

## Why Is Lead A Health Risk?

Lead is a common metal that has been used over the years in many consumer products. It can still be found in lead-based paint, some imported consumer products, and, under some conditions in air, soil, household dust, pottery, food, plumbing pipes and components, and drinking water. If it is inhaled or swallowed, lead can build up in the body over time. If too much lead enters the body, it can damage the brain, nervous system, red blood cells, and kidneys. Lead in drinking water can be a particular problem for infants who drink formula made with tap water. Pregnant women and nursing mothers also need to be concerned about lead levels in drinking water since it can be passed on to unborn children and breast-fed babies.

## How Can Lead Get Into My Well Water System?

Well water in Minnesota usually does not contain detectable levels of lead. However, the pipes and other components in the household plumbing may contain lead. If they do, lead may dissolve into the water. The longer the water stands idle in the plumbing pipes and components, the more lead can dissolve into the water.

## The most common sources for lead in drinking water from wells are:

- Lead pipes are typically the worst contributor to elevated lead levels.
- Lead solder was used in the past to join copper pipes, but has been illegal in Minnesota since 1985.
- Brass components such as faucets, coolers, and valves. Although brass usually contains low lead levels of 8 percent or less, it can still dissolve lead into the water, especially during the first few months of use. If you have new brass plumbing components installed in your plumbing system, be sure to flush the water before drinking. The federal Reduction of Lead in Drinking Water Act requires that most pipe, pipe and plumbing fittings, and fixtures installed in potable water-supply systems after January 2014 must contain no more than 0.25 percent lead.
- Lead "packers" above the well screen may have been used in wells that were drilled over 20 years ago.
- Some submersible pumps manufactured before 1995 may contain leaded-brass components.

Since January 1995, all submersible pump manufacturers in America have agreed not to use leaded-brass components in submersible pumps.

- Other plumbing components. Some trade agreements with foreign nations allow them to export plumbing components for sale in the United States that are not lead free.

## How Can I Reduce My Contact with Lead?

### Find out what your source(s) of lead may be.

Lead in your drinking water is one way you may be in contact with lead. The most common way to be in contact with lead in Minnesota is through lead-based paint. You may also be in contact with lead through dust, soil, food, hobbies, or your job. Read below to learn how you can protect yourself from lead in your drinking water.

Visit [Lead Poisoning Prevention:](#)

### [Common Sources](#)

([www.health.state.mn.us/divs/eh/lead/sources.html](http://www.health.state.mn.us/divs/eh/lead/sources.html)) to learn about how to reduce your contact with lead from sources other than your drinking water.

## Let the water run.

If any parts of your plumbing system were built before 1986, let the water run for at least 30-60 seconds before using it for drinking or cooking if the water has not been turned on in over six hours. This will "flush" the water that is standing in the plumbing pipes and components. You should do this for all faucets used for drinking and cooking. Flushing will remove much of the lead that may have dissolved into the water overnight. After an extended absence, such as a vacation, flush the system for twice as long as you normally do.

For more information, see [Let it run...and get the lead out!](#)

([www.health.state.mn.us/divs/eh/water/factsheet/com/letitrun\\_english.html](http://www.health.state.mn.us/divs/eh/water/factsheet/com/letitrun_english.html)).

## Use cold water for drinking and cooking.

If any parts of your plumbing system were built before 1986, make sure you use cold water for drinking and cooking. Hot water dissolves lead from pipes and fixtures faster than cold water. If you need hot or warm water for making food, drinks, or baby formula, warm up cold tap water in the microwave or on the stove.

### Have your water tested for lead.

In most cases, letting the water run and using cold water for drinking and cooking should keep lead levels low in your drinking water. If you are still concerned about lead, make arrangements with an accredited laboratory to have your tap water tested for lead. If the water test shows you have lead in your water, you can reduce your contact with lead by:

- Letting the water run.
- Using cold water for drinking and cooking.
- Using a point-of-use water treatment system for lead.

Minnesota Department of Health recommends lead levels in water be as close to zero as possible. For public water systems, the Environmental Protection Agency sets an action level at 15 parts per billion (ppb) for lead in water. A public water system has to take actions to reduce the lead level in water if more than 10 percent of the water samples they test from household taps have lead levels over 15 ppb.

[Search for Accredited Laboratories](http://www.health.state.mn.us/labsearch)  
([www.health.state.mn.us/labsearch](http://www.health.state.mn.us/labsearch)).

### Consider using a point-of-use water treatment system for lead.

Two common types of water treatment units good at removing lead from water are reverse-osmosis devices and distillation units.

You can read more at [Point-of-Use Water Treatment Units for Lead Reduction](http://www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html)  
([www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html](http://www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html)).

For more information contact a well specialist at your nearest MDH office.

#### MDH District Offices

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218-302-6166

1505 Pebble Lake Road  
Fergus Falls, Minnesota 56537  
218-332-5150

3333 West Division Street  
St. Cloud, Minnesota 56301  
320-223-7300

1400 East Lyon Street  
Marshall, Minnesota 56258  
507-476-4220

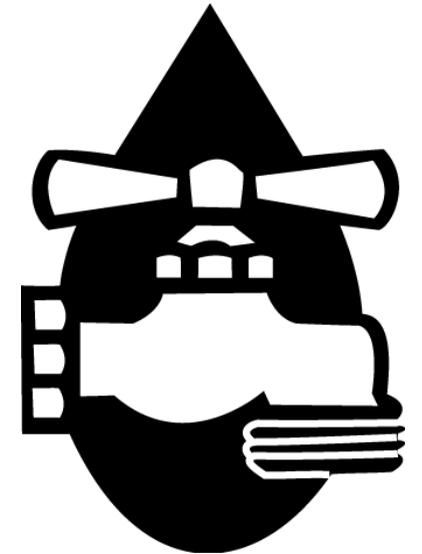
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MDH [Well Management Section](http://www.health.state.mn.us/divs/eh/wells)  
([www.health.state.mn.us/divs/eh/wells](http://www.health.state.mn.us/divs/eh/wells))

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# Lead in Well Water Systems



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