

Safe Well Water RI

Trusted, expert information

Tip Sheet 8



“Tip sheets helped us learn about our well water.”

Get Tip Sheets at www.riwelltesting.org:

- 14 Tip Sheets about harmful substances
- 10 Tip Sheets about treatment choices
- 3 Tip Sheets about other topics of concern

Well water is groundwater, meaning that it comes from the water stored in the earth and rocks below ground. Even though groundwater is *under* the surface, substances *on* the surface, such as gas from a lawnmower or animal waste, can seep down and pollute it. Some natural substances stored in rocks and soil can also affect the smell, taste, color, and safety of well water.

Lead in Drinking Water Wells

Lead: A toxic metal not natural to drinking water

Lead is not naturally found in water. Most lead in well water results from corrosion (wearing away) of metal in old lead pipes, lead-based solder, or brass fittings.

Lead in drinking water can cause lead poisoning and long-term health problems. The effects are most serious for babies in the womb, infants, and children. While drinking water is usually not a major cause of lead poisoning, it can greatly harm infants who drink formula mixed with leaded water.

What health problems can lead cause?

Possible serious damage to the:

- Brain
- Kidneys
- Nervous system
- Red blood cells

Infants and young children are at highest risk of lead poisoning, which can slow their growth in body and mind.

The Rhode Island Department of Health requires that all children be screened for lead. Parents and caregivers should talk with their doctors about this.



How will I know if I have too much lead in my well water?

You won't know unless you have your water tested. Lead has no smell or taste. And, your water will look the same as usual.

If there are children under age 6 in your home, test your water for lead.

Use a State-certified lab to test your water.

Find a list here: www.health.ri.gov/find/labs/drinkingwater.

How does lead get into well water?

Major source: Corrosion (wearing away) of plumbing fixtures including lead pipes, lead solder and brass fittings. Well pumps may also contain brass fittings. Acidic water (water with a low pH) corrodes lead in plumbing more quickly.

- **Homes built before 1930** are more likely to have lead pipes.
- **Homes built before 1988** may contain lead-based solder.
- **Older wells** may have been built using lead screens. Sometimes, lead was poured into older wells to keep out sand.

What can I do about lead in my well water?

If your water has lead in it, take steps to remove it!

Four possible solutions if your well water tests high for lead:

- 1. Remove the source.** Replace lead pipes, the well pump, or other plumbing with lead solder or brass. This may be too costly unless the plumbing is old and due for an upgrade.
- 2. Flush the pipes** whenever water remains unused for more than 6 hours (such as first thing in the morning or after work):
 - ▶ Let the water run as cold as it can get for at least 1 minute before using.
 - ▶ **NEVER** use water from the hot water faucet for cooking, drinking or making baby formula. Use cold water and heat it up on the stove.If you try flushing, check it! Have a State-certified lab test your water after flushing.
- 3. Use bottled water** for drinking and cooking.
- 4. Install a home treatment system.** These systems include:
 - ▶ Activated carbon—Tip Sheet 17
 - ▶ Distillation—Tip Sheet 20
 - ▶ Ion exchange—Tip Sheet 21
 - ▶ Reverse osmosis—Tip Sheet 24

Important: Before you install a treatment system, call us for expert advice. *Before* you buy a system, ask how it will be installed and whether this costs extra. Get at least 3 price quotes. Learn the questions to ask. See Tip Sheet 16. *After* you buy a system, be sure to:

1. Keep all the paperwork and directions.
2. Learn what you must do to maintain the system and do it.

Learn more

Get Tip Sheets about choosing and buying water treatment systems at www.riwelltesting.org.