

Safe Well Water RI

Trusted, expert information

Tip Sheet 29



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

Get Tip Sheets at www.rivelltesting.org:

- 15 Tip Sheets about harmful substances
- 10 Tip Sheets about treatment choices
- 4 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.

PFAS in Drinking Water Wells

PFAS: Per- and polyfluoroalkyl substances are a large family of man-made chemicals that have been found in drinking water. There are thousands of different PFAS chemicals in use. The most familiar are PFOS and PFOA.

PFAS are commonly added to nonstick, stain-resistant and waterproof consumer products such as clothing, cookware, carpets and upholstery, and food packaging. They are added to some firefighting foams used at airports, military bases and fire training areas. PFAS are often called “forever chemicals” as they don’t easily break down in the environment.

In some parts of Rhode Island, PFAS have been found in private well water. To learn about areas known to have PFAS, contact the Rhode Island Department of Health.

What health problems can too much PFAS cause?

PFAS in drinking water may cause:

- High cholesterol
- Heart disease
- Thyroid disease
- Ulcerative colitis
- Liver problems
- Increased body weight
- Cancer (a variety of organ cancers)
- Allergies and autoimmune diseases
- Lower immune protection from vaccination
- Decreased metabolism
- Increased risk of diabetes

In addition, PFASs may cause complications during pregnancy and after the baby is born, including:

- Longer time to get pregnant
- Elevated blood pressure during pregnancy
- Babies born with low birth weight
- PFAS transferred to infants during breastfeeding



How do PFAS get into my well water?

PFAS can move into the air, water and soil in and near areas where these chemicals are produced and used in large volumes. Since these chemicals are used in many household items, they can leave the house in wastewater (laundry, dishwashing, etc.) and enter the environment from a septic system or municipal wastewater treatment facility.

How will I know if I have PFAS chemicals in my well water?

You won't know unless you have your well water tested. These chemicals often have no smell or taste and your water may look the same as usual.

You may want to test for PFAS chemicals if you live near:

- Industrial plants that produced PFAS
- Military bases
- Firefighting training areas
- Airports that use PFAS-containing firefighting foam
- Anywhere else that PFAS-containing firefighting foam has been used

Use a State-certified lab to test your water.

Find a list here: health.ri.gov/find/labs/drinkingwater. Not all labs offer PFAS testing, so call ahead to check.

Compare the numbers and letters on your lab test results with the standards (limits) set by the United States Environmental Protection Agency (EPA).

The EPA has set a lifetime health advisory level (HAL) for PFOA and PFOS in drinking water. The level is for *total* PFOA and PFOS added together.

EPA limit (HAL) for PFOA and PFOS:

70 ppt (parts per trillion)

70 ng/L (nanograms per liter)

What can I do about PFAS chemicals in my well water?

1. **Get expert advice.** Call us.
2. **Use bottled water** for drinking and cooking.
3. **Connect to a public water supply** if available.
4. **Use a home treatment method.** Methods that reduce PFAS include:
 - Activated carbon – Tip Sheet 17
 - 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.rivelltesting.org.



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