

# Safe Well Water RI

Trusted, expert information

## Tip Sheet 1



**It's smart to be curious about your well water.**

**See the other easy-to-read Tip Sheets in this series.**

- 14 Tip Sheets about harmful substances that can be present in well water
- 10 Tip Sheets about ways to treat well water problems
- 2 Tip Sheets with information about:
  - » **Hiring a registered well driller or pump installer**
  - » **Understanding how much water your well produces**

**Tip Sheets at:**  
[www.riwelltesting.org](http://www.riwelltesting.org)

# Are you a smart well owner?

## Find what you need to know here:

- The 4 steps to protect your well water
- What to test for and where to test
- How Rhode Island state agencies help you

## The 4 steps to protect your well water

### STEP 1: Learn

#### Know the source of well water – groundwater.

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

#### Know what type of well you have and where it is.

If you're not sure where your well is, do a "walk around" and find it. If you're still not sure, call us. Check the condition of the well too. Look for any cracks or damage in the well casing or cover.

#### 3 basic well types:

- Dug well:** Shallow, about 10 to 30 feet deep.  
Chance of harmful substances getting in from ground above—*high*. May also go dry in periods of very low rainfall.
- Driven or sand-point well:** Deeper than a dug well, about 30-50 feet deep.  
Chance of harmful substances getting in—*moderate to high*
- Drilled well:** Deepest well, usually drilled into bedrock 100-400 feet down.  
Chance of harmful substances getting in—*moderate*.

Steps 2, 3, 4



**Call us!** University of Rhode Island Water Quality Program (401) 874-5398  
Rhode Island Department of Health (401) 222-6867



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## STEP 2: Protect

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### Protect your well water.

- **Maintain existing wells.** Inspect your well at least once a year. Check for cracks in the well casing and check the seals on the well cap. Make sure that water cannot pool around the wellhead.
- **Keep pollution away.** Keep the area around your well clean — free from animal waste, fertilizer, gasoline, and substances that could pollute the groundwater below. Don't use plants or decorations around the well that could attract rodents.
- **Prevent backflow.** If you connect a hose to an outside faucet, buy a backflow prevention device at a hardware store and install it. The backflow prevention device prevents dirty water from flowing back through the hose into the household water supply if the water pressure drops. This is especially important if you use a hose to fill pesticide or chemical containers. Do not dip the end of the hose into the container.
- **Locate and construct new wells correctly.** Hire only *registered* well drillers and pump installers. Ask for proof they are *registered* with the State of Rhode Island. Registered drillers and installers have passed a national exam and know the safety rules. Find a list of registered professionals here: [www.rivelltesting.org](http://www.rivelltesting.org).
- **Seal unused wells.** If you abandon a well or have an unused well on your property, hire a registered well driller to seal it up. These wells can be a safety hazard. Cracks can allow pollution above the ground to get into your groundwater.



“We know our well water is safe for our family. We took the 4 steps.”

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## STEP 3: Test

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### Test your well water. Use a certified testing lab. Follow the well testing schedule.

- **Use a State-certified lab** to make sure you get accurate water test results. These labs will **not** try to sell you a treatment system you don't need. *Before* you invest in any treatment, call us to learn more.
- **Follow the testing schedule developed by water safety experts.** This means testing for :
  - » just a few basics each year
  - » certain substances every 3-5 years
  - » other substances every 5-10 years

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## STEP 4: Act

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### If you have questions about test results, get advice from experts.

- **Don't believe ads with shortcuts for testing and treating water.** Find out exactly what's wrong before you purchase any treatment system, including a “filter”.
  - » The best treatment solution depends on what substances and what amounts are in the water.
  - » Sometimes more than one substance can get into your water. So, you might need more than one treatment solution.
- **Call us to help you.** We are experts who do not make money from any treatment system. Treatment can range from low-cost, low-tech “fixes” to complex and costly systems. Before you spend money, find out how to get your money's worth.

## What to test for: Well Testing Schedule

If you have never tested your well water, test for **everything** listed below.

After this first complete test, you can follow the schedule below that spreads out the tests and the costs.

| ⌵ Every year              | ⌵ Every 3–5 years  | ⌵ Every 5–10 years                |
|---------------------------|--|-----------------------------------|
| Coliform bacteria (germs) | Cadmium      Lead  | Volatile Organic Compounds (VOCs) |
| Nitrate                   | Calcium      Manganese   | MtBE                              |
| Nitrite                   | Copper      Sulfate  |                                   |
| Color                     | Fluoride      pH   |                                   |
| Turbidity (cloudy water)  | Iron      Zinc   |                                   |
| Chloride                  | Tests for corrosiveness  |                                   |
| Sodium                    | <ul style="list-style-type: none"> <li>• Alkalinity</li> <li>• Total Dissolved Solids</li> <li>• Hardness</li> <li>• Specific Conductance</li> </ul> |                                   |

## Where to test: State-certified Water Testing Labs

### BAL and ESS Labs

(401) 785-0241  
185 Frances Avenue  
Cranston, RI 02910  
[www.ballaboratory.com](http://www.ballaboratory.com)

### Microbac Laboratories

(800) 334-0103  
61 Louisa Viens Drive  
Dayville, CT 06241  
[www.microbac.com](http://www.microbac.com)

### New England Testing Lab, Inc.

(401) 353-3420  
59 Greenhill Street  
West Warwick, RI 02893  
[www.newenglandtesting.com](http://www.newenglandtesting.com)

### RI Analytical Labs

(401) 737-8500  
41 Illinois Avenue  
Warwick, RI 02888  
[www.rianalytical.com](http://www.rianalytical.com)

### RI State Health Laboratories

(401) 222-5600 (*General inquiries*)  
(401) 222-6064 (*Sample bottle pick-up and drop-off questions*)  
150 Richmond Street  
Providence, RI 02903  
[www.health.ri.gov/laboratory-testing/drinking-water-quality-testing](http://www.health.ri.gov/laboratory-testing/drinking-water-quality-testing)

Water test kit



**TIP:** Lab websites give details about standard water testing packages and costs. You can also call the labs for this information. The yearly tests cost about \$100.

These labs are State-certified as of 3/2019. For updates, see:

[www.health.ri.gov/find/labs/drinkingwater](http://www.health.ri.gov/find/labs/drinkingwater).



**Call us!** University of Rhode Island Water Quality Program (401) 874-5398  
Rhode Island Department of Health (401) 222-6867

## Rhode Island state agencies help make sure the water is safe to drink

State government plays a big role in protecting both private and public drinking water.

**Private well water** As a well owner, you have a private water supply. *You* are in charge of making sure your drinking water is safe with help from State agencies.


### ■ Rhode Island Department of Health

- » Sets well water quality standards, based on national standards, for substances that might harm your health or cause problems with your appliances or plumbing.
- » Requires well water tests for all new wells and property transfers.
- » Provides expert advice on well water testing, protection, and treatment.

### ■ The state building code regulates where and how new wells are built.

**Tip:** If you are fixing a well or installing a new one, use a *registered* well driller or pump installer. These experts have passed a national exam. They know the laws and rules. Find a list of registered professionals here: [www.riwelltesting.org](http://www.riwelltesting.org).

**Public water** The Rhode Island Department of Health also keeps public drinking water safe. They make sure that all public water systems meet the strict safety standards set by federal and state laws. Public water systems include those owned by cities, towns and water districts, as well as schools, factories, and restaurants that have their own wells. **Bottled water** is also regulated by the Rhode Island Department of Health, and must meet similar safety standards.

 **You can make sure your well water is safe to drink. We're here to help.**

### Need help? Contact us.

#### University of Rhode Island Water Quality Program

(401) 874-5398

[riwelltesting.org](http://riwelltesting.org)

E-mail: [Safewater@uri.edu](mailto:Safewater@uri.edu)

#### Rhode Island Department of Health

(401) 222-6867

[health.ri.gov/private-wells](http://health.ri.gov/private-wells)

E-mail: [DOH.RIDWQ@health.ri.gov](mailto:DOH.RIDWQ@health.ri.gov)

