Environmental Health Spotlight

Private Drinking Water: A User’s Guide

Where does your water come from?

Percent of Vermont Population Served By Drinking Water Source

- 60% Public Water Supply
- 40% Private Wells or Springs

Public water systems (town water) serve at least 15 connections or 25 year-round residents.

Private water systems (wells or springs) serve single-family homes, duplexes, or small groups of homes.

Drinking water can become contaminated from natural or human causes. As a private water system owner, you are in charge of maintaining and testing the water system. **You will not know if your water is contaminated unless you test it.** Follow the Private Water Testing Schedule below.

**KEY MESSAGES**

Private systems are monitored and maintained by their owners. It is important for owners to test their water to make sure it is safe.

Public water systems are tested regularly for more than 90 contaminants as required by the US EPA. The costs for testing are included in customers’ water bills.

Public systems send their customers annual Consumer Confidence Reports with specific information about their water.

**RESOURCES**

For public system test results: https://anrnode.anr.state.vt.us/DWW/

For results by contaminant: http://healthvermont.gov/tracking

**Private Water Testing Schedule**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>May Cause</th>
<th>Keep Levels Below........</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Every Year for Bacteria</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>diarrhea, vomiting</td>
<td>not detected</td>
</tr>
<tr>
<td><strong>Test Every Five Years for Inorganic Chemicals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>bladder, lung, skin cancer</td>
<td>0.010 mg/L†</td>
</tr>
<tr>
<td>Fluoride</td>
<td>staining of teeth</td>
<td>4.0 mg/L</td>
</tr>
<tr>
<td>Lead</td>
<td>brain, kidneys, nervous system toxicity</td>
<td>0.015 mg/L</td>
</tr>
<tr>
<td>Manganese</td>
<td>nervous system toxicity</td>
<td>0.300 mg/L</td>
</tr>
<tr>
<td>Nitrate/Nitrite</td>
<td>oxygen deficiency in infants, cancer</td>
<td>10.0 mg/L</td>
</tr>
<tr>
<td>Uranium</td>
<td>kidney damage, cancer (lifetime risk)</td>
<td>0.020 mg/L</td>
</tr>
<tr>
<td><strong>Test Every Five Years for Alpha Radiation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Alpha Radiation</td>
<td>cancer</td>
<td>15.0 pCi/L‡</td>
</tr>
</tbody>
</table>

† You should also test every five years for: chloride, copper, iron, sodium, and hardness.

‡ mg/L = milligrams per liter, ‡ pCi/L = picocuries per liter (additional testing may be needed)

**WHEN TO TEST YOUR WATER:**

- Follow the Private Water Testing Schedule on the left.
- A new well is drilled.
- You buy a home served by a well.
- You’re expecting a baby.
- Your water changes in smell, taste, or color. Drink bottled water if it does.
- You put in new parts to the system such as a new pump or new pipes.
- The well runs dry and comes back.
- You put in a water treatment system to remove a contaminant. Test treated water each year for it.
- After a natural disaster such as a flood or earthquake.

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Arsenic: Naturally Occurring and Toxic

**KEY MESSAGES**
Arsenic usually gets into drinking water from natural deposits in the earth.

Some places in Vermont have geologic (underground) formations that increase the chances of having arsenic in water.

Consuming water contaminated with arsenic over long periods of time increases the risk of developing bladder, lung, or skin cancer.

**WHY SHOULD YOU TEST?**
Your water may look, smell, and taste fine, but your water may NOT be safe to drink. **Testing is the only way to know what is in your water.**

**CONTAMINANT LEVELS**
The US EPA Maximum Contaminant Level (MCL) is the highest amount of a chemical allowed in drinking water.
The MCL for arsenic is: **0.010 mg/L** (milligrams per liter)

**VERMONT LAW REQUIRES:**
- Testing Drinking Water from Private Water Supplies fact sheet must be given to people drilling new wells and to new homeowners.
- Vermont State Certified laboratories must send private well water test results to the State of Vermont.

**Ordering Water Test Kits**
Order water test kits from the Vermont Department of Health Laboratory or a Vermont State Certified laboratory. The Vermont Department of Health Laboratory provides testing services for bacteria, inorganic chemicals, and alpha radiation.

To order water test kits, call: 1 (800) 660-9997 (toll-free in Vermont) or (802) 338-4736

For more information on water contaminants or to find a list of Vermont State Certified laboratories, visit healthvermont.gov

**RESOURCES**
Questions about your private well treatment or health effects? Call the Health Department Drinking Water Program: 1 (800) 439-8550