MAKE SURE YOUR WELL WATER IS HEALTHY TO DRINK

The best way to know if drinking water from a private drinking well is safe to drink is by testing it. Common water quality tests check for germs such as E. Coli, and chemicals such as nitrates, arsenic, uranium, lead, and fluoride.

Drinking water quality is checked periodically in public/community drinking water systems. If the tests show unhealthy levels of germs or chemicals, the community is alerted and the managers of the water system work to fix the problem. If your drinking water comes from a private well, you need to test the water periodically and fix any problems if the water is of poor quality.

If your well water smells, tastes and looks fine, you should still have it tested. Often germs and chemicals are unnoticed and the only way to find these is through testing. If germs are in your drinking water, they can cause abdominal cramping and diarrhea, for example.

When to Test
Make your drinking water quality a health priority for you and your family by testing your water:

- **Every Year:** Bacteria, Nitrates. Checking these yearly is a good indicator if your water quality has degraded. This may mean your well casing has cracked or your water has been polluted by animal or human waste. The best time to test is in late summer.
- **Periodically:** Other Chemicals. Test at least once for arsenic, uranium, fluoride and total dissolved solids if you live in a rural area. If you live in an area that may be subject to industrial pollution, near a mine or mill site, test periodically for contaminants of concern.

- **Special Reasons:** There may be other reasons to test your water beyond your regularly scheduled tests such as:
  - Someone in the home is expecting a baby or is nursing.
  - The water changes in smell, taste or color.
  - The well runs dry and then comes back.
  - A spill of chemicals or fuels occurs near your well.
  - You put in new parts in your water system, like a pump.
  - You put in a treatment system to fix a water quality problem.
  - Agricultural activities near your well.
  - The well is flooded.
Maintain Your Well and Water Quality

Follow these steps regularly help keep your water safe:
- Keep the area around your well clean. Make sure there is no nearby animal waste or pollution around the well.
- Pay attention to changes in the color, taste, and smell of the water.
- Test your well periodically:
  - Get a water test for bacteria and nitrates, every year.
  - Get water tested for chemicals every three to five years if you live near a mine or mill.

Well Testing Schedule

<table>
<thead>
<tr>
<th>Water Quality Concern</th>
<th>Safe Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Every Year</strong></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliform Bacteria, including <em>E. Coli</em></td>
<td>0 coliform/100 mL</td>
</tr>
<tr>
<td>Nitrate Nitrogen</td>
<td>10 mg/L or less</td>
</tr>
<tr>
<td>Nitrite Nitrogen</td>
<td>1 mg/L or less</td>
</tr>
<tr>
<td><strong>Test Once or Periodically</strong></td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>10 ug/L or less</td>
</tr>
<tr>
<td>Uranium</td>
<td>30 ug/L or less</td>
</tr>
<tr>
<td>Lead <em>Especially if planning a baby, pregnant, or have a child under age 6.</em></td>
<td>15 ug/L or less</td>
</tr>
<tr>
<td>Fluoride</td>
<td>2 mg/L or less</td>
</tr>
</tbody>
</table>

**Safe Limits:** Compare the numbers on your test results with the numbers listed above under the Safe Limit. Make sure the letters match. Check to see if your numbers are at or below the limits. If your numbers are above the limits, begin using bottled water for drinking and cooking. Then fix the problem such as by installing a filtration/treatment system.

To learn about the potential health effects of drinking water exceeding the safe limit, visit the Environmental Protection Agency’s website at [http://water.epa.gov/drink/contaminants/index.cfm#List](http://water.epa.gov/drink/contaminants/index.cfm#List).
Water Treatment

If bacteria, parasites, and chemicals are in your water, you can improve the quality with treatment.

To make sure your water is safe for drinking, testing is your first step. If test results show that your drinking water contains contaminants at levels above the safe limit, an appropriate water-treatment system or use of an alternative source of drinking water, such as bottled water is recommended. Long term, a more cost-effective solution for homes on private well water may be filtration system such as a point of use reverse osmosis (RO) system or an ion exchange system.

Talk to water treatment companies and learn the pros and cons of treatment systems. Choose one that best meets your water quality needs by removing or reducing the bacteria and chemicals found in your water.

**Reverse Osmosis**
Point of use (at the kitchen sink) reverse osmosis (RO) treatment units are used by some well users to reduce metals in their drinking water.
RO systems are fairly small and are usually placed under the kitchen sink. Properly installed, RO systems will remove many contaminants from drinking water, including arsenic, uranium and radium. There are different types, brands and dealers of reverse osmosis systems. It is recommended that you purchase a unit that is “NSF Certified” for the contaminants such as metals found in your drinking water.
After installing the RO system, use the water from the RO faucet for drinking water, cooking, and making coffee, tea, and ice.

**Ion Exchange**
Ion exchange, while less commonly available to household consumers, is an effective method for uranium removal. Ion exchange technology can be purchased from a specialized business and should be installed by professionals in the water filtering business.
Ion exchange units are typically sold to consumers who want minerals removed from the water to make it less “hard.” When shopping for an ion exchange unit be sure to look for designs that specifically remove uranium.

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**Well Water Quality Information**

NM Environmental Public Health Tracking (Department of Health)
https://nmtracking.org

State Environment Department,
www.nmenv.state.nm.us/dwb/safe

Bernalillo County Office of Environmental Health
www.bernco.gov/safe-water-2927/

Centers for Disease Control and Prevention/Tracking Network
http://epitracking.cdc.gov/showWaterLanding.action

Welloowner.org
www.welloowner.org/?5e29d590

National Environmental Services Center:
www.nesc.wvu.edu/subpages/wells.cfm

U.S. Environmental Protection Agency:
www.epa.gov/safewater/privatewells/index2.html

USDA Rural Development Program
www.usda.gov/rus/water/HWWSP.htm