

Roanoke County has a lower-risk groundwater profile. Radon is detected in ~100% of wells, driven by geological sources. Contamination is often invisible — testing is the only way to confirm your well's safety.

**N/A**  
HOUSEHOLDS ON PRIVATE WELLS

**Varies**  
PRIMARY AQUIFER TYPE

**LOW**  
OVERALL RISK LEVEL

**YOUR TOP WATER QUALITY RISKS**

| CONTAMINANT       | HOW COMMON                | RISK LEVEL          | SOURCE & CONTEXT  |
|-------------------|---------------------------|---------------------|---|
| <b>Radon†</b>     | ~100% of wells            | <b>Advisory</b>     | <b>Geological</b> — Radioactive gas dissolved from uranium-bearing rock     |
| <b>Manganese*</b> | ~6% above aesthetic limit | <b>Moderate</b>     | <b>Geological</b> — Found in reducing aquifer zones alongside iron          |
| <b>Sulfate*</b>   | ~2% above aesthetic limit | <b>Low–Moderate</b> | <b>Geological</b> — Natural dissolution from gypsum and sulfate minerals    |
| <b>Uranium</b>    | ~86% of wells             | <b>Low–Moderate</b> | <b>Geological</b> — Naturally occurring in granitic and sedimentary bedrock |
| <b>Arsenic</b>    | ~100% of wells            | <b>Low–Moderate</b> | <b>Geological</b> — Naturally dissolves from bedrock and glacial sediment   |

\* Secondary standard — an aesthetic limit for taste, odor, or staining. Not a health-based EPA limit.

† No finalized EPA primary MCL. Figure shows detection frequency, not regulatory exceedance.

**WHAT TO DO NEXT**

- Order a water test.**  
Test for Radon, Manganese, Sulfate, Uranium, coliform bacteria. Bacteria annually; others every 3–5 years.
- Get your free county report.**  
See full data, treatment options, and certified labs at <https://yourwaterreport.com/states/va/roanoke-county/>
- Upload your lab results.**  
We'll interpret them, flag anything above limits, and recommend next steps — free.

**KNOW YOUR WELL**

Well age / year drilled \_\_\_\_\_

Last water test date \_\_\_\_\_

Treatment systems installed \_\_\_\_\_

Well driller / service contact \_\_\_\_\_

**WHAT YOUR RESULTS MEAN**

Use this to interpret your lab report — match the contaminant to your result.

| IF YOUR TEST SHOWS              | WHAT IT MEANS                                      | CONSIDER                                    |
|---------------------------------|--|---|
| <b>Bacteria detected</b>        | <b>Immediate concern</b>                           | Shock chlorination; add UV system           |
| <b>Radon &gt; 4,000 pCi/L</b>   | <b>EPA proposed limit; also affects indoor air</b> | Aeration system; test indoor air            |
| <b>Manganese &gt; 0.05 mg/L</b> | <b>Aesthetic + health concern at high levels</b>   | Oxidation + filtration system               |
| <b>Uranium &gt; 30 µg/L</b>     | <b>EPA limit exceeded — kidney risk</b>            | Reverse osmosis or ion exchange             |
| <b>Arsenic &gt; 10 µg/L</b>     | <b>EPA limit exceeded — chronic cancer risk</b>    | Reverse osmosis or activated alumina filter |

**WHO SHOULD USE THIS**

- Homeowners on private wells — not covered by public water testing
- Home buyers doing due diligence before closing
- Families with infants, elderly, or immunocompromised members
- Anyone who hasn't tested their well in the past 3 years

**LOCAL RESOURCES**

**Full county report**  
<https://yourwaterreport.com/states/va/roanoke-county/>

Free personalized well water report at <https://yourwaterreport.com/states/va/roanoke-county/>

Data: EPA ECHO · USGS NWIS · Water Quality Portal · U.S. Census ACS  
For informational purposes only. Contact a licensed professional for testing and treatment.