FREE GUIDE

THE 15-MINUTE HOME WATER QUALITY CHECKLIST

A Room-by-Room Guide to Identifying Water Prblems Before They Become Health Problems

Test Smart, Filter Right & Protect Your Family

WellWaterTrust.com

The 15-Minute Home Water Quality Checklist

A room-by-room guide to identifying water quality problems before they become health problems.

This checklist helps you identify the most common signs of water contamination in your home, understand what to test for, and know when you need a certified professional. Whether you're on a private well or a public supply, the steps below will give you clarity about what's in your water.

Every fact in this guide has been verified against the EPA, USGS, CDC, and NSF International. Regulatory details reflect the status as of May 2026.

1. Warning Signs in Your Water

You don't always need a lab to know something is wrong. Watch for these red flags:

Visual

- ☐ Cloudy or milky appearance (turbidity) that doesn't clear after running the tap.
- ☐ Brown, orange, or rust-colored water (may indicate iron, manganese, or corroding pipes).
- ☐ Blue-green staining on fixtures (often a sign of copper leaching from pipes).
- ☐ Black specks or particles in the water.

Smell & Taste

- ☐ Rotten-egg smell (hydrogen sulfide gas or sulfate-reducing bacteria).
- ☐ Chlorine or bleach odor (common in public water; excessive levels may indicate a treatment issue).
- ☐ Metallic taste (iron, manganese, or lead).
- ☐ Musty or earthy smell (possible algae or bacterial contamination in the source).

Physical Clues

- ☐ Scale or white buildup on faucets and shower heads (hard water: calcium and magnesium).
- ☐ Slippery or slimy feel to the water.
- ☐ Stained laundry after washing.

> **Important**
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> Many of the most dangerous contaminants—PFAS, lead, arsenic, nitrates, bacteria—are invisible, odorless, and tasteless. A clean-looking glass of water can still be contaminated. Lab testing is the only way to be sure.

2. What to Test For

The contaminants you should test for depend on your water source and local conditions. Here are the most important ones:

Contaminant	Why It Matters	Who Should Test
PFAS (PFOA/PFOS)	Linked to cancer, immune effects	Everyone
Lead	Neurotoxic, especially to children	Homes built before 1986
Coliform / E. coli	Indicates bacterial contamination	All private wells
Nitrate	Dangerous to infants (blue baby)	Wells near farms/septic
Arsenic	Carcinogen, naturally occurring	Well water in some regions
Hardness (Ca/Mg)	Scale, appliance damage	Anyone with buildup
pH	Corrosion indicator	All sources
Iron / Manganese	Staining, taste, pipe damage	Wells with discolored water

> **PFAS: The "Forever Chemicals"**
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> A 2023 USGS study published in Environment International estimated that at least 45% of U.S. tap water contains one or more PFAS compounds. The EPA has set Maximum Contaminant Levels (MCLs) of 4 parts per trillion (ppt) for PFOA and PFOS. If you haven't tested for PFAS, you should—regardless of whether you're on a well or public supply.

3. How to Collect Water Samples

Proper sample collection is critical. A bad sample gives you bad results. Follow these steps:

First-Draw Sample (for lead testing)

1. Let the faucet sit unused for at least 6 hours (overnight is ideal).
2. Without running the tap first, fill the sample bottle with the first water that comes out.
3. This captures water that has been sitting in your pipes and plumbing fixtures, where lead leaches.

Flushed Sample (for source water testing)

1. Run the cold water tap for 2–3 minutes to clear the pipes.
2. Then fill the sample bottle. This captures water from your well or supply main.
3. Use this for testing PFAS, nitrate, bacteria, arsenic, and other source contaminants.

General Rules

- [ ] Use the sample containers provided by the lab—never a container from home.
- [ ] Keep samples cold (not frozen) during transport.
- [ ] Deliver samples within 24–48 hours for bacteria testing (some labs require same-day).
- [ ] Label each sample with date, time, and tap location.

4. Finding an ELAP-Certified Lab

Not all labs are created equal. For results that are legally defensible and scientifically reliable, use a lab certified under your state's Environmental Laboratory Accreditation Program (ELAP) or the national equivalent (NELAP / TNI):

- [ ] Ask the lab: "Are you ELAP- or NELAP-accredited for drinking water analysis?"
- [ ] For PFAS testing, confirm they use EPA Method 533 or 537.1 (the accepted methods for PFAS in drinking water).
- [ ] Request the lab's scope of accreditation—it lists exactly which contaminants they're certified to test for.
- [ ] Expect to pay $30–$75 for a basic well water panel and $200–$400+ for a comprehensive PFAS panel.

> **Pro Tip**
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> Many state and county health departments offer free or subsidized well water testing for coliform bacteria and nitrate. Call your county health department first—you may save $50–$100 on the basics.

5. Reading Your Test Results

Your lab report will list each contaminant with a measured value and a comparison to the applicable standard. Here's how to interpret the key columns:

- Result / Measured Value: the concentration detected in your sample, usually in mg/L (parts per million) or ug/L (parts per billion). PFAS is reported in ng/L or ppt (parts per trillion).
- MCL (Maximum Contaminant Level): the EPA's legally enforceable limit for public water systems. For PFOA and PFOS, the MCL is 4 ppt.
- SMCL (Secondary MCL): non-enforceable guidelines for aesthetics (taste, color, odor). Exceeding an SMCL isn't a health crisis but may affect quality of life.
- "ND" or "< MDL": Not Detected, or below the Method Detection Limit. This is a good result.

> **Private Well Owners**
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> EPA MCLs legally apply only to public water systems. But they represent the best available science on safe exposure levels. If your private well exceeds an MCL, treat it the same way a public system would: investigate and address the source.

6. When You Need Filtration

Not every water quality issue requires treatment. Here's a decision framework:

Filtration Is Recommended When:

- ☐ PFAS (PFOA or PFOS) detected at or above 4 ppt.
- ☐ Lead detected above the EPA action level of 15 ppb in your first-draw sample.
- ☐ Bacteria (total coliform or E. coli) detected in any sample—this requires immediate action.
- ☐ Nitrate above 10 mg/L (especially if infants or pregnant women are in the household).
- ☐ Arsenic above 10 ppb.

Filtration May Not Be Needed When:

- Only aesthetic issues (taste, smell, hardness) that don't exceed health-based limits.
- Results are below all MCLs and action levels.
- A re-test confirms the initial result was a sampling error.

7. NSF/ANSI Certification Standards Decoder

When shopping for a water filter, look for these independent certifications. They verify that the filter actually removes what it claims to:

Standard	What It Covers	Key Contaminants
NSF/ANSI 53	Health effects	Lead, cysts, VOCs, PFAS
NSF/ANSI 58	Reverse osmosis	TDS, lead, arsenic, PFAS
NSF/ANSI 401	Emerging compounds	Pharmaceuticals, pesticides
NSF P473	PFAS (legacy)	Now folded into 53 and 58

> **Critical Detail**
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> Certification is contaminant-by-contaminant. A filter certified to NSF 53 for lead is NOT automatically certified for PFAS. Always check the product's Performance Data Sheet to confirm the specific contaminants it has been tested and certified to reduce.

8. Questions to Ask Your Water Pro

When hiring a water testing or filtration professional, ask these questions:

1. Is the testing lab you use ELAP- or NELAP-accredited?

2. What test methods do you use for PFAS? (Look for EPA Method 533 or 537.1.)
3. Do you hold WQA (Water Quality Association) certification?
4. Is the filtration system you recommend certified to NSF/ANSI 53 or 58 for the specific contaminants found in my water?
5. Will you provide a written report explaining each result and your treatment recommendation?
6. What is the total installed cost, including equipment, labor, and ongoing filter replacements?
7. How often do filters need to be replaced, and what does that cost annually?
8. Do you offer a warranty on the installation and the equipment?
9. Can you provide references from homeowners with similar water quality issues?
10. Will you re-test after installation to confirm the system is working?

> **Why WQA Certification Matters**
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> WQA-certified professionals have passed specialized exams in water treatment science. They understand how different contaminants interact, which treatment technologies work for which problems, and how to size systems correctly. A WQA credential is the water industry's equivalent of a board certification.

Ready to find out what’s in your water?

WellWaterTrust matches you with a vetted, ELAP-certified testing lab or WQA-credentialed filtration installer near you. One request, one matched pro, one free quote.

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Free for homeowners. No obligation.