



SACRED SAMPLING SOLUTIONS

CERTIFIED NYS ELAP LABORATORY

The Whole-Home Safety Check

What's actually worth testing in your home's
water, air, and surfaces — and why.

A free guide from Sacred Sampling Solutions

General education — not medical or legal advice. sacredsamplingsolutions.com

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Your home inspection was visual. This isn't.

If your water looks clear, your air smells fine, and your walls look solid, it's easy to assume everything is safe. But the contaminants that actually affect your family's health are almost all **invisible, odorless, and tasteless** at the levels that matter. Lead doesn't change the color of water. Radon has no smell. Asbestos looks like ordinary building material until it's disturbed.

A home inspector reports on what they can see and operate. A public water utility tests the water when it *leaves the treatment plant* — not what comes out of your faucet after traveling through the pipes in your street and your walls. And a private well gets no report at all. The only way to know what's really in your home is to measure it.

This guide walks through the three places worth checking — your **water**, your **air**, and your **surfaces & materials** — with plain-language explanations of what each contaminant is, why it matters, the health-based limit to compare against, and when it's worth testing. Use the checkboxes to build your own plan.

How to use this guide

Don't try to test everything at once. Skim all three parts, check the boxes next to anything that applies to your home, and start with the items marked most relevant to your situation — an older home, a private well, a new baby, or a renovation. The testing schedule near the end turns your checked boxes into a plan you can actually keep.

Part 1 · Water

What comes out of your tap

Where your water comes from decides what's most likely in it. On **city water**, your biggest unknowns are lead and copper from your own plumbing, disinfection byproducts, and PFAS. On **well water**, it's bacteria, nitrate, arsenic, and whatever the local geology adds — and no one is testing it but you.

TEST FOR	WHY IT MATTERS	WHEN TO TEST
☐ Lead	There is no safe level of lead for children. It rarely comes from the source — it dissolves from your home's own pipes, solder, and brass fixtures, so a utility test can't tell you what's at your tap. EPA action level 15 ppb (dropping to 10); the health goal is zero.	Every home once — priority if built before 1986, or anyone pregnant / young children.
☐ PFAS 'forever chemicals'	Man-made chemicals that don't break down; a 2023 USGS study found them in ~45% of U.S. tap water. The 2024 EPA limits for PFOA and PFOS are just 4 parts per trillion. Linked to immune, cholesterol, and cancer effects.	Once for any home; sooner near airports, military bases, or industry.
☐ Bacteria — coliform & E. coli	Total coliform signals something has entered the water that shouldn't have. E. coli specifically means fecal contamination — unsafe to drink until fixed.	Wells: every year. City water: after any pressure loss or plumbing work.
☐ Nitrate	From fertilizer and septic systems. The EPA limit of 10 mg/L exists specifically to protect infants under six months from 'blue-baby syndrome.' Groundwater can take decades to recover.	Wells yearly — essential if anyone is pregnant or there's an infant.
☐ Arsenic	A naturally occurring metal that affects an estimated 2 million U.S. wells. Completely tasteless and odorless; long-term exposure is linked to several cancers. EPA limit 10 ppb.	Any private well — once, then every 3–5 years.
☐ Copper & other metals	Copper and chromium leach from plumbing; iron and manganese affect health and aesthetics. Reported together on a metals panel by ICP-MS.	With any lead / metals test, especially older or corrosive plumbing.
☐ VOCs	Volatile organic compounds — solvents and fuel components like benzene and TCE — can reach groundwater near gas stations, dry cleaners, and industrial sites.	Once if you're near those sources, or after major plumbing work.

City vs. well, in one line. On city water, rely on your utility's annual Consumer Confidence Report for the source, but test your own tap once for lead, PFAS, and disinfection byproducts. On a well, you are the water utility — the schedule near the end of this guide is built for you.

Part 2 · Air

What you breathe indoors

Most people spend around 90% of their time indoors, where some pollutants concentrate far above outdoor levels. These are measured with passive badges or canisters you expose for a set period and mail to a lab — each compound named and quantified, not reduced to a single vague ‘air quality score.’

TEST FOR	WHY IT MATTERS	WHEN TO TEST
☐ Radon	A radioactive gas from the natural decay of uranium in soil; it seeps into homes and is the second-leading cause of lung cancer in the U.S. Invisible and odorless. EPA action level 4 pCi/L.	Every home, once, with a short-term test — especially basements and ground floors.
☐ Formaldehyde & carbonyls	Off-gasses from pressed-wood furniture, cabinetry, laminate flooring, and new carpet — for months to years. No useful odor at the levels that matter, and it rises with heat and humidity.	New builds, renovations, manufactured homes, and nurseries.
☐ VOCs (air)	From paint, adhesives, cleaning products, air fresheners, and new materials. Which compound dominates matters — limonene from a cleaner and benzene from a solvent both raise a ‘TVOC’ number, but only one is a carcinogen.	After renovation, new furniture/flooring, or unexplained headaches or irritation.
☐ Mold	Spores are everywhere; the question is whether counts are elevated versus outdoors and whether a high-risk species is present. Air samples find hidden growth; surface samples identify visible growth.	After any water damage or leak, a musty smell, or unexplained symptoms.
☐ Ammonia & combustion gases	Ammonia (from cleaning, refrigeration, animal areas) irritates below the level you can smell. Nitrogen dioxide (NO ₂) is the marker of indoor combustion from gas cooktops and unvented heaters.	Homes with gas appliances, attached garages, or strong cleaning-product use.

Why a lab badge beats a consumer gadget. A \$50 monitor gives one combined number and can't tell a citrus cleaner from a carcinogen. A lab names each compound — and a named compound points at a source you can actually fix.

Part 3 · Surfaces & materials

What a home inspection can't see

A visual inspection stops at the surface. Confirming what a material actually contains — or what's settled onto it — takes a laboratory. These matter most before you renovate an older home, or before you move into one.

TEST FOR	WHY IT MATTERS	WHEN TO TEST
☐ Asbestos	Added to dozens of building materials from the 1930s to ~1980 — popcorn ceilings, floor tile and mastic, pipe insulation, joint compound. Intact and undisturbed it's low-risk; the hazard begins when you cut, sand, or demo it. There is no safe level of airborne fibers.	Before disturbing suspect materials in a pre-1980 home, and before purchase.
☐ Lead paint & dust	In homes built before 1978, lead-paint dust is the single biggest indoor hazard for a crawling baby. A dust-wipe test measures it against EPA hazard standards (5 µg/ft² on floors).	Pre-1978 homes with young children, or before any renovation that disturbs old paint.
☐ Fentanyl surface residue	Persists on hard surfaces long after a property looks and smells ordinary — no visual or odor cue. A wipe test gives a documented, dated measurement rather than an assumption.	Rental turnover, resale due diligence, and vehicle fleets.
☐ Mold (materials)	After a leak, a clearance test confirms remediation actually worked — that spore counts dropped back to background before the walls are closed up.	After remediation of any significant water damage.

A quick word on lead: paint and water are two *separate* exposure paths. A pre-1978 home can have lead paint *and* lead in its water from different sources — worth checking both if young children live there.

Put it on a schedule

A testing plan you can actually keep

Testing everything once is good; testing the right things on a rhythm is better. Here's a realistic cadence.

If you have a private well

- **Every year:** total coliform, E. coli, nitrate & nitrite, pH, total dissolved solids.
- **Every 3 years:** heavy metals (lead, arsenic, copper, iron/manganese) and VOCs.
- **Once:** PFAS, and radon in water if you're in a radon-prone area.

If you're on city water

- Use your utility's annual report (CCR) for source-water quality.
- **Test your own tap once:** lead & copper (especially pre-1986 homes), PFAS, disinfection byproducts.
- **Re-test** after any CCR violation, plumbing work, or a change in taste, smell, or color.

Air & home

- **Radon:** a short-term test once for every home; re-test after any foundation work.
- **Formaldehyde / VOCs:** after a renovation, new flooring or furniture, or unexplained symptoms.
- **Asbestos / lead:** before disturbing materials in a pre-1980 (asbestos) or pre-1978 (lead) home.

Test now, whatever the schedule says, if...

- You've had a flood, leak, or loss of water pressure (test bacteria + mold).
- New farming, construction, or industry started nearby.
- The taste, smell, or color of your water changes.
- You're preparing a nursery, or someone develops unexplained GI, skin, or respiratory symptoms.

Behind the result

How a lab actually finds this stuff

A real lab result isn't a guess or a color on a strip — it's an instrument reading with a defined detection limit. For metals like lead and arsenic, labs use **ICP-MS**, which can detect a single lead atom among a billion water molecules. For PFAS, VOCs, and pesticides, they use **GC-MS** or **LC-MS/MS**, which separate a mixture and identify each compound by its molecular fingerprint. Bacteria are grown and counted. Detection reaches parts per billion — and for PFAS, parts per *trillion*, roughly one drop in a thousand swimming pools.

What 'certified ELAP' means. An ELAP-accredited lab (Environmental Laboratory Approval Program) is audited by the state for its methods, instruments, and quality control. It's the difference between a number you can act on — or hand to a contractor, landlord, or buyer — and one you can't.

If you only do one thing this year

Run a comprehensive water panel — lead, copper, bacteria, nitrate, and PFAS. Those five catch the contaminants most likely to affect your family's health, from one sample. Add an inexpensive short-term radon test. And if your home predates 1980 and you're about to renovate, test for asbestos *before* the first cut.

Where to go from here

Sacred Sampling Solutions offers mail-in kits for the water, air, and material tests in this guide — collected at home and analyzed by a certified NYS ELAP laboratory, with a documented chain of custody. We're independent: we sell tests, not filters, so there's no incentive to over-report. Not sure where to start? Take the 60-second kit finder, or read the full plain-language guides:

Find your kit: sacredsamplingsolutions.com/quiz

Read the guides: sacredsamplingsolutions.com/learn

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