

Understanding Your Radon Test Results: What St. Louis Homeowners Need to Know

Why Radon Testing Matters in St. Louis

When you buy or sell a home in St. Louis, radon testing often comes up during the inspection period. I have spent years working with homeowners and real estate agents in this region, and one thing I hear all the time is confusion over what the numbers actually mean. A homeowner gets a report back from a radon testing kit, sees a number like 3.2 pCi/L, and has no idea whether that is cause for alarm or just background noise. The truth is, understanding your radon test results requires knowing a few key facts about how radon behaves, what the EPA recommends, and what options you have if the number is high.

Radon gas is a natural radioactive byproduct of uranium decay in soil. It seeps into homes through cracks in the basement floor, gaps around pipes, and other openings. Because St. Louis sits on geology that can produce measurable radon levels, every home in the area should be tested at least once. But a single number from a short-term radon test is just a snapshot. It can be affected by weather, barometric pressure, and whether the windows were open. That is why I always tell clients to look at their radon test results as a starting point, not a final verdict.

How to Read a Radon Test Result

The EPA has set an action level of 4.0 pCi/L. If your [radon test results](#) show a level at or above that threshold, the agency recommends fixing your home. But what about 3.5 pCi/L? Or 2.9 pCi/L? There is no law that says you must act below 4.0, but the EPA also states that any radon level carries some health risk. Lung cancer from prolonged exposure to radon gas is a real concern, and the risk increases with both the concentration and the time you spend breathing it.

When I work with a home buyer in St. Louis, I explain that a radon test result of 2.0 pCi/L is not zero, but it is far lower than the typical level found in many homes that need mitigation. The key is to compare your number to the long-term average, not just a 48-hour reading. Short-term tests are useful for real estate transactions because they give a quick answer, but they can miss seasonal swings. A long-term radon test, lasting 90 days to a year, gives a much better picture of your actual exposure.

The Role of Continuous Radon Monitors

One of the best tools I have seen for getting accurate radon test results is a continuous radon monitor. Unlike a passive radon testing kit that you mail to a lab, a continuous monitor sits in

your home and takes readings every hour or even more frequently. Air Sense Environmental uses these devices for St. Louis home inspections, and the difference in data quality is striking. Instead of one average number, you get a time series that shows when radon levels spike and when they drop. That information is gold for deciding whether you need radon mitigation.

For example, I once helped a family whose short-term radon test results came back at 4.8 pCi/L. They were ready to panic and install a radon fan system immediately. But after placing a continuous monitor for a week, we saw that the high readings only happened late at night when the house was closed up and the basement door was shut. During the day, with normal ventilation, levels dropped below 2.0 pCi/L. That changed the conversation from expensive remediation to simple behavioral changes like improving air circulation. A continuous radon monitor can save you money and unnecessary stress.

What to Do When Radon Test Results Are High

If your radon test results show a level above 4.0 pCi/L, the standard fix is sub-slab depressurization. That involves installing a radon fan and piping system that pulls radon gas from under the basement slab and vents it outside, above the roofline. It is a proven method used by radon mitigation contractors across the country. In St. Louis, many homes with basements benefit from this approach, especially those built on clay soils that trap gas.

But not every high result calls for that level of work. Sometimes the cause is a simple crack in the foundation or a poorly sealed sump pump. A home inspector with radon experience can often identify the entry point and recommend a targeted seal. The cost of sealing a few cracks is much lower than full sub-slab depressurization. That is why I always advise homeowners to get a follow-up test after any repair, to confirm the fix actually lowered the radon level.

Seller Disclosure and Radon

In Missouri, radon disclosure is not mandatory for home sellers, but many real estate agents recommend including radon test results in the seller disclosure anyway. Why? Because it builds trust and avoids surprises. If a buyer tests after closing and finds high radon, they may wonder what the seller knew. By providing a recent test from a reputable company like Air Sense Environmental, you show transparency. Some buyers even ask for a radon contingency in the contract, giving them the right to back out if radon test results exceed a certain level. That is becoming more common in St. Louis real estate transactions.

Long-Term Monitoring vs. One-Time Tests

I have seen families test their home once, get a low number, and never think about radon again. That can be a mistake. Radon levels change with the seasons, with renovations, and even with

changes in how you use your home. If you finish your basement or install a new HVAC system, the pressure dynamics shift. A radon testing kit used five years ago tells you nothing about today. I recommend a long-term radon test every two to three years, or whenever you make major structural changes.

For new construction, radon-resistant construction techniques can help from the start. Builders in St. Louis increasingly install a layer of gravel and a vapor barrier under the slab, along with a vent pipe that can later be connected to a radon fan if needed. That passive system costs very little during construction but saves thousands if radon levels turn out high later. If you are building a home, ask your contractor about including these features.

Practical Advice for Homeowners

Whether you are in the middle of a real estate transaction or just want peace of mind, here are the steps I recommend:

- Start with a short-term radon test from a reliable source. Follow the instructions exactly, keeping windows closed and the home in closed-house conditions.
- If the result is below 2.0 pCi/L, you are in good shape. Test again in a few years.
- If the result is between 2.0 and 4.0 pCi/L, consider a long-term radon test or a continuous radon monitor to get a better picture.
- If the result is 4.0 pCi/L or higher, call a certified radon mitigation professional. Do not try to fix it yourself without proper training.
- After mitigation, retest to confirm the radon level has dropped. A reputable contractor will guarantee their work.

The Bottom Line on Radon Test Results

Radon is a serious health risk, responsible for thousands of lung cancer deaths each year. But it is also a manageable problem. The first step is always testing, and the second is understanding what your radon test results actually mean. Do not ignore a high number, but do not assume the worst either. With the right information and help from professionals who know St. Louis homes, you can make informed decisions about radon mitigation or remediation. Whether you are buying, selling, or just maintaining your home, testing is cheap insurance. And if you ever need a second opinion, companies like Air Sense Environmental with their continuous radon monitors can give you the detailed data you need to move forward with confidence.