

Why You Need a Radon Test St Louis MO Homeowners Should Know the Risks

When I first moved to St. Louis, I thought radon was something you only worried about in basements out east or in the mountain states. My realtor mentioned it once during a home tour, but I brushed it off as a checklist item. It wasn't until a neighbor mentioned his continuous radon monitor that I started paying attention. Radon gas is a serious health risk, and if you own a home in this region, you need to understand what a radon test st louis mo actually tells you.

The geology around St. Louis is full of uranium-bearing granite and shale. As those rocks break down, they release radon gas, which seeps up through the soil and into your home. The EPA estimates that radon causes more than 20,000 lung cancer deaths each year in the United States. It is the second leading cause of lung cancer after smoking. And because the gas is invisible and odorless, you cannot detect it without a proper test.

What a Radon Test Measures

A radon test measures the concentration of radon gas in the air inside your home. Results are reported in Picocuries per liter, or pCi/L. The EPA recommends taking action if your home has an average annual level of 4 pCi/L or higher. But even levels between 2 and 4 pCi/L can pose a health risk, especially over many years of exposure.

The test itself can be a short-term test or a long-term test. A short-term test, often an activated charcoal test, stays in your home for two to seven days. It gives you a quick snapshot, which is useful during a real estate transaction. But because radon levels fluctuate with weather, season, and how you use your home, a short-term test can miss peaks. A long-term test, such as an alpha track detector, stays in place for 90 days to a year. That gives you an average that is much more reliable for understanding your true exposure.

When you search for a [radon test st louis mo](#), you will find both do-it-yourself kits and professional services. The DIY kits are cheap, often under 20 dollars, but they come with limitations. You have to place the device in the right spot, keep windows and doors closed during the test period, and mail the device to a lab. Miss any of those steps and your results may be invalid. Professional services, like those offered by Air Sense Environmental, use a continuous radon monitor that records levels hour by hour. This device can detect spikes and give you a Confidence Interval for the reading, which is a statistical measure of how certain we are that the true average falls within a certain range.

Why Radon Levels Vary So Much in St. Louis

St. Louis is not a uniform radon zone. Some neighborhoods sit on more porous soil that lets gas flow easily. Others have clay or dense fill that traps gas. The condition of your home matters even more. A house with a basement that has cracks in the floor or walls will let in more radon than a well-sealed slab. A crawl space with exposed dirt or gravel can be a major entry point. Even the way you run your HVAC system affects pressure differences that pull radon from the soil into your living space.

I have seen homes on the same street with completely different radon readings. One house had a basement level of 2 pCi/L, while the neighbor's house, built only ten years later, tested at 12 pCi/L. The difference was the foundation: the older house had a solid concrete slab, the newer one had a sub-slab gravel layer that acted like a highway for radon. That is why a single test result from a few blocks away tells you nothing about your own home. You have to test your own house.

How to Test Properly

If you decide to test your home yourself, place the device in the lowest lived-in level of the house. That is usually the basement or a ground-floor room if you have no basement. Do not put it in a crawl space or an unfinished area where you do not spend time. The device should be at least 20 inches from the floor and away from drafts, heat sources, windows, and exterior walls. Keep the house closed up for at least 12 hours before starting the test and during the entire test period. That means no opening windows, running window fans, or using whole-house fans that draw in outside air.

For a short-term test, follow the kit instructions exactly. Most kits require the device to stay in place for 48 to 96 hours. After that, you seal it up and mail it to a lab. You will get a report in a few days. The report will show the average level and sometimes the peak level.

For a longer view, consider a long-term test. Alpha track detectors are the standard for this. They are not affected by humidity or temperature the way some short-term devices are. They are also more accurate for the EPA's action guideline, since that guideline is based on an annual average.

If you want the most reliable data, hire a professional who uses a continuous radon monitor. Air Sense Environmental, for example, sets up a device that logs readings every hour. At the end of the test, you get a detailed report showing the hourly highs and lows, the average, and the Confidence Interval. That kind of data is invaluable if you are trying to decide whether to invest in radon mitigation or if you are in the middle of a real estate transaction and need clear results quickly.

What to Do If Your Test Shows High Radon

If your test comes back at 4 pCi/L or higher, the EPA recommends you take steps to reduce the level. The most common solution is sub-slab depressurization, also known as soil suction. A contractor drills a small hole through the basement floor, digs a pit below the slab, and installs a pipe that runs up to a fan on the outside of the house. The fan creates a vacuum that pulls radon from under the slab and vents it safely above the roofline. This system can reduce indoor radon levels by 99 percent in many homes.

For homes with a crawl space, a similar system can be installed by sealing the crawl space floor with a heavy plastic membrane and venting the area under the membrane. Radon-resistant construction techniques, such as placing a layer of gravel and a vapor barrier under a new slab, can prevent high levels from the start. If you are building a new home in St. Louis, ask your builder about these features. They are inexpensive when added during construction but costly to retrofit later.

It is worth noting that even if your test shows levels below 4 pCi/L, you might still want to consider mitigation. The risk from radon is linear; there is no safe level. The Missouri Department of Health recommends testing every two years, especially after any major renovation that affects the foundation or the HVAC system. Some homeowners test annually just for peace of mind.

Radon in Real Estate Transactions

If you are buying or selling a home in St. Louis, a radon test is almost always part of the inspection period. Buyers have the right to test, and sellers often agree to a radon test as a condition of the contract. The standard is a short-term test placed by a licensed professional or by the buyer using a reliable kit. If the test shows an actionable level, the buyer may ask for a credit or for the seller to install a mitigation system.

This can be a stressful moment in a real estate transaction. I have seen deals fall through because one side did not understand what the test result meant. That is where a professional test with a continuous radon monitor can help. The detailed report shows that the high reading was not a fluke or a one-time spike. It also gives the buyer confidence that the mitigation contractor will have good baseline data to design the right system.

Some sellers try to avoid the issue by saying they will test after the sale. Do not accept that. Test before you close so you know what you are buying. If the level is high, you can negotiate the cost of mitigation into the contract. A typical sub-slab depressurization system in St. Louis costs between 800 and 1500 dollars, depending on the complexity of the installation. That is a small price for reducing a serious health risk.

To sum up the practical steps: test your home, understand the results, and act if the level is high. A radon test st louis mo is not just a piece of paper; it is a tool that tells you whether the air you breathe every day is safe. Whether you use a DIY kit or a professional service, the important thing is to do the test. Your lungs will thank you.

For more information on testing and mitigation, the EPA website has a comprehensive guide, and the Missouri Department of Health offers local resources. But the first step is always the test itself. Do not wait until you hear about a neighbor's high reading. Be proactive. Test your home today.