

Why Radon Testing St Louis Homeowners Should Not Skip

You might not think about the air in your basement very often. But if you live in St. Louis, Missouri, that basement could be slowly filling with a radioactive gas you cannot see, smell, or taste. Radon gas comes from the natural decay of uranium in the soil. It seeps up through the ground, finds the path of least resistance, and enters your home through cracks in the foundation, gaps around pipes, and even through sump pumps. The only way to know if it is inside your home is to measure it. That is where professional radon testing st louis comes in.

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. For nonsmokers, it is the number one cause. The risk is real, and it is local. The geology of the St. Louis area, with its limestone and shale, can produce elevated radon levels. I have tested homes in Creve Coeur, Kirkwood, and the Hill neighborhoods, and the readings vary wildly from one block to the next. Neighbors can have completely different results because of small differences in soil permeability and foundation construction.

What Makes Radon Measurement Tricky

A lot of people grab a radon test kit from the hardware store, leave it out for a few days, and mail it off. Those short-term radon test kits have their place, but they come with serious limitations. They are often passive devices that absorb radon onto charcoal or use an alpha track detector. They can give you a rough number, but they are sensitive to how you place them, how long you leave them, and whether you keep windows and doors closed during the test. If you run the test during a week of heavy rain or high winds, the results can be misleading.

I have seen homeowners get a low result from a test kit, only to find out later that the test was done in July with the windows open. That reading was not representative of the living conditions during the heating season when the house is closed up. A proper radon measurement requires closed-house conditions for at least 12 hours before and during the test. Some kits do not enforce that, and the instructions are easy to ignore.

A better approach, especially if you are serious about radon safety, is to hire a professional who uses a continuous radon monitor. These electronic devices sit in your home and take hourly readings for 48 hours or longer. They record fluctuations, detect tampering, and give a much more reliable average. Many real estate transactions now require a radon test, and most agents and buyers prefer a continuous monitor because it leaves a digital record that is hard to dispute.

Short-Term vs. Long-Term: Which Test Do You Need?

The choice between a short-term radon test and a long-term radon test depends on what you are trying to learn. A short-term test, usually two to seven days, is fine for a real estate transaction. You need a quick answer to close the deal. But for your own peace of mind and health, a long-term test that lasts 90 days to a year gives you a much better picture of your actual exposure. Radon levels can change with the seasons. In the winter, when the house is sealed and the furnace is running, levels often go up. In the summer, with windows open, levels drop. A one-time test in December might scare you, while a test in April might lull you into a false sense of safety.

I once tested a summer home near the Missouri River. The owners used it only from May to September. They did a short-term test in June, got a low reading, and thought they were fine. I suggested a long-term test over the winter when the house was empty and closed up. The long-term result came back at over 8 picocuries per liter, well above the EPA action level of 4. The house had a crawl space with exposed dirt, and the radon was pouring in through the floor. They never would have caught that with a summer test.

What Happens If Your Levels Are High

If your test shows elevated levels, do not panic. Radon mitigation is a well-understood process. The most common method is called soil suction, also known as sub-slab depressurization. A contractor drills a small hole in the basement floor, digs out a pit, and installs a pipe that runs up through the wall to the outside. A radon fan is mounted on the pipe, either in the attic or outside, and it creates a vacuum under the slab. The fan pulls the radon-laden air from beneath the house and vents it safely above the roofline, where it dissipates into the atmosphere. This system can reduce radon levels by 80 to 99 percent in most homes.

Sometimes a simpler fix works. If your home has a crawl space, sealing the crawl space floor with a heavy plastic vapor barrier and ventilating the space can help. A ventilation system that brings in fresh outdoor air and exhausts indoor air can also dilute radon. The right solution depends on the house construction, the soil type, and the radon entry points. That is why a professional assessment after the test is valuable. The test itself is just the first step. The next step is understanding what the numbers mean and what to do about them.

Why Professional Radon Testing St Louis Makes Sense

I have worked with Air Sense Environmental on several projects, and their approach to [radon testing st louis](#) is thorough. They use continuous radon monitors that meet EPA standards. They place the device in the lowest livable level of the home, usually a basement or a first-floor room if there is no basement. They log the time, temperature, and humidity during the test.

After 48 hours, they retrieve the device and download the data. The report includes the average reading, the hourly highs and lows, and a clear statement about whether the level is above or below the EPA action level. They also explain what to do next, whether that means retesting, mitigation, or simply monitoring over time.

One thing I appreciate is that they do not try to sell you a mitigation system immediately. They give you the data and let you decide. Sometimes the best next step is a long-term test to confirm the short-term result. Sometimes it is calling a mitigation contractor. But you cannot make a smart decision without good data.

Common Myths About Radon

I hear a lot of misconceptions. Some people think radon is only a problem in older homes with cracked foundations. Not true. New homes can have high radon levels too. The construction materials and soil underneath the house are the main factors, not the age of the building. I have tested a brand new home in Wentzville that hit 6 picocuries per liter because the builder did not install a radon-resistant barrier under the slab.

Others think that if their neighbor tested low, they can skip testing. Wrong. Radon levels vary from house to house based on foundation type, soil porosity, and even the weather. You cannot rely on someone else's test. The only way to know your own exposure is to test your own home.

Another myth is that radon is only a problem in basements. While basements often have the highest levels because they are closest to the soil, radon can migrate upstairs through air currents and stack effect. If your basement has high levels, the upper floors are probably elevated too, just not as high. Testing the basement gives you the worst-case scenario, but the whole house is affected.

Practical Steps You Can Take Today

- Buy a continuous radon monitor from a reputable company or hire a professional to run a test.
- If you use a test kit, follow the instructions exactly: close all windows and doors for at least 12 hours before and during the test, and keep the device at least 20 inches off the floor away from drafts.
- Test during the heating season if possible, or at least when the house is normally closed up.
- If the result is above 4 picocuries per liter, consider a follow-up long-term test before spending money on mitigation.

- If you are buying or selling a home, make sure the radon test is done by a certified professional using a continuous monitor, and that the results are shared with both parties.

Radon is a serious health risk, but it is also a manageable one. You cannot fix what you do not measure. The cost of a professional test is small compared to the peace of mind and the potential health benefit. And in the St. Louis area, where the geology is favorable to radon, it is not something to ignore.