

Radon Collinsville: What Homeowners in Metro East Illinois Need to Know

If you live in Collinsville or anywhere across Metro East Illinois, you have probably heard about radon gas. Maybe a neighbor mentioned a test kit, or you saw a flyer at the real estate office. But unless you have dug into the details, it is easy to push the topic aside. I have spent years working with radon testing and mitigation, and I can tell you that understanding radon in Collinsville is not just about checking a box. It is about knowing what the gas does, how it moves, and what you can actually do about it.

Radon is a radioactive gas that comes from the natural decay of uranium in soil and rock. It has no color, no smell, and no taste. The only way to know it is there is to test for it. And in the Metro East region, including Belleville, Edwardsville, O'Fallon IL, and Collinsville, the geology can produce elevated levels. The EPA has set an action level of 4 picocuries per liter of air, but even lower levels carry some health risk over long exposure. The primary concern is lung cancer. In fact, radon is the second leading cause of lung cancer in the United States, right behind smoking.

So where does [radon collinsville](#) fit into this picture? It is not a special kind of radon. It is the same gas that shows up in basements and crawl spaces across the country. But the local soil conditions, home construction styles, and seasonal weather patterns in Collinsville create a specific environment where radon can enter a home more easily. That is why I always tell homeowners that a generic approach to radon testing is not enough. You need to consider how your house sits on the ground, what kind of foundation you have, and how your HVAC system interacts with the pressure inside the house.

I once worked with a family in a split-level home near Collinsville. They had tested with a short-term kit and got a result just below the EPA action level. They thought that meant they were fine. But their home had a crawl space with exposed dirt, and the winter months caused a stack effect that pulled radon up into the living areas. A follow-up test with a continuous radon monitor showed spikes that the short-term kit had missed. That is the kind of nuance you do not get from a single test or a generic online article.

How Radon Gets Into Your Home

Radon gas enters a home primarily through the ground. As the gas rises through soil, it can seep through cracks in the foundation, gaps around pipes, sump openings, and even through the pores of hollow-block walls. The pressure inside a typical house is slightly lower than the pressure in the soil around it, especially during colder months when warm air rises and

escapes through the upper levels. That pressure difference acts like a vacuum, pulling radon-laden air through every tiny opening.

In the Metro East area, many homes were built on slab foundations or with basements. Both types can be vulnerable. A slab can develop hairline cracks over time. A basement often has a floor drain or a sump pit that acts as a direct pathway. Even a well-sealed basement can have high radon levels if the soil underneath has significant uranium content. That is why radon testing in Belleville, Edwardsville, O'Fallon IL, and Collinsville should not be a one-time event. Conditions change. Soil moisture shifts. The house settles. A test from five years ago may no longer reflect the current situation.

Testing: The First Step

There are two main ways to test for radon: short-term and long-term. A short-term test uses a charcoal canister or an electret device that sits in the lowest livable area of the home for two to seven days. Long-term tests use a continuous radon monitor or another device that measures for 90 days or more. The EPA recommends a long-term test for the most accurate picture, but a short-term test can give you a quick snapshot, especially if you are buying or selling a home.

In my experience, a single short-term test can be misleading. If you test during a week of heavy rain, the soil pores fill with water and block radon movement, giving you a low reading. If you test during a dry spell with high winds, the house may pressurize differently and pull in more radon. That is why I always advise homeowners to use a continuous radon monitor for at least a few days and to test during the heating season when windows are closed and the stack effect is strongest.

If you are in Collinsville and you want to get a baseline, you can order a test kit from a state-certified lab. The Illinois Emergency Management Agency oversees radon testing requirements in the state. They maintain a list of approved testers and mitigation companies. But even a DIY kit can give you a useful number as long as you follow the instructions exactly. Do not open windows during the test. Do not run fans that exchange indoor air with the outside. And place the detector in the lowest room you use regularly, not in a closet or a rarely used storage area.

When Mitigation Is Needed

If your test comes back at 4 picocuries per liter or above, the EPA says you should take action. That action is radon mitigation. The most common and effective method for homes in the Metro East region is sub-slab depressurization, also called soil suction. This involves drilling a hole through the basement floor or slab, creating a small pit underneath, and installing a pipe that runs up through the house to a radon fan on the exterior or in the attic. The fan creates a

vacuum under the slab, pulling radon-laden soil gas away from the foundation and venting it safely above the roofline.

A properly installed sub-slab depressurization system can reduce radon levels by 80 to 99 percent. But it has to be done right. The fan must be sized correctly for the house. The pipe must be sealed where it passes through the floor. And the system needs a manometer to show that the fan is running and the vacuum is holding. I have seen systems where the fan was installed in a garage and the pipe was not insulated, leading to condensation and freezing in winter. That is why hiring a qualified professional like Air Sense Environmental makes a difference. They have experience with the local soil conditions and know how to design a system that works year-round.

What Radon Collinsville Means for Home Buyers and Sellers

If you are buying a home in Collinsville, radon testing should be part of your inspection contingency. Many buyers assume that a home built after a certain year is safe, but that is not true. Radon levels depend on the soil underneath the house, not the construction date. I have seen new construction homes with elevated radon because the builder did not install a passive system or the gravel layer under the slab was not thick enough to allow gas to escape.

For sellers, a radon test result below the action level can be a selling point. If you have already installed a mitigation system, include that in your disclosure. Buyers in the Metro East area are becoming more aware of radon, and a home with a documented low level and a functioning system can stand out. On the flip side, if a test shows high levels, it is better to address it before listing. A seller who ignores a known issue may face a renegotiation or a lost sale.

I recall a house in O'Fallon IL that sat on the market for months. The listing agent had disclosed a radon test result of 8 picocuries per liter, but the seller did not want to pay for mitigation. Eventually, a buyer came in with an offer that was contingent on a full radon mitigation system. The seller agreed, the system was installed, and the post-mitigation test came back at 1.2. The buyer was happy, and the seller avoided a price drop. That is the kind of outcome that happens when you treat radon as a solvable problem rather than a stigma.

For homeowners who have questions about their specific situation, I recommend reaching out to a company like Air Sense Environmental. They serve the entire Metro East Illinois region, including Belleville, Edwardsville, O'Fallon IL, and Collinsville. They can help you interpret test results, recommend a mitigation strategy, and install a system that meets the standards of the Illinois Emergency Management Agency. They use continuous radon monitors for pre- and post-mitigation testing, and they stand behind their work with a guarantee that the system will bring levels down.

Maintaining Your System

Once a sub-slab depressurization system is installed, it does require a little attention. The radon fan should run continuously. If it stops, radon levels can climb back up within hours. Check the manometer periodically to make sure the pressure difference is within the normal range. If the fluid level drops or the reading changes suddenly, there may be a blockage in the pipe or a fan failure. Some systems have an audible alarm, but many do not, so a visual check every month is a good habit.

Also, make sure the exhaust pipe is clear of debris and that the vent cap is not blocked by snow or leaves. If the pipe runs through an unconditioned attic, check for signs of condensation in winter. In rare cases, the fan may need to be replaced after five to ten years of continuous use. That is a simple job for a professional, but it is not something you want to discover when you are selling the house and need a new test.

Radon is not something that goes away on its own. The gas is always being generated in the soil. But with the right testing and the right mitigation, you can keep your indoor air safe. And that is the whole point. You do not need to live with a health risk that you can measure and control.

If you have not tested your home in the last two years, now is a good time to start. The process is straightforward, the cost is low, and the peace of mind is real. For anyone in the Metro East area, understanding radon collinsville means taking that first step with a test, and then acting on the results. It is not complicated, but it does require attention. And that attention can make a real difference in the long-term health of your family.