

Understanding Radon Levels St Louis County: What West County Homeowners Need to Know

If you own a home in West St. Louis County, you have probably heard about radon. Maybe a neighbor mentioned it during a block party in Chesterfield, or you saw a flyer at the hardware store in Ballwin. The topic comes up often, and for good reason. Radon is a naturally occurring radioactive gas that seeps into homes from the soil below. It is invisible, odorless, and tasteless, but it carries real health risks. The question most homeowners ask is: what does radon levels St Louis County actually look like, and what should I do about it?

I have spent years testing and mitigating radon in homes across this area. From split-level ranches in Wildwood to stately colonials in Town and Country, I have seen the full range of scenarios. The short answer is that many parts of St. Louis County sit atop geology that can produce elevated radon readings. The longer answer involves understanding how your specific home interacts with the soil beneath it, and that is where professional judgment matters more than a generic map.

Why Radon Is a Local Concern

The United States Geological Survey and the EPA have both identified large portions of Missouri as a radon hazard zone. St. Louis County falls squarely within that zone. The underlying bedrock, especially the limestone and shale common in West St. Louis County, can contain trace amounts of uranium. As that uranium decays, it releases radon gas. The gas moves upward through soil pores and can enter your home through cracks in the foundation, gaps around pipes, or the sump pit.

[Radon levels St Louis County](#) homes experience vary block by block. Two houses built side by side can test completely differently. One may show a safe reading of 1.5 picocuries per liter, while the other hits 8.0 or higher. The EPA recommends action at 4.0 picocuries per liter, but the Missouri Department of Health encourages homeowners to consider mitigation even between 2.0 and 4.0. That is not alarmism. That is the reality of living on karst terrain.

Testing: The Only Way to Know

You cannot see radon and you cannot smell it. The only reliable method is a proper radon test. Many homeowners start with a short-term radon test, which typically lasts two to seven days. These are inexpensive and give you a quick snapshot. You can buy a passive radon detector at most hardware stores or order one online. You place it in the lowest livable area of your home, usually the basement or a first-floor room with a concrete slab, and mail it to a lab afterward.

Short-term tests are useful for a preliminary screening, but they have limitations. Radon levels fluctuate with weather, barometric pressure, and even how often you open windows. A single short-term test can miss a spike that happens a week later. For a more accurate picture, I recommend a long-term radon test. These run for 90 days to a full year and capture seasonal variations. The EPA and the Missouri Department of Health both endorse long-term testing as the gold standard for determining annual average exposure.

If you want real-time data, you can also use a continuous radon monitor. These electronic devices sit in your home and log readings hourly. They cost more upfront, but they give you a detailed timeline. I have seen cases where a homeowner tested low in summer and high in winter, and the continuous monitor caught the pattern. That kind of information is invaluable when you are deciding whether to install a mitigation system.

What the Numbers Mean

Radon levels St Louis County homes show a wide spread. In my own work with Air Sense Environmental, I have tested houses in Chesterfield that came in under 2.0, and others less than a mile away that hit 12.0. The geology does not care about neighborhood boundaries. A home built on a limestone ledge may have higher readings than one on deep clay. The age of the house matters too. Older homes often have more cracks in the foundation slab, and the soil beneath them has settled over decades, creating pathways for gas entry.

It is also worth noting that radon does not respect the property line. If your neighbor in Ballwin tested low, that does not guarantee your home is safe. The only way to know is to test your own living space. And if you are buying a home in Wildwood or Town and Country, make a radon test part of your inspection contingency. Sellers are not required to disclose radon results in Missouri, so you need to ask.

Mitigation: Reducing the Risk

If your test comes back high, do not panic. Radon mitigation is well understood and highly effective. The most common system for West St. Louis County homes is sub-slab depressurization. A contractor drills a small hole through the basement floor, creates a suction point under the slab, and runs a pipe with a fan to the outside. The fan runs continuously, pulling radon-laden air from beneath the house and venting it safely above the roofline. This method typically reduces radon levels by 80 to 99 percent.

For homes with crawlspaces, a different approach works better. Crawlspace ventilation involves sealing the crawlspace floor with a heavy vapor barrier and then adding a fan to exhaust the air from under the house. Sometimes a sump pump system can help if

groundwater is contributing to high moisture and radon entry. The right solution depends on your home's foundation type, soil conditions, and the severity of the problem.

I have seen homeowners try to seal cracks with caulk or paint on basement walls. Those efforts rarely bring levels down enough on their own. Radon can enter through invisible gaps you cannot see. Active soil suction, whether sub-slab depressurization or crawlspace ventilation, is the proven method. The upfront cost is modest compared to the health benefit of reducing your family's exposure to a known carcinogen.

Health Implications You Cannot Ignore

Radon is the second leading cause of lung cancer in the United States, after smoking. The EPA estimates that radon causes about 21,000 lung cancer deaths per year. For nonsmokers, it is the number one cause. Those are sobering numbers, and they apply directly to residents of St. Louis County. The Missouri Department of Health has noted that elevated radon levels in homes across the state contribute to this burden.

The risk is cumulative. Living in a home with 8 picocuries per liter for 20 years carries a much higher lifetime risk than living there for 2 years. That is why early testing and mitigation matter. If you have children or elderly family members, they are more vulnerable because their lungs are still developing or their immune systems are weaker. Even a moderate reading of 4.0 over many years increases the odds of lung cancer. Mitigation is an investment in long-term health.

Practical Steps for Homeowners

- Test your home with a short-term radon test first. If the result is above 4.0, proceed to a long-term test or a continuous radon monitor for a full picture.
- If you confirm elevated levels, contact a certified radon mitigation professional. Do not try to design your own system. Improper installation can make the problem worse or create new health hazards.
- Retest after mitigation to confirm the system is working. Most contractors, including those at Air Sense Environmental, include a follow-up test as part of the service.
- Test again every two years or after any major renovation that disturbs the foundation or slab.

Homeowners in Chesterfield, Ballwin, Wildwood, and Town and Country should treat radon testing the same way they treat a furnace inspection or a roof check. It is routine maintenance for the air you breathe. The cost of a test is small, and the peace of mind is considerable.

Final Thoughts from the Field

I have walked through basements in every corner of West St. Louis County, and I can tell you that no home is immune. I have also seen the relief on a homeowner's face when a mitigation system brings their radon levels St Louis County down to a safe range. That moment makes the job worthwhile. Radon is a hidden hazard, but it is one you can manage with the right information and the right help.

If you live in St. Louis County and have not tested your home yet, start there. It is the only way to know what you are dealing with. And if you find that your radon levels St Louis County are elevated, reach out to a professional who understands the local geology and the proven techniques for fixing it. Your health and your family's health depend on the air you breathe every day.