

Why Radon Inspection Home Buyers Should Prioritize Testing Before Closing

The Invisible Risk That Follows You Inside

When you walk through a potential new home, you notice the obvious things: fresh paint, updated fixtures, the smell of a clean basement. But the most serious threat in many St. Louis homes is something you cannot see, smell, or taste. Radon gas is a natural radioactive byproduct of uranium breaking down in soil and rock. It seeps into homes through cracks in the foundation, gaps around pipes, and other radon entry points. Over the long term, breathing elevated radon levels is the second leading cause of lung cancer in the United States, after smoking. That is why radon inspection home buyers are making this test a standard part of their due diligence.

The EPA radon guidelines recommend that any home be tested before a purchase is finalized. If you live in a region with moderate to high radon potential, ignoring that recommendation can mean inheriting a health hazard that costs thousands to fix later. St. Louis sits on a geologic mix that produces pockets of elevated radon. The county-by-county radon map from the EPA shows zones across the metro area where levels frequently exceed the actionable threshold of 4 picocuries per liter. That map alone should make radon testing a conversation starter during any real estate transaction radon discussion.

How the Test Works and What It Tells You

A standard radon test for a home purchase is usually a short-term radon test that runs for 48 to 96 hours. The home is kept in closed-house conditions, meaning windows stay shut and normal airflow is minimized. A small radon detector is placed in the lowest livable area of the house, often the basement. After the test period, the device is sent to a lab, and the result comes back as a number. If that number is 4.0 pCi/L or higher, the EPA recommends radon mitigation.

But there is a catch with short-term tests: radon levels can fluctuate day to day with weather, barometric pressure, and soil saturation. A single short-term reading might catch an unusually high spike or a quiet lull. That is why a growing number of professionals, including Air Sense Environmental, advocate for the use of a continuous radon monitor. This device takes readings every hour and produces an average over the test period. It also catches tampering or power loss, giving buyers more confidence in the result. For [radon inspection home buyers](#) who want certainty before waiving a home inspection contingency, a continuous monitor provides the most trustworthy snapshot.

Where the Inspection Meets the Contingency

The home inspection contingency is the clause in a purchase agreement that lets buyers back out or renegotiate based on what the inspection reveals. Most standard home inspections do not include radon testing. The inspector will look at the structure, the roof, the electrical system, and the plumbing, but they will not place a radon detector unless you specifically request it. That means radon falls entirely on the buyer to arrange, often on a tight timeline. A radon test has to be set up, run for its full duration, and then the results must come back before the contingency deadline expires. Missing that window can leave you stuck with a house that needs a radon mitigation system you did not budget for.

Experienced radon inspection home buyers schedule the test as soon as the offer is accepted. They coordinate with the seller's agent to close the house for the required period and then wait for the lab results. If the reading comes back high, they have a few options: ask the seller to install a radon mitigation system, negotiate a credit to cover the cost, or walk away. In the St. Louis real estate market, where inventory can be tight, many sellers are willing to address radon rather than risk losing the sale.

Mitigation Is Not a Mystery

If you test and find radon levels above the EPA action level, do not panic. Radon mitigation is a well-established trade. A qualified radon system installer will assess the home's foundation, the soil type, and the existing drainage. The most common fix is a sub-slab depressurization system, often called a sump pump radon system. A pipe is run through the basement floor into the gravel layer below, and a small fan creates negative pressure that pulls radon gas from beneath the house and vents it safely above the roofline. This system typically costs between 800 and 2,500 dollars, depending on the complexity of the crawl space or basement radon conditions. That is a fraction of what you would spend on health care or home value loss down the road.

For new construction, radon-resistant construction techniques can be built in from the start. A layer of vapor barrier under the slab, sealed joints, a passive vent stack, and a capped stub for an active fan are all standard in areas with high radon potential. If the home you are buying was built after about 2010 in a zone designated by the radon map, it may already have these features. But you still need to test. Passive systems are not always effective on their own, and the only way to know is to measure.

Short-Term vs. Long-Term: Which One for a Purchase?

Real estate transactions run on deadlines. A short-term radon test fits that window, but a long-term radon test, which runs for 90 days to a year, gives a far more accurate picture of the

annual average. The EPA itself recommends a long-term test after you move in, but that does not help you at the closing table. The practical compromise is this: use a short-term test for the transaction, ideally with a continuous radon monitor, and then plan to do a long-term test during your first year of occupancy. If the long-term test shows a number higher than the short-term one, you will know to revisit mitigation sooner.

Some buyers choose to skip the short-term test altogether and just include a radon contingency in the offer, agreeing to test after closing and then handle mitigation if needed. That approach works, but it can lead to surprises. If you close and then find a level of 12 pCi/L, you are suddenly responsible for the full cost of radon mitigation, plus any disruption to your finished basement. Testing before closing puts the negotiating power in your hands.

Health Effects You Cannot Afford to Ignore

Radon health effects are cumulative and silent. There is no headache, no cough, no immediate signal. The risk comes from years of breathing in radioactive particles that damage lung tissue. The EPA estimates that radon causes about 21,000 lung cancer deaths per year in the United States. For nonsmokers, it is the number one cause of lung cancer. That statistic alone is why radon testing is not a luxury or a box to check. It is a legitimate health screening for the place where you spend the most time: your home.

When Air Sense Environmental goes into a St. Louis home to set up a continuous radon monitor, the technicians often hear the same thing: "I never thought about radon when I bought my first house." That is changing. More buyers are reading radon disclosure forms, asking about basement radon history, and demanding test results before they sign. Sellers are also getting smarter, testing ahead of time so they can either fix the problem or show a clean bill of health. It makes the whole transaction smoother.

Putting It All Together

If you are buying a home in St. Louis, the radon map says you are in a zone where testing is recommended. The EPA radon guidelines say test before you buy. The home inspection contingency is your tool to make it happen. A short-term radon test with a continuous radon monitor gives you a defensible number. If the number is high, radon mitigation is a known fix with a known cost. If the number is low, you have peace of mind that lasts as long as you own the house.

Radon gas does not care about your timeline, your budget, or your excitement about a new home. It moves through soil and into basements every day. A simple test, arranged early in the transaction, turns an invisible risk into a manageable detail. That is what radon inspection home buyers understand: the price of a test is small compared to the cost of not knowing.