

What Radon for Home Buyers Really Means in St. Charles County

Why radon matters when you are buying a home

If you are shopping for a house in St. Charles County, you have probably heard about radon. Maybe a friend mentioned it, or your realtor handed you a pamphlet. But the phrase "radon for home buyers" can feel abstract until you are staring at a test result and wondering whether to walk away or negotiate. I have spent years testing and fixing radon problems in homes across St. Charles, O'Fallon, St. Peters, and Wentzville, and I can tell you this: radon is a real issue here, but it is also one of the most manageable ones you will face in a home purchase. The key is knowing what you are looking at and what your options are.

The EPA estimates that radon causes thousands of lung cancer deaths each year. In Missouri, the state has some of the highest average radon levels in the country, especially in counties with limestone bedrock and porous soil. That is exactly what we have under much of St. Charles County. So when you hear "radon for home buyers," it is not just a checkbox on a disclosure form. It is a practical concern that deserves a straightforward conversation.

How radon gets into a house

Radon is a radioactive gas that comes from the natural breakdown of uranium in soil and rock. It seeps up through the ground and can enter a home through cracks in the foundation, gaps around pipes, sump pumps, or even the pores in concrete block walls. Once inside, it can build up to concentrations that are dangerous over years of exposure. The only way to know the level is to test.

I have been inside crawl spaces and basements where the radon level was well above the EPA action guideline of 4 picocuries per liter. The homeowners had no idea. The gas is invisible and odorless. You cannot taste it or feel it. That is why a home inspection should always include a radon test if you are serious about a property. A standard home inspection does not cover radon unless you specifically ask for it or hire a separate specialist.

Testing options for buyers

When you are in the middle of a home purchase, time is tight. You usually have a few days to a couple of weeks to complete inspections and contingencies. That is where a short-term radon test comes in. These are typically charcoal-based test kits that sit in the lowest livable level of the house for two to seven days. You then mail them to a lab and get results within a few days.

The EPA recommends that short-term tests be conducted with the house in closed conditions, meaning windows and doors stay shut as much as possible, to get a worst-case reading.

A radon test kit from a hardware store can work, but I recommend using a certified tester or at least a kit from a reputable lab. The test cost is small compared to the peace of mind. For a more thorough picture, a long-term radon test runs for 90 days to a year. That is rarely practical during a real estate transaction, but it gives a more accurate average of year-round levels. If you buy the house, you can always follow up with a long-term test later.

Some buyers now use an active radon monitor, which is an electronic device that records radon levels continuously and can show short-term spikes. These are more expensive but give you real-time data. I have used them in homes where the seller had already mitigated but the buyer wanted independent verification. They work well as long as you follow the placement and setup instructions.

Interpreting the results

If the test comes back at 4 pCi/L or higher, the EPA says you should fix the house. But that does not mean the house is unlivable or that you should walk away. It means the house needs a radon mitigation system. And here is the good news: radon mitigation is a proven, reliable technology. It is not experimental or exotic.

The most common method is sub-slab depressurization. A radon vent pipe is installed through the basement floor or slab, connected to a radon fan that runs continuously. The fan creates a vacuum under the slab, pulling soil suction that draws radon away from the house and vents it safely above the roofline. The fan itself is typically a small, quiet unit like a RadonAway or Swan fan, designed to run for years with little maintenance. The pipe can be routed up the outside of the house or inside a garage or closet, depending on the layout. A good installer will hide it as much as possible, but it is a mechanical system and it will be visible somewhere.

The cost of a radon mitigation system in our area usually runs between \$1,200 and \$2,500, depending on the complexity of the foundation and the routing of the vent pipe. That is a fraction of what you might spend on a new roof or HVAC system. In my experience, most sellers will agree to either install the system or credit the buyer for the cost, especially if the radon test was done during the inspection period. The key is to have the test done early so you have room to negotiate.

Radon in water: another layer for well homes

If the house you are buying uses well water, you need to think about radon in water as well. Radon can dissolve into groundwater and then release into the air when you shower, wash dishes, or run a washing machine. The Missouri Department of Natural Resources (MoDNR)

and local health departments often provide guidance on well water testing. Radon in water is usually addressed with a granular activated carbon filter or aeration system installed at the point of entry. It is a separate fix from the soil suction system, but both can be done together.

Indoor air quality is a bigger picture than just radon, but radon is the most serious single contaminant you are likely to encounter in a home. Moisture, mold, and VOCs are also important, but radon is the one that can cause cancer after years of exposure. That is why I always tell buyers to take it seriously, but not to panic.

What to ask your home inspector or radon tester

When you schedule a radon test, ask the tester whether they follow the EPA protocol for short-term testing. Ask if they provide a written report that includes the lab analysis and recommendations. If the test comes back high, ask for a quote on a mitigation system before you go back to the seller. You want to be armed with a dollar figure, not just a scary number.

I have seen buyers lose a house they loved because they did not understand radon and let fear drive the decision. I have also seen buyers successfully negotiate a credit and then install a mitigation system themselves after closing. The difference was knowledge. That is what "[radon for home buyers](#)" really boils down to: knowing what you are dealing with, knowing what it costs to fix, and knowing that it is rarely a dealbreaker.

If you are buying in St. Charles County, do not skip the test. It costs a few hundred dollars for a professional short-term test and can save you thousands in uncertainty. The EPA and the Missouri Department of Natural Resources both recommend testing every home, regardless of whether your neighbor tested low. Radon levels can vary dramatically from one house to the next, even on the same street. I have tested houses side by side where one was at 2 pCi/L and the other at 20 pCi/L. The geology under each slab is different, and the construction details matter.

Long-term thinking for new homeowners

Once you close on the house, consider running a long-term radon test during your first year. That will give you a true annual average. If it is still above 4, you can proceed with home radon reduction work. If it is below, you can relax. Either way, you have taken control of your indoor air quality. Radon mitigation systems are reliable, and the fans from RadonAway and Swan are built to last. Some of them have warranties pushing ten years. Replacement fans are easy to find and simple to swap out.

The bottom line is that radon is not a mystery. It is a measurable, fixable problem. When you understand "radon for home buyers" as a practical step in the home buying process, it stops

being scary and starts being just another item on your due diligence list. Test early, get a clear answer, and make an informed decision. That is the whole game.