

# When to Take a Radon Alarm Seriously: What Every Homeowner Should Know

If you own a home in St. Louis, you have likely heard about radon. It is a radioactive gas that seeps up from the ground through cracks and gaps in a foundation. The EPA recommends that every home be tested for radon, and many homeowners in our area have installed a radon mitigation system to keep indoor levels safe. But what happens after that system is in place? How do you know it is still working properly? That is where understanding a radon alarm becomes important.

A radon alarm is not the same thing as a smoke detector or a carbon monoxide alarm. It does not go off with a loud noise when something burns or when a gas leak happens. Instead, a radon alarm is typically a continuous radon monitor that sits in your living space and measures radon levels over time. It gives you a reading, often in picocuries per liter, and alerts you if that number climbs above the EPA action level of 4 pCi/L. Many newer monitors also send notifications to your phone. If you see that alert, it means your radon level has risen and you need to investigate why.

## Why Your Radon Mitigation System Might Not Be Working

Most homes in St. Louis that have a radon problem rely on a sub-slab depressurization system. This involves a radon fan that creates suction under the concrete slab, pulling radon gas from beneath the house and venting it through a radon vent pipe to the outside, above the roofline. When everything is sealed and the fan runs continuously, the system keeps indoor radon levels low. But these systems require radon mitigation system maintenance. Fans wear out. Pipes get blocked. Cracks can open up in the foundation that were not there before.

I have seen cases where a homeowner assumed their system was fine because they could hear the fan running. But when a radon test kit or a continuous radon monitor showed elevated levels, we discovered that the radon fan had a cracked impeller. It was spinning but not moving enough air. That is a classic example of why a [radon alarm](#) is so valuable. It gives you a real-time check on the system performance, not just a guess based on sound.

## How a Radon Alarm Fits Into Your Home Radon Test Routine

The EPA recommends a home radon test every two years, and also after any major renovations or changes to the foundation. A short-term radon test kit, which you mail to a lab, gives you a snapshot of radon levels over a few days. That is a good baseline. But a continuous radon monitor, which is essentially a radon alarm, gives you ongoing data. It can show you daily fluctuations, seasonal changes, and sudden spikes that a single test might miss.

For example, if you have a radon mitigation system and the power goes out for a day, the fan stops. The radon level in the home can rise within hours. A continuous monitor will catch that. A radon test kit you set out once a year might not capture that event at all. So the alarm function is not just about scaring you. It is about giving you awareness that something in your system has changed and needs attention.

## **Common Causes for a Rising Radon Level After Installation**

If your radon alarm goes off or shows a rising trend, do not panic. Start with a simple check: is the system still running? Go to the radon vent pipe outside and listen for the fan. If it is silent, you may need a fan replacement. That is one of the most common repairs we perform. Fans have a lifespan, and in a dusty basement environment they can fail sooner than expected.

Another possibility is that a radon entry point has opened up. Maybe you added a new sump pump or ran a new drain line through the slab and did not seal around it. Maybe the soil has settled and created a gap under the foundation. Crack sealing is often part of the original installation, but it can degrade over time. A radon inspection can identify these new pathways and help you decide whether sealing them is enough or if the system needs adjustment.

Weather can also play a role. Heavy rain can saturate the soil and temporarily reduce soil suction effectiveness. Barometric pressure changes can pull more radon into the house. A good continuous radon monitor will show these patterns. If the level stays high for more than a week, it is time to call a professional. Air Sense Environmental has seen many St. Louis homes where a simple fan replacement or a crack seal brought levels back down within days.

## **Radon Mitigation System Maintenance: What You Can Do Yourself**

Some tasks are straightforward. Keep the area around the radon fan clear of debris. Make sure the radon vent pipe is not blocked by leaves or snow. Check that the fan is running by listening or by feeling for vibration on the pipe. If you have a continuous radon monitor, note the baseline reading when the system is working and watch for changes.

But there are limits to DIY. If the fan is making strange noises, or if the reading on your radon alarm stays high despite the fan running, do not assume the system is fine just because it sounds like it is working. The motor could be failing. The impeller could be damaged. The soil suction pipe could be clogged with debris or water. These issues require someone who understands radon mitigation system mechanics.

Air Sense Environmental specializes in radon system repair, fan replacement and inspection for existing St. Louis radon mitigation systems. We do not install new systems. We fix the ones that are already there. That is a different skill set from a general contractor or an HVAC person. A radon system has to maintain a specific negative pressure under the slab. If the fan is

undersized or the pipe has a leak, the system may not pull enough radon out to keep the house safe.

## **Radon-Resistant Construction and Older Homes**

Newer homes built with radon-resistant construction have a layer of gravel, a vapor barrier, and a sealed sump under the slab. That makes retrofitting a system easier. But many St. Louis homes were built before radon was a known concern. Their foundations have more cracks, more pipe penetrations, and more opportunities for radon entry. For those homes, a properly designed sub-slab depressurization system is the most effective solution. And once it is installed, a radon alarm becomes the homeowner's best tool for making sure it stays that way.

I have worked on homes where the system was installed ten years ago and never checked. The fan was still running, but the radon level was back up to 6 pCi/L because the original sealant had dried out and cracked. A continuous radon monitor would have alerted the owner months earlier. That is the value of having an active alarm rather than a passive test every two years.

## **What a Radon Alarm Can and Cannot Tell You**

A radon alarm tells you the current radon level in that room. It does not tell you where the radon is coming from. It does not diagnose a failing fan or a broken pipe. It gives you a symptom, not a cause. If the level is high, you need to follow up with more investigation. That might mean a radon inspection by a professional who can test the pressure under the slab, check the fan performance, and inspect the vent pipe for blockages.

Some homeowners ask if they can just buy a radon alarm and skip the professional inspection. The answer is no. The alarm is a monitoring tool, not a repair tool. It can save you from months of exposure to high levels, but it cannot fix the system. Think of it like a smoke detector. It alerts you to a fire, but you still need to put out the fire and fix the wiring. The same logic applies to radon.

## **Final Thoughts on Staying Safe**

If you already have a radon mitigation system in your St. Louis home, consider adding a continuous radon monitor if you do not already have one. It is a small investment that gives you peace of mind. And if your radon alarm has ever gone off and you ignored it because you thought it was a false alarm, do not make that mistake again. The system might be trying to tell you something important. A quick check or a call to a specialist can confirm whether everything is working as it should.

Radon is a serious health concern. It is the second leading cause of lung cancer after smoking. But it is also a problem that can be managed with the right equipment and regular attention. A

radon alarm, combined with periodic radon test kit use and professional radon mitigation system maintenance, keeps your family safe and your home healthy.