

Radon Levels in PA Homes Spark New Health Advisory for Homeowners

A fresh examination of radon levels in PA homes has prompted renewed calls for testing and mitigation across the state. The findings, drawn from a broad sampling of residential properties, indicate that a significant portion of Pennsylvania households may be exposed to radon concentrations above the recommended threshold. This announcement comes as state health officials and independent researchers alike underscore the importance of routine radon measurement in both new and older housing stock.

What the Data Shows

Radon is a naturally occurring radioactive gas that seeps into buildings from the ground. It is odorless, colorless, and tasteless, making detection impossible without specialized equipment. The latest analysis of radon levels in PA homes reveals that roughly two out of five tested residences show readings at or above the action level set by the U.S. Environmental Protection Agency. That action level is 4 picocuries per liter of air. Readings above that mark are considered hazardous and warrant corrective measures.

The survey covered a range of housing types, from single-family detached homes to townhouses and apartment units in both urban and rural settings. Testing was conducted over a full year to account for seasonal variation, as radon concentrations can fluctuate with weather and changes in home ventilation. The data shows that the highest readings tend to cluster in the central and eastern regions of the state, though no area is entirely free of risk.

Why Pennsylvania Is at Higher Risk

Pennsylvania sits atop several geological formations that are rich in uranium, the source material for radon. The state is part of a larger radon-prone zone extending through the Appalachian region. Because of this underlying geology, [radon levels in PA homes](#) have historically been among the highest in the country. A 2020 report from the Pennsylvania Department of Environmental Protection ranked the state as having one of the most serious radon problems in the nation.

Homes built directly on bedrock or with basements that penetrate the soil are particularly vulnerable. Cracks in foundations, gaps around pipes, and even sump pumps can create entry points for the gas. Once inside, radon can accumulate to harmful levels, especially in lower floors where ventilation is limited.

Health Implications of Prolonged Exposure

Long-term exposure to elevated radon is the second leading cause of lung cancer in the United States, after smoking. The EPA estimates that radon is responsible for about 21,000 lung cancer deaths annually. For nonsmokers, the risk is still substantial, though lower than for smokers. The combination of smoking and high radon exposure multiplies the danger significantly.

Health experts point out that symptoms of radon exposure do not appear immediately. The damage accumulates over years, which makes early detection and mitigation essential. The new data on radon levels in PA homes serves as a reminder that the risk is ongoing and that the window for preventive action is wide open.

Testing: The First Step

Testing for radon is straightforward and inexpensive. Short-term test kits, which cost around fifteen to twenty dollars, can be placed in the lowest lived-in level of a home for two to ninety days. After that, the kit is sent to a laboratory for analysis. Long-term tests, which run for more than ninety days, provide a more accurate picture of annual average exposure. Many county health departments and cooperative extension offices offer free or discounted test kits to residents.

The EPA recommends that all homes be tested for radon, regardless of age or location. Retesting every two years is advised, especially after major renovations or changes to heating and cooling systems that can alter air pressure and radon entry rates.

Mitigation Options for Homeowners

If a test reveals elevated radon, mitigation is typically handled by a certified radon mitigation contractor. The most common method is sub-slab depressurization, also known as active soil depressurization. This involves installing a vent pipe and fan system that draws radon from beneath the foundation and exhausts it safely above the roofline. Sealing cracks and openings in the foundation is done in conjunction with the fan system, though sealing alone is not sufficient to reduce radon to safe levels.

Other techniques include increasing ventilation in the basement, installing heat recovery ventilators, or pressurizing the home to prevent radon entry. The cost of mitigation varies widely based on the size and design of the home, the severity of the problem, and the local market for contractor services. Most systems fall in the range of eight hundred to twenty-five hundred dollars.

Key Steps for Homeowners

- Test the home every two years, or after any major structural work.

- Use both short-term and long-term test kits for accuracy.
- Hire a certified radon mitigation professional if levels exceed 4 pCi/L.
- Retest after mitigation to confirm that the system is working.
- Encourage neighbors to test as well, since radon problems often cluster in communities.

Legislative and Community Response

In response to the latest findings, several municipalities are considering ordinances that would require radon testing at the point of home sale. Proponents argue that such measures would protect buyers and force sellers to address known hazards before closing. Opponents counter that mandatory testing could slow real estate transactions and increase costs. No statewide mandate currently exists in Pennsylvania, though a handful of states have adopted disclosure requirements.

Community awareness campaigns have also gained traction. Local libraries, schools, and civic groups have begun hosting informational sessions on radon testing and mitigation. Some radio stations and newspapers have run public service announcements highlighting the new data. The goal is to normalize testing as a routine part of home maintenance, much like checking smoke detectors or changing furnace filters.

Looking Ahead

The release of this latest assessment is expected to spur additional research into the effectiveness of current mitigation strategies and the long-term health outcomes for residents. Researchers are also exploring the relationship between radon levels and newer building materials, energy-efficient construction, and the growing practice of finishing basements into living spaces.

For now, the message from public health officials is clear: test your home, understand the radon levels in PA homes, and take action if needed. The combination of geological risk and housing stock characteristics in Pennsylvania makes this a persistent issue that will not resolve on its own. With testing rates still low compared to other states, there remains a large gap between awareness and action.

As more homeowners become educated about the risks and the simple steps to address them, the hope is that the number of homes with unsafe radon levels will decline. The new data provides both a warning and a roadmap. Acting on it could save lives.