

## Radon

### Radon is a Naturally Occurring Radioactive Gas

Radon is a naturally occurring radioactive gas released from rock, soil, and water due to the natural decay of uranium. While levels in outdoor air pose a relatively low threat to human health, radon can accumulate to dangerous levels inside buildings. Radon is odorless, colorless and tasteless, but an elevated radon level in homes can affect health.

According to the U.S. Surgeon General, exposure to radon is the second leading cause of lung cancer in the United States and the number one cause among non-smokers.

The Environmental Protection Agency (EPA) estimates that radon causes more than 20,000 lung cancer deaths in the country each year. Only smoking causes more lung cancer deaths. Smokers with high radon exposure have an increased risk of lung cancer.

### Radon is Found in Homes All Over the United States

Radon has been found in elevated levels in homes in every state. No area of the country is free from risk. Two homes next to each other can have vastly different radon levels. Just because one home does not have an elevated level of radon does not mean the neighboring home will have a low radon level, as well.

Radon is measured in picocuries per liter of air (pCi/L), a measurement of radioactivity. The only way to know if a home is under the EPA action level of 4 pCi/L is to test. If home radon levels are 4 pCi/L or above, EPA and the Centers for Disease Control and Prevention recommend that the radon be addressed. High levels of radon in homes usually come from the surrounding soil. Radon gas enters through cracks and openings—such as sump pump lids and plumbing features—on the lower levels of the home. Hot spots include basements, first-floor rooms, and garages, but radon can be found anywhere in a home.

### How to Test for Radon

The U.S. Surgeon General recommends that all homes in the U.S. be tested for radon. Testing for radon is easy to do. If a home has a radon problem, steps can be taken to address it.

Testing for radon is simple. It is as easy as opening a package, placing a radon detector in a designated area, and, after a set number of days, sending the detector back to a lab for analysis. The lab will then report the radon test results.



Radon test kits can be ordered online at <https://states.aelabs.com/#/ok>, while supplies last. The kit, return postage, and analysis are provided at no cost to Oklahoma residents.

## How to Correct a Radon Problem

The cost of making repairs to reduce the radon level depends on several factors, including how the home was built. Most homes with elevated radon levels can be addressed for about the same cost as other common home repairs, like painting or having a new hot water heater installed. For a list of certified radon mitigators, contact DEQ at (405) 702-5100.

## New Homes Can be Built with Radon-Resistant Features

Radon-resistant construction methods can be effective in reducing radon entry. When used properly, these simple and cost-effective techniques can help reduce the accumulation of radon gas in homes.

Every new home should be tested after occupancy, even if it was built using radon-resistant construction methods. If radon levels at or above EPA's action level of 4 pCi/L are detected, it is easier and less expensive to reduce radon levels in homes that have been built with radon-resistant construction techniques.

Additional questions about radon can be directed to DEQ's Radiation Management Section at **(405) 702-5100**.