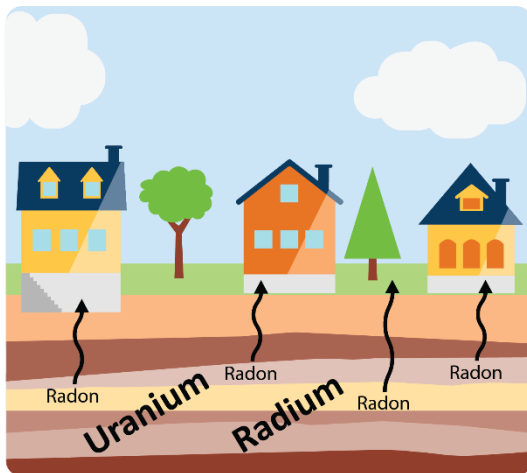


Test your home for radon: Dodge County Environmental Services is distributing test kits

You can obtain a test kit from the Dodge County Environmental Services Department, while supplies last.

Dodge County Environmental Services is located on the 2nd Floor of the Government Services Building located at 721 North Main Street, Mantorville, MN 55955

Have you wondered if radon is a problem in your home? Radon is found in nearly all soils. It is a colorless and odorless radioactive gas that comes from the soil. Levels in outdoor air are usually much lower than indoor air.



Radon is a naturally occurring radioactive soil gas.

It is a problem in houses because radon levels can accumulate indoors. Houses can suck air from the soil and that draws radon gas in through the foundation. The soil around your home is porous so the radon gas is able to move through the dirt and rocks and into the basement through pathways, like cracks in the concrete slab, and accumulate in the house.



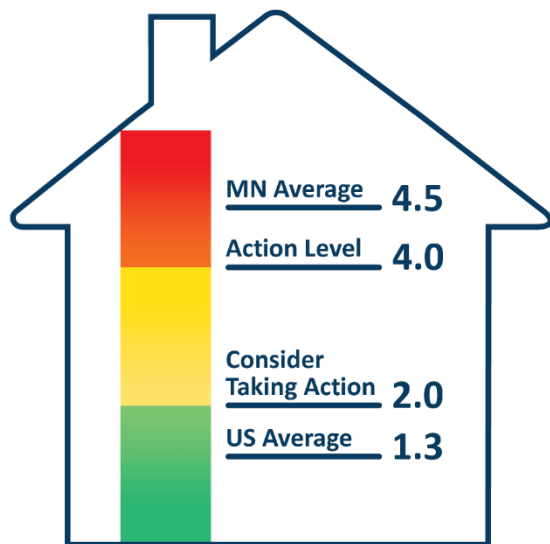
Air moves up and out of buildings, which draws in soil gases, including radon.

Radon is a health concern. When breathed in, the radioactive particles from radon gas can damage the cells that line the lung. Studies have shown that over time breathing radon gas can increase your risk of lung cancer. Radon is the second leading cause of lung cancer and the leading cause in non-smokers. In the United States, it is estimated that radon exposure causes 21,000 lung cancer deaths a year. This lung cancer risk increases for those who smoke.

The Environmental Protection Agency (EPA) recommends taking action to reduce radon in homes that have a radon level at or above 4 picocuries per liter (pCi/L).

In Minnesota, about 40% of radon tests completed between 2010-2018 were elevated (at or above 4.0 pCi/L). The average level was 4.5 pCi/L, which is above the action level. To learn more about radon levels in Minnesota visit the [MDH Radon Data Portal](https://apps.health.state.mn.us/mndata/radon) [https://apps.health.state.mn.us/mndata/radon]. There are elevated levels in all counties, making radon a widespread concern.

Indoor Radon Levels in pCi/L (picocuries per liter)



Minnesota has high radon levels; the statewide average is above the action level of 4 pCi/L.

You can't tell if a home will have high radon by its age, tightness, construction features, or soil type. Homes that are next door to each other can have different indoor radon levels, making a neighbor's test result a poor predictor of radon risk.

Testing is the only way to know if your home has elevated radon levels. Tests should be done in the lowest level of the home that is frequently occupied. There are generally two types of tests to detect radon: a short-term test and a long-term test. The Minnesota Department of Health (MDH) recommends conducting a short-term test first. This is usually completed in only 2 to 7 days. If your short-term test result is greater than 8 pCi/L, then you should conduct one more short-term test. On the other hand, if that first short-term test result is between 2 to 8 pCi/L, consider conducting a long-term test. If the average of the two tests is at or above 4.0 pCi/L, then you should take action to reduce your household radon levels. Mitigation could be considered at levels between 2 and 4 pCi/L. Licensed radon professionals can also test homes.



Examples of Test Devices: short term test kits (top), a continuous radon monitor (bottom left), and a long term test kit (bottom right).

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It's recommended that you test a home that you are buying, for example, as part of a home inspection. While there is no testing requirement in home sales, state law does require radon disclosure and notification. Testing and, if necessary, installing a reduction system can be negotiated between buyers and sellers, just as home inspections and other repairs are dealt with during home sales. A licensed radon measurement professional should conduct the testing during real estate transactions. Any person testing a home they don't own or lease must be licensed by MDH. A list of measurement professionals can be found at [MDH Radon](https://www.health.state.mn.us/communities/environment/air/radon/findprof.html) [https://www.health.state.mn.us/communities/environment/air/radon/findprof.html].

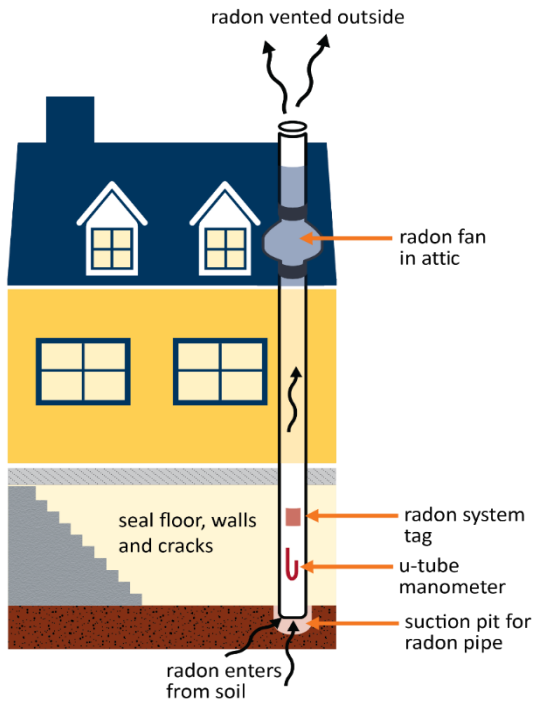


Have a licensed radon measurement professional test a home you're considering purchasing.

If your home's radon level is at or above 4.0 pCi/L, you should hire a radon mitigator to install a system to reduce radon concentrations. Radon reduction typically involves installing a venting pipe and fan to pull the gas from under the home to the outside. A list of licensed mitigators is available at [MDH Radon](https://www.health.state.mn.us/communities/environment/air/radon/mitigation.html) [https://www.health.state.mn.us/communities/environment/air/radon/mitigation.html].

The goal of a radon mitigation system is to reduce the indoor radon levels to below the EPA action level of 4.0 pCi/L, and many systems reduce concentrations below 2.0 pCi/L. Systems must have a MDH mitigation system tag (installed after 9/1/20), and features that show the system is working (an alarm and a performance indicator). After a mitigation system is installed, the home should be re-tested to verify radon reduction.

The PBS series "[Ask This Old House](https://www.thisoldhouse.com/how-to/how-to-install-radon-mitigation)" [https://www.thisoldhouse.com/how-to/how-to-install-radon-mitigation] visited a home in Minneapolis to install a radon mitigation system. The episode shows what to expect from a radon professional and how a system is installed.



A radon mitigation system added to an existing house usually involves a PVC pipe placed through the house, starting under the slab, sump hole, or drain tile (typically on suction point is sufficient). Radon gas is drawn out of the soil with a fan in the attic and expelled through the roof.



In this picture, a PVC pipe is connected to an existing drain tile under the foundation of a home. The performance indicator (blue tube) shows the fan is working.



The radon fan should be located in an unconditioned space, such as the attic or outside. This fan will pull the radon gas from the soil and help expel the gas above the roof line.

When building a home, consider asking your builder to activate the passive system by adding a fan. Since 2009, new homes are required by code to be built with passive radon resistant features. These are somewhat effective at reducing radon, but about 1 in 5 of these newer homes still have radon above the recommended action level. MDH encourages builders to activate the passive radon system by adding a radon fan. In addition, new home buyers should request this fan during construction. In new homes with radon fans, MDH has found very low radon concentrations similar to background levels.

For more information about radon, contact:

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