

Radon

FACT SHEET



Washtenaw County
Health Department

What is radon?

Radon is a tasteless, colorless, and odorless radioactive gas. It is formed by the natural breakdown of uranium found in soil and rock. Radon moves through the ground and enters your home through cracks, sump pump pits, crawl spaces and other holes in the foundation. Your home traps the radon inside, where it can build up to unsafe levels. Radon is also found in outdoor air, but is diluted to such low levels that it's usually not a concern.

Why is radon a health risk?

When you breathe radon gas, tiny radioactive particles are trapped in your lungs, damaging the lung tissue. Over time, this tissue damage can lead to lung cancer. Radon is the leading cause of lung cancer for non-smokers in the United States, and is associated with over 21,000 lung cancer deaths each year. Not everyone who breathes radon will develop lung cancer, but your risk is greatly increased if your home has high levels of radon, and if you smoke or live with someone who smokes.

What is a safe radon level?

Because radon is a radioactive material, there is no "safe" level of radon. The Environmental Protection Agency (EPA) recommends taking action to reduce radon levels above 4.0 pCi/L. To put this into perspective, the average indoor radon level in the United States is 1.3 pCi/L, and the average outdoor radon level is 0.4 pCi/L.

Who should test for radon?

Everyone should test for radon. You can't tell if a house has radon just by looking at it. It doesn't matter if the house is new or old, big or small, or if it has a basement or not. The only way to know your home's radon level is to test. About 40% of homes in Washtenaw County test above the EPA's 4.0 pCi/L radon action level, so residents in this area should be sure to test.

How do I test for radon?

Testing for radon is easy and inexpensive. Begin with a "short-term" radon test, which usually takes a few days. Do-it-yourself testing kits are available, or you can hire a private company.

A short-term test is a good screening device to see if your home may have a radon problem. Keep in mind that radon levels vary due to weather conditions, the time of year, operation of the heating/cooling system, appliance use, opening/closing windows and doors, etc. As a result, one short-term test should not be used to make decisions on whether or not to fix a home.

If your radon level is **over** 4.0pCi/L, test again to be sure, and fix your home if the average of the two tests is above 4.0 pCi/L.

If your level is **under** 4.0 pCi/L, test again if you put an addition on your home, if you install a new heating or cooling system, or if you begin using a lower level of your home (such as creating a play room or office in the basement).

How can radon be reduced?

The radon mitigation method most often used is a vent pipe system and fan, which pulls radon from beneath the house and vents it to the outside. The system also decreases the pressure below the home's foundation, making radon less likely to travel inside. This type of system does not require major changes to your home and is good at lowering the radon level. The system may cost around \$1000.

Use a reliable company. Lists of certified radon mitigation companies are available from these two agencies:

- National Radon Safety Board: www.nrsb.org
- National Environmental Health Association: www.radongas.org

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. For more information contact your health care provider or visit the Centers for Disease Control and Prevention at www.cdc.gov.