

# 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?

The Environmental Protection Agency (EPA) recommends fixing your home if the radon level is 4 pCi/L or more. Because there is no known safe level of exposure to radon, EPA also recommends *considering* fixing your home if radon level is between 2 pCi/L and 4 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 pCi/L radon action level, so residents in this area should be sure to test.

**For more information, visit:  
[www.washtenaw.org/radon](http://www.washtenaw.org/radon)**

### How do I test for radon?

Testing for radon is easy and inexpensive. Start with a "short-term" radon test. Use a do-it-yourself test kit, which will have results available in several days to a couple of weeks. If you need results quickly (like when purchasing a home) consider hiring a private testing company.

A short-term test is a good screening device to see if your home may have a radon problem. Radon levels vary due to weather, time of year, 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 the radon level is **over** 4 pCi/L, test again to be sure, and fix your home if the average of the two tests is above 4 pCi/L. Longer term tests (90 days to a year) are a good option if initial short-term results are borderline.

If the radon level is **under** 4 pCi/L, consider testing again in 5 years. Test sooner if you put an addition on your home, install a new heating or cooling system, or begin using a lower level of your home (like creating a playroom or office in the basement). With current technology, radon levels in most homes can be reduced to 2 pCi/L or below, so you may want to consider fixing your home if the level is between 2 and 4 pCi/L.

### How can radon be reduced?

The most common radon reduction method is a vent pipe system and fan, which pulls radon from under the house and vents it outside. It also lowers the pressure under the foundation, making radon less likely to come inside. This type of system does not require major changes to the home and is generally very good at lowering the radon level. The system may cost around \$1000. Be sure to use a reliable company certified in radon mitigation. Check these sites:

- National Radon Safety Board:  
[www.nrsb.org/find-a-pro](http://www.nrsb.org/find-a-pro)
- National Radon Proficiency Program:  
<https://nrpp.info/pro-search>

*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](http://www.cdc.gov).*