

# Know your risk for radon exposure

May 27 2014, by Mallory Powell

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Kentucky has the "triple crown of lung cancer" - the country's highest rate of smoking and high rates of secondhand smoke exposure and radon exposure. Radon exposure is the second leading cause of lung cancer in the U.S. If you're exposed to radon and tobacco smoke, either through personal use or secondhand smoke, your risk of lung cancer increases tenfold.

Radon is a radioactive soil gas that is colorless, odorless and tasteless. It enters buildings through the foundation and plumbing and becomes trapped in indoor spaces. When inhaled, [radon](#) causes immediate DNA damage before decaying into lead, which stays in the body for decades. Most radon-induced lung cancers are thought to be associated with low to moderate radon concentrations.

The entire state of Kentucky is at high risk for radon exposure, with about 40 percent of homes estimated to have unsafe levels. Here's how you can make sure that you and your loved ones are not exposed to radon:

1. Test your [home](#). Radon is only detectable through testing of indoor spaces, which is easy and free or low-cost. Many local health departments have radon programs providing free radon test kits. Most testing is as easy as setting the testing envelope on a bookshelf for 2 to 3 days. The tests are then mailed, usually free of charge, for processing, and the lab mails or emails the results. Long term tests of 90 days are encouraged if tobacco smoking occurs in the home.

2. The Kentucky State Radon Program can provide contact information for your local health department's radon coordinator, and offers free radon test kits. Visit [chfs.ky.gov/dph/info/phps/radongas.htm](https://chfs.ky.gov/dph/info/phps/radongas.htm) or call (502) 564-4856. Radon test kits can also be purchased at home improvement stores for \$15-\$25.
3. Mitigate your home if [radon levels](#) are unsafe. If a building has unsafe levels of radon exposure, the radon can be mitigated from the soil by a certified mitigation specialist. The mitigation process, however, can be expensive, ranging from \$1,200 to \$2,500 depending on the size of the home. Certified radon mitigation professionals can be found at [ky-radon.info/KY\\_nehalist.html](https://ky-radon.info/KY_nehalist.html).
4. Prevent radon exposure in new home construction. Prevent radon exposure before it starts by adding a Radon Resistant New Construction (RRNC) passive system during home construction. This system can be activated by a certified mitigator if high radon levels are found in the home. RRNC costs approximately \$600-\$800 for a single family home, compared to \$1,200 to \$2,500 for mitigation of an existing home.

Provided by University of Kentucky

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