

# RADON ACTION PLAN

## What do the numbers mean and what should I do?

### What is radon?

Radon is a natural radioactive gas that comes from the decay of uranium in rocks and soil. You cannot see, smell, or taste it, and it causes no immediate symptoms. The only way to know how much radon is in your home is to test for it. Radon can build up indoors, and it is dangerous for everyone to breathe.

### How does radon affect health?

Breathing radon is the second leading cause of lung cancer in the U.S. after tobacco smoke, causing about 21,000 lung cancer deaths each year. To lower your risk of lung cancer, avoid breathing both radon and tobacco smoke. Recently, scientists have found a link between breathing radon and other health conditions like stroke, high blood pressure in women who are pregnant, childhood leukemia, and asthma.

### How is radon measured?

Radon is measured in picocuries per liter of air (pCi/L), which tells us how much of the radioactive gas is in the air we breathe. In general, there are two different methods of testing, short-term testing which is over a period of 2-90 days; and long-term testing over 91-365 days. Short-term testing is the quickest way to determine your home's radon level. Because indoor radon levels can vary based on the weather and how open or closed our homes are, a radon level from a long-term test will be more representative of your home's year-round average than a radon level from a short-term test.

For more information on how to test your home for radon using the Airthings® Corentium Home Radon Detector, watch this video: <https://tinyurl.com/UKBREATHE>.

For additional information on measuring radon in the home, see the *U.S. Environmental Protection Agency's A citizen's guide to radon: A guide to protecting yourself and your family from radon* (linked below).

## What is a safe level of radon?

There is no safe level of radon. To reduce your risk of lung cancer you should always aim for having the lowest radon level possible in your home. **The U.S. Environmental Protection Agency recommends you have your home fixed if the radon level is at or above 4.0 pCi/L.**

## What if my radon level is 4.0 pCi/L or higher?

If your 2-week average radon level is 4.0 pCi/L or higher, the U.S. Environmental Protection Agency recommends you **fix your home**. The higher your 2-week average radon value is, the more certain you can be that your home should be fixed.

However, you can test again using the Airthings® Corentium Home Radon Detector by either:

- Immediately testing again for 2-weeks and averaging the radon levels of the first and follow-up tests.

OR

- Immediately testing again for 3 months.

To complete a follow-up test, check out the Radon Detector Kit from the library, request a 3-week or 3-month check out period depending on the length of follow-up testing, place it in the same testing location and follow the same testing procedure as before. If your follow-up radon level is still 4.0 pCi/L or higher, you should fix your home.



## What if my radon level is between 2.0-3.9 pCi/L?

If your 2-week average radon level is between 2.0 and 3.9 pCi/L, the U.S. Environmental Protection Agency suggests homeowners **consider fixing their home for radon**. If your radon level is between 2.0 pCi/L and 3.9 pCi/L, you can take a follow-up test to be sure. To get a better idea of your year-round average radon level, test again for 3 months using the Airthings® Corentium Home Radon Detector.

To complete a follow-up test, check out the Radon Detector Kit from the library, request a 3-month check out period, and place it in the same testing location and follow the same testing procedure as before. If your follow-up radon level is still between 2.0 and 3.9 pCi/L, consider fixing your home for radon. If it is 4.0 pCi/L or higher, you should fix your home. If the follow-up level is below 2.0 pCi/L, test again every two years.

## What if my radon level is lower than 2.0 pCi/L?

If your 2-week average radon level is below 2.0 pCi/L, the U.S. Environmental Protection Agency recommends **testing again every two years**. When you retest, refer back to this information for guidance.

## How do I get my home fixed for radon?

Radon mitigation is the term used for reducing radon in the home. Lowering radon levels inside your home reduces your risk of lung cancer. **Radon mitigation systems can lower radon levels in homes by up to 99%.**

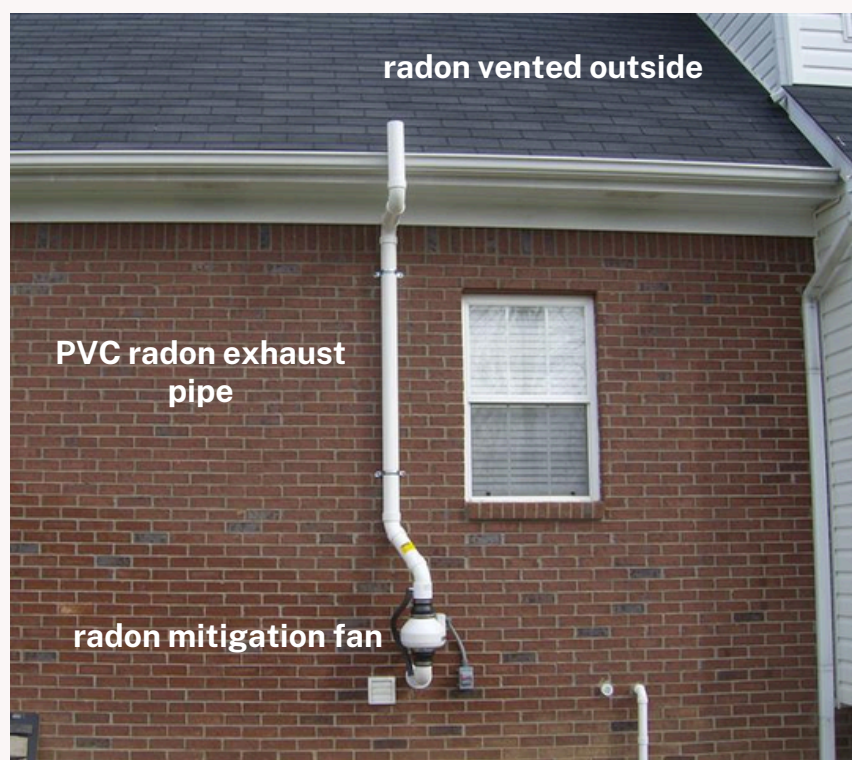
Kentucky law requires radon mitigation systems be installed by a certified radon mitigation professional. A certified professional would install a pipe and fan system to reduce radon inside your home.

For additional information on lowering radon in the home, see the *U.S. Environmental Protection Agency's Consumer's guide to radon reduction: How to fix your home* (linked below).

**To find a certified radon mitigation professional visit:**

<https://nrpp.info/pro-search/> or

<https://nrsb.org/find-a-pro/>



## What can I do about exposure to tobacco smoke?

Make your home and vehicles smoke- and vape-free. Ask people to smoke or vape outside, at least 20 feet away from doors, windows, and vents. Never allow smoking inside the home, cars, trucks, or other vehicles.

## How can I learn more about radon?

- U.S. Environmental Protection Agency (EPA) (2016). A citizen's guide to radon: A guide to protecting yourself and your family from radon: <https://www.epa.gov/radon/citizens-guide-radon-guide-protecting-yourself-and-your-family-radon>
- U.S. Environmental Protection Agency (EPA) (2016). Consumer's guide to radon reduction: How to fix your home: <https://19january2017snapshot.epa.gov/radon/consumers-guide-radon-reduction-how-fix-your-home.html>
- UK's BREATHE website: <https://breathe.uky.edu>
- Radon and Children: <https://breathe.uky.edu/radon/radon-and-children>
- Radon Activity Book (for children and adults): <https://www.uky.edu/breathe/radon/radon-activity-book>
- Radon Comic Book (for children and young adults): <https://www.uky.edu/breathe/radon/radon-comic-book>
- Kentucky Radon Potential Interactive Statewide Map: <https://kygs.maps.arcgis.com/apps/View/index.html?appid=eac52b77783d4f2a92403740aaf8de76>

## How can I learn more about radon and tobacco smoke?

- Quick Facts about Radon and Secondhand Smoke: <https://www.uky.edu/breathe/radon/quick-facts-about-radon>
- Secondhand Smoke: What it Means to You: <https://www.hhs.gov/sites/default/files/secondhand-smoke-consumer.pdf>
- For help to quit using tobacco, call toll-free 1-800-QUIT-NOW or go to <https://smokefree.gov/>

