

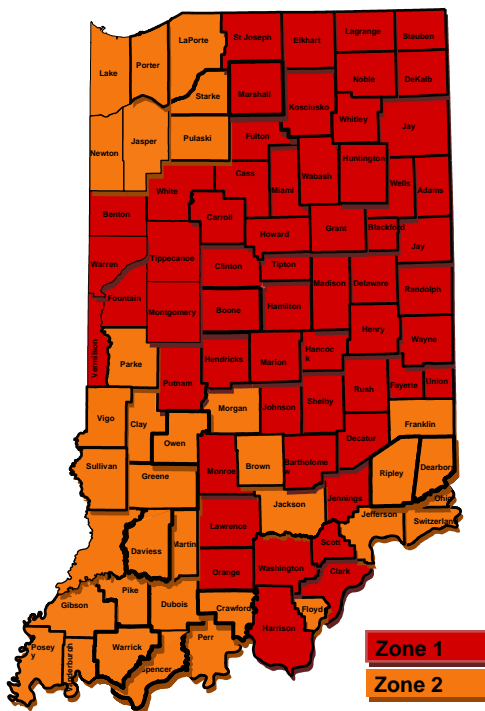
Indiana State Department of Health
Lead & Healthy Homes Division
INDIANA RADON HOTLINE = 1-800-272-9723

RADON FACT SHEET FOR INDIANA

- Radon is the leading cause of lung cancer deaths in the U.S. for people who do not smoke.
- Radon is the second leading cause of lung cancer deaths in the U.S. for people who smoke. The risk of lung cancer from radon exposure is 10-20% greater for smokers as for non-smokers
- Radon is estimated to cause twenty-one thousand (21,000) radon-related deaths from lung cancer each year in the U.S. (EPA estimate).
- Radon is a naturally-occurring, radio-active gas that is found in the soil and it is colorless, odorless and tasteless. It can seep into your home through cracks, sumps, joints, basement drains or other tiny openings in foundations.
- Elevated radon levels can be present in any type of home; old, new, basement, no basement, crawlspace or slab-on-grade. Because changes occur in our homes and environment, it is suggested to test your home for radon every five years.
- Nearly 1 out of every 3 homes in Indiana is estimated to have radon levels (greater than 4.0 picocuries per liter (pCi/L). Testing is inexpensive and easy – it should only take a few minutes of your time. The only way to be sure is to TEST YOUR HOME.

[Maps and tables are not intended to be used to determine if a home in a given area should be tested for radon. Homes with elevated levels of radon have been found in all areas of Indiana].

Indiana – EPA Map of Radon



- Radon is the leading cause of lung cancer deaths in the U.S. for people who DO NOT smoke.
- Radon is estimated to cause over twenty one thousand (21,000) radon-related deaths from lung cancer each year in the U.S. (EPA estimate).
- Red= High Potential for radon in the soil.
- Orange= Moderate Potential for radon in the soil

Test, Fix, Save a Life!

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The average indoor radon level is estimated to be about 1.3 pCi/L, and the average outdoor radon level is estimated to be about 0.4 pCi/L. Most homes today *can* be reduced to 2 picocuries per liter (pCi/L) or below with a radon mitigation system installed in the home. An average cost of radon mitigation system installations in Indiana is around \$800 to \$1200.

Lowering high radon levels requires technical knowledge and special skills. You should use an Indiana-licensed contractor who is trained to fix radon problems. A qualified contractor can study the radon problem in your home and help you pick the right treatment method. See below for “10 Step Guide to the Radon Mitigation Process”.

CONTACTS:

- **1-800-SOS-RADON (1-800-767-7236)**
National Radon Hotline Purchase radon test kits by phone.
- **1-800-55RADON (1-800-557-2366)**
National Radon Helpline Get live help for your radon questions.
- **1-800-426-4791**
Safe Drinking Water Hotline, operated under contract to EPA. For information on testing, treatment, radon in water, and drinking water standards Click here for [Citizen's Guide to Radon by the EPA](#).



RADON MYTHS:

MYTH: Scientists are not sure that radon really is a problem. **FACT:** Although some scientists dispute the precise number of deaths due to radon, all the major health organizations (like the Centers for Disease Control and Prevention, the American Lung Association and the American Medical Association) agree with estimates that radon causes thousands of preventable lung cancer deaths every year. This is especially true among smokers, since the risk to smokers is much greater than to non-smokers.

MYTH: Radon testing is difficult, time-consuming and expensive. **FACT:** Radon testing is easy. You can test your home yourself or hire a qualified radon test company. Either approach takes only a small amount of time and effort.

MYTH: Homes with radon problems can't be fixed. **FACT:** There are simple solutions to radon problems in homes. Hundreds of thousands of homeowners have already fixed radon problems in their homes. Most homes can be fixed for about the same cost as other common home repairs; check with one or more qualified mitigators. Call your Indiana State radon office at 1-800-272-9723 for help in identifying qualified mitigation contractors.

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MYTH: Radon affects only certain kinds of homes. **FACT:** House construction can affect radon levels. However, radon can be a problem in homes of all types: old homes, new homes, drafty homes, insulated homes, homes with basements, and homes without basements. Local geology, construction materials, and how the home was built are among the factors that can affect radon levels in homes.

MYTH: Radon is only a problem in certain parts of the country. **FACT:** High radon levels have been found in every state. Radon problems do vary from area to area, but the only way to know if your radon level is too high; is to test your home.

MYTH: A neighbor's test result is a good indication of whether your home has a problem. **FACT:** It's not. Radon levels can vary greatly from home to home. The only way to know if your home has a radon problem is to test your home.

MYTH: Everyone should test their water for radon. **FACT:** Although radon gets into some homes through water, it is important to first test the air in the home for radon. If your water comes from a public water supply that uses ground water, call your water supplier. If high radon levels are found and the home has a private well, call the Safe Drinking Water Hotline at 1 800-426-4791 for information on testing your water.

MYTH: It's difficult to sell homes where radon problems have been discovered. **FACT:** Where radon problems have been fixed, home sales have not been blocked or frustrated. The added protection is sometimes a good selling point.

MYTH: I've lived in my home for so long, it doesn't make sense to take action now. **FACT:** You will reduce your risk of lung cancer when you reduce radon levels, even if you've lived with a radon problem for a long time.

MYTH: Short-term tests can't be used for making a decision about whether to fix your home. **FACT:** A short-term test, followed by a second short-term test or a long term test can be used to decide whether to fix your home. However, the closer the average of your two short-term tests is to 4 pCi/L, the less certain you can be about whether your year-round average is above or below that level. Keep in mind that radon levels below 4 pCi/L still pose some risk. Radon levels can be reduced in most homes to 2 pCi/L or below.

There is NO safe level of radon in your home. Your individual Risk for lung cancer increases with higher levels of radon gas and increased exposure. The following table estimates your lifetime risk of lung cancer death due to long-term exposure to radon.

Radon Level Annual Average	Lung Cancer Risk For people who Never Smoked	Lung Cancer Risk For people who Smoke
20 pCi/L	36 out of 1,000	260 out of 1,000
10 pCi/L	18 out of 1,000	150 out of 1,000
8 pCi/L	15 out of 1,000	120 out of 1,000
4 pCi/L	7 out of 1,000	62 out of 1,000
2 pCi/L	4 out of 1,000	32 out of 1,000

Test, Fix, Save a Life

10 Step Guide to the Radon Mitigation Process

1. **Homeowner's** Radon Test reveals the home has a radon problem.
2. **Homeowner** contacts a certified radon mitigator to request bids. Indiana has a list of mitigation contractors at: <http://www.in.gov/isdh/24346.htm> .
3. **Contractor** does a walk-through of the home to identify problems then outlines the mitigation system they recommend.
4. **Homeowner** reviews the following questions with each contractor, requesting a proposal, bid and references:
 - A. Will the contractor perform diagnostic tests to determine the suction point location(s) and correct pipe and fan sizing?
 - B. Will a contract be provided?
 - C. Who will do the licensed electrical work?
 - a) Is there a warranty on materials or the workmanship? If yes, how long?
 - b) Will the contractor offer the homeowner training about the radon mitigation system's operation and/or troubleshooting?
 - c) Will the contractor guarantee that radon levels will be brought to below the Environmental Protection Agency's (EPA) recommended action level of 4.0 *pCi/L (picoCuries per Liter)*?
 - d) What will the contractor do if post mitigation radon levels are not below the EPA's recommended action level of 4.0 *pCi/L*?
 - e) Can the Contractor provide a list of references? Be sure to call them.
 - f) Is the quoted price guaranteed?
 - g) Beware of un-licensed installers, super cheap mitigation rates, free fan upgrades or free upgraded materials.
5. **Homeowner** evaluates and compares contractor recommendations, bids and contracts, selecting the contractor and scheduling the work to begin.
6. **Contractor** may perform diagnostic testing to ensure proper size and installation methods are applied. One size doesn't fit all homes.
7. **Contractor** appropriately seals required areas, (*e.g.* large cracks, crawl spaces, sump pits, etc).
8. **Contractor** installs the mitigation system, (*i.e.* suction pit or ventilation, pipe routing, etc). Electrical hook-up completed by a licensed electrician, not a licensed contractor.
9. **Contractor** provides full explanation of system's operation to **Homeowner**.
10. **Homeowner or Contractor** tests the home after the mitigation system has been completed to ensure the system IS reducing radon to the desired level.