"A Radon Guide for Tenants"

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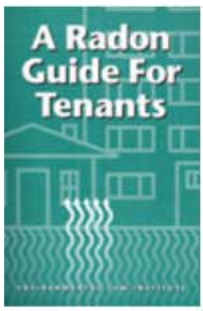

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Editor's Note: *This on-line version of the printed document reflects minor changes in terminology and references to EPA's Indoor Air Quality Information Clearinghouse (IAQ INFO).*

Purpose of This Guide

This guide is for people who rent their apartments or houses. The guide explains what radon is, and how to find out if there is a radon problem in your home. The guide also talks about what you can do if there are high radon levels in your home.

State radon agencies and other organizations may be able to give you additional information or assistance. Some of those offices have other materials that may help you learn more about radon. For example, the United States Environmental Protection Agency (EPA) has developed several booklets, including:

- A Citizen's Guide to Radon;
- Consumer's Guide to Radon Reduction; and
- Home Buyer's and Seller's Guide to Radon.

You can get these and other publications from EPA by calling the National Radon Hotline at 1-800-SOS-RADON [1-800-767-7236]. The Citizen's Guide to Radon is also available in Spanish [El Radón] (call 1-800-SALUD12 or your State Radon Office for a copy).

Did You Know That . . .

- Research shows that radon causes between 7,000 and 30,000 lung cancer deaths each year in the United States.
- Over one-third of all housing units in this country are rental units. Most of these are either single-family houses or apartments located below the third floor of a building.
- People living in rented houses and apartment buildings can find out whether there are high levels of radon gas in their homes. Building owners can fix radon problems by having repairs made to the building.

What is Radon?

Radon is a radioactive gas that is found in soil and rock in all parts of the United States. It is formed by the decay of uranium, which is a natural process. Radon gas is invisible, and it has no odor or taste.

What Types of Buildings Contain Radon?

- Radon may be found in all types of homes and buildings in the United States. If there is radon gas in the ground, it can seep into a building.
- Radon typically moves up from the ground into a home through drains, cracks or other holes in the foundation. Radon then can be trapped inside the home.

How Does Radon Affect Health?

- Studies show that radon is the second leading cause of lung cancer, behind cigarette smoking.
- The higher the radon level indoors, the greater the amount you breathe. Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe. As they break down, these particles release small bursts of energy. This can damage lung tissue.
- Inhaling indoor air containing radon over a period of many years can increase your risk of getting lung cancer. Your chance of getting lung cancer from radon depends on how much radon is in your home and how much time you spend in your home. If you are a smoker or a former smoker, the risk of getting lung cancer from radon is even greater.

Does Your Home Have High Radon Levels?

You cannot see, smell or taste radon. Therefore, **testing** is the only way to determine the radon level in your home.

Has Your Building Been Tested Already?

- If the building you live in has been tested properly for radon, then you probably do not need to test for radon yourself. Before or after you move in to your home (whether you live in a house or apartment building), you can ask the owner if the building has been tested for radon. If the owner tells you that radon testing has been done already, you can ask for a copy of the test results. If you have questions about those results, you can call your state radon office for help, or call the National Radon Helpline at 1-800-557-2366.
- If you do not know whether your building has been tested properly for radon, you can test for radon yourself or ask the owner to test.

EPA Recommends Testing All Homes Below the Third Floor

Because most indoor radon comes from naturally occurring radon in the soil, high indoor levels are more likely to exist below the third floor. This is why EPA recommends testing all homes below the third floor.

In some cases, high radon levels have been found at or above the third floor, due to radon movement through elevators or other air shafts in the building. If your apartment is at or above the third floor and you are concerned about this possibility, you could also decide to test for radon.

Can You Test for Radon Yourself?

- You can test for radon yourself. You can also hire a professional to test your home for radon.
- Testing for radon is easy to do, and takes very little time.
- To test for radon yourself, you must first get a radon test device. You can buy do-it-yourself radon test kits in hardware stores and other similar stores. Some laboratories provide kits through mail order. Make sure you get one from a "qualified" radon service professional or your state's requirements - the test kit will usually say so on the package.
- The price of a radon test kit starts at about ten dollars ($10.00). The price generally includes the cost of having a laboratory analyze the test. More expensive types of radon tests are also available; some of these are do-it-yourself kits, and some are used mainly by professional radon testers.
- If you cannot find a radon test kit in your community, you can order a low cost test kit from the National Radon Hotline by calling 1-800-SOS-RADON [1-800-767-7236].

Different Ways to Test For Radon

The quickest way to test for radon is with a short-term test. Short-term tests remain in your home for 2 days to 90 days, depending on the device. Long-term tests remain in your home for more than 90 days.

Because radon levels tend to vary from day to day and season to season, a long-term test is more likely to tell you your home's year-round average radon level than a short-term test.

To get more information about radon testing methods, call the National Radon Hotline at 1-800-SOS-RADON [1-800-767-7236].

How do you use a radon test kit?

It is important to follow the instructions that come with the kit. When you use any radon test, keep in mind:

- The test kit should be placed in the lowest level of your home that your family uses regularly. For example, if you live in a house and you use the basement, place the test kit there. Otherwise, use the first floor. Put the test kit in a room that is used regularly, but NOT in your kitchen or bathroom.
- Keep the test in place for as long as the instructions say, but for at least 48 hours. Then, re-seal the package and mail it to the laboratory mentioned on the package. Results should be sent to you within a few weeks.
- Keep doors and windows closed as much as possible during the test. Drafts can affect the test results.

What do radon test results mean?

- Radon levels are measured in "picocuries per liter" or "pCi/L." The higher the level, the greater the risk from long-term exposure. EPA recommends that you take action to reduce radon if the radon level in your home is 4 pCi/L or higher. (This "action level" was set at 4 pCi/L partly because it is technically possible to reduce radon to 4 pCi/L in most homes.)
- If you took a short-term test and your results were 4 pCi/L or higher, EPA recommends doing a second test to confirm the results. You can do this follow-up test yourself, or you can contact the owner about the owner doing further testing. The Appendix contains an excerpt from EPA's Citizen's Guide to Radon, which explains more about follow-up testing.
- If you have questions about what your test results mean, contact your state radon office.

What Can You Do if Your Home has High Radon Levels?

Fixing a radon problem usually involves repairs to the building. Therefore, it is generally the building owner - and not the tenant - who is authorized to have this work done. However, if your home has high radon levels, you can take steps to see that the problem is fixed.

- If your radon testing shows high radon levels, you should inform the building owner in writing. In most states, owners are required generally to keep their properties "habitable" - safe and fit for people to live in. You can give the owner a copy of your test results and discuss what steps the owner plans to take to fix the problem. The owner will probably need to do more radon testing in the building. You can ask for copies of those test results.
- If you live in an apartment building, you can share your radon information with other residents. Other residents may wish to test their own units or to discuss the matter further with the owner. (Even if your radon test showed low radon levels, there may be high levels in other parts of the building.)
- If you are concerned that a radon problem in your building is not being fixed, you may want to get more information and advice. For example, your state radon office can provide you and the building owner with more specific information about testing for and fixing radon problems. Local community organizations that work on radon or housing problems may be able to help find ways to fix the radon problem in your building. For legal advice, you can contact your local bar association for help in finding a lawyer. Or, limited income tenants can contact the nearest legal services office to find out if free legal assistance is available.

What Can Building Owners Do About Radon Problems?

As mentioned earlier, rental property owners are usually responsible for keeping their properties in a safe and fit condition. There are steps that rental property owners can take to address the problem of high radon levels.

- High radon levels can be reduced by making repairs to the building. The right system depends on the design of the building and other factors. State radon offices or the Radon Fix It Line (1-800-644-6999) can provide general information on methods for reducing radon. Also, the EPA's Consumer's Guide to Radon Reduction is a quick and easy way to learn more about the different ways to fix radon problems.
- Radon reduction costs between $500 and $2,500 for a single family home. For a larger building, the costs will depend on the size and other characteristics of the building.
- Radon reduction work generally requires a trained professional. To find out which radon reduction system is right for a building, and how much those repairs will cost, building owners should consult with a professional radon contractor.
- Many states have programs set up to train or certify radon professionals. Your state radon office can provide a list of individuals who have completed state or national programs. Or, you can call the Radon Fix It Line for free publications, referrals or how to find a "qualified" radon service professional.

Are Funds Available to Reduce High Radon Levels in Rental Housing?

- There are some federal programs that might be used to help fund radon reduction in homes that are affordable to limited income families. These programs generally give money to local agencies or groups, which then fund the work. Some examples are:

  Community Development Block Grant (CDBG) program - funds rehabilitation and repair of affordable housing. For more information, call the U.S. Department of Housing and Urban Development (HUD) at 202-708-3587.

  "203k" program - funds rehabilitation and repair of single family homes. For more information, call HUD at 202-708-2121.

  Environmental Justice Grants - funds community-based organizations and tribal governments addressing environmental concerns of people of color and low income communities. For more information, call EPA's Office of Environmental Justice at 1-800-962-6215.

- Some states, such as Maryland, have governmental programs that can provide loans for radon reduction work in limited income housing.

- Some community groups are raising funds from private companies and foundations to pay for radon reduction in limited income homes. One of these groups is the Pennsylvania Resources Council - for more information about its work, call 610-353-1555.

To find out more about federal and state programs, or about how community groups have developed local projects to fix radon problems, owners and residents can contact the government agencies and organizations listed in this guide.

Renter's Radon Checklist

- Find out whether the building you live in has been tested for radon.
- If your building has not been tested for radon, ask the building owner to test, or test your own apartment or house.
- Follow the instructions included in your radon test kit. If your short-term test shows radon levels above 4 pCi/L, EPA recommends doing a follow-up test.
- If your test shows radon levels above 4 pCi/L, notify the building owner of the test results in writing. Discuss with the owner the need for additional testing and radon reduction repairs.
- If you have high radon levels or if you need additional information and assistance about radon testing and radon repairs, contact your state radon office, the National Radon Helpline or other organizations that work on radon or housing issues.

> ***If You Smoke . . .***
>
> Smoking combined with exposure to high radon levels is an even more serious health risk. If you smoke or are a former smoker, the presence of radon greatly increases your risk of lung cancer. If you stop smoking and lower your radon levels, you will reduce your lung cancer risk.

For More Information

State Radon Contacts

www.epa.gov/iaq/whereyoulive.html

If you have trouble reaching a radon office in your state, or if you would like information on tribal government radon programs, call the National Radon Helpline at 1-800-557-2366. *[You may call the **Indoor Air Quality Information Clearinghouse [IAQ INFO]** at their toll-free number **(800) 438-4318** to speak to an information specialist, **Monday through Friday, 9:00 a.m. to 5:00 p.m. eastern time.** After hours, you may leave a*

*voice message, or you may make inquiries by **fax [(703) 356-5386]** or via e-mail: iaqinfo@aol.com anytime.]*

Radon Information Hotlines

The following telephone numbers are run by non-governmental, non-profit organizations.

- *To receive general information on radon:*

  National Radon Information Hotline (National Safety Council)
  1-800-SOS-RADON [1-800-767-7236]

- *To ask general questions about radon:*

  National Radon Helpline (National Safety Council)
  1-800-55-RADON [1-800-557-2366]

Non-Governmental Organizations

In addition to the radon information hotlines, you can call the following organizations for information or assistance.

- *To find out more about radon and local radon programs:*

  American Lung Association EXIT Disclaimer
  To contact your local chapter, call 1-800-LUNG-USA

  Environmental Law Institute EXIT Disclaimer
  1616 P Street, N.W., Suite 200
  Washington, D.C. 20036
  202-939-3800

  National Medical Association
  1012 10th Street, N.W.
  Washington, D.C. 20001
  202-347-1895 or 1-800-662-6563

- *To find a housing and community development organization near you that works on affordable housing issues:*

- **National Congress for Community Economic Development**
  1875 Connecticut Ave., N.W.
  Washington, D.C.
  202-234-5009

- *To find a legal services office near you that works on affordable housing issues:*

  National Legal Aid and Defender Association
  1625 K Street, N.W. Suite 800
  Washington, D.C. 20006
  (202) 452-0620

Radon Testing

The following is an excerpt from EPA's Citizen's Guide to Radon:

EPA Recommends the Following Testing Steps:

Step 1

Take a short-term test. If your result is 4 pCi/L. or higher*, take a follow-up test (Step 2) to be sure.

Step 2

Follow up with either a long-term test or a second short-term test:

- For a better understanding of your year-round average radon level, take a long-term test.
- If you need results quickly, take a second short-term test.

The higher your initial short-term test result, the more certain you can be that you should take a short-term rather than a long-term follow up test. If your first short-term test result is several times the action level - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

Step 3

- If you followed up with a long-term test: Fix your home if your long-term test result is 4pCi/L or more*.
- If you followed up with a second short-term test: The higher your short-term results, the more certain you can be that you should fix your home.

Consider fixing your home if the average of your first and second test is 4pCi/L or higher*.

* 0.02 Working Levels (WL) or higher.