Purpose of This Guide

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

Did You Know That . . .

• Radon causes approximately 21,000 lung cancer deaths in the U.S. and approximately 1,200 deaths in Illinois each year.

• One-third of all housing units in Illinois are rental units. Most 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 if they have high radon concentrations in their residences. 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 U.S. and throughout Illinois. 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. Radon gas is in the ground, and it can seep into buildings.

• Radon typically moves from the ground into a home through drains, cracks or other
openings in the foundation due to pressure differentials. Radon then can be trapped inside the home.

How Does Radon Affect Health?

• Studies show radon is the leading cause of lung cancer among non-smokers.

• 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 that can damage the lung tissue.

• Inhaling indoor air containing radon over a period of many years increases your risk of lung cancer. Radon-induced lung cancer risk depends on how much radon is in your home how much time you spend in your home and your family history. 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, you probably do not need to test for radon yourself. Before you sign your lease agreement (whether you live in a house, apartment, or
condominium building), the owner is required to inform you in writing that a radon hazard may exist. If you have questions, call IEMA at 1-800-325-1245.

- If your building has not been tested for radon, you can test for radon yourself using a radon test kit or ask the owner to test by hiring a licensed radon contractor.

**IEMA Recommends Testing All Homes Below the Third Floor**

Because most indoor radon gas comes from naturally occurring radon in the soil, high indoor levels are likely to exist below the third floor. IEMA recommends testing all residences 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 test for radon.

**Can You Test for Radon Yourself?**

- You can test for radon yourself. You can also hire a professional to test your residence for radon.
- Testing for radon is easy to do and takes very little time.
- To test for radon yourself, first obtain 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.
• The price of a radon test kit starts at about $10.00. The price generally includes the cost of laboratory analysis. 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.

• You can find links to websites for low cost test kits at www.radon.illinois.gov.

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 two days to 90 days, with the average test lasting between 2-7 days, depending on the device. Long-term radon tests remain in your residence for more than 90 days.

Because radon levels vary from day to day and season to season, a long-term test provides a home's year-round average radon level.

How do you use a radon test kit?

Follow the instructions that come with the kit. When you use any radon test:

• 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. 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 listed on the package. Results are sent 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 radon level, the greater the risk from long-term exposure. IEMA recommends you take action to reduce radon if the radon level is 4.0 pCi/L or higher.

• If a short-term test is 4.0 pCi/L or higher, IEMA recommends a second test to confirm the results. You can place the follow-up test yourself, or contact the owner about further testing.

**What Can You Do if Your Residence 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 the steps below to see that the problem is fixed.

• If your radon testing shows high radon levels, you should inform the building owner in writing. When you provide the owner a copy of the test results, ask what steps the owner plans to take to address the problem. The owner may need more radon testing to confirm radon concentrations in the building. Ask for copies of all 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 more information and advice. IEMA can provide you and the building owner with specific information about testing and fixing radon problems.

What Can Building Owners Do About Radon Problems?

- There are steps property owners can take to address high radon levels and to reduce their tenants’ risk of radon-induced lung cancer.

- High radon levels can be reduced by making repairs to the building. The right radon reduction system depends on the building design and other factors. IEMA provides information to reduce radon levels.

- Radon reduction costs between $600 and $1,200 for a single family home. For a larger building, the costs will depend on the size and other characteristics of the building.

- Radon reduction requires a trained professional. To find out which radon reduction system is right for a building and the cost of repairs, building owners should consult with a radon contractor licensed by IEMA.

- IEMA has programs to train radon professionals and can provide a list of individuals who are licensed.
Tenant's Radon Checklist

• Check the building you live in. Has it been tested for radon?

• If your building has not been tested for radon, ask the building owner to test or test your own residence.

• Follow instructions included in your radon test kit. If your short-term test shows radon levels above 4.0 pCi/L, IEMA recommends doing a follow-up test.

• If your test shows radon levels above 4.0 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 the IEMA 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 a 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.