



Lung Association Radon Initiatives and Resources

Alexis Gigliello, MPH

Nationwide Manager, Indoor Air Quality

Alexis.Gigliello@Lung.org



Radon and Lung Cancer



Radon and Lung Cancer



Radon and Your Risk for Lung Cancer



Radon is the second leading cause of lung cancer in the United States, behind smoking. Radon contributes to over 21,000 lung cancer deaths each year. 1 in 15 homes across the country have high levels of radon. Radon gas has no color, taste or scent, so the only way to detect it is to test for it.

The Problem: Radon causes lung cancer

Radon is a radioactive gas that forms naturally underground. Radon enters homes and buildings through cracks in the foundation, basement, walls, floors and other openings. Once indoors, radon can become trapped at harmful levels in the air you breathe.

The solution: Reduce radon exposure

Every home, school or other occupied building should be tested for radon. The EPA action level for radon is 4.0 pCi/L. Any home or building testing above this level should hire a professional to install a radon mitigation system.

How does radon cause lung cancer?

As radon gas decays, it creates small byproducts. Once inhaled, these byproducts attach to the lining of your lungs and release tiny radioactive particles that go in the lining of your lungs and reach your DNA. These particles can cause breaks in DNA strands, which can lead to mutations and lung cancer.

Who is at risk for radon-induced lung cancer?

Anyone is at risk for developing lung cancer from long-term radon exposure. Some individuals are at higher risk of harm from radon gas, including:

- Individuals who smoke and are exposed to radon have a 10 times higher risk of lung cancer compared to those who are exposed to radon alone.
- Individuals who have had lung cancer before are at higher risk of getting lung cancer a second time if exposed to risk factors like radon or cigarette smoke.
- Adults living with an underlying disease like COPD may be at higher risk for getting another disease, like lung cancer. This risk is even higher when someone is exposed to risk factors like radon or cigarette smoke.
- Certain occupations are at higher risk for radon exposure including miners, underground tunnel and subway workers, plumbers, construction and water treatment workers.

How to protect yourself

Test your home for radon. Order a do-it-yourself radon test kit for under \$20 from local hardware stores or at [Lung.org/radon-test](https://www.lung.org/radon-test).

Talk to your provider about lung cancer screening. A low-dose CT scan is used to detect lung cancer early, when it is more likely to be treatable. If lung cancer is caught early, the likelihood of surviving 5 years or more improves to 64%.

You may be eligible for insurance coverage of lung cancer screening if you're between the ages of 50-80 with a smoking history of 20 pack years or more (coverage can vary by plan). Screening for lung cancer due to radon exposure without a smoking history is not currently covered by insurance and can cost around \$100 - \$400. Talk with your doctor about lung cancer screening and learn more at [Lung.org/lungcancer](https://www.lung.org/lungcancer).

1-800-LUNGUSA | [Lung.org](https://www.lung.org)

How does radon cause lung cancer?

Radon decay products penetrate through the lining of the lungs and can cause breaks in DNA strands, which can lead to mutation and cancer development.

Who is at risk for radon-related lung cancer?

- Individuals who smoke and are exposed to radon
- Individuals who have had lung cancer before
- Adults living with an underlying lung disease
- Certain occupations: radon professionals!



Addressing Lung Cancer

Prevention

- Avoiding tobacco smoke
- **Radon testing & mitigation**
- Reduce exposure to carcinogens like asbestos
- Education

Detection

- Low-dose CT scans: especially for those who have lived in a **home with chronically high radon levels**

Treatment

- Cancer reduction treatments
- Smoking cessation
- **Radon testing & mitigation**
- Palliative care

Take Action!

When talking about radon, you should also be talking about lung cancer!

Learn more about lung cancer and share lung cancer resources with clients

Encourage clients to learn about lung cancer screening:

- Visit [Lung.org/savedbythescan](https://www.lung.org/savedbythescan)
- Call the Lung HelpLine at **(844) 252-5864**

Talk to your healthcare provider about lung cancer screening

Advocate for regulations that increase access to lung cancer screening




Lung Association Radon Resources and Initiatives



Resources for the Public

Lung.org/radon



Radon Basics

Radon is the second leading cause of lung cancer in the United States. The American Lung Association's Radon Basics course is a free one-hour interactive online learning program designed to help people understand more about radon, a radioactive gas commonly found indoors at dangerous levels.



Radon and Lung Health



Radon and Lung Cancer

Radon is the second leading cause of lung cancer. Although radon exposure causes no immediate symptoms, the long-term threat of lung cancer is very real. Radon can cause lung cancer in anyone, even those who have never smoked. If you also smoke and are exposed to radon, your risk is even higher.

How Does Radon Get Inside?

In nearly all cases, radon gets into homes, schools and other buildings in a few ways:

- Gaps and cracks in the foundation
- Sinks, porches, sills and other openings
- Pipes, sumps, drains, walls and other openings

Is Radon a Problem in My Home?

Any home can have a radon problem. The most new and old homes, well-sealed and drafty homes, homes with or without basements, and town apartments. In fact, more than 1 in 10 homes have elevated levels of radon. Even if your neighbors have low radon levels, yours could still be high. High levels of radon have been found in every state.

Because radon is invisible and odorless, the only way to know if there is a problem in your home or building is by testing the radon level. The American Lung Association, the EPA and the Surgeon General recommend testing ALL homes for radon. There are many low-cost, do-it-yourself radon test kits available at hardware stores, other retail outlets and/or directly from qualified professionals. You can also hire a trained contractor to do the testing for you.

What Can I Do About Radon in My Home?

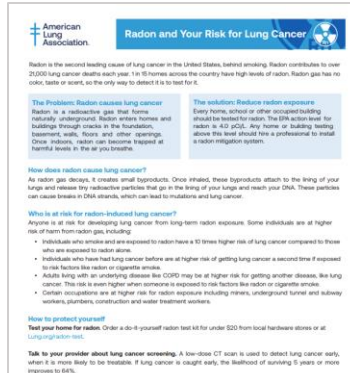
If a radon test shows you have a high level of radon in your home or building (pCi/L or more), take action! Even if radon levels are between .2 and 4 pCi/L, the EPA and the Lung Association agree that radon reduction should be considered.

You can reduce radon levels. The usually involves properly sealing openings between the building and the ground and changing the flow of air gas into your home. Repairs should be completed by a trained or certified contractor. Contact your state program to find a qualified professional in your area.

For More Information:

To learn more about radon and how to protect yourself, or to purchase a test kit, visit the American Lung Association at Lung.org/radon.

1-800-LUNGUSA | Lung.org



Radon and Your Risk for Lung Cancer

Radon is the second leading cause of lung cancer in the United States, behind smoking. Radon contributes to over 20,000 lung cancer deaths each year. In 10 homes across the country have high levels of radon. Radon gas has no color, taste or scent, so the only way to detect it is to test for it.

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- Individuals who have had lung cancer before are at higher risk of getting lung cancer a second time if exposed to radon like radon or cigarette smoke.
- Adults living with an underlying disease like COPD may be at higher risk for getting another disease, like lung cancer. This risk is even higher when someone is exposed to radon factors like radon or cigarette smoke.
- Certain occupations are at higher risk for radon exposure including miners, underground tunnel and subway workers, plumbers, construction and water treatment workers.

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1-800-LUNGUSA | Lung.org

- **Radon Basics:** FREE, online learning module to learn more about radon
- **Radon and Lung Health:** educational video about radon risks, testing and mitigation
- **What is Radon:** educational factsheet about finding and fixing radon problems
- **Radon and Your Risk for Lung Cancer:** handout educating those at high-risk for lung cancer

Resources for Professionals

Advocates & Decision-Makers

- Lung.org/radon-advocates

Healthcare Professionals

- Lung.org/IAQResources

Real Estate Professionals

- Lung.org/radon-real-estate

Schools

- Lung.org/radon-schools

American Lung Association. Are Your Patients Safe from Radon?

What is radon?
Radon is a naturally-occurring invisible, colorless gas that comes from the radioactive breakdown of uranium in soil, rock, and water.

Radon in homes
About 1 in 15 homes in the US have high radon levels.

Radon can enter any home
Radon is drawn in through cracks and gaps in the foundation.

Radon occurs naturally in the soil

1. Uranium decays and creates radium
2. Radium decays and creates radon gas

Children and radon
Children are more susceptible to long-term damage from radon exposure.

Smoking and radon
Individuals who use tobacco and live in homes with elevated radon levels increase their risk of lung cancer about 10 times.

1-800-LUNGUSA | Lung.org/radon

How Radon in Schools May be Putting Kids in Danger

Clean air in schools is an important part of creating a healthy learning environment, especially for children's developing lungs, and radon is no exception. Read about Darrell's experience in getting schools in Indiana tested for radon.

[READ THE BLOG](#)



Guidance for Home Buying & Selling

Request Testing Data	Ask About Mitigation	Test the Home Before Purchase
Sellers should provide buyers with previous testing data.	Discuss any mitigation systems or radon resistant features in the home	A radon test should always be done before purchase.

Tip! A certified radon measurement professionals can conduct a radon test in under 48 hours for around \$200.



Finding Funding to Fix Radon Problems (Webinar)

Learn about federal funding opportunities that can help support efforts to improve indoor air quality, including radon testing

Radon Testing Disparities in States

This series of state reports on testing disparities has been developed to help decisionmakers identify communities most in need of additional attention.

Clean Air School Challenge

[Lung.org/CASC](https://lung.org/CASC)

The **Clean Air School Challenge** meets schools where they are in their IAQ and energy management journeys.

Schools receive support and guidance as they work their way through the 3 program phases: assess, plan, and act.



Scan the QR code to learn more!
Questions? Contact CASC@lung.org

Mini-grant funding available (up to \$9500 per school)!

Non-competitive, no match requirements

Mini-grants can be used for:

- Radon mitigation
- Secondary radon testing
- HVAC maintenance
- Lead or mold assessment & removal
- Other IAQ support!

Radon Test Kit Store

Nationwide

The Lung Association operates a nationwide radon test kit store at Lung.org/radon-test.

- Short-term charcoal test kits: **\$18**
- Long-term Alpha Track Detectors: **\$30**

Through **State Indoor Radon Grants (SIRG)** the Lung Association offers FREE or discounted radon test kits to residents and/or local health departments in select states.

Key Distribution Statistics:

Time Period	# of Kits Sold
July 1, 2023 – June 30, 2024 (FY24)	7,038
July 1, 2024 – June 30, 2025 (FY25)	12,999

Lung Helpline and Tobacco Quitline

Free information and support from lung health experts.



Lung HelpLine

- Staffed with bilingual, licensed healthcare professionals
- Direct to local services like lung cancer screening and tobacco cessation
- Assist with healthcare coverage
- Answer lung health and lung disease questions

Radon Specifics

- Ordering radon tests
- Interpreting test results & recommending action
- Directing to local resources and certified radon professionals
- Finding financial assistance for mitigation

Radon HelpLine Call Statistics:

Time Period	# Radon HelpLine Calls
July 1, 2023 – June 30, 2024	952
July 1, 2024 – June 30, 2025	1,141

Our Vision

A World Free of Lung Disease