

Best Practices for Radon Test Kit Distribution Programs



Overview

Numerous state, local, tribal, and non-profit organizations promote low-cost or free home radon test kits to increase access to home radon testing. However, too many test kits go unused. Identifying and implementing best practices will increase the use of these home radon test kits. The American Lung Association conducted an evaluation of current approaches to consumer-grade, passive radon test kit distribution, practices that increased utilization of radon test kits, and programming support for radon education, testing, and mitigation. From this evaluation, evidence-informed best practices were identified and can be adapted across radon test kit distribution programs.

Five questions informed this evaluation:

1. What approaches are currently being used to distribute radon test kits?
2. What program components increase the likelihood that residents utilize and return radon tests kits?
3. How do organizations track radon test kit distribution, utilization, analysis results, and mitigation?
4. What common practices emerge across radon test kit distribution programs operating at different scales?
5. How can programs follow through with residents to support radon mitigation?

Radon gas is the second leading cause of lung cancer in the United States. Radon is colorless, odorless, and tasteless, but can be present at dangerous levels in homes and buildings. The only way to detect radon is to test for it. Though no exposure to radon has been demonstrated to be safe, the current guidance in the United States recognizes an action level of 4.0 picoCuries per Liter of air (pCi/L), but average levels of exposure in the 2 to 4 pCi/L range should also be considered for mitigation

Methodology

A multi-method evaluation was used to understand radon test kit distribution practices. Using multiple methods provides a deeper, more reliable, and complete understanding. Methods included a literature review, review of published FY20-FY25 Environmental Protection Agency (EPA) State Indoor Radon Grant (SIRG) reports, conversations and interviews with partners, analysis of internal American Lung Association radon test kit distribution utilization, and analysis of findings from a questionnaire of nationwide radon programs.



Literature Review

Seven (7) published studies were identified that focused on community engagement, public health outreach, radon testing interventions, radon test-kit distribution, tracking and evaluation, and radon mitigation following elevated results.

Findings from published literature

- **Use channels that leverage trust + regular contact**
- **Intensive engagement yields increased radon literacy and higher radon test kit completion**
- **Behavioral frameworks & follow-up reminders matter.** Behavioral interventions showed that single brief contacts are less effective than staged, theory-based interventions with follow-up.
- **Low friction logistics** (prepaid mailers, reminders, simple instructions) are vital.

EPA State Indoor Radon Grant (SIRG) Reports

The Lung Association, EPA and other federal, non-profit, and industry partners work together to implement the National Radon Action Plan. States and tribes facilitating SIRG programs carry out radon control, testing, and mitigation activities that align with the goals of this plan. FY20-FY25 SIRG reports were reviewed for successful grantee approaches to radon test kit distribution and effective utilization.

Partner Engagement

The following conversations and interviews provided insight into effective radon test kit distribution programs including:

- Idaho Department of Health and Welfare (Cooper, 2025)
- Masonic Cancer Alliance (Denes-Collar, 2026)
- Texas Tech University (Millerick, 2025)
- University of Wisconsin Health Carbone Cancer Center (LaConte, 2025)
- Vermont Department of Health (Thomson, 2025)
- Wisconsin Department of Health Services (Dawson & Koch, 2025)

Nationwide Questionnaire

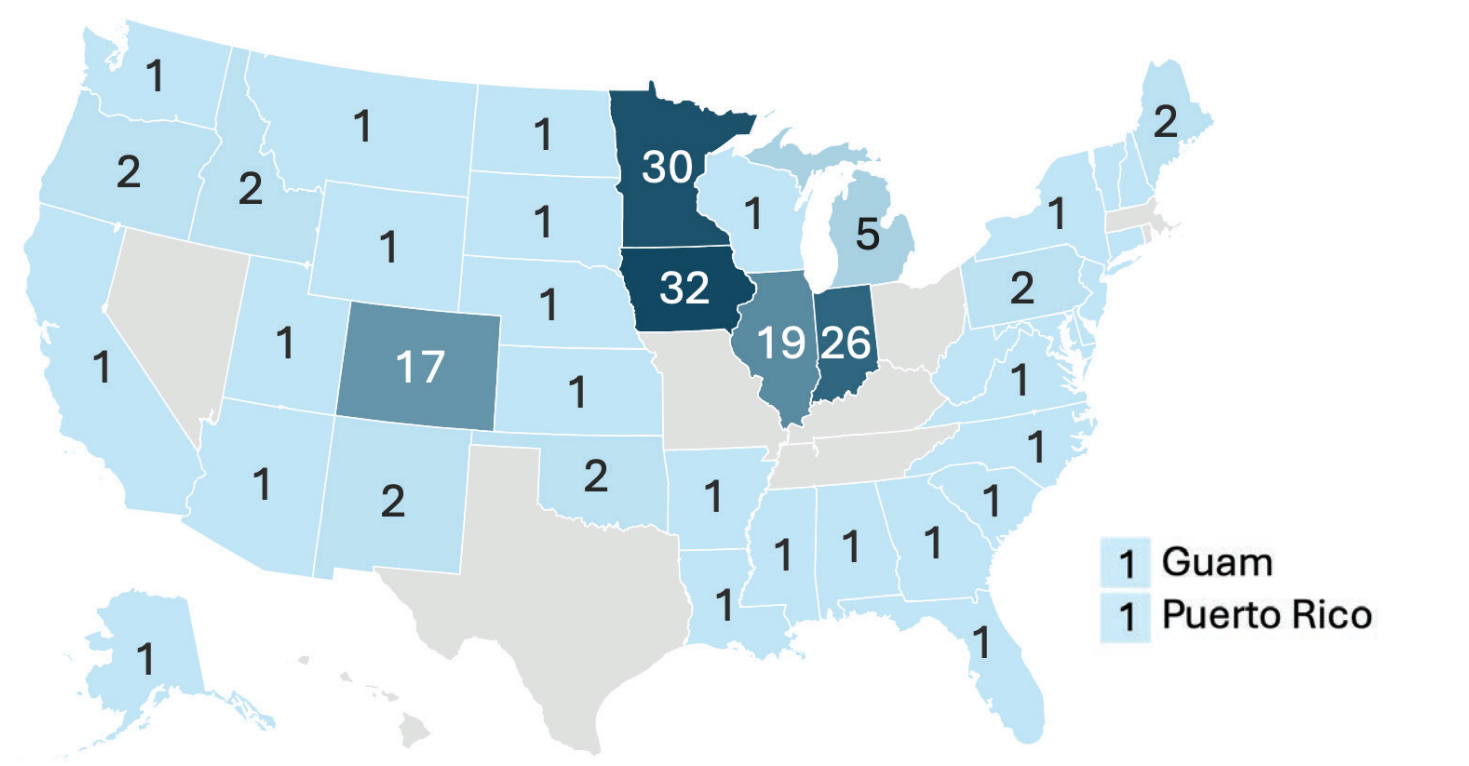
In early 2026, the Lung Association developed a nationwide radon test kit distribution program questionnaire to gain insight on how radon test kit distribution programs operate and what contributes to enhanced knowledge, increased utilization, and intent to mitigate among community members.

The Lung Association drafted and refined a questionnaire with input from internal and external experts, including radon, lung cancer and indoor air quality experts, and public and environmental health professionals at the national, state, and tribal level. Revisions were made based on feedback. The questionnaire was tested and revised, resulting in a questionnaire instrument with 76 total questions (16 core questions and 10 questions per each of six radon program types).

Respondents were asked to report data from the last full fiscal year of their radon test kit program. This questionnaire gathered data separately for short-term radon test kit distribution and long-term radon test kit distribution. Each category included the same set of questions for free, discounted, and full retail cost (full price) programs.

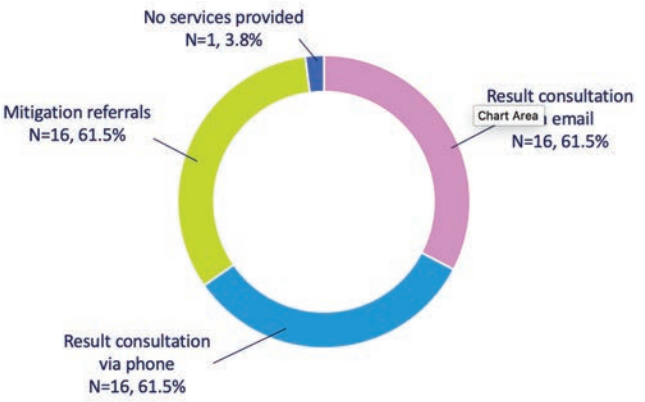
The Lung Association distributed this questionnaire by email to 554 contacts including 167 state radon program contacts and 387 county health department and county-level organization contacts. State radon program contacts were asked to distribute to county and local contacts that distribute radon test kits. The Institute for Tribal Environment Professionals distributed the questionnaire to 663 tribal member contacts. Three email reminders were sent to all contacts between January 21, 2026 and February 27, 2026.

A total of 187 questionnaires were completed. Following the removal of exclusion criteria, including incomplete surveys or duplicate responses, 173 (92.5%) questionnaires were available for analysis from 41 states, Guam, and Puerto Rico.



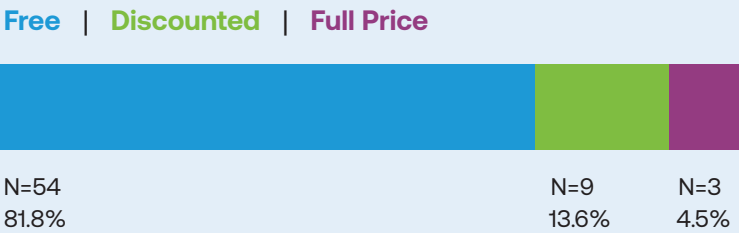
Of the 173 usable questionnaires, 135 (78%) programs reported radon test kit distribution, and 66 (48.9%) of those programs tracked utilization. The chart below describes the usable questionnaires by organization type.

Services Provided After Radon Result is Received



Of the 66 (81.8%) radon test kit distribution programs that tracked utilization:

- 54 (48.9%) distributed test kits for free
- 9 (13.6%) distributed test kits for a discounted cost
- 3 (4.5%) distributed test kits for full price



Of the 66 programs that tracked utilization, 42 (63.6%) programs provided estimated utilization rates. The Lung Association reached out, twice, to each of the 42 programs to request exact utilization rates. Clarifying responses were received from 29 programs. The remainder of this evaluation’s analysis is based on radon test kit programs that provided exact utilization rates (N=53 programs, 80.3%)

Utilization Rates of Distributed and Tracked Radon Test Kits

41.9%

Average utilization rate for 66 programs that tracked utilization, including estimates

46.7%

Average utilization rate for 53 programs that tracked utilization and provided exact data

44.9%

Median utilization rate for 53 programs that tracked utilization and provided exact data

High Utilization Programs

The Lung Association analyzed the radon test kit distribution program components for 26* programs that reported a utilization rate equal to or above the median of 44.9%. This includes 17 (65.4%) free programs, seven (26.9%) discounted programs, and two (7.7%) full price programs. The program components of these 26 programs (i.e. high utilization rate programs) were examined to develop best practice recommendations.

Best Practice Recommendations in Radon Test Kit Distribution:

Ten radon test kit distribution best practice recommendations were identified through this evaluation.

- 1 Require a nominal monetary fee for all distributed radon test kits.
- 2 Include clear, simple instructions for using the radon test kit.
- 3 Provide a pre-paid, self-addressed shipping label for radon test kit return.
- 4 Integrate educational materials that support radon reduction and lung cancer prevention.
- 5 Prioritize in-person distribution of radon test kits to allow a high-touch experience.
- 6 Limit advanced ordering requirements for in-person pick-up.
- 7 Include coupons for residents to redeem when an order process is necessary.
- 8 Evaluate reminder efforts
- 9 Provide streamlined services to support residents in reducing radon exposure.
- 10 Track radon test kit program data and outcomes to enhance program implementation and reach.

**Twenty-seven (27) programs had utilization rates equal to or above the median of 44.9%. One (1) program was removed from further analysis because it operates one-on-one with clients, and its program components are not generalizable to other radon test kit distribution programs.*

Along with these best practice recommendations, key health literacy and behavior change practices should be considered, including:

1. **Immediacy** – utilization rates are higher when residents can easily and quickly access radon test kits.
2. **Effort** – enhanced accessibility should be paired with personal effort to receive the radon test kit.
3. **Personal connection** – in-person contact and relationship building can instill trust with residents.
4. **Education** – opportunities to increase knowledge and environmental health literacy leads to increased trust and intent to test.

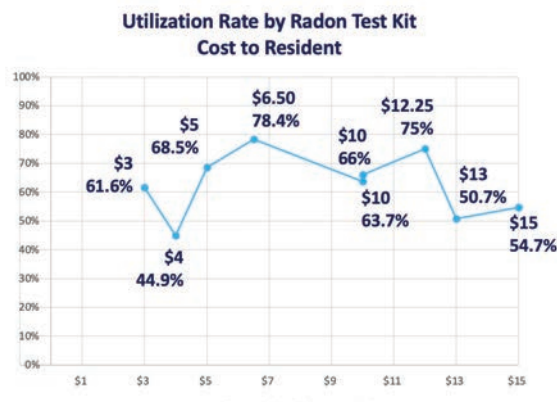
1. Require a nominal monetary fee for all distributed radon test kits.

Findings show that a nominal fee resulted in higher utilization rates when compared to free radon test kits.

Fees for the 66 radon test kit distribution programs that tracked utilization rates included:

- Free (N=54, 37.9%)
- Discounted (N=9, 48.7%)
- Full price (N=3, 55.3%)

Respondents did not provide a coherent distinction between the cost of discounted and full price radon test kits. This graph demonstrates that no single price point influenced radon test kit utilization rates.



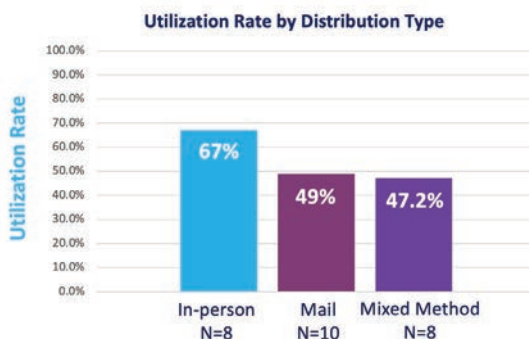
Case: A statewide radon program operated both a free and discounted (\$12.25 per radon test kit) radon test kit distribution option. Both options required residents to advance order a radon test kit, included a pre-paid shipping label, and did not conduct follow-up reminders. The free radon test kit distribution option (N=1809) had a utilization rate of 59.7%, and the discounted radon test kit distribution option (N=774) had a utilization rate of 75%.

2. Include clear, simple instructions for using the radon test kit.

Literature emphasizes the importance of providing clear instructions and training to increase confidence in conducting a home radon test. All high utilization programs included instructions for using the radon test kit.

3. Provide a pre-paid, self-addressed shipping label for radon test kit return.

Of the high utilization rate programs, 22 (84.6%) included a pre-paid, self-addressed shipping label for easy return of the used radon test kit. The published literature also supports the inclusion of pre-paid, self-addressed shipping labels to reduce barriers in use and returning test kits. See graph below.

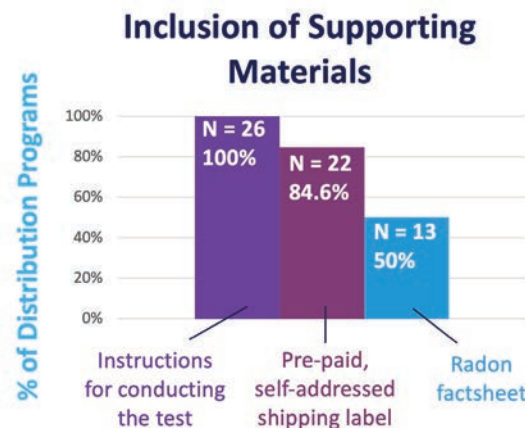


4. Integrate educational materials that support radon reduction and lung cancer prevention.

While all high utilization rate programs included instructions and most included a pre-paid shipping label (N=22, 84.6%), inclusion of supporting educational materials varied with only 13 (50%) including a factsheet about radon.

The variety of supporting educational materials included with radon test kits included:

- Written or video instructions for conducting a radon test
- Factsheet about radon and its health risks
- Factsheet about interpreting radon results and mitigation
- State specific guidance on radon
- Radon mitigation assistance information
- Information on lung cancer screening risk assessments
- Live educational sessions to build knowledge and confidence



Case: The published study, Citizen Science Approach to Home Radon Testing, Environmental Health Literacy and Efficacy, trained participants in radon health risks, testing and mitigation prior to distributing test kits. In comparing participant responses to the study's pre- and post-questionnaire, an increase was seen in scores for environmental health literacy, response efficacy, health information efficacy, and self-efficacy to test for radon. These responses also resulted in high radon testing utilization.

5. Prioritize in-person distribution of radon test kits to allow a high-touch experience

Many radon test kit distribution programs offered various pre-order and distribution methods. The following pre-order format and distribution methods for the high utilization rate programs were analyzed:

- Pre-order required via phone, email, website, or mail order
- No pre-order required prior to in-person pick up
- In-person pick-up (at program offices, partner offices, or community events)
- Shipping test kits to residents

Of the high utilization rate programs:

- 10 (38.5%) distributed radon test kits through mail-only
- 8 (30.8%) distributed in-person only
- 8 (30.8%) used mixed methods of radon test kit distribution

In-person distribution of radon test kits had higher utilization. This may be due to the immediacy of receiving the radon test kit, trust or brief education gained through the in-person interaction or an in-person educational opportunity.

Case: Data suggests that in-person distribution may be more feasible for programs serving smaller communities due to staffing, resources, and population size. The average number of radon test kits distributed in-person was 193 while the average number of radon test kits distributed by mail was 2,212.

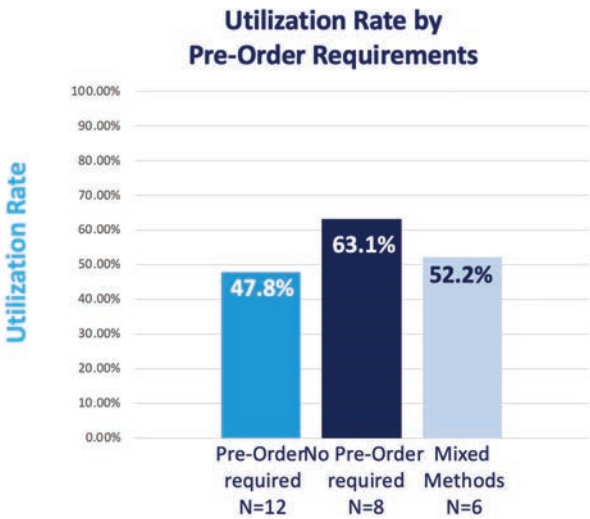
6. Limit pre-ordering requirements for in-person pick-up

Programs that did not require a pre-order and provided in-person pick up options saw higher utilization.

Ordering methods closely aligned with distribution methods:

- 12 (46.2%) programs required some type of pre-order before radon test kit pick-up or shipment
- 8 (30.8%) programs did not require any pre-order prior to radon test in-person pick up
- 6 (23%) programs used mixed methods.

Of the eight programs that distributed radon test kits in-person, only seven (87.5%) programs did not have residents pre-order prior to pick-up and one (12.5%) used mixed methods.



Case: Data suggests that ordering methods alone do not contribute to enhanced utilization rates. The distribution method seems to be a key factor. For example, one county program distributed 300 test kits and saw a 90% utilization rate. All test kits were distributed in-person. Pre-order methods included phone, email, and website options. The program also accepted in-person pick-ups without ordering.

7. Include coupons for residents to redeem when a pre-order process is used

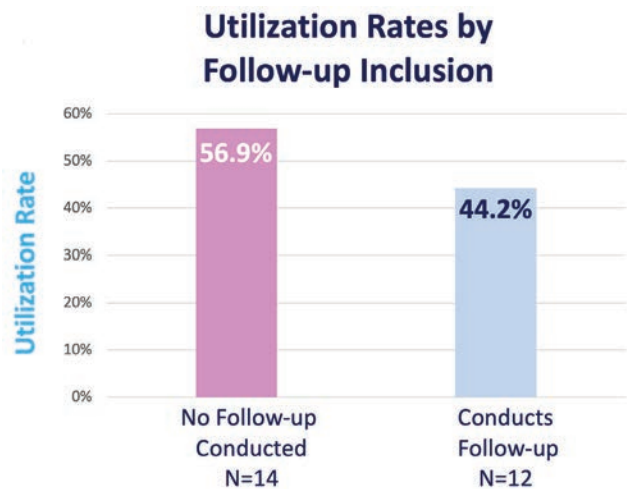
Of the 18 radon test kit distribution programs that required a coupon to pre-order, findings support that the inclusion of a coupon at time of pre-order may enhance utilization. See the table below.

	Number of Programs and Percent	Utilization rate
Coupon required to pre-order	2 (11.1%)	59.8%
No coupon needed to pre-order	12 (66.6%)	47.4%
Mixed methods	4 (22.2%)	48.3%

8. Consider allocating follow-up reminder resources elsewhere

While published literature supports the use of follow-up reminders for residents to use their radon test kits, questionnaire responses showed mixed findings. Among high utilization rate programs, 12 (46.1%) conducted follow-up reminders through phone, email, or in-person, and 14 (53.8%) did not conduct any type of follow-up.

The average utilization rate for the 14 high utilization rate programs that did not conduct any type of follow-up reminder was higher (56.9%) than the average utilization rate for the 12 programs that did conduct follow-up reminders (44.2%). See chart at right.



Case: The following is analysis of utilization rates for the American Lung Association’s radon test kit distribution with and without follow-up.

No Follow-up (October 1, 2023 – September 30, 2024)

- 3,939 test kits distributed; 53% utilization rate

Follow-up (October 1, 2024 – September 30, 2025) included email reminders sent monthly for two months, starting one month post-purchase.

- 3,698 test kits distributed; 46% utilization rate

9. Provide streamlined services to support residents in reducing radon exposure

Of the high utilization rate programs, all but one (25 out of 26) program provided services after the resident received the radon test kit results. Sixteen (16, 61.5%) programs provided results consultation via phone or email and mitigation referrals.

Four (4) of the high utilization rate programs that provided additional services after the radon test kit results were received, stated that they only provide additional services if it’s initiated by the resident. Published literature also recommends programs to proactively provide services to support residents in taking action to reduce radon exposure.

10. Track radon test kit program data to enhance program implementation and reach.

Tracking radon test kit distribution numbers, zip codes, utilization rates, mitigation, and other program components can help identify opportunities for efficiency, reaching priority audiences, and ensuring program impact. Tracked data can inform state and national radon utilization and radon level maps, evidence for funding priorities and support large-scale radon control efforts.

Programs reported a difficulty in tracking mitigation after radon test kit distribution. Of the 135 programs that reported they distribute radon test kits, only six (4.4%) reported that they “somewhat” track mitigation and only two (1.5%) were able to provide exact data.

Reported barriers to tracking mitigation after radon test kit distribution, included:

- Reporting standards vary by state and jurisdiction
- Communities have not yet had results at or above 4.0 pCi/L
- Tracking is only available for residents who apply for financial rebates
- Tracking is only available through a self-completed questionnaire distributed by the program to residents that reported high radon levels
- Inconsistency in the data that is collected
- Lack of staff resources to track mitigation

Summary

Effective radon test kit distribution programs are critical to identifying homes with elevated radon levels and supporting residents in taking action to reduce radon exposure. By using data to evaluate which program components improve test kit utilization, radon and public health programs can better target resources, strengthen outreach, and enhance radon testing and mitigation practices. Providing comprehensive services for radon risk reduction supports a broader public health goal of preventing radon-related lung cancer and reducing the burden of preventable disease.

Radon test kit distribution programs are encouraged to:

1. **Evaluate current approaches.** Identify which program components are working, where gaps exist, and where resources are being allocated.
2. **Implement evidence-informed strategies.** Incorporate best practice recommendations for engaging the community, providing education, distributing test kits, reducing test kit use barriers, tracking utilization, and supporting mitigation.
3. **Measure, learn, and improve.** Track utilization and outcomes to identify opportunities for improvement. Through continuous improvement, programs can reach priority populations and reduce the risk of lung cancer.

American Lung Association resources to assist radon test kit distribution programs.

Consumer Resources

[Lung.org/radon](https://www.lung.org/radon)

- [Radon Basics](#) (learning course)
- [Lung.org/radon](https://www.lung.org/radon) (website with downloadable handouts)
- [Radon and Lung Health](#) (video in English and Spanish)
- [Smoking Cessation Interventions and Lung Cancer Screening](#) (handout)

Radon & Lung Cancer Support

- [Radon HelpLine](#) (call and email service)
- [Saved by the Scan](#) – Lung Cancer Risk Quiz (interactive webpage)
- [Lung Cancer Screening Program](#) (one-on-one lung cancer screening support program)
- [Freedom From Smoking](#) (smoking cessation program)

Professional Resources

[Lung.org/radon-advocates](https://www.lung.org/radon-advocates)

- [Finding Funding to Fix Radon Problems](#) (webinar)
- [State Credentialing of Radon Service Providers Saves Lives](#) (backgrounder)
- [Tracking Radon Data to Save Lives](#) (backgrounder)
- Radon Resource Library (resource hub)

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- Jill Heins Nesvold, MS, Nationwide Senior Director, Health Systems Improvement and Indoor Air Quality

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About the American Lung Association

The American Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease through education, advocacy and research. The work of the American Lung Association is focused on four strategic imperatives: to defeat lung cancer; to champion clean air for all; to improve the quality of life for those with lung disease and their families; and to create a tobacco-free future. For more information about the American Lung Association, which has a 4-star rating from Charity Navigator and is a Platinum-Level GuideStar Member, call 1-800-LUNGUSA (1-800-586-4872) or visit: [Lung.org](https://lung.org). To support the work of the American Lung Association, find a local event at [Lung.org/events](https://lung.org/events).



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