Public Health
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Naugatuck Valley Health District

2026 RADON REPORT

April 10, 2026

A SUMMARY OF THE NAUGATUCK VALLEY 2026 RADON EDUCATION AND SHORT-TERM TEST KIT DISTRIBUTION PROGRAM

NVHD Radon Program Background

In honor of January being National Radon Action Month, Naugatuck Valley Health District (NVHD) participated in the annual statewide radon awareness initiative led by the Connecticut Department of Public Health (CT DPH) Radon Program and reaffirmed its support of the Radon Program's mission: to promote radon awareness, testing, mitigation, and radon-resistant new construction (RRNC) throughout the state to reduce the number of radon-induced lung cancer deaths in Connecticut.

Joining 35 other local health departments and districts, NVHD promoted radon awareness education and prevention through outreach and by distributing free home radon test-kits to residents. The district received and distributed 100 free short-term home test kits made available from the Radon Program. NVHD's Public Health Specialist, Vanessa Lopez, MPH, CCHW coordinated the test-kit pick up at NVHD's office located at 98 Bank Street, Seymour, CT 06483 and performed outreach across the Valley emphasizing the health risks of radon exposure, the importance of testing during winter months/ heating season, and available mitigation resources.

Image 1: 2026 Local Health Partners

1. Aspetuck, 2. Central Connecticut, 3. Chatham, 4. Chesprocott, 5. Cromwell, 6. Darien, 7. East Hartford, 8. East Shore, 9. Eastern Highlands, 10. Essex, 11. Farmington Valley, 12. Glastonbury, 13. Housatonic Valley, 14. Middletown, 15. Milford, 16. Monroe, 17. Naugatuck Valley, 18. New Britain, 19. New Canaan, 20. New Fairfield, 21. New Haven, 22. North Central, 23. Northeast District, 24. Norwalk, 25. Quinnipiack Valley, 26. Ridgefield, 27. South Central, 28. South Windsor, 29. Stamford, 30. Stratford, 31. Wallingford, 32. Waterbury, 33. West Hartford - Bloomfield, 34. West Haven, 35. Westbrook, 36. Wilton

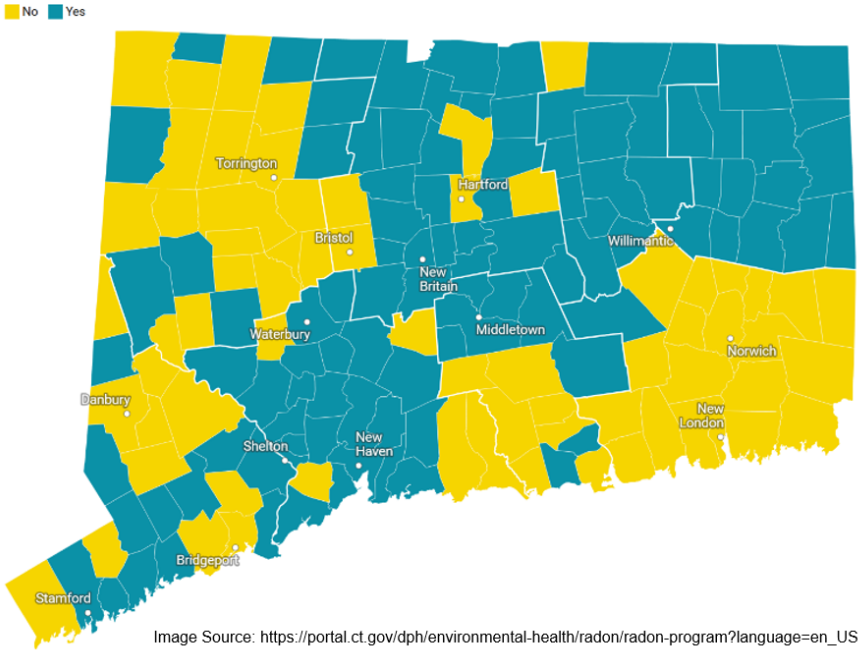


Image Source: https://portal.ct.gov/dph/environmental-health/radon/radon-program?language=en_US

The district issued a press release, updated its website, posted content in the monthly newsletter, and shared social media posts to raise awareness of the free kits available and the dangers of radon.

This report will summarize the NVHD Radon Education and Short-Term Test Kit Distribution Program, including the laboratory results of the home test-kits provided to Valley residents as of April 8, 2026.

Questions related to the content of this report may be directed to Vanessa Lopez, MPH, CCHW at vlopez@nvhd.org.

What is Radon?

Radon is a naturally occurring, radioactive gas released in rock, soil, and water formed from the breakdown of uranium. Radon is the heaviest of the noble gases, about 9 times heavier than air, and found at atomic number 86 on the periodic table of elements.

You cannot see, smell, or taste radon gas. For this reason, it is often referred to as a silent killer. For educational purposes, when cooled to its solid state below its melting point (approximately -96°F), radon glows yellow. The glow becomes orange-red as the temperature is lowered.

Image 2:

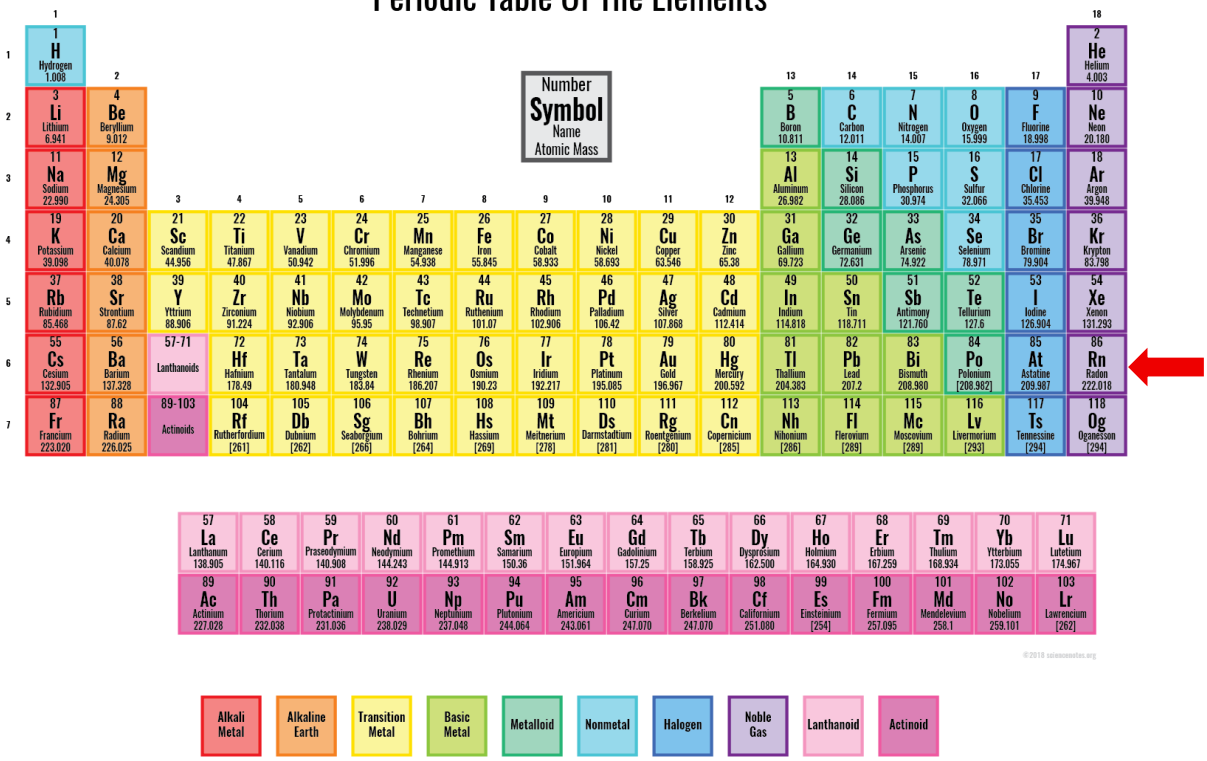


Image Source: https://sciencenotes.org/printable-periodic-table

Radon is product of the decay of naturally occurring radioactive isotopes in uranium, which is a heavy metal found in the rock layer of earth. Commonly found in igneous rock, in Connecticut, uranium can be found in granite, pegmatite, and mineral veins. Uranium-238 has a half-life of 4.4 billion years and eventually breaks down into another metal called radium-236. In the natural environment, radium occurs at trace levels in virtually all rock, soil, water, plants and even animals.

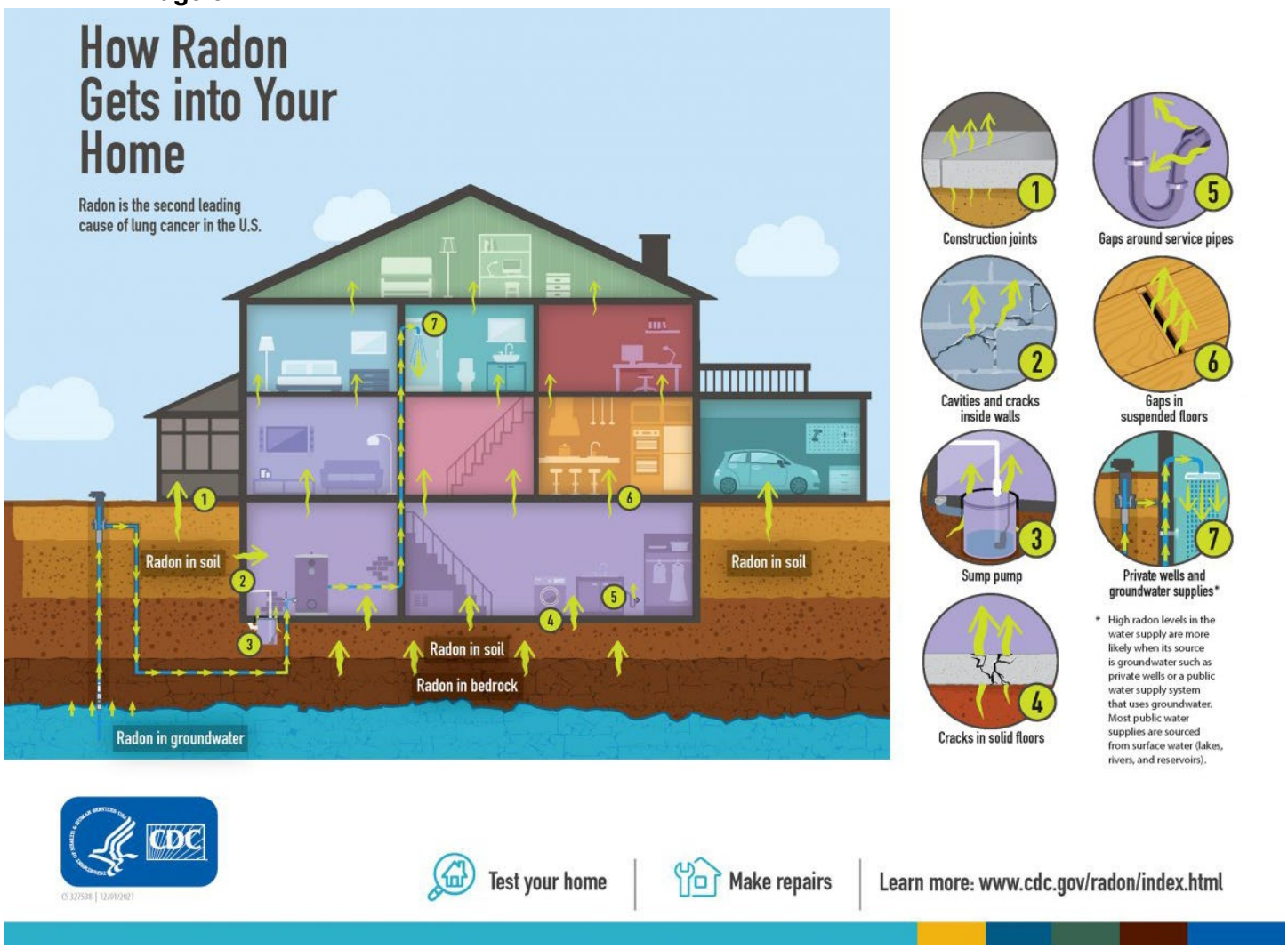
The amount of radium allowed in drinking water from community water systems is regulated. Private wells are generally not regulated for radionuclides. In CT, private well owners are responsible for testing the quality of their own drinking water and maintaining their own wells. As of October 1, 2022, testing for uranium is required for newly drilled wells under CT General Statutes Section 19a-37(c)(2). Additionally, under 19a-37(f)(1), the local director of health may require a private well or semipublic well to be tested for arsenic, radium, uranium, radon or gross alpha emitters, when there are reasonable grounds to suspect that such contaminants are present in the groundwater. For purposes of this subsection, “reasonable grounds” means (A) the existence of a geological area known to have naturally occurring arsenic, radium, uranium, radon or gross alpha emitter deposits in the

bedrock; or (B) the well is located in an area in which it is known that arsenic, radium, uranium, radon or gross alpha emitters are present in the groundwater.

Radium's half-life is 1,620 years and eventually breaks down into radon gas. Radon's most stable isotope, radon-222, has a half-life of about 3.8 days. Although it has a relatively short half-life, radon decays into longer lived, solid, radioactive elements which can collect on dust particles and be inhaled as well.

Because radon comes naturally from the earth, people are always exposed to it both outdoors and indoors. Levels in outdoor air pose a low threat to human health. Long-term exposure to indoor radon gas through cracks and gaps in buildings and homes poses a significant health hazard. There is a common misconception that radon exposure is a problem exclusive to older homes and buildings, but it can build up in the air in any home or building whether it has a basement, is sealed or drafty, or is new or old. It is a risk anywhere in the country.

Image 3:



The U.S. EPA and the U.S. Geological Survey have evaluated the radon potential in the U.S. and have developed a map to assist National, State, and local organizations to target their resources and to assist building code officials in deciding whether radon-resistant features are applicable in new construction.

Each zone designation reflects the average short-term radon measurement that can be expected to be measured in a building without the implementation of radon control methods. The radon zone designation of the highest priority is Zone 1. All of NVHD's jurisdiction is in Zone 1.

This map is not intended to be used to determine if a home in a given zone should be tested for radon. Homes with elevated levels of radon have been found in all three zones. All homes should be tested regardless of geographic location.

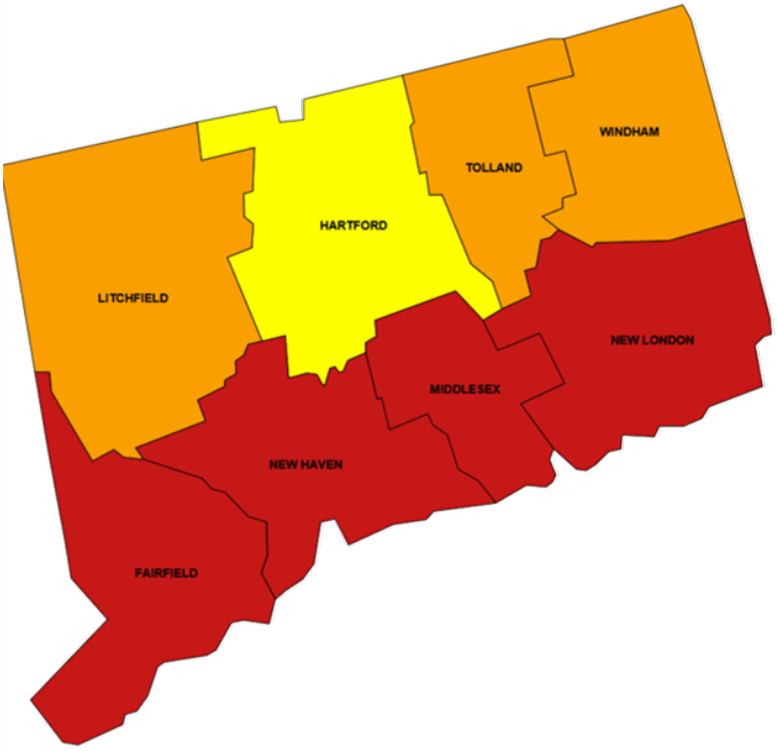
Image 3:
CONNECTICUT - EPA Map of Radon Zones

https://www.epa.gov/radon/epa-map-radon-zones

The Map of Radon Zones was developed in 1993 to identify areas of the U.S. with the potential for elevated indoor radon levels. The map is intended to help governments and other organizations target risk reduction activities and resources.

The Map of Radon Zones should not be used to determine if individual homes need to be tested. No matter where you live was developed using data on indoor radon measurements, geology, aerial radioactivity, soil parameters, and foundation types. The EPA recommends that this map be supplemented with any available local data to further understand and predict the radon potential for a specific area.

All homes should be tested, regardless of zone designation.

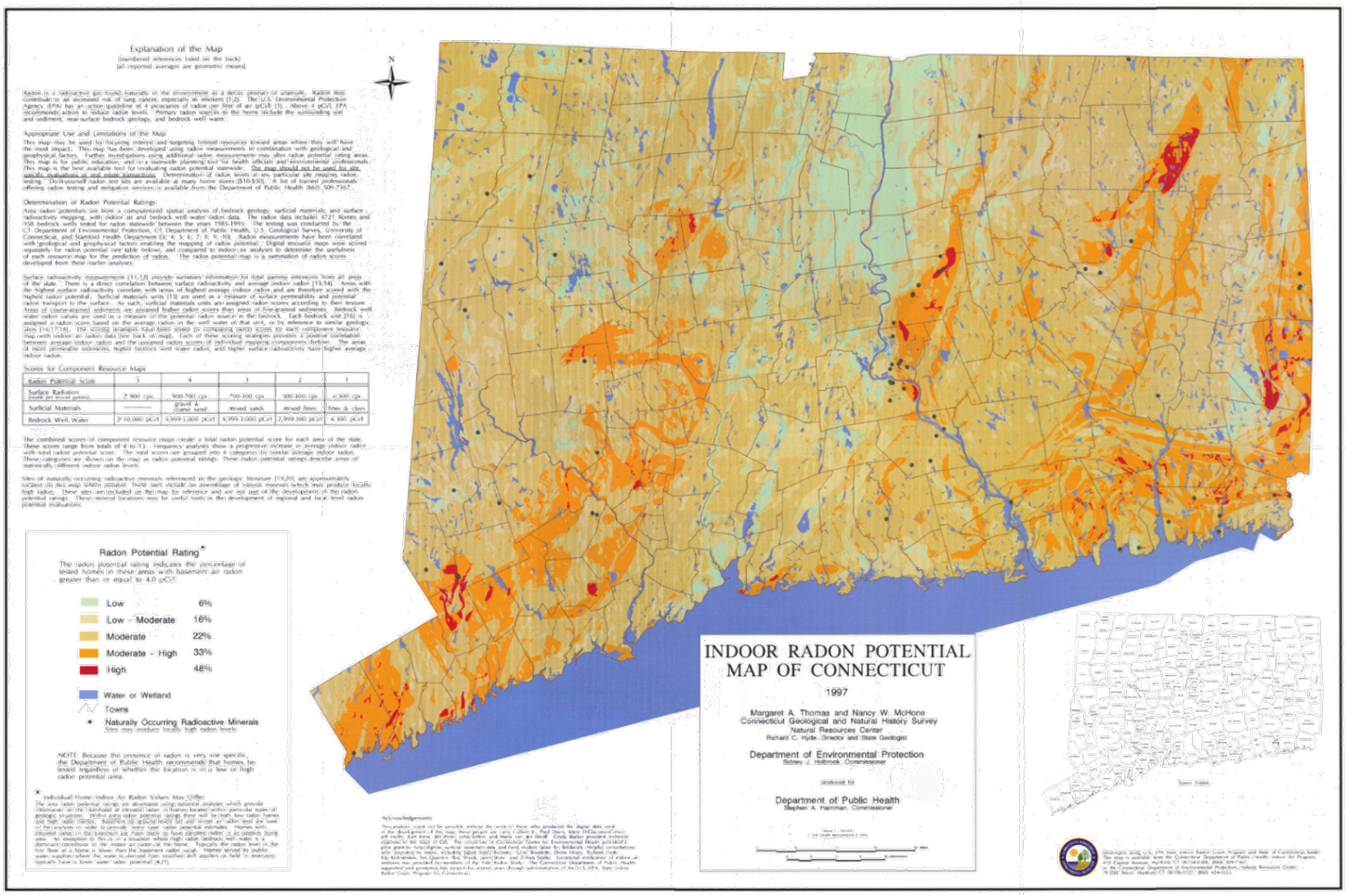


IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of Connecticut" (USGS Open-file Report 93-292-A) before using this map. See https://doi.org/10.3133/ofr93292A. This document contains information on radon potential variations within counties. The EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.

What the colors mean?

Color	Zone	Description
	Zone 1 (red zones)	Highest potential Counties have a predicted average indoor screening level > (Greater) than 4 pCi/L (picocuries per liter) (150 Bq/m3 (becquerels per meter cubed))
	Zone 2 (orange zones)	Moderate potential Counties have a predicted average screening level ≥ (Greater than and equal to) 2 pCi/L (75 Bq/m3) and ≤ (less than and equal to) 4 pCi/L (150 Bq/m3)
	Zone 3 (yellow zones)	Low potential Counties have a predicted average indoor screening level < (Less than) 2 pCi/L (75 Bq/m3)

Image 4: Indoor Radon Potential Map of Connecticut



Timeline of Notable Radon-Related Events

1899-1900

- Radon's alpha radiation discovered by English physicist Ernest Rutherford (1899)
- German physicist Friedrich Ernst Dorn discovered radium was releasing a gas (1900)

1923

- Name change from "niton" to radon
- "Poor man's radium" – radium was being used to treat cancer but was expensive
- Radon, the decay product of radium was thought to have similar curative powers

WWII-1980s

- Studies show high incidence of lung cancer among uranium miners
- EPA established Indoor Radon Program

1992

- EPA publishes "A Citizen's Guide to Radon" using extensive technical analyses of data, risk communication research, and legislative directives

2005

- 2 studies (1 North American, 1 European) show definitive evidence of an association between residential radon exposure and lung cancer
- U.S. Surgeon General issued Health Advisory warning Americans about the health risk from exposure to radon in indoor air

2009

- WHO launches 1st Global Call to Action on indoor radon
- 30 countries and 100 experts reviewed data and found 14% of lung cancers worldwide attributable to indoor radon
- EPA supports initiative

Health Impacts

Long-term exposure from breathing in radon gas can be harmful to your health. Radon is the second leading cause of lung cancer deaths in the United States after cigarette smoke and is considered the leading environmental cause of cancer overall. Health officials from the Environmental Protection Agency (EPA) and the U.S. Surgeon General's office estimate that radon is responsible for more than 21,000 lung cancer deaths each year in the United States.

Factors that increase your risk of getting lung cancer from radon include the following:

- Smoking cigarettes, currently or in the past.
- High radon levels in your home or another building that you regularly spend time in.
- High radon levels in the part of the home or building where you spend the most time (radon levels are often higher in basements and lower levels).
- Burning wood, coal, or other substances that add particles to air.

According to the Centers for Disease Control and Prevention (CDC), when you breathe in radon, radioactive particles from the decay of radon gas can get trapped in your lungs. As these particles continue to decay, they release radiation that eventually, over time, can alter the DNA inside the lung cells increasing the likelihood that those cells will mutate to become cancerous. It is not quick; it takes many years for lung cancer to develop and most people don't have symptoms until lung cancer is advanced and at that point it is harder to treat. For these reasons, it is important to take steps to reduce radon exposure throughout your life to help prevent lung cancer.

Surgeon General Health Advisory

January 13, 2005

"Indoor radon is the second-leading cause of lung cancer in the United States and breathing it over prolonged periods can present a significant health risk to families all over the country. **It's important to know that this threat is completely preventable.** Radon can be detected with a simple test and fixed through well-established venting techniques."

RADON RISK IF YOU SMOKE

Radon Level	If 1,000 people who smoked were exposed to this level over a lifetime*...	The risk of cancer from radon exposure compares to**...	WHAT TO DO: Stop Smoking and...
20 pCi/L	About 260 people could get lung cancer	250 times the risk of drowning	Fix your home
10 pCi/L	About 150 people could get lung cancer	200 times the risk of dying in a home fire	Fix your home
8 pCi/L	About 120 people could get lung cancer	30 times the risk of dying in a fall	Fix your home
4 pCi/L	About 62 people could get lung cancer	5 times the risk of dying in a car crash	Fix your home
2 pCi/L	About 32 people could get lung cancer	6 times the risk of dying from poison	Consider fixing between 2 and 4 pCi/L
1.3 pCi/L	About 20 people could get lung cancer	(Average indoor radon level)	(Reducing radon levels below 2 pCi/L is difficult)
0.4 pCi/L		(Average outdoor radon level)	

Note: If you are a former smoker, your risk may be lower.

RADON RISK IF YOU'VE NEVER SMOKED

Radon Level	If 1,000 people who never smoked were exposed to this level over a lifetime*...	The risk of cancer from radon exposure compares to**...	WHAT TO DO:
20 pCi/L	About 36 people could get lung cancer	35 times the risk of drowning	Fix your home
10 pCi/L	About 18 people could get lung cancer	20 times the risk of dying in a home fire	Fix your home
8 pCi/L	About 15 people could get lung cancer	4 times the risk of dying in a fall	Fix your home
4 pCi/L	About 7 people could get lung cancer	The risk of dying in a car crash	Fix your home
2 pCi/L	About 4 people could get lung cancer	The risk of dying from poison	Consider fixing between 2 and 4 pCi/L
1.3 pCi/L	About 2 people could get lung cancer	(Average indoor radon level)	(Reducing radon levels below 2 pCi/L is difficult)
0.4 pCi/L		(Average outdoor radon level)	

Note: If you are a former smoker, your risk may be higher.
*Lifetime risk of lung cancer deaths from *EPA Assessment of Risks from Radon in Homes* (EPA 402-R-03-003).
**Comparison data calculated using the Centers for Disease Control and Prevention's 1999-2001 National Center for Injury Prevention and Control Reports.

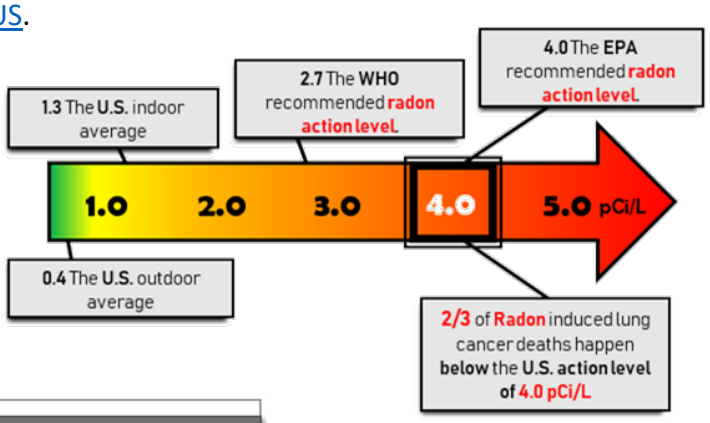
Source: https://www.epa.gov/sites/default/files/2016-12/documents/2016_a_citizens_guide_to_radon.pdf

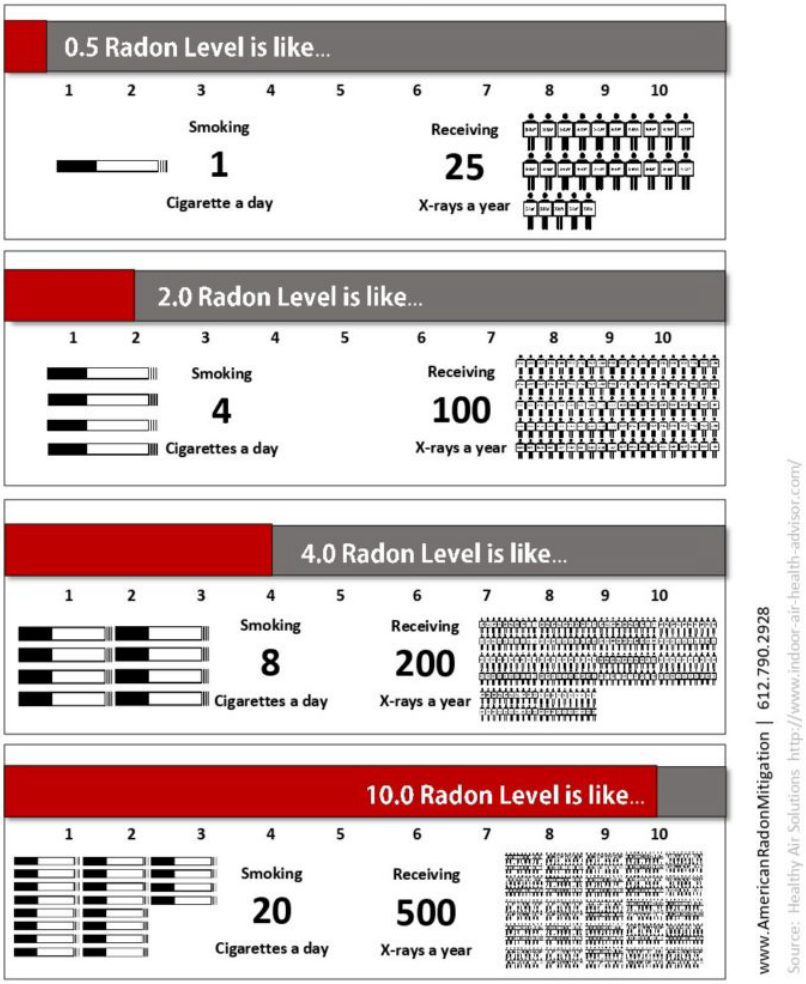
Radon Testing

There is no known safe level of radon. You should always aim to have the lowest level. It is recommended to test your home every two to five years. Homes with radon-resistant new construction features should be tested for radon after occupancy. Residents are encouraged to participate in NVHD's annual testing initiative when test kits are free of cost.

In addition to self-testing your home, residents have the option of hiring a professional to test for radon in the home. The State of Connecticut does not license or otherwise certify radon professionals, however, the Radon Program maintains lists of nationally certified professionals in accordance with the requirements of CGS § 19a-14b (5)(b). The CT DPH list of Nationally Certified Measurement Professionals includes individuals who are certified by one of the two national certifying agencies: National Radon Proficiency Program (NRPP) or the National Radon Safety Board (NRSB) and is available online at https://portal.ct.gov/dph/environmental-health/radon/radon----for-professionals?language=en_US.

The U.S. Environmental Protection Agency (EPA) recommends fixing your home if radon levels are 4.0 picoCuries per liter of air (pCi/L) or higher. Homeowners should consider reducing their potential lung cancer risk by fixing homes with radon levels between 2 pCi/L and 4 pCi/L.





Radon testing is the process of measuring the concentration of radon gas in a specific area to assess potential health risks. There are two main types of radon testing: short-term and long-term testing that can be performed through passive or active testing.

Passive radon testing devices do not need power to function. These include charcoal canisters, alpha-track detectors, charcoal liquid scintillation devices, and electret ion chamber detectors. Both short- and long-term passive devices are generally inexpensive.

Active radon testing devices require power to function and usually provide hourly readings and an average result for the test period. These include continuous radon monitors and continuous working level monitors, and these tests may cost more.

Long-term kits measure radon in your home for at least 90 days to one year. Long-term kits tell you your home's year-round average level. The longer the test, the better the results will reflect your home radon levels and your lifestyle.

Short-term kits measure radon in your home much quicker. The kits provided by NVHD via CT DPH require two to seven days of testing but some short-term tests may take up to 90 days. A total of 100 RadonAway short-term radon home test-kits were distributed by NVHD between January and March 2026. The kits were provided free of cost by the Connecticut Department of Public Health Radon Program.

When performing a short-term at-home test, individuals must close all windows and outside doors 12 hours prior to testing. This is why testing during January, or colder weather months, is ideal. Other considerations include placing the test kit should in lowest lived-in level of the home 2-6 feet above the floor and away from the exterior walls where it wouldn't be disturbed. No operation of fans or other machines which bring in air from outside during the testing period.

Each voluntary participating household received:

- One 3–7 day short-term air test device, instructions, analysis and test report
- USPS Shipping & Analysis
- Same business day results after test device was received at lab

Each kit that was distributed included information on how to prepare the residence for a test, how to physically set up the test, and how to successfully fill out the forms. The simplicity of the test kit made the process of testing and learning results easy for our residents; radon results were provided to the residents through www.radon.com, an online website where residents can search their results by entering their kit number.

The Public Health Specialist also created documents that were shared among NVHD's social media pages, informing those about radon and the importance of testing for it. This outreach was seen by our community and led them to call to inquire about the radon test kits.

Because the number of kits was limited to 100, participants are asked to sign a notice of commitment for completing and returning their radon test kit. Recipients were asked to attest to the following questions in exchange for a free kit and entry into a raffle for a gift card as an additional incentive:

- ✓ I understand that this radon test kit is provided free of charge.
- ✓ I agree to follow the instructions provided and return my completed radon test.
- ✓ I understand that participants who return their completed radon test kit by *February 28, 2026*, will be automatically entered into a raffle sponsored by the Naugatuck Valley Health District.
- ✓ I understand that radon test kits may still be returned after *February 28, 2026*, however, kits returned after this date will not be eligible for raffle entry.
- ✓ I understand that returning my test kit helps protect my household and supports radon awareness efforts across the Naugatuck Valley.

The Public Health Specialist monitored the status of test results available and performed follow-up for residents for whom results were not received. The goal was to encourage testing and increase return rates for the test-kits provided. Attempts were made via emails as well as phone calls for those who did not list an email address.

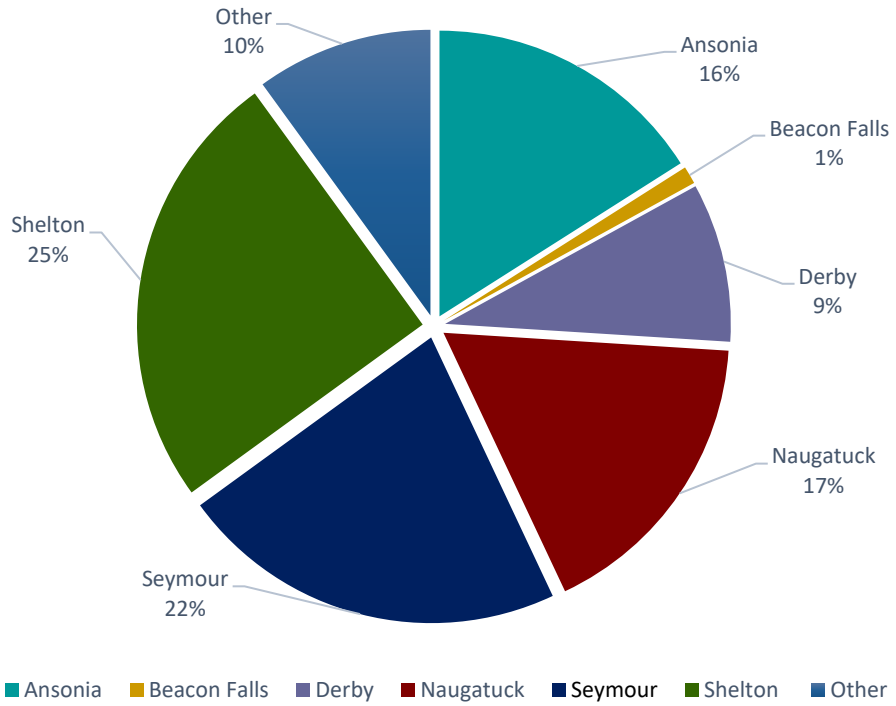
At the conclusion of the 2026 distribution, the Public Health Specialist entered eligible test-kit recipients into a digital prize wheel. Tom M. (Ansonia) was randomly selected to receive a $25.00 ShopRite gift card.

2026 Data from NVHD Test-Kit Distribution

Total Number of Radon Test-Kits distributed by Residence Town/City/Borough during January–March 2026:

Ansonia	**16**
Beacon Falls	**1**
Derby	**9**
Naugatuck	**17**
Seymour	**22**
Shelton	**25**
Other	**10**
Total	**100**

Percentage of Radon Kits Distributed by Residence Town/City/Borough



Total Number of Radon Test Kit Results Received by NVHD by Town/City/Borough as of April 8, 2026

Ansonia	**8 of 16**	**50% returned**
Beacon Falls	**1 of 1**	**100% returned**
Derby	**2 of 9**	**22% returned**
Naugatuck	**10 of 17**	**59% returned**
Seymour	**14 of 22**	**64% returned**
Shelton	**11 of 25**	**44% returned**
Other	**4 of 10**	**40% returned**
Total	**50 of 100**	**50% returned**

Radon Concentration Findings:

Radon levels ranged from <0.3 pCi/L to 18.9 pCi/L**.**

*It should be noted that a number of test-kits did not yield results because they were not received by the laboratory within the required 11-day analysis window, likely due to delays in USPS delivery**.**

- The majority of test results were below the EPA action level of 4.0 pCi/L.
- A total of 11 out of 100 distributed kits (11%) had results equal to or greater than 4.0 pCi/L**.**
- Among returned results (n=50), this represents 22% of tested homes with elevated radon levels.

Total Number of Initial Radon Test Kit Results Greater or Equal to 4.0 pCi/L by Town/City/Borough:

Ansonia	**2 of 8**	**25% ≥ 4.0 pCi/L**
Beacon Falls	**0 of 1**	
Derby	**0 of 2**	
Naugatuck	**1 of 10**	**10% ≥ 4.0 pCi/L**
Seymour	**4 of 14**	**29% ≥ 4.0 pCi/L**
Shelton	**3 of 11**	**27% ≥ 4.0 pCi/L**
Other	**1 of 4**	**25% ≥ 4.0 pCi/L**
Total	**11 of 50**	**22% ≥ 4.0 pCi/L**

Follow-Up Testing Recommendation

The Connecticut Department of Public Health recommends that any initial test result equal to or greater than 4.0 pCi/L be followed by a second test within one month to confirm elevated radon levels and determine the need for mitigation. Additional voluntary testing is performed at the expense of the homeowner/tester. NVHD does not have additional funding to supply additional testing devices.

Radon Remediation

There are several methods to lower radon levels in a home; some prevent radon from entering the home and some reduce radon levels after it has entered. Radon problems can be corrected by qualified radon contractors. A homeowner should hire a qualified radon mitigation (reduction) contractor to decrease airborne radon levels. To obtain a list of qualified radon mitigation contractors, please visit the DPH Radon Program web site at www.ct.gov/dph/radon.

Natural ventilation occurs when windows, doors, and vents are opened and outdoor air mixes with the indoor air. This can temporarily reduce indoor radon levels however once the windows, doors, and vents are shut, radon concentrations can return to previous values within roughly 12 hours.

Other radon reduction techniques that can be used in any type of home include sealing, house or room pressurization, heat recovery ventilation, soil suction, specific foundation designs, and crawlspace ventilation.

RADON REDUCTION OF VARIOUS MITIGATION TECHNIQUES

Technique	Typical Radon Reduction	Comments
Subslab Suction (Subslab depressurization)	50 to 99 percent	Works best if air can move easily in material under slab.
Passive Subslab Suction	30 to 70 percent	May be more effective in cold climates; not as effective as active subslab suction.
draintile Suction	50 to 99 percent	Can work with either partial or complete drain tile loops.
Block-wall Suction	50 to 99 percent	Only in homes with hollow block-walls; requires sealing of major openings.
Sump-Hole Suction	50 to 99 percent	Works best if air moves easily to sump from under the slab.
Submembrane depresserization in a Crawlspace	50 to 99 percent	Less heat loss than natural ventilation in cold winter climates.
natural ventilation in a Crawlspace	0 to 50 percent	Costs variable.
Sealing of Radon Entry Routes	See Comments	Normally only used with other techniques; proper materials and installation required.
House (Basement) Pressurization	50 to 99 percent	Works best with tight basement isolated from outdoors and upper floors.
natural ventilation	Variable/Temporary	Significant heated or cooled air loss; operating costs depend on utility rates and amount of ventilation.
Heat Recovery ventilation (HRv)	Variable/ See comments	Limited use; effectiveness limited by radon concentration or the amount of ventilation air available for dilution by the HRV. Best Applied in limited-space areas like basements.
Private well water Systems: Aeration	95 to 99 percent	Generally more efficient than GAC; requires annual cleaning to maintain effectiveness and to prevent contamination; requires venting radon to outdoors.
Private well water Systems: Granular Activated Carbon, or GAC	85 to 95 percent	Less efficient for higher levels than aeration; use for moderate levels, around 5,000 pCi/L or less in water: radioactive radon by-products can build on carbon; may need radiation shield around tank and care in disposal.

Note: Mitigation costs vary due to technique, materials, and the extent of the problem. Typically the cost of radon mitigations are comparable to other common home repairs.

Citations

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