

Why are People Concerned about Radon?

Radon can cause cancer. After cigarette smoking, radon is the second leading cause of lung cancer deaths in the United States.

Radon is a colorless, odorless, radioactive gas that is continuously released from some rock formations and soils. Radon levels vary county-by-county and even within counties. Radon is found in homes all across New York State. Indoor radon levels may be very different in nearby houses because of construction methods and type of bedrock and soil. It is more likely to be a problem for homes with basements. Radon can enter a home through foundation cracks, openings for pipes, wall/floor joints, chimneys and hollow concrete block foundations. Well water can be contaminated with radon and may carry radon into a house through the pipes.

The United States Environmental Protection Agency has set a level of concern, or “action level” for homes. Remedial action should be taken if the radiation level is currently 4 picocuries per liter of air (pCi/L) or greater. EPA also recommends that remedial action should be considered if radiation levels are between 2 and 4 pCi/L.

The EPA action level figure was calculated for adults. Children are more susceptible to the adverse effects of exposure since their lung cells are rapidly dividing, their lungs are smaller and their breathing rate is faster. No federal or state standards define an acceptable or “safe” level of radon.

New Yorkers should test their homes for radon and, if elevated levels are found, take steps to reduce those levels.

How Can I Measure the Radon Concentration in My Home?

There are several ways to test for radon in your home.

Charcoal Canisters are the least expensive and simplest method to measure radon concentrations in air. Residents of New York who own their homes can purchase these devices from the New York State Department of Health (NYSDOH) for \$6.75 each, which includes the cost of the canister and the laboratory analysis. After the test is completed, mail the canister to the laboratory. The laboratory will analyze the sample and mail the results to you. Obtain test kits by calling NYSDOH at 1-800-458-1158. Similar kits are available at some hardware stores.

Alpha Track Kits are more expensive than charcoal canisters but they test the air over longer periods of time and give a more accurate estimate of long-term levels. These kits are available at some hardware stores.

Continuous Radon Monitors are the most complex and expensive devices, costing \$200 or more, but they are also the most accurate, providing periodic readings that can show trends in radon exposure. You must hire a professional to conduct these tests.

Radon-in-Water Tests can be done by private laboratories, generally at a cost of \$25 to \$50. Contact the NYSDOH at 1-800-458-1158 for a list of laboratories certified by the State of New York to perform radon-in-water tests. The lab will give directions how to take a water sample for analysis

What Steps Can I Take to Reduce Radon Levels?

There are simple, effective, low-cost ways to reduce elevated radon levels in your home.

- **Seal radon entry points** such as basement sumps, cracks in crawl spaces, and foundation cracks and holes, using grout or caulking. This can be a relatively quick way to reduce accumulation rates. A list of caulking compounds that can be used, including information on lifespan, shrinkage, ease of use, flexibility, adhesion, and cost is available at 1-800-458-1158.
- **Ventilation systems** can prevent the entry of radon into your house or remove it after it enters. You can use simple or complex methods, ranging from installing fans to special ventilation systems that maintain in-home temperatures. Local contractors can provide these systems. EPA believes the most effective methods involve increased house ventilation in combination with air-to-air heat recovery.
- **Increase indoor air pressure** to keep radon out. This can be done by supplying additional sources of air from the outside to furnaces and fireplaces. This requires careful planning and should only be performed by a qualified contractor.

Radon mitigation for a typical single-family home may range in cost from \$500 to \$2500. The average cost is about \$1200.

Sources of Additional Information

- “*Radon: The Invisible Intruder*”
This booklet, issued by the New York Attorney General, includes additional information on the issues discussed above. It is available on the Attorney General’s website, www.oag.ny.us/environment/radon_brochure.htm or by calling 1-518-474-6806.
- New York State Department of Health 1-800-458-1158. Call to obtain the NYSDOH report of radon levels on a county-by-county basis, to obtain charcoal canisters, or to ask questions about radon.
- USEPA’s Radon Division 1-212-637-4013. Call to obtain USEPA publications such as:
 - “*Home Buyer’s and Seller’s Guide to Radon*” (2006)
 - “*A Citizen’s Guide to Radon (Fourth Edition)*” (2005)
 - “*Consumer’s Guide to Radon Reduction*” (2006)
 - “*A Radon Guide for Tenants*” (1996)
 - “*Radon in Schools (Second Edition)*” (1994)



Dear New Yorker:

Radon, an invisible, radioactive and naturally occurring gas, can seep into homes and cause health problems. Since radon levels vary widely even among houses next door to each other, the only way to know for sure if there is a problem in your home is to measure the radon levels.

This booklet was prepared to provide you with basic information on testing radon levels and to inform you about the methods available to reduce radon concentrations in your home, should that be necessary. References are included to direct you to more detailed information on both monitoring and remediation techniques. I hope the information in this pamphlet proves useful to you.

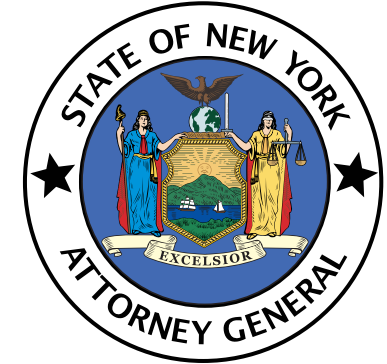
Sincerely,

A handwritten signature in black ink, appearing to read "Eric T. Schneiderman".

ERIC T. SCHNEIDERMAN
Attorney General

Printed on recycled paper.

RADON IN YOUR HOME



Environmental Protection Bureau

Social Justice Division

August 2007

Eric T. Schneiderman
Attorney General

