

A Full Service Radon Testing, Mitigation & Remediation Company providing peace of mind from Radon in homes and businesses throughout Southeastern PA and the Tri-State Area.

RADON IS YOUR FAMILY AT RISK?

RADON...

- Is found all over the US.
- Is a naturally occurring radioactive gas without color, odor or taste that comes from the radioactive decay of uranium in soil, rock and groundwater.
- Emits ionizing radiation during its radioactive decay to several radioactive isotopes known as radon decay products.



Uranium is the source for RADON – 222 in the chart of elements

- Radon is a gas
- It is naturally occurring
- You cannot see or smell it
- It enters building from the soil





Common RADON entry points

Radon gets into the indoor air primarily from soil under homes and buildings.







Average Contributions From RADON Sources In US Homes

The movement of soil gas into a home is the predominant entry route. These are averages, each home is different!



RADON Gas Spatial Distribution

- Radon enters from beneath foundation and travels upward – diluted with outdoor air, infiltrating the building.
- If radon is less than 4 pCi/L in lower level, one can say with reasonable confidence that upper floors are also less than 4 pCi/L.

Radon Testing



Pennsylvania's RADON Zones



Zone 3 (yellow zones) counties have a predicted average indoor radon screening level less than 2 pCi/L – Low Potential Zone 2 (orange zones) counties have a predicted average indoor radon screening level between 2 and 4 pCi/L – Moderate Potential Zone 1 (red zones) counties have a predicted average indoor radon screening level greater than 4 pCi/L – Highest Potential



RADON Health Effects

- Radon is a known human lung carcinogen and is the largest source of radiation exposure and risk to the general public.
- Radon is the number one cause of lung cancer among non-smokers, according to EPA estimates.
- Radon is the second leading cause of lung cancer.
- Radon is responsible for about 21,000 lung cancer deaths every year. About 2,900 of these deaths occur among people who have never smoked.



Residential RADON Exposure Is A Leading Environmental Health Risk:

National and International Public Health Agencies support the contention that radon is a leading environmental health risk!



Lung Cancer Deaths Per Year Are Estimated To Be 163,510*

Nearly 21,000 of those deaths are attributed to exposure to RADON**

*CA: A journal of Clinicians, 2005 **EPA, 2003



Should we be concerned about RADON-induced lung cancer given that the risk pales in comparison to the risk posed by smoking?

- RADON is the number one cause of lung cancer among non-smokers, according the EPA estimates.
- Overall, radon is the second leading cause of lung cancer.
- Radon is responsible for about 21,000 lung cancer deaths every year.
- About 2,900 of these deaths occur among people who have never smoked.



EPA & Surgeon General Recommend Taking Action If A Home Is At Or Above 4.0 pCi/L (year long average)

- 4.0 pCi/L is the EPA action level
- Average indoor: 1.3 1.4 pCi/L
- Average outdoor: 0.4 pCi/L



Remediation (Mitigation) Is An Option

- Techniques have been developed to reliably reduce radon to less than 4.0 pCi/L.
- Almost all systems can be installed in one day by a qualified contractor.
- The repairs take 24 hours to take effect before retesting can occur.
- EPA, DEP and state offices maintain lists of qualified contractors.



RADON Mitigation

- Active Soil Depressurization (ASD) is the most common approach.
- It employs a method for creating a vacuum beneath the foundation greater in strength than the vacuum applied to the soil by the building.
- Caulking and sealing is not a stand-alone technique.
- Ventilation approaches have proven more costly and less effective.



Sub-Slab Depressurization (SSD)

- 4" hole is cut through the concrete slab.
- A pit is dug.
- PVC piping is inserted.
- Piping is routed to exterior of house or to the attic.
- Inline suction fan is installed.
- Radon gases are vented above the roof line.









Sub-Membrane Depressurization

- Most common in homes with dirt crawl spaces.
- Plastic sheeting covers dirt floors.
- All seams and openings are sealed with adhesive.
- PVC pipe is inserted to create suction under plastic.
- Radon gases are exhausted to exterior of the home.







Sump/Drain Tile Depressurization

- Sump pump is sealed.
- PVC pipe is inserted into sump basin.
- Suction is applied to sump basin.







Passive System Conversion

- Existing PVC pipe is cut.
- Suction fan is installed.
- Electric is ran.









Why Choose RADON-RID?

- We are a Experienced, Licensed and Certified Radon Mitigation Contractor.
- We offer FREE on-site walkthrough with a Certified and Licensed Radon specialist.
- We provide testing, review testing guidelines and measurement results and determine if additional measurements are needed.
- We evaluate the radon problem and provide a written proposal on how radon levels will be lowered.
- We design a specifically tailored radon-reduction system, considering aesthetics as well as function.
- We install the system according to the <u>Radon Mitigation Standards</u> state and local codes.
- We confirm the finished system effectively reduces radon concentrations to acceptable levels by providing a FREE follow-up radon test.
- We complete the system installation with care for personal property and minimal disruption.



Let us provide you and your family with peace-of-mind and solve your RADON problem today!









Mitigation Cert #2586 | Testing Cert #2585 | PA

#2585 | PA HIC Cert. #: PA047660

