Reducing Radon Levels

There are several ways to fix, or mitigate, a radon problem. The most common method is called **sub-slab depressurization**. This method involves installing a pipe through the basement floor and exhausting the radon gas outside of the home. There are other effective methods for reducing radon levels. A licensed radon mitigation contractor can assist in determining the best method to reduce radon in your home. **For a list of radon mitigation contractors, please visit the radon website.**

Building a New Home?

If you are building a home, there are features that can be incorporated during construction to reduce radon levels. It is less expensive to include these features during construction than to mitigate the home later. These features minimize radon entry into the home and may also reduce moisture and other soil gas problems. Request that your builder use radon-resistant construction techniques.

Additional Online Resources

**Rhode Island Department of Health**  
www.health.ri.gov/healthrisks/poisoning/ radon/

**U.S. Environmental Protection Agency**  
www.epa.gov/iaq/radon/

**University of Rhode Island: Well Water Fact Sheet**  
www.uri.edu/ce/wq/has/PDFs/Radon.pdf

For more information on radon call the HEALTH Information Line  
401-222-5960 / RI Relay 711

What is Radon?

Radon is an odorless radioactive gas that can cause lung cancer. It comes from the natural decay of uranium that is found in the air all around us, and in soils in the United States. It can seep into homes and other buildings, creating levels that can be dangerous.
Why is Radon a Problem?
Radon is estimated to cause approximately 21,000 deaths a year nationally. Radon can cause lung cancer and is a serious environmental health problem. Exposure to elevated levels of indoor radon gas is second only to cigarette smoking as a cause of lung cancer in the United States. Individuals who are exposed to elevated radon levels and also smoke, are at an increased risk of developing lung cancer. The threat posed by radon is completely preventable!

What Can I Do?
Test your home. Radon testing is easy and inexpensive. It is the only way to find out your home’s radon level and prevent health risks to you and your family.

How do I Test for Radon?
Several easy-to-use test kits for radon are available. A homeowner, tenant, or radon measurement consultant can perform radon testing in residential properties. To obtain a list of companies that sell radon test kits or a list of radon consultants, please visit HEALTH’s radon website.

There are two types of tests: a short-term radon screening test (2-4 days) or a long-term test device (90-365 days). Due to natural variations in radon levels, a short-term test may not accurately reflect your true risk. A long-term radon test will provide a better indication of the year-round radon level in your home. If you have an elevated radon level in your home and you have a well, you should test the well water for radon.

Buying an Existing Home?
Rhode Island Real Estate Disclosure Law requires that the seller disclose prior elevated radon test results and advises the buyer to test for radon prior to purchase. Remember, an elevated radon level can be reduced.

Understanding Your Radon Test Results
Your test results will be reported in units of pico-Curies per Liter (pCi/L), a measure of radon concentration. There is no “safe” level of radon. However action is recommended by the US Environmental Protection Agency (EPA) at 4.0 pCi/L to reduce your radon and lung cancer risk.

Approximately 1 in 4 of homes in Rhode Island test at or above 4.0 pCi/L. There is no federal or state standard for radon in private well water, however an elevated level can contribute to the radon in air.

Testing Chart by Property Type

<table>
<thead>
<tr>
<th>Selling/Buying</th>
<th>Own/Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Testing</strong></td>
<td></td>
</tr>
<tr>
<td>In 1 area:*</td>
<td>In 1 area:*</td>
</tr>
<tr>
<td>2 short-term tests at same time or 2 sequential tests.</td>
<td>1 short-term test. If ≥ 4.0 pCi/L, then do a second test.</td>
</tr>
<tr>
<td><strong>Where to Test</strong></td>
<td></td>
</tr>
<tr>
<td>Test away from windows, doors, external walls and ≥ 20in above the floor.</td>
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</tr>
<tr>
<td><strong>How to Test</strong></td>
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<tr>
<td>Close the windows and doors at least 12hrs before test begins and follow instructions on test kit. Return kit to lab immediately after test.</td>
<td></td>
</tr>
<tr>
<td><strong>EPA Resource</strong></td>
<td></td>
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</tbody>
</table>

* All tests should be done in the lowest lived in level (e.g. frequently used basement). When using 2 short-term tests for a home sale, use the average of the 2 test results as the home’s radon level.