

# Inspector's Notes

November 2018








## What is this Radon stuff?

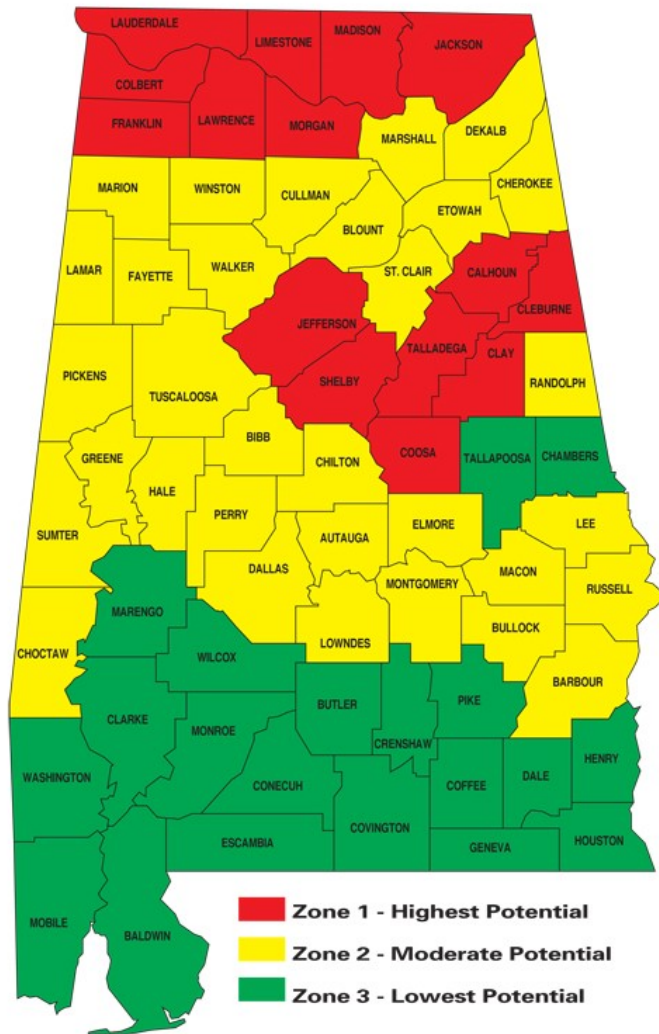
I'm often asked; "Do I really need to worry about Radon?" I always answer, "Well, yes and no." It's not really the Radon gas you need to worry about. You breathe in radon, you exhale radon; no problem. The most harmful part of radon are the decay byproducts.

### Quick Science Lesson

Radon, a colorless, odorless gas, is a byproduct of decaying radioactive uranium-238 found in the soil. It's the only time in the decay process that uranium is in the form of a gas. Radon has a half-life of 2.38 days, meaning that in 2.38 days 50% of a given portion of radon will have decayed. When radon decays it gives off **polonium** and **lead**. It's these Alpha ( $\alpha$ ) particle byproducts that settle in lung tissue resulting in **the second leading cause of lung cancer in the United States**.

| ELEMENT  | HALF-LIFE    | Where is Radon found?   |
|--|--------------|---|
|  Radon-222          | 3.83 Days    | <ul style="list-style-type: none"> <li>• Radon is naturally occurring in soil, rocks, and water.</li> <li>• It travels up from the ground and can even contaminate well water.</li> <li>• It's found in igneous rock (rock formed from molten rock material).</li> <li>• It's most prevalent in northern states.</li> </ul> |
|  Polonium-218       | 3.05 Minutes |   |
|  Lead-214           | 26.8 Minutes |   |
|  Bismuth & Polonium | 26.8 Minutes |   |
|  Lead-214           | 22 Years     |   |

# Alabama Radon Zones



<https://www.alabamapublichealth.gov/radon/radon-in-alabama.html>

- There are 15 counties in Alabama that have been identified as having the highest potential for elevated radon levels. They are Calhoun, Clay, Cleburne, Colbert, Coosa, Franklin, Jackson, Jefferson, Lauderdale, Lawrence, Limestone, Madison, Morgan, Shelby and Talladega. [www.alabamapublichealth.gov](http://www.alabamapublichealth.gov)

- These counties have measurements above 4 pCi/L (picocuries per liter of air).
- Average outdoor levels are 0.4 pCi/L
- Average indoor levels are 1.3 pCi/L
- The Surgeon General recommends remediation for homes that measure 4.0 pCi/L or above.

*Take your inspection  
to Higher Ground!!*

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**Do you have a question** you've encountered while out in the field? Has your client posed a question you're not familiar with. Is there something on which you'd like to hear more information? Let me know and I'll include it in my monthly newsletter.

If you have a question, you can count on it that others have the same question, so let me hear from you. Email your questions or inquiries to Higher Ground Inspections;

[hginspectionsllc@gmail.com](mailto:hginspectionsllc@gmail.com) or

[anthony@highergroundinspections.com](mailto:anthony@highergroundinspections.com).

Answers are always free. I look forward to hearing from you!