What is radon gas? Is it dangerous?

Radon is a naturally-occurring radioactive gas that can cause lung cancer. Radon gas is inert, colorless and odorless. Radon is naturally in the atmosphere in trace amounts. Outdoors, radon disperses rapidly and, generally, is not a health issue. Most radon exposure occurs inside homes, schools and workplaces. Radon gas becomes trapped indoors after it enters buildings through cracks and other holes in the foundation. Indoor radon can be controlled and managed with proven, cost-effective techniques.

Breathing radon over time increases your risk of lung cancer. Radon is the second leading cause of lung cancer. Nationally, the EPA estimates that about 21,000 people die each year from radon-related lung cancer. Only smoking causes more lung cancer deaths.

You can take steps to reduce and control the amount of radon in your home. Testing is the only way to determine radon levels. Have your home tested, either by a professional or with a do-it-yourself home test kit. If radon levels are high, contact a certified radon service professional to fix your home. EPA guidance suggests mitigating if levels are at or above 148 Becquerels/meter^3 (4 picocuries/liter). Usually, radon problems are fixed using an underground ventilation system or by increasing the rate of air changes in the building.

For more information about indoor air quality and the health risk of radon, click HERE.

The Pen Lake Association has purchased 2 radon testers that are available for loan to our membership. to use to test Sunday and returned on Saturday for the next member to pick. Please be advised, the Pen Lake Association assumes no responsibility if radon is detected in your residence. Further details on how to borrow the testers will be made available later this spring.

Understanding what radon is

Radon gas occurs naturally when uranium, thorium, or radium break down. Since these three items are common elements in the earth's crust, people are constantly exposed to some level of radon.

According to the **EPA**, the average level of radon in outdoor air is 0.4 picocuries per liter of air — a picocurie is one trillionth of a curie. The average level of indoor radon is 1.3 pCi/L. Because there is no known safe level of radon, the EPA recommends homeowners take action to lower indoor radon levels if they exceed 2 pCi/L.

How radon gets into the home

Radon is a noble gas — it is stable and does not react with other elements — that is 7.5 times heavier than air. These two traits make it susceptible to air pressure and currents. This means radon gas can easily navigate up through the soil and enter the home through the tiniest cracks or gaps in a building's foundation.

Radon gas is water-soluble. This means it can be absorbed by groundwater. When well water is used for tasks such as washing the dishes, showering, and cooking, radon gas can escape into the air of the home. Admittedly, this only accounts for up to 2% of the total radon found inside the home.

Because radon gas is easily influenced by air currents, turning on a forced air heating or cooling system while keeping the doors and windows closed disperses radon throughout the entire home.

Why is radon bad?

When uranium, thorium, or radium decay, three forms of radiation are released: alpha particles, beta particles, and gamma rays.

Alpha particles cannot penetrate the skin. However, they can penetrate the cells that line the lungs. If you breathe in radon, most of it will be exhaled. However, some particles may remain in the lungs. These are the particles that decay inside the body and cause irreparable damage.

Radon found in drinking water can be ingested. While this can cause damage to the stomach and other internal organs, scientists currently believe, in most cases, ingesting radon is not a major cause of concern.

There are two types of radon detectors you can purchase for your home: passive and active.

Passive radon detector: A passive radon detector monitors radon and its daughter particles — particles that remain after the original radioactive particles have decayed — through one of three methods: a charcoal scintillation device absorbs radon (and its products), an alpha track detector counts alpha particles that strike a plastic film, or an electret ion device measures the amount of radon present via a reduction of electrical charge in statically charge Teflon disc. These types of devices require no electricity and must be sent out to a lab for analysis.

Active radon detector: An active radon detector requires electrical power and continuously monitors and records the level of radon or its daughter products. Many offer hourly readings as well as an average result for the entire test period. These models are typically more expensive than passive radon detectors, but there are no lab fees involved. Additionally, they may have a much faster turnaround, often providing the first measurement within 24 hours.

Question1/

The detector shows Day 1 after 4 days

Thanks for bringing this to our attention, I understand that it's been 3 days now but your device only shows Day 1 just for your reference that is perfectly normal. The data or days of measurement on the main screen of your device will only show Day 1, and Day 7 (it doesn't show any other numbers for the Days of measurement like day 2, 3, 4 or 5).

Question 2/

Hitting the Mode button shows a 4. Is this telling me that it has been monitoring for 4 days?

Yes, that is correct. Once you press the mode button you will be able to see additional information about your device.

Question 3/

If I lend it to a friend, should the unit be reset?

Yes, we recommend resetting the device if you are going to change the room or location of your device so that it can calibrate and gather enough data in order to adjust properly to its new environment.

Question 4/
Do I need to download anything to store history on a computer?

Your Corentium Home device it is a stand-alone device and doesn't have an option to connect to a computer or laptop.

Question 5/
The micro-USB connector on the side of the unit is for what purpose?

The micro-USB port is used during production and can not be used outside the factory.