

***Our Vision: Healthy People in Healthy Communities***  
**Adams, Clay, Nuckolls and Webster Counties**

For Immediate Release: Thursday, January 12, 2023  
For more information contact: Michele Bever, PhD, MPH, Executive Director  
402-462-6211 / 1-877-238-7595

.....

Local family's home tests high for radon; mitigation brings levels down

By Ashley Swanson

When the Murman household of rural Glenvil moved, Kathy Murman decided to test the new home for radon.

Murman knew that there is a high radon potential in Nebraska, meaning the type of rocks and soils here are a source of radon. She also was aware that radon is the second leading cause of lung cancer in the United States and she wanted to make sure her new family home did not put her family at risk. She wanted to test to find out if this colorless, odorless radioactive gas was finding its way into their home.

Murman purchased a do-it-yourself radon testing kit from the South Heartland District Health Department (SHDHD) in September 2022. She followed the kit's directions for where to place the test kit and how long to leave it out, and then sent the kit to the company for processing.

Radon tests measure the amount of radioactive gas per liter of air, in picocuries per liter (pCi/L). When the results came back, Murman learned that the radon level in their home was 13 picocuries per liter (13 pCi/L), more than three times higher than the "take action" level of 4 pCi/L.

Murman's next step was to hire a licensed radon mitigation business to discuss what could be done to reduce radon gas concentrations in their home. She contacted All American Radon out of Ayr. The radon mitigation specialist came to the Murman home to see the layout and discuss options for installing a system that could remove the radon gas.

Radon enters buildings and homes from the soil beneath, through cracks and holes in the foundation. Homes can trap radon inside, where it can build up. Any home can have a radon problem – new homes, old homes, drafty homes and well-sealed homes, homes that have basements and those that do not. Radon gas can be present throughout a house but is usually at higher concentrations in the lower-level closed spaces, like basements.

There are several ways to reduce the high-risk radon in your home, including:

- Vent pipe system and fan—These systems remove radon from below the foundation and crawlspace before it enters the home.
- Sealing foundation cracks and other openings—Sealing every entry route may be very difficult and new cracks will continually develop.
- Better ventilation of the home or continuous ventilation of the basement, especially in the summer months when windows can be left open.

In their home, Murman explained that “two four-inch diameter holes were dug in the basement so that pipes could be installed. These pipes went from the basement into the attic and out through the roof; a ventilation fan was also installed in the attic.”

This system was able to draw radon gas into the pipes in the basement and exhausted it into the atmosphere outside.

About a week after the radon removal system was installed, the radon gas levels were checked again and they dropped about 70 percent. Ryan Meyer, owner of All American Radon, who did the mitigation on Murman’s house, said if the house is tested again and reads 4 pCi/L or higher, he would adjust the system to make it work properly.

Following the installation of the system Meyer said the Murman’s—or any household—should monitor the system to ensure it’s still running.

“The longer the system runs, the better it works,” Meyer said, adding that the EPA recommends households should get testing done every two years.

According to Michele Bever, SHDHD health director, radon is a health risk in the 4-county health district, consisting of Adams, Clay, Nuckolls and Webster counties.

“Radon forms naturally from the decay (breaking down) of radioactive elements, such as uranium, in the ground; 57% of the results from homes tested last year were above the Environmental Protection Agency (EPA) action level of 4 pCi/L,” Bever said. “Unless you test for radon in your home, there is no way to know how much radon exists in the air you are breathing.”

The EPA estimates that radon causes about 21,000 lung cancer deaths each year in the United States. “In January, during National Radon Action Month, SHDHD is making a special effort to encourage residents to test their homes to find out if they are at risk,” Bever said.

Radon test kits are available at South Heartland (606 N. Minnesota Ave. #2, Hastings, NE 68901) for \$8. Kits may also be purchased at the Nebraska Extension offices in Clay, Nuckolls and Webster Counties and the public library in Superior. For more information, call SHDHD at 402-462-6211.

##