# RADIONUCLIDE FACT SHEET

# **NEW HANOVER COUNTY**

# TAKE ACTION TEST THE INDOOR AIR OF BUILDINGS.

**SOURCE OF RADON:** Radon is a gas that is naturally present in rocks and soil in North Carolina. It is created when uranium in the ground decays. Some building materials can also have uranium, and the only way to know if radon is being released indoors is by testing the air. Radon itself cannot be seen, smelled, or tasted.

## **TEST YOUR INDOOR AIR**

It is important to test the air in your home, apartment, or commercial building for radon every two years. Radon is a gas that can be harmful and cause lung cancer if it builds up in your indoor air.<sup>(1)</sup>

- If your indoor air radon level is between 2 and 3.9 picoCuries per liter, the NC Radon Program recommends you consider hiring a certified radon professional. They can install a system that will lower the radon level and make your air safer to breathe.<sup>(1)</sup>
- If your indoor air radon level is equal to or higher than 4.0 picoCuries per liter, the NC Radon Program strongly recommends that you hire a certified radon professional. They can install a system that will lower the radon level and make your air much safer to breathe.<sup>(1)</sup>

#### PROTECT THE MOST VULNERABLE

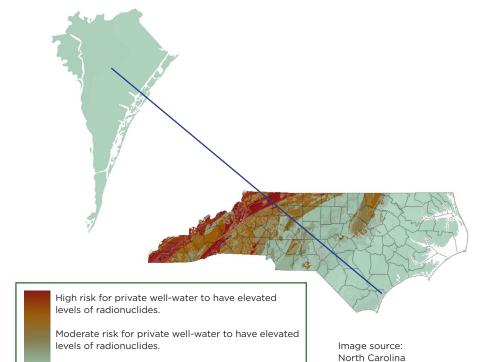
Smokers and People Exposed to Secondhand Smoke

While breathing in radon alone can cause lung cancer, the Centers for Disease Control and Prevention (CDC) reports that people who smoked or currently smoke and are exposed to radon are 25 times more likely to get lung cancer. (4)

### Children

The CDC reports that children are twice as likely to be affected by breathing in radon than adults. Additionally, if children are exposed to tobacco smoke and elevated radon levels, their risk of developing lung cancer increases at least 20 times.<sup>(5)</sup>

Owners of buildings built with certain materials, such as large buildings and midhigh-rise condominiums, should consider testing the indoor radon level. The CDC reports that "any buildings built with sandstone, concrete, brick, natural stone, gypsum, and granite contain naturally occurring radioactive elements like radium, uranium, and thorium." The only way to know if these materials increase indoor radon levels is by testing for radon. (6)



### MORE INFORMATION

- 1. http://radon.ncdhhs.gov
- 2. www.dph.ncdhhs.gov/chronicdiseaseandinjury/cancerpreventionandcontrol/index.htm
- 3. https://schs.dph.ncdhhs.gov/units/ldas/docs/NCSHIP-2022-Full.pdf

Very low risk for private well-water to have elevated

- 4. www.atsdr.cdc.gov/csem/radon/health\_effects.html
- 5. www.atsdr.cdc.gov/csem/radon/who\_risk.html

levels of radionuclides.

6. www.cdc.gov/nceh/radiation/building.html#:-:text=Radioactive%20materials%20in%20 sandstone%2C%20concrete,radium%2C%20uranium%2C%20and%20thorium











Geological Survey.