

Source: <http://www.navajonationepa.org/radon.html>

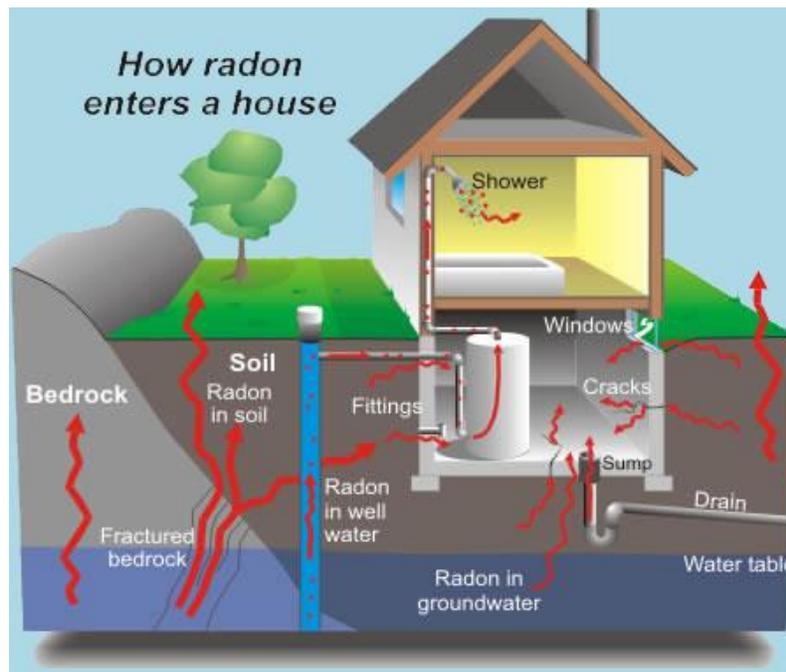
## Navajo Nation Environmental Protection Agency Radon Program

### What is Radon?

Radon is a colorless and odorless gas that is present indoors and outdoors. In 1990, the National Safety Council conducted a study on the effects of this naturally occurring gas. It is estimated that radon can cause 7,000 to 30,000 cancer related deaths each year. Due to its harmful effects, radon is the second leading cause of lung cancer, next to smoking.

### Our Goal:

The goal of the Navajo Nation Environmental Protection Agency's Radon Program is to ensure all homes and tribal offices are tested at least once and all schools and day cares are tested yearly.



### How Does Radon Get Into Your Home?

Radon comes from uranium. Uranium is found in soil and rock, such as phosphate, pitchblende, shale, and granite. As uranium decays, it produces radium. In return, decaying radium produces radon. Radon gas travels upward from the ground and enters buildings and homes through dirt floors and through cracks in the foundation and basement. Radon also travels through drains, walls, and other openings where it is trapped. Radon in the outside air is in very low concentrations and is not a problem. It can also come from your water, if your water is supplied by a well. If a well serves as your water source and your home has been tested to have a level of 4 picoCuries per liter of air (4 pCi/l-air) or higher, you might consider having your water tested.

## Why is Radon Harmful?

Radon is a radioactive gas, making it harmful to our bodies. Long-term exposure to radon, in small or large amounts, can develop into lung cancer. Radon releases tiny radioactive particles that can be inhaled. These particles attach to lung tissue and cause damage, resulting in lung cancer. The chance of developing lung cancer is increased for smokers.

## How much Radon is Safe?

Radon is not safe, in any amount or at any level. The USEPA's recommended action level for radon is 4 pCi/l. The World Health Organization recommends mitigations to lessen indoor radon when the level is 2.7 pCi/l. Levels of indoor radon vary greatly from place to place; the only way to know the radon levels in a building is to test the indoor air.

## How Can We Help?

The Radon Program, a division of the Navajo Nation Environmental Protection Agency, is dedicated to informing the public about radon and its health effects. The program conducts routine tests in area schools and tribal buildings. Tests are also administered in private homes at the request of the homeowner.

The test kits used by our program are the charcoal canister devices (short-term testing) and the alpha-track detectors (long-term testing). The charcoal canisters provide relatively quick results and the alpha-track detectors provide a more accurate average of the radon concentration in a specific area.

If you have been told your home has high levels of radon, we recommend you take two immediate actions to reduce those levels:

- **Increase indoor ventilation** — Open doors and windows slightly to increase ventilation and air flow through your home. Use an electric fan to blow inside air to the outdoors.
- **Increase indoor humidity** — Leave a pot of water steaming on your wood-burning stove. Adding water vapor to the air inside your home increases the indoor humidity, which can lessen radon levels.



Homes found to have high radon levels will be referred to the Navajo EPA Radon Program and to the Navajo EPA Superfund Program for follow up.

If you would like to know more about radon, contact the Radon Program at (928) 871-7703 or call the National Radon Hotline at 1-800-SOS-RADON. If you would like outreach about radon at Chapter Houses or School, please call John Plummer at (928) 871-7703.

**NNEPA Radon Program @ (928) 871-7863**

**Fax: (928) 871-6757**

**Contact person: John Plummer, Environmental Specialist**

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