

# Naturally Occurring Radon in Alaska

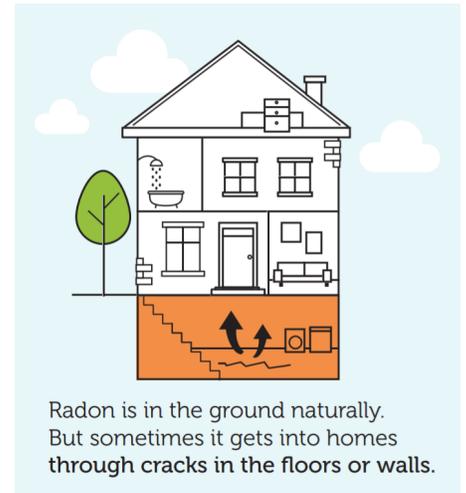
## Alaska Division of Geological & Geophysical Surveys



**Radon (Rn) is a naturally occurring radioactive gas released in rock, soil, and water from the natural decay of uranium.** While levels in outdoor air pose a relatively low threat to human health, **radon can accumulate to dangerous levels inside of buildings.** You can't see, smell, or taste it, but an elevated radon level in your home may be affecting the health of your family.

### Radon Health Risks

Exposure to radon is the second leading cause of lung cancer in the United States and the number one cause among non-smokers. The U.S. Environmental Protection Agency (EPA) estimates that radon causes more than 20,000 lung cancer deaths in the country each year. Only smoking causes more lung cancer deaths. If you smoke and your home has radon, your risk of lung cancer can be higher. In fact, **the EPA and the U.S. Surgeon General urge all Americans to protect their health by testing their homes, schools, and other buildings for radon.**



Radon is in the ground naturally. But sometimes it gets into homes through cracks in the floors or walls.

### How does radon enter my home?

High levels of radon in homes usually come from the surrounding soil. Radon gas enters through cracks and openings—such as sump pump lids and plumbing features—on the lower levels of your home. Hot spots often include basements, first-floor rooms, and garages, but radon can be found anywhere in your house.

**Radon and Smoking: A Dangerous Combination**

If you live in a home with high radon levels, smoking raises your risk of lung cancer by **10 times**.

Learn more by calling the National Radon Hotline:  
**1-800-SOS-RADON (1-800-767-7236)**

Source: U.S. Environmental Protection Agency

### Can I prevent radon from entering my home?

Houses can be built to resist radon gas from seeping in. Simple building and venting techniques will reduce the chance of high radon levels building up in your new home. Designing and building your home to be radon-resistant is especially easy and affordable during construction. Be sure to talk to your builder about it.

In a pre-existing home, some radon problems may be fixed with easy solutions. Larger problems may require the help of a mitigation contractor. Solutions for addressing radon include sealing cracks and installing special pipes to draw radon away from your home.



Contact: Paul Goodfellow | [paul.goodfellow@alaska.gov](mailto:paul.goodfellow@alaska.gov)  
IC 82 v. 2 | [doi.org/10.14509/31109](https://doi.org/10.14509/31109)



# Naturally Occurring Radon in Alaska

## Alaska Division of Geological & Geophysical Surveys



### Alaska Radon Database

One in 15 homes in the United States has elevated levels of radon. However, we do not know the statistics in Alaska. The Division of Geological & Geophysical Surveys (DGGS) and the University of Alaska Fairbanks' Cooperative Extension Service are creating a radon database and updating the Alaska Radon Map ([maps.dggs.alaska.gov/radon](http://maps.dggs.alaska.gov/radon)) to better understand radon potential and identify where elevated levels of radon exist in the state.

**All Alaskans are encouraged to contribute to the radon map database.** Previously collected and new test results are both helpful. Your information will be aggregated to ensure confidentiality.

If you want to test your home, radon test kits are inexpensive and easy to use. To contribute results from a previous radon test, please contact us.

**1 out of 15 U.S. homes have high radon levels\***



\*According to the Centers for Disease Control and Prevention

### Testing for radon



Because we can't see, smell, or taste radon, it's easy to forget that it may be a problem in any home in Alaska. It's also important to remember that just because your neighbor's house does not have an elevated level of radon does not mean that your house will have a low radon level.

**The only way to know if this dangerous gas is collecting in your home is to test and confirm your home's level is under the EPA action level of 4 pCi/L.**

You can test for radon with a short-term (typically 48–96 hours), or long-term test (up to a year). Tests conducted longer than 90 days are preferred. If the radon test results are needed quickly, the averaged results of two short-term tests (less than 90 days) can be used in deciding whether to mitigate.

The American Association of Radon Scientists and Technologists recommends homeowners retest every five years or after events that may change the airflow or structure of the house, such as significant earthquakes and renovations.

**Radon test kits are available** in hardware stores and other retail outlets, and for purchase online from the National Radon Program Services ([sosradon.org/purchase-kits](http://sosradon.org/purchase-kits)). Radon service providers will also conduct testing for you. On a limited basis, radon test kits may be available at no cost to Alaska residents. Visit [dggs.alaska.gov/hazards/radon.html](http://dggs.alaska.gov/hazards/radon.html) for current information.

Learn more online: [maps.dggs.alaska.gov/radon](http://maps.dggs.alaska.gov/radon)  
or contact Paul Goodfellow  
[paul.goodfellow@alaska.gov](mailto:paul.goodfellow@alaska.gov) | 907-269-6401

Contact the Alaska Radon Hotline at 1-800-478-8324 for more information on radon testing and mitigation.