

Surveillance of environmental and occupational exposures for cancer prevention



Radon

Occupational Exposure Fact Sheet



What is radon?

Radon is a **naturally occurring radioactive gas** found in several isotopic forms. It is produced from the natural breakdown of uranium in soils and rocks and is colorless, tasteless, and odourless.

Radon in groundwater, soil, or building materials may enter the working environment and then decay, emitting ionizing radiation. Levels of radon in confined spaces or underground are often significantly higher than outdoor air levels.

The International Agency for Research on Cancer classifies radon as a **known** carcinogen (IARC 1).

Occupational exposure to radon

Inhalation is the most common route of occupational exposure to radon.

Approximately 57,000 Canadians are exposed to radon at work. This includes 50,000 in general indoor environments, and 7,000 in high risk industries and/or jobs, mainly in underground environments.

Industries with the largest number of exposed workers in Canada include:

- Educational services (7,300 people exposed)
- Mining and oil and gas extraction (6,600 exposed)
- Health care and social assistance (5,000 exposed)

Occupations with the largest number of exposed workers include:

- Underground production and development miners (2,800 exposed)
- Elementary school and kindergarten teachers (1,800 exposed)
- General office clerks (1,500 exposed)

Results show the majority of workers exposed to radon are in the low exposure level category, with a significant number at risk for moderate to very high exposure.

What are its health effects?

There is a well-established link between exposure to radon and **lung cancer**. People who smoke and are exposed to elevated levels of radon have a significantly increased risk of developing lung cancer, according to Health Canada.





Where can you learn more?

- Uisit our website at www.carexcanada.ca
 - Follow us on Twitter @CAREXCanada
- Email us at info@carexcanada.ca

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Exposure Level

Low Medium High Very high

38,000 67%

2,30<mark>0</mark> 4%

9,500

17%