Radon: gas from the Earth

What is radon?

Radon is an odourless, colourless, and tasteless gas produced by the radioactive decay of uranium that occurs naturally in rock, sediment, soil, and water. Radon gas seeps from the ground into the atmosphere and is dispersed and diluted to harmless levels. However, it can accumulate in poorly ventilated basements and crawl spaces, because it is more dense than air. Radon can also enter homes in water drawn from local groundwater wells. Radon dissolved in the water escapes to the indoor air as people take showers, and wash clothes and dishes. Longterm exposure to high levels of radon increases the risk of lung and throat cancer.

A survey of representative homes in the Yukon Territory found that radon emission from soils around Whitehorse is several times the national average. The radon comes from the granitic bedrock and overlying glacial sediments.

Coping with radon

Radon levels can vary greatly from house to house, depending on basement type, ventilation, and geological material on which the houses are built. To test radon levels, collectors can be signed out from the Yukon Housing Corporation, then returned for a reading. Seepage of radon into a home can be reduced by sealing holes in walls and floors, by installing small fans outside to reduce soil-gas pressure around the foundation, and by improving basement ventilation. The Yukon Territory's Building Code has provisions to ensure that new construction avoids potential gas buildup.

RADON GAS: Beware of the stuffy basement How radon enters a house Shower Windows 🗲 Soil **Bedrock** Cracks Radon Fittings in soil Sump Radon Drain in well water Fractured bedrock Water table Radon in groundwater