

Radon

Human Health Risk	H
Ecological Risk	
Socioeconomic Risk	M

Radon is a radioactive gas that is emitted during the decay of uranium, a naturally occurring mineral found in New Jersey rocks and soil. While radon gas is not a threat in the ambient (outdoor) air, it can become concentrated in buildings where it enters and collects in basements. At these concentrated levels, radon is a human carcinogen. When radon is inhaled, small radioactive particles are retained in the lungs, increasing the risk of lung cancer. Radon may also be present in drinking water, and exposure via ingestion of contaminated water increases the risk of stomach cancer.

Who's at risk?

Some individuals are exposed to greater concentrations of radon because of the location and/or construction of their homes or businesses.

Houses and other structures contain varying concentrations of radon gas due to differences in the radon content of underlying soils and rocks, and because of differences in ventilation. Smokers are at an increased risk because there is a synergistic effect from the combined exposures.

What are the human health impacts in New Jersey?

The total number of lung cancers resulting from radon exposure may be as high as 1700 per year. The number of stomach cancers attributable to radon may total 10 per year.

What are the socioeconomic impacts in New Jersey?

While total socioeconomic impacts are modest, economic costs may be significant. When combined with radium exposures, health care costs for the excess cancers may be as high as \$90 million annually. In addition, there are costs for remediating homes with known high levels of radon. These costs add up to between \$14 million and \$70 million per year.

What's being done?

Legislation requires minimum standards for new home construction, and a federal rule has been proposed for mitigation of drinking water risks, in areas with elevated radon levels. New Jersey citizens are encouraged to monitor their homes for radon.