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Author

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Organization

Evict Radon National Study

Title

An update on the 2023-2028 Canadian national trial for measuring radon decay products in toenail clippings to assess long-term, personalized radon exposure dosimetry.

Abstract

In late 2025, Evict Radon National Study teams published the successful outcomes of the pilot project carried out from 2021-2024 to determine whether measuring the radon decay product ^{210}Pb in toenail clippings might be a useful readout of a person's long term radon exposure. The original trial involved ~40 people mostly living in Alberta with known, long-term household radon exposure. Since 2024, we have been recruiting up to 10,000 Canadians for a larger-scale validation trial of this emerging technology. The new cohort spans all Canadian regions and provinces, and includes people of diverse job-types, living in different housing types, will be evenly weighted by men and women, and include people who have or are smoking tobacco, and/or who are experiencing cancer. In his talk, Dr. Pearson will update the research community on progress to date on recruitment and early outcomes of nationwide radiation dosimetry of radon exposure among this cohort of participants, as a function of the homes and communities in which they live and work. Importantly, he will describe activities planned for fall 2026 to help recruit new people interested in taking part in this research, and will outline how the Canadian radon awareness community of professionals can help ensure national balance and success of this project.