

The research project is organized by the EVICT RADON NATIONAL STUDY team of pan-Canadian cancer researchers at the BC Cancer Agency, the University of British Columbia, the University of Calgary, Queens University, the University of Waterloo, Dalhousie University, as well as the BC Generations Project, the Alberta Tomorrow Project, and the Atlantic PATH Project, which are all part of the CanPath coalition of longitudinal health studies.

For administrative purposes, the research ethics approval of this study was provided by the Health Research Ethics Board of Alberta – Cancer Committee.

STUDY TITLE:

Understanding Canadian Environmental Lung Toxicant Exposures, Biomarkers and Health Impacts through Transdisciplinary, Citizen Science Research

FUNDED BY PEER-REVIEWED RESEARCH and OUTREACH GRANTS FROM:

Health Canada
The Canadian Cancer Society
The Canadian Institutes of Health Research
The Government of Alberta
The Alberta Real Estate Foundation
The Canada Foundation for Innovation

Study ID: HREBA.CC-24-0310

Contact Information: radon@ucalgary.ca

The project lead is Aaron Goodarzi, and he is joined by the following Senior Investigators from across Canada whose expertise is in (these disciplines): Maria Aristizabal (biology), Darren Brenner (epidemiology), Graham Dellaire (biology), Trevor Dummer (epidemiology), Doreen Ezeife (medicine), Amy Li (engineering), Geoff Maksym (engineering), Victor Martinez (biology), Cheryl Peters (epidemiology), Cathy Ryan (geoscience), Joshua Taron (building science), Alain Tremblay (medicine), Robin Urquhart (epidemiology), Alison Wallace (medicine), Michael Wieser (radiation physics), and Jennifer Vena (epidemiology).

THANK YOU FOR YOUR INTEREST in becoming a **CITIZEN SCIENTIST** participant within the Evict Radon National Study. It is very important that you understand that this is a citizen science-based study that requires you to purchase a specific radon testing kit (offered entirely at cost / nonprofit) to people living in Canada, via this project.

For your convenience, the essential consent declarations (that you will need to agree with in the affirmative to participate) have been broken down into four simple sections that will follow this page. This is an online consent process, and no signatures are required.

You can download all consent information for your own records [HERE](#). Thank you for making our research processes better!

CONSENT Part 1 of 4:

WHY AM I BEING ASKED TO TAKE PART IN THIS RESEARCH STUDY, AND WHAT IS IT ABOUT?

1. You are either:
 - a. Interested in radon testing and participating in scientific studies.
 - b. Invited to participate through a lung cancer screening program, oncologist, physician or patient advocate referral.
 - c. You have previously participated in the Evict Radon National Study and have consented to be contacted for future radon related research opportunities.
 - d. A part of a Canadian Partnership for Tomorrow longitudinal study cohort.
2. The **PURPOSE** of this study is to measure radon exposure in Canada to determine how this source of lung cancer is shaped by buildings, geologies, behaviours, and to develop technology needed to assess radon exposure in people.
3. The **POINT OF THIS STUDY** is to use radon exposure information to develop solutions to Canada's worsening radon gas exposure problem and enable wider access to early lung cancer screening programs for people who need it.
4. Taking part in **THIS STUDY IS VOLUNTARY** and researchers are available to discuss this with you. You may leave the study at any time, without giving reason, and without penalty.

If you decide to participate in this study, you will need to respond "YES" to the statement below. If you want more information before answering, please read the full consent document [HERE](#) and/or contact radon@ucalgary.ca.

Consent Statement 1: "I understand that I have been asked to take part in a research study and why it is being done."

- Yes, I understand
- NO, I do not want to participate (this will end participation)

CONSENT Part 2 of 4:

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

Up to 25,000 participants from across Canada might take part in **CITIZEN SCIENTIST**-based radon testing of their residential property or properties. Citizen science research is where members of the general public collect information on their environment in collaboration with professional scientists, with each party using some of their own resources to achieve this goal.

WHAT WILL HAPPEN DURING THIS STUDY?

People who are interested in citizen-scientist based household radon testing are asked to do this by obtaining an at-cost (non-profit) long term radon test kit that is facilitated by and obtained from our study team, for CAD \$53.99+GST. These radon devices are administered and quality-controlled by our C-NRPP (Canadian National Radon Proficiency Program) certified radon testing partner, Radon West Ltd. Purchased kits will then be mailed directly to the preferred residential address. Citizen Scientists pursuing this option will complete two short (10-20 minute) surveys, one when they register the kit online at the start of radon testing, and one when they enter the end date at the end of testing. Kits will be returned by pre-paid mail for analysis and all participants will receive their household radon test outcome by direct email.

1. **Your commitment as a citizen scientist** is to obtain the radon test from our study team for \$53.99+GST, and perform the radon test in your primary household for a period of 91 to 365 days. You will also be asked to complete two online surveys, lasting between 10-20 minutes each.
2. **Our commitment** is to ensure the quality control of the radon testing process provides you with the most reliable household radon test outcome possible, typically within 6-8 weeks of the radon test device being returned successfully to the laboratory. We will also provide you free-to-download copies of all annual research outcomes, in one annual email sent out at the end of each calendar year.
3. **Participant data is always fully de-identified**, so that your name, contact information, address, personal responses, and specific radon test results are NEVER published, or searchable in any way whatsoever where you can be identified. Your privacy is our highest priority.

If you decide to participate in this study, you will need to respond "YES" to the statement below. If you want more information before answering, please read the full consent document [HERE](#) and/or contact radon@ucalgary.ca.

Consent Statement 2: "I understand what I am to do (If I decided to take part) and how the information collected will only be used for this study."

- YES, I understand
- NO, I do not want to participate (this will end participation)

CONSENT Part 3 of 4:

WHAT ARE MY RESPONSIBILITIES SHOULD I DECIDE TO PARTICIPATE IN THIS STUDY? If you choose to participate in Citizen Scientist-based radon testing, you will be expected to perform the radon test and complete two short online surveys.

WHAT WILL HAPPEN IF I CHOOSE TO WITHDRAW FROM THE STUDY EARLY? You can choose to end your participation in this research study at any time prior to the submission of findings for peer-review (called early withdrawal), without having to provide a reason. These requests should be submitted via email to radon@ucalgary.ca.

WHAT ARE THE POTENTIAL BENEFITS OR RISKS OF PARTICIPATING IN THIS STUDY?

1. The **DIRECT BENEFIT** of being a citizen science participant, is receiving a C-NRPP quality controlled long term radon result.
2. The **POTENTIAL or INDIRECT BENEFITS** of participation include:
 - a. Increasing your personal knowledge of the origins and modifiers of the Canadian radon exposure problem.
 - b. Carrying out work that allows research teams to develop solutions to reduce and/or prevent radon exposures and reduce future lung cancer cases in Canada.
 - c. Enable research teams to develop new methods that can measure lifetime radon exposure, so that more people who need early screening for lung cancer can access these programs.
3. There are **NO KNOWN RISKS** of physical harm connected with participation in performing a radon test as part of this study.
4. The **POTENTIAL or INDIRECT RISKS** associated with participation include learning of a radon reading in the building tested that you or others may identify as a health concern. Please be aware that it is entirely your choice to act, or not, on the outcomes of a radon test. For radon levels at or over 200 Bq/m³, you are advised to reduce levels below this amount before selling your house to another person. If no action is taken, you are advised to disclose this outcome during a real estate transaction. For more information, we refer you to the most up to date facts via [Health Canada](#) and/or the [C-NRPP](#). Please note that there are financial costs associated with installation of radon mitigation systems. The Evict Radon National Study is NOT affiliated in anyway with radon mitigation, installation or consultation.

If you decide to participate in this study, you will need to respond "YES" to the statement below. If you want more information before answering, please read the full consent document [HERE](#) and/or contact radon@ucalgary.ca.

Consent Statement 3: "I understand the potential benefits and risks associated with this study and that I am free to leave this study at any time, without reason or penalty."

- YES, I understand
- NO, I do not want to participate (this will end participation)

CONSENT Part 4 of 4:

IS THERE ANY CONFLICT OF INTEREST RELATED TO THIS STUDY?

No. There are no conflicts of interest relating to this study. The researchers and their families have no known personal connection to any for-profit group relating to this work. Funding from this study comes from public sector agencies.

HOW WILL MY PERSONAL INFORMATION BE KEPT PRIVATE? PLEASE BE ASSURED that all information entered will be kept 100% confidential and stored in secured, encrypted servers in Canada, subject to Canadian privacy laws.

WILL THERE BE COSTS TO PARTICIPATION / WILL I BE COMPENSATED FOR

PARTICIPATION? At this time, Citizen Science participants are required to obtain an at cost, C-NRPP certified, radon test kit that are priced at \$53.99+GST and that includes all postage to and from labs, and all other associated costs. There are no other financial costs associated with participation. There is no form of compensation associated with taking part in this research other than receiving your household radon test outcome.

WHAT IF MY RESIDENCE IS FOUND TO HAVE HIGH RADON THROUGH THIS STUDY? The purpose of this research is to evaluate radon levels in Canadian residential buildings, and so you will learn the level of radon (in Bq/m³, the unit that radon is measured in Canada) of your home. You are also able to learn this through many other radon testing options that are available to the public. If your residence is found to have levels of radon above Health Canada's administrative action guideline of 200 Bq/m³, it is still your personal choice whether to take action (such as the installation of a professional radon reduction) or not. The Evict Radon National Study does not provide radon mitigation estimations or services, and the research team (and their families) are NOT directly affiliated with anyone who offers these services. How you respond to this information is entirely within your personal choice. For independent information on radon mitigation, please see the [Canadian Nation Radon Proficiency Program](#) and/or [Health Canada](#).

WHAT ARE MY RIGHTS AS A PARTICIPANT IN THIS STUDY?

Your rights to privacy are legally protected by federal and provincial laws that require safeguards to ensure that your privacy is respected. By providing your consent to join this study, you do NOT give up any of your legal rights.

If you decide to participate in this study, you will need to respond "YES" to the statement below. If you want more information before answering, please read the full consent document [HERE](#) and/or contact radon@ucalgary.ca.

Consent Statement 4: "I understand that I do NOT give up any of my legal rights by participating in this study."

- YES, I understand
- NO, I do not want to participate (this will end participation)

OK – YOU'RE ALL SET!

To become a Citizen Scientist Participant, please enter your full name, email address and click the consent button below. You will be redirected to the secure webstore where you can purchase your at-cost, C-NRPP approved radon test kit.

First Name	Last Name
Enter your contact email address here	Re-enter your contact email address here

CLICK TO CONSENT AND JOIN THIS STUDY

Here are some key things to know:

Who do I contact for questions related to this study? If you have questions about taking part in this study, you should first contact radon@ucalgary.ca for the most rapid response.

If you have any questions about your rights as a participant, or about ethical issues related to this study, and you would like to talk to someone who is not involved in the conduct of the study, please contact the Office of the Health Research Ethics Board of Alberta - Cancer Committee at:

- Telephone: 1 780 423 5727
- Toll Free: 1 877 423 5727

Upon consent, you will receive an automated, date-stamped email verifying your consent for your records.