Home-owner Information Form

Project Title

Climate Attribution of Wildfire Smoke Impacts on Priority Population Health in Southeast Asia and Australia (CANBREATHE)

Lead Researcher

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What is this study about?

This project looks at how climate change affects wildfires and smoke pollution - and how these changes impact people's health, especially for groups like Indigenous peoples, pregnant women, and young children. Wildfires and smoke are becoming more common and more dangerous. Through this project, we're working with local communities in Australia, Thailand, Indonesia, Laos, and Cambodia to better understand smoke exposure in homes and how we can protect people's health.

Who is funding this research?

This study is funded by Wellcome Trust, a global organisation that supports research to improve health and respond to climate change.

Why am I being invited?

We're inviting you to take part in a study where we will install low-cost air quality monitors in and around your home to measure pollution levels (like $PM_{2.5}$), temperature, humidity, and other conditions. We'll also ask you a few questions about your home, and your experience during smoke events. This will help us understand how much smoke enters homes during haze or wildfire seasons - and how we can reduce exposure indoors.

As part of the study, we will also demonstrate how to make DIY air purifiers using simple materials like fans and filters. Half of the participating households will be randomly selected to receive and test these DIY purifiers during the haze season, so we can evaluate how effective they are at improving indoor air quality.

What will I be asked to do?

If you choose to take part in the study, here's what we'll ask you to do:

- Allow us to install small indoor and outdoor air quality sensors at your home
- Take part in a short interview about your home, daily activities, and your experience during smoke events

- Let us record basic information about your home (e.g. number of rooms, windows, and ventilation features)
- If selected, try out a simple DIY air purifier that we will provide, along with easy instructions on how to use it
- Allow us to visit your home occasionally to check the sensors and answer any questions you may have
- **To participate in this project, your house/residence must have access to 24/7 internet and electricity. You must remain at this house/residence for the period of 6 months (March/ April/ May to September/ October/ November 2027).**

The sensors will run continuously for around 2-3 weeks at the start of the study and then will continue monitoring for up to 6 months (in Darwin).


PurpleAir



OneTemp (Milesight)


NTAQHI (Nanogen)


AirGradient ONE (indoor)



AirGradient Open Air (outdoor)

Images of the low-cost air quality monitors that will installed



Sample images of the DIY air purifier

Do I have to take part?

No. Taking part is completely **voluntary**. You can choose not to participate or withdraw from the study at any time without any penalty. You can also choose whether or not you'd like to take part in the DIY air purifier part of the study. Saying no will not affect you in any way.

What are the risks?

There are no major risks from participating in this study. The air quality sensors are small, safe, and only collect environmental data (such as air pollution levels, temperature, and humidity)—they do not record personal, audio, or video information. Some people may feel uneasy about having sensors in their home, and we're happy to explain how they work and how the data is used. For participants selected to use a DIY air purifier, minor risks include electrical safety (as with any plug-in device), potential overheating if left unattended, and tripping hazards from cords. Clear safety instructions and ongoing support will be provided to reduce these risks.

What are the benefits?

You'll gain insights into your home's air quality and how it's affected by smoke. Additionally, you'll receive a DIY air purifier to help reduce indoor pollution during smoke events. Your participation will support community health and inform better policies on air pollution.

How will my information be used?

Everything you share will be treated as confidential. We'll remove names and personal details from the data. Results may be used in reports, presentations or research papers, but no one will be identified.

Will my information be kept private?

Yes. Your name and address will be kept confidential, and any data we share or publish will be de-identified. Only the research team will have access to your personal information. No individual results will be used for diagnosis or public reporting.

How will my data be stored?

The information collected will be stored securely on a password protected computer throughout the project and then stored at the University of Canberra or the lead organisation in each jurisdiction for the required five year period after which it will be destroyed according to university protocols.
You can request that your data be withdrawn from the study at any stage prior to publication.
We will ask for your permission to store your contact information and study results for a minimum of 5 years so that we will be able to contact you about future research projects. You do not have to give permission for your contact data and study results to be stored, you can include your decision in the consent form.
We will permanently remove all identifying information from your data after holding it for the required minimum of 5 years from completion of the research in accordance with the Australian National Health and Medical Research Council and the provisions of the Australian Privacy Act 1988.

Will my data be used in future research?

If you agree, the information collected during the conduct of this research may be used in future research projects on related research areas. Any future use of your data will comply with any conditions imposed by the Human Research Ethics Committee of the University of Canberra.

Ethics Committee Clearance

The project has been approved by the Human Research Ethics Committee of the University of Canberra (HREC14589).

Queries and Concerns

Queries or concerns regarding the research can be directed to the researcher and/or supervisor. Contact details are at the top of this form.

If you have any complaints or reservations about the ethical conduct of this research, you may contact the University of Canberra's Research Ethics & Integrity Unit team via telephone 02 6206 3916 or email humanethicscommittee@canberra.edu.au or researchethicsandintegrity@canberra.edu.au

If you would like some guidance on the questions you could ask about your participation please refer to the Participants' Guide located at https://www.canberra.edu.au/research/graduate-research/current-research-students/integrity-and-ethics/ethics/accordion/human-ethics/human-ethics-documents/Agreeing-to-participate-in-research.pdf