



**PHRN** Population  
Health  
Research  
Network



## The risk of 'Mr Fluffy' insulation

Loose-fill asbestos insulation saw thousands of Australians concerned about their health and homes. Data linkage was able to shed light on the risks.

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# Loose-fill asbestos insulation

When Australian National University epidemiologist Associate Professor Rosemary Korda first started holding public forums for Canberra residents affected by 'Mr Fluffy' insulation, people were very distressed.

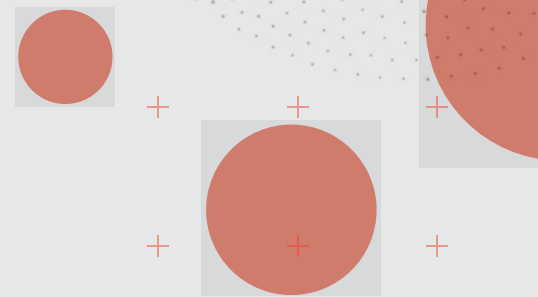
"There was quite a bit of anger in the room, and pretty upset people," she remembers.

"There were definitely people who were very concerned about future health effects of the asbestos insulation, particularly because of the lag time to diagnose mesothelioma and potentially other cancers.

"Saying, 'how do we know that my child's not going to develop cancer in 20 years' time'?"

Others feared having to move out of their neighbourhood, losing their gardens, lower property prices and being stigmatised.

"It was very distressing for community members," Associate Professor Korda says.



## A DATA LINKAGE FIRST

Associate Professor Korda and her colleagues set about designing a study that could give the community and the ACT Government some answers.

The plan was to use existing data to locate those who had lived in a Mr Fluffy house between 1983 and 2013.

The addresses of the more than 1000 Mr Fluffy houses had already been made public.

But tracking down everyone who lived in those homes in a city as transient as Canberra was a huge challenge.

ANU analyst Hsei Di Law, who did the data linkage for the project while working for the Australian Institute of Health and Welfare, says the team were one of the first researchers to access Medicare enrolment details.

"We wanted to study ACT residents who lived in Mr Fluffy houses compared to other residents in the ACT who hadn't lived in these houses," Law says.

"The Medicare enrolment data remains one of the only ways to track address histories."

## ELEVATED RISK OF MESOTHELIOMA

The researchers found about 17,000 people had lived in a Mr Fluffy house in Canberra, representing 1.7 per cent of the population who had ever lived in the ACT over the study period.

They then linked this group to the national cancer database and death records.

"These linkages tell you if any of those people were diagnosed with mesothelioma, or other cancer, or died, after living in a Mr Fluffy home," Law says.

The team also linked cancer and death records for Canberra residents who had not lived in a Mr Fluffy house.

The study found men who lived in houses with loose-fill asbestos insulation were two and half times as likely to develop mesothelioma than those who did not live in these houses.

But Associate Professor Korda says the absolute risk is low.

"Mesothelioma is a really uncommon cancer," she says.

"We would have expected two or three cases in 17,000 people over the period of the study—that's how rare it is—but we actually found seven cases.

"That was enough to actually indicate, yes, the rates are elevated."

There were no mesothelioma cases in women—something the researchers say fits with surveys suggesting men are much more likely to go into the roof space, where the asbestos insulation was installed.

The study also found slightly higher rates of colorectal and prostate cancer in people who lived in Mr Fluffy houses, although this could be because of limitations in the study design.

## THE FINAL PUBLIC FORUM

Before the research, the ACT Government's policy of buying back and demolishing Mr Fluffy homes had been contentious.

But Associate Professor Korda says the independent study provided evidence that Mr Fluffy homes were associated with increased risk of harm, supporting the government's approach.

After the findings were released, the researchers held another public forum.

"I remember this so distinctly," Associate Professor Korda says.

**"We had people stand up publicly and said 'thank you for doing this study'."**

For some, it was validation that giving up their home was justified. For others, the low absolute risk helped to allay their fears.

"I think people took different things away from it," Associate Professor Korda says. "The tone in the room was incredibly satisfying."



**An economic analysis conducted in 2017 found that by 2034, more than 0.5% of the reduction in cancer burden in Australia would be attributable to PHRN-related data linkage.**

### Privacy and security

Privacy protection and data security lie at the heart of the Population Health Research Network. The collection, use and disclosure of personal information by government agencies and other agencies are bound by strict legislative and regulatory conditions. Researchers wishing to access linked data must also adhere to stringent conditions, including ethics approval, data custodian approval and the development of a detailed data security plan.

Researchers are typically given access to a linked data set put together to meet the specific needs of their project. This de-identified data includes only the minimum information required for the research, such as age rather than date of birth.

Government agencies handle personal information in highly-secure environments. Data is delivered to researchers through a secure remote access facility, ensuring no information is stored on the researcher's personal computer or their institutional network. Researchers cannot export raw data from this system, only their analyses, and these are checked.

Researchers must only use the data for the approved purpose and are not allowed to link any other information. At the conclusion of the project, all data must be destroyed or returned.

Penalties for researchers and government employees can include criminal conviction, jail time or substantial fines. In the more than ten years since the network began, there has never been a breach.