

ACT Asbestos Health Study

Link to the National Strategic Plan:

Strategy:
Research

Deliverable:
Commission and promote research that reduces the risk of exposure to asbestos and minimises the impact of asbestos-related disease

Outcome:
Commissioned research identifies practical and innovative approaches to prevent or minimise risks from exposure to asbestos fibres, and support for people with asbestos-related diseases

Location:
ACT

The issue

In 2015 the ACT Government responded to calls from community residents for detailed information about the potential health impacts associated with living in a property contaminated with loose fill asbestos insulation (Mr Fluffy).

Funded through the Asbestos Response Taskforce (the Taskforce) the ACT Government commissioned the National Centre for Epidemiology and Population Health (NCEPH) at the Australian National University (ANU) to undertake a two-year study to improve understanding of the health risks associated with Mr Fluffy loose fill asbestos insulation. The purpose of the study was to gain an additional understanding of the risk of developing mesothelioma from living in a house containing loose fill asbestos insulation.

On 21 June 2017 the NCEPH at the ANU released their final report of the ACT Asbestos Health Study.

Action taken

The ACT Government provided funding of \$415,807 over two years to the ANU's NCEPH to support the study. Independent researchers from the NCEPH undertook the study in consultation with external cancer epidemiology experts from Sydney University and the Karolinska Institutet, Sweden. The research was overseen by a Steering Committee that included representation from ACT Health, the Taskforce, NCEPH, the NSW Chief Health Officer and other experts as required.

There were four separate stages to the study:

1. an analysis of mesothelioma rates and distribution in the ACT (September 2015)
2. focus groups held with current and recent residents of affected houses to discuss their health-related concerns (February 2016)
3. a survey looking at the likely exposure levels and health related concerns of current and recent residents (February 2017)
4. a study linking a number of data sets to estimate the risk of developing mesothelioma in current and former residents compared with the general population (June 2017).

The unique nature of asbestos exposure caused by loose fill asbestos meant that direct evidence was not available from scientific literature or from other countries about potential health risks. This study makes an important contribution to knowledge of the risks of low-level domestic exposure to loose fill asbestos.

Results

Stage four of the study linked Medicare data, death registrations and the Australian Cancer Database to compare the incidence of mesothelioma in people who have lived in a Mr Fluffy house with the incidence in those who have not lived in a house with loose fill asbestos insulation.

The study covered the period from November 1983 to December 2013 and found around 17,000 people had lived in a Mr Fluffy house in Canberra, representing 1.7 per cent of the population.

In total, 285 current and former residents of the ACT were diagnosed with mesothelioma over the study period. Only seven of these residents had lived in a Mr Fluffy house before their mesothelioma was diagnosed.

The study found the risk of contracting mesothelioma was low, but the rate of mesothelioma in men living in Mr Fluffy homes was 2.5 times higher than in men not living in these houses. This corresponded to four extra cases of mesothelioma in male Mr Fluffy residents between 1984 and 2013 (that is, additional to the number expected to occur in this group, even if there had not been loose fill asbestos insulation installed in these houses).

There were no cases of mesothelioma in women who had lived in a Mr Fluffy affected property. On average in Australia at present, the rate of mesothelioma in females is about a fifth of that in males.

The study also found that the rate of colorectal cancer was 1.3 times higher in male Mr Fluffy residents and 1.7 times higher in female Mr Fluffy residents than the corresponding rates in residents who did not live in affected premises. These were higher than expected and might be due to unavoidable bias in the study's design.

Prostate cancer rates were also found to be 1.3 times higher in male residents of affected premises. This result was unexpected and it is uncertain whether or not it was due to asbestos exposure in the affected houses.

The elevated rates of colorectal and prostate cancers identified in the study for residents of loose fill asbestos insulation were somewhat unexpected. Other studies have found, at most, weak associations between asbestos exposure and these cancers. Study researchers suggested additional explanations for these associations should be considered, including other risk factors that were unable to be measured, such as smoking or diet, and particularly in the case of prostate cancer, people seeking screening for cancer.

Although the study found the rate of mesothelioma was higher in men who had lived in a loose fill asbestos insulation property than in men who had not, the risk of developing mesothelioma was very low even among Mr Fluffy residents.

The increased risk of mesothelioma in men living in affected properties may reflect higher exposure to loose fill asbestos through activities like entering roof spaces or doing renovations. These activities were reported more frequently by men than women in the cross sectional survey (Report 3 of the Asbestos Health Study).

Results from the study should be interpreted with care, as there was:

- no data prior to November 1983
- little information on other possible explanatory factors, such as occupational history of asbestos exposure
- statistical uncertainty due to small numbers of some cancers.

Outcomes

The ACT Government noted the findings of the final report of the study indicating an increased risk of mesothelioma among men living in a Mr Fluffy property.

Following the release of the study, the taskforce distributed the report and advice from the Chief Health Officer on health implications to homeowners, residents and registered former residents. This correspondence advised that people concerned about their health should seek advice from a qualified medical practitioner who could provide an assessment of individual circumstances. Information on other support services available was also provided, including help for people experiencing psychological distress.

The results of the study also reinforced the need for people who continue to live in affected properties to have an asbestos management plan (AMP) prepared by a licensed asbestos assessor in place, and to make sure that any remediation work recommended in these plans is carried out. WorkSafe ACT continues to monitor compliance with AMPs in these properties.

The taskforce's personal support team continues to provide ongoing information and advice to assist homeowners experiencing psychological distress and health concerns, and to connect them with the free support services provided through community partners.

Next steps

To enable future revisiting of the issue, the data sets are being preserved in keeping with the relevant ethics committee approval requirements.

Advice from the NCEPH and the ACT Chief Health Officer is that mesothelioma takes a long time to present, so whilst it might be useful to re-run the data linkage and analysis, this should not occur for several years.

More information

<http://nceph.anu.edu.au/research/projects/act-asbestos-health-study>

<https://www.youtube.com/watch?v=PyLzM42e07Y&feature=youtu.be>



Figure 27: Loose fill asbestos insulation advertisement