

Australian Government Department of the Prime Minister and Cabinet





Safety meets savings

B_TA

Exploring financial incentives for asbestos removal

January 2025

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Managing Director Behavioural Economics Team of the Australian Government Department of the Prime Minister and Cabinet 1 National Circuit Barton ACT 2600 Email: <u>beta@pmc.gov.au</u>

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Research team

Current and former BETA staff who contributed to the report were: Angela Bender, Annalese Bolton, Nicholas Hilderson, Cale Hubble, Bethany Jones and Hanne M Watkins.

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The trial was pre-registered on the BETA website and the American Economic Association registry:

https://behaviouraleconomics.pmc.gov.au/projects/testing-incentives-encourage-asbestosremoval

https://www.socialscienceregistry.org/trials/14411

Who is **BETA**

Who are we?

We are the Behavioural Economics Team of the Australian Government, or BETA. We are the Australian Government's first central unit applying behavioural economics to improve public policy, programs and processes.

We use behavioural economics, science and psychology to improve policy outcomes. Our mission is to advance the wellbeing of Australians through the application and rigorous evaluation of behavioural insights to public policy and administration.

What is behavioural economics?

Economics has traditionally assumed people always make decisions in their best interests. Behavioural economics challenges this view by providing a more realistic model of human behaviour. It recognises we are systematically biased (for example, we tend to satisfy our present self rather than planning for the future) and can make decisions that conflict with our own interests.

What are behavioural insights and how are they useful for policy design?

Behavioural insights apply behavioural economics concepts to the real world by drawing on empirically-tested results. These new tools can inform the design of government interventions to improve the welfare of citizens.

Rather than expect citizens to be optimal decision makers, drawing on behavioural insights ensures policy makers will design policies that go with the grain of human behaviour. For example, citizens may struggle to make choices in their own best interests, such as saving more money. Policy makers can apply behavioural insights that preserve freedom, but encourage a different choice – by helping citizens to set a plan to save regularly.

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Executive summary

Each year, approximately 4,000 people die and 54,750 life years are lost to asbestos-related disease in Australia (Urbis 2023). **Asbestos exposure risk is increasing in Australian homes**. Most asbestos-containing products have reached their end of product life and are degrading, increasing the risk that harmful fibres are released. The <u>Asbestos National</u> <u>Strategic Plan</u> (the National Plan) – developed by the Asbestos and Silica Safety and Eradication Agency (ASSEA) – provides nationally consistent and coordinated actions to eliminate asbestos-related diseases. A strategic action of the National Plan is for governments to develop incentives that **encourage homeowners to proactively, safely, and legally remove asbestos from their properties**.

In partnership with ASSEA, BETA undertook research to determine which financial incentives would most effectively encourage homeowners to remove asbestos. BETA also explored the amount homeowners were willing to pay, and their broader decision-making about asbestos removal, including their understanding of asbestos exposure risks. Our online study included over 4,000 owners of Australian homes built before 1990. Respondents completed a discrete choice experiment, a randomised controlled trial, and a survey.

Financial incentives could encourage asbestos removal if they cut immediate costs and provide additional benefits. We found:

- Homeowners, many of whom feel financially stretched, strongly preferred grants but grants have economic downsides. Tax offsets and interest-free loans appear to be marginally effective in encouraging asbestos removal.
- Most homeowners could afford many asbestos removal jobs (or at least substantially contribute to them). Although costs vary widely, the median amount homeowners could afford exceeded the median cost of previous jobs.
- Many homeowners do not know if they have asbestos or not. Furthermore, many are not motivated to either look for asbestos on their property or consider removal – potentially driven by assumptions that removal would be too costly.
- While many homeowners say that health concerns would prompt proactive removal, in practice most remove asbestos while undertaking renovations.
- While owner-occupiers may be motivated by renovations, landlords may be more motivated by rules and regulations.
- Younger homeowners (who tend to have mortgages and higher income, and are putting money aside for future property expenses) are more likely to consider asbestos removal than older homeowners (who tend to own their home outright, but have lower incomes and are generally not saving for future property expenditures).

Our findings suggest that to maximise the effectiveness of financial incentives:

- Ensure that homeowners appreciate the concrete financial benefits to them.
- Demonstrate that removing asbestos is affordable and achievable by clearly laying out the likely price, process and benefits for the target homeowner's situation.
- Consider how incentives can encourage both discovery and removal.
- Leverage homeowners' desires to renovate, with asbestos removal as a side benefit.
- Convey the latent and irreversible effects of asbestos-related diseases.

Background

Asbestos exposure risk in homes is increasing

Each year in Australia, approximately 4,000 people die and 54,750 life years are lost to asbestos-related diseases (Urbis 2023). The combined burden across the lifetime of those living with asbestos-related diseases has been valued at \$11 billion (Urbis 2023; ASSEA 2017).

Exposure risk within residential homes is increasing. This is because asbestos-containing materials have reached their end of product life and are degrading (Brown et al. 2023). As the asbestos-containing materials age and degrade, they become more likely to release asbestos fibres into the air.

Household exposure risks are further heightened due to possible damage and disturbance of asbestos-containing materials during DIY home projects (Newgate Research 2020). Two in three Australian adults report that they are inclined to undertake home improvement projects, many without professional help (SEC Newgate Research 2021). Increasingly frequent extreme weather events and other disasters also heighten exposure risks (Urbis 2023).

ASSEA coordinates national actions to eliminate asbestos disease

The Asbestos and Silica Safety and Eradication Agency (ASSEA) oversees national actions to improve asbestos awareness and the effective and safe management, removal and disposal of asbestos. ASSEA promotes consistent messages, policies and practices across Australia.

ASSEA coordinates and supports the Commonwealth, state and territory governments to work cooperatively to implement the <u>Asbestos National Strategic Plan</u> (the National Plan). The National Plan provides a long-term, phased approach to eliminating asbestos-related diseases in Australia through nationally consistent and coordinated actions. Phase 1 of the National Plan (from 2014 to 2018) established an evidence base to understand the asbestos legacy in our homes, workplaces and the environment. Phase 2 (2019-2023) focused on increasing awareness and supporting more effective management and removal of asbestos-containing materials. The third phase (2024-2030) is focused on strategies that facilitate safe, proactive removal and disposal, including through enhanced regulatory frameworks and incentive programs. The Commonwealth and all state and territory governments have endorsed Phase 3 of the National Plan.

ASSEA aims to encourage the proactive removal of all asbestos

The actions in Phase 3 of the National Plan facilitate a shift away from the acceptance of in situ management of asbestos containing materials to a proactive approach of controlling risk and removing asbestos containing materials safely, as well as ensuring the necessary supports are in place to encourage and facilitate removal in workplaces and homes. An economic evaluation of asbestos management and removal options identified that

government incentives to increase the rate of safe removal and disposal of asbestos from non-government buildings, such as residential structures, would result in a quicker and more economical reduction of asbestos-related disease (Urbis 2023). ASSEA's incentives report – *Options for government supported incentives for proactive asbestos removal* – summarises several possible incentive programs (such as grants and loans), and outlines broad considerations for jurisdictions who are designing and implementing a program (ASSEA 2025).

BETA was commissioned to research incentive types and amounts

ASSEA commissioned BETA to conduct primary research into which incentive types and amounts would be most effective in encouraging homeowners to remove asbestos from their properties.¹ The purpose of the research was to complement ASSEA's incentives report with a homeowner perspective, which jurisdictions can consider when estimating a potential program's impact, feasibility and costs.

Our research focused on two key drivers of behaviour – costs and perceived health risks/concerns – which we drew from the Health Belief Model (Alyafei and Easton-Carr 2024).

Reducing the cost to homeowners is key

Previous research has identified that for residential property owners, the cost of asbestos removal, disposal and replacement is the main impediment to removal (Ipsos 2018). Hypothetical government initiatives that reduce this cost have been associated with higher reported willingness to remove asbestos (Ipsos 2018). We sought to extend this research by comparing different incentive types and examining homeowners' preference for specific incentive levels (for example, is a 15-year interest-free loan more attractive than a 5-year one?). We also sought to update the previous findings in the context of recent cost-of-living pressures, and explore whether homeowners' preferences for the various incentive types and levels varied depending on which cohort they belong to – for example, whether the homeowners are owner-occupiers or landlords, have a mortgage or own the residence outright, live in regional, remote or urban areas, and are from low versus high income brackets.

Although the cost of removal and disposal has been identified as the biggest barrier for homeowners considering removing asbestos from their property (Ipsos 2018; Urbis 2023; Heartward Strategic 2021a; Heartward Strategic 2021b), a range of other barriers and enablers may also exist (such as increasing the value of the property). We also aimed to identify how commonly these additional barriers and enablers were experienced by homeowners.

Education regarding asbestos exposure risk is likely important

Homeowners' understanding of the health risks of asbestos exposure has been associated with their willingness to safely and legally remove asbestos from their home. In a past study, homeowners who were aware of the health and safety risks of asbestos were more likely

¹ While many asbestos-related diseases currently occur due to exposure at work, more than half of the 6.2 million tonnes of asbestos-containing materials in our built environment are in Australian homes. Commercial buildings were outside the scope of the present project.

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than unaware homeowners to say they were willing to have asbestos removed from their property (lpsos 2017).

Given the importance of risk awareness, ASSEA has developed guidelines for communicating asbestos exposure risk to the public (Commonwealth of Australia 2021). Specifically, ASSEA recommends that communications explain when asbestos becomes dangerous, and the steps people can take to prevent exposure, such as proactive removal.

But risk communication can backfire. Those at risk can sometimes respond defensively to health promotion messages by either downplaying the risk or by increasing the undesirable risky behaviour (Schüz et al 2013). We therefore also investigated whether homeowners' willingness to remove asbestos would be influenced by the addition of new risk information (that asbestos is now degrading) to existing information (including that asbestos fibres are dangerous, and that homes built before 1990 likely contain asbestos).

While our research focused on financial costs and health concerns, there are other points in a homeowner's asbestos removal 'journey' where a behavioural science perspective might be useful for intervention and program design. We discuss some of these broader ideas in a separate section on behavioural design considerations.

Research methods

We recruited over 4,400 homeowners to participate in an online study

To be eligible for the study, participants had to own at least one residential property built before 1990. Over 75% of participants owned a single residential property, with about 25% owning more than one. The sample included a mix of people owning homes in regional or remote areas (26%) and urban or suburban areas (74%). The sample also included a mix of those whose property was mortgaged (70%) versus owned outright (30%), and people who were living in their property (owner-occupiers, 79%) versus renting it out (landlords, 16%)². The age range was from 18 years old to over 65 years, and the sample had a skew towards women (63%, versus 37% men). A full demographic breakdown of the sample is included in Appendix A, and further details are discussed where relevant in the subgroup analyses section (page 25).

All participants completed the full study, which included a discrete choice experiment (DCE), a survey, and a randomised controlled trial (RCT). These components are outlined in turn below, and the full study text is included in Appendix B. Details of our analyses are provided in the accompanying Technical Report.

We used a DCE to examine the influence of incentives

In collaboration with ASSEA, we selected four different incentive programs to test: a grant, a loan, a lottery, and a tax offset. ASSEA's incentives report identifies broader issues jurisdictions would need to consider when implementing an incentive program (ASSEA 2025). BETA's research focused on answering a specific question: what is the impact of each incentive type (and different levels of the incentive) on homeowners' willingness to remove asbestos from their property? We chose to answer this question with a DCE, because this method could quantify the relative impact of each incentive on homeowners' choices using a hypothetical scenario.

After completing screener and demographic questions, participants read background information that asked them to imagine that asbestos had been found on their property. The information stipulated that they would need to contract a professional to safely remove and dispose of the asbestos.³ They were also given information about four different incentive

² A small number of homeowners reported that they did not live at their property, but their family did; or that the property was vacant.

³ For simplicity, in this report we refer to 'removal' of asbestos to mean safe and legal removal and disposal. Participants saw the following description of the job: "For the next section of this study, please imagine that asbestos has been found on your property (...) It's a significant amount; more than 10 square metres. You're unable do the removal and disposal yourself, so you have got some quotes from licensed asbestos industry professionals who will safely remove and legally dispose of the asbestos."

programs – for example how much the loan would be, and what was involved in the grant application (see Table 1, and full details in Appendix B).⁴

Having read about the problem and possible incentives available, participants were then shown two different scenarios, and asked 'in which scenario would you be most willing to remove the asbestos?' Each scenario included a mix of different incentives (and incentive levels), as well as a quoted cost for the asbestos removal (see Table 1 and Figure 1). Participants could also choose a third option: 'I would not remove the asbestos.' Each participant responded to six different pairs of scenarios.⁵

By analysing the scenarios participants chose, we could then estimate how much each incentive influenced their choices, and how the impact of each incentive (and each level of the incentive) compared to the impact of the other incentives.

Incentive program	Description for participants	Values shown in the DCE
Grant or subsidy	You may get a grant or subsidy to help reduce the amount you have to pay a licensed professional for asbestos removal and disposal from your property. The grant amounts range from \$5,000 up to \$15,000, but can never be larger than the cost of removal and disposal. The grant is managed by your state or territory government through an application process.	 None \$5,000 \$10,000 \$15,000
Interest- free loan	You may get an interest-free loan for up to \$50,000 (or the actual cost whichever is lower). The loan is for the sole purpose of asbestos removal and disposal from your property. Repayment periods vary from 5 to 15 years. The loan is managed by a bank, is secured against the property, is subject to the banks normal lending criteria, hardship policies, etc., and requires some paperwork. The loan can be paid off sooner than the maximum loan term.	 None 5 year 10 year 15 year
Tax offset	You may claim a tax offset against your annual income for the removal and legal disposal of asbestos from the property whether you live in it or rent it out. If the property is rented, you can also claim lost income while removal works are done. You need to keep all receipts and claim the offset at tax time.	Not availableAvailable
Lottery	If you pay for a licensed asbestos removalist to remove and dispose of asbestos from your property, you can go into a draw for a chance to win one of 10 prizes of up to \$20,000 to cover those expenses. You will need to complete an application form and provide a copy of your receipts to your state or territory government to join in the lottery.	Not availableAvailable

Table 1. Summary of incentive programs presented to participants in the DCE

⁴ They were also informed that the incentive programs were hypothetical, but that their responses would help inform the design of future programs to support homeowners.

⁵ A seventh, duplicate scenario was included in order to calculate and adjust for participants' intra-rater reliability – that is, how consistent their responses were across the scenarios.

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Figure 1.	Example of the	task for partici	pants in the DCE

Scena	rio 1		Scenario 2
Quoted \$20,000 Cost		Quoted Cost	\$10,000
Grant \$10,000		Grant	None
Interest- 15 year free Loan	repayment	Interest- free Loan	5 year repayment
Lottery Availabl	e	Lottery	Available
Tax Availabl Offset	e	Tax Offset	Not available

Note: Participants were asked 'In which scenario would you be most willing to remove asbestos?' They could also respond 'I would not remove the asbestos'.

We conducted a survey to explore common barriers

To assess additional barriers to asbestos removal, we asked participants why they have or have not had asbestos removed from their property, including questions about cost, perceived safety (and risk), and other factors that may influence their decision. We also included questions about any past experience removing asbestos. We explored whether experiences with and attitudes towards asbestos removal were different for different subgroups (including landlords versus owner-occupiers, remote versus metro regions – see further details in the subgroup analyses section, page 255).

We used an RCT to explore the impact of new risk advice

The amount consumers say they would pay for a service reflects the value they place on that service (Lam and Ossolinski 2015), and someone's motivation to avoid risks is a significant driver of their consumption behaviour (Mitchell 1999). We expected that risk perceptions would influence homeowners' views on asbestos removal, and therefore potentially the amount that they would be willing to pay.

Under Phase 3 of the National Plan, ASSEA's public communication is focusing increasingly on the risks of degrading asbestos. We wanted to test if this new message would motivate people to remove asbestos, or if it might backfire by triggering defensive reactions (Schüz et al 2013).

We therefore designed an RCT to estimate the impact of this additional risk information on how much homeowners would value asbestos removal and disposal (measured in dollars). While everyone in the study read information about the risks of asbestos (as part of the introduction to the DCE), we randomly assigned half the sample (the 'intervention group') to read an additional paragraph about the increasing risk of ageing asbestos, and the updated recommendation to proactively remove it. The other half (the 'control group') did not read this

information, but otherwise completed the same study. All participants were then asked to indicate (in dollars) how much they could realistically afford to pay if they had to have asbestos removed from their property (see full question in Appendix B). We compared the responses in the intervention group and the control group to see if the new information about increasing risk changed the amount of money people would put towards asbestos removal.

Incentives and costs

Reducing out-of-pocket costs is most attractive to homeowners

As expected, in the DCE, cost presented a major barrier to asbestos removal. As the quoted cost in a given scenario increased, the likelihood of participants saying they would remove asbestos in that scenario drastically reduced, consistent with previous research (Ipsos 2018).

Similarly, grants had the largest *positive* impact on the likelihood of participants saying they would remove asbestos. As the size of the grant increased, participants' willingness to remove asbestos also increased. However, the positive impact of a grant was smaller than the negative impact of a quoted cost of the same amount (see Figure 2). This indicates that in this study participants 'discounted' the value of a dollar from a grant relative to a dollar from their own pocket. This could be due to the paperwork or 'hassle costs' that would probably be required to access a grant in practice. It could also be due to loss aversion (the tendency for costs or losses to 'loom larger' – psychologically speaking – than equivalent gains).



Figure 2. Relative impact of tested incentives on willingness to remove asbestos (percentage points)

Note: These Average Marginal Component Effects represent how much the probability of selection of any offer (that is, any collection of incentives against a specific cost) would change if each attribute switched from the reference group to the indicated group. Costs and grants are compared to a reference group of \$0; for the other incentives, the reference groups are no tax offset, no loan and no lottery. Effects are averaged across all respondents and all scenarios, and do not imply an absolute preference or selection of an individual choice.

Our results are in line with standard economic theory, with participants preferring the incentives that have a higher expected value. In particular, out-of-pocket costs (quoted cost minus the value of the grant) were the main driver of participants' choices in the DCE. We compared scenarios with full cost recovery (where the grant fully covered the quoted cost) to those with partial or no cost recovery. When neither scenario had full cost recovery, 21% of

participants said they would *not* remove the asbestos. However, when both the scenarios had full cost recovery, only 6% said no, and 94% of participants said they *would* remove the asbestos. While participants in this study were overall quite likely to say they would remove asbestos, this analysis highlights the importance of out-of-pocket costs. It also demonstrates that cost reductions alone may not be enough to prompt actual asbestos removal, given that some homeowners chose not to remove asbestos even when a grant reduced out-of-pocket costs to zero.

Unfortunately, the impact of out-of-pocket cost was so large that it overshadowed the other incentive programs we tested, limiting our ability to make comparisons between incentive types. It's unclear how homeowners would have judged the incentives if the grant option was not included. Below we review the findings for each incentive type in turn.

Participants preferred the grant over other incentive options

In this study, grants (when they were available) ranged from \$5,000 to \$15,000, with larger grants having a bigger impact on willingness to remove asbestos. This effect was much larger than the effect associated with the other incentives (loans, tax offsets and lotteries). In terms of subgroups, participants on a lower income and those who had paid off their mortgages appeared to find the grant somewhat less attractive than those who were on a medium or higher income, and still paying off a mortgage (for more on these two cohorts, see the subgroup analyses section, page 255). However, even for these participants, grants were more attractive than any of the other incentives.

While grants were vastly preferred by participants in this study – as we would expect given their higher expected value, directly offsetting the quoted cost of asbestos – there are risks to implementing grant programs as well. ASSEA's incentives report notes, for example, that consumer grants can cause cost inflation (ASSEA 2025), with the extra funding available to homeowners simply being 'absorbed' by suppliers setting higher prices. While cost inflation may be somewhat mitigated by providing different grants to different cohorts (such as targeting lower-income households, or homes in high-risk postcodes), the required eligibility testing increases a program's administrative burden, complexity and running costs.

Loans also encouraged asbestos removal

In the DCE, participants were also presented with an option of an (up to) \$50,000 interest-free loan, with repayment periods varying from 5 to 15 years. The loan increased people's willingness to remove asbestos, although the effect was marginal compared to a grant (see Figure 2). We did not observe large differences between the different repayment periods. There was some indication that the 10-year repayment period was preferred by participants; 10 years may have represented the 'sweet spot' where the repayment period was long enough to provide significant savings, but also short enough that participants felt they could still plan that far ahead.

The DCE results may underestimate the real-world impact of a loan. Key benefits of an interest-free loan for homeowners include savings against inflation (which increases as the repayment period increases), and the way loans can help homeowners manage their cash flow. These benefits may have been less salient in our online study, in which participants appear to have fixated on immediate out-of-pocket costs. If a loan program were

implemented in practice, it could be made attractive to homeowners by clearly highlighting the concrete savings and other tangible benefits.

Homeowners who expect their incomes to drop or fluctuate in the future (such as those nearing retirement and with unstable incomes) may be less likely to experience a loan's benefits. Our analysis suggests that the loan was somewhat *more* attractive to participants who were still paying off a mortgage – perhaps because they could imagine bundling their debt or managing an asbestos loan in the same way as they manage their mortgage – than to those who owned their homes outright.

Furthermore, in a real-world situation – perhaps with no grant available – homeowners might lack access to sufficient funds or savings to cover a removal job, making loans a more valuable or necessary option than the DCE results suggest. A loan might enable a motivated but cash-poor homeowner to remove asbestos if the up-front cost is prohibitive for them.

The tax offset had a similar impact to the loan

Our study found the impact of an income tax offset was similar to the impact of an interest-free loan. In general, a tax offset would likely benefit homeowners with higher incomes more than those with lower incomes. In our study, the tax offset appeared to be slightly more attractive to participants with high household incomes (those with household incomes over \$130,000). It was also more attractive to participants who were landlords and were thinking about the property they rent out during the DCE (for more about landlords, see the subgroup analyses section, page 255).

The lottery had almost no impact

Lotteries have been used to influence other health-related behaviours (such as screening for sexually transmitted diseases; Niza, Rudisill, and Dolan 2014). Although they may be less impactful than certain incentive payments (see Mantzari et al 2015 for a review), we were aiming to determine whether they may represent a more cost-effective option for jurisdictions. The DCE results suggest this is unlikely to be the case in the context of asbestos removal, perhaps due to the significant upfront costs. In the DCE, when presented alongside other incentive options, the lottery had almost no impact on homeowners' willingness to remove asbestos (see Figure 2).

Most homeowners could afford many removal jobs

Results from the survey enabled us to compare the amount homeowners said they could afford to pay for asbestos removal with the amount homeowners had actually paid for past removal jobs.

We asked participants how much they could realistically afford to pay for asbestos removal and disposal, if they discovered it on their property.⁶ The most common maximum budget reported by homeowners was \$5,000, and half of the respondents had a budget of up to

⁶ We also used this question as the outcome measure for our RCT, the results of which are reported on page 23.

\$10,000, which appears to cover many asbestos jobs (see Figure 3). Overall, few participants said they could pay more than \$30,000 for asbestos removal (around 10% of the sample).⁷

The median budget reported by homeowners varied, as expected, depending on the income of the participants (see Figure 3). For high income individuals (those with household incomes above \$130,000) the median response was \$10,000; double the median budget for homeowners with lower incomes (with household incomes below \$70,000).

Figure 3. Amounts homeowners could afford for asbestos removal compared to the reported cost of previous asbestos removal jobs



Note: The y-axis on each plot represents the number of respondents providing each response. For example, the peak of the red curve illustrates that many respondents had paid just under \$2,000 for asbestos removal. Low-income homeowners (with a household income of less than \$70,000 per year, n = 888) had a median maximum budget for removal of \$5,000 (as indicated by the vertical line on the plot above). Medium-income homeowners (between \$70,000 and \$130,000 per year, n = 1,300) had a median response of \$8,000, and high-income homeowners (more than \$130,000 per year, n = 1,960) had a median response of \$10,000. (Very high responses were removed for these calculations.) 756 respondents had had asbestos removed previously and they reported an average cost of \$4,391 (median = \$2,000).

We also asked our survey respondents if they had previously removed asbestos from a property they owned (see Box 1). Eighteen per cent (n = 756) said they had, of which the

⁷ The largest cost of asbestos removal we included in the DCE was \$30,000, and some participants may have anchored on this amount as a maximum value. However, some participants also appeared to interpret this question as their overall wealth, as we had some very high responses.

majority (67%) had done so within the last 10 years.⁸ The median reported cost of the asbestos removal was \$2,000 (half the homeowners indicated a cost of \$2,000 or less) and the mean cost was \$4,391.⁹ The reported cost varied widely, from \$0 to \$800,000. It is unclear if respondents focused solely on the asbestos removal cost, or whether they incorporated broader costs associated with remediation and renovation when answering this question. These averages are likely to underestimate the cost of asbestos removal, because we only know the cost of the jobs that were completed; it is likely that many more expensive jobs were not undertaken.

Other survey results indicate that cost is indeed preventing some removal jobs. Among the small number of participants who told us they had faced such hard barriers that they had been unable to remove asbestos known to be in their property (n = 19, or 2% of those who wanted to remove asbestos), most said it was cost that had prevented them. The number of participants here is too small to draw strong conclusions, but other reported barriers included that they were advised that it was safe to leave the asbestos where it was, that the hassle or inconvenience of organising asbestos removal and/or replacement became too great, or that there were other things they needed or wanted to spend their money on.

Other survey results indicate that the cost of removal is part of the reason some homeowners are keeping asbestos known to be in their property (see subsequent section). It is unclear if these homeowners have actually gotten quotes, or if they are assuming that removal would be too expensive for them.

In summary, removal costs can vary significantly and can be prohibitive. Homeowners clearly consider out-of-pocket costs to be a large barrier to removing asbestos. Many jobs similar to those that have been completed in the past, however, might turn out to be within many people's budgets.

⁸ The most common locations the asbestos was removed from were bathrooms (26% of respondents) and interior wall sheeting (22% of respondents). Many were unaware of how much asbestos was removed from their property, in terms of both metres squared (32% of respondents) and weight (65% of respondents). Among those who did know, small jobs were most common: less than 30m² (45%) and less than 100kg (23%).

⁹ Two outliers of \$200,000 and \$80,000 were removed from this calculation of the mean cost.

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Other drivers of asbestos removal

Financial incentives are targeted at homeowners who are aware that they have asbestos, and who may be considering removing it. But a necessary first step is for homeowners to discover if they have asbestos on their property. Figure 4 illustrates the size of the different cohorts among our survey respondents, at the different points on the asbestos removal 'journey' (see also Figure 7 in the 'Behavioural design considerations' section). We discuss the barriers and enablers to asbestos removal for each cohort in turn below, from those who are unaware they have asbestos (44%), through to those who have asbestos but are not planning to remove it (13%) or are delaying removal (9%), and finally those who already have plans to remove the asbestos in the next 12 months (4%). All results in this section draw on our survey questions, unless otherwise specified.





Note: n = 4,403. Percentages do not add up to 100% due to rounding.

Many are unaware of asbestos on their property and do not prioritise finding out

Of all the survey respondents, 44% were uncertain if there was asbestos on their property (n = 1,959) (Figure 4). Most of these respondents did not feel it was a priority for them to find out, with 46% indicating it was a low priority for them, and a further 15% indicating that it was 'not at all a priority' (Figure 5).

Figure 5. Respondents' priority ratings for checking if asbestos is on their property

0%	20%	40%	60%	80%	100%
Essential / High 10%	Moderate 29%		Low 46%	١	lot at all 15%

Note: Responses to the question, 'How much of a priority is it for you to find out whether there is asbestos on your property?' (n = 1,959). 7% responded 'High priority' and 3% responded 'Essential'.

We asked those for whom asbestos discovery was a 'low' or 'not at all' a priority what would make it more of a priority for them (n = 1,180). By far, the most common theme in their free-text responses related to conducting renovations. While some indicated that they would find out when planning to renovate, the responses of many others suggested that they would wait to find out incidentally during the process of renovations, maintenance, or repairs to damage on the property. Many also said that it would become a greater priority to find out if the health concerns associated with the asbestos increased (such as people actually becoming sick, with asbestos confirmed as the cause). Others suggested subsidised or free inspections, legal mandates, or instructions from others such as strata managers.

Box 1: Homeowners use renovations as a time to discover and remove asbestos

Asbestos removal behaviour is strongly associated with renovations and property maintenance and repairs (Heartward Strategic 2021a; Ipsos 2018).

Consistent with this, a substantial proportion of our respondents (30%) said they became aware of asbestos on their property incidentally through renovations, maintenance and repairs. Many homeowners reported that they were willing to become aware the same way. This is risky given the increase in asbestos exposure health risks if the asbestos-containing material becomes damaged during discovery. This type of discovery can also represent an 'unexpected complication', often associated with knee-jerk responses, unsafe decisions and illegal behaviour such as covering up the asbestos, quickly ripping it out, or disposing of it in residential bins (Heartward Strategic 2021a).

Although intentions to renovate appear important for tipping homeowners in favour of removing asbestos, we're unsure how much is happening the other way – that is, the extent to which the presence of asbestos prompts homeowners to renovate. We know at least that plans to renovate are much more common than plans to discover or remove asbestos: while 70% of all our respondents were open to renovating, only half of those who knew they had asbestos had plans to remove it, and the majority (61%) of those unaware if their property contained asbestos showed little motivation to find out. This suggests that the presence of asbestos, or potential for asbestos to be on the property, is currently not a particularly strong prompt to renovate.

Ways to leverage renovations to encourage asbestos removal are discussed in the section on behavioural design considerations.

One in four homeowners know they have asbestos on their property

Twenty nine per cent of all survey respondents reported that there was no asbestos on their property¹⁰, while a further 26% told us that there was (Figure 4).¹¹ Of the people in the survey who knew they had asbestos on their property (n = 1,160), the most common way of finding out was when they had renovations or work done (30%) or when they acquired the property (27%). Only 10% found out through an asbestos assessment. Another 28% assumed there was asbestos present due to the age of their residence.

But knowing you have asbestos appears insufficient to prompt asbestos removal on its own: of the 1,160 respondents who knew they had asbestos on their property, 50% indicated that they had no plans to remove the asbestos. Their reasoning is unpacked below, before we turn to the cohort that said they were planning to remove their asbestos.

¹⁰ Of those who said they had no asbestos on their property (n = 1,284), 39% said they had had extensive renovations done and no asbestos was found, 37% said they had had an asbestos assessment which did not identify any asbestos, and 18% said they had already had the asbestos removed.

¹¹ The asbestos was primarily located on the outside the house such as in guttering, roof, eaves, or external walls or doors (56% of respondents who knew they had asbestos on their property), and on the inside of the house, such as in walls, doors, ceiling, or insulation around pipes (52%). For 27% of respondents, asbestos was located on the grounds of the property, such as in sheds, fences, pool areas, garages or carports.

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Those keeping asbestos feel it's not causing harm and is in good condition

The majority of the 577 respondents with no plans to remove the asbestos on their property thought the asbestos was not a health concern: 64% said the asbestos was not currently causing harm, 52% said the asbestos was in good condition, 30% said their or their family's health was not at risk, and 45% said they had been told that it's safe to leave the asbestos where it is. Similarly, these homeowners indicated that they *would* be more willing to consider removal if the asbestos began causing harm (60% of respondents), if the asbestos became damaged (57%), if the risks to their, their family, or their tenants' health increased (51%) or if a professional advised them that the asbestos in their property was unsafe (42%; Table 2). These findings reveal that many homeowners do not take into account the often latent and irreversible effects of asbestos–related diseases (Bianchi and Bianchi 2007). Overall, these findings suggest that in addition to reductions in out-of-pocket costs, homeowners may be motivated by health concerns and risk perceptions, consistent with the Health Belief Model (Alyafei and Easton-Carr 2024).

A reasonable proportion also reported that they wouldn't be able to afford removal even if they wanted to (34%), but they would be more willing to consider removal if financial incentives were available (45%) or if it didn't take up too much of their savings (24%, Table 2). Similarly, in our DCE, it appeared that those with no plans to remove their asbestos were more focused on out-of-pocket costs (that is, grants and quoted costs) than those who intended to remove their asbestos. These responses appear to conflict with our finding that most people could afford many removal jobs (see above). Homeowners may be imagining that asbestos removal is very expensive, leading them to assume they could not afford it, without investigating how much removal would actually cost them.

Finally, 29% of respondents indicated that if they had other renovations planned, this would be a prompt to remove asbestos (see Box 1).

Many delay removal as they feel it is not causing harm and want time to save

Of the 1,160 respondents who knew they had asbestos on their property, 24% indicated that they planned to remove it within the next 1-5 years, and another 10% that they planned on removing the asbestos but not for at least 5 years. The most common reasons homeowners reported delaying the removal of asbestos was because they did not think the asbestos was currently causing harm, and because they needed time to save money for the removal as well as other renovations (Table 3).

Table 2. Circumstances that would increase homeowners' willingness to remove asbestos

Circumstances that would increase willingness to remove, for homeowners with no plans to remove known asbestos	Percentage of respondents (n = 577)
If the asbestos was causing harm	60%
If the asbestos became damaged or was in poor condition	57%
If the risk to my, family, or tenant's health increased	51%
If a financial incentive program became available	45%
If I was told by a professional it was unsafe	42%
If I had other renovations planned	29%
If removal didn't take up too much of my savings	24%
If someone else organised the removal and replacement for me	17%
If removing the asbestos increased the value of the property	16%
If I could be held legally responsible for harm caused by asbestos in the property	14%

Note: This table presents only the most endorsed items. See Appendix Table S5 for extended table. This table contains data from the 577 respondents with no plans to remove the asbestos on their property, who answered the question 'Under what conditions would you be more willing to have the asbestos removed? (Please select up to 5 options.)' Only 2 respondents failed to answer this question. Response options were presented to respondents in a randomised order.

Reasons for delaying removal	Percentage of respondents	Circumstances that would make them consider removing the asbestos sooner	Percentage of respondents
The asbestos is currently not causing any harm	52%	If the asbestos was causing harm	53%
The asbestos is currently in good condition and doesn't need to be removed	46%	If the asbestos became damaged or started degrading	52%
My or my family's health is not affected by the asbestos on the property	22%	If the risk to my, my family, or my tenant's health increased	52%
There are other things I need or want to spend money on first	34%	If a financial incentive program became available	50%
l am planning the removal to coincide with other renovation plans	42%	If the asbestos removal was part of other renovations that I needed to undertake sooner	40%
I need time to save up or get enough money to pay for the removal	48%	If I was able to afford to remove or replace the asbestos sooner	39%
I have been told that it is safe to leave the asbestos there for now	34%	If I was told by a professional it was unsafe	35%
I don't want the hassle or inconvenience of organising asbestos removal and/or replacement	15%	If someone else organised the removal and replacement for me	12%
I may sell the property as is instead of removing the asbestos	12%	If I could be held legally responsible for harm caused by asbestos in the property	11%

Table 3.Most common reasons homeowners delay asbestos removal and whatwould make them consider removing it sooner

Notes: This table contains only the most common reasons identified. See the Appendix Table S6 for all options presented to respondents. All 397 respondents who had asbestos on their property and planned to remove the asbestos but not for at least 1 year answered the questions: 'What are your main reasons for delaying removal? Please select up to 5 reasons.' and 'Under what conditions would you remove the asbestos sooner? (Please select up to 5 options.)'. Response options were presented to respondents in a randomised order for both questions.

Renovations trump health concerns in prompting actual removal

Of the 1,160 respondents who knew they had asbestos on their property, only 16% had plans to remove the asbestos *within the next 12 months.* The most common reason for removal

within this timeframe was because they were also conducting other renovations at the same time (63%; Table 4). Like the other cohorts discussed already, health concerns were also commonly mentioned, but much less often than renovations. This suggests that even homeowners who are motivated to remove asbestos may need a prompt – with renovations often spurring them into action (see also Box 1).

Reasons	Percentage of respondents
I have plans to renovate the property anyway	63%
My, my family, or my tenant's health is at risk	36%
The asbestos is damaged or in poor condition and should be removed	32%
Removing the asbestos will increase the value of the property	28%
I was told by a professional it is unsafe	19%
The asbestos was causing harm	16%
I can afford it	15%
Someone else is organising the removal and replacement for me	15%
Children or someone who is sick lives in, regularly visits or lives next door	13%
Others in the community are also removing their asbestos	9%
I don't have insurance that would cover the expensive clean-up costs if the asbestos got damaged	8%
Fires, floods, severe storms etc. often occur in the area	6%
Other	2%

Table 4. Reasons homeowners are removir	g asbestos within the next 12 months
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Notes: All 186 respondents who had asbestos on their property and planned to remove the asbestos within the next 12 months answered the question: 'What are your main reasons for removing the asbestos? Please select the top 5 reasons.' Response options were presented to respondents in a randomised order. A small number of landlords (n=2) also responded with 'my tenants are vacating the property'.

New risk information did not influence the maximum affordable price

In the RCT component of the study, half the homeowners read a short additional paragraph about degrading asbestos and the new advice to have it proactively removed. We did not find any evidence that providing this information caused homeowners to indicate a higher maximum price for asbestos removal (see Figure 6).¹²

¹² This analysis included income as a covariate; see the accompanying Technical Report for details and full results. For exploratory subgroup analysis of the maximum price reported by each income bracket, see page 14.

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Figure 6. Effect of additional risk information on maximum budget reported for asbestos removal

Note: The control group read standard asbestos risk messages, while the intervention group also read an additional paragraph about the increasing exposure risks within Australian homes from degrading asbestos. We then compared their responses to the question, 'What cost of removing the asbestos would be so expensive that you could not realistically afford to remove and legally dispose of the asbestos even if you wanted to?'

While we didn't find an effect in this study, we are unable to confidently rule out any positive or negative effect of the additional risk message. This is because our ability to detect an impact may have been limited by two factors:

- 1 *All* participants in the study read general information about the risks of asbestos in the introduction to the DCE, so there may have been limited scope for the additional paragraph in the RCT to further heighten participants' perceived risk.
- 2 When asked what they could afford to pay for asbestos removal, responses varied widely (the highest responses were in the millions, and the lowest response was \$0). This variability limited our statistical power to detect any differences between the control and intervention groups.

Taken together with the survey results, on balance it seems that while many homeowners say that perceived risk and health concerns would influence their removal decisions, this risk perception is less likely to influence the amount of money a household can put towards the job.

Subgroup analyses

While the results reported in the previous sections were largely consistent across the different cohorts we surveyed, some subgroups stood out as having a different pattern of responses. In particular, being a landlord, mortgage status, age, and location appeared to influence participants' responses to the survey.¹³ We also found some differences between low- and high-household income homeowners, however this difference may be due to low-income homeowners also being more likely to be older. These cohorts are summarised in turn below. Responses did not appear to notably differ according to CALD status, gender, or remoteness. All results in this section draw on our survey questions, unless otherwise specified.

Landlords versus owner-occupiers

Our survey suggests that landlords might be more motivated by asbestos rules and regulations than by renovations (which was a common motivator for owner-occupiers). Financial incentives for landlords could focus on replacing rental income while asbestos work is conducted, as many said this was likely to motivate them to remove asbestos (or remove it sooner).

There were 687 landlords in our sample. Their properties were as likely to be urban or remote as the owner-occupier properties (with a quarter being in a regional or remote area, and the remainder in an urban or suburban area) but the property was much more likely to be an apartment or unit (25% vs 8%).¹⁴ Landlords were also more likely to be paying off a mortgage on their rented property (76% vs 69%).

Landlord properties were less likely to have had a significant renovation since 1990 (60% vs 74% for owner-occupiers). Landlords were also less likely to be planning renovations, and more likely to say they were doing 'ongoing maintenance or repairs only' (28% vs 19%), and 'I will not be renovating the property but am open to minor/ongoing repairs' (14% vs 7%).

Landlords were more likely to say they were unsure if their property had asbestos (52% vs 43% for owner-occupiers), and slightly more likely to say that finding out wasn't a priority (19% vs 14%). If they said their property had *no* asbestos (n = 181), landlords were much more likely to say they knew there was no asbestos because they had had an asbestos assessment (55% vs 34%).

If they did know they had asbestos (n = 147), landlords were somewhat less likely to say it was on the grounds (such as a fence or shed) -20% gave this response versus 29% for owner-occupiers. About half said they had no plans to remove it (51%, similar to full sample),

¹³ This section presents descriptive statistics for different subgroups. While we compare percentages for different groups (such as landlords and owner occupiers), we did not statistically test for differences between these groups. Therefore, any apparent differences in percentages should be interpreted with caution, as we cannot confirm whether they represent statistically significant differences.
¹⁴ 63% of landlords had a freestanding house, versus 85% of owner-occupiers.

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but landlords were more likely than owner-occupiers to say they would delay removal by more than 5 years (16% vs 9%).

Landlords who said they did not have plans to remove asbestos (n = 75) were asked what would make them more willing to remove it. This is a small group in our study, so results should be interpreted with caution. Landlords selected risks to tenants relatively often (27%), as well as the general response of 'if it was causing harm' (59% vs 60% for owner-occupiers). They were more likely than owner-occupiers to say a legal requirement would encourage them to remove asbestos (25% vs 12%) – possibly because it's more realistic for landlords that it could *become* a legal requirement, or because they feel it's more likely that legal requirements would apply to them. They also mentioned finances – if they could be compensated for lost rental income (32%) – but were less likely to say that affordability was key (12% vs 26%).¹⁵ For the 55 landlords who were delaying removal more than 12 months, we asked what would make them remove it sooner, and the results looked similar. Caution should be exercised in interpreting the results due to the small sample, but this group also seemed more likely to say they'd be influenced by someone telling them it was unsafe (and to say that a reason for *not* removing asbestos was that they had been told by a professional it was safe).

Mortgaged versus owned outright

In our sample, 30% owned their property outright, and 70% were paying a mortgage. As discussed below, older homeowners (who also often had lower incomes) were more likely to own their properties outright.

Mortgaged properties were somewhat more likely to have 'some ongoing maintenance issues' – 43% compared to 35% of properties owned outright – and homeowners with mortgages were more likely to say they were planning both minor (37% vs 30%) and major (27% vs 15%) renovations. Neither group was likely to sell their properties – 81% of those who own their property outright, and 80% of those with a mortgage said they had no plans to sell.

Those who owned their property outright were more likely to be sure there was no asbestos on their property (36% vs 26%), and less likely to be unsure (39% vs 47%). Homeowners who owned their property outright were more likely to say they thought there was asbestos on their property because they 'just assume that it's there' (33% vs 27%). They were also more likely to say they knew they had *no* asbestos because they had already had extensive renovations done (45% vs 35%). Along with the fact that this was an older cohort, this suggests they have owned their properties for longer, have already done renovations, and have learnt more about the absence (or presence) of asbestos over time.

Those who own their property outright and knew they had asbestos (n = 328) were also more likely to say they had no plans to remove it (58% vs 46%). When asked what would make them more willing to remove it, those who own their property outright were more likely to say if the condition deteriorated (60% vs 55%), and if they were told it was unsafe (45% vs 40%). They also said they would be more willing to remove it if it was causing harm (56%), but this response was more common among those who are paying off a mortgage (62%).

¹⁵ As noted on page 14, landlords also found the tax offset more attractive than the other cohorts did.

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Interestingly given the different responses with regards to maintenance and past renovations, both mortgage-holders and those who own their property outright were almost equally likely to respond that they would be motivated to remove asbestos if they were undertaking renovations (30% vs 28%). They were also almost equally likely to care about the potential for increased health risks to themselves or their family (48% vs 46%).

As those with a mortgage were especially likely to say they would be more willing to remove asbestos if it was causing harm (62%), and likely to be planning a renovation (64%),¹⁶ this suggests a potential leverage point for this group: jurisdictions could partner with lenders to provide information about asbestos on mortgage statements. This information could inform homeowners that as asbestos-containing materials are ageing and degrading, they could already be causing harm, and that the current advice is to remove it proactively. The statements could also provide clear links to any 'next steps', including incentives programs that might be available in the homeowner's area.

Older versus younger homeowners

Of our survey respondents, 26% were 18-34 years old and 12% were older than 65 years. While most older homeowners owned their property outright (81% of 65+ year olds), most also had a low income (62%).¹⁷ This is in contrast to younger respondents, who were more likely to be paying off a mortgage (86% of 18-34 year olds), and less likely to have a low income (10%). These different circumstances likely influence their views on asbestos and asbestos removal.

Among homeowners aged over 65 years who have asbestos on their property, only 1 in 4 reported plans to remove it.¹⁸ This is in sharp contrast to the 61% of 18-34 year olds who reported removal plans.

Those aged over 65 years were more likely to indicate that they would consider removal if the asbestos became damaged or was in poor condition (66% of the over 65 year olds) than other homeowners with no asbestos removal plans (57%). They were also less likely to say that affordability matters: only 10% of the homeowners aged over 65 years indicated that reducing the impact on their savings would make them more willing to remove asbestos (compared to 24% of all homeowners with no plans).

Meanwhile, affordability considerations were more prominent among younger homeowners, with 38% of those aged 18-34 years saying they would be more willing to consider asbestos removal if it didn't take up too much of their savings. This may suggest that older homeowners – compared to younger homeowners – are less further along on their asbestos removal journey (see Figure 7 in the next section). The first step may be to become aware of the risks and motivated to remove the asbestos (older homeowners), before examining the household budget and finances to determine actual feasibility (younger homeowners).

¹⁶ As noted on p. 13, those with a mortgage may also have found the loan more attractive than other cohorts did.

¹⁷ Low income respondents reported a combined annual income before tax of below \$70,000, considering the income of everyone contributing financially to repairs, maintenance, or renovation on their property.

¹⁸ And 39% of those aged 50-64 years.

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Consistent with younger homeowners focusing on costs, more younger homeowners reported that they have set aside savings specifically for property repairs, maintenance and renovations than older homeowners – 61% of homeowners aged 18-34 year olds reported having set aside savings, compared to only 36% of the over 65 year old homeowners. While 77% of homeowners aged 18-34 years were open to conducting minor or major renovations on their property, only 46% of homeowners aged over 65 years were. Despite this, many young homeowners are delaying asbestos removal. Those aged 18-34 years old were more likely than other subgroups to delay asbestos removal for at least 1 year (42% or 120 out of 289 respondents aged 18-34 years who knew they had asbestos on their property).

States and territories

Results across the states and territories were largely consistent. However, a few differences stood out.

Those living in Western Australia (WA, n = 414) were more likely than other Australians to say they know there is asbestos on their property (40% of those living in WA, compared to 26% of all homeowners). They are more likely to find this out during acquisition of a property (39% vs 27%) and less likely to find out while renovating (18% vs 30%). This could be an effect of the housing stock in WA: fewer homeowners in WA report that their property has been well-maintained compared to other state/territories (46% vs 54%). By contrast, homeowners living in Victoria were less likely to find out whether their property contains asbestos via asbestos inspection assessments. Among the homeowners who knew their property did *not* contain asbestos, fewer living in Victoria than in other states and territories found out through having an asbestos assessment done (28% compared to 37% across all states and territories).

Common locations for asbestos on properties also varied between the states and territories (Table 5). Specific locations reported by homeowners who have previously removed asbestos indicate that greater proportions of those living in Queensland had removed asbestos from their bathrooms (39% vs 26%), interior walls (32% vs 22%), and ceilings (28%), while a greater proportion of those living in WA have removed asbestos-containing fences (62% vs 11%).

Table 5.Locations of asbestos currently on homeowners' properties by stateand territory (percentage)

State	Inside the home	On the outside of the home	On the property grounds
NSW (n = 341)	59	55	24
Victoria (n = 226)	42	69	20
Queensland (n = 259)	71	53	16
WA (n = 165)	30	38	67
SA (n = 103)	38	68	20

Note: Our survey included too few responses from Tasmania, the Northern Territory or the Australian Capital Territory to present results for these jurisdictions.

Behavioural design considerations

The financial incentives, health concerns and risk perceptions we considered in this research are most relevant for a particular group of homeowners: those who are aware they have asbestos and are considering removing it. But the 'journey' of asbestos removal begins before this point and continues after it (see Figure 7). This section briefly outlines ideas and considerations (from a behavioural science perspective) for encouraging asbestos removal throughout the journey.

Prompt discovery

A homeowner cannot remove their asbestos if they don't know it's there. In our survey, 44% of homeowners were unsure whether they had asbestos on their property – even though all participants owned homes built before 1990, which are highly likely to contain asbestos (unless they have had major renovations). Furthermore, most of these homeowners said that finding out whether they have asbestos was a low priority (46%), or not at all a priority (15%). Prompting disengaged homeowners to discover if there is asbestos on their property could include:

- **Communicating realistic costs**. A widespread narrative that asbestos removal is expensive may be contributing to homeowners' disinclination to check if their property contains asbestos or actively consider removal. Providing the public with common removal cost estimates may prevent homeowners from automatically dismissing discovery and removal activities due to unverified perceptions about affordability.
- Leveraging renovation plans. Currently, renovations are a key way that homeowners discover if there is asbestos on their property. But unexpected discovery can lead to exposure and unsafe decisions, such as covering it up, inexpert removal or inappropriate disposal (EPA, 2021). Communications could target those considering renovating perhaps customers of particular businesses with messages about the benefits of finding asbestos in a calm, measured and safe way, that allows for safe and legal removal planning.
- Partnering with other programs. Expanding existing government programs with access to homeowners – such as those targeting energy efficiency or disaster preparedness – could increase the profile of asbestos and prompt consideration by homeowners already considering home improvements (see ASSEA's incentives report Appendix A for a list of potential programs; ASSEA 2025). Joint programs pairing asbestos removal with other upgrades could increase homeowners' value perception by adding to the benefits gained from a single inconvenience (with messages such as 'Make your home safe, energy-efficient, and future-proof all in one go').





- **Tradespeople as messengers**. Builders, carpenters and other tradespeople could be influential messengers, for example by discussing asbestos risks with homeowners early in the process of discussing home improvement works. Tradespeople may be personally motivated, for their own health, to encourage an asbestos inspection prior to beginning work.
- **Calls to action**. Campaigns informing the public about the risk of ageing asbestos in pre-1990 homes could include clear and simple calls to action (such as 'book an inspection now' with a link to a register of licenced inspectors in their area). Common misconceptions about asbestos could be tackled in popular home improvement media such as magazines and television shows.
- Targeted communications. Messages are more likely to prompt action if they feel
 personalised to the recipient's circumstances. Annual council rate notices, for example,
 could notify residents that they have been specially chosen to receive a free or
 subsidised asbestos inspection (or disposal see ASSEA's incentives report, ASSEA
 2025). These notices could counteract a potential 'ostrich' effect¹⁹ by highlighting that
 asbestos found early can be removed more safely, easily and cheaply. The next step
 could be made simple and accessible through a booking link or QR code.
- **Mandatory reporting or disclosure**. Regulation could mandate that owners of pre-1990 homes check for asbestos before advertising for rent or sale, or tradespeople could be required to report the location of asbestos they see to a central register.

Motivate removal planning

In our study, 26% of the sample were aware that they had asbestos in their homes – but only half of these had plans to remove it. When asked what would motivate them to remove asbestos (either sooner or at all), the most common responses focused on the condition of the asbestos and health concerns. ASSEA is already leveraging this motivation through a communications campaign emphasising risks. Additional ways to build and maintain motivation could include:

Bundling with broader support for renovations. Given that homeowners are • commonly removing asbestos simply as a side-benefit of other renovations, an effective way to encourage asbestos discovery and removal might be to focus on enabling broader renovation activities (such as with subsidies) - but making that support contingent upon asbestos removal at the same time. Framing it as 'enabling renovations', as opposed to 'removing asbestos', has the added advantage of not requiring people to understand or appreciate asbestos exposure health risks. Humans commonly struggle to grasp risk as a concept (Slovic, Fischoff, & Lichetenstein 2016), and better public understanding of risk does not always lead to a uniform response (Klinke 2021). In our survey we found that many homeowners did not account for the delayed onset and irreversible nature of asbestos-related diseases (Bianchi & Bianchi 2007), in that they were willing to wait until the asbestos began causing harm, or until the asbestos was in poor condition. Enabling renovations may encourage asbestos removal while side-stepping the need for people to first accurately understand the risks. Support for home ownership (such first home buyer schemes) could similarly be made contingent on the recipient's removal of any asbestos within a certain time period.

¹⁹ An 'ostrich' effect means avoiding getting an inspection for fear of getting bad news.

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- **Tackling misconceptions**. While risk communications may not be effective for all homeowners, they may help motivate some to begin actively investigating removal options. Public campaigns could highlight that asbestos is becoming more dangerous simply due to its age, and clarify the nature of asbestos-related diseases as latent, irreversible and chronic.
- Showing that it's affordable and achievable. Homeowners could be provided with testimonials or 'case studies' from other homeowners in their area who have successfully removed asbestos and were happy to have done so. Providing the public with realistic estimates of asbestos removal costs which may be cheaper than they expect could help prevent homeowners from automatically discounting removal due to an untested belief that they couldn't afford it.
- Time-limited support. We often regard rare or scarce things as more valuable. Asbestos removal programs could target particular areas one at a time, with accompanying communications to homeowners highlighting the narrow window to get financial or other support. Such an approach could also help manage industry capacity by restricting upticks in demand and encouraging bulk removal jobs.
- **Promoting a community/social angle**. Safely disposing of a toxic substance benefits the homeowner, their family and their tenants, but also the broader community in the longer term. Some homeowners may respond to calls for them to make a meaningful, enduring contribution to the liveability of Australia's built environment. This motivation could be amplified through group-based programs that involve everyone in a street, postcode, community group or council banding together to achieve a shared goal (see also ASSEA's incentives report, ASSEA 2025).
- **Complementing risks with benefits**. Risks can be motivating, but unpleasant to think about. Reframing the risks of inaction as the benefits of action might support homeowners. Asbestos removal could be pitched as offering peace of mind (for example, 'Breathe easy in a clean home').

Facilitate engagement and follow-through

Seemingly small hassles can have an outsized impact on the take-up of a behaviour or a government program. Even aware, motivated homeowners may not remove asbestos if the process is difficult, or if other things always seem to be a higher priority. To bridge this 'intention-action gap', program designers could:

- Make the 'next step' easy and salient. Homeowners who have discovered asbestos could be supported to proceed quickly to removal without effort or hassle. ASSEA's easy-to-understand 'Guide for Homeowners' could be sent to homeowners by their licenced inspector. Inspectors could set up arrangements with removalists enabling a homeowner to automatically receive a phone call to book in a removal job.
- Lock in initial commitments. Once a homeowner demonstrates their interest in asbestos removal, systems could be in place to help them maintain that focus. Homeowners who contact the government about an incentive program could be immediately provided with checklists, decision aids or other planning tools. Homeowners who begin an application process in an online portal, but do not complete it, could receive a reminder message a few weeks later.

• Send reminders. Sometimes people do not follow through simply due to forgetfulness or procrastination. Reminder messages – with relevant resources and useful links – could be sent every few months to anyone who found asbestos in an inspection.

The way a government program or service is designed and communicated can similarly impede people from following through on their good intentions to access support and make a change in their life (sometimes referred to as 'sludge'; NSW Behavioural Insights Unit 2024, Sunstein 2021). Even an appealing, helpful program can be under-utilised if it is hard to access or confusing. The support program uptake, designers could:

- Make the benefits concrete and tangible. Our study found that easily understandable, direct cost savings were appealing to homeowners. When an incentive program uses an instrument more complicated than a grant (such as a loan or tax offset), uptake could be maximised by highlighting the expected dollar savings for the homeowner. A simple sum (even one that relies on assumptions) would help homeowners understand the long-term benefits to their cash flow.
- Clearly express any eligibility criteria and required documentation. Simple language (that has been tested with the target audience) would help a homeowner immediately recognise a program as accessible to them. Evidence and documentation requirements can be major hassles in application processes – noting these requirements upfront reduces frustration and surprise later on.
- Make as much as possible happen effortlessly. Automatically enrolling homeowners into a program can ensure uptake more than promoting a program that requires active sign-up. Similarly, pre-filling forms with information already known about the homeowner eases the administrative burden of accessing support.
- Create a seamless user experience. Forms and processes should be easy to use and only request relevant information (BETA 2020).

Discussion and conclusion

Removing asbestos can be a distressing and difficult process. Our research suggests that many homeowners would benefit from support and guidance at various stages if they are to play their part in reducing the amount of asbestos in the Australian built environment, a key objective of the National Plan.

Renovations could be leveraged to prompt discovery and removal

Removing asbestos may not be pleasant, but renovating your home can be. Consistent with previous research (Ipsos, 2018; Heartward Strategic 2021a; Heartward Strategic 2021b), we found asbestos removal was associated with renovations.

Homeowners in our study seemed to see asbestos removal as a side benefit of renovations, rather than renovations being prompted by the presence of asbestos. Many of the homeowners planning imminent asbestos removal in our study were doing so in the context of other renovations. Many delaying removal were doing so to save enough money for other renovations as well. A substantial proportion of homeowners were content remaining unaware of whether asbestos is on their property, unless they were to consider renovating their property, with some reporting that they are willing to let any unknown asbestos remain in place until it's discovered during renovations.

This suggests that targeting communications at pre-1990 homeowners who are considering renovations may increase safe discovery and planned removal. In addition, leveraging homeowners' desires to renovate may encourage more homeowners to remediate asbestos. This could be done by broadening the incentives to cover renovations, contingent on asbestos removal.

Health concerns may motivate discovery and removal

Health concerns play a big part in how homeowners talk about their asbestos removal decisions. Those who did not have plans to remove asbestos, or who were delaying removal, said that they would feel more motivated if the asbestos deteriorated or someone got sick. This underscores the importance of tackling common misconceptions about the safety of leaving painted, undisturbed asbestos in place, and about the latent onset and irreversible nature of many asbestos-related diseases. These misconceptions could be addressed using trusted messengers to communicate to owners of pre-1990 homes that, given its age, asbestos is no longer in 'good' condition and that exposure risks are increasing with time.

Reducing out-of-pocket costs could facilitate removal

The cost of removal, disposal and replacement is a major barrier to asbestos eradication in the Australian built environment. For homeowners, financial incentives may alleviate some of

the costs and thus increase their willingness to remove asbestos. In our discrete choice experiment (DCE), we found that grants were the most attractive incentive program to homeowners, seemingly because they directly address out-of-pocket costs. However, there are substantial downsides and risks to implementing grants (such as the inflationary pressure they exert on the market). To avoid or at least monitor for the downsides of a grant, jurisdictions could consider alternative ways of addressing out-of-pocket costs, and pilot any new program to address any unintended consequences before scaling (see also ASSEA's incentives report, ASSEA 2025).

Homeowners are likely to respond to concrete benefits

Although the presence of a grant program 'overshadowed' the other incentives in the DCE, we also found that loans and tax offsets may be marginally effective in increasing the rate of asbestos removal. For these incentive programs – which are more complex than a grant – uptake could be maximised by highlighting the expected dollar savings for the homeowner. A simple sum (even one that relies on assumptions) would help homeowners understand the long-term benefits to their cash flow.

Make the process seamless

Regardless of which incentive program a jurisdiction chooses to design and implement, from a behavioural perspective it will be important to clearly communicate the program's eligibility and requirements, and to make it easy to access – for example by making as much of the process automatic as possible, sending reminders, and showing people how easy and achievable asbestos removal can be (such as through case studies). These behavioural considerations (alongside others outlined in this report), should be taken into account alongside the broader industry considerations highlighted in ASSEA's incentives report (ASSEA 2025).

Appendix A: Additional tables

This Appendix contains the following additional tables:

- Appendix Table 1: Respondent demographics Summary of respondents' age, gender, location, and similar
- Appendix Table 2: Financial status of respondents Summary of respondents' employment status, income, savings, and similar
- Appendix Table 3: Property questions (finances) Summary of the type of property, whether it is mortgaged, rented out, and similar
- Appendix Table 4: Property maintenance and plans Summary of whether and when the respondents had plans to renovate or sell
- Appendix Table 5: All circumstances that would increase homeowners' willingness to remove the asbestos off their property – Extended version of Table 2 in the report
- Appendix Table 6: All reasons homeowners are delaying asbestos removal and what would make them consider removing it sooner – Extended version of Table 3 in the report
- Appendix Table 7: All hypothetical circumstances that would increase and decrease the willingness to remove asbestos of homeowners unsure if they had asbestos on their property – Participants who reported no asbestos on their property, or were unsure, were asked which circumstances would increase or decrease their willingness to remove asbestos if it was found on their property
- Appendix Table 8: Conditions that increase the priority of discovering whether property contains asbestos – For most participants who were unsure whether they had asbestos on their property, finding out was not a high priority. We asked in an open-ended question what would make it a priority.

Appendix Table 1. Respondent demographics

Category	Value	Count (per cent)
Gender	Woman or female	2,766 (63%)
	Man or male	1,610 (37%)
	Other	10 (0%)
Age	Younger (18 - 34)	1,124 (26%)
	Lower middle (35 - 49)	1,671 (38%)
	Upper middle (50 - 64)	1,018 (23%)
	Older (65+)	556 (13%)
Location	New South Wales	1,298 (29%)
	Victoria	1,189 (27%)
	Queensland	823 (19%)
	Western Australia	414 (9%)
	South Australia	397 (9%)
	Tasmania	190 (4%)
	Australian Capital Territory	75 (2%)
	Northern Territory	17 (<1%)
Language	English	4,174 (95%)
	Other	176 (4%)
Country of birth	Australia	3,683 (84%)
	Other	709 (16%)
English proficiency	Native or very good	4,269 (97%)
	Below 'very good'	126 (3%)
Culturally or linguistically diverse (CALD)	No	3,895 (88%)
	Yes	451 (10%)
	Unknown	57 (1%)
Aboriginal or Torres Strait Islander	No	4,220 (96%)
	Yes	143 (3%)

Appendix Table 2. Financial status of respondents

Category	Value	Count (per cent)
Household income	Less than \$30,000	217 (5%)
	\$30,000-\$50,000	299 (7%)
	\$50,001-\$70,000	372 (8%)
	\$70,001-\$100,000	644 (15%)
	\$100,01-\$130,000	656 (15%)
	\$130,001-\$150,000	542 (12%)
	\$150,001-\$200,000	747 (17%)
	Over \$200,000	671 (15%)
	Don't know / prefer not to answer	255 (6%)
Income category	Low (less than \$70,001)	888 (20%)
	Medium (\$70,001–\$130,000)	1,300 (30%)
	High (over \$130,000)	1,960 (45%)
Work status	Working in paid employment	3,030 (69%)
	Retired	608 (14%)
	Self employed	310 (7%)
	Carer/home duties	293 (7%)
	Other	162 (4%)
Dependents	Yes, children	2,204 (50%)
	Yes other	128 (3%)
	No	2,060 (47%)
Financial situation	Very comfortable	254 (6%)
	Reasonably comfortable	1,868 (42%)
	Just getting along	1,792 (41%)
	Struggling	460 (10%)
	Prefer not to say / no response	29 (1%)
Number of properties owned	One	3,319 (75%)
	More than one	1,084 (25%)
Savings for property maintenance	Yes	2,236 (51%)
	No	2,166 (49%)

Appendix Table 3. Property questions (finances)

Category	Value	Count (per cent)
Financial decision-maker for the property	l am	2,064 (47%)
	Shared with spouse/other	2,276 (52%)
	Spouse or Other	403 (9%)
Property type	Apartment or unit	483 (11%)
	Townhouse	182 (4%)
	Duplex or terrace house	140 (3%)
	Freestanding house	3,596 (82%)
Title type (for properties other than freestanding homes)	Torrens title	98 (2%)
	Strata title	539 (12%)
	Community title	49 (1%)
	Other/don't know	119 (3%)
	The remaining 3,596 respondents (82%) owned freestanding homes	
Is a business run from this property?	Yes	343 (8%)
	No	4,039 (92%)
	Don't know	19 (<1%)
Property ownership	Mortgaged	3,073 (70%)
	Owned outright	1,320 (30%)
	Other (e.g. owned by a self-managed super fund with or without financing)	9 (<1%)
Landlord	Yes	687 (16%)
	No	3,498 (79%)
	Unknown	218 (5%)
Property remoteness	An urban or suburban area	3,280 (74%)
	A regional or remote area	1,123 (26%)

Appendix Table 4. Property maintenance and plans

Category	Value	Count (per cent)
Property condition	Well-maintained	2,384 (54%)
	Has some ongoing maintenance issues	1,780 (40%)
	Needs significant maintenance or repairs	238 (5%)
Already renovated the property	Yes	3,147 (71%)
	No	979 (22%)
	Unsure	276 (6%)
Future renovation plans	Ongoing maintenance or repairs only	896 (20%)
	Yes - minor renovations only	1,523 (35%)
	Yes - major renovations	1,010 (23%)
	Currently no plans to renovate but open to it if needed	544 (12%)
	I will not be renovating the property but am open to minor/ongoing repairs	368 (8%)
	I will not be renovating the property or repairing damage	61 (1%)
Renovation timing	I'm currently renovating	409 (16%)
	In the next 12 months	1,117 (44%)
	In the next 2-3 years	820 (32%)
	In the next 4-5 years	146 (6%)
	In the next 6-10 years	31 (1%)
	In more than 10 years	10 (<1%)
Plans to sell	Yes	396 (9%)
	No	3,520 (80%)
	Unsure	485 (11%)
Sell timing (for the 396 planning to sell)	I'm currently in the process of selling the property/transferring ownership	52 (13%)

Category	Value	Count (per cent)
	In the next 12 months	175 (44%)
	In the next 2-3 years	121 (31%)
	In the next 4-5 years	37 (9%)
	In the next 6-10 years	10 (3%)
	In more than 10 years	1 (<1%)
Plans for a change in tenants (for the 697 landlords)	Within the next 6 months	47 (7%)
	In the next 6 to 12 months	65 (9%)
	In 1-2 years	90 (13%)
	At some point, but in more than 2 years	77 (11%)
	Not for the foreseeable future	104 (15%)
	Unknown	304 (44%)

Appendix Table 5. All circumstances that would increase homeowners' willingness to remove the asbestos from their property

Circumstances that would increase homeowners' willingness to remove, if they had no plans	Percentage of respondents
If the asbestos was causing harm	60%
If the asbestos became damaged or was in poor condition	57%
If the risk to my, my family, or tenant's health increased	51%
If a financial incentive program became available	45%
If I was told by a professional it was unsafe	42%
If I had other renovations planned	29%
If removal didn't take up too much of my savings	24%
If someone else organised the removal and replacement for me	17%
If removing the asbestos increased the value of the property	16%
If I could be held legally responsible for harm caused by asbestos in the property	14%
If fires, floods, severe storms etc often occurred in the area	5%
If children or someone who is sick either lives in, regularly visits, or lives next door	4%
If I could be compensated for lost income while my tenants vacated the property during the removal	4%
If it was easy to find a licensed asbestos removalists	4%
If others in the community were doing it at the same time	3%
If I didn't have insurance that covered the expensive clean-up costs of damaged asbestos	2%
Other	2%
If the property was not heritage listed	<1%
If I decided to sell the property soon	0%

Note: 577 respondents with no plans to remove the asbestos on their property answered the question 'Under what conditions would you be more willing to have the asbestos removed? (Please select up to 5 options.)' Only 2 respondents failed to answer this question.

Appendix Table 6. All reasons homeowners are delaying asbestos removal and what would make them consider removing it sooner

Reasons for delaying removal	Percentage of respondents	Circumstances that would make them consider removing the asbestos sooner	Percentage of respondents
The asbestos is currently not causing any harm	52%	If the asbestos was causing harm	53%
I need time to save up or get enough money to pay for the removal	48%	If the asbestos became damaged or started degrading	52%
The asbestos is currently in good condition and doesn't need to be removed	46%	If the risk to my, my family, or my tenant's health increased	52%
I am planning the removal to coincide with other renovation plans	42%	If a financial incentive program became available	50%
There are other things I need or want to spend money on first	34%	If the asbestos removal was part of other renovations that I needed to undertake sooner	40%
I have been told that it is safe to leave the asbestos there for now	34%	If I was able to afford to remove or replace the asbestos sooner	39%
My or my family's health is not affected by the asbestos on the property	22%	lf I was told by a professional it was unsafe	35%
I don't want the hassle or inconvenience of organising asbestos removal and/or replacement	15%	If someone else organised the removal and replacement for me	12%
I may sell the property as is instead of removing the asbestos	12%	If I could be held legally responsible for harm caused by asbestos in the property	11%
It is hard to find a licensed asbestos removalist in my area	6%	If removing the asbestos increased the value of the property	8%
I would lose my tenants and rental income <i>(only asked of landlords)</i>	5% (18 Iandlords)	If children or someone who is sick started living in, regularly visited, or moved in next door	7%
Fires, floods, and severe storms etc are uncommon in my area	4%	If it was easier to find a licensed asbestos removalists	7%

Reasons for delaying removal	Percentage of respondents	Circumstances that would make them consider removing the asbestos sooner	Percentage of respondents
The property is heritage listed	2%	If I decided to sell the property soon	7%
Other	2%	If I could be compensated for lost income while my tenants vacated the property during the removal (only asked of landlords)	4% (17 landlords)
		If I didn't have insurance that covered the expensive clean-up costs of damaged asbestos	3%
		If fires, floods, severe storms etc became a higher risk in the area	3%
		If others in the community were doing it at the same time	3%
		If the property was not heritage listed	2%

Notes: All 397 respondents who had asbestos on their property and planned to remove the asbestos but not for at least 1 year answered the questions: 'What are your main reasons for delaying removal? Please select up to 5 reasons.' and 'Under what conditions would you remove the asbestos sooner? (Please select up to 5 options.)'. Response options were presented to respondents in a randomised order for both questions.

Appendix Table 7. All hypothetical circumstances that would increase the willingness to remove or leave in place asbestos of homeowners unsure if they had asbestos on their property

Reasons for leaving any asbestos found	Percentage of respondents	Reasons for removing any asbestos found	Percentage of respondents
If the asbestos was not causing any harm	66%	If the risk to my, my family, or my tenant's health increased	67%
If I had been told that it is safe to leave the asbestos in place	66%	If the asbestos was causing harm	60%
If my or my family's health was not at risk	55%	If I was told by a professional it was unsafe	50%
If I could not afford to remove or replace the asbestos	46%	If a financial incentive program became available	45%
If the asbestos was in good condition	36%	If the asbestos became damaged or started degrading	43%
If I decided to sell the property as is	25%	If I was able to afford to remove or replace the asbestos sooner	31%
If I did not have other renovations planned	25%	If the asbestos removal was part of other renovations that I needed to undertake sooner	30%
If I had insurance that covered the expensive clean- up costs if the asbestos got damaged	14%	If I could be held legally responsible for harm caused by asbestos in the property	25%
If there were other things I need or want to spend money on	12%	If someone else organised the removal and replacement for me	19%
If it was hard to find a licensed asbestos removalist in my area	11%	If removing the asbestos increased the value of the property	16%
If I didn't want the hassle or inconvenience of organising asbestos removal and/or replacement	9%	If it was easier to find a licensed asbestos removalists	15%
If the property was heritage listed	5%	If children or someone who is sick started living in, regularly visited, or moved in next door	10%
If I would lose my tenants and rental income <i>(only</i> asked of landlords)	4% (84 Iandlords)	If I could be compensated for lost income while my tenants vacated the property during the removal (only asked of landlords)	7% (137 landlords)

Reasons for leaving any asbestos found	Percentage of respondents	Reasons for removing any asbestos found	Percentage of respondents
If fires, floods, and severe storms were uncommon in my area	3%	If I didn't have insurance that covered the expensive clean-up costs of damaged asbestos	4%
Other	<1%	If fires, floods, severe storms etc became a higher risk in the area	3%
		If others in the community were doing it at the same time	2%
		If the property was not heritage listed	1%

Notes: All 1,959 respondents who reported no asbestos on their property, or were unsure, were asked which circumstances would increase their willingness to remove asbestos, or increase the likelihood of them leaving it in place, if it was found on their property. Response options were presented to respondents in a randomised order for both questions.

Appendix Table 8. Conditions that increase the priority of confirming the presence of asbestos

Themes	Respondent free text responses
Planning renovations	"If renovations were to be planned"
	"If I were planning to do renovations or other work that would increase the risk of exposure"
	"When I'm closer to a financial situation to actually do renovations"
Incidental discovery such as when	"If [asbestos] was discovered doing any repairs of new work to the house"
conducting maintenance or repairs	" damage to property exposing asbestos"
maintenance en repaire	"If I was to find evidence of it during a renovation"
	"Visible signs of asbestos"
Increased risks or	"If I had to move into the property I'd probably investigate."
(potentially) causing	"Having children living with me"
nam	"If I became aware of an imminent risk"
	"If my family were having health issues and didn't know what was causing them"
	"Clearly making me sick"
Reduced cost /	"Free Inspection paid for by the Government"
increased affordability	"if a low cost test was available"
	"Free inspection and lower cost of removal"
	"Free check and grant, tax offset"
	"my financial situation to be able to afford the rate, insurance, repayments, land tax and now possible asbestos"
Legal mandates	"If a law was passed that made inspections mandatory"
	"If it was mandatory in order to lease or sell the property"
Influence of strata or neighbours	"If asbestos was found somewhere in the whole building or in one of the other apartments, I would investigate ours"
	"if the strata came and said we have to check"
	"rumblings from neighbours about asbestos found in their property"

Notes: All 1,959 respondents who were unsure if there was asbestos on their property answered the questions "What would have to change for it to be more of a priority for you?"

Appendix B: Full survey text

[Participant information sheet and consent form]

Eligibility and screener questions

Do you own one or more residential properties in Australia?

'Properties' include: Freestanding houses, apartments, units or townhouses, duplex or terrace houses, Torrens title and other property titles held via lots or shares (e.g. strata, community, company title etc.), or residences on long-term leaseholders of crown land for which you have a mortgage or own outright.

- No
- Yes, one
- Yes, more than one

Participants who answered 'no' were not eligible to participate.

When was your property/were your properties built? If you are unsure, please provide your best estimate.

- Between 2018 and 2024
- Between 2003 and 2017
- Between 1991 and 2002
- Between 1961 and 1990
- Between 1931 and 1960
- Between 1901 and 1930
- Before 1901

Participants who owned more than one property could provide more than one response. Participants who owned at least one property built before 1990 were eligible. If they owned properties built before and after 1990, they were asked to focus on the one built before 1990.

Which of the following apply to your property?

- I live there full time
- I live there part of the year
- I don't live there but my family members do
- I rent it out / it is available to rent
- The property is vacant and I have no immediate plans for it to be occupied by anyone

Participants who owned more than one property built before 1990 could provide more than one response. Anyone who owned more than one property built before 1990 and indicated that they rented out one of them was asked to focus on the rented property. (These were coded as 'landlords' in our study, along with those who only owned one property built before 1990 and indicated that they rented it out.)

Questions about the property

Which state or territory is this property located in?

- New South Wales
- Victoria
- Queensland
- Western Australia
- South Australia
- Tasmania
- Australian Capital Territory
- Northern Territory

Is this property in...

- An urban or suburban area
- A regional or remote area

Is this property...

- Owned outright
- Owned and paying off mortgage
- Other (e.g. owned by a self-managed super fund with or without financing) please specify [free text]

What is the combined annual income (before tax) of those responsible for contributing financially to any repairs, maintenance, or renovations on this property?

- Less than \$30,000
- \$30,000-\$50,000
- \$50,001-\$70,000
- \$70,001-\$100,000
- \$100,01-\$130,000
- \$130,001-\$150,000
- \$150,001-\$200,000
- Over \$200,000
- Don't know
- Prefer not to answer

What is the postcode of this property? [free text]

What type of property is it?

- Apartment or unit
- Townhouse

- Duplex or terrace house
- Freestanding house

What type of Property Title do you hold for your property? [Not asked if participants owned a freestanding house]

- Torrens Title
- Strata Title
- Community Title
- I don't know/other (please specify) [free text]

Do you or someone in your household run a registered business from this property? (This does not include working from home as an employee for a separate company.)

- Yes
- No
- Don't know

How would you describe the condition of the property?

- Well-maintained
- Has some ongoing maintenance issues
- Needs significant maintenance or repairs

Has the property had a major renovation (e.g. new kitchen, bathroom, laundry, roof, garage, etc) since 1990?

- Yes
- No
- Unsure

Do you currently have plans to renovate or repair this property?

- Ongoing maintenance or repairs only
- Yes minor renovations only
- Yes major renovations
- Currently no plans to renovate but open to it if needed
- I will not be renovating the property but am open to minor/ongoing repairs
- I will not be renovating the property or repairing damage

When do you intend to renovate? [Only asked for those who answered 'yes' to the previous question.]

- I'm currently renovating
- In the next 12 months
- In the next 2-3 years
- In the next 4-5 years
- In the next 6-10 years
- In more than 10 years

Do you currently have plans to sell or transfer ownership of the property?

- Yes

- No
- Unsure

When do you intend to sell or transfer ownership? [Only asked for those who answered 'yes' to the previous question.]

- I'm currently in the process of selling the property/transferring ownership
- In the next 12 months
- In the next 2-3 years
- In the next 4-5 years
- In the next 6-10 years
- In more than 10 years

When do you think there will be a change of tenants on your property? [Only asked of landlords.]

- Within the next 6 months
- In the next 6 to 12 months
- In 1-2 years
- At some point, but in more than 2 years
- Not for the foreseeable future

Initial risk information

Thank you for your responses so far. Now please read the following information carefully.

Exposure to asbestos can cause several life-threatening diseases, including lung cancer. An estimated 4,000 Australians die annually from asbestos-related diseases. The risk of developing an asbestos-related disease increases with more asbestos exposure, however some people can develop disease from minor exposure. The only way to eliminate the risk is to avoid exposure to asbestos fibres.

Homes built before 1990 are likely to contain asbestos. Asbestos is present in 1 in 3 homes built before 1990. It was widely used in home construction, both inside (e.g., in kitchens, bathrooms and laundries), and outside (e.g., for wall sheeting, roofs, guttering and fences) before it was completely banned in 2003.

Clean-up of damaged asbestos is dangerous, time-consuming and costly. Asbestos becomes dangerous when damaged, disturbed or deteriorated, increasing the risk of releasing harmful asbestos fibres. The escalating frequency and intensity of extreme weather and other disaster events in Australia is also increasing the risk of exposure to asbestos fibres. Asbestos becomes damaged and disturbed during these events and the subsequent clean-up is much more dangerous, time-consuming and costly than planned, professional removal.

Your responses to the next task will allow us to identify potential financial supports that could help people in Australia to remove asbestos from their properties.

Introduction to discrete choice experiment

For the next section of this study, please imagine that **asbestos has been found on your** [rental] property that was built before 1990.

It's a significant amount; more than 10 square metres. You're unable do the removal and disposal yourself, so you have got some **quotes from licensed asbestos industry professionals** who will safely remove and legally dispose of the asbestos.

You have also done some research on **government programs you may be eligible for** to help with the cost. In this hypothetical task, you may be able to get multiple types of support at the same time. Under these programs, asbestos removal and disposal must be done by licensed asbestos professionals and valid evidence provided for that work.

You found the following potential programs:

- Interest-free loan: You may get an interest-free loan for up to \$50,000 (or the actual cost whichever is lower). The loan is for the sole purpose of asbestos removal and disposal from your property. Repayment periods vary from 5 to 15 years. The loan is managed by a bank, is secured against the property, is subject to the banks normal lending criteria, hardship policies, etc., and requires some paperwork. The loan can be paid off sooner than the maximum loan term.
- **Tax offset**: You may claim a tax offset against your annual income for the removal and legal disposal of asbestos from the property whether you live in it or rent it out. If the property is rented, you can also claim lost income while removal works are done. You need to keep all receipts and claim the offset at tax time.
- **Grant or subsidy:** You may get a grant or subsidy to help reduce the amount you have to pay a licensed professional for asbestos removal and disposal from your property. The grant amounts range from \$5,000 up to \$15,000, but can never be larger than the cost of removal and disposal. The grant is managed by your state or territory government through an application process.
- Lottery: If you pay for a licensed asbestos removalist to remove and dispose of asbestos from your property, you can go into a draw for a chance to win one of 10 prizes of up to \$20,000 to cover those expenses. You will need to complete an application form and provide a copy of your receipts to your state or territory government to join in the lottery.

You can open this information in a separate tab by clicking here. We recommend that you keep it on hand while completing the next task.

On the following pages, we will show you **two hypothetical scenarios**. Each scenario will vary according to the quoted cost of removal, and the financial supports available to you.

You will be asked to choose the scenario in which you would be *most willing* to have the asbestos removed. We'll ask you to complete this task 7 times.

Although these financial supports do not exist in the real world, your responses to this hypothetical task will inform government as to the type of financial supports that will be most helpful for Australian homeowners, such as yourself.

To ensure we get an accurate understanding of your thoughts about asbestos removal, before responding, please genuinely think about

- the actual cost to you
- the intentions you currently have for your property
- your financial situation, and

• what you would have to give up (e.g. a holiday or that new deck you wanted) if you had to pay for asbestos to be removed instead.

There are no right or wrong answers; please just give your honest answer.

Discrete choice experiment

As described and presented in the report.

Asbestos questions

Participants were reminded to think about their property built before 1990 (if they owned a newer property as well), and to think about the one they were renting out (if they owned multiple pre-1990 properties).

Is there currently asbestos on your property?

- Yes (these participants received the questions tagged 'yes-asbestos' below)
- No (these participants received the questions tagged 'no-asbestos' below)
- Unsure (these participants received the questions tagged 'unsure' below)

[yes-asbestos] How did you find out about the asbestos on your property?

- I found out when I acquired the property
- I found out during renovations or work on the property
- I had an asbestos assessment done
- I just assume there is because of the age of the house
- Other (please specify)

[yes-asbestos] Where is the asbestos? Please select all that apply.

- Inside the home (e.g. walls, doors, ceiling, or insulation around pipes)
- Outside the home (e.g. guttering, roof, eaves, or external walls or doors)
- On the grounds of the property (e.g. sheds, fences, pool areas, garage or carport)
- Other (please specify)

[yes-asbestos] Do you currently have plans to remove the asbestos?

- Yes within the next 12 months
- Yes within the next 1-5 years
- Yes but later than 5 years
- No

[yes-asbestos] **[reasons for removal]** What are your main reasons for removing the asbestos? Please select the top 5 reasons. [Displayed only to those who said they had plans to remove asbestos within the next 12 months, to the previous question.]

- The asbestos was causing harm
- My or my family's health is at risk
- Children or someone who is sick lives in, regularly visits or lives next door
- The asbestos is damaged or in poor condition and should be removed
- I was told by a professional it is unsafe
- I can afford it

- I have plans to renovate the property anyway
- Someone else is organising the removal and replacement for me
- Fires, floods, severe storms etc often occur in the area
- I don't have insurance that would cover the expensive clean-up costs if the asbestos got damaged
- Removing the asbestos will increase the value of the property
- Others in the community are also removing their asbestos
- My tenant's health is at risk (*Landlords only*)
- My tenants are vacating the property (*Landlords only*)
- Other (please specify)

[yes-asbestos] **[reasons for NOT removing]** Why are you not planning to remove it? Please select up to 5 reasons. [Displayed only to those who said they had no plans to remove the asbestos.]

- The asbestos is currently not causing any harm
- The asbestos is in good condition and doesn't need to be removed
- My or my family's health is not at risk from the asbestos on the property
- I have been told that it is safe to leave the asbestos where it is
- I was advised to bury the asbestos on my property
- There are other things I need or want to spend money on
- I can't afford the removal even if I wanted to
- I plan on selling the property as is
- I have no plans to renovate the property
- I don't want the hassle or inconvenience of organising asbestos removal and/or replacement
- It is hard to find a licensed asbestos removalist in my area
- Fires, floods, and severe storms etc are uncommon in my area
- I have insurance that would cover the expensive clean-up costs if the asbestos got
- I would lose my tenants and rental income (*Landlords only*)
- My property is heritage listed
- Other (please specify)

[yes-asbestos] Under what conditions would you be more willing to have the asbestos removed? Please select up to 5 reasons. [Displayed only to those who said they had no plans to remove the asbestos.]

- [response options very similar to [reasons for removing], above

[*yes-asbestos*] What are your main reasons for delaying removal? Please select up to 5 reasons. [*Displayed only to those who said they had plans to remove the asbestos, but not for at least 1 year.*]

- [response options very similar to [reasons for NOT removing], above

[*yes-asbestos*] Under what conditions would you remove the asbestos sooner? Please select up to 5 options. [*Displayed only to those who said they had plans to remove the asbestos, but not for at least 1 year.*]

- [response options very similar to [reasons for removing], above

[no-asbestos] How do you know there is no asbestos on your property?

- I have already had the asbestos removed from the property
- I have had extensive renovations done and no asbestos was found
- I have had an asbestos assessment which did not identify any asbestos in the building
- Other, please specify

[*unsure*] Considering all your current priorities, how much of a priority is it for you to find out whether there is asbestos on the property?

- Not at all a priority
- Low priority
- Moderate priority
- High priority
- Essential

[*unsure*] What would have to change for it to be more of a priority for you? [free text] [Asked only of participants who said finding out was 'not at all a priority' or 'low priority'.]

[no-asbestos] [*unsure]* If asbestos was discovered on your property, under what conditions would you be most likely to have the asbestos removed? (Please select up to 5 options.)

- response options very similar to [reasons for removing], above

[no-asbestos] [*unsure]* If asbestos was discovered on your property, under what conditions would you prefer to leave the asbestos rather than have it removed? (Please select up to 5 options.)

- response options very similar to [reasons for NOT removing], above

Asbestos removal experience

Have you ever had asbestos removed from a property that you owned?

- Yes
- No
- I tried (or wanted) to but couldn't. In a few words, please tell us what stopped you.

Please tell us what stopped you from having it removed. (Select all that apply) [Only displayed if participants answered 'I tried' above.)

- I was advised to leave the asbestos where it is
- I was advised to bury the asbestos on my property
- There were other things I needed or wanted to spend my money on
- The cost of removal and disposal was too high
- I decided to sell the property instead
- The hassle or inconvenience of organising asbestos removal and/or replacement became too great
- I couldn't find a licensed asbestos removalist in my area
- My property was heritage listed
- I didn't want to lose tenants or rental income (landlords only)

- Other (please specify)

When did you have it removed? [Only displayed if participants answered 'yes' above.]

- [7 response options, counting back by decades from 2024 to pre-1964]

How many meters squared of asbestos-containing material did you have removed? [Only displayed if participants answered 'yes' above.]

[31 response options, count from 0-10 m2 to 300+. Participants could also respond 'I don't know']

How many kilograms of asbestos-containing material did you have removed? [Only displayed if participants answered 'yes' above.]

[21 response options, count from 0-100 kg to 2001+ (more than 2 tonnes).
 Participants could also respond 'I don't know']

Whereabouts on the property was it removed from? Select all that apply. [Only displayed if participants answered 'yes' above.]

- external roofing
- ceiling
- interior wall sheeting
- external wall sheeting
- guttering
- fences
- kitchen
- laundry
- bathroom
- shed/garage
- other outdoor areas (e.g. pools)
- Internal or external doors
- other (please specify)

How much did asbestos removal and disposal cost (in AU\$)? (insert whole numbers only into the response box) [free text] [Only displayed if participants answered 'yes' above.]

Randomised Controlled Trial

Thank you for your responses so far. This is the second-last page of questions.

In this section, we are interested in how you would respond if you really did discover asbestos in your property.

For context: The cost of professional asbestos removal and disposal depends on the amount, location, and condition of the asbestos. For example, asbestos removal and disposal can currently range from \$2,000 for a small job to over \$100,000 for a large job. Asbestos handling becomes more hazardous and costly when the asbestos is in poor condition.

Intervention – half the participants were randomly assigned to read the following additional risk message:

Exposure risks within Australian homes are increasing.

Asbestos products in Australian homes are anywhere between 30-100 years old. This means that most asbestos products are degrading. Asbestos becomes dangerous when damaged, disturbed, or deteriorated, increasing the risk of releasing harmful asbestos fibres. The current advice is that homeowners pro-actively remove and safely dispose of all asbestos now to reduce risks to human health.

Outcome measure - all participants responded to this question:

What cost of removing the asbestos would be so expensive that you could not realistically afford to remove and legally dispose of the asbestos even if you wanted to?

To answer this question, please think about your financial situation and the money you could access (i.e. via loans, trusts, savings, etc.). We are interested in understanding the amount you could realistically afford to pay if you found asbestos on your property and had to have it removed and legally disposed of.

Please enter a dollar value in the box below (Note: please insert whole numbers only. Do NOT include the '\$' sign) [free text]

In a few words, please tell us how you arrived at this number?

Additional demographic questions

Are you currently ...?

- Working in paid employment
- Working as an apprentice
- Self employed
- Retired
- Student
- Carer/home duties
- Unemployed
- Looking for work

Do you have dependents for whom you are financially responsible?

- Yes, children
- Yes other
- No

How would you describe your financial situation?

- Very comfortable
- Reasonably comfortable
- Just getting along
- Struggling
- Prefer not to say

Do you put aside savings specifically for future property repairs, maintenance or renovations?

- Yes
- No

Who is responsible for financial decision-making about your renovations and maintenance of your property? Please select all that apply.

- lam
- My spouse
- Shared with spouse or other family members
- Shared with others (including non-family)
- Other family members
- Other people (non-family)

What age bracket are you in? [range from 18 to 65+, and with the option 'prefer not to say']

How do you describe your gender?

- Female
- Male
- Non-binary
- I use a different term
- Prefer not to say

Do you identify as an Australian Aboriginal and/or Torres Strait Islander person?

- Yes
- No
- Prefer not to say

Which country were you born in?

- Australia
- Other

What is your main language spoken at home? [English, a range of other common options, and 'prefer not to say']

How would you describe your proficiency in spoken English?

- Native speaker
- Very good
- Good
- Okay
- Bad
- Very bad
- Cannot speak English
- Prefer not to say

To help us improve this survey, please tell us if any of our questions or task instructions were confusing or could be improved. [free text]

In a few words, is there anything else you think we should consider to encourage the safe and legal disposal of asbestos from people's homes? [free text]

At the end of the study, participants were provided with links to further asbestos information and support services.

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B_TA

Behavioural Economics Team of the Australian Government

General enquiries <u>beta@pmc.gov.au</u> Media enquiries <u>media@pmc.gov.au</u> Find out more <u>www.pmc.gov.au/beta</u>

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