

SUMMARY REPORT

# Asbestos Safety Social Research

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HEARTWARD

STRATEGIC

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## Main points

This document summarises the findings from a major program of research commissioned by the NSW Environment Protection Authority covering both the generation and disposal of asbestos waste in residential settings. It was undertaken by Heartward Strategic in 2019 and 2020 and collected contributions from more than 6000 members of the NSW community.

The attitudes and actions of the people of NSW uncovered by this research show that asbestos is a **WHOLE COMMUNITY ISSUE IN TERMS OF BOTH RISKS AND SOLUTIONS**. Whether asbestos is knowingly or accidentally encountered, exposure can occur across the entire journey from discovery of asbestos through to its disposal. Consequently, the risk of exposure to asbestos fibres is not confined to one group or another, but homeowners, renters, 'do-it-yourselfers', building trades, construction and demolition workers, asbestos specialists, waste drivers and workers, and handy people helping friends and family may each come across asbestos at some point.

Prevention of exposure is also regarded as a whole community issue, with responsibility for asbestos and its risks seen to lie with property owners, industry and governments at the local, state and federal level. This diffusion of perceived responsibility and uncertainty around legal liability leads to a lack of personal accountability. This research found that **ASBESTOS CAN BE A 'HOT POTATO'** that no group in the community wants to deal with, despite widespread support for minimising the risk of asbestos exposure.

Most of the NSW community is generally aware that asbestos poses a risk to human health. For all groups within the community, protecting themselves and their loved ones is the main motivation prioritising safe and lawful behaviour. However, this does not necessarily lead to safe and lawful actions in relation to asbestos. Instead, there are currently numerous **BARRIERS THAT PREVENT PEOPLE FROM TAKING ACTION TO KEEP SAFE**. These barriers include:

- a lack of specific knowledge about and skills to deal with asbestos
- a lack of resources and support to act safely and lawfully
- fear of health consequences which can cause avoidance behaviours and hasty actions.

A key output from this research was an **ASBESTOS WASTE JOURNEY MAP, WHICH CHARTS THE PROCESS FROM ASBESTOS DISCOVERY TO DISPOSAL** to help identify where problems lie and interventions are needed. This map makes it clear that risk minimisation requires a **MULTI-FACETED COORDINATED EFFORT**. Communications alone will not be enough to shift behaviour and care must be taken to ensure messages from all sources are clear and consistent.

The asbestos waste journey also shows that actions at one end of the process have impacts at the other. A lack of planning and choices made before or at the time asbestos is encountered can have **NEGATIVE DOWNSTREAM IMPACTS** on other people and their safety, while the unsafe actions and advice of professionals can have **NEGATIVE UPSTREAM EFFECTS** on less informed groups in the community. To create change, the issues at both ends of the journey need to be addressed.

This research shows that care must be taken when **USING FEAR-BASED MESSAGES IN COMMUNICATIONS** about asbestos. Pushed too far, members of the community can panic and be more likely to avoid dealing with asbestos or act hastily. This can be mitigated by ensuring that messages that are likely to trigger fear are countered with immediate, clear action steps that can be taken.

## Research background

'Asbestos' describes a wide range of materials that are hazardous to human health in fibrous form, as it can be easily breathed in and become trapped in the lungs, increasing the risk of several types of cancer (including mesothelioma). Asbestos-containing materials are found in and around the human-made (built) environment and are an ongoing hazard to the community and environment through the potential for exposure to asbestos fibres.

In Australia, asbestos was widely used in many building materials and products from the 1940s through to the 1990s, and can potentially be found in any structure built, renovated or extended during this time. This asbestos is now coming to the end of its product life, meaning asbestos fibres are released more freely, increasing the health risks from these materials.

Asbestos waste can also be found in soil, underneath buildings and dumped. Each year in NSW, a significant amount of asbestos waste is generated and disposed of, and this is predicted to keep rising.

The NSW Environment Protection Authority (EPA) and the NSW Asbestos Coordination Committee (NACC) are involved with protecting and maintaining the health and safety of the community and the environment, through interventions that lead to safe and lawful behaviour in relation to asbestos.

In 2019 and 2020, Heartward Strategic, an independent, Australian social research company, undertook research to provide guidance on increasing safe and lawful behaviour in relation to asbestos. The research covered the discovery, removal and disposal of asbestos in home maintenance, renovations, demolition and property development, and included various groups within the NSW community:

- members of the general public
- owners and residents of relevant properties
- home handypeople and DIYers, who do unpaid renovation and maintenance work
- people affected by asbestos-related disease
- government authorities and local government representatives
- industry representative organisations
- licensed domestic trades, building and maintenance professionals
- demolition and waste services professionals
- paid handypeople – licensed and unlicensed
- occupational hygienists and private certifiers
- asbestos assessors and licensed removalists
- asbestos transporters
- waste facility staff.

The research program included several components:

1. An online survey of a representative sample of 4,063 NSW adults - focussed on asbestos discovery and removal
2. A subsequent representative online survey of n=2,702 NSW adults- focussed on waste disposal
3. 20 group discussions and 48 extended interviews with more than 130 individuals
4. 12 stakeholder consultation sessions
5. Five waste site visits

This report brings together and summarises the main findings from this entire program of research and provides guidance about how to approach interventions to increase the safe and lawful behaviour of community members in relation to asbestos. Statistics presented are sourced from either of the two NSW community surveys.

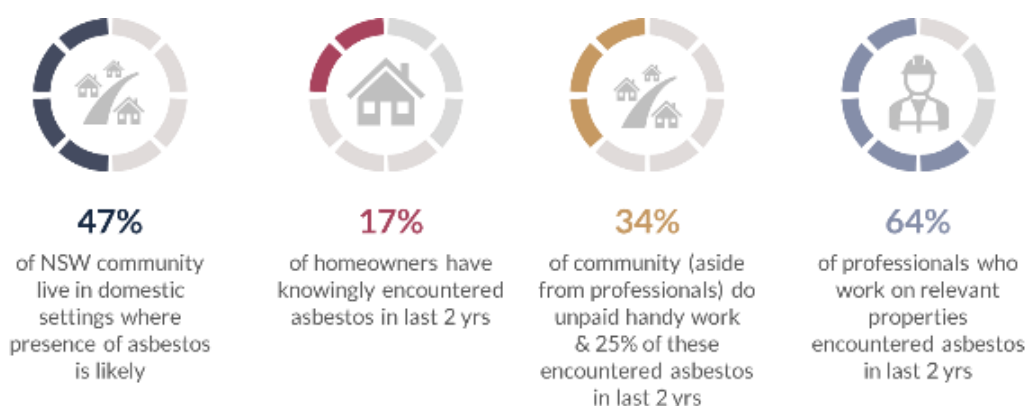
Further information about the research or its findings can be found in the two full reports, one focused on asbestos discovery and removal and the other on the disposal of asbestos waste. Both are publicly available [here](#) and [here](#).

## Research findings

### ASBESTOS IS AN ISSUE FOR THE WHOLE NSW COMMUNITY

The prevalence of asbestos and the attitudes and actions of the people of NSW uncovered by this research show that asbestos is a whole community issue in terms of both risks and solutions. Whether asbestos is knowingly or accidentally encountered, exposure can occur from the discovery of asbestos through to its disposal. Consequently, the risk of exposure to asbestos fibres is not confined to licensed tradespeople and do-it-yourself renovators, but also includes homeowners; renters; unpaid handypeople; unlicensed tradespeople and paid handypeople; building, construction and demolition workers; waste drivers and workers; and asbestos removal, transport and disposal specialists.

Figure 1 – Presence of risk in the NSW community<sup>1</sup>



As shown in Figure 1, the research found substantial proportions of the population have potential to be exposed to asbestos in their homes, the homes of people they know, or their jobs. Almost half of the NSW community (47%) lives in domestic settings where the presence of asbestos is likely. Among those who own homes built before 1990, one in six (17%) have come across asbestos in the last two years. The research also identified that a third of all community members (who do not work in a job where they may come across asbestos) are unpaid handypeople who help friends or family with their home improvement projects and that a quarter (25%) of these people had encountered asbestos while helping out in the last two years. Almost two thirds (64%) of those working in jobs where they may come across asbestos had done so in the last two years.

There is also a significant overlap between these groups, meaning that certain individuals may be exposed to asbestos through multiple avenues.

Like risks, prevention of exposure to asbestos is also regarded a whole community issue, and the expectation is that the responsibility for managing asbestos risk should also be shared - between local, state and federal government, the original manufacturers of asbestos materials, relevant professionals and property owners. This diffusion of responsibility for managing the risk leads to a lack of accountability - asbestos can be a 'hot potato' that no group within the community wants to deal with.

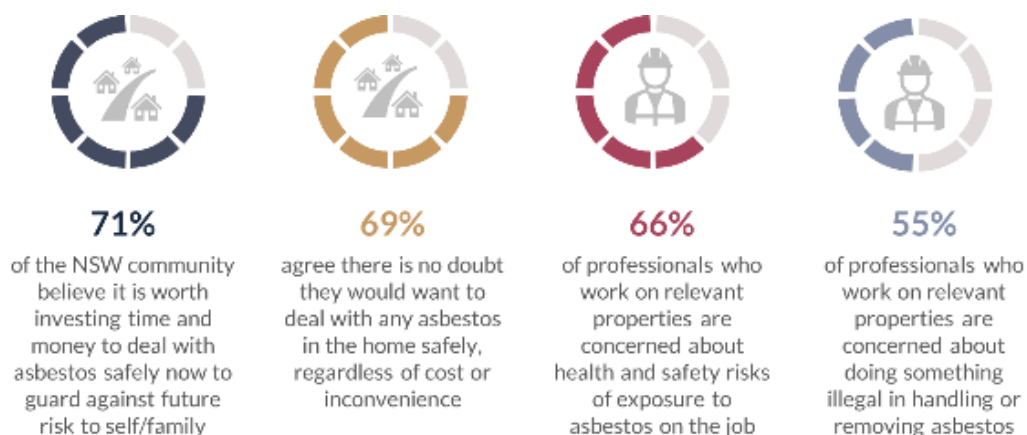
<sup>1</sup> Source, all proportions: Heartward Strategic (2021) Asbestos Safety Part 1: Household Renovation and Maintenance. NSW EPA.

## WIDESPREAD SUPPORT FOR MINIMISING THE RISK OF ASBESTOS EXPOSURE

Most of the NSW community is aware that asbestos poses a risk to human health. All groups within the community are motivated to avoid the threat of asbestos exposure to protect their own safety, and that of their loved ones, as well as other people (such as co-workers, friends and neighbours) that their behaviour impacts. Shared by all members of the community, the primary motivations that have the potential to drive safe and lawful behaviour in relation to asbestos include:

- *Keeping oneself, loved ones and others safe* – Survival instincts and protective impulses provide powerful motivation for non-professionals and professionals to act safely and lawfully.
- *Avoiding distress and concern* – Asbestos is a topic that stirs up uncomfortable responses such as alarm, fear, anxiety and unease, and avoidance of discomfort is a primary driver of behaviour.
- *Minimising costs, delays and inconvenience* – Property owners and both paid and unpaid workers on these properties are motivated to keep within budgets, stick to schedules and minimise inconvenience on any project they undertake.

Figure 2 – Community beliefs about safe and lawful behaviour<sup>2</sup>



This research also revealed motivations more specific to different parts of the community. As shown in Figure 2, seven in ten (71%) members of the NSW community surveyed believe that it is worth investing time and money to guard against any future asbestos exposure risk to themselves or their family, and a similar proportion (69%) agreed that dealing with asbestos safely is important, regardless of cost or inconvenience. However, the research found property owners are also motivated by quality of life and financial concerns, such as *creating a comfortable and enjoyable home*, and *maintaining or increasing the value of their property*. The tensions between these motivations are evident in behaviour where community members do not always act safely and lawfully, despite their concerns about exposure.

Among professionals working on relevant properties, two thirds (66%) have concerns about asbestos exposure on the job and more than half (55%) about doing something unlawful at work. The research also revealed that, for professionals, there is strong motivation to *preserve their professional reputation*, *feel pride* in their work and *avoid penalties*, however they also need to *protect their financial security and ongoing business viability* in the face of commercial pressures. These motivations and the tensions between them can result in professionals behaving in ways that are not safe or lawful.

<sup>2</sup> Source, all proportions: Heartward Strategic (2021) Asbestos Safety Part 1: Household Renovation and Maintenance. NSW EPA.

## POWERFUL BARRIERS OBSTRUCT PEOPLE FROM ACTING SAFELY AND LAWFULLY

Even though the reasons for minimising the risk of exposure to asbestos fibres are clear, this does not always translate into appropriate actions. This research revealed many instances of NSW community members not acting safely and lawfully in relation to asbestos, due to powerful barriers that obstruct this. The COM-B model for behaviour change<sup>3</sup> can help us understand why this occurs. It suggests that for people to act in a particular way (in this case, acting safely and lawfully with asbestos), the following conditions must be met:

**1. Can I do it?**

People must believe they have the necessary knowledge (psychological capability) and skills (physical capability) to do this.

**2. Do I have support to do it?**

People must have sufficient resources available (physical opportunity) and a suitable social context (social opportunity).

**3. Do I want to do it?**

People must consciously believe it is a good idea (reflective motivation) and be driven by unconscious beliefs or habits (automatic motivation) towards the behaviour.

This research found that there are barriers to safe and lawful action in relation to asbestos in all of these areas. Policies and interventions, including strategies, programs, initiatives and campaigns, designed to minimise asbestos exposure risk need to address these barriers, which are summarised below.

### CAN I DO IT? - CAPABILITY BARRIERS

- **Serious knowledge gaps**

This research found a lack of knowledge among all groups in the community, with less than one in five (18%) claiming to know a lot about asbestos and over half (52%) having no idea how to dispose of asbestos if they found it on their property. Specific areas where knowledge gaps were found to exist include:

- the possible locations and in which building products asbestos can be found
- how to identify asbestos and materials containing asbestos
- detail about the risks and consequences of asbestos exposure
- how to behave safely in relation to asbestos
- the legal requirements and responsibilities in relation to asbestos
- how and where to dispose of asbestos
- the actual costs of asbestos removal and disposal.

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<sup>3</sup> Michie, S., van Stralen, M., and West, R. (2011) The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation science*, 6 (42).



- ***Decision-making challenges***

The unease and fear associated with asbestos and its risks, and a lack of awareness of appropriate sources of advice and assistance, combine to make it confusing and difficult for people to make decisions around how to deal with asbestos.

- ***Lack of specific or high-quality training***

This research identified a notable lack of formal and informal asbestos-related training among some groups who work in jobs where asbestos may be encountered. Even licensed asbestos professionals were reported to receive varied quality training with skilled staff not always easy to find.

## **DO I HAVE SUPPORT TO DO IT? - OPPORTUNITY BARRIERS**

- ***Cost of removal and disposal***

Throughout this research, the perceived and actual costs associated with asbestos removal and disposal were consistently raised as a driver of unlawful and unsafe actions. This was not always related to the cost itself, but to knock-on effects including:

- lack of planning and costs not factored into projects resulting in no or insufficient budget available for asbestos removal and disposal
- costs of removal and disposal leading to under-quoting by operators who then dispose of asbestos unlawfully, placing downward pressure on prices for legitimate operators
- costs of disposal of small amounts of asbestos due to minimum charges applied by licensed waste sites acting as a disincentive.

- ***Unsafe decisions driven by cost and inconvenience***

Cost minimisation measures may include ignoring the asbestos, deciding to leave it where it is found and covering it up, or using less personal protective equipment than is required.. Similarly, the safe and lawful removal and disposal of asbestos was seen as an inconvenience in several ways:

- causing unexpected delays to projects for property owners and professionals (having flow-on cost implications)
- necessitating special trips to waste facilities licensed to accept asbestos which may involve travelling some distance, and which may be particularly inconvenient if disposing of small amounts.

- ***Lack of available equipment or staff***

People working in jobs where they may come across asbestos reported often not having appropriate safety equipment to hand when encountering asbestos, and difficulties engaging skilled and licensed staff.

- ***Absence of asbestos in social discourse and do-it-yourself culture***

Members of the NSW community note the lack of presence of the issue of asbestos safety in the media, which can suggest that the issue is not important, or the risk is low.

- ***Lack of single trusted source of information or consistent message***

This research found that no central body or source is seen to be definitive when it comes to information about asbestos and its removal and disposal. Even differences in how asbestos can be dealt with depending on the quantity (below and above 10m<sup>2</sup>) leads to inconsistency in messages received by the community about asbestos and its risks.

- ***Trades and professionals seen as asbestos experts***

In the absence of a central, widely known knowledge source, tradespeople and other building professionals are considered by other members of the community to be asbestos experts. As a result, their advice is trusted and their behaviour indicates how to treat asbestos, regardless of whether or not this is safe and lawful. Members of the public may then copy this behaviour, spreading unsafe social norms.

- ***Work culture can foster risk taking***

People working in jobs where they may come across asbestos can face numerous other risks in their workplace which they may prioritise over asbestos. In this research, some workplaces responded to this with stringent safety processes, but others did not. Professionals can sometimes feel subject to pressure to accept risks, and rush or skip safety protocols.

## DO I WANT TO DO IT? - MOTIVATION BARRIERS

- ***Lack of perceived consequences***

This research found that some community members and professionals are not overly concerned about the consequences of unsafe or unlawful behaviour because:

- health consequences of asbestos exposure are not immediate
- health risks are seen as inflated and unlikely
- responsibility for asbestos waste is not well understood
- possible legal consequences are not well understood
- legal consequences are seen as unlikely.

- ***Misplaced belief in knowledge or abilities***

This research found that community members' and professionals' faith in their own asbestos-related knowledge and skills tended not to match their actual skills and knowledge, leading to decisions and behaviours that put people at risk. Specifically, the research identified:

- a lack of knowledge that does not match the degree of confidence felt
- a lack of capability to identify, remove and dispose of asbestos that does not match the perceived skill level in undertaking these.

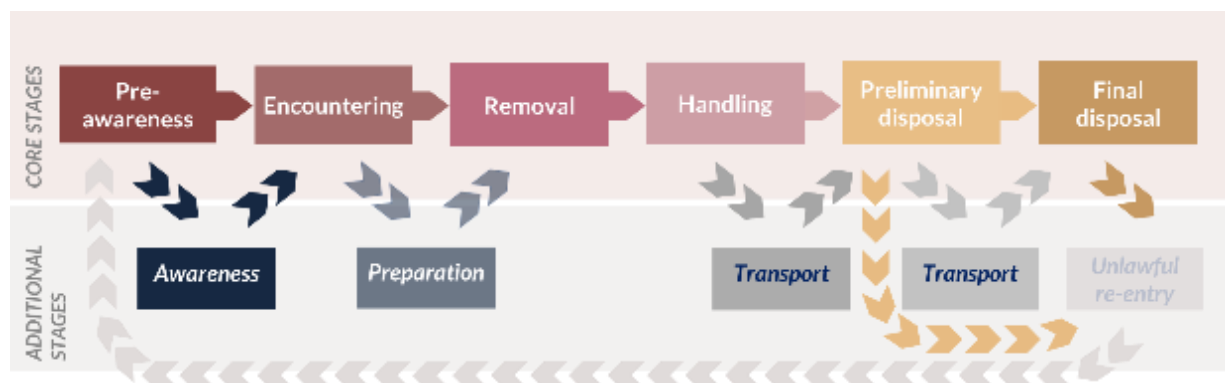
- ***Avoidance behaviour easily prompted***

Asbestos is considered a risk to human health from which community members want protection. If they cannot find a way to immediately protect themselves, this can lead to panic or denial, poor decisions and disregard for safety protocols. For instance, in their fear or alarm, some people downplay risks, preferring to be 'none the wiser', while others make unsafe decisions in haste to rid their home of any risk. This also fuels avoidance of accepting responsibility for asbestos.

## THE PROCESS FROM ASBESTOS DISCOVERY TO DISPOSAL

The findings from this research, as well as from previous research, have been applied to develop a map of the asbestos waste journey (Figure 3), starting from before asbestos is discovered, right up until asbestos waste is disposed of. This map ensures that all groups who may come in contact with asbestos are considered, and it also focusses attention on the outcome sought: that materials containing asbestos are safely and lawfully disposed of. Understanding the process can help to address unsafe or unlawful behaviours by identifying where the issues are, and which groups are relevant at each stage.

Figure 3 – The asbestos waste journey map



The map is made up of *core* stages which always occur in the process from before asbestos discovery to its disposal, and *additional* stages - which may or may not happen, depending on the situation. A description of each stage follows:

1. **Pre-awareness** - At this stage, the owners, or anyone working on or living at the property is unaware that asbestos might be present. This research found many instances where there was no prior awareness of asbestos that was encountered during work on properties. When there is no awareness of the possibility of asbestos, there is no planning for contingencies in case it is found. This absence of planning for asbestos can be problematic further along the journey, when fear and time and cost pressures can lead to hasty, unsafe behaviours.
2. **Awareness** - People with prior experience or greater knowledge of asbestos may suspect or have been made aware of the presence of asbestos at a property before they come across it. This research showed that where there is awareness of asbestos or the possibility that asbestos may be found before actually encountering it, consideration, planning, and safe and lawful actions are more likely to occur.
3. **Encountering** - At this stage, asbestos is encountered and decisions about what to do and first actions are taken by those who come across it. Which actions are taken, and how safe and lawful they are, depends on whether or not the asbestos was previously known about, and on whether or not those discovering it recognise or suspect it is asbestos. If the decision is taken to remove the asbestos, at this point, appropriate personal protective equipment (PPE) may be sourced, or asbestos professionals called in.
4. **Preparation** - Before asbestos is moved or removed, a preparation stage may occur between encountering asbestos and its removal and disposal. Based on this research, preparation is most likely to occur where the presence of asbestos has been anticipated and planned for. Preparation can include, for example, laboratory testing of the material, cordoning off the area, wetting down the asbestos, putting on PPE and notifying neighbours.

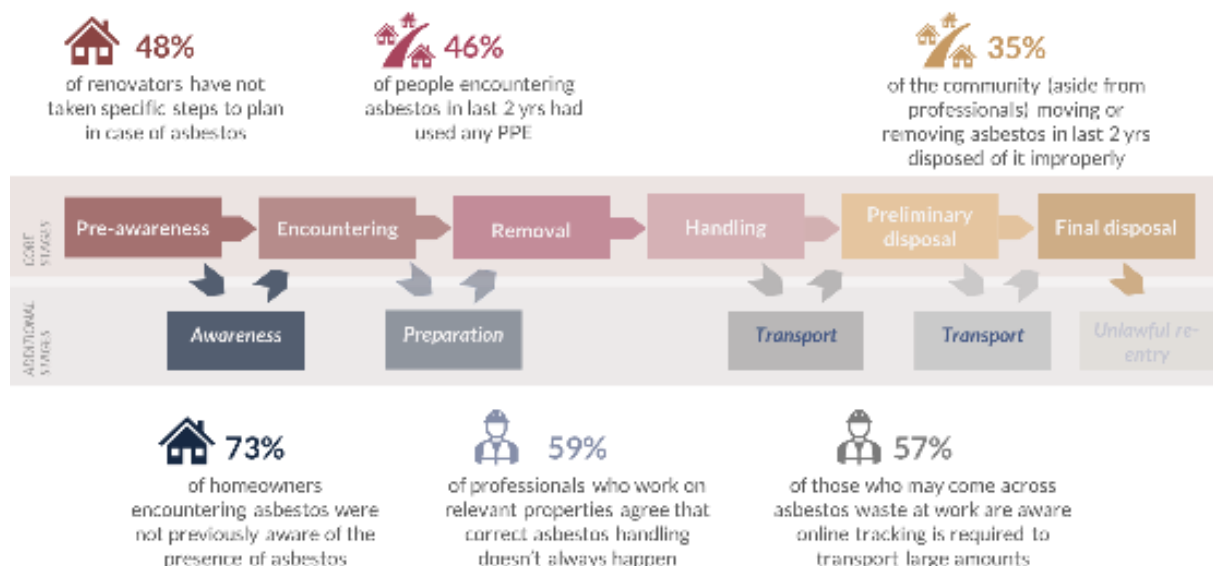
5. *Removal* – Once a decision has been made to move or get rid of the asbestos or suspected asbestos, the material is then removed from the place where it was found. This stage may be carried out by licensed asbestos specialists, tradespeople, handy people, property owners or residents. This research found that behaviour varies significantly between safe, lawful removal, and haphazard removal that places the community at risk.
6. *Handling* – Once removed, the asbestos waste is then readied for disposal. In this research, behaviour at the handling stage ranged from safe and lawful preparation of asbestos waste, including bundling, wrapping and stacking of asbestos ready for transport, to throwing asbestos pieces into a pile or a skip bin on a building site.
7. *Transport* - Transportation of asbestos only occurs where it is disposed of, either temporarily or finally, somewhere other than its original site. Initial transportation from the site can be to a preliminary disposal location such as a stockpile, or illegal dump, before being transported again to an appropriate waste site.
8. *Preliminary and final disposal* – Disposal has occurred when the asbestos has been relocated from where it was originally found. This research found a range of different options used, from on-site disposal (where asbestos waste is buried in soil or concealed under or behind an existing structure), to placing asbestos in a residential curbside bin, illegal dumping, and taking it to a lawful waste site. Final disposal has occurred when asbestos waste has been lawfully disposed of at a licensed waste facility.
9. *Unlawful re-entry* – This research found that asbestos may unlawfully re-enter the system as fill or recycled materials from any stage after removal.

An understanding of the asbestos waste journey shows the cumulative impacts of behaviour early in the journey on the end result. Failure to be aware of, or plan for encountering, asbestos prior to work has downstream impacts, making it more likely that asbestos waste may be removed, handled or disposed of unsafely or improperly. Similarly, behaviour from professionals from the preparation stage onwards has upstream impacts, influencing impressionable community members who trust the advice and actions of those who work with asbestos.

## A MULTIFACETED, COORDINATED EFFORT IS VITAL TO MINIMISING RISK

This research identified many points along the asbestos journey where safe and unlawful behaviour occurs. It is not a matter of just one place or another, or even one group within the community or another.

Figure 4 – Unsafe or unlawful actions occur across the asbestos waste journey<sup>4</sup>



As shown in Figure 4, among the general community, this research showed that the majority (73%) of homeowners who encountered asbestos were not previously aware there was asbestos on their property. Not surprisingly, half of home renovators (48%) indicated that they had not taken specific actions to plan for the possibility that asbestos might pose an issue during work.

When it comes to risks during removal of asbestos, fewer than half (46%) of community members who had come across asbestos in recent years had used any personal protective equipment when handling the asbestos. This was echoed among professionals who work on relevant properties, where six in ten (59%) agree that correct handling of asbestos does not always happen.

In terms of where the asbestos waste ends up, just over a third (35%) of the community (not including people working in jobs where they may come across asbestos) who moved or removed asbestos in recent years, disposed of it improperly, such as putting it somewhere else on the property or disposing of it in a residential curbside garbage, recycling or green waste bin.

This research demonstrated that, in combination, capability, opportunity and motivation barriers obstruct the motive to protect oneself and others from asbestos exposure, leading to unsafe and unlawful actions throughout the community. This research emphasises the need for a multilayered approach to pave the way for risk minimisation. Intervention in one area alone, for example, capability-building communications, will be insufficient to shift behaviour.

<sup>4</sup> Source of first five proportions shown in Figure 4: Heartward Strategic (2021) Asbestos Safety Part 1: Household Renovation and Maintenance. NSW EPA. Source of final proportion shown (57%): Heartward Strategic (2021) Asbestos Safety Part 2: Asbestos Waste. NSW EPA.

To provide guidance on bringing about positive change, the table below summaries those groups within the community who play a role in the asbestos waste journey.

**Table 1 – Groups in the NSW community involved across the asbestos waste journey**

<i>Group</i>	<i>Main points</i>
NSW Community who live in or own a property that may contain asbestos	<ul style="list-style-type: none"> <li>• Most are at the pre-awareness stage of the asbestos waste journey and do not know if there is asbestos on their property</li> <li>• Once asbestos is discovered, can be involved throughout the entire journey</li> <li>• Low knowledge of asbestos and few consider and anticipate it when buying a property, renovating, comparing quotes, or hold contractors to account</li> <li>• Little or no planning for asbestos leading to limited options for dealing with asbestos when discovered during work</li> <li>• Fear (of health, costs and time implications) prompts strong impulse to get rid of asbestos as soon as possible leading to hasty action and attempts to conceal or avoid</li> </ul>
Construction and development businesses and workers	<ul style="list-style-type: none"> <li>• Prevalence of asbestos not known and often not considered up-front, but frequently involved in finding asbestos, decisions about its disposal and sometimes throughout the journey to disposal</li> <li>• Used to working in the context of physical risks and may perform asbestos-related tasks without knowledge, skills or PPE</li> <li>• Business owners try to remain competitive by being pragmatic and minimising costs, delays, and hassle to get the job done, while protecting their staff, profit and reputation and avoiding penalties</li> <li>• Lack of easy options for asbestos refresher training and skill building, with sometimes poor on the job training</li> <li>• Lack of clarity about who is responsible for any asbestos found</li> </ul>
Demolition businesses and workers	<ul style="list-style-type: none"> <li>• Can be involved from removal to disposal stages of the journey as often hybrid operators who may remove asbestos or transport, it as well as demolish structures</li> <li>• Aware of asbestos but limited knowledge of friable asbestos, handling small pieces, load contamination, and legal requirements of transportation and disposal</li> <li>• Working in a risky workplace can desensitise workers to asbestos exposure risks</li> <li>• Minimal if any asbestos-related training but workers may be exposed given work culture encourages ploughing ahead despite risks</li> <li>• Highly competitive field with undercutting and profiteering impacting safe choices</li> </ul>

Licensed asbestos removal specialists

- Mainly involved in preparation, removal & handling journey stages, with many also transporting and disposing of asbestos waste
- Highly motivated by the need to keep people safe while protecting their business reputation and viability
- Advice is highly regarding and best practice behaviours on the job are valued, but they are not always onsite when this expertise is needed
- Face competitive pressures including, price cutting by unlicensed or unscrupulous competitors, affecting business viability
- Since customers are not well informed, there can be pressure to cut corners or not act safely and lawfully
- Some knowledge and skill gaps exist due to differences in training and experience resulting in lack of adequately trained/experienced employees

Waste collection and transport businesses and workers

- Often part of other businesses (demolition, asbestos removal, skip bins) rather than specifically waste transporters
- Primarily involved in transport and disposal journey stages, but may be incidentally involved in handling asbestos waste resulting in unanticipated and unprotected exposure
- Knowledge levels highly variable from well informed to same as general community and no requirement for or ready access to training
- Focused on identification of asbestos at pick-up or collection site as may not be included in communications about
- Often in difficult position at the end of the waste journey, left to bear responsibility of others and attempting to recover costs from customers
- Business risks and challenges lead to consideration of ceasing asbestos transportation
- Lack of clarity about licensing, oversight and regulatory requirements (including use of WasteLocate)

Waste sites management and workers

- Mainly involved in the disposal and transportation stages
- Sites highly variable in terms of business models, processes, resources and equipment, pricing, volumes, and staff expertise and skills
- Priority is identifying and safely dealing with asbestos to protect ongoing safety and operation of the site, but compliance systems heavily reliant on customer honesty
- Unanticipated asbestos diminishes business viability and unlawful re-entry can occur when remnants remain undetected in recovered materials
- Requirements and penalties drive good process, but can have unintended outcomes like less recycling, rejected loads and dumping, and 'emu picking'
- Perceive an absence of enforcement at the tip face and a lack of clarity about WasteLocate and rejected loads registers

## MUTUALLY REINFORCING CYCLE OFFERS POTENTIAL TO CREATE CHANGE

This research clearly shows that a lack of awareness, planning, consideration and accountability for asbestos among property owners limits the options available to them, as well as those they contract to work on their properties, when it comes to the removal and disposal of asbestos. This can impact the safety of those people downstream who later encounter asbestos waste from the property.

At the same time, significant social factors have been found to discourage or interrupt safe and lawful behaviour across the community. Lack of knowledge among general community leads to heavy reliance on a sometimes over-confident, under-trained body of professionals, whose unsafe actions can act as powerful upstream cues to the public that asbestos is not as serious as they may fear. When these cues are coupled with a lack of information or conflicting messages, this can lead to confusion, poor decision-making and unsafe or unlawful behaviour. The absence of asbestos in the media or in do-it-yourself culture reduces its the issue’s salience, sending the message that it is not a relevant consideration for those renovating and maintaining their homes.

Figure 5 – Cycle of influence shows upstream and downstream impacts



The research reveals a mutually reinforcing cycle of influence between professionals and the general community, with actions having upstream and downstream consequences. Communications aimed just at members of the general community may be undermined by contradictory behaviour among professionals. Similarly, interventions to improve workplace knowledge and skills will be impacted by the community lack of planning or accountability for asbestos risk.

This suggests that efforts to minimise asbestos risk should aim to bring about bi-directional behaviour change, influencing both sides of this equation at once:

- **push** – positively influence the actions of building professionals and in turn members of the public
- **pull** - influence members of the public to consult with and expect, detect and demand safe and lawful behaviour from building professionals.



## CLEAR CONSISTENT MESSAGES NEEDED FROM ALL SOURCES

This research provides evidence that the presence of conflicting messages about asbestos and its risks undermines safe and lawful behaviour by causing confusion and leaving room for grey moral reasoning and justification of unsafe behaviour. Communications about asbestos from all sources will have the most impact if they are aligned in their message.

Most community members in this research indicated they are open to consulting a government body if they find asbestos, though no single government body was currently thought to be a complete information source. There is clearly an opening for a leadership role as a definitive information source.

Given observed behaviour has a significant impact on community attitudes and behaviours, it's crucial that the right messages about asbestos safety are being spread to the community through government action, influencers of do-it-yourself culture in the media, and through the actions of both licensed and unlicensed professionals.

## INCREASING PROFESSIONALS' KNOWLEDGE WOULD BENEFIT THE COMMUNITY

Though professionals are viewed as experts and are heavily relied upon by homeowners for asbestos advice, knowledge deficits can facilitate poor practice in dealing with residential asbestos. This research indicates that interventions are required to improve knowledge among relevant professionals:

- when they are formally trained or first enter their profession
- when they are required to engage with professional bodies for initial licensing and/or renewal
- when they purchase relevant equipment or receive assistance with purchasing equipment
- then they engage with third parties, such as asbestos specialists, SafeWork, transporters or waste sites.

## INTERVENTION IS NEEDED EVEN BEFORE RENOVATIONS ARE PLANNED

This research showed that asbestos is typically not planned for prior to work being undertaken on relevant residential properties, limiting the options for dealing with it safely once it is discovered. Asbestos specialists are often called in once asbestos has already been accidentally disturbed during renovation work.

To ensure asbestos is lawfully and safely dealt with, it needs to be factored into decisions long before work begins so that owners are not tempted to plough ahead with work and professionals are not pressured to complete work within pre-set time and budget limits. This suggests that interventions aimed at or around renovations are likely to be too late to be effective.

In this research, community members suggested that knowing what is on one's property well in advance of considering any work would allow for a wider range of informed decisions to be made regarding the property and the asbestos. This includes whether to purchase the property in the first place, being mindful of the asbestos in planning any work, planning to maintain or remove the asbestos and alerting professionals and any others prior to working onsite.

## SMALL PIECES A SPECIFIC ISSUE NEEDING FAST, SAFE OPTIONS FOR DISPOSAL

Both community members and professionals who come across asbestos use curbside residential bins as a fast, easy and free asbestos disposal method, especially for small amounts of the material. This unlawful disposal method provides an immediate solution for the psychological distress prompted by discovering and dealing with asbestos. Some community members are unsure if this practice is illegal, though they generally suspect it is, but they are also unsure how else to immediately deal with the asbestos. Few are aware of or concerned about what impact this may have on transport or waste workers.

The cost of disposal of small amounts of asbestos is a barrier to safe behaviour especially for members of the community that are economically constrained. Perceived cost and inconvenience are also issues, with people reluctant to appropriately wrap such small amounts of asbestos, or transport and pay for disposal at a licensed waste facility, even if they can afford it.

The practice of putting asbestos in curbside residential bins has an immediacy that is unrivalled by other disposal options. This research indicates that, to address this practice, the community need to be aware of ways to easily, lawfully and safely dispose of small pieces of asbestos and have timely access to these when they need them.

## USE OF FEAR-BASED MESSAGES TO PROMPT SAFE ACTIONS MUST BE LINKED WITH ACTION STEPS

The emotions typically associated with asbestos include fear, alarm, concern, unease, anxiety and distress, consequently the topic of asbestos can be too off-putting or scary to think about. Tapping into this fear has the potential to motivate safe behaviour. However, this research indicates that if this fear tips over into panic, this can lead to avoidance behaviour.

Care must be taken that communications about asbestos exposure risks are always accompanied by simple, effective, immediate actions people can take to minimise the risks. Otherwise, fear can lead to the very behaviours that interventions are trying to prevent.