Taking risks with asbestos
What influences the behaviour of maintenance workers?

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Asbestos is the single greatest cause of work related fatalities, and is still present in many buildings from the 1950s, ‘60s and ’70s. Today, the workers most at risk of contracting an asbestos related disease are those in construction related trades who conduct maintenance work on these buildings. This report presents the results of 60 interviews with maintenance workers (including electricians, joiners/carpenters, plumbers/heating engineers, and painters/decorators), who discuss their attitudes towards, knowledge about, and behaviour around, asbestos.

The research found that there are a range of issues affecting how likely an individual is to behave safely around asbestos, including:

- technical issues regarding the complexity of the message about asbestos and how to deal with it effectively;
- psychological issues, such as attitudes towards risk and personal health;
- cultural factors, such as prevailing worksite culture and economic pressures; and
- control factors, and whether individuals feel able to exert control over their work environment.

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EXECUTIVE SUMMARY

This report presents the findings of a qualitative research project conducted by the Institute for Employment Studies (IES) for the Health and Safety Executive (HSE). It involved face-to-face interviews with 60 individuals working in construction and/or maintenance work and examines barriers to behaviour change amongst this group in relation to working with asbestos.

RESEARCH BACKGROUND AND METHOD

Asbestos was widely used as a building material until as late as 1999, and it is estimated that many tonnes of this are still present. When disturbed or damaged these materials can release dangerous fibres which, when breathed in, can lead to a number of serious diseases. At least 3,500 people in Great Britain die every year from these diseases, making asbestos the single greatest cause of work related fatalities. The greater the level of exposure to asbestos fibres, the greater the risk of contracting an asbestos related disease (ARD). There is a long delay between exposure to asbestos and the onset of diseases (between 15 and 60 years). The group of workers most at risk from contracting ARDs now include those who work on buildings built or refurbished in the 1950s, to ’70s, in a range of construction related trades (eg plumbers, carpenters).

There are a number of pieces of legislation designed to protect workers from exposure to asbestos, including the Control of Asbestos at Work Regulations 2002. Regulation 4 of these regulations is known as ‘Duty to Manage’ and covers non-domestic premises. This requires dutyholders (normally building owners or managers) to take reasonable steps to identify and record where asbestos could be present, its condition, and to take steps to reduce the risks of anyone being exposed. They must also provide this information to people who are likely to work on or disturb asbestos-containing materials (ACMs). The regulations are enforced (by Field Operations Directorate inspectors) and promoted through a range of awareness raising activities, including the production of materials and guidance which explain the asbestos risks and how to deal with them.

The construction industry is dominated by small employers, work is undertaken on a project by project basis and through a high degree of sub contracting. Much of the workforce at site level is hired on a casual basis. Any weaknesses in the management of health and safety can therefore be exacerbated by the delegation of responsibilities through long supply chains and the need for cost and efficiency savings. The health risks of the job change with each site, and occupational health knowledge is likely to be limited. There is also evidence that workers substantially underestimate their own levels of exposure to asbestos.

The purpose of this new research is to examine how the attitudes, awareness, knowledge and behaviour towards or around asbestos are shaped. Sixty interviewees were included, and electricians, joiners/carpenters, plumbers/heating engineers and painters/decorators were all represented. Older workers were more likely to be involved, and over half of those interviewed were sole traders. Over half were mostly engaged in work on domestic premises.

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1 On 13th November 2006 the Control of Asbestos at Work Regulations 2002 were superseded by the Control of Asbestos Regulations 2006, which amalgamate all existing asbestos regulations into one set of regulations.
MESSAGES AND MISINFORMATION ABOUT ASBESTOS

There are a range of factors which appear to shape the messages that workers have received about asbestos. These include formal training, conversations within the workplace, the views and behaviours of family, colleagues, employers, and examples from the media.

Receiving adequate training is a key element in minimising the risks posed by asbestos at an individual level. Where respondents have received training, this tended to be brief and specific, and often delivered in the workplace. Others had been taught about asbestos during their apprenticeships, however, this had often occurred some time in the past. Having received this form of training, however, did not in itself lead to greater confidence about the issues. Often those individuals who had never had any training about asbestos were the most confident about their knowledge. It would seem that giving people a little information can actually make them more aware of the gaps in their own knowledge, as they are more aware of the complexity of the issues involved in dealing with asbestos safely. Without formal information, individuals tend to base their knowledge on what they had picked up from colleagues and/or family/friends. Older workers in particular can be a strong influence, although this can be negative as well as positive if they don’t take the risks to their own health seriously. The amount of training that individuals had received was often related to the size of the company that they worked for, with those working as sole traders or for smaller employers less likely to have access to training.

The main messages that individuals could recall from training appear to be about the health consequences of asbestos exposure. A number recalled watching a ‘shock tactic’ video on this. The overall message that asbestos is dangerous had, therefore, clearly filtered through to the vast majority of workers. However, without any further supporting information on how to deal with asbestos if encountered, or how to identify it, people were often left in a state of general anxiety, but without the specific knowledge to actually control this.

There was some confusion about the relative risks faced by people working in different trades, and with different materials. Also, without appropriate asbestos identification skills, individuals could not always determine for themselves when they might have worked with asbestos in the past and therefore estimate the levels of their own exposure. They were therefore often caught in a ‘catch 22’ situation whereby they can’t protect themselves against something that they can’t be sure is there. Again, this can leave workers in a psychologically uncomfortable state.

ATTITUDES TOWARDS THE ASBESTOS RISK

Given that most individuals know that asbestos can pose a danger to health, it is also important to understand how they then relate this generic information to their own lives. How seriously do they take this risk? Workers provided a number or examples of how they deny the importance/relevance of the risks to them. These included:

• Most asbestos has been removed, so there isn’t enough still around to worry about. This is driven by knowledge that the use of asbestos has been banned for some years.

• Exposure occurs only in extreme cases, such as shipyards or the use of asbestos lagging. People with this belief were therefore less likely to see their own work as putting them at risk.

• Some levels of asbestos are actually ‘safe’. There was a contrast between those who had taken on board the ‘one fibre can kill’ message, and individuals who cited the risks to the general population of asbestos exposure, for example, through riding on the underground rail system.

• New materials pose more of a risk. This is driven by the fact that asbestos was used for some considerable time before the risks became apparent. New materials, such as MDF,
were therefore seen as the greatest potential risks, because their effects were still largely unknown.

- Other risks on site are more important. More visible risks and/or those with immediate and potentially devastating effects, eg falling from heights, or injuries from power tools, were often seen as greater risks. Not only due to the immediacy of effect, but also the frequency with which they were encountered.

- Asbestos risks are ‘a lottery’, and some levels of risk are inevitable. In both these cases, workers see asbestos risks are outside of their own control, and therefore, in their own minds, the extent to which they can be expected to change their behaviour is limited.

- Economic factors are very important, and often drive behaviour to the extent that risks, even large ones, are seen as worthwhile. Individuals can see that taking a stand about safe behaviour isn’t worth losing their job over, for example, or feel pressurised into taking a job which entails some risk, because of the economic returns. These factors can also inhibit safe behaviour because taking appropriate action involves delays and therefore costs money.

- Safety cultures and the prevailing attitudes towards risk within a work environment and/or within an employer also influence behaviour and how seriously people perceive the risks. If employers actively promote safe behaviour, this can be a powerful influence, although the reverse is also true.

There is also likely to be a complex interplay between these factors for any one individual. Their attitudes towards asbestos risks are likely to be influenced by their overarching attitudes towards their own health and towards risks generally, as well as the extent to which they feel able to control their work environment. This in turn is likely to be affected by the nature of their employment contract and labour market capital.

**KNOWLEDGE ABOUT CORRECT PROCEDURES**

When asked to rate their own knowledge about asbestos, people were most confident about their understanding/knowledge of why asbestos is a risk, the kinds of materials that contain asbestos, and what to do when asbestos was identified. They were less confident about the different types of asbestos (eg the nature of the different colours), how to decontaminate oneself and/or dispose of asbestos waste.

The risks to those in the maintenance trade were relatively well understood. Individuals were largely aware of the effects that asbestos fibres have on the body, and the conditions that can result from exposure. There was some confusion about whether asbestos ‘hooks’ into lungs or is more organic in nature (ie it grows). These different ideas did seem to drive the perception of risk, as adherence to the organic model (which is incorrect) could result in individuals feeling that it is now too late to take appropriate action. Individuals with some understanding of the issues were able to identify the risks associated with fibre release, and this message does appear one with which many workers are familiar.

The main actions that individuals identified when the presence of asbestos was suspected were:

- leave it alone
- report it, get it tested
- use protective clothing.

These are very clear messages, but all require action to be taken that can damage the economic validity of the job. The least economically detrimental, but also most potentially harmful to individuals, is to carry on working but wearing some protective clothing. The danger of this approach is that individuals tended not to have detailed knowledge of what equipment was
required, and some had relied on normal masks, for example, which would not actually protect them adequately. Combine this with a lack of knowledge on correct decontamination and disposal procedures, and individuals could be putting themselves at risk even though they may believe (from their limited knowledge) that they are actually following procedures.

**ASBESTOS IDENTIFICATION**

Most workers felt that they ‘only occasionally’ came into contact with asbestos, although some stated that they worked with the material on an almost daily basis. Workers discussed a range of ways to identify asbestos, most of which involve at least some risk to health. The only way to accurately determine whether something contains asbestos is to get it professionally tested. However, this method tended to be referred to only by workers on larger sites, or employees of larger companies.

The main methods discussed were:

- Use my senses, as it can be identified by colour, texture, taste or smell. Individuals with the most experience of working with asbestos were the ones most likely to believe that they could identify asbestos containing materials in this way.
- Drill it, scrape it or touch it to reveal what type of fibres lay beneath the surface of a material. This is clearly against best practice recommendations as only when a substance is disturbed or damaged does it become dangerous.

Many individuals, however, were clearly without any strategies for identifying asbestos, and were totally reliant on co-workers.

**EXAMPLES OF WORKING WITH ASBESTOS**

Individuals were able to recount a number of examples of working with asbestos. Many of these, despite the fact that the individual believed them to follow good practice, did not do so. Additionally, individuals who currently working with asbestos in either low grade products or infrequently, were most likely to discuss extreme examples of exposure which had happened to them in the past. This was common, and workers did focus on the most dangerous, obvious or risky experiences. Whilst understandable, this revealed that, for some at least, small but frequent episodes of exposure are simply not seen as dangerous.

The main examples that people identified with and had experienced were:

- pausing or stopping work, or not feeling able to do so
- avoiding unnecessary breakages or fibre release, or examples where this had been the case and work had continued
- dampening down materials, although this often involved talk of soaking or hosing down areas rather than lightly wetting (which is actually considered good practice)
- using personal protective equipment, although there was some confusion about the correct equipment for different jobs
- safely disposing of waste, although individuals also recounted examples of unsafe disposal and the costs and time associated with correct disposal.

There were two distinct time periods where individuals felt that they had been exposed and where exposure had occurred in different ways: in the ‘bad old days’ exposure had been unknowing and extreme, whereas more recently exposure was the result of misinterpretations of
guidance and/or a lack of regard for safety precautions. Some workers felt strongly that they had experienced examples of deliberate cover-ups of asbestos finds.

REACTION TO EXISTING INFORMATION

The majority of interviewees were not familiar with HSE guidance information that was shared with them during interviews. However, workers did identify with the style and messages contained within the information when they saw it. Older workers were sometimes dismissive of the role of information and guidance for them, as they felt that they already knew as much as they needed to. Despite this, the overall reaction to the pictures contained in the HSE asbestos leaflet was very positive.

Individuals largely admitted that they didn’t update their knowledge as much as they perhaps should, but saw a role of the HSE in proactively contacting those in the trades. They acknowledged that it was unlikely that most individuals would actively seek out information, due to time pressures. However, having some reference materials that could be consulted when required was something that individuals did expect would be useful to the majority. The use of the internet was also seen as something that workers would tap into more and more in the future.

CONCLUSIONS

There are a range of issues which affect how likely an individual is to behave safely around asbestos. These can be broken down into four main categories:

1. Technical issues, relating to the complexity of messages about asbestos, its effects and how to deal with it effectively.
2. Psychological issues, concerning an individual’s attitudes towards risk, health and the specific risks posed by asbestos.
3. Cultural factors such as pressures from their employers, clients, co-workers etc, which are largely driven by economic as well as social pressures.
4. Control factors, namely the extent to which individuals feel that they are able to control their work environment. These are linked to the nature of the employment contract an individual has, and their labour market capital.

Attitudes towards behaving safely are likely to be affected by whether the negative impact of not doing so is outweighed by the positive benefits of doing so (ie whether the economic or social costs are outweighed by the health benefits). The prevailing safety culture and the attitudes of co-workers/family/employers are also clearly important. These combine with an individual’s sense of control to determine their intention to behave safely or not. However, putting this intention into practice is actually dependent on them having sufficient knowledge in order to take appropriate action. Moving forward is therefore about changing all aspects of this psychological process, but all of these are underpinned by the provision of better knowledge.
1. INTRODUCTION

This report presents the findings from a qualitative research project conducted by the Institute for Employment Studies (IES) on behalf of the Health and Safety Executive (HSE). Based on 60 face-to-face interviews, the project examined barriers to behaviour change amongst maintenance workers in terms of working safely with asbestos.

1.1 ASBESTOS IS A MAJOR HEALTH ISSUE

Asbestos is a very dangerous substance if not dealt with correctly. Many tonnes of asbestos were used in some building materials until as late as 1999 (eg asbestos cement), and much of this is still present. Asbestos is contained in a wide variety of different substances and can be difficult to identify. Often those most at risk of exposure are unaware that this is the case.

1.1.1 Asbestos biggest cause of work related deaths

Breathing asbestos fibres can lead to various asbestos related diseases (ARDs). These are mainly cancers of the chest and lungs, and are the single greatest cause of work related fatalities in the UK. As a result of their past exposure to asbestos materials, at least 3,500 people in Great Britain die each year. The numbers of deaths from these ARDs have been rising steadily since the 1970s and predictions are that they will continue to do so.

If asbestos is disturbed, the fibres can break down into sharp fibres that can be breathed in. If these fibres lodge in the lungs they do not dissolve and can work their way to the outer surface leading to several diseases, some of which are fatal.

The fatal conditions caused by asbestos exposure are:

• **Asbestosis** – an irreversible scarring of the lungs that causes a decrease in elasticity. An industrial disease associated with past high levels of exposure of all types of asbestos.

• **Lung cancer** – increased incidence in those working with asbestos. Smokers who are exposed to asbestos fibres will increase the likelihood of contracting the disease.

• **Mesothelioma** – cancer of the lining of the lungs or lower digestive tract.

It is unclear exactly what levels of exposure cause diseases, but the more asbestos fibres breathed in, the greater the risk to health. There are a range of other factors which affect the risk of developing ARDs. These include the duration of contact, the fibre type (mineral form and size distribution), and the type of contact with it. Additionally, the other chemicals that individuals are exposed to, their age, sex, diet, family traits, lifestyle (including whether you smoke tobacco), and state of health are all thought to play a role.

There is usually a long delay between first exposure to asbestos and the onset of the disease (between 15 and 60 years). Therefore, many fatalities in recent years relate to occupations and geographical areas where past exposure to asbestos materials has been the most direct, including shipbuilding, railway engineering and asbestos product manufacture. However, only by minimising exposure amongst those who are now at the greatest risk will ARDs ever be wiped out.

1.1.2 Asbestos still present in variety of forms

The supply, import and use of asbestos was banned by the Asbestos (Prohibition) Regulations 1992. The current danger of asbestos exposure comes from the large quantities of the material
that are present in buildings built prior to the ban. The HSE estimates that over half a million non-domestic premises contain some form of asbestos\(^2\). Estimates for domestic premises are much more difficult, although asbestos was a common building material in homes and other buildings constructed in the 1950s, '60s and '70s.

There are three main types of asbestos still found in premises. These are commonly called ‘blue asbestos’ (crocidolite), ‘brown asbestos’ (amosite) and ‘white asbestos’ (chrysotile). All of them are dangerous, although blue and brown are more dangerous than white. Despite these names, the different types cannot be identified by their colour.

Providing that the asbestos-containing materials (ACMs) are in good condition and are not damaged or disturbed there is little risk. However, there are many materials in which asbestos can be found and some of these are more prone to damage or deterioration, and hence fibre release, than others. The HSE’s ‘Guide to Managing Asbestos in Premises’ lists some of these materials in order of ease of fibre release (and hence in order of risk):

- sprayed asbestos and asbestos loose packing – generally used as fire breaks in ceiling voids
- moulded or preformed lagging – generally used in thermal insulation of pipes and boilers
- sprayed asbestos – generally used as fire protection in ducts, firebreaks, panels, partitions, soffit boards, ceiling panels and around structural steelwork
- insulating boards used for fire protection, thermal insulation, partitioning and ducts
- some ceiling tiles
- millboard, paper and paper products used for insulation of electrical equipment; asbestos paper has also been used as a fire-proof facing on wood fibreboard
- asbestos cement products, which can be fully or semi-compressed into flat or corrugated sheets, largely used as roofing and wall cladding, also gutters rainwater pipes and water tanks
- certain textured coatings
- bitumen roofing materials
- vinyl or thermoplastic floor tiles.

### 1.1.3 Construction and maintenance workers are now most at risk

Part of the difficulty facing maintenance workers is therefore, the wide range of products in which asbestos has been used. Another difficulty is that of identifying whether or not a suspect material actually contains asbestos. This will hold true for all maintenance workers, regardless of specialism and affect all those working in buildings constructed from the '50s through to the '70s. Workers who maintain or refurbish such buildings may not know which materials contain asbestos.

A range of trades are at risk. Plumbers, carpenters, electricians, construction workers, construction managers, builders, painters, decorators, and scaffolders are all included in the 20 occupations which have the highest projected mortality rates from asbestos exposure\(^3\).

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\(^2\) See www.hse.gov.uk for further details.

Research conducted by the Health and Safety Laboratory has shown that plumbers seriously underestimate their exposure to asbestos and do not take adequate precautions. The research involved a comparison between work activity logs (in which workers note down when they believe they have come into contact with asbestos) and passive asbestos samplers (which record actual levels of exposure). It found that even amongst plumbers who recorded that they had not worked with asbestos at all, 69 per cent had in fact had some asbestos contact over the course of a sample week.¹

1.1.4 Dealing with asbestos safely

From the Control of Asbestos at Work Regulations 2002, regulation 4, the ‘Duty to Manage’ Regulation came into force in May 2004. The regulation covers all non-domestic premises, regardless of what type of business is carried out in them. It also covers the common areas of domestic premises (eg halls, stair wells, lift shafts, roof spaces).

The **duty to manage** requires those in control of premises to:

- Take reasonable steps to determine the location and condition of materials likely to contain asbestos.
- Presume materials contain asbestos unless there is strong evidence that they do not.
- Make and keep an up-to-date record of the location and condition of the asbestos-containing materials (ACMs) or presumed ACMs in the premises.
- Assess the risk of the likelihood of anyone being exposed to fibres from these materials.
- Prepare a plan setting out how the risks from the materials are to be managed.
- Take the necessary steps to put the plan into action.
- Review and monitor the plan periodically.
- Provide information on the location and condition of the materials to anyone who is liable to work on or disturb them.²

These regulations are supported by the activities of Field Operations Directorate which, during 2002/3, targeted notifiable asbestos jobs and also carried out *ad hoc* site inspections. Within the industry, other measures are also in place which are designed to ensure that work involving asbestos is carried out in accordance with strict health and safety standards according to specific asbestos-related regulations and other applicable legislation. The Control of Asbestos at Work Regulations 2002 requires employers to prevent employee exposure to asbestos, or to control the levels of exposure to the lowest possible. Employers should also make an assessment of the likely exposure of their employees, which should include how workers will be protected. Therefore even when maintenance work is being carried out on domestic premises, workers are within their rights to expect some form of assessment to have been carried out of the risks they face. Where individuals are sole traders, however, they are responsible for safeguarding their own health. In addition, there is a range of detailed guidance available on various aspects of working with asbestos which outlines the appropriate procedures in a variety of situations.³

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² www.hse.gov.uk/campaigns/asbestos/duty.htm
The HSC/E Disease Reduction Programme includes work to reduce the risk of developing asbestos-related diseases by reducing the likelihood of maintenance workers being exposed to asbestos fibres. It is important for this programme, therefore to have a range of information on how to influence those most likely to come into contact with asbestos, through a better understanding of the influences on their behaviour.

1.2 THE EMPLOYMENT CONTEXT

The structure of the employment in the UK in general has been changing over the past 30 years, with increasing proportions of workers engaged on fixed-term contracts and working for small companies that complete work as sub contractors. Since the early 1980s, the construction industry has become increasingly fragmented and dominated by small employers and the self-employed. Construction work is mostly undertaken on a project by project basis, whereby contractors assemble teams of people who often work together for a short period of time and then move on to another location or disperse. At the same time, much of the work is managed by a main contractor which sub-contracts parts of it to smaller firms who specialise in a particular aspect of the process. To cope with the fluctuating workload, and in order to reduce overheads, much of the workforce at the site level is hired on a self-employed basis.

As a result of these complex sub-contractual relationships, and the nature of employment contracts ‘… information on occupational health in the construction industry is at best sparse and scattered’. Weaknesses in the management of occupational health and safety can be aggravated by delegating responsibility via contracts and through long supply chains, aggravated by downwards pressures for speed and cost efficiencies. The effects of this combination of pressures are made explicit in reports of associations between high accident rates and the presence of contracted labour. Furthermore, domestic work can be relatively small scale, with jobs typically lasting a few days to a few weeks, with contractors working alone or with a ‘mate’. The health risks of the job change with each site, and occupational health knowledge is likely to be very limited. The implication is therefore that particular attention needs to be paid to health and safety issues in the context of subcontracting and long supply chains.\(^7\)

1.3 CURRENT RESEARCH: BARRIERS TO SAFE BEHAVIOUR

IES was commissioned by the HSE to conduct a research project to examine maintenance workers’ awareness, attitudes and behaviour towards asbestos risks, including an examination of the barriers which discourage such workers from taking appropriate action.

Given the complexity of the construction industry outlined above, it was clearly important for this research to capture the experiences of a range of construction workers. In particular, those at the end of supply chains who may be particularly vulnerable to asbestos exposure, including sole traders. The next section outlines the basic methodology used in this study and provides some further details on the research participants involved.

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\(^7\) Institute of Occupational Medicine (2002), Mapping health hazards and risks across aspects of the construction process, HSE, CRR 447

1.3.1 Research method

This research involved in-depth semi-structured interviews with 60 participants, all of whom worked in the construction industry. Potential participants were identified through around 30 intermediaries (e.g., training providers, suppliers, recruitment agencies, employers, trade bodies, trade unions). In addition, around 3,000 sole traders were sent a letter with an opt-in slip attached which they were asked to send back to IES if they were interested in participating in the research. All participants were given a £20 gift voucher on completion of the interview,\(^9\) and interviews were conducted on respondent’s work premises or in their own homes at a time convenient for them.\(^10\) Each interview lasted between 20 minutes and an hour and a half. These interviews were all fully transcribed and analysed using Atlas.ti (qualitative analysis software), the process of which is described more fully in Appendix 2. In no way can the sample of individuals involved in this research therefore claim to be representative of the building and maintenance sectors as a whole. What this research does provide is insights into the experiences of a wide range of workers of varying ages, experiences and working within different trades.

The aim of this research was to provide insights into the knowledge, attitudes and behaviours of a wide range of workers of varying ages, experiences and from different trades. It does not claim to be representative of the building and maintenance sectors as a whole, but rather explores and provides a picture of current themes related to asbestos risk and identifies some of the barriers to changing behaviour.

1.3.2 Participants

The 60 interviewees who took part in this research included an approximately even distribution of electricians, joiners/carpenters, plumbers/heating engineers, painters/decorators and other maintenance trades. As is common in the building and maintenance trades, many of the individuals involved worked across more than one specialism, for example providing both plumbing and carpentry services.

Thirty-eight of the 60 interviewees were sole traders, though it was clear that some of these individuals worked in situations where they operated as virtual employees. Fourteen interviewees were employees in large companies and eight were employed in small or medium companies or in partnerships. Over half (34 out of 60) mainly worked alone. All but eight of the interviewees worked in the private sector. Over half (36 out of 60) spent most of the time engaged in domestic work, while the reminder either worked mainly on non-domestic premises (17) or had an even mix of domestic and non-domestic work (7).

Just over two-thirds had undertaken an apprenticeship, though not necessarily training in their current occupation. A further ten interviewees had undertaken a course or some work-based training, and nine had no formal training. Just over one-third currently smoke and just under a half knew someone with an ARD. Six of the interviewees were aged less than 30 years, 12 were between 30 and 40 years, 15 were aged between 41 and 50 years, and 27 were aged over 50.

The achieved sample in the research consisted mainly of speakers of English as a first language, which limits the applications of the findings in describing the experiences of non-English speaking, or migrant workers dealing with asbestos risks in these trades.

\(^9\) The use of incentives proved to be an effective aid in recruiting the target sample, and in communicating with the workers. It showed that the researchers respected the workers’ time, and that their experiences and views were valued.

\(^10\) To ensure researcher safety all interviews were conducted with two IES research staff present.
1.3.3 Research questions

The core research questions were to uncover why maintenance workers do not always follow HSE guidance, and to identify ways of encouraging workers to follow the guidance in the future. To explore this, workers were encouraged to discuss their attitudes, awareness, knowledge and behaviour around asbestos. More specifically the interviews covered the following topics:

- Workers’ occupations, types of work undertaken and whether they work in the rented domestic as well as the non-domestic sectors.
- Their perceived contact with ACMs in their work.
- To what extent workers are provided with details of the location of asbestos when visiting a work site.
- Training and refresher courses received.
- Levels of knowledge and awareness of HSE guidance on good practice.
- Attitudes to asbestos risks and to working correctly with ACMs.
- Key organisations/stakeholders that influence maintenance workers.
- Workers favoured means of receiving work-related information.
- Sources of guidance on working with asbestos and individual reactions to existing asbestos guidance.
- Influence of colleagues and others on individual attitudes, awareness and behaviour.
- Financial and other barriers to engaging in good practice.

During the interviews a technique of questioning known as ‘critical incident interviewing’ was used to elicit examples of when individuals had worked with asbestos, and discuss how they dealt with it and felt about the situation. Awareness and knowledge were tested using a four point scale developed and tested through other research.\(^{11}\) The interview schedule and other research materials are provided in Appendix 1. The structured interview included sections on work and training history, attitudes, awareness and knowledge, experiences and behaviour at work.

1.4 STRUCTURE OF THIS REPORT

The remainder of this report presents the findings from this study in the following chapters:

- Chapter 2 discusses the general messages, and sometimes misinformation, about asbestos that workers have received.
- Chapter 3 explores individual attitudes towards the asbestos risk.
- Chapter 4 examines levels of awareness and knowledge of safe working practices.
- Chapter 5 looks at how individuals identify asbestos.
- Chapter 6 considers the experiences of individuals who have worked with asbestos.
- Chapter 7 gauges reactions to existing guidance about working with asbestos.
- Chapter 8 presents our initial conclusions from this work.

\(^{11}\) See Casebourne J, Regan J, Neathey F, Tuohy S (2006), Employment Rights at Work: Survey of Employees 2005; DTI Employment Relations Research Series ERR51, for further details on how this was developed.
2. TRAINING EXPERIENCES, MESSAGES AND MISINFORMATION ABOUT ASBESTOS

“Yes, there’s a couple of times I remember specifically being told about asbestos and I didn’t retain a lot of that information, which is part of the reason that I was happy to see you today; because I felt it’s important for you to know that a lot of people aren’t actually – even though they’re being trained, it’s not sustained, it’s not sinking in.”

Electrician, 34 yrs, sole trader, domestic work

The 60 interviews conducted for this research explored several aspects of workers’ attitudes towards asbestos and the dangers associated in working with it. This chapter examines the messages workers have received about asbestos and the sources of those messages.

Individuals are likely to be influenced by those around them in the work environment and by the experiences they have had in their careers and personal lives. Formal training, informal conversations at the workplace, and the views and behaviour of colleagues, employers, and others on-site all contribute to the ways in which individuals think about asbestos. Fact and fiction therefore often merge, shaping both attitudes and behaviours towards/around asbestos. Workers can be left confused as they deal with conflicting messages.

2.1 SOURCES OF INFORMATION ABOUT ASBESTOS

Workers were asked to discuss their training history, and whether or not this included any specific training on asbestos. A number found it difficult to remember the detailed content of their last training experiences (for some, this was more than 20 years ago), and many did not remember any lessons on asbestos, either in their apprenticeship or any other health and safety related training they had received during the course of their careers. Older generations of respondents, who had started working with asbestos when it was still a new material, had often received their training when the related dangers were unknown. Much of the training on asbestos referred to by interviewees predates the 1992 Act.

2.1.1 Asbestos related training and research

Most commonly, respondents reported experiencing a mixture of formal training and informal information gathering from colleagues or from their own research (eg through use of the internet).

**Formal training**

The HSE is clear that adequate training is a key element in minimising the risks posed by asbestos. It therefore provides a range of guidance materials, such as a training video which discuss the risks. Training is important even for those who have worked with asbestos in the past, as they are likely to have forgotten parts of the training they have received and/or be unaware of new, safer work methods. Employees should have their training organised by an employer, but sole traders are responsible for providing this for themselves.

Where respondents reported receiving formal training, this tended to be brief and specific, and often delivered through the workplace. In very few cases, mostly observed in medium or large organisations, employers had active campaigns to raise awareness of asbestos with annual refresher courses and periodic reminders. One worker was a union rep at his workplace (NHS) and was actively involved in promoting awareness around asbestos. The hospital published a
monthly staff newsletter; this was used to help promote awareness of asbestos risks, and focussed on good practice. This level of commitment or experience of asbestos awareness raising was, however, uncommon.

It was interesting to note that individuals without formal training were often very confident about how well informed they were on the topic, even though this was often without any detailed knowledge. In contrast, individuals who had been engaged in a formal apprenticeship or who had recently undergone training were more hesitant about the level of their knowledge. This could simply be that ‘ignorance is bliss’, in that individuals without any training about asbestos mistakenly believe that identifying and dealing with asbestos is either straightforward, or that the matter has no relevance for them. Those who have undergone some form of training, in contrast, are aware that there are gaps in their own knowledge and that the subject can be complex.

Some respondents presented snippets of technical information particularly about the different types of asbestos, but seemed confused in their answers, or referred to further information in some written material which they didn’t actually know themselves. It is possible that this group had attended courses or read materials but that they had not retained the details. This highlights the importance of providing reference materials for use outside of training sessions and which individuals can use to access the details of what constitutes safe behaviour.

**Informal sources of information**

A small number of individuals reported how they had undertaken their own information gathering, conducting their own research online, through contact with their local councils or the HSE. Those who had sought out information on asbestos for themselves noted that this was not an easy task, and that finding useful information about asbestos could be challenging.

“*I think I’ve been looking for information about asbestos. I’ve been a bit disappointed on the information that’s around because I remember to go on a web site one day and really look into it. […] Partly because I wasn’t clear I was looking at the website to see what asbestos looks like, and I’m pretty good on surfing the web because that is what I was doing for the years before, and I tried to focus on what it looks like, but the pictures were extremely small and low quality.*”

**Electrician, 31 yrs, sole trader, domestic work**

A small but significant number of interviewees could not recall ever having received training on asbestos. This was particularly common amongst older workers, or those who had not undertaken apprenticeships. Without formal training, workers based their knowledge and awareness of asbestos issues on what they had picked up through their workplace, colleagues, the media, and family/friends. The quality of the messages communicated through informal networks and media varied, but in some cases resulted in raised awareness amongst those who had previously not considered asbestos to be a risk.

“*I mean I probably exposed myself to this dust, because we didn’t know that really asbestos fibres was in Artex until fairly recently. And I don’t know, I don’t really think until my friend told me about, or another friend and colleague told me about this course that he went on, that we really realised what extent the product was, asbestos as a product was in the environment. I mean we knew it was in like corrugated roofs and all this sort of stuff.*”

**Other maintenance, 48 yrs, employee in large company, domestic work**

### 2.1.2 Company size and level of training

A consistent theme throughout the interviews was the contrast between the work practices of sole traders and those in larger firms. In some ways this difference can be explained by the varying access to training and the different levels of training offered. There were some workers who had undertaken formal apprenticeships to gain entry to their field and had therefore
experienced more training, albeit for some this took place some time ago. It was also acknowledged that, on the whole, training updates were generally confined to workers in larger firms, and/or those working on bigger sites. Some smaller firms found it difficult to justify the expense of training their workers when having to compete for work on price alone. Those working for smaller companies, or for themselves, and/or who have entered the trade without a formal apprenticeship, therefore appear to be most at risk from a lack of recent information on a range of issues, of which asbestos is one.

“They don’t give a small firm any help in Health and Safety, because any [training] that my men go on, my firm has got to pay for it. And plus the time factor, I’ve got to pay for the course, and pay their wages, and the majority I will lose them for a week at a time. So they’re not any help. That’s how you get a lot of cowboy firms now. People that can … you see what they do is, they undercut you. I go for a job to price, my men have got all their certificates. The man round the corner has maybe got four men, working casual, no Health and Safety, so he can undercut you. And big firms are guilty of that. Whoever is the cheapest gets it. They don’t really check that, the background of a firm.”

Other maintenance, 59 yrs, SME employee, non-domestic work

2.2 MESSAGES FROM TRAINING

The training and informal research or information sharing that individuals have undertaken has resulted in some very clear messages filtering through to maintenance workers.

2.2.1 Use of ‘shock tactics’ in training

In some cases, messages from formal training were very strong. A few of the workers mentioned a video they had watched as part of their training which contained detailed images of the effect asbestos had on lungs, and left a very strong impression with its viewers. Some of the viewers found this video particularly difficult, and often upsetting, to watch, as it made them reconsider tasks they had undertaken in the past and led to worry about the damage this may have already caused. There were concerns about the use of shock tactics like this, however, in case it could act as a deterrent to younger workers considering entering construction related trades. However, it was acknowledged that shock tactics could be useful in order to get some young people interested in health issues.

“The main message is when they’re showing you the films of people’s lungs, etc. That’s the main thing, that really stayed. Although as I say, I’m a bit late for that now but that did stay with you.”

Other maintenance, 69 yrs, employee in large company, non-domestic work

“About five years ago there was a specific course on the hazards of asbestos and it scared everyone stiff. Everyone was going to die and you know… most of the maintenance guys have all worked with it, not just as asbestos but things that contain asbestos.”

Other maintenance, 47 yrs, employee in large company, non-domestic work

2.2.2 Asbestos is ‘dangerous’

The main messages that respondents receiving training had therefore picked up was that asbestos was very dangerous, and should only be handled by professional asbestos removal specialists.

Several workers were surprised when, in training, they were informed about the wide variety of products and materials that potentially contained asbestos. They also reported that it was often difficult to retain all the information passed on during training, and a number of workers referred to written materials that they had available should they need more detailed information. A smaller number, however, were able to discuss more detailed messages that they had picked
up through training, including how to identify asbestos, and what procedures to take if contact and exposure were unavoidable.

“I can’t remember much from the training, but I’ve got a great big booklet from it. And it goes through the 1,000s of products that have asbestos in them. That surprised me how many things had asbestos in them - even toilet seats.”

Painter/decorator, 59 yrs, sole trader, domestic work

“I wouldn’t touch it. I wouldn’t touch it. And even if I did, even if I thought that it had to come out for Health and Safety reasons, I would be putting on a face mask and a suit. And afterwards I would be showering straight away. Especially it would depend on what type of colour it was as well. But nine times out of ten I wouldn’t touch it. I wouldn’t go near it, and if I walked into a house and I saw it and I thought it was potentially dangerous, I would advise the boss to close the premises. Especially with it being in removing. I don’t take no risks, it isn’t worth it. It’s not just my life. If they’ve got young kiddies as well, you know.”

Other maintenance, 38 yrs, SME employee, non-domestic work

2.2.3 General anxiety, but little specific knowledge?

Whilst shock tactics were recognised to have some value, it was also clear that, in the opinion of those interviewed, there are some individuals working within construction who do not receive appropriate training in order to protect themselves and others on site. Some individuals identified the fact that they didn’t consider themselves to have had the right training, but others also remarked on the fact that their colleagues (including employers and partners, and other people they are required to work with on sites) had insufficient knowledge on this issue. The lack of practical advice and training could result in situations where some workers put themselves at risk of asbestos exposure.

This suggests that although many workers were aware of the danger from asbestos in a very general sense, they can also be unsure of the extent of these dangers or what they can do to protect themselves. A number of interviewees revealed a general anxiety coupled with little specific knowledge.

Lack of specific knowledge increases worker risk in two ways. The first is through not having the skills required to identify asbestos at a site, the second, through not knowing the specific procedures to follow in any given asbestos related situation. The main impact of training, overall, therefore, would appear to be that that it heightens awareness of asbestos risks. Without the supporting detailed information of what to do about these risks, however, workers remain in a potentially vulnerable, and psychologically uncomfortable position.

2.3 CONFLICTING MESSAGES AND MISINFORMATION

It was apparent that many workers (both those who had and hadn’t received training) had encountered mixed messages about asbestos. Often there was confusion about the relative dangers associated with the different trades, different types of materials or working practices.

2.3.1 Conflicting messages and misinformation

There were a number of examples where workers had come to believe that their own trade (and this applied across all the trades) were at less risk of exposure than other trades and than is actually the case (all workers in the maintenance trades are at risk of asbestos exposure, see Chapter 1 for further details). While the content of training seemed to raise awareness of asbestos in general, particularly the health risks associated with coming into contact with the material, workers often did not connect this risk to their own work activities.
Several workers interviewed were under the impression that because asbestos had been banned, and was no longer a material used in building and construction, that it no longer posed any risk. In a few cases, this was despite having received formal training and possessing an above average level of awareness about asbestos in a broader sense.

“Well basically now it’s not really a risk because asbestos is not made now. You’re talking about when in the ‘60s asbestos was a building material and it’s as simple as that.”

Carpenter/joiner, 56 yrs, SME employee, domestic work

On the whole, workers felt unsure about the different messages they had received. Even those who had actively sought out information, or seemed generally well informed, found it difficult to get clear answers:

“Well first of all any asbestos is bad news. But the blue and the brown, I think it’s brown wasn’t it, those two haven’t been used for quite some time, according to these people. I mean that’s the trouble, you ask one person one thing and then somebody else tells you something completely different. It’s extremely difficult to find a really balanced view on a lot of these issues.”

Other maintenance, 48 yrs, employee in large company, domestic work

A key finding then is that different sources of information provide different stories on asbestos leading to confusion and difficulty for workers in understanding what they need to do.

### 2.3.2 Confusion about different materials

Overall, there was considerable confusion about the kind of materials that contain asbestos, and which were or weren’t dangerous. There were conflicting views, for example, about the relative safety of Artex, ‘Marley tiles’ and corrugated cement sheeting used on garage roofs. The debate is important because these products were the ones that workers most frequently came into contact with. While some interviewees understood the relative risks associated with different types of asbestos containing products (ie that some pose a greater risk of fibre release than others, see Chapter 1 for further details), others had received a simpler message of ‘all asbestos is dangerous’.

Some workers cited questionable work practices surrounding ACMs, and yet were under the impression that they were taking appropriate precautions based on advice they had previously received. This raises questions about whether current practice is always guided by the most up-to-date information. In a number of examples, this wasn’t the case.

“There is a huge debate, as I understand it, as to whether Artex is considered to be a risky product to deal with or not. And also when you’ve got thermo plastic tiles on the floor, Marley tiles as most people call them, asbestos fibres of which there are only something like three to five per cent I think is what they reckon. That itself is contained in a sort of plastic. I mean you would have to grind it up, and smash it into it little tiny pieces to make any difference. But I suppose if you took a whole room out and there was dust blowing around, then obviously that’s potentially hazardous.”

Other maintenance, 48 yrs, employee in large company, domestic work

### 2.3.3 Identifying asbestos – a Catch 22 situation

If many workers are operating with only the simple message that all asbestos is dangerous, this raises the question of how they are to use this limited knowledge to help them in their day to day work. A lack of more detailed awareness or knowledge about asbestos creates, for many, a ‘Catch 22’ situation. Workers know they shouldn’t work with asbestos (or shouldn’t do so without some precautions in place), but do not have the skills necessary to confidently identify ACMs. It can therefore be very difficult for them to safeguard their own and colleagues’ health. This ‘Catch 22’ situation (ie where you can’t protect against something that you don’t know is there) was frequently discussed in interviews with both those who had and hadn’t received
training. Identification is therefore a key issue, and one that training could potentially give more emphasis to.

“They had a lagging company come in and just say, showed us various pieces of asbestos and said this is white, this is blue, they didn’t show us any brown, which is supposed to be the worst. And that was quite a while ago, it’s not been updated. The trouble is, it’s like, it’s alright showing you but when you’re there, how do you know it’s asbestos, compared to plasterboard? It’s the identification that is probably the hardest thing to find out really.”

Electrician, 43 yrs, employee in large company, domestic work

Descriptions of the types of materials that contain asbestos tended to be fairly general, and there were a number of workers who were unsure about their ability to identify such materials. This was particularly true for workers who were aware of the large number of products that do in fact contain asbestos. In contrast, many workers (both those who have received training and those who have not) associate asbestos with only a small range of products and materials. Older workers in particular tend to rely on their knowledge of having worked with asbestos earlier in their careers and their experiences of those specific materials (in a number of cases this was related to lagging) in making decisions about what constitutes safe behaviour today. Only a few workers felt more confident about their asbestos identification skills.

“The only form of asbestos that I know how to identify is the corrugated sheeting, the asbestos type of corrugated sheeting. And like I said before, I do know that, I believe that some artexers used to use asbestos within the artex. Apart from that I wouldn’t know how to identify it, so if I come across it, I wouldn’t know whether I was in danger from it or not.”

Painter/decorator, 33 yrs, sole trader, domestic work

2.3.4 Lack of confidence about how to deal with asbestos

All workers were asked to say how confident they felt about asbestos. Responses were mixed. Often those who stated that they felt most confident only provided very brief responses, whereas sometimes those who felt less confident would go into more detail to justify their lack of knowledge, or discuss how they would like to know more about various issues. Very few interviewees considered that knowing about asbestos in at least general terms was not relevant to them. Even those who considered themselves to know very little about the subject seemed to be convinced of the general dangers of asbestos.

“I know it’s bad for you, but I don’t know a lot about it. I do come across it quite a lot. I was working in a house about a month ago, oh no, yeah, a month ago, and like it was one of them old war prefab buildings and all the walls are asbestos. I had to hang a radiator like I had to drill it, so I opened the door and put a mask on. But then I had to go under the floor in the house, I had a mask on there now I think about it, it must be all asbestos down here, however long it lasts down there. I put a mask on but what kind of mask you’re supposed to use, I don’t know.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

“Yeah, well - I only know, I believe it’s a dodgy type of, how can you put it, substance I would say you know. That’s why I’m apprehensive about getting involved in it you see, you know, even handling it. If I can not handle it, great do you know what I mean. I would say to the client: you’ll have to get rid of that yourself, if I had to knock something down you know, definitely after the last three or four years you know, after what’s happened to them. So I’m fully aware you know the danger if you know, otherwise you wouldn’t be putting it in these special containers would you, and made to put it in special containers you know.”

Other maintenance, 61 yrs, sole trader, domestic work

Even where workers feel confident about identifying asbestos, the specific procedures they should then adopt were unclear. HSE guidance states that “If you come across any hidden or dusty materials which you suspect may contain asbestos, stop work and get advice”. However, there was a lack of clarity about where to seek this advice. There was often further anxiety about
involving asbestos specialists for either identification or removal as this has cost implications (as issue discussed further in Chapter 3). In domestic jobs, in particular, individuals often felt ‘on their own’ in dealing with an issue that they know relatively little about.

“I think not many people do know about the proper procedure. It’s alright saying that you have to have these special skips and what have you, but if you come across it in a room in somebody’s kitchen, and it’s gotta be ripped out, all of a sudden what do we do? Do we have to ring somebody or can we just… we’re not really told enough about it.”

Carpenter/joiner, 56 yrs, SME employee, domestic work

A number of workers who felt less confident about their overall levels of knowledge about asbestos actually went on to reveal, in the detail of their answers, that they did in fact have a good understanding of the basic messages. Some people associated knowledge of asbestos very much with the different types of asbestos – blue, white and brown rather than the materials that they might contain.

“Not very, I mean I know it’s bad for you, I know obviously asbestos dust and everything can get in your lungs and whatever but other than that, we’ve been told very little about it, and we don’t really get involved in it so they don’t teach us about it.”

Plumber/heating engineer, 23 yrs, SME employee, domestic work

2.4 OTHER INFLUENCES AND CHANGES OVER TIME

As the dangers of working with asbestos have become more widely known over the years, several generations have passed through the building and maintenance trades. These different generations often hold very different views on working with asbestos. However, the division between safe and unsafe working is not exclusively age related, there are also complex interplays between the attitudes and behaviours of these different generations, including the ways in which older workers use their knowledge to train younger ones. Misconceptions can therefore be passed on from one generation to the next. In contrast, older workers are often able to mark how their own understanding of the issues has improved as more information has become available.

2.4.1 ‘Safe’ practice has changed

While there may still be confusion about what safe practice entails, many workers observed changes in practice around asbestos, both in their own work and within their industry and trades. As their awareness grew, some were surprised by the lengths required in order to avoid exposure from asbestos, especially considering the levels of contact they’d had in the past.

“Once upon a time, when I was working as an apprentice say from, I don’t know, 20 years to date type of thing you’d meet a lot of old guys on sites and they’d say they’re making such a big point of asbestos but we used to cut it up with saws when we were younger like you know.”

Electrician, 34 yrs, SME employee, non-domestic work

“And of course the thing is over the years, when I was an apprentice and stuff, obviously there was no safety aspect… of maybe wearing like maybe a face mask to protect yourself. Because some of the buildings were like fascias, and of course you’d rub them down and used to undercoat them and re-gloss them. But the thing was, obviously rubbing them down, you didn’t know that the asbestos was very dangerous and of course you’re breathing all that in. Obviously you wouldn’t now, you wouldn’t get nowhere near it, you wouldn’t touch it, even paint it you know.”

Painter/decorator, 36 yrs, sole trader, domestic work

Several workers commented on how they were more likely to ask questions about the materials they were working with now than they had been in the past. A number felt that the changes in practice they had experienced were mainly due to themselves and their colleagues gaining
wisdom with experience: not only were they now more aware of the risks involved, but also more conscious of health issues in general.

“Much more careful, much more eyes open, and much more eyes open on other people, even if, if I was in another place and I saw somebody who doesn’t work with us you know, another subcontractor working on dodgy stuff, I would probably say: do yourself a favour mate, get that checked.”

Other maintenance, 56 yrs, employee in large company, non-domestic work

For some, general awareness within the construction industry had improved to such a degree that professional reputations were at stake if they were seen to be taking risks with materials that might contain asbestos.

“There’s been an attitude change. Nothing would make me work with it now. I’m in the painting and decorating association, very active in it. Everyone knows that and if someone saw me working with asbestos, I’d never look anyone in the face again.”

Painter/decorator, 59 yrs, sole trader, domestic work

2.4.2 ARDs drive awareness

As many of the workers observed, the increase in awareness of the dangers of working with asbestos were closely linked to the perceived increasing prevalence of ARDs. Almost half of those who took part in the study either knew someone directly, or had themselves, been affected by an ARD. Aside from this personal experience of ARD, general awareness, through the media and publicity surrounding lawsuits against employers, the growing presence of ARD seemed to affect workers in different ways. For some, it clearly revealed the seriousness of the risks involved. For others, the growing awareness of ARDs was an impetus for change at the workplace.

A number of workers knew colleagues, friends, and family afflicted with ARDs. The awareness of illness and early death was moving and emotional, and could often result in changes to their own behaviour including their attitudes towards general health issues (eg one worker told of how his experience of losing colleagues to ARDs inspired him to quit smoking, which he had not done previously despite having also been told that he had scarring in his lungs - an indicator of asbestos exposure and an early warning sign of asbestosis).

“And so I think it is a general awareness now, that’s gradually creeping into people. Because more or less nowadays everybody knows someone who’s died of it. It is a massive epidemic now and it’ll get worse,… it will gradually get worse.”

Other maintenance, 63 yrs, SME employee, non-domestic work

“I used asbestos over 40 years ago, early ’60s, and there was no dust masks issued and no danger signs so we would just work. That was when I worked for me uncle, we used to do shop-fitting and work for the GPO, that sort of stuff. It was mainly industrial work, a bit of domestic work. And I found out I got it about three years ago I think. I had a chest infection and spit some blood up and they sent me to the hospital and x-ray and scan and ‘you’ve got asbestosis’.”

Other maintenance, 68 yrs, sole trader, domestic work

“I’ve always been working in the heating industry and we’ve always been near lagging and when I came to this place I work, within the furnaces, all the pipe work was lead and asbestos. And everywhere else where I’ve worked, the furnaces were all lined. In 1984 we, I had a colleague who died, well it wasn’t put down to asbestosis, it was put down as something else, but we … anyway we had a campaign and we got, well we’ve got 90 per cent of the asbestos removed.”

Fitter, 59 yrs, employee in large company, non-domestic work

“That tree you can see through there, see the tree and the gap between the two lots of trees there? See there’s one little root sticking up, that’s [Name]’s tree, we had to bury him at 57, he was only 57, he died, he had cancer, it was asbestosis … Then there was another chap, he only lasted a
year after he left here, he died, like you know, he was another one. We’ve a few here that have gone down with it … asbestosis.”

Electrician, 56 yrs, employee in large company, non-domestic work

Several workers cited experience of ARDs as a point at which they re-evaluated the risks associated with asbestos and began to change their work practices. For a few workers, their experiences of ARD coincided with asbestos training they were receiving through the workplace. Having the seriousness of the effects of asbestos in the forefront of their minds seemed to help them absorb the safety messages.

“Every time I’ve come across potential asbestos or because as I said, someone in the family was actually very ill and actually died from it, I would just walk away.”

Other maintenance, 30 yrs, SME employee, both domestic and non-domestic work

“Well with me, it’s a personal thing, my uncle died of asbestosis and I saw him die a very painful death where he was virtually being drained to keep him going. But that was down in the Isle of … there used to be a site called the [named] which had a lot of asbestos in there. He was an electrician, he wasn’t actually working with it but it was in the air and it took him, it also took a friend. So there’s an element of you know this is, I’ve seen what this can do.”

Carpenter/jointer, 54 yrs, sole trader, both domestic and non-domestic work

### 2.4.3 It’s ‘too late for me’

Many of those with direct experience of ARDs affecting colleagues and/or friends were older workers. However, there are other influences on this group. Whilst direct experience of the effects of ARDs on people they know can influence them to take positive steps to safeguard their own health, this can also work negatively in that there is an ‘inevitability’ about their own exposure.

Older workers who had been working in construction/maintenance for a number of years had often come into contact with asbestos when it was a relatively new material and were therefore able to discuss instances where they had been exposed to high levels of asbestos in the past. As a result, there were individuals who simply believed that it was now too late to protect themselves from the risk of developing an ARD. This group were still concerned about avoiding any further contact, but seemed to have greater tolerance of low levels of exposure in their current work. In addition, several of those who took part in the study had themselves been diagnosed with an ARD, and this affected the way they described their tolerance of risk.

“There is an older generation, although we are very wary of it now, we still may take a risk whereas I think the youngsters would not, because we’ve worked with it in the past and perhaps got a little bit, I don’t know, lax and might think that because we’ve worked with it in the past we’d get away with it again but we won’t. And I think the youngsters today, well they’re taught in college about it so they would not, they wouldn’t touch it at all whereas we might.”

Fitter, 64 yrs, employee in large company, non-domestic work

“Well I come across it every day on this estate with the tanks but it’s not a danger. When I look back the danger was when I used to breathe it all in, in the mill. But that was so long ago, that was over 40 years ago.”

Plumber/heating engineer, 60 yrs, sole trader, both domestic and non-domestic work

“People of my age group won’t take the white asbestos seriously at all, not at all because we’ve already been, if we have been, we’ve been affected by it, what’s the point?”

Other maintenance, 53 yrs, sole trader, domestic work

The attitudes of some of these workers appear very entrenched, and getting messages through to workers who have high levels of exposure earlier on in their careers could be difficult. However, taking a position where unsafe behaviour is tolerable because ‘it’s too late for me’
might seem justifiable in relation to their own health, but also clearly has implications for others working with them.

“I says: I ain’t touching it. He says: oh – you’ll be alright. He just carried on knocking it down with a hammer. He chucked it in the back of his van.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

In some ways the warnings about asbestos have been so effective in getting the dangers across for this ‘exposed’ group that they now see little point in attempting to manage new risks. This could be because of the relatively simple messages that seem to predominate, without any detailed information about risks or risk management behaviour (as outlined earlier in this chapter). There are similarities here to the attitudes of some hardened smokers, who rationalise continuing their habit by the perception that the damage has already been done, and is irreversible. This raises implications of how best to communicate with this group in the future. Should messages, for example, focus on the risk to their colleagues and others on site or that they may come into contact with? Alternatively, specific information, which clearly sets out the relevant facts, and is targeted at those who consider themselves to already have had potentially dangerous levels of exposure, could be a valuable tool in encouraging safe behaviour amongst this group. Influencing these workers could be a prime route to influencing behaviour more generally due to the influence of older workers in general, as discussed next.

2.4.4 Older workers have great influence

Almost all of the workers in the study spoke of how they picked up skills and knowledge at work and through their colleagues. Some older colleagues were seen as particularly valuable sources of guidance. However, some workers felt that the work practices of older colleagues could be out of line with current thinking. Despite being aware of the dangers of asbestos themselves, some younger colleagues found it difficult to protect themselves from the dangerous work practices of their colleagues.

“I remember working with a plumber once, years ago, about ten years ago in a house, and he was taking something out and I remember saying ‘isn’t there asbestos in that heating’, because there was like a boiler thing with like the gaskets or something, and he was breaking it apart, and he said ‘oh I’m not worried about that’. I thought that was a bit of blasé attitude.”

Painter/decorator, 35 yrs, sole trader, domestic work

“It’s when I work with older people now and they say oh that’s asbestos, and no one seems to really care about it, they just sort of, if there’s asbestos on site or whatever, we get … to one side or whatever.”

Other maintenance, 29 yrs, sole trader, domestic work

Despite younger workers being conscious of the dated nature of these attitudes, it was also evident that the approaches taken by older workers were affecting how younger workers evaluated the asbestos risk. In such cases, the older worker’s practice was often informed by their experiences with asbestos from much earlier, when it was still considered to be a safe and useful material. Some of the younger workers had begun to question the validity of asbestos warnings which emphasised the deadliness of inhaling even the smallest amounts of the material after hearing about the experiences of their older colleagues who appeared to be healthy and well.

“I thought well, it makes you wonder whether the risks are real or whether it is just, well obviously it makes you wonder how big the risks are because it has been his attitude all the way through his life and he’s dealt with it day in, well not day in, just dealt with it a lot more than I have and it doesn’t seem to have done him any harm.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work
“There's a bloke at college, he used to work with it every day he said, his face was covered in it. And because he used to, the old soil pipes that they had to use asbestos rope and pack it down like this and in front of their face and he said it was just covered in it. There’s nothing wrong with him yet!”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

On the whole it is clear that older workers can act as very strong role models for younger workers in their trades, but this does not always mean that they pass on correct information or encourage safe behaviours. Those older workers who had been strongly moved by experiences of ARDs, and the warning messages of asbestos risks, and tended to be more vigilant in their approaches to handling asbestos risks, had set a positive example to the next generation of workers. Unfortunately, older workers who are prepared to tolerate the risks to their own health in working with asbestos in an unsafe manner can also encourage unsafe behaviours. What is clear, however, is that older workers tend to have the respect and trust of their colleagues. How best to utilise this role in order to pass on messages about safe behaviour is more difficult to determine, but this could be a useful communication channel.

2.5 MAIN ISSUES

2.5.1 Training and information on asbestos

Whilst a number of the respondents had taken part in formal asbestos training over the course of their careers, whether specific or as a cursory topic in a H&S module, most had built up their knowledge of asbestos through their work experience, and through the knowledge and experience of colleagues and family. As a result, workers were subject to a number of mixed messages about asbestos. Almost all those interviewed had picked up on the general message that asbestos was a dangerous material, with clear messages not to touch it, and to not work with it. However, their knowledge was much more limited when it came to identifying or dealing with asbestos in practice.

Is it also worth summarising the following points:

- Most commonly, individuals have had some formal training, but this is supplemented through contact with friends and colleagues and informal, on the job, experiences.
- A number of different sources of information are used, but with differing levels of reliability.
- Knowledge of what constitutes safe practice and the information to support this has changed over time, and over the course of some older workers’ careers.

This all leads to mixed messages and misinformation and little consistency in knowledge, attitudes, behaviours.

2.5.2 Dealing with asbestos in practice

Despite information being available, many respondents lacked confidence about their ability to recognise and identify asbestos during their work, or lacked awareness of the range of materials that potentially contain asbestos.

Additionally, few felt confident about the specific procedures to follow once asbestos had potentially been identified (eg what to do, who to notify, how to test etc).

Overall this made for a situation where there was a fair degree of anxiety about asbestos in general, combined with little knowledge of how to spot the danger and what to do if you did. In
psychological terms, this is an uncomfortable state for individuals to endure. In the face of high anxiety and a lack of specific knowledge about how to deal with asbestos individuals are likely to listen to, or give credence to, sources of knowledge that reduce their anxiety, even where they know these sources to be less reliable.

The influence of colleagues and employers was also a significant factor in how workers incorporated asbestos messages into their work practice. Older workers, in particular are often strong role models for younger colleagues. This is not always a positive thing, however, as some older workers who feel it is too late to protect themselves from the dangers of asbestos exposure can put themselves and others at risk. Some even discredit safety messages about asbestos, playing down the risk. However, in the main, and where they had taken the safety messages about asbestos on board, older workers can be powerful champions for asbestos awareness and safety in their workplaces.
3. ATTITUDES TOWARDS THE ASBESTOS RISK

“I wouldn’t have even considered it to be honest. I mean honestly, as you get older you hear about it and my old governor actually died of it so - asbestos related sort of, from when he was in the dockyard and so on. But no, I don’t really think about it.”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

Given that the majority of workers know that asbestos is a dangerous material, the next step is to understand in more detail how they relate this knowledge to their own situation. An important part of how individuals behave around asbestos is their perception of the relative risks to their own health, rather than the risks in a more generic sense. This chapter explores workers’ own assessments of the risks that asbestos exposure poses for them and goes on to look at the extent to which workers feel able to protect themselves against these risks. It also considers the explanations workers have for why they do sometimes work with asbestos, or become exposed in one way or another. These rationalisations of their behaviour are helpful in understanding how seriously workers take the risks to their health, and in understanding what approaches might work best to overcome the barriers to behaviour change.

There does appear to be some tolerance for what is perceived as ‘low level’ exposure. Additionally, the risks posed by asbestos exposure are seen as only one of many that workers face in construction and maintenance work. The risks are often seen as having a random element, whereby some people will escape the consequences of exposure (ie like smokers), and safety guidelines can be seen as too costly or time consuming to implement in practice.

3.1 WORKER ASSESSMENTS OF THE ASBESTOS RISK

There is a huge variety of materials that contain asbestos. Some of these are considered to be higher risk materials due to the greater likelihood that they will give off fibres if disturbed (Chapter 1 provides a more detailed overview of this). However, with all ACMs, whilst the nature of the material itself is important, so too is the amount of it present in the workplace and, perhaps more importantly, its condition. If the ACMs are in poor condition or are likely to be disturbed by the planned works (eg through the use of power tools), a decision needs to be taken as to whether it needs to be repaired, sealed, enclosed or removed.

The extent to which individuals are able to, or motivated to, take the appropriate action, however, is motivated by a range of factors. These are discussed in the remainder of this section.

3.1.1 There just isn’t enough asbestos out there to worry about

There was often confusion regarding the relative safety of dealing with different ACMs. Many workers were convinced that working with certain types of ‘low graded’ materials posed very little, if any, danger. This subsequently informed the types of materials they avoided, and those they deemed safe. In addition, there was a prevailing ambiguity about the amount of asbestos which was perceived as dangerous. Another belief was that most asbestos had already been removed and therefore did not pose a threat to health. The resulting attitude was that the little remaining amounts of asbestos were relatively safe. A small number of workers were under the impression that because asbestos had been banned, it was no longer a danger.

“In the amount of times that I’ve been working I’ve only ever seen harmful asbestos a couple of times, in the long amount of work that I very rarely see anything other than low graded you know,
on roofs or some cladding inside houses. Do you know what I’m saying? I don’t see, I don’t come across it very often, no.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

“The sites I work on and quite a lot of the sites are not at risk really because quite a lot has been cleared up. I don’t know what percentage but I would imagine at least 75 per cent I would have thought had been cleared up by now.”

Other maintenance, 69 yrs, employee in large company, non-domestic work

It was a commonly held belief that many of those who had been affected with ARDs had been exposed to very large amounts of asbestos. The shipyards, work with the Navy, and tasks involving applying asbestos lagging were all frequently cited examples of extreme levels of exposure, associated with ARDs. Whilst this view is in line with the types of occupations in which workers ARDs have tended to work, the onset of ARDs is not limited to these professions. Given that some high risk occupations have now largely vanished from the UK economy (eg asbestos production), the groups now most at risk are those in the building and maintenance trades. The danger is that this view (that ARDs are only associated with a few, high risk, occupations) can lead to the misconception that tasks such as drilling through asbestos boards or removing asbestos corrugated sheeting, are relatively danger free. Certainly a number of those interviewed either held this view themselves or knew colleagues who did so.

3.1.2 Some levels of asbestos seen as ‘safe’

This is compounded, for some, by the lack of clarity about what constitutes dangerous exposure. The ‘one fibre can kill’ message had been taken up by quite a few of those interviewed. However, this is not necessarily a positive thing. For some, this message is so extreme, or anxiety causing, that they tend to ignore it, making their own assessments of what constitutes an acceptable risk, but based on little useful information. It was evident that some workers struggled to know the correct balance required to protect themselves from asbestos exposure, without going ‘over the top’ and appearing overly paranoid.

“So yeah you know, I think there’s plenty of knowledge out there, there’s certainly plenty of training, but I just, I don’t think people consider that one fibre can kill and seem to think they can drill through it and it’s another part of the job done.”

Plumber/heating engineer, 30 yrs, sole trader, domestic work

“I suppose you could go over the top in every job couldn’t you, and wear a big - do you know what I mean. Like you wouldn’t know what’s behind any of these walls would you when you drill into them. But I mean that I don’t consider too much of a risk really, probably worse off out in the street, for what’s blowing around, I don’t know.”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

One way workers tended to rationalise the asbestos risk, was to emphasise that asbestos was generally present in the atmosphere and that everyone was at risk of exposure. Examples of exposure from riding in the underground, or standing near traffic were cited. This ‘generalised risk’ was often associated with the view that small amounts of asbestos were not dangerous.

“That the biggest risk is from asbestosis where your lungs are completely saturated from it. It’s sort of generally present though in the atmosphere because it’s been used in industry and building materials and in car brake linings, so you’re likely to breath a bit of it in standing on a busy street corner.”

Painter/decorator, 35 yrs, sole trader, domestic work

There are negligible levels of asbestos fibres found in the soil, water and air, both naturally and from man-made sources. However, asbestos concentrations in the air in rural areas are about ten times lower than those in larger cities, which are still around 1,000 times lower than levels accepted in today’s asbestos-related jobs. With such low exposure, environmental risks are negligible.
3.1.3 New materials more visible

A number of workers spoke about newer products in the market that could become, or were already, ‘the new asbestos’. Knowing that asbestos had been so widely used for a considerable time before its effects on human health were observed made many workers conscious of the potential for other current and new products to have similar repercussions in the longer-term. Products such as MDF were sometimes seen to be equivalent in danger to asbestos, as well as any material that created a lot of dust. The distinction between these materials and asbestos is that workers know that they are still being used on sites, whereas many believe asbestos is no longer present in sufficient amounts to affect them.

The fact that the dangers of asbestos were unknown for so long, but are now better understood, suggests to some that it is the new products which have yet to be observed in the long term which pose the greatest risk. It is possible that concerns such as these could dilute the perceived danger of asbestos exposure, but equally there is some evidence (as discussed in Chapter 6), that the presence of airborne fibres or chemicals encourages some workers to use Personal Protective Equipment (PPE) which they may not have donned for asbestos risks alone.

“But it mean the ’60s and ’70s there wasn’t an asbestos awareness was there? It’s the same now with MDF, MDF would kill you but you know, you watch this lot on the television remodelling homes. And they recommend you use it and that’s … that stuff you put in lofts, fibreglass, that’ll - you get up in a loft and you try ripping that out, and think of the state of your lungs afterwards, even with a mask. And as I say, in those days it wasn’t, it’s only in the ’90s that asbestos awareness really come on to people.”

Other maintenance, 63 yrs, SME employee, non-domestic work

“To me, asbestos is a risk but I’ve heard that the new asbestos is fibreglass so you know, I know a bit about asbestos, is that old hat now, people are moving on to something else? Is it gonna be a risk to me in the future that will be an asbestos risk that hasn’t been highlighted.”

Electrician, 43 yrs, employee in large company, domestic work

3.1.4 Other risks more important

Another factor is that workers in the building and maintenance trades already perceive themselves as working in an industry that is ‘full of risks’. This perception is based on fact. The construction industry accounts for over a third of all worker fatalities, and the sector has a higher than average rate of working days lost. However, in construction the focus tends to be on safety rather than health risks. A recent survey of construction employers and sole traders showed that that, whilst 50 per cent of respondents considered working at height to be a major risk, just 23 per cent identified breathing dusts or gases. With a range of other concerns, therefore, workers often found it hard to justify focussing on asbestos.

Workers were asked how serious they considered asbestos to be relative to other health and safety risks in their work. Several considered asbestos to be one of the most significant risks, but falls, electricity, dust, saws and other power tools were commonly felt to pose greater risks than asbestos. This perception appears to be driven by three main factors:

1. The immediate nature of harm caused by some hazards as opposed to the long latency period for ARDs.
2. The visibility of some risks when compared to the ‘hidden’ nature of asbestos.

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32 ONS (2004), Occupational Ill Health in the Construction Industry: Statistical Factsheet, HSE publication
3. The relative frequency with which individuals were exposed to some risks, in contrast to the perceived infrequency of asbestos exposure.

“I think it’s probably for me less of a worry than just general dust. Because obviously for me dust is every day and asbestos is minimal.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

“Say you’re using a saw and you cut your fingers, that’s it, that can be repaired but with asbestos you can lose your life. Then again, working at heights, if you fall you can kill yourself. To me they are all on a par.”

Carpenter/joiner, 42 yrs, sole trader, both domestic and non-domestic work

“Falling from heights, I don’t really…. well I suppose I do go up ladders sometimes and I suppose if I fell from a ladder yes I’m going to be injured, I might not be able to work again. Whereas asbestos, we don’t really know how dangerous it is until it shows up do you. So I think being up a ladder and the risk of falling is a clear and present danger isn’t it, whereas asbestos is a potential threat and depending on how you handle the stuff, it may not be that dangerous.”

Carpenter/joiner, 49 yrs, sole trader, domestic work

3.1.5 Some level of risk ‘inevitable’

It was evident that some workers did not take the risks posed by asbestos at all seriously. These individuals often compared asbestos to smoking cigarettes, or developing cancer in general. While they acknowledged that asbestos was dangerous, they felt that there were too many risks present in their job to ever allow for a completely safe working environment

“Then again smoking is a risk, everything is a risk, living is a risk. You work with the likes of cement, it’s windy and you’re trying to put it in a mixer, and it’s blowing about your face. There are hundreds of risks in the building trade.”

Other maintenance, 59 yrs, SME employee, non-domestic work

“I don’t consider it a big risk at all. Even being aware that training tells you that it’s a big risk, personally I’d rank it about the same as getting cancer from smoking, that same sort of level of danger ie, you don’t consider it when you’re on the building site, there’s a lot more things to worry about.”

Electrician, 34 yrs, sole trader, domestic work

3.1.6 Asbestos not always seen as a ‘real’ risk

There were three main groups of workers in terms of how they perceived asbestos was actually being dealt with in practice:

- Group 1 considered that the measures in place were about right, they were generally well informed enough and that they were able to protect themselves adequately.
- Group 2, however, felt that asbestos risks were not being taken seriously enough at work by their colleagues.
- Group 3 who actually felt that the level of risk relating to asbestos had been inflated, part of an overwhelming number of health scares and warnings that they had been subjected to. This group also tended to view the risks as relevant only to those who had already been exposed or had already developed ARDs (potentially driven by the perceptions that only specialist high risk trades are affected, see Section 3.1.1).

Whilst the latter were a relatively small group, this does suggest that at least some workers are taking risks because they simply don’t think asbestos risks are ‘real’ in terms of the extent to which they affect them. What this means is that some workers, those in group 2 most notably, are potentially without adequate control of their workplace, in that they are working with
colleagues who don’t take asbestos risks seriously. The two quotes below are from an individual who would be categorised as a member of group 3.

“I sort of tend to think it’s just like flavour of the month. Oh this is going to be the flavour of the month, and we’ve got bird flu coming, or we’ve got asbestos, or we’ve got mad cow disease ....

… for the first ten minutes, then I’d go ‘yeah, okay’. (Makes sighing sound). I think if I was working somewhere where I know there was asbestos, then I would be aware of it and look through and go ‘ah right’, but generally speaking you sort of like… it’s a five minute wonder. Oh that’s a health scare, and then it fades away in your memory doesn’t it?”

Painter/decorator, 48 yrs, sole trader, domestic work

3.1.7 Not worth losing your job over

Taking the risk seriously is only one aspect of actually protecting yourself. If individuals do not have the knowledge required to take appropriate action, or feel they do not have sufficient control over their working environment to do so, this too can affect their behaviour. To discover more about how these issues affect the individuals interviewed, workers were asked to discuss the extent to which they felt they felt able to protect themselves from asbestos dangers.

Sometimes individuals felt that the decision to work safely was outside their direct control because of the working practices of those around them, or due to fears of losing their job or compromising their standing with their employer. Workers therefore often felt pressured to complete tasks without asking too many questions.

“If I had the time, if I had the money, I would protect myself. I’d feel that I could protect myself against it but I choose not to.”

Electrician, 34 yrs, sole trader, domestic work

This suggests that there is a group of workers who do not take adequate precautions because they lack confidence about their position in the labour market. It seems likely, therefore, that where workers have lower skill levels and/or work on a temporary or casual basis, they could be more at risk of exposure, if they feel they lack the power to take control of potentially risky situations at work. This is unlikely to be limited to behaviour around asbestos risks.

3.1.8 Asbestos risks ‘a lottery’

The extent to which workers believe themselves to be at risk of asbestos exposure is also related to their general attitudes towards risk. A number of respondents simply didn’t want to think about any risks to their health. Other workers felt that the chances of developing an ARD were completely out of their control, describing this as ‘a lottery’. This attitude is likely to affect how individuals view the risk that asbestos poses to their health, and therefore whether they feel measures to protect themselves from this risk are ‘worth’ taking. If workers view the consequences of the risks they face as down to chance, they are therefore, by definition, outside their control. They may therefore feel powerless in reducing the risks to their health. In a number of cases, individuals were more concerned about protecting other members of their household.

“I’d like not to think so because obviously I’ve got a young family and stuff so you know, that sort of aspect, I try not to think about it as much as I can really.”

Painter/decorator, 36 yrs, sole trader, domestic work

“It’s the luck of the draw I think well, I’ve worked with asbestos, I’m a lot better at trying not to work with it but it’s not done me any harm. But I know it’s a lottery thing, I could quite easily develop something from asbestos and I know also that my wife, when I go at home at night with my overalls and stuff like that, she would wash my overalls. I’m now aware that she could quite easily have caught something you know, have developed asbestosis from long exposure to that.”

Other maintenance, 56 yrs, employee in large company, non-domestic work
In fact, no amount of asbestos is considered safe. Products which contain greater than one per cent of asbestos minerals are considered to be asbestos-containing. The more asbestos you are exposed to, the more likely you are to get an asbestos disease. Asbestosis and lung cancer are dose-related diseases in that the more asbestos that is breathed in, the more likely individuals are to contract them. However, mesothelioma, requires only very small amounts of exposure to asbestos to occur, so there are different messages which are correct in relation to different ARDs. Workers’ concerns about family members’ exposure through contact with clothing are also based in fact. A number of recorded cases of ARDs relate to women who have been exposed through washing their husband’s work wear.

This perception that the risks posed by asbestos are uncertain could be linked to overly negative images such as the ‘one fibre can kill you’ type which simply overwhelm individuals as there is therefore nothing they can do to protect themselves. Moving to a more balanced and accurate, but equally simple, set of messages would therefore seem to be a positive step forward in encouraging individuals to assume control of their own risk management.

### 3.2 RATIONALISATIONS OF UNSAFE BEHAVIOURS

Even if a worker takes the risks of asbestos seriously they then have to decide how and whether to take the necessary precautions to protect themselves. Several workers expressed an awareness of how to protect themselves from asbestos, but demonstrated little inclination to follow the necessary procedures. Time and financial constraints were often cited as factors which affect how well individuals feel able to follow the correct safety procedures. This section explores these and other factors which individuals use to rationalise risky behaviours.

#### 3.2.1 Money talks

One of the major reasons given about why people actively took the decision to work in potentially unsafe environments was losing money. These costs, however, were present in a variety of ways. These included whether certain jobs were just too lucrative to turn down, whatever the risks, and the drive to remain competitive in an increasingly cost driven industry.

**The risk versus cost equation**

One of the reasons workers gave for knowingly working with asbestos was the attraction of doing a large piece of work, of which working with or around asbestos was only a small part. This was especially true of sole traders who, by turning away a large project because it would involve working with asbestos, may find themselves short of work and money. Some workers suggested that when they were required to work with asbestos on a job, they tended to build in additional time and costs that they felt would allow them to control the risk as well as they could. In essence, a number of workers stated that they assessed the risk of asbestos relative to the total value for the work being done. If the profits on the work were felt to outweigh the potential risk to their health in doing the work, then they would take the contract.

“... it was part of a bigger job, because she wanted all the guttering replaced and the fascia boards done, and the outside of the house painted. It was quite a big job and it was a nice little earner really, so it was kind of ... it was enough money in it to make it worthwhile not rushing it and spending a bit of time being cautious and getting the asbestos down ....”

**Painter/decorator, 35 yrs, sole trader, domestic work**

“...Well I thought, I always have a choice to say whether you want to do the job or whether you don’t. Like you have a risk, so you weigh up the money for doing it because I only had to drill four little holes in it and that was it. So like I felt I did it, it was obviously worth doing.”

**Plumber/heating engineer, 22 yrs, sole trader, domestic work**
If individuals’ attitudes towards risks are affected by this type of calculation, being able to make accurate assessments of risk and cost are therefore critical. If the original costs for the job do not include, say, asbestos removal costs for example, in order to keep costs down it may be tempting to take short cuts. Alternatively, if individuals are unaware of the risks they face in working with asbestos, they may discount their safety too cheaply.

**Remaining competitive**

For some workers, despite the fact that they had identified the need for specialist support in dealing with asbestos on site, the cost of professional asbestos removal firms was felt to be prohibitive. The costs of bringing in outside labour were therefore felt to be so high that they were sometimes forced to knowingly deal with dangerous situations themselves in order to remain competitive. If asbestos was discovered during a job, asking the client to cover the costs of removal could mean that they could not afford to complete the work and that they may lose business to other contractors who are prepared to take the risks. There also seemed to be a lack of clarity and/or dialogue with the client about where the responsibility for covering the cost of asbestos removal should lie.

“Well yeah, they talked about it, they said: oh blimey, it’s asbestos you know, well we can’t afford the asbestos teams and we’ll just get a labourer and ditch it.”

Carpenter/joiner, 54 yrs, sole trader, both domestic and non-domestic work

“I would say the reason it hadn’t been found on the other part of the job was because the subcontractor who did that job didn’t want to delay the work because it costs you money. And money’s the driving force behind construction.”

Other maintenance, 63 yrs, SME employee, non-domestic work

The expression ‘downing tools’ was often used to describe the appropriate safety procedure to follow when coming across asbestos during a job. In some cases these tools need to be hired and paid for whether or not they are in use. This was felt to be a deterrent to stopping work and taking time out to identify asbestos.

“Well normally, you have to borrow tools or hire tools, perhaps if they’re really expensive and you haven’t got the money, you can’t work can you? That’s why a lot of people ignore asbestos when they find it. I’ve had that before now, I’ve come across that before now, that people have totally ignored it. Because it costs money.”

Other maintenance, 63 yrs, SME employee, non-domestic work

**3.2.2 Safe behaviour takes ‘too long’**

Financial pressures and constraints were very closely linked to time pressures. However, the need for speed was explained by two separate contributing factors. First, it was felt that some workers simply did not take the asbestos risks seriously enough to change their work practice, (and potentially delay a project), in order to follow the necessary safety procedures. Completing jobs quickly was often a priority over safety. The second factor related to the nature of the contract and depended on the type of client involved. Sole traders often described working on large sites where they felt under great pressure to deliver to timescales. One worker discussed the different health and safety cultures present on large and small sites which can result in an unfavourable power dynamic, where sole traders do not feel able to raise health and safety issues. Rather than risk upsetting the client and delaying the larger programme of work, some sole traders are prepared to bear the risk themselves, and simply hope for the best.
“I think I mean someone like a sole trader would be probably just happy enough drilling through it just to get the job done or someone who’s at the sharp end and thinks you know, this whole project, if it’s a big project, say at the airport, this whole project’s gonna be held up and they’ll point the finger at me so I’m gonna do it anyway, just hold my breath.”

Plumber/heating engineer, 30 yrs, sole trader, domestic work

“… there’s no way you could, as a sole trader, go in and start demanding that asbestos removed until you carry on your job and things like that. You know, I think an electrician or a plumber would be just as happy drilling through it thinking that if they hold their breath they’ll be alright, popping a cable through and leaving the area. I mean there’s certainly plenty of evidence that I’ve seen that that’s what happens.”

Plumber/heating engineer, 30 yrs, sole trader, domestic work

“It does take time. Keeping the tools tidy, cabling around, … I have to say that I am in a position that I can afford to spend some time like that, but there are many many guys that are like labourers or you know, even a foreman with a huge amount of works on it, that don’t take a lot of time to think about that, the safety, sometimes.”

Electrician, 31 yrs, sole trader, domestic work

3.2.3 Safety cultures and peer pressure influence behaviour

The interrelated issues of time and costs were important influences on an individual’s behaviour towards asbestos risks, but colleagues and employers also played a role. Several interviewees spoke about the influence of other workers on site, and of work cultures generally.

“You know, I’m saying half of them, I would say 95 per cent of them don’t know what they’re doing. I’m a tradesman, I’ve been a tradesman for years, I didn’t know what I was doing either. But at the same time what you’re doing is you’re doing a job and if you’ve got anything to say about the job, you know, you don’t like asbestos or whatever, there’s always somebody at your back that will do it. So you’re in fear of either losing the job or you know.”

Electrician, 55 yrs, sole trader, both domestic and non-domestic work

A small group of workers felt that they had to adapt to the prevailing ethos of the company they worked for, and that the cost of not doing so could be losing their job. Younger workers were felt to be particularly at risk, partly because they are under more pressure to ‘do as they are told’, but also because they can be less informed, less confident, and more reliant on their employer as they lack the experience to secure another job.

“When you’re only working for a company, if you don’t do what you’re asked to do, there’s ten other people out there that will. So if you don’t do what you’re told then somebody else will. They won’t say that you’ll get the sack for that reason but they’ll just employ somebody else … And this was the time when I started to kind of realise a little bit more, I had more confidence in what I was doing and knew that we shouldn’t be allowed on site without particular safety gear. And he was just, if you didn’t do it, he’d kick you off and you’d be out of a job you know.”

Painter/decorator, 33 yrs, sole trader, domestic work

Safety cultures, however, can also be a positive force in health and safety practice. One worker highlighted how he and his colleagues had been encouraged to raise the issue of asbestos, and had been reassured that there would be no recriminations. For workers to be able to feel they can request that a material be tested for asbestos requires that the employer has made it clear that they are prepared to act accordingly to ensure worker safety if the material is found. Larger firms were felt, in general, to be more likely to safeguard against risks. For some, it was also a question of training, as those who had been formally trained through apprenticeships felt they had more respect for good health and safety practice than those who had learned their skills informally. One worker commented that he thought awareness was higher amongst union members.

Older workers are also an influence on behaviour. Their attitude towards asbestos risks can be a powerful motivator in either a positive or negative way. The role of older, more experienced,
workers as part of the prevailing culture on sites, or as a driver of peer pressure, therefore should also be noted (see Chapter 2 for further details).

3.3 MAIN ISSUES

3.3.1 Attitudes towards risk, and asbestos risks

Whilst the information that individuals receive, through training or informal sources, influences how individuals interpret or understand risks, there are a range of other factors which contribute to how they actively view or manage these risks. Individuals are affected by:

- the extent to which they have seen the effects of ARDs
- any first hand experiences, their perceptions of different levels of exposure and how this is linked to ARDs
- their ability to identify asbestos and ACMs
- the relative risks of other dangerous materials and jobs on site
- the long-term onset of symptoms, difficulty in identifying asbestos.

All of these issues seem to be important for individuals in calculating how much of a risk asbestos poses for them.

Workers’ contact with and understanding of ARDs can have both a positive and negative influence on how workers assess the risk. Those who believe they have already been exposed to asbestos can fail to take further steps to safeguard themselves, but having seen friends/colleagues or relatives go through an ARD can help to encourage other individuals to take the health risks seriously. The overall understanding that asbestos is a highly dangerous material is complicated by the belief that it only becomes so after high levels of exposure, or is only a problem for older generations of workers. There was a general attitude that the potential levels of exposure in the maintenance trades is now very low, given that the material is not placed in new builds, but also due to the mistaken impression in some cases that it has already been removed from the majority of older buildings. The asbestos message was also diluted by concerns about other risks, such as environmental pollution, new dangerous materials (eg MDF or fibreglass), and even the view that there was so much asbestos in the atmosphere that it was pointless to try and control it at work.

3.3.2 Commercial concerns

In order to take the decision to behave safely around asbestos, workers not only need to know about the risks, but also take these risks seriously enough to cause them to change their behaviour. Reasons given for not adopting safe practices included financial pressures and constraints, concerns about speed and timescales, work cultures and peer pressures.

Individuals were able to rationalise unsafe behaviour through their calculation of the risks of the job versus the financial benefits. Often people were prepared to ‘take a chance’ if the job was felt to warrant it through a sufficient financial pay off. This was further exacerbated by the fact that a fairly common view was that there is somehow a random element to whether ARDs are contracted after exposure, often described as ‘a lottery’. Therefore, individuals are able to focus much more on concrete, commercial concerns, rather than less visible and less clear issues around their own health.
3.3.3 Peer pressure

Peer pressure is also a powerful factor. The general safety culture of a site (eg rigorous risk assessments, use of personal protective equipment) plays a role in how seriously workers take all risks, and certainly how they assess the risks posed by asbestos. Older workers, as already referred to in Chapter 2, are often seen as useful sources of information about how to behave around asbestos as they have often had greater experience of working with ACMs. Where they, and other workers, for a range of reasons, dismiss the risks posed by asbestos this can lead to negative consequences. Additionally, the attitude of employers towards the safety of their staff has a very powerful effect. Where they are seen to take the risks seriously, and express their willingness to stop the job if workers’ health is at risk, this is extremely effective in preventing risk taking.

3.3.4 Combined effects

There is also likely to be a complex interplay between these factors. For example, on sites where corners are cut, there is likely to have a combination of negative peer pressure, a strong drive for cost reductions and tight deadlines. In such an environment the extent to which individuals feel sufficiently valued or ‘in control’ to take appropriate action in relation to any risk could be limited. However, given the lack of understanding about the risks posed by asbestos and how to deal with them, it is likely that individuals feel even more powerless in relation to asbestos risks than many others. This could be a particular issue for those working on a temporary or casual basis, or the self employed working as sub contractors.
4. DETAILED KNOWLEDGE: CORRECT PROCEDURES

“Shall I tell you what I know? I mean what I know is the fibres … it used to be the wonder material didn’t it because it had strength, it was light and fireproof, so a lot of it was used. I am aware that it can crop up almost anywhere, particularly like patchup jobs and sorts of things like that. I think it’s probably one actually because what I know about it is that the fibres, as I’ve said before, if you break it or drill into it, it produces a dust in the air which is like fine little fibres which are long and thin I think. You breathe them in and they get entrapped in your lungs and then that causes your lungs to respond in a certain way, I think it grows over them and basically clogs up the ability of the lungs to pass the oxygen into the blood stream. I think it’s something like that.”

Carpenter/joiner, 49 yrs, sole trader, domestic work

Individuals pick up information about asbestos from a range of sources, they then apply their own calculations about risk, may be influenced by others they work with or for, and this, in part determines the extent to which they seek to minimise the risks they face. However, a major factor in whether individuals do, in fact, protect their health is how equipped they are to implement correct procedures. During the interview, workers were asked a series of questions to determine their levels of knowledge about various aspects of asbestos and asbestos handling. Responses varied tremendously, by a range of work and individual characteristics, and also by the aspect of asbestos under question.

were then asked to rate their own knowledge, using a four point scale, about a range of aspects of working with asbestos. Following this, up to four areas were explored with each interviewee. If individuals felt they knew about an area, the interviewer explored what they knew and their sources of information. If they did not know about a particular topic but felt they should know more, they were asked why they thought this topic was important and where they might go to look for information. If individuals felt the topic was not relevant to them, the interviewer tried to find out why this was the case. This chapter deals with the detailed responses to these knowledge testing questions.

4.1 OVERALL KNOWLEDGE ABOUT ASBESTOS

Interviewees were asked, using a four point scale, to rate the extent to which they felt confident about a range of asbestos related issues. Workers indicated which of the following best described the way they felt:

a) You know about it and understand it pretty well
b) You know a little bit about it but are not confident you know enough
c) You don’t know but feel you should
d) You don’t know and you don’t need to know

Table 4.1 presents a summary of the results.

Using this assessment, people were most confident about: why asbestos is a risk and what tasks increase this risk, what to do when they come across asbestos, and the kinds of materials that contain asbestos. People were less confident about the different types of asbestos, how to decontaminate oneself after working with it, and how to dispose of asbestos waste. The aspects that people were most likely to say were not relevant to them, or that they did not need to know about, were how to: reduce the risk when you need to work with it, decontamination, and disposal.
What does this tell us? It suggests that individuals feel that they understand the risks well. They know the basics of what to do when asbestos is identified and the likely sources of asbestos materials. More tellingly, individuals don’t see the detail of how to reduce the risks when working with asbestos as relevant to them. This is likely to reflect the views expressed in Chapter 3, whereby individuals don’t see asbestos as a real threat. People feel, wrongly, that it is simply so rare to find asbestos in buildings any more that they don’t need to worry about working with asbestos. It just won’t happen to them. So most workers’ knowledge tends to focus on a rather theoretical understanding of asbestos as a substance, rather than on practical steps they might need to take when they do work with it (eg minimising risks, decontamination and removal). Promoting the message that asbestos remains a threat to the health of those working in maintenance and construction, and that having at least a basic understanding of the principles of safe working is important for anyone in these trades, would therefore seem to be an important part of any future awareness raising or promotional activities.

<table>
<thead>
<tr>
<th>Per cent</th>
<th>Know and understand it pretty well</th>
<th>Know a little but are not confident</th>
<th>Don’t know but feel should know</th>
<th>Don’t know and don’t need to</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why asbestos is a risk in maintenance/refurbishment work</td>
<td>63</td>
<td>32</td>
<td>5</td>
<td>–</td>
<td>100</td>
</tr>
<tr>
<td>The sorts of materials in general that might contain asbestos</td>
<td>42</td>
<td>43</td>
<td>12</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>The sorts of tasks which might put you at risk of asbestos exposure</td>
<td>52</td>
<td>32</td>
<td>17</td>
<td>–</td>
<td>100</td>
</tr>
<tr>
<td>The different types of asbestos</td>
<td>22</td>
<td>47</td>
<td>27</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>The things you should do when you come across asbestos during a task</td>
<td>65</td>
<td>22</td>
<td>10</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>How to reduce the risk when you need to work with it</td>
<td>50</td>
<td>23</td>
<td>18</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>How to decontaminate yourself afterwards</td>
<td>30</td>
<td>18</td>
<td>42</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>How to dispose of the waste which might contain asbestos</td>
<td>50</td>
<td>13</td>
<td>23</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on responses from 60 interviewees

Source: IES interviews with construction/maintenance workers 2006

4.2 WHY ASBESTOS IS A RISK IN MAINTENANCE/REFURBISHMENT WORK

As a whole, workers were generally confident that they understood the risks to them that asbestos posed when they conducted maintenance work. They were therefore able to cite a range of ways in which asbestos affects health and the health of those working in maintenance in particular. Most respondents mentioned issues such as lung disease, breathing difficulties or damage to the respiratory system. Many also mentioned that dust particles of asbestos could be breathed in.
The effects of exposure

The main messages that had reached the individuals who felt they had some awareness about this issue were that:

- asbestos affects the respiratory system
- the danger lies in airborne dust particles.

Aside from these two main messages, there were a number of other areas where fewer, but still a significant number of respondents provided further examples of the risks they felt affected people in the building and maintenance trades. These included:

- the long-term nature of asbestos-related diseases
- cancer
- contact through the eyes and skin (exposure can occur through breathing, eating, or drinking the substance, or by skin contact).

“Yeah, what I understand is it has small particles which can go into your lungs and I think it might even be carcinogenic. It can certainly have like long-term effects that you won’t realise at the time but in later life you will suffer.”

Electrician, 34 yrs, sole trader, domestic work

Conflicting views on how asbestos causes harm

Another issue was the nature of asbestos particles. There were two distinct views on how asbestos caused health problems, namely:

- asbestos particles ‘hook’ onto the lungs, or
- asbestos particles are an organic agent that ‘grows’ once lodged in the lungs.

This perception of asbestos fibres as organic or biological agents appears associated with the idea that one particle can grow of its own accord and cause disease. Seeing asbestos in this way could promote the idea that contact with asbestos is a ‘lottery’ (see Chapter 3 for further details) in that some people can be exposed to asbestos and not get ill. The idea of asbestos as an organic material was more common amongst older workers.

“Well I understand that once you breathe it in, it can stick to your lungs and multiply. That’s all I do know, that’s what I’ve been told by the doctor, that’s all. I mean I don’t know anything more about that, but that were enough for me.”

Carpenter/joiner, 56 yrs, SME employee, domestic work

“Well yes, because it can, it’s like a living organism isn’t it.”

Fitter, 59 yrs, employee in large company, non-domestic work

This contrasts with the idea of particles ‘hooking’ to the lungs, which may result in individuals being more sensitive to repeated exposure resulting in the accumulation of particles in the lungs. This is actually the more accurate description as the asbestos fibres. However, this is complicated by the different types of fibres that exist. White asbestos (chrysotile) fibres, the most common type found in the UK are actually flexible and curved, whilst the other types are straighter. All of these remain unchanged (ie they do not break down) over long periods, and they can get trapped in the lungs when they are breathed in.

“Once airborne the biggest risk is to your lungs. It sort of hooks into your lungs and it doesn’t move, whereby it can eventually cause a tumour after 20 years.”

Painter/decorator, 35 yrs, sole trader, domestic work
Getting across simple messages about exactly how asbestos affects health, and the implications of this for differing amounts of exposure, would therefore seem to be an important part of enhancing knowledge.

**Maintenance work itself not seen as risky**

Interestingly, individuals rarely discussed the nature of the maintenance work itself as a risk factor (eg contact with old buildings and the nature of work in these premises), although there were a couple of examples of this.

“What it is, with maintenance work you are, you’re maintaining obviously a building that has been previously installed by someone else. So if you’re going in voids, lift shafts, ducts, or varying things, like that, various things like that, you don’t know what’s there. So if there’s a leak on a pipe or anything where it goes through a wall, there is a high risk that asbestos may be involved in the lagging if it’s an older building, it would be there. If it’s very old the dust on the floor there’ll be a lot of it and there’s a great chance, even if someone’s … it out before, that it’s lying in the dust. As you’re walking in you’re disturbing it, it’s just, you’ve got to breathe so it can go in.”

Carpenter/joiner, 42 yrs, sole trader, non-domestic work

It was more common to identify with the idea that other jobs (eg ship builders) carry far more risks from asbestos exposure. Dismissing the risks for maintenance workers in this way may be understandable – it leads to a much more psychologically ‘comfortable’ position – but it also carries dangers. Maintenance workers are now the most likely to be affected by asbestos exposure, and whilst other trades may have been more dangerous in the past, those in construction and related trades are now the target group for behaviour change in order to reduce future incidence of ARDs. Gaining acknowledgement of this fact within the sector could help people to take the risks they face more seriously.

“… I know it’s a risk when it gets into dust. It’s not so much a risk when it’s just there, if it’s broken and it becomes airborne and you can get it into your lungs. That’s why it’s a risk to builders because they’re the people taking it down usually aren’t they.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

4.3 **MATERIALS THAT MIGHT CONTAIN ASPHALTOS**

Interviewees were fairly confident about their knowledge of the types of materials that contain asbestos. A selection of interviewees were asked for further details on this, and on where they expected to find asbestos. Individuals tended to correctly identify between one and four different types of materials/areas, though a few mentioned more, up to a maximum of eight.

**Multitude of products/materials**

Some respondents talked about the difficulty of listing materials because they were aware that asbestos could be mixed with other substances in a large number of products. A number of individuals also discussed how they had recently discovered this to their surprise and concern.

“I’d say pretty well, … you can’t really answer like that because … floor tiles, there’s loads of stuff made with it so it’s very hard to know what is and what isn’t. It’s not marked up is it most of it.”

Electrician, 56 yrs, employee in large company, non-domestic work
"Very little actually, yes. If it’s asbestos building, I’m sure it’s not now, to me asbestos is asbestos and there’s no variation, I didn’t know that it was mixed with other materials, I didn’t know that at all."

Other maintenance, 68 yrs, sole trader, domestic work

**Training not a factor in correct identification**

Interestingly, the level of training individuals had received did not appear to affect the degree to which they were able to correctly identify ACMs, but younger workers did seem to be less confident about their knowledge on this point. This was true even where individuals were able to identify a range of ACMs. Some attributed their own lack of confidence to a lack of experience of working with such materials. Older workers were often cited as a useful source of information on this issue.

“I don’t know because people of a different age group, mostly know more about it because they’ve dealt with it, in like asbestos was around a lot when they were younger but now like it’s in nothing, it’s just like taboo isn’t it, you’re not supposed to touch it. But what you’re not supposed to touch, I don’t know. Like a lot of the older generation they know what it is because they worked with it, well they put it in mostly didn’t they, so they know what it is. But I don’t know what it is.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

“Well, no because I’d just be really paranoid and really scared but I just knew when I come across it what it looked like, what it felt like and then I would ask. There was loads of times I was saying to people ‘is it asbestos?’ they was like ‘no, it’s just dust’. Or ‘no it’s insulation’. But I got really paranoid about it and because my grandfather-in-law was really ill as well so it was at the forefront of my mind all the time.”

Other maintenance, 30 yrs, SME employee, both domestic and non-domestic work

**Identification not dictated by trade**

Interestingly, an individual’s trade did not appear to affect their ability to identify a full range of materials. For example, lagging around pipes was mentioned by a joiners/carpenters, soffits by plumbers, floor tiles by electricians, and central heating by painters and decorators. Despite this, most respondents did appear to refer most to materials that they had encountered in the course of their work.

“If it’s on a gas supplier or a gas system then I can recognise it. If it was on something else I probably wouldn’t realise it was asbestos. It doesn’t say on it asbestos does it? The sort of stuff I work on is classed as asbestos cement, whether that’s different to asbestos.”

Plumber/heating engineer, 62 yrs, sole trader, domestic work

While it is important for workers to develop knowledge about the areas and material that they are most likely to encounter in their job, such divisions may be difficult to define in practice, particularly for those who work in multidisciplinary environments or work across trades. Despite this confidence in identifying materials which in theory might contain asbestos, the practical identification on sites nevertheless remains a problem for many of those interviewed. The issues relating specifically to asbestos identification are dealt with in more depth in Chapter 5.

**4.4 IDENTIFYING THE DIFFERENT TYPES OF ASBESTOS**

Much appears to be made in training about the different types of asbestos (see Chapter 2 for further details). However, this was still an area about which individuals tended to feel less well informed, and often felt that they should actually know more. Workers tended to want to build their knowledge in order to help them both recognise asbestos when working and in order to assess the relative risk/avoid the most dangerous types. The focus, however, was almost
exclusively on the colour categories of asbestos, although very occasionally interviewees also mentioned the geological names, textures of different types of asbestos, or the products (eg asbestolux). White, blue and brown were all commonly mentioned types of asbestos, although grey asbestos was sometimes listed instead of white or blue. Some interviewees discussed how the colour descriptions with which they were familiar did not correspond with the actual colours that they experienced at work. In fact, asbestos types cannot be identified by their colour. Too great a focus on the colour distinctions in training and information could therefore be misleading.

“We’ve had an asbestos awareness thing, it’s to try and show you that blue asbestos isn’t actually blue and I don’t think brown asbestos is actually brown is it?”

Carpenter/joiner, 47 yrs, employee in large company, non-domestic work

“As far as I’m concerned the blue asbestos is white anyway.”

Plumber/heating engineer, 55 yrs, sole trader, non-domestic work

“Because you get, there is a prevailing attitude, it’s not that type of asbestos, that’s not the stuff that’s the bother. That’s quite common. How does someone know that, I don’t know it.”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

Interviewees were aware that the different colour categories were associated with different levels of risk. They were less confident, and/or consistent, in naming the most dangerous type, some (tentatively) suggesting brown was the most dangerous, some (tentatively) suggesting blue was the most dangerous. This hierarchy of risk was the main area of concern, and the reason why they felt they needed to know more in this area. Several interviewees had not knowingly come across brown asbestos in their working life, although some had heard about it. Blue asbestos was more frequently encountered, and white was the most common.

“White is pretty dangerous because of the microfibres it produces.”

Painter/decorator, 48 yrs, sole trader, domestic work

“Everyone thought the blue asbestos was the problem not the white.”

Painter/decorator, 59 yrs, sole trader, domestic work

“There used to be the grey and you’ve got your white asbestos nice and clean. That’s not supposed to damage you so they say, I don’t know.”

Plumber/heating engineer, 63 yrs, sole trader, domestic work

Any confusion amongst individual workers is likely to reflect an ongoing debate about the actual danger that white asbestos poses. Until recently it was thought to remain ‘locked into’ materials and therefore not pose a threat to health. Now it is acknowledged as less dangerous than the other types, but the actual level of danger is still under investigation. This may be a moot point, however, in that white asbestos is often mixed with other types. Greater clarity on this issue, when it is possible to provide it, would therefore be well received by workers, given that the message of different colours and their association with different levels of risk has had such widespread penetration.

4.5 TASKS WITH A RISK OF ASBESTOS EXPOSURE

Interviewees were asked whether they knew what sorts of tasks might put them at risk of exposure to asbestos. Interviewees were generally fairly confident about this aspect of working with asbestos. Some workers spoke more about their own behaviour, while others referred to particular work situations.
4.5.1 Fibre release

Amongst those who were able to discuss the sorts of tasks that involve a risk of exposure, there was a general understanding that damaging the integrity of the material and releasing fibres was a key danger factor. Most referred to actions such as the breaking, drilling, or sanding of materials. There was also some understanding of the risks associated with asbestos materials that degrade or easily break. A few workers specifically mentioned the use of machinery as being an important factor involved in the risk and some were clear that as long as the material is left intact, it does not pose a risk.

“What, making holes and things, yes but you see I make holes everyday and I don’t expect to encounter it every day. I think I can sort of spot … you get the idea of what it looks like and how to identify that it may be asbestos so I think …”

Carpenter/joiner, 49 yrs, sole trader, domestic work

“You know if they’ve been helping me do something like install some lights or something like that. So you’re not, if you are – it says in the book, the Health & Safety Executive book, if you’re having to drill into it, use a hand drill and not an electrical drill. Don’t be using sanding things. Don’t be sanding it, and don’t be cutting it with a wizzer.”

Other maintenance, 48 yrs, employee in large company, domestic work

“Well I think the [one word] material. If it’s broken, fractured or what. If it’s sound, and safe, then there is no need to disturb it. If it’s broken and damaged, it will need to be taken out by a specialist. And that goes for everything that could possibly have asbestos in it.”

Other maintenance, 38 yrs, SME employee, non-domestic work

4.5.2 Some buildings more dangerous

A smaller number of interviewees concentrated more on the situations or types of building that they could work in, rather than the specific task or their own behaviour.

“Only my limited experience. I wouldn’t take on a ship obviously, because in a ship it’s everywhere. […] it is literally lagged with asbestos, but apart from that I wouldn’t know.”

Painter/decorator, 61 yrs, sole trader, domestic work

“The tasks that might put me at risks of exposure to asbestos? That would be working on machinery that had been installed quite a long time ago and could feasibly be lagged with asbestos, heat protection. Or, working, especially down below ground in the hospital where all the pipes are, there’s a risk there of asbestos dust. I know a lot of them have been cleaned but it’s still dusty down there. So if that dust is disturbed then there’s a possibility that it still contains asbestos.”

Fitter, 64 yrs, employee in large company, non-domestic work

Whilst identifying potentially high risk situations is important in reducing the risk of exposure, and hence a reasonable concern, it could illustrate different perceptions of how ‘in control’ workers feel about the risks they face (ie they externalise rather than internalise the ability to control risk). It was also apparent that the risks of asbestos exposure were often felt to be greater for ‘other people’, ie those working in roles different from that of the respondent (eg a painter clearly outlined the dangers to carpenters).

4.6 HOW TO DEAL WITH ASBESTOS ONCE IDENTIFIED

Individuals generally felt relatively confident about the key ways to deal with asbestos once it had been identified. However, they were far less clear about the details, and often omitted key facts or failed to recognise their importance.
4.6.1 Leave it alone

A very common strategy related to bringing jobs to a definite halt once asbestos had been identified. Some interviewees talk about ‘walking away’, getting away from the area or sealing the area so others cannot get in. Stoppages could be used to assess the risk, and/or to permanently stop the job. For some individuals the issue was more about getting out of the situation (that they considered to be plainly high risk), whilst for others it was more about either confirming or discounting the risk.

“I understand that it’s dangerous, you shouldn’t touch it, you shouldn’t work with it and it should be either – it’s your job to get the firm in that specialises in removing it or reporting it to the person whose job it is to get them to organise somebody to come and clear it up … close the site down.”

Plumber/heating engineer, 55 yrs, sole trader, non-domestic work

This is obviously a very powerful message. However, it is possible that if individuals see this as the only way to deal with asbestos, that they may well choose to ignore the problem. Given the financial and peer pressures about getting jobs done within budget and on time (see Chapter 3 for further details), walking away from a job may simply not be perceived as a realistic option. It is therefore important that workers know about other strategies for dealing with asbestos.

4.6.2 Use protective clothing

Other individuals focussed not on removing the risk completely, but on how best to work with the materials identified. This was less common, but these individuals tended to focus on the use of protective clothing and/or equipment as a means of dealing with asbestos, and in particular, the use of goggles and masks.

“Well as I say, if you’re demolishing it and breaking it up I’d probably wear a mask.”

Other maintenance, 68 yrs, sole trader, domestic work

“Oh, if you come up against it? If you had to wear a mask and goggles and that if you come up against it, yeah. The mask? You put your mask on and your goggles and that’s it. I mean you should wear clothing you know it has to be disposed of oh well yeah, you get other people to do that. They’re asking you about it but we wouldn’t do it anyway would we, that’s what I say, you wouldn’t do it, you’d get a specialist in oh yeah, you’d have a special licence, yeah.”

Plumber/heating engineer, 63 yrs, sole trader, domestic work

While some workers knew that using a mask was one of the better ways of protecting themselves from inhaling the dust, it was sometimes felt too difficult to adopt these measures in practice.

“Only way to protect yourself is with a face mask, but as soon as you put a mask on you are hunting for breath. We are working so hard, you’re sweating, your temperature rises and you got to take the mask off.”

Painter/decorator, 59 yrs, sole trader, domestic work

HSE guidance clearly states that, in fact, personal protective equipment is the last line of defence. Specifically, the guidance on the use of respiratory protective equipment suggests that a disposable particulate respirator (FFP3) will normally be adequate, but there is a range of more detailed advice on how best to protect yourself whilst wearing one. The use of disposable overalls is also recommended, as is the use of a type H vacuum cleaner for personal decontamination. There is actually a huge variety of other equipment that can be used in dealing with asbestos, and/or to seal off an area where asbestos is suspected. Yet again, therefore, lying underneath a relatively simple message (which has been picked up on) lies a huge amount of detail (which has not).
4.6.3 Report it, get it tested

Another clear message that workers seem to have picked up is that asbestos should be tested and/or reported. This was raised by both sole traders and employees, but sole traders tended to be vaguer about exactly how this should be done. It seems that whilst sole traders theoretically know that they should report it, they do not necessarily know who to report it to. The problem is that often, unless they are working on a large site at the time, they do not have site managers, safety officers or other appropriate persons to whom they can report the discovery. Clients (eg private home owners or local councils) were mentioned occasionally, but were not thought to provide any real help or offer solutions. For a variety of reasons, therefore, sole traders often felt that whilst they had gained a good knowledge, in general terms, about testing and reporting, they felt this difficult to apply in practice. Employees, in contrast, tended to have specific individuals or job titles/roles to whom they know they need to report the possible presence of asbestos and therefore didn’t need to understand the issue to the same extent.

“I don’t even remember the last time I came across it, it’s a fair while back. If you come across it now, you have to report it and get it taken away, which is a bit daft because asbestos is safe, as long as it’s not disturbed. It’s only when you disturb and cause the dust, or breaking it. When it’s still contained in its cement bonding, it’s pretty harmless. So long as it’s taken away properly, unscrewed and wrapped.”

Painter/decorator, 48 yrs, sole trader, domestic work

“If I know it’s asbestos, I’m not going to work with it. If I thought it was asbestos, I would approach … well if it’s commercial, domestic, etc I would tell someone about it and tell them to get it checked out so I wouldn’t work in it at all. I would definitely get it checked out.”

Carpenter/joiner, 42 yrs, sole trader, both domestic and non-domestic work

“Only what we’ve been told, report it straight away to the safety office and don’t go near it. That’s what we’re told to do, don’t start taking things apart.”

Plumber/heating engineer, 60 yrs, employee in large company, non-domestic work

This would suggest, therefore, that sole traders in particular could benefit from some guidance on how they can test and report asbestos quickly and cheaply, tying into these overriding concerns. Given that they also fear losing clients if they have to involve them in asbestos issues (see Chapter 3), this issue is additionally important.

There are actually three methods of assessing whether asbestos is present:

- Bulk sampling: where a small sample of the material is examined under a microscope, and subjected to visual inspections to determine the condition of the material.

- Wipe testing: where a sample of dust is removed from the area and inspected under a microscope. This technique shows if asbestos fibres have settled out of the air onto surfaces and is mostly used as a back-up to air monitoring.

- Air monitoring: involves pumping a sample of air through a filter and conducting a count of the number of fibres trapped on the filter under the microscope. This technique is used to check fibre levels in the air after removal or during disruption of asbestos materials.

In addition to the different tests which are required in response to different potential hazards, there are also a range of technical requirements which must be met or the reliability of these tests can be compromised. Given this complexity, and the need to use specialists, it is easy to see how the idea of testing can be difficult for those responsible for smaller sites to deal with or fully understand. Again, these individuals would seemingly benefit from concise and clear guidelines on what to do about this issue.
4.7 REDUCING THE RISKS INVOLVED IN WORKING WITH ASBESTOS

It was common for workers to state that dealing with asbestos wasn’t actually something they needed to know about, as they didn’t work with it in any form. Many interviewees were adamant that they would never be in a situation when they needed to work with asbestos either because they simply did not come across asbestos in their line of work, or that they would or did walk away from any job when asbestos was discovered. There were a small number of interviewees who stated that they both ‘did not know and did not need to know’ how to deal with asbestos. There were also a fairly high proportion of interviewees who stated that they did not come across asbestos anymore, often despite having earlier identified that they did in fact work with ACMs.

The key may lie in how interviewees define ‘asbestos’. One example was a man who, at different points, stated that he doesn’t work with asbestos anymore: “My particular job at the moment I shouldn’t have to go anywhere near asbestos”, but who had already stated that he currently worked with asbestos cement. This may also link into confusion about the relative dangers of different types of asbestos (discussed earlier in this chapter). Until fairly recently white asbestos, such as that contained in asbestos cement was not thought to cause harm. Therefore individuals may be taking decisions about their behaviour based on what they believe is solid, reliable information, but in fact this is actually now out of date. This reinforces the need for better information about different types of asbestos and the relative risks caused by different ACMs.

Few interviewees elaborated on how to reduce the risk (because so many viewed the topic as irrelevant), however, the following precautions were identified:

- Masks/breathing apparatus (this was the most common response).
- Painting the material to seal it (this is appropriate only in dealing with undamaged asbestos insulating board).
- Setting down a polythene membrane (used to cover any surface within a segregated area which could become contaminated).
- Sealing the environment or isolating the area.
- Avoiding breakages.
- Dampening or wetting the material (to reduce the number of asbestos fibres released during the work).
- Using special skips for waste.
- Wearing protective clothing.

“Going back to the course I did, I don’t think things have changed that much. To work with asbestos you need to be kitted up and have a positive pressure full-face mask, breathing equipment that comes from a filter system, overalls with elasticated cuffs, gloves, boots, like a spaceman.”

Painter/decorator, 48 yrs, sole trader, domestic work

“I’d just be wearing a half mask, I’ll be wearing tie back overalls, boots and gloves and disposable.”

Plumber/heating engineer, 30 yrs, sole trader, domestic work

4.8 DECONTAMINATION

Another area which individuals did not consider to be relevant to them was how to decontaminate themselves or areas following exposure to asbestos. This was mainly because
they did not believe they were subject to exposure in the first place. This was also an area that respondents felt they did not know much about, largely because they didn’t feel the need to gain knowledge in this area.

“I’d never be in that situation, so it is irrelevant. Way back maybe, but then why would you worry about what’s on your clothes when you’ve been breathing it in for 12 hours?”

Painter/decorator, 59 yrs, sole trader, domestic work

“I hope I will never be in that situation, so there’s no answer to that … I’m hoping I’ll never gonna be in a situation where we’re gonna be putting a blooming tent up in the backyard with a spraying thing and hosing me down. A massive big vacuum cleaner sucking all the dust off me …”

Plumber/heating engineer, 60 yrs, sole trader, both domestic and non-domestic work

Those that were able to elaborate on this aspect of asbestos risk, tended to focus on:

• Washing hands, bathing or showering.
• Disposing or washing work clothes.
• Disposing of masks, gloves or disposable overalls.

Very occasional references were made about vacuuming a fellow worker, hosing down or getting workers tested.

### 4.8.1 Viewed as emergency procedure rather than precaution

Some workers did acknowledge the possibility that they could become accidentally contaminated and that it might, therefore, be useful to have some knowledge about contamination procedures. Amongst these workers, decontamination was considered an emergency, rather than a precaution or regular procedure. Although some workers believed that they would be wearing disposable overalls and masks because they would know about exposure in advance, others believed that they would be wearing their ordinary work clothes, and because of the unexpected nature of the exposure they may not have a change of clothes. Some interviewees were aware of decontamination procedures because they had seen asbestos removal specialists at work or heard about it during training (using air lock areas to change their clothes etc) but few had actually experienced those types of procedures. A number of interviewees understood the term ‘decontamination’ to mean something other than disposing of clothes and washing, wondering whether it was actually possible to decontaminate the lungs following exposure.

“You can feel sick straight away but then it goes off, and you feel better again, but it’s still around in your systems. This is what I’ve been reading is bad about asbestos. So decontaminating yourself would be interesting to know if you can, and how to do that.”

Electrician, 31 yrs, sole trader, domestic work

### 4.8.2 Difficult-to-follow procedures

The basic messages of how to decontaminate via washing and disposing of clothing appear to have filtered through to the group of individuals who believed that they need to know about decontamination. However, a number of this group also felt that there were practical barriers which would prevent them from following the procedures properly. Although several people mentioned showering as soon as possible, others felt that they would be unlikely to have showering facilities available on site and that they would therefore need to wait until they got home to decontaminate. Individuals were often able to describe procedures to be followed on large sites, but not on smaller ones. There was often, therefore, a gap between individual’s knowledge of what they should do to decontaminate, and what they felt they could actually do in their work situation.
“…I’ve been told what to do, and I’ve read what to do but I’ve never actually done it.”

Fitter, 64 yrs, employee in large company, non-domestic work

“…is it serious contamination or not because there is nothing to measure it with. You haven’t got something you can stick in a machine that says you must wash your overalls or burn them. This lot is £75 so if you’ve got to burn them everyday you do on it, it would certainly put the price of the job up.”

Plumber/heating engineer, 62 yrs, sole trader, domestic work

“And you’ll take your clothes off, put them in a bag with your coveralls. But then all asbestos has to be disposed of legally and so you’re standing there with a bin bag full of clothes that’s been exposed to asbestos.”

Other maintenance, 63 yrs, SME employee, non-domestic work

4.9 ASBESTOS DISPOSAL

Managing asbestos disposal was another issue that individuals did not see as particularly relevant to them. Disposing of asbestos waste was viewed as a simple matter, in that they always used a specialist removal company or worked on a large site where the disposal was organised by others. Even when they had been involved in the actual removal process, workers simply double bagged and labelled the waste or put it in a special skip and then waited for someone else to collect and dispose of it. In fact, the HSE provides specific guidance on the removal of different ACMs, and specific information on the use of Personal Protective Equipment (PPE), the preparation of sites for removal, actual removal and cleaning following removal.

A number of individuals had vague ideas that it was taken to special landfill sites but did not feel that they needed to know more. A few noted that waste could be left for some considerable time after they had prepared it, and before it was collected. Overall, workers did not see dealing with asbestos removal issues as a part of their job.

Some sole traders working on small domestic jobs however, were much more concerned about the issue. They generally knew that they should not bring it to a local landfill site, but were at a loss to know what else to do with it. One solution to this was to complete the particular job they were employed for, leave the waste in the garden (sometimes wrapped and labelled) and then tell the householder to contact their local council to take it away. Use of specialists was also mentioned, but leaving the householder to call the council was seen as a cheaper option. A number of individuals acknowledged that their approach to asbestos removal did not follow correct procedures.

“…I know you can’t get rid of it, you can’t take it to the dump or anything like that. What I have done in the past, buried it under concrete if I’m in the middle of a lot of hard core I suppose. I’ve used it underground as hard core … I do know that others have put it in polythene bags and take it to the dump, sort of secretly hiding it and chucking it in but I don’t think that’s a very good way, I don’t think you would approve of that.”

Other maintenance, 68 yrs, sole trader, domestic work

“If you want an honest admission, basically for me to dispose of asbestos I pay one of the rubbish cleaners to pick up the bags, take it to the tip in a private vehicle.”

Other maintenance, 53 yrs, sole trader, domestic work
4.10 MAIN ISSUES

4.10.1 Some knowledge seen as ‘irrelevant’ …

Individual’s knowledge operates at two levels: a basic understanding of health risks, but without any detailed knowledge of what to do to minimise this risk. Most workers seem to be happy with this situation, and generally don’t feel they need to know more, particularly about some aspects of working with asbestos that they don’t perceive as relevant to them eg decontamination, disposal or risk reduction. This appears driven by the general perception that in their working lives, the tasks they complete and the job they do, asbestos isn’t really a risk. Therefore, whilst asbestos is acknowledged as a dangerous material in a general sense, individuals tend to be reluctant to accept, or dismissive, of the actual risks to their own health. This can manifest itself in inaccurate estimations of the risks facing those conducting maintenance work. It is therefore entirely rational for workers who do underestimate the risks in this way to dismiss the need to learn anything other than the very basics about working with asbestos.

4.10.2 … therefore, a lack of detailed knowledge

Whilst individuals felt confident about what to do when asbestos was identified, they were less clear about how to identify it in the first place. Workers tended to focus on the different types of asbestos, relating more to colour descriptions (ie brown, blue, white), and relative dangers posed by different materials, rather than any detailed understanding of the full range of ACMs (although there were a number of exceptions).

Strategies to deal with asbestos were relatively simple, either walking away, reporting its presence or the use protective clothing. Detailed knowledge of how to actually reduce risks when working with asbestos was uncommon, largely because people didn’t identify their job as involving this type of contact. A few interviewees did have detailed knowledge on this issue, however, and were able to identify a range of actions that could be taken. Decontamination was seen as an emergency procedure only, rather than something that affected their day to day working lives, and was also seen as difficult to undertake properly in practice. Disposal often involved using the council, or involved illegal practices.
5. IDENTIFYING ASBESTOS

“What there is to know about it, I dunno, I don’t know how to recognise it really. I can’t tell the difference between that fake asbestos and the real asbestos because you get the sheets of it as well don’t you. I couldn’t tell you, not a lot.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

The identification of asbestos is something that workers are often unsure about. This in itself can act as a major barrier to safe behaviour, as individuals may therefore work with asbestos unknowingly, exposing themselves to harm. Understanding how workers identify asbestos and ACMs is therefore an important part of this research. During their interviews, participants were asked to discuss how they identified and understood asbestos and ACMs. Discussions covered:

- The frequency with which individuals come into contact with materials that contain asbestos.
- The materials understood to contain asbestos.
- Visual and other clues used in identifying asbestos.
- How the presence of asbestos on a work site is identified.

5.1 LEVELS OF CONTACT WITH ASBESTOS

Over half the interviewees stated that they only ‘very occasionally’ came across materials that contained asbestos while at work. Whereas less than five per cent of the workers questioned stated that they encountered asbestos ‘every day or almost every day’. A small number did not know the level of contact they had with such materials, due mainly to a lack of confidence about their asbestos identification skills. There were a small group who still had a high level of contact with asbestos ranging from nearly every day to monthly. The majority of these worked on council owned buildings (eg older houses or public buildings such as schools).

5.1.1 Don’t really come across it any more

Workers who had been in the construction sector for a number of years acknowledged that there were two distinct time periods during which the amount of contact that they had with asbestos was different. These periods were broadly defined as pre and post ‘asbestos awareness’. The first of these occurred before the dangers of asbestos were known; with the result that generally workers did not take action to protect their health. A number of workers noted differences, mainly that asbestos used to be a material that they worked with frequently, but that it was now no longer a problem for them.

“Mainly a few you know 10-15 years ago perhaps, you were more exposed to it, but nowadays I don’t think I’m exposed to it at all.”

Painter/decorator, 48 yrs, sole trader, domestic work

“I wouldn’t say it was very frequent, the most thing I would do is remake the joints with fire clay where they’re breaking down. You handle it but you’re not cutting it as such, like you used to.”

Plumber/heating engineer, 62 yrs, sole trader, domestic work

One individual illustrated the changes in his behaviour over time as awareness of the dangers of exposure to asbestos grew, with the two quotes below.

“But when we were removing the asbestos, we didn’t take any precautions, we just used to rip it off and throw it in the bucket and ditch it …”
“That would have been about between ’76 and ’78, when we come in the harbour then, they used to shut a compartment down if there was any work to be done and get specialists to come in to remove the asbestos, test it, before we were allowed to go in. But up until then, they didn’t bother.”

Fitter, 64 yrs, employee in large company, non-domestic work

This could impact on behaviour if, through their own experiences in the past, or because colleagues talk about these past experiences, individuals focus on asbestos exposure as related only to the presence of large amounts of asbestos. This can mean that current risks seem insignificant in comparison, and therefore may not be taken seriously.

5.1.2 Asbestos is there but it’s not a problem

Awareness-raising campaigns and the removal of asbestos from buildings marked the turning point for many individuals in terms of their behaviour, and the level of contact they had with asbestos. These activities resulted in an increase in knowledge and a greater desire to identify asbestos on work sites. Linked to this there was a clear understanding that working on older buildings increased the chances of coming into contact with asbestos; while those who only worked on new builds believed that their level of contact with such materials was very low. There was some variation in perceptions of the cut-off point after which asbestos was no longer commonly used (as discussed earlier in Chapter 2).

“Obviously any new build or anything built since the ’80s say you’re more unlikely to come across asbestos. Whereas anything before that then obviously you will.”

Electrician, 34 yrs, SME employee, non-domestic work

“Yeah I haven’t come across it much lately but there again, – there’s that many new buildings now, there’s none in the new buildings.”

Electrician, 56 yrs, employee in large company, non-domestic work

A number of individuals, although they worked on sites containing ACMs, understood their level of risk to be low as precautions had already been taken to reduce any potential dangers. These included the removal of asbestos, ‘no go’ areas, and visual alerts on areas that contained asbestos. There is, therefore, some evidence of good practice in identifying asbestos here, and the use of visual alerts seems an effective way of highlighting potential risk areas. What is less clear is how well these areas have actually been contained.

5.1.3 Not in my line of work

Some workers stated that they did not come across asbestos generally, but that particular jobs increased their chances of coming into contact with it. Others, however, continued to think that asbestos identification was not relevant to their particular trade.

“I walk past the asbestos every day that’s encapsulated and stuff, you see it all around you.”

Other maintenance, 47 yrs, employee in large company, non-domestic work

“I’m just intrigued as to what you’re going to ask me because as a plumber, we’re limited in what sort of asbestos we come across.”

Plumber/heating engineer, 60 yrs, sole trader, both domestic and non-domestic work

“It’s more I would say the construction industry which we’re not really construction, we’re more of a maintenance people.”

Carpenter/joiner, 47 yrs, employee in large company, non-domestic work

This picks up on the points raised in previous chapters, whereby there is a need to reinforce the message that everyone involved in the maintenance trades is potentially at risk.
5.2 WAYS OF IDENTIFYING ASBESTOS

Workers discussed a number of ways to identify asbestos, and how this was possible without having a sample taken and tested, relying on their ability to ‘spot it’ in some way, (although some did discuss how testing and sampling were necessary on occasion). Asbestos fibres are actually, usually, too small to see. Mineral wool and other materials used in products might look like asbestos. The only way to tell for sure is to take a piece of the material to a laboratory and have it analysed. Certified asbestos inspectors must collect the samples. They have the training to know what materials to sample and how to collect the samples properly.

A few workers discussed how they had learned to identify asbestos as part of a training course that they had undertaken. Such training varied in length and scope and was either part of their wider training, or apprenticeship, or focused specifically upon asbestos awareness raising. This training route, however, was relatively unusual.

5.2.1 Use my senses

A number of the interviewees felt they could identify it from the colour, texture, taste or smell. These workers, who rely on their senses alone, could already be exposing themselves to asbestos during this identification process. There are a number of quotes (presented below) which illustrate how individuals currently identify asbestos in this way.

“Just the colour of it mainly. You can always tell asbestos on that sort of padding, especially if it’s pipe insulation, you can always tell it’s asbestos or your assumption is it’s asbestos. Because it frays round the edges and it’s powdery.”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

“The taste mainly. And the smell, it’s a very – with asbestos it’s very, like a dry sort of taste, the dust, it’s a distinctive sort of taste.”

Painter/decorator, 36 yrs, sole trader, domestic work

“Because I can identify asbestos guttering. It’s just like chunky stuff that looks like it’s made of concrete. It’s just completely … there’s nothing else that looks like it.”

Painter/decorator, 35 yrs, sole trader, domestic work

“In old buildings it is likely to have degraded and it is easy to spot because it flakes. A flaky pipe is probably asbestos. It might be aluminium, but you can tell.”

Painter/decorator, 59 yrs, sole trader, domestic work

“…. there was all this fluffy stuff round the pipes, like cotton wool.”

Other maintenance, 63 yrs, SME employee, non-domestic work

Individuals with the most experience of working with asbestos may actually be most at risk. Many of those who had been in the industry for a number of years were of the opinion that their experiences of working with asbestos meant that they were able to identify it, very reliably, on sight. While their greater familiarity with the material may offer them some advantage in determining the materials that could pose a threat, they may also be taking unnecessary risks. They could be exposing themselves unknowingly when working with products they haven’t seen or worked with before. In contrast, younger workers, often because they had not worked around asbestos, felt that they were less able to identify it than their older colleagues, but might therefore be more cautious of materials.

“You can tell, you’ve been in the industry for long enough.”

Other maintenance, 63 yrs, SME employee, non-domestic work
“Worked with it all my life I suppose and you get to know what asbestos looks like and what materials contains asbestos, just through experience.”

Fitter, 64 yrs, employee in large company, non-domestic work

“A lot of the older generation they knew what it is because they worked with it, well they put it in mostly didn’t they, so they know what it is. But I don’t know what it is”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

5.2.2 Drill it, scrape it or touch it

Some workers described how touching, scraping or drilling into a material was the best way to reveal whether or not a substance contained asbestos. HSE guidance states that those in charge of jobs should, where possible, plan work to avoid disturbing asbestos material, and that only when these materials are disturbed or damaged do they pose a serious risk to health. This type of action is, therefore, potentially dangerous. Adopting an approach to identification that requires fibre release does not constitute an effective strategy to safeguard health, but does seem to be a relatively common approach.

“Well if you drilled it, you would know. You would know the texture of it. It’s a totally different texture than plywood, or plaster board.”

Carpenter/joiner, 52 yrs, sole trader, domestic work

“If you were cutting that you would know as soon as you touched it or hit it with a hammer that it was asbestos because it’s very very hard, and it’s not like hitting plywood.”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

“I guess some folk are just ignorant and I’ve got a friend who’s a plumber but he didn’t have the benefit of going to university or having any of the training about asbestos apart from you know maybe the odd half day training course. And his knowledge is pretty poor and he’s working in council houses and he will come across asbestos, I know for a fact that he does but he doesn’t recognise it, he doesn’t recognise the risk that he’s facing and those around him are facing if he disturbs it.”

Plumber/heating engineer, 30 yrs, sole trader, domestic work

5.2.3 Many cannot identify asbestos

There were a number of interviewees who clearly indicated that they were not confident in their ability to identify asbestos should they come across it; especially if it came in a form that they were not familiar with. Some workers were aware that they had a limited range of experience on which to draw, whilst others felt that they were not able to identify asbestos in any form. These workers tended to be in the middle age group, perhaps having missed both the intensive work experience with asbestos of older workers and the asbestos awareness training available in more recent apprenticeship courses.

“Yes, but I’m also aware that there’s some types that I’m sure I’ve never seen brown asbestos, so I wouldn’t even know that when I come across it.”

Electrician, 34 yrs, sole trader, domestic work

“I mean for a self employed person, knowledge, knowing is most important and like I say, I don’t know how to differentiate between the different types of asbestos and I don’t know what products asbestos has been used in.”

Painter/decorator, 33 yrs, sole trader, domestic work
“Just really what I see, you know, just really what I see. Really and truly at this present moment in time if a piece of asbestos come out of the sky and hit me in the head, I wouldn’t know what it was, I’ve no idea.”

Electrician, 55 Yrs, sole trader, both domestic and non-domestic work

“You know if I looked at a board, a wall, I wouldn’t know whether it’s a fibreglass wall, a plasterboard wall or an asbestos wall.”

Electrician, 43 yrs, employee in large company, domestic work

5.2.4 Formal identification rarer

Other ways workers identified asbestos included requesting formal identification from samples, noting alert stickers/signs, or referring to asbestos registers. These methods were generally only mentioned by those who worked on larger sites, usually involving commercial or public buildings.

“…the first question you ask is how long ago did you have that done. And they ‘well it was there when we moved in’. ‘When did you move in?’ ‘About 20 years ago’, so they say 20 years ago, I’d have that tested end of story.”

Other maintenance, 38 yrs, SME employee, non-domestic work

“What we have at work is, there is certain areas where there’s fighting on the ceiling, it’s marked ‘asbestos risk’, they actually mark the walls where they think there’s asbestos…”

Electrician, 43 yrs, employee in large company, domestic work

Among those who worked on private residential properties the majority held the opinion that the owners of the house were unlikely to know if there was asbestos present and would, therefore, be unable to inform construction workers of its presence. In fact it was much more common for workers to inform owners about the presence of asbestos.

“If you’re working in a house and it’s privately owned and you’re working for Mr and Mrs such and such, they generally haven’t got a clue, so it’s down to me to recognise any asbestos anyway.”

Painter/decorator, 35 yrs, sole trader, domestic work

“I’ve pointed out to an old lady just round the corner that she had asbestos ceilings in the house.”

Plumber/heating engineer, 30 yrs, sole trader, domestic work

Often workers relied on colleagues or supervisors to tell them that asbestos was present. Relying on others in this way was not an option for individuals who tended to work mainly on their own. This suggests that sole traders and/or those working on small contracts in the private residential sector could benefit from better awareness of the simple steps that can be taken to protect themselves against asbestos risks.

5.3 MAIN ISSUES

5.3.1 Familiarity breeds contempt?

What is clear from the interviews is that workers still encounter a wide range of materials that contain asbestos on work sites, although this is felt to be occurring with less frequency. Workers generally fall into one of two groups, those who are older, and feel able to identify asbestos using a range of methods, and those who are younger, and who are not confident in their ability to do so. Different risk factors are relevant to each. Older workers may well be exposing themselves (and their younger colleagues) to asbestos fibres due to both some of the
identification techniques used and perhaps an over-confidence in their ability to identify all forms of asbestos.

5.3.2 Reliance on informal identification

Perhaps because of their own confidence (or colleagues’ confidence) in their ability to identify asbestos without recourse to formal procedures, examples of professional testing of potential ACMs were fairly rare. These options were generally only available to workers when working on larger sites, commercial or public buildings. As many of the interviewees were employed on mainly private domestic properties where such options are not available, identification is therefore still a major problem.
6. EXPERIENCES OF WORKING WITH ASBESTOS

“So the supervisor on this job says ‘you’ll have to take the asbestos out of the skip’. I said ‘I’m not taking asbestos out of the skip’. I said ‘in fact I will do nothing, I’m going home’. I said ‘because all the fibres where he’s chopped it off are all, it’s got no door, it’s all outside’. It’s all outside and if we start taking the roof off, it’s all gonna blow up. I’m not doing that, I’m going home’.”

Other maintenance worker, 63 yrs, SME employee, non-domestic work

The report has so far covered the messages that people receive about asbestos, their levels of awareness about it, and individual attitudes towards the risks involved in working with/around it, as well as the precautions that can be used to protect against these risks. All of these contribute to their behaviour. In this chapter, the actual experiences that workers have had during their careers of working with asbestos and ACMs are considered in further detail. This includes both good and bad practice, as well as workers’ personal assessments of whether, in their experiences, asbestos risks were dealt with well or badly.

When asked to discuss examples of good practice, the main issues identified by individuals were:

• pausing or stopping work
• avoiding unnecessary breakages and release of fibres
• dampening down materials
• using personal protective equipment
• safely disposing of waste.

Some actual examples of good practice behaviour were absent from those covered by interviewees. These include how to deal with contaminated clothing, their own washing, cleaning up during the task, and opting for hand tools over power tools.

6.1 PAUSING OR STOPPING WORK

An effective way of dealing with a potential discovery of asbestos was to stop work. For some this was seen as a temporary pause to assess the situation, get a material tested, report the discovery to someone, or protect work colleagues. Stopping work was considered to be good practice. Work stoppages tended to relate to three different motivations:

• sealing/isolating the area
• identifying asbestos
• walking away from the job.

While those in more powerful positions spoke about halting a job or sealing an area, others discussed simply walking away. Many interviewees confidently recounted times when they walked away from a job because asbestos was discovered during the course of their work. There was a general feeling that this was the correct course of action.
Example 1: Walking away even when others did not

In this example, an individual described how he decided to walk away from a site that his boss was happy to continue working on.

“There was a time like I said, a time when we were in a church in Birmingham and there was a big boiler and it was really old and a flue, that went up through the roof. We had to smash it down, that was me boss, with his lump hammer smashing it. I said ‘that’s asbestos isn’t it?’ He says ‘oh don’t worry about it’, and I says ‘well you can take that down then’, and I just went outside. Because this room was full of dust so I just left him to it.”

Plumber/heating engineer, 22 yrs, sole trader, domestic work

He discussed the factors that led him to take this decision, and these included:

• the fact that there were a number of other tasks on the site which he could do instead
• the amount of dust that was being created “it wasn’t exactly a pleasant place to be, even if it wasn’t asbestos dust”
• he confidently identified the material as asbestos
• no protective masks were available
• the space was enclosed (a very small room)
• he knew his boss well
• the timescale for the job was reasonable.

The interviewee felt that he did not deal with the risk particularly well, and that he should perhaps have insisted that his boss stop the work and get a specialist in. However, he didn’t believe that he could tell his boss “to stop smashing it”. The attitude of his boss did, however, make him question whether the risks of asbestos exposure were exaggerated, but did not influence his behaviour in this instance.

6.2 AVOIDING UNNECESSARY BREAKAGES AND RELEASE OF FIBRES

Many respondents seemed to be aware of the need to avoid doing anything that would release asbestos fibres into the air. Some also gave examples of how they used that knowledge in their work. However, the degree to which they actually avoided fibre release varied. Many interviewees spoke about ‘being careful’ and not bashing a material to break it up. Using hand tools rather than power tools (which is recommended to reduce fibre release) was not something that individuals discussed.

Example 2: Early identification and advice from colleagues

One individual describes his experiences of working in a team that had been advised at the start of the job that the roof contained asbestos. The team were also informed that, as they were working outside, and as the sheets were being removed intact, the risk was low. He felt confident that this was the correct advice and believed that they company would have employed specialists if the work took place indoors. The team used wrecking bars and screwdrivers (rather than the HSE recommended bolt cutters). They stacked the cement sheets against a wall awaiting the wrapping and collection by an asbestos removal company. Masks were available but he could not remember using one. When asked about clothing he replied “I don’t really think anyone sort of thought of that to be fair”. He believed that the risk was managed well. When asked about how they cleared up the waste, he replied:

“There wasn’t really any dust because they were careful about, the guys that did it for us, they were careful about. And if there were any breakages it was very minimal.”

Carpenter/joiner, 33 yrs, employee in large company, domestic work
The factors that may have influenced his behaviour were that:

- he had been advised that the roof was asbestos at the start of the job
- he received advice specific to that job
- he trusted his bosses and the colleagues with whom he was working.

The message that breaking the cement should be avoided was clearly understood and acted upon at the site. However, the task was not managed adequately. There was no dampening of the cement, use of personal protective equipment or security for the removed items (eg lockable skip). Despite all these omissions, however, this individual was satisfied that his health had been adequately safeguarded, but this seems unlikely.

There are obviously dangers in relying on others for advice about how best to deal with asbestos, as it is by no means certain that they will have the detailed knowledge required to provide adequate support for decision making about how best to behave. Without some knowledge of their own, it is difficult for workers to determine whether the advice they have been given will actually safeguard their health in the best possible way. In example 2, despite being given some good advice, certain aspects of good practice were neglected (eg no one mentioned clothing or masks), and without some detailed knowledge of his own, the individual in question was unable to check whether there were extra precautions that he should be taking.

6.3 USING PERSONAL PROTECTIVE EQUIPMENT

Individuals very often identified the use of masks and other protective equipment as a way to protect themselves against asbestos exposure. HSE guidance actually states that this is the last line of defence against exposure, but many workers believe that this alone is sufficient to prevent exposure. The extent to which workers held detailed knowledge on how best and when to use this equipment varied considerably. A number of workers cited examples in their own lives where they either did not know which masks to use on specific jobs or more generally in their work. Additionally, if there are costs attached to using this equipment that individuals must shoulder themselves, this can act as a barrier to taking appropriate precautions. Workers tend to be reluctant to throw away expensive equipment, and hence may reuse equipment for cost reasons that should have been disposed of following a single use.

When asked to specify examples of how they had worked with asbestos, interviewees often focussed on large scale, extreme experiences of exposure, rather than more everyday experiences which were actually more typical of the kind of contact they had experienced with asbestos. The focus was often on dramatic episodes, such as where the asbestos had been removed by specialists and, therefore, on the protective wear and equipment that these specialists used, rather than the more everyday equipment that they themselves might need to use. These incidents were, therefore, somewhat removed from the more regular work of the interviewees where the protective equipment was more ‘mundane’. The danger is that by focussing on these extreme examples (a theme which occurs throughout this report), day-to-day exposure is discounted as ‘minimal’, and therefore not, in comparison, a real risk.

Example 3: Past, extreme, experiences can override current safety concerns

One man recalled an unusual incident from very early in his career when he was asked to check that the electrical supply to lights was turned off before asbestos removal workers could continue with their work. Specifically, he had to unscrew light switches and confirm that there was no supply, and remove fuses from relevant switch boards if necessary. His task did not involve disturbing asbestos but took place in an area highly contaminated with asbestos because the removal work had already begun. He described how the foreman on the job clearly told him how to use the double-tented area to remove his outdoor wear and put on a breathing apparatus and white suit before entering the work area, and how to change back
into his outdoor wear safely afterwards. Removal work halted completely while he was working and he noted that no other workers were present, just bags of waste. He found the whole experience frightening.

This example was offered when asked to give an example of working with asbestos, although at another point in the interview he revealed he had more regular, recent and normal contact with asbestos, where he was able to demonstrate good practice in the use of protective equipment.

“What we have at work is, there is certain areas where there’s lighting on the ceiling, it’s marked ‘asbestos risk’, they actually mark the walls where they think there’s asbestos and that’s the closest bit we come to. So if we do that, we just normally put a mask on. If we’re working on the light, work on the light and everything goes in the bin [white paper suit and mask].”

Electrician, 43 yrs, employee in large company, domestic work

The factors that influenced his behaviour around asbestos were:

• the free availability of protective clothing
• established procedures on what to do
• definite identifications of asbestos.

For a number of individuals it was not clear whether they were using protective equipment correctly. A few described the type of mask, confident that they were using the right sort, while others said they did know they should use a mask, but did not know which type to use. Most seemed to use a simple dust mask without any special filters. Some interviewees spoke about disposing of the mask afterwards while others spoke about ‘my mask’ as if they used the same mask repeatedly. The more complex masks, in which some people had great confidence in in terms of their utility in protecting the wearer, were not seen as disposable. The quotes below illustrate some examples of this.

“Yeah, double elastic that goes round, again a lot of people, a lot of the young boys don’t like them because they put marks on your face! So you’ve got a pair of goggles on and have these great marks round there, and the other things leave marks there. The young boys are style conscious. I mean sometimes it takes a couple of days to get them off, these marks to go. So if you’re saying to a lad use it ... Friday night and he’s going out, ... like Alliance and Leicester Capone! But they’re effective, those other things, don’t even bother about them, throw them away. You can get some of them now, some of the triangular masks have like a little yellow filter.”

Other maintenance, 63 yrs, SME employee, non-domestic work

“More with ventilators, proper, I don’t know what it’s called, [one word]. It’s completely sealed and there’s two vents on each side. And it just does, it filters the air. It’s a pretty good one.”

Painter/decorator, 33 yrs, sole trader, domestic work

6.4 DAMPENING DOWN MATERIALS

A smaller number of individuals raised the issue of dampening down materials as part of good practice. Wetting asbestos materials reduces the number of asbestos fibres released during work, and the use of wetting agents (rather than water) helps the materials to absorb the liquid, as blue and brown asbestos do not readily absorb water. HSE guidance clearly states that areas should not be over wet, and there are hazards involved with wetting when conducted around electrical equipment.

Despite having some basic knowledge that wetting an area constituted one element of good practice, the manner in which individuals had actually applied this technique in practice did not always appear to adhere to current guidance. Some interviewees, for example, spoke about soaking and hosing an area rather than lightly spraying the material. The basic message of
stopping the fibres becoming airborne has reached these individuals, but the idea of containing the fibres within a limited area had not reached the majority of individuals.

Example 4: Dampening part of effective removal

This individual was self-employed and worked mostly on house extensions and alterations. He spoke about removing asbestos cladding from some sheds six years ago. He described the asbestos as hard blue asbestos, the type he had applied earlier in his career as bath panels and as fireproofing for staircases and doors.

“I dismantled it and the council came and took it away, I dismantled it per their instructions. Hosed it down with water, carefully removed the screws and nails and wrapped it up in thick builders polythene, taped it up very carefully, we didn’t want to breathe any. So it was damped down all the time and it was on a, we worked on a sheet and the people were happy that I was doing it and this was per the council instructions. It was laid on the front garden for the council to dispose of carefully. The lady of the house says they just picked it up, chucked it in the rubbish, in the wagon, ripped all the polythene and it come out and - that was [Name] Council disposal team. I didn’t see it – the lady told me. So after all the careful handling of it, ...”

General maintenance worker/builder, 68 yrs, sole trader, domestic work

He felt able to deal with the asbestos because:

- he was able to recognise the asbestos because of his experience of it early in his career
- the householders for whom he was working seemed to take the matter seriously
- he received detailed advice from his local council specific to that job and which he took to be authoritative.

Despite his own belief in the good practice he felt he had adopted, he was obviously disappointed in the way that he felt the final disposal had been dealt with, and this appeared to influence how he felt about taking advice from his local council in the future.

Example 5: Use of third parties can result in misinformation

This is an example of how guidance can be misinterpreted, especially when passed on through a third party, although it does take place some time ago. In this case the individual was often involved in bathroom refits. He spoke specifically about finding an asbestos-lagged hot water cylinder in a house about 14 years ago. He was reluctant to deal with it, so the householder contacted the environmental health department at the local council for advice.

“And they were very sort of - just oh - sounding uninterested - and that’s ... it might not matter to them, but it matters to me. And what they said is tell your plumber just to soak it. Soak it in water and put it in a poly bag, ... poly bag to cover it. So that was their attitude ....”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

6.5 DISPOSAL

Individuals frequently discussed asbestos removal as part of their experiences of working with asbestos. For a number of these workers, their only experience of knowingly handling asbestos came when they were required to remove it from a site, rather than engage in other maintenance work. This is interesting because in earlier sections of the interview this was one of the main areas about which individuals felt comfortable without detailed knowledge of procedures (see Chapter 5). It may be that one reason individuals focus on disposal is that, without adequate asbestos identification skills, they may only have worked with the substance unknowingly in other ways. In contrast, however, when asked to dispose of asbestos, it has already been identified as a dangerous material.
A number of individuals were able to provide more detail about preparing asbestos for disposal. They spoke about wrapping the asbestos waste in heavy-duty polythene and tape, or double bagging it. Some interviewees had experience of working on large sites where there were special closed bins or skips for disposing of asbestos. Other examples of good practice included employing specialist firms to remove it, or making arrangements with the local council to collect the wrapped asbestos.

Interviewees working in private homes often made arrangements directly with the council to collect the waste. Others removed and wrapped the waste and instructed the home owner to call the council to have the waste removed. It was unclear whether this approach was adopted in order to avoid the costs associated with removal, or simply because they did not know about other providers of the service. There was a fairly widespread reporting that asbestos could not be brought openly to regular landfill sites, though covert disposal in council sites did occur. One interviewee mentioned that a benefit of getting a material tested included having a certificate (demonstrating that the material did not contain asbestos) which enabled him to use ordinary landfill sites.

**Example 6: Council key role in disposal**

One worker recalled his experience of being asked to fit tongue and groove panelling to the side of a bath in a private house.

“Well I was trying to decide whether I needed to take the old panel off and put the new thing on, and I was just sort of tapping around and I was wondering whether to drill into it or not, and I was wondering about it, and I said to the woman ‘I think it might be asbestos’, and so at that moment you think ‘well, careful’, and I do remember at this time that I wasn’t so much ... I wasn’t particularly ... I mean I knew you shouldn’t drill in it, but I didn’t know that you shouldn’t break it, and I didn’t break it in fact, and so then I phoned the council. There’s a number you can phone and I was aware of this, and they said don’t on any account break it or drill into it. They wanted to know whether this was domestic or commercial, because if it was commercial I would have had to have paid to get it removed. I was saying that the point is I am actually ... I was completely honest with them. I said I’m a self-employed carpenter. I’m doing a job in somebody’s house, I said, but I could walk away from the job and she could phone you up and say can you remove this, and so they agreed that I would just wrap it up and tape it up and leave it outside.”

Carpenter/joiner, 49 yrs, sole trader, domestic work

The interviewee tried to ensure the safe disposal of the waste by negotiating with the council. Good practice such as calling a specialist or using a special skip were considered to be clearly outside the normal expectation for a small job on a private residential property. The interviewees awareness of an advice line at the local council and the flexible response from the council seems to have been a key factor in facilitating this approach. It contrasts with examples of interviewees hiding asbestos waste under hard core or in bin bags which they brought to ordinary landfill.

Where workers are operating mainly on small sites or domestic premises, it is often removing the materials which is the most problematic element of dealing with asbestos. Many sole-traders working in the private domestic market were unsure about what they should be doing with asbestos waste. Some recalled a time when it was possible to legally bring asbestos to council sites for disposal in specialist skips, but many believed that this type of facility no longer existed. Some felt that changes in the law were actually encouraging fly-tipping and making disposal more dangerous. Dealing with clients who have no knowledge or regard for the dangers associated with asbestos exposure was another problem that workers have had to deal with.
Example 7: No one to pick it up

A fitter working for a large public organisation recalled renewing some pipe work in the air conditioners when he recognised asbestos. Despite a clear identification, and taking the correct precautions in preparing the material for disposal, whoever was responsible for actually removing the material from the site did not appear to fulfil their responsibilities.

“I didn’t know what type of asbestos, whatever, blue, white, brown, so I seen the supervisor and I said ‘look that’s got asbestos I reckon, I’m not happy about that’. And he said ‘well, be careful, take it down, bag it up, bring it up the yard, and we’ll dispose of it’. I didn’t take any other precautions other than to minimise the amount of disturbance of the lagging on the pipe work. I took the whole pipe work down without taking the lagging off, bagged it up, sealed it up, marked it, took it up the yard, and it was sitting up in the yard for months. It was to my knowledge it was never properly disposed of.’

Fitter, 64 yrs, employee in large company, non-domestic work

Example 8: Private home owners taking things into their own hands

This example involves a renovation specialist dealing with houses that have been flooded or fire damaged, and their experience on one job of removing floor tiles from a house.

“... and she was adamant that it didn’t really matter blah, blah, blah, and I said ‘No, we have to have them tested’. So I called in an asbestos team to come out and test these tiles, and they got there and there was no tiles. She’d taken them up ... which, that’s up to her, that’s down ... you know she was explained the risks of asbestos and she took the risk dealing with it herself. I also pointed out to her that she can’t just skip them. You can’t just go and toss them to your local skip. These have to go through a contaminated site, so best not to take them up regardless.”

Other maintenance, 38 yrs, SME employee, non-domestic work

Due to his knowledge of how to deal with asbestos in the proper manner, this individual still managed to protect himself, but others with less knowledge or who feel under more commercial pressure to fulfil client requirements may not have felt able to do this.

6.6 EXAMPLES OF POSSIBLE EXPOSURE

A number of workers discussed their experiences of working with asbestos in ways that they felt did not illustrate good practice, or where they themselves had not followed recommended procedures, but nevertheless felt they had handled the situation well. The focus again (as discussed earlier in this chapter) was often on extreme experiences which had mostly occurred some considerable time in the past, before awareness of asbestos risks were established and publicised. It was recognised that these practices are far less common now, although not completely eradicated. Whilst these experiences could be discounted as not relevant to today’s workforce, they do appear to influence behaviour in a number of ways.

More recent experiences tended to focus on misinterpretations of guidance or situations where a lack of regard for safety precautions, rather than blatant disregard, existed. Workers also highlighted examples of bad practice which they felt illustrated what was happening generally in the industry. These often involved occasions where they had been a witness to, rather than a direct participant in bad practice.

6.6.1 The bad old days

The more dramatic examples of bad practice experienced in the past seem to overwhelm any concerns about current risks. Where the amount of exposure is felt to be much less than in the past, or where the identification of asbestos is more difficult, these experiences are often
downplayed in terms of the risks involved. Many interviewees simply did not identify small repeated incidents of possible exposure as ‘working with asbestos’.

Situations which workers tended to focus on generally involved:

• a clear indication that the material was known to be asbestos
• visible and substantial amounts of fibres being released
• no use of protective equipment.

While some older interviewees did dismiss the risks in their current work on the basis that ‘it is too late for me’ (see Chapter 3 for further details), this was not universal and many older workers were still keen to protect themselves from further damage in their sixties.

Example 9: Creating large amounts of dust

A number of individuals spoke about the careless breaking up of asbestos insulation boards with hammers, of using grinders to cut up boards when fitting out flats, and being covered in dust at the end of the day. One individual recalled his experience of working in the public sector and of contact with asbestos 35 years ago. He had often drilled into asbestos when no-one was aware of the dangers.

“No, I don’t think they did. Just carry on regardless. Terrible. Chippies come out with chain saws in front of me like, dust everywhere like. That’s what you used to get in the old days.”

Electrician, 56 yrs, employee in large company, non-domestic work

Example 10: Scrap metal collection

A number of interviewees discussed how they had disturbed asbestos in order to salvage some scrap metal or witnessed other people salvaging scrap metal, for example removing asbestos insulation from copper pipes.

In particular, one individual with a high level of awareness of asbestos-related risks recalled his work on a cemetery 15 years ago. He was employed with three others to remove a roof. He recalls being instructed, very clearly and definitely, by the supervisor, not to go into the mortuary room because it was full of asbestos. However, when the supervisor took him and his three colleagues around the site, the door of the mortuary had been removed and the asbestos had been removed. The supervisor asked another worker on the site, a bricklayer, if he had taken the asbestos out and he confirmed that he had. The interviewee was then told to take the asbestos waste out of the skip where the bricklayer had dumped it. He refused and went home.

“And I said to my four mates, two of them were in … and I said ‘it’s up to you, I don’t know what you’re doing, I’m getting the train home. I’m not very happy about this at all.’ I said to the bricklayer ‘why did you do that?’ And he went ‘ah, it was in the way and the boys wanted the copper out of it for scrap’. I said ‘you’ve probably killed yourself [name]’. Actually he ain’t, I’ve seen him the other week! Mind you, I don’t know the state, he might have the asbestos scars as well. I have never knowingly worked with asbestos and yet I have got the scars in my lungs. I have never known anywhere, every time I’ve come across it, in all the years I’ve gone, no. And I will lose a job, be out of work and not touch it, … I said ‘did you hose down the wall, [name]?’ He went ‘no, what for!’”

Other maintenance, 63 yrs, SME employee, non-domestic work

Deliberate cover ups

Some interviewees spoke about incidents that they observed and disapproved of such as:

• covering up of asbestos finds
• the use of low-skilled labourers for unlicensed asbestos removal
• private home owners dealing with asbestos inappropriately
• problems with disposal.

A common element amongst all these observations was that interviewee believed that the ‘guilty party’ clearly knew about the presence of asbestos. A few respondents also spoke about how they had been told that asbestos had been removed from a building, only later to find out that some asbestos was actually present, and that workers had been exposed to asbestos as a result.

Example 11: Keeping a lid on it
A number of interviewees gave examples of working on sites when asbestos was discovered but was kept quiet in some way, either temporarily while a situation was assessed or permanently. This provoked strong feelings. On occasion workers had discovered asbestos in a building which had recently been renovated and noted that a previous contractor had not reported the presence of asbestos or added the property to the asbestos register.

“Well, we were doing the school in [Name], we were doing one wing, the other wing had been done the year before and nobody had reported discovering asbestos. So we had the feeling, the contractor who did that, came across it, just ignored it to the detriment of his workforce. Now if the workforce don’t complain like we complained, that’s it.”

Other maintenance, 63 yrs, SME employee, non-domestic work

Example 12: Use of low skilled labour
Several interviewees recalled recent incidents where low-skilled labour was employed to remove asbestos, often with very minimal protection or training.

“The worrying fact is the chap I’m doing the job for, he knows that there is asbestos on the job, he couldn’t really care if there’s asbestos on the job and he knows the dangers and he knows the cost of taking the asbestos down professionally. So what he did is he’s got a lot of, half of the boys that are in there are working unemployed, cash in hand sort of thing. And they’re quite happy to take this asbestos down, probably not in the knowledge of what it’s doing to them. But he knows and he is storing this in an oil tank, an old oil tank and at the end of the day when all the asbestos is stored in the oil tank he’s going to brick this up. That’s his idea.”

Electrician, 55 yrs, sole trader, both domestic and non-domestic work

Another individual recalled how they found an asbestos panel while renovating some flats and reported it to their site manager. They did not get the response they were hoping for.

“Well yeah, they talked about it, they said oh blimey, it’s asbestos you know, well we can’t afford the asbestos teams and we’ll just get a labourer in and ditch it.”

Carpenter/joiner, 54 yrs, sole trader, both domestic and non-domestic work

6.7 MAIN ISSUES

Individuals were able to discuss a range of experience of working with asbestos. Some of these related to situations where asbestos exposure was likely, either through unwitting or deliberate dismissal of the risks. More common where instances where, although some procedures had been followed, these were incomplete and could have led to exposure. Despite this, the vast majority of more recent experiences were viewed by individuals as relatively safe, and their own behaviour appropriate. The most commonly discussed safeguards were: to pause or stop work; avoid unnecessary fibre release; use personal protective equipment; or damp down materials. Overall, workers experiences were characterised by a lack of detailed procedural knowledge of their own, and many were reliant on others to inform them about correct procedures. There were a number of examples where individuals themselves had tried to follow correct procedures, but where this
required them to break with the overriding culture on a site, or stand up to colleagues. It is likely
that individuals wanted to share examples where they felt they had themselves behaved
appropriately, so it is unclear how widespread unsafe behaviours are more widely.
7. THE UTILITY OF EXISTING INFORMATION

“Well I’m not going to knock them, it’s an effort to educate people and I’m grateful for that. But as I said earlier, I don’t get stimulated easily by this type of stuff (the written information) so I personally don’t, it’s not the best method for learning for me.”

Electrician, 34 yrs, sole trader, domestic work

Given the examples of bad practice discussed and the difficulties that workers face in adopting good practice when working with asbestos (as outlined in Chapter 6), in combination with the often mixed messages that individuals receive about the nature of the asbestos risk (see Chapter 3), it is important to understand how workers view the information that the HSE produces. This information is an important potential source of impartial, up to date, and factually correct advice for those working in maintenance and construction. During the course of their interviews, workers were shown examples of HSE materials in the form of an asbestos alert card and information leaflet produced by the HSE about asbestos. They were asked to comment on whether they had seen the information before (if they had they were then questioned about how useful they found it; and if they had not they were asked if they would find it useful). Following this, discussion focused upon what sources of information they would use if they had wished to find out about asbestos, and what formats they would like such information to be provided in. This chapter provides an analysis of worker responses to this topic.

7.1 FAMILIARITY WITH HSE INFORMATION

The majority of interviewees had seen neither the HSE alert card or the asbestos leaflet before. Around three-quarters of the interviewees had not seen the alert card until it was shown to them within the interview, although a small number had seen the asbestos symbol (shown on the front of the alert card) attached to buildings that contained asbestos.

“I’m familiar with the symbol, the asbestos symbol but I haven’t seen this card.”

Electrician, 34 yrs, sole trader, domestic work

“I’ve seen something similar in yellow stuck on walls and what have you that’s got asbestos in.”

Electrician, 43 yrs, employee in large company, domestic work

Similarly around three-quarters of the interviewees had not seen the asbestos leaflet produced by the HSE. A small number, however, mentioned that they had seen other written information about asbestos, or information by the HSE on other health-related issues, either at their work sites or that they had sourced themselves.

7.2 REACTIONS TO THE HSE LEAFLET AND ALERT CARD

Workers were positive about the idea of receiving more information generally about asbestos, and the HSE leaflet and alert card in particular. A number of the interviewees felt that it was important for them to have access to impartial information, and which is not provided by a company whose main interest would be in selling alternative products or asbestos removal services. Information from the HSE was therefore particularly welcome. Some workers felt that the HSE produced information was useful as either a refresher to their existing knowledge or as a reference point should they, or a colleague, require detailed information about asbestos.
The general consensus was that the more information they had on the topic, the more able they would be to:

- have an understanding of the dangers of working with asbestos
- recognise and identify it when working on site
- protect themselves from the dangers inherent to such activities
- avoid working with asbestos-containing materials
- follow current best practice procedures.

“**It points you in the right direction as far as being able to identify stuff.**”

Plumber/heating engineer, 60 yrs, sole trader, domestic work

“If you were a little bit unsure or someone asked you a question, you can refer back to it.”

Carpenter/joiner, 42 yrs, sole trader, both domestic and non-domestic work

“Well I use it to show to the men.”

Other maintenance, 48 yrs, employee in large company, domestic work

“I think if I was working somewhere where I know there was asbestos, then I would be aware of it and look through and go ‘ah, right’.”

Painter/decorator, 48 yrs, sole trader, domestic work

Older workers tended to feel that the HSE materials were more relevant to younger colleagues who were likely to have less experience of working with asbestos so far in their careers. A small number of older workers were uninterested in receiving information about asbestos as they felt that it was too late for them, as they had already been exposed to asbestos earlier in their working lives (a theme which has been raised in a number of preceding chapters of this report). The extent to which HSE can target information at these individuals is therefore uncertain.

“It is useful for a lot of people who will be coming into the trade now, apprentices, people like that. A lot of the older fellows, they just tend to accept the risks.”

Painter/decorator, 48 yrs, sole trader, domestic work

Overall, interviewees were positive about the format of, and information contained within, the HSE written materials. A number of those interviewed raised the issue that they were very busy during their working day and that it was therefore important for them that written information did not contain too much writing, as this would put them off picking up a leaflet to read in the first instance. The use of photographs was popular as they showed real-life settings within which asbestos could be found and could convey a lot of information without the use of written text.

“If this was delivered to me I probably would actually read it as opposed to a lot of stuff and I think: I haven’t got time to read that.”

Painter/decorator, 35 yrs, sole trader, domestic work

“But the benefit of this booklet, and I think that there can’t be too many of these, is photographs about things that contain it.”

Other maintenance, 48 yrs, employee in large company, domestic work

“I would say you can’t have too many pictures, photographs. It’s much more, you can relate to it ... they need to have lots of photographs.”

Other maintenance, 48 yrs, employee in large company, domestic work
Individuals who were familiar with the leaflet had found it in a variety of places. These included:

- wholesalers or builders merchants
- having downloaded it from the HSE website
- from work sites where they had been left in rest rooms
- during asbestos training.

7.3 WAYS OF ACCESSING INFORMATION ABOUT ASBESTOS

Workers felt that, for them, one of the key issues in dealing with asbestos was having access to information on the issues as and when they required it. A number of workers also felt that it would be useful if information about health and safety issues, such as, but not exclusively, asbestos were sent to them on a regular basis as a mat\er of course. They believed that the onus of responsibility for finding information should not be on them. It was a common feeling that if workers weren’t required to be proactive in seeking information, if they only had to react to information sent to them, that this could reduce some of the barriers to behaviour change.

“… you have to source that, they don’t send it to you. I think it would be as well them sending it you. It doesn’t come to you, you have to go to it.”

Carpenter/joiner, 35 yrs, sole trader, domestic work

“… these sorts of things are better if you get them delivered to your house.”

Plumber/heating engineer, 55 yrs, sole trader, non-domestic work

“I think the local authority should send general leaflets out to the whole country.”

Painter/decorator, 36 yrs, SME employee, both domestic and non-domestic work

“I’m too lazy to go looking for the information so if somebody actually approached me, that would be better.”

Electrician, 34 yrs, sole trader, domestic work

In practice undertaking regular large scale mailings to all construction/maintenance workers would be a huge, costly and complex task (although electronic methods of communication could make this less costly). However, workers also provided a number of ideas on where they believed it would be most useful to have information displayed/available. Some of these are provided below:

“I mean yeah definitely I think this would be a good idea to distribute out to sites or to be sort of given as an induction, part of an induction as like an awareness leaflet.”

Electrician, 34 yrs, SME employee, non-domestic work

“This is something really I’d like to see on our notice board. You know so people can come and just have a reference.”

Electrician, 43 yrs, employee in large company, domestic work

“I mean if these were distributed in the likes of wholesalers you know and left on the likes of wholesalers counters, you know guys like me would see it.”

Electrician, 55 yrs, sole trader, both domestic and non-domestic work

“I’d take them in, if we had a notice board yes, if you’re on a site where you’ve got a notice board then you’d pin some of them up.”

Other maintenance, 63 yrs, SME employee, non-domestic work
7.4 USE OF DIFFERENT INFORMATION FORMATS

Although the majority of the interviewees were positive about the written information provided by the HSE it was also felt that it would be useful to provide information in a variety of formats. There were a number of interviewees who clearly had a preference for information presented visually (for example on DVD or television). Even among those who preferred to read health and safety information there was a general feeling that if information could be disseminated using a wider the variety of formats then it was likely that more individuals would be reached. While written formats were often considered to be essential basics, they were not felt to be suitable for all workers.

“Written down is the best you can get to be honest, … I suppose newspapers and radios are good ’cos builders read newspapers and listen to the radio all day, so they would be a good idea, but I think just a yearly refresher coming through your post.”

Carpenter/joiner, 35 yrs, sole trader, domestic work

Videos were suggested as a useful way of sharing information by a number of interviewees, with a few commenting that the use of ‘shock tactics’ and disturbing images might be useful in terms of making people realise how dangerous the risks of asbestos are (Chapter 3 also discusses this issue). The internet was also a popular choice in terms of where workers would look for information; and there was an acknowledgement among many that electronic sources would become increasingly popular over the next few years. However, there were indications that individuals turned to the internet for answers to very specific queries, rather than general information. Trade press and stores were felt to be another way of sharing messages and with the added benefit that this could also hit individuals outside the trades who are purchasing materials to use in their own homes (ie ‘DIYers’).

“I think the shock tactics would probably work if you’ve got like pictures and things like that or videos and things that you could actually show people. That basically that’s you know, that’s what can happen. I think that’s probably the best way.”

Carpenter/joiner, 33 yrs, employee in large company, domestic work

“I think just keep on reinforcing it with horrible videos of people dying and hope they don’t have a nervous breakdown at the end of it.”

Fitter, 45 yrs, employee in large company, non-domestic work

“Well nowadays it would be the internet wouldn’t it I suppose, on the HSE website or something like that, I would assume they would do that type of thing.”

Electrician, 34 yrs, SME employee, non-domestic work

“Through places like B&Q because probably, even although all people aren’t electrical contractors, even although all people aren’t builders, there must be a lot of domestic premises that will get asbestos in them. And there’s a lot of DIY enthusiasts who are doing projects in their homes and they’re probably coming up against asbestos.”

Electrician, 55 yrs, sole trader, both domestic and non-domestic work

Training was another suggestion, especially where it involved examples of materials containing asbestos and information about where it was likely to be found. Some workers felt that this was most important for those coming into the industry and for individuals who hadn’t worked around asbestos for a number of years. Trade unions were also felt to be a useful potential source of information, although only by a small number of interviewees.

“I would think on a course quite frankly. Only because if you go on a course at least you’ve got to sit there and listen. I’m very old fashioned as far as this is concerned, because I’m very lazy where it comes to the computer because I sort of you know – I tend not to absorb things quite so well as if I’ve got to sit there and listen to somebody.”
A number of the respondents also compared asbestos to other health issues, in that information should be available via government campaigns. A common example was relating asbestos to smoking.

“Well it needs a massive education programme. A massive government sort of education programme on the lines of how to stop smoking, binge drinking, and don’t drink drive.”

Other maintenance, 63 yrs, SME employee, non-domestic work

“What you need to do is you need to put it out there where you can’t avoid it, whether that’s in the newspaper, on TV. I mean I know it’s expensive but TV would be a great one for getting the point across.”

Other maintenance, 30 yrs, SME employee, both domestic and non-domestic work

“I would have thought the Government should print up literature and inform all building companies or anybody who’s likely to be in contact with asbestos.”

Plumber/heating engineer, 55 yrs, sole trader, non-domestic work

7.5 NEED FOR REINFORCEMENT

Another issue that workers discussed was how, despite the provision of information, there were additional factors that impacted on the extent to which individuals actually changed their behaviour. The first of these was that although the information could be given to individuals, it was their choice whether or not they read and accepted it; and following this, whether they changed their behaviour accordingly. Workers often felt that people might change their behaviour immediately after reading the information, but would then revert back to their old practices after a relatively short period of time. Therefore, frequent reinforcement of messages was seen to be very important in changing behaviours. Similarly, a number of interviewees mentioned fresher courses as an essential element in maintaining an appropriate level of knowledge about asbestos and maintaining behaviour change.

“I’ve worked with people that’s seen that film and the effect was the first six months I was very good … but the effect wears off.”

Fitter, 45 yrs, employee in large company, non-domestic work

“… probably they should be told about asbestos more frequently than what they are at the moment. As I said we’ve had one lecture on it in my time. I think it should be done more often.”

Fitter, 64 yrs, employee in large company, non-domestic work

“I think every couple of years they should have an asbestos course just to remind people, like a refresher when you do your fork truck training every four years, just to remind people how serious it is.”

Other maintenance, 47 yrs, employee in large company, non-domestic work

It was common for workers to discuss how, whilst they or colleagues might pick up the relevant information, this did not necessarily mean that they then went on to make good use of it. It was also felt to be difficult to always take in the key messages, for example, if an article appeared in a magazine, it may not be read, with other articles preferred for interest or relevance.

“It is to a point but people will just put it in the back of their drawer and forget about it.”

Fitter, 45 yrs, employee in large company, non-domestic work
“… there is a lot of ignorance on site and these things are all very well and good but you could probably say 60 or 70 per cent of the people on the site wouldn’t bother reading it.”

Carpenter/joiner, 33 yrs, employee in large company, domestic work

“… you read the bits you want to read don’t you rather than read cover to cover so probably missed stuff in that.”

Plumber/heating engineer, 57 yrs, sole trader, domestic work

7.6 FUTURE POSSIBILITIES FOR SHARING INFORMATION

Individuals were asked to suggest examples of how they might like to see asbestos messages in the future. A variety of different approaches were put forward. A very popular idea was to use photographs of common ACMs and how these might occur in everyday tasks as a way of communicating with workers about the potential risks. A couple of interviewees suggested going further and providing simulated samples, or samples in sealed units, to help teach people how to identify asbestos-containing materials. As already discussed earlier in the chapter, some interviewees felt that there was a need for a much wider campaign encompassing the general public, perhaps similar in characteristics to an anti-smoking campaign.

“Seeing it or having it simulated in that area … that is my suggestion … some people take their time to prepare some sample of looking like asbestos, but that would be the most effective way. A little sample … let the people look.”

Electrician, 31 yrs, sole trader, domestic work

“It would be nice, I mean you could do it in the same way as smoking. You know if people were to perhaps come forward with their – because with their experience of how they got it. I think sometimes people think you’d have to be in a room full of it and breathe it in for several hours, but you don’t, just one particle. And I think that sort of thing could come into it, to help people.”

Carpenter/joiner, 42 yrs, sole trader, non-domestic work

“This sounds terrible now for a man to say this but, if you wanted that to take real effect, they should send it to all the blokes’ wives … send it to the wives and the wives will worry about it, I think it’s like tests for cancer, I expect it’s more wives get on to their husbands and partners about checking their selves and what they do in women’s magazines and all that.”

Fitter, 45 yrs, employee in large company, non-domestic work

7.7 MAIN ISSUES

The leaflet and alert card were very well received by respondents. The size (limited written material), use of photographs and the recognisable alert sign were all popular. However, the majority of those within the study had not seen the HSE written information, suggesting that a more extensive distribution campaign could be necessary.

Workers were positive about the effect that large scale, national, marketing campaigns could have upon awareness, but there are obviously cost implications of this. The use of an ‘anti-smoking’ type approach was commonly suggested, although a number of workers felt that any future information sharing could simply be targeted at those working in construction/maintenance. It was clear that, for information to effectively reach all those working within this sector, it will be necessary for a variety of formats to be adopted and information developed to fit the varied needs of a heterogeneous community.
8. CONCLUSIONS

The detail of the preceding report demonstrates that there are a complex range of factors which influence individual behaviours, all of which need to be taken into account if any future training or information sharing is to be effective, and barriers to safe behaviour overcome.

In order to bring these together in this final chapter, we have attempted to examine some of the basic principles of existing psychological theories to provide a possible model of behaviour amongst those interviewed for this research. We also discuss what this model means for future attempts to promote safe working.

8.1 INFLUENCES ON MAINTENANCE WORKERS

Within the detailed responses of the workers interviewed, their behaviours are affected by a range of factors. The extent to which each of these applies to any one individual will obviously differ by their personal circumstances and beliefs, but here we attempt to draw together some overriding themes.

8.1.1 Technical issues

There are a range of technical issues which relate specifically to dealing with asbestos, rather than other risks that workers face in their working lives. These include:

- Asbestos is a material that comes in diverse forms, about which the risks are still being investigated, and which has been mixed with other materials to produce a vast array of products that contain asbestos.

- Asbestos is also hard to identify with any certainty. It is a laborious and technical process to get it tested and there are specialised testing procedures required to confirm the presence of the material which involve the use of outside professionals.

- A range of knowledge about what types of materials contain asbestos, the best protective equipment to use, and the correct procedures to follow are all necessary to be able to deal with the risks involved in working with asbestos adequately.

- Some individuals have no access to training on this issue, whereas others did not find their training fit for purpose, or have not received training for some time or on up-to-date methods. Individuals’ knowledge is often based on information received from other sources and is subject to conflicting messages about what is and isn’t appropriate behaviour.

8.1.2 Psychological factors

In addition, psychological factors, such as attitudes towards risk and general health also play a part. In more detail these include:

- It can be difficult for individuals to deal with situations where they have a general anxiety about an issue, but where this is also coupled with a lack of detailed knowledge about the issue. This fits very well with how many people describe their attitudes towards asbestos. The message that asbestos is dangerous is clear, but how to identify and deal with it much less so. Therefore individuals may attempt, internally, to minimise the risks that asbestos poses to them. They are therefore far more likely to identify with messages, from whatever source, which downplay the risks.
• Whether asbestos results in a serious health condition was, like smoking, often likened to a lottery. This belief in a chance element allows people to dismiss the risks as being outside of their control. In contrast, if people believe that even the smallest amount of exposure can prove fatal, then they can justify not taking any action because it is already too late for them to protect themselves. Better information on the nature of the asbestos risk would help to reduce the likelihood of people taking unprotected risks in future, even if they did so previously.

• The health risks posed by asbestos are relatively vague. People don’t have access to specific statistics about the risks as they relate to them in their job. This has to contend with very real demands placed on people to get the job done quickly or cheaply or face the consequences (which are very visible, eg loss of work) of not doing so.

• The time between exposure and identifiable health outcomes can be up to 60 years. This long term nature of the risk can be difficult for some people to identify with, particularly younger workers.

• Individuals often focus on the negative aspects of asbestos exposure rather than more positive aspects about control, for example, or on the technical details of different asbestos types rather than the practical side of what to do when asbestos might be present. This could be as a result of the focus of training that they have received, or simply reflect the messages that individuals are most likely to pick up on.

• Perhaps because of all this, as well as for other reasons, proximity to Asbestos Related Diseases can drive both awareness and the propensity to take the risks seriously enough to face the potential economic consequences of taking proper action. Exposure to the outcomes of asbestos in this way is a powerful reinstatement of the real nature of the health risks involved.

8.1.3 Cultural influences

There are also a range of cultural factors which relate to the construction industry specifically, the behaviour and priorities of employers, co-workers and clients. These affect individuals in a variety of ways:

• Occupational health receives far less attention in the construction industry than does worker safety. Asbestos therefore suffers as an issue in that people tend to focus on other risks such as falls from heights, serious injury through machinery etc, which are perceived to be far more common, and with far more immediate consequences. Therefore asbestos may not be perceived as a ‘priority’ risk within the industry.

• There is a prevailing machismo culture which affects safe behaviour of all types, including whether individuals wear fairly basic protective equipment such as hard hats, ear defenders etc. Attitudes towards asbestos are therefore affected by this. The control measures are so disruptive that avoiding the use of them may be culturally more acceptable in some cases.

• Other forms of denial about the risks exist, and are voiced in a number of ways. For example, through the fact that asbestos poses a risk to everyone, that maintenance work itself isn’t risky, that the work of people in other trades is more risky, or simply that the scale of risk is hugely overestimated.

• The role of older workers as potentially useful role models or as inhibitors of safe behaviours is also important. More experienced workers are a source of practical and experiential information about a range of health and safety issues. If they promote safe working this will encourage less experienced workers to follow suit.

• Employers and those responsible for sites also have a role to play. If staff are encouraged to come forward generally about health and safety issues, or specifically about asbestos, this
will enable people to feel confident about taking action to safeguard their health. If however, employers do not promote a good safety culture then there are likely to be negative consequences.

- Finally, but perhaps most importantly, there is a focus within construction and the related trades (as with many industries) on economic factors. Competition can be fierce and time is money. As many individuals are employed on a casual or subcontractor basis, the consequences for them of shutting down a job, even temporarily, is a loss of pay. Therefore it is likely that, culturally, there are a range of factors at play which are not only about employers, but also co-workers.

8.1.4 An individual's sense of control

The extent to which individuals feel they are able to control their fate at work, and specifically in relation to work risks and/or asbestos appears related to a range of factors. These include:

- Whether the individual is an employee of a larger firm or is self-employed. This affects the amount of control that individuals feel they are able to exert over their work environment, but also the extent to which they have clear reporting channels for potential asbestos finds. Self-employed individuals on big sites, where they are often subcontractors, can feel relatively powerless relative to employees of the main contracting company, who can often feel most powerful on larger sites.

- The extent to which individuals know what to do and feel confident about this, including their familiarity with the workplace environment. If workers have up to date and relevant knowledge about a work situation they find themselves in, then it is likely that their sense of control will be far greater than if they have no, or only very limited, knowledge about what to do. This includes the ability to identify asbestos in the first place.

- How individuals feel about their status on site. Older workers are generally given more respect, as are skilled tradesmen, these groups may feel in a better position to speak out about the asbestos risk than individuals who feel more vulnerable about their position on site.

8.1.5 Understanding how these factors interact

None of these factors exist in isolation and the way that individuals make decisions about their behaviour is likely to be affected by a range of influences at any one time. Attitudes towards behaving safely are likely to be affected by whether individuals believe that the negative impact of dealing with asbestos safely now (eg economic costs) is offset by the positive impacts on their health in the longer term. In addition, the prevailing safety culture of their employer or the site on which they are working (combined with the way in which colleagues or even clients feel about or behave around risks/asbestos risks specifically) will also be important in shaping behaviours. Also, an individual’s personal beliefs about the extent to which they can control the way that asbestos is dealt with on site is affected by their skills, their status within their current work group, and the nature of their employment contract.

Individuals therefore reach the point at which they either intend to positively deal with asbestos as safely as they can, or to ignore the risks and knowingly undertaken risky behaviour. However, another factor is the extent to which their knowledge is sufficiently developed in order to actually behave safely even if the intention is there. The HSE can actively help individual workers to improve their knowledge through, for example, wider distribution of materials that they have already produced and which workers react well to. In addition, the HSE has a role in ensuring that employers in the construction and maintenance industries are given the full facts about the continued risk that asbestos poses. They, along with other key
influencers (eg older, more experienced workers on sites), seem well placed to change safety cultures for the better.

8.2 MOVING FORWARD

A key factor in shaping attitudes towards asbestos, changing social norms, and helping people feel in control of their health and safety at work is providing people with sufficient information for them to make their own decisions about what does and does not constitute safe behaviour. This will be further complicated by their own attitudes towards risks, and their capital within the workforce and/or on that particular job. However, in order to allow individuals to make rational decisions about the behaviour they feel is appropriate for them in any given circumstance, a better understanding of the outcomes of their behaviour is vital.

There is a tendency for people to focus on the more technical side of their asbestos training (where they have received training), for example the different types of asbestos, rather than on the practical aspects of dealing with asbestos well. This latter type of information should, therefore, form the basis of more effective training. Reinforcement of these messages also need to be undertaken on a regular basis for them to remain a priority.

Better information about the scale of risk would also be useful in helping individuals evaluate how and whether asbestos is a relevant issue for them. It could be useful to move away from the basic message that ‘asbestos kills’, which has successfully reached this population of workers, to a more detailed message about how many and how. For example, current smoking warnings focus on rather vague messages (eg smokers die younger), but have been criticised for a lack of clarity (eg not specifying smokers die ten years younger on average). This clarity is what causes people to take the risks seriously.

Previous marketing and awareness raising campaigns have been immensely successful in communicating basic messages about how risky it can be to work with asbestos in an unsafe way. The priority must be to continue to focus on providing workers with more detailed knowledge on how to protect themselves. The current materials were well received by the workers interviewed here, but had reached very few of them. Therefore, it may be less a question of redesign, but more of redistribution of what already exists. Having written materials to hand for when the need to consult detailed information arises is very important. Using other media (eg internet, e-mails), however, will become increasingly necessary to support a diverse workforce. However, workers tend to consult these media for answers to specific questions, rather than for general information, so designing them appropriately will be important. The use of visual images of asbestos, for example, was an extremely popular method of sharing information.

The social influences on workers are many. Their family, friends, colleagues and management all play a part in shaping behaviours. Older workers in particular are seen as a source of advice and information on asbestos issues, particularly their knowledge of the ill-health impacts they have seen or heard about affecting current or ex-colleagues. However, it is also important to recognise that older workers themselves may only be in possession of limited information, and may, in some cases, myths and misinformation. Tapping into these informal social networks could be a useful way of challenging behaviours. In particular, recruiting older or retired workers as ‘asbestos advocates’ could also be a useful strategy.
APPENDIX 1: DISCUSSION GUIDE

INTRODUCTION

Introduce self and colleague and thank them for taking part.

Project: We work for the Institute for Employment Studies which is an independent, not-for-profit, research company, and we’ve been commissioned by the Health and Safety Executive to find out what workers, such as yourself, think about asbestos and whether there are things that make it harder for you to protect yourself from the dangers associated with it. I’m interested in what you think about all types of asbestos – so whenever I say asbestos I’m including all types - white, blue, brown.

Confidentiality: Any personal material from your interview that is used in project reports will be quoted anonymously and any references that could identify you will be removed.

Tape: I would like to record the interview just so that I make sure I get everything that you say properly. The tape will be deleted when we are finished with it. Is this ok?

Time and exit: It will take about an hour – is that ok? You can terminate the interview at any time and withdraw consent for the use of any information you provided.

Do you have any questions at this stage?

BACKGROUND

Current work (use summary sheet)

1. Could you start by telling me a little about your current job?
   • Who do you work for? (private/public)
   • Size of company? Sole trader?
   • Their (main) occupation and type of work undertaken
   • Casual/temporary/permanent employer relationship

2. What proportion of your time do you work on peoples’ homes (domestic - rented/owner occupied?) and what proportion on non-domestic buildings?

3. Do you tend to work alone? If no: Do you tend to work in the same team on different jobs?

4. How long do you tend to be on a site? How large are most of your jobs?

Work history

5. How long have you been doing this type of work?

6. Have you always worked for this employer/as a sole trader/as a casual employee? If not:

7. Was your previous job different from your current job? If yes: In what way was it different?
Training history

8. How did you get into this line of work?
   • Did it involve a formal apprenticeship?
   • Did it involve a college course?

9. Have you had any type of training since then? What sort of training was it (on or off the job) and what did it cover?

10. How do you keep up to date or learn new skills at work? *Prompt only if necessary: eg, how do you hear or read about new products or legislation?*
    • Suppliers?
    • Work mates?
    • Unions?
    • Trade bodies?
    • Bosses?
    • Training providers/colleges?

11. Have you had any H&S training (all H&S training not just asbestos)?
    • What sticks in your mind from H&S training? What was it about?
    • When was that/how often do you have such training?

ATTITUDES TO ASBESTOS RISKS

Messages from training experiences

Thinking generally about any work-related training you might have had, not just H&S training….

12. Did you learn anything about asbestos as part of it? (Include both initial and refresher training)? *If no, go to next section.*

13. Did it change the way you thought about asbestos? Did anything surprise you? In what way?

14. Do you do anything differently as a result of that training?
    • *If yes:* What do you do differently?

15. What do you remember most from the part about asbestos/training on asbestos? What were the main messages that you took away about asbestos?

Other sources of messages

16. Thinking about the people you work with, in general do you think the people you work with take the asbestos risk seriously?
    • Can you think of examples of things they have said or done to make you think that?
17. *If employer relationship relevant:* How about the various bosses you’ve had, do you think they take the asbestos risk seriously?
   • Can you think of examples of things they have said or done to make you think that?

**Sense of control**

18. Compared to other dangers at work and health risks generally, how serious do you think asbestos related diseases are generally? Do you think you are at risk?
19. Do you feel able to protect yourself from asbestos?
   • Why/why not?
20. Do you feel you can prevent yourself getting an asbestos related disease?
   • Why/why not?

**Amount of contact with asbestos**

21. How often do you come across materials that contain asbestos at work? (Don’t know is a valid answer – no need to probe further, if given vague answer then probe:) Can I confirm, is this:
   • Every day or almost everyday
   • Once or twice a week
   • Once or twice a month
   • Very occasionally
   • Don’t know
22. When are you most likely to come across asbestos?

**AWARENESS AND KNOWLEDGE**

**General awareness levels**

I now want to ask you a little bit about how much you know about asbestos. How much different people know varies – some people will know more than others and one of the main aims of this study is to find out what people do and don’t know.

23. In general, how well informed do you feel about asbestos?

*Use summary sheet.* Now I’m going to read out a few questions about asbestos. For each question, I want you to tell me how much you know about the subject, *(show card)* either:

a) You know about it and understand it pretty well
b) You know a little bit about it but are not confident you know enough
c) You don’t know but feel you should
d) You don’t know and you don’t need to know
Do you know:
1. Why asbestos is a risk to people involved in maintenance and refurbishment work?
2. The sorts of materials in general that might contain asbestos?
3. The sorts of tasks might put you at risk of asbestos exposure?
4. The different types of asbestos?
5. The things you should do when you come across asbestos during a task?
6. How to reduce the risk when you do need to work with it?
7. How to decontaminate yourself afterwards?
8. How to dispose of the waste which might contain asbestos?

Things they know about

“This section is about finding the messages that they received about asbestos, including any misconceptions and the sources of those messages.

Select one topic (rotate topics across interviewees)

You said you felt you knew about X ….

24. Can you tell me briefly what you understand by that?
I’m just trying to get an idea what sorts of things come to mind. Please don’t worry about getting something wrong – it’s not meant to be a test.

25. Anything else?

26. Can you remember how and where you learned about that? And from whom?

Things they know a little about

Select one topic (rotate topics across interviewees)

You indicated that you might like to know more about X ….

27. Would you like to know more about this? Do you think it is important?

28. If yes, can you tell me why you think it is important to know about this?

29. Where do you think you might you get that information?

30. Are there other ways you would prefer to find out about it?

Things they feel they need to know about

Select one topic (rotate topics across interviewees)

You indicated that you might like to know more about X ….

31. Can you tell me why you think it is important to know about this?

32. Where do you think you might you get that information?

33. Are there other ways you would prefer to find out about it?

Things they don’t think they need to know about

Select one topic (rotate topics across interviewees)
34. You said that you don’t need to know about X, can you tell me why you think this isn’t important in your job?

**BEHAVIOUR BARRIERS**

**Identifying asbestos**

35. How do you find out if there are any asbestos risks (location/task) at the start of a job?
   - shown written plans
   - told formally
   - hear informally
   - find out as you are working on it

36. *If they are sometimes told and sometimes not told in advance…what is different about those jobs where they are told/not told?*

37. Do you ever ask for information on asbestos in specific buildings?
   - If no, what do you think would happen if you did ask?

**Working with asbestos**

The aim of this section is to determine the critical requirements that need to be in place for an individual to follow good practice when working with asbestos, which is done by examining specific incidents. It is necessary to keep the discussion focussed on the example, leading the interviewee back to the incident if they start to offer general opinions. We are not trying to identify what good practice means – that has already been determined – though it is of interest to see what the interviewee considers to be appropriate behaviour.

**Interviewer reminder**

**Incident** – coming across something that they either knew contained asbestos or thought might contain asbestos when conducting maintenance work

**Good practice** – examples:
   - minimising dust creation
   - protecting self from breathing fibres
   - cleaning up appropriately

**Critical requirements** – what we are looking for, ie surrounding circumstances, influences, thoughts, attitudes, pressures.

**Identifying the incidents**

38. I want to find out what workers tend to do when they think they may have come across asbestos, and one way to do that is to look at specific incidents. What we do is we gather a couple of examples from the people that we are talking to and then we look across all the incidents to see why sometimes people deal with asbestos in different ways. The time when someone didn’t deal with it well is just as valuable to me as when you or a workmate did. And remember everything you say is confidential. You will not be individually linked to any of the practices you describe. Explaining how data is used is more reassuring that simply promising confidentiality.
39. Can you think of a time that you, or a workmate you were working with, came across something that you either knew contained asbestos or you thought might contain asbestos? If they reply ‘never work with asbestos (anymore)’, see if you can get any incident from the past and if that fails skip to 56.

40. Thinking about that time, what was the job/task you were doing/asked to do?

41. When was that?

42. Please describe what happened and what you did.

Repeat the above to identify a couple of examples (ideally ones which are easily recalled), where different behaviours were displayed. If you are having difficulty identifying the incidents you can engage the interviewees’ help by using questions around the good practice rules below. It is OK to tell them the ‘rules’ if required.

<table>
<thead>
<tr>
<th>Good practice (basic rules) Questions in bold</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Being shown a plan of where the asbestos is located and having a risk assessment or method statement for doing the job. <strong>Were you given any instructions about asbestos at the start of the job?</strong></td>
</tr>
<tr>
<td>• Keep asbestos materials (including waste) damp whilst you are working on them. <strong>Were the asbestos materials wet or dry?</strong></td>
</tr>
<tr>
<td>• Don’t use power tools on asbestos materials; they create dust. Use hand tools instead. <strong>What types of tools did you use on the asbestos materials?</strong></td>
</tr>
<tr>
<td>• Use a suitable mask when you can’t avoid creating dust. Don’t breathe it in. <strong>Did you have access to a mask? What type of mask? Did you use it?</strong></td>
</tr>
<tr>
<td>• Clean up as asbestos dust as you go with a type ‘H’ vacuum cleaner. Don’t use brooms or brushes. <strong>How did you clean up any dust afterwards?</strong></td>
</tr>
<tr>
<td>• Double bag asbestos waste before it dries in heavy-duty polythene bags. <strong>How did you get rid of the waste?</strong></td>
</tr>
<tr>
<td>• Wash before meals and before you go home. <strong>Were there any washing facilities at the place you were working – did you use them?</strong></td>
</tr>
<tr>
<td>• Don’t bring contaminated clothing home. <strong>Did you get a chance to change out of your work clothes before going home? What did you do with your work clothes afterwards?</strong></td>
</tr>
</tbody>
</table>

**Explore the incidents**

*Probe the details of each incident in turn. It is okay to work with an incident that involved a workmate coming across asbestos if the interviewee was present.* Thinking about the incident when you/your workmate …

43. Were you aware of the location of the asbestos in advance, from what source?

44. Why did you think it might contain asbestos? What triggered that knowledge?

45. Can you tell me what you did when you discovered it might be asbestos?

46. Were you working alone? Who were you working with?

47. Can you tell me generally about the background to that job?

- What was the client/customer like?
- How did you get on with the boss?
- Was the budget for the job particularly tight or generous?
• How about the timescale for the job?
48. What did the people you were working with do and say at the time?
49. What about the bosses/foremen/people in charge of the job? What did they do/say?
50. Did you speak to anyone else about it? What was their reaction?
51. What did you think at the time?
52. How much choice did you feel you had about continuing with the task (without taking further precautions)?
   • What were the external pressures at the time?
   • What would you have lost?
   • How did you feel about that?
53. What happened as a result of what you/your workmate did? What was the outcome?
54. Did you think the asbestos risk was dealt with well?
55. Can you now think of a time when you dealt with an asbestos risk differently (repeat from q 36). How about someone you worked with, something you saw someone doing? *Skip the next section if appropriate.*

**Never worked with ACMs (anymore)**

This section is suitable if they reply that they ‘never work with asbestos’. Info: May say it was only white asbestos, asbestolux, turnabestos or marinite (all of which do contain asbestos).

56. Can you tell me if you or a workmate have done any work which involved:
   i. insulation board (on walls, near electrical or heating components), partition walls, ceilings either tiled or spray coated
   ii. roof sheet, tiles or cladding
   iii. pipework which was covered in spray-on insulation or other lagging.
  
*Chose one example (rotate across interview from the three types of job).*

57. Can you tell me more about that? Describe what you did.
58. Check whether the task involved
   • drilling into it, removing it, repairing it, painting it
   • cutting it, removing, repairing or tidying it up?

59. What were the general circumstances surrounding the job?
   • What was the client/customer like?
   • How did you get on with the boss?
   • Was the budget for the job particularly tight or generous?
   • How about the timescale for the job?

60. Were you working alone? If no, Who were you working with?
61. Did you know what the board/tiles/roof/insulation was made of? If yes: What was it?
62. How did you know or discover what it was made of?
63. Why were you sure it did not contain asbestos?
64. What did the people you were working with do and say at the time?
65. What about the bosses/foremen/people in charge of the job? What did they do/say?
66. Did you speak to anyone else about it? What was their reaction?
67. What did you think at the time?
68. How much choice did you feel you had about continuing with the task (without taking further precautions)?
   • What were the external pressures at the time?
   • What would you have lost?
   • How did you feel about that?

**REACTION TO ASPEROS GUIDANCE**

69. Have you come across these HSE materials (show Alert Card, Hidden Killer Leaflet)?
   Have you had a look at them?
70. Do you find this sort of thing helpful? *If yes:*
   • In what way? How do you use it?
   • Has it changed the way you approach tasks? In what way?
71. The HSE publishes materials like these (alert card and leaflet), what other ways of getting information would you find (more) helpful? *Only prompt if necessary*
   • Video of real life stories
   • Newspaper or radio coverage
   • Trade magazine articles
   • Formal Training course
   • Group discussions with interested others
   • Informal/on the job training or discussion

**FINALLY ...**

**Health issues (use summary sheet)**

Finally, I have a few personal questions …

72. Do you mind telling me your age?
73. Do you smoke?
74. Do you have any illnesses or health conditions?
75. Do you know anyone who has had an asbestos related disease?

**Wrap up**

• Provide them with your card and information leaflets.
• Remind them that you cannot provide legal or health advice.
• Reassure them of confidentiality.
• Summary will be available if they wish to receive one.
• Get signature for voucher.
<table>
<thead>
<tr>
<th></th>
<th>SHOW CARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>You know about it and understand it pretty well</td>
</tr>
<tr>
<td>2.</td>
<td>You know a little bit about it but are not confident you know enough</td>
</tr>
<tr>
<td>3.</td>
<td>You don’t know but feel you should</td>
</tr>
<tr>
<td>4.</td>
<td>You don’t know and you don’t need to know</td>
</tr>
</tbody>
</table>
SUMMARY SHEET

Current work

1. Occupation:
   - Electrician
   - Plumbing & heating engineer
   - Painter & decorator
   - Carpenter & joiner
   - Other maintenance worker

2. Size of company:
   - Sole trader
   - Very small (less than 10)
   - Small (less than 50)
   - Medium (50 to 250)
   - Large (more than 250)

3. Sector:
   - Public
   - Private

4. Contract:
   - Casual/very short-term
   - Fixed term
   - Permanent

5. Proportion of time on domestic work:
   - Majority - Over 75 per cent
   - Mixed - Between 25 and 75 per cent
   - Minority – Less than 25 per cent

6. Mainly work alone:
   - Yes
   - No
**Awareness and knowledge**

1. Please tick level for each topic
2. Then circle areas explored

<table>
<thead>
<tr>
<th>What you should know</th>
<th>Know well</th>
<th>Know a little</th>
<th>Feel should</th>
<th>Don’t need to know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why asbestos is a risk to people involved in maintenance and refurbishment work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The sorts of materials in general that might contain asbestos?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The sorts of tasks might put you at risk of asbestos exposure?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The different types of asbestos?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The things you should do when you come across asbestos during a task?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to reduce the risk when you do need to work with it?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to decontaminate yourself afterwards?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to dispose of the waste which might contain asbestos?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Health issues**

Age __________ (write in)

Smoke?
- Yes
- No

Any illnesses or health conditions________________________________________________________

Know anyone with an asbestos related disease?
- Yes
- No

IES ID_____________________________
APPENDIX 2: ATLAS.TI METHODOLOGY

The analysis of interview transcripts was aided by the use of a qualitative analysis software package named Atlas.ti. Using qualitative software rather than traditional analysis methods has a number of advantages. It allowed a systematic exploration of themes, ensuring that all the interview data was used, and promoted consistency in analysis of all the in-depth interviews conducted by a number of researchers. It is important to note, however, that Atlas.ti is not the method of analysis in itself, rather it is a tool for conducting the analysis. Atlas.ti allows users to organise various kinds of data (in this case Word documents containing interview transcripts) according to ‘codes’ and ‘families’.

The code list was developed by the research team, with each code being carefully defined to ensure consistency of coding between the researchers. The code list was based loosely on the discussion guide, however, it also incorporated some initial themes that had been identified through conducting the interviews. The analysis also made use of ‘memos’ to allow researchers to explore additional themes and codes as they read through and analysed the transcripts. Families were used to group each transcript by demographic and other sampling criteria, and were subsequently used to order the coded data.

All team members conducting the analysis with Atlas.ti were trained in the software, and familiarised with the code list and families to ensure consistency of application throughout the coding process. The process of using Atlas.ti consisted of importing the transcript document, assigning it to the appropriate families, and then reading through the document. As the researcher read through the document, sections of text which pertained to the codes were highlighted, and the appropriate code was applied (this is done by ‘dragging and dropping’ the code from the code list to the highlighted section of text). When the document was completed, it was possible to scroll through to view where and how the codes had been applied to the data and where overlap between codes had occurred.

The next step in the Atlas.ti analysis was to collect the coded data using ‘output’: this sorts the sections of transcripts which have been linked to the codes, using the ‘query tool’. The query tool in Atlas.ti allowed the researcher to combine codes and families in a variety of ways. The queries that were run were informed by the process of coding the transcripts, and the overlap between the code list and the final report structure. Themes and sections of the discussion guide (represented through the code list) were grouped into sections to be described and developed in each of the chapters. The researchers then used the printed Atlas.ti output to identify themes, trends, and interesting examples, for the different sections of the report. Because the Atlas.ti output was a collection of data (sections of text) from the interviews with respondents, the themes and issues emerging from the research at this stage were easily highlighted using accurate quotes which appropriately represent the range of views and opinions expressed.

FAMILIES

Occupation: Electrician
Occupation: Joiner/carpenter
Occupation: Plumber/heating engineer
Occupation: Painter/decorator
Occupation: Other/mixed trade
Size of company: Sole
Size of company: Small/medium (2-49)
Size of company: Large (50+)

Domestic work: majority
Domestic work: mixed
Domestic work: minority

Work alone: Yes/mainly
Work alone: No

Age: under 30
Age: 31 - 40
Age: 41 - 50
Age: 51 - 60

(ARD - Knows anyone with an asbestos related disease)
ARD: Yes
ARD: No

Training: Apprenticeship (or equivalent) in same or related trade
Training: Some courses and work-based training
Training: No formal training – only on the job training

Sector: Private
Sector: Public

Smoke: Yes
Smoke: Used to but quit
Smoke: No
CODES

Profile
P1: details of current work (1.2.1), work history (1.2.2), training history (1.2.3)
P2: health issues (1.7.1)

Attitudes to asbestos risks
A1: messages from any Asbestos training (1.3.1), other sources of messages (1.3.2)
A2: sense of control (1.3.3)
A3: how seriously they take the asbestos risk (personal)
A4: changes in attitudes towards asbestos over time

Working with asbestos
B1: perceived level of contact with asbestos (1.3.4): current, and historical
B2: recognising asbestos: how they recognise it, ease/confidence in recognising it, or not recognising it, where they expect to find it (Q22 and other areas)
B3: ways of finding out about asbestos on a job (apart from recognising) (1.4.1)
B4: Critical Incidents: good examples, less good examples, also if never worked with ACM’s, personal assessments of how well asbestos risks are handled (Q44), and any mentions of working with asbestos – (1.4.3) CODE ALL HERE
B5: reasons given for taking risks when working with/around asbestos: rationalisations
B6: influence of colleagues and others (positive and negative)
B7: how much choice/control around situations involving asbestos (Q42)

Awareness and knowledge
(Code answer to each question, and then code answers to probes for each corresponding question – from following sections: 1.5.2, 1.5.3, 1.5.4, 1.5.5).
C1: general confidence in awareness/knowledge of asbestos (Q53 and elsewhere)
C2: ‘why a risk to people involved in maintenance and refurbishment work’
C3: ‘materials that might contain asbestos’
C4: ‘tasks that might put you at risk of asbestos exposure’
C5: ‘types of asbestos’
C6: ‘things you should do when you come across asbestos during a task’
C7: ‘reducing the risk when working with asbestos’
C8: ‘decontamination’
C9: ‘disposal’

Asbestos guidance
G1: reactions to HSE materials: seen before, find it helpful, how they might be used
G2: preferences for other formats (Q67)
Taking risks with asbestos
What influences the behaviour of maintenance workers?

Asbestos is the single greatest cause of work related fatalities, and is still present in many buildings from the 1950s, '60s and '70s. Today, the workers most at risk of contracting an asbestos related disease are those in construction related trades who conduct maintenance work on these buildings. This report presents the results of 60 interviews with maintenance workers (including electricians, joiners/carpenters, plumbers/heating engineers, and painters/ decorators), who discuss their attitudes towards, knowledge about, and behaviour around, asbestos.

The research found that there are a range of issues affecting how likely an individual is to behave safely around asbestos, including:

- technical issues regarding the complexity of the message about asbestos and how to deal with it effectively;
- psychological issues, such as attitudes towards risk and personal health;
- cultural factors, such as prevailing worksite culture and economic pressures; and
- control factors, and whether individuals feel able to exert control over their work environment.

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