Why a National Asbestos Database Can and Should be Established

Introduction

The use of all asbestos in building and construction was finally banned over twenty years ago. Despite this, millions of tonnes of this highly carcinogenic material remain in hundreds of thousands of buildings across the United Kingdom (UK). Regulations require those responsible for the maintenance of individual buildings, 'duty holders', to record and assess the location and condition of all asbestos on their premises. Yet it remains a fact that we do not know with any certainty where precisely this material can be found, what type of asbestos is present, in what quantity, or what condition.

For over a decade now, there have been calls for a centralised register, in effect a national asbestos database, to assure public safety (Taylor 2008). During this time there has been an increase in the number of asbestos related deaths amongst teachers and nurses (occupations not traditionally associated with exposure) and the number of claims against the NHS by staff who have been exposed to asbestos. Despite this no significant action has been taken to address the underlying concerns that the management of asbestos 'in-situ' might need significant reform.

We have called for Government to establish a central register of all asbestos currently in place in public buildings across the UK (including schools, hospitals and social housing). In response to this the Health and Safety Executive (HSE) stated:

'It is not clear what additional benefits a national database would have over [existing practice]. Given the number of buildings in Great Britain that contain asbestos; the amount of maintenance and refurbishment work that is done on buildings; and the degree of detail on each building required to make the data accurate; any such national system would be hard to achieve and very difficult to maintain.'[1]

This paper challenges the HSE position, arguing that a national database would bring a range of benefits. Furthermore, that new technology may be used to feasibly create and maintain a national database.

[1] This statement was provided by the HSE for the Shelagh Fogarty Show on LBC radio, quoted here at 8:37 minutes into the recorded broadcast about asbestos in the UK.

Background and context

The Control of Asbestos Regulations (CAR12) require that information about the location of asbestos is shared with those who use buildings and who may disturb it. This may include building occupants (residents and workers), visitors (such as hospital patients) and building maintenance contractors, amongst others. There have, however, been concerns that many duty holders face logistical difficulties when distributing asbestos registers to all who should see them. This is a particularly problematic when large or multiple buildings are involved and in schools where the duty holder varies depending on the type of institution. This confusion has prompted calls for the creation of a national database to improve compliance with CAR12.

Duty holders are required to keep an asbestos management plan, which includes an asbestos register, providing information on the condition and location of all asbestos on premises (CAR12 2013: 36). These are often long documents that contractors are uninclined to read thoroughly, instead of being short and digestible. Data on the locations of asbestos often does exist; however, it may be available in a piecemeal and confusing format, which creates problems with compliance. We have a patchwork quilt of asbestos registers being used, both in terms of quality and format, which makes it difficult to ensure compliance.

In April 2018, a I.0.S.H survey indicated that one in three construction workers indicated they have never checked the asbestos register before starting work on a new site and one in six did not even know of their existence, despite being one of the most at-risk categories of worker (IOSH 2018a).

There are certainly thousands and possibly tens of thousands of accidental disturbances of asbestos in the UK every year by those who have not been made adequately aware of the locations or dangers of asbestos. These include teachers, pupils, building maintenance and construction workers. Although data is scarce and many of these disturbances go unreported, the implication is that thousands of duty holders continue to fail to fulfil their legal responsibilities, allowing thousands of avoidable asbestos exposures to recur every year in the UK.

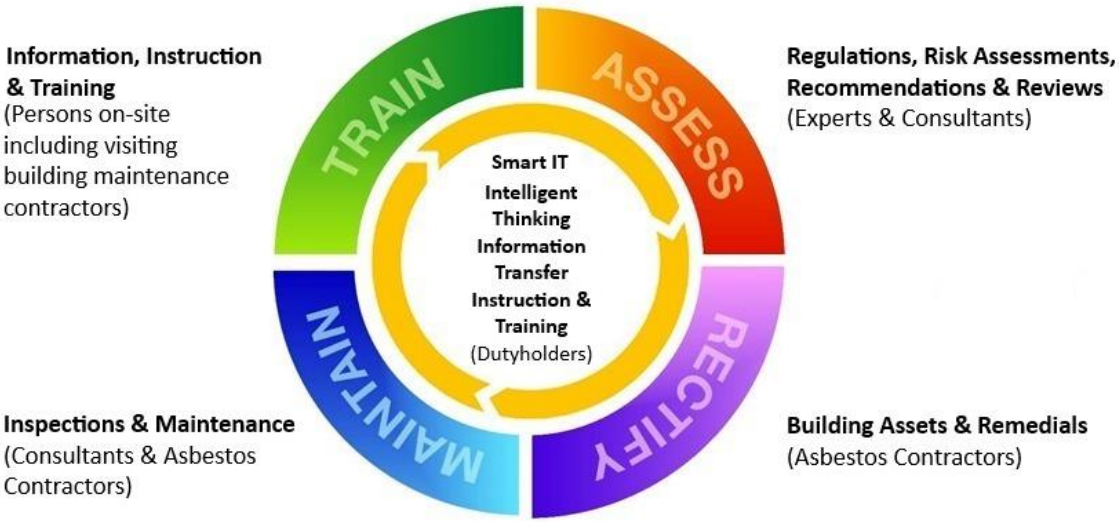
There have been numerous Freedom of Information requests which indicate an increased risk of exposure in public buildings and demonstrate how difficult it remains for duty holders to provide accurate information. In July 2019, we conducted Freedom of Information requests with all Local Education Authorities (LEAs) in Great Britain, to determine the extent of the asbestos problem in schools. Only 47.5% of LEAs provided complete data on the type of and location of asbestos in their schools (Morrin, Aldane and King 2019: 25).

In September 2019, Mesothelioma UK sent Freedom of Information requests inquiring about claims made against the NHS by staff exposed to asbestos. They found an increase in claims – from 38 in 2004/5 to 140 in 2018/19 (Morrin, Aldane and King 2019: 18). Schools and hospitals are high risk locations, meaning teachers and nurses face an increased risk of exposure. It is difficult to ensure compliance with CAR12 on these premises.

Improving safety compliance

The 'Safety Compliance Cycle' was developed by Andrew Paten, Co-founder of UKNAR CIC and Co-founder of the Metro Safety Group,[2] as a simplified model to aid the understanding of management of health and safety responsibilities. It can be adapted to a range of building safety compliance disciplines. It breaks health and safety compliance requirements into four key components that need to be connected and joined up effectively if compliance is to be achieved and asbestos exposures prevented in buildings where asbestos is known or believed to be present.

Joining up the 'Safety Compliance Cycle for Asbestos'



When managing asbestos, joining up and connecting these 4 elements requires collaboration between the asbestos consultants, who record and review its condition; asbestos contractors, who rectify or remedy issues when necessary; asbestos inspectors who monitor

[2] Metro Safety are preferred providers of fire, health and safety and building services to many of the UK's leading managing agents and property owners, as well as major retailers, housing associations, local authorities and other commercial occupiers.

the condition of the asbestos plus the relevant building occupants and visitors , including a wide range of contractors who must be suitably informed and adequately trained about how to deal with any asbestos risks they may encounter in the building. Unfortunately, there is often poor or little communication between the various stakeholders which can result in non-compliance with CAR12 and higher rates of asbestos exposure. To address non-compliance and prevent avoidable exposure to asbestos all elements of the safety compliance cycle need to be joined up and working together.

To join up compliance effectively across a large number of properties on any scale cannot be done without some form of Smart IT. This does not just require Information Technology systems. Smart IT requires Intelligent Thinking by the duty holders to make meaning of the information provided. It requires Information Transfer to all the key stakeholders on a timely up to date basis and it requires appropriate Instruction, Information & Training for those persons at risk on site and in buildings where asbestos is known or believed to be present.

A competent expert is first required to assess and review the condition of asbestos products, identifying the risk and recording this in the management plan. Significant findings from this first stage must be acted on in a timely manner. This may involve Building Remedial works which in the case of asbestos may involve rectifying damaged products by removing or encapsulating them. Where remedial or removal works are required, CAR12 requires that these works are carried out by contractors that can demonstrate their competence and have adequate training. Works on some types of ACMs (asbestos containing materials) can only be done by contractors that are licensed by the HSE. Once this has been done there is a requirement for any asbestos allowed to remain in situ to be maintained in safe condition using regular inspections to identify any potential deterioration or disturbance.

One of the greatest risks of disturbance occurs when other building maintenance contractors', tradesmen or site occupants carry out maintenance and minor works or works which are not controlled by CDM (Construction Design and Management Regulations 2015) and are unrelated to asbestos. Mostly, these works are not controlled or managed as well as larger projects. Frequently, a wide range of maintenance staff and other visiting contractors carry out works with little or no on-site management presence. It is often when these works are carried out that the contractors unwittingly disturb asbestos materials due to a lack of communication and relevant site information compounded by a lack of adequate training. All contractors and persons on site must be given adequate training and information to manage the risk of asbestos. This is a requirement of CAR12 but often the persons on site including visiting contractors do not receive either the information or the training they need.

The result is a disconnect in the 'Safety Compliance Cycle', as information is not easily or effectively shared or transferred between the different stakeholders. And there are numerous examples of where this is the case. In one instance the asbestos lagging was left

behind after the removal of a pipe in a NHS hospital. By the time the duty holder (NHS Trust) had discovered the problem they were unable to identify the contractor. Such failures are not just a problem for duty holders: the relevant consultants, visiting contractors and other building occupants are frequently ill-informed and unaware of each other's role or activities. Not only may they be putting themselves and others at risk they may also be failing in their own duty of care responsibilities.

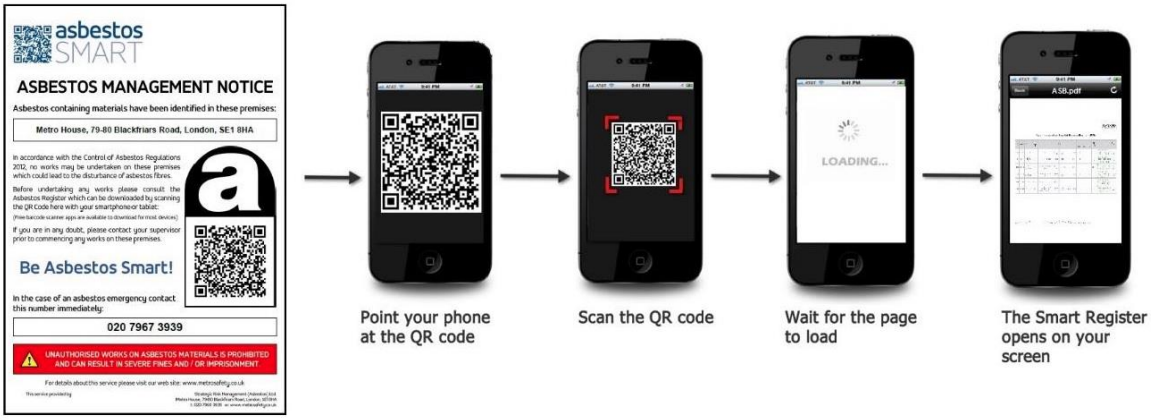
A centralised database would allow a data record of all contractors and consultants who work in a building to be easily incorporated into a shared system. It would also allow for up to date assessment on the condition of asbestos in buildings. And it could more usefully quantify the amounts and different types of asbestos present, which could inform a cost-benefit analysis for the phased removal of all asbestos, starting with the buildings presenting the greatest risks.

The Solution

The problems in the UK are that data about asbestos in buildings is scattered and incomplete and that current methods take too long to access details about the quantity and location of asbestos in buildings. There is no common shared or easily accessible source recording exactly where asbestos can be found. This makes it much harder to manage asbestos intelligently and safely to avoid unnecessary disturbances.

There are better systems for managing asbestos in-situ. Poland have introduced an 'Electronic Spatial Information System' (effectively a national database), to aid and monitor their commitment to remove all asbestos by 2032 (Ministry of Economy 2010: 24). Many responsibilities for completing this national database have fallen onto local authorities. The Dutch have also established a national database for all hazardous substances in buildings, including asbestos. The UK can learn from and build on these examples with the use of new technology.

UK National Asbestos Register (UKNAR CIC) is a new social enterprise established to help duty holders manage asbestos simply and safely while better informing and educating those people who may be at risk. UKNAR CIC have developed Asbestos SMART. It is a simple innovation, which gives contractors and key personnel easy access to a building's asbestos register on their mobile phone. Enrolled buildings are given a unique QR Code that can be incorporated into a sign, reminding visitors to scan the code so they can download the building's asbestos register in seconds.



The four components depicted in the asbestos Safety Compliance Cycle – experts & consultants, building assets & remedials, asbestos contractors and building occupants - can all be joined up and connected through Asbestos SMART. As properties age, asbestos deteriorates in-situ becoming a greater threat to public health, which is why asbestos-containing materials are inspected periodically. It is crucial that this data can be updated easily and accessed by the different stakeholders in the Safety Compliance Cycle. Asbestos SMART provides instant access to the asbestos register, so all relevant site visitors, contractors and building occupants can view up to date information on the condition and location of asbestos on that site, in order to avoid putting themselves and others at risk.

The creation of a national database using new technology such as Asbestos SMART, would bring a range of benefits:

- The buildings asbestos register can be accessed 24/7
- Money is saved on storing and distributing asbestos registers
- Accidental disturbances will be reduced, immediately saving significant clean-up costs, expensive unplanned building remedial works plus longer term medical and compensatory costs
- Public reassurance that asbestos is being managed appropriately
- Provide centralised and standardised data, which government and other stakeholders could utilise. Note: The HSE are responsible for auditing asbestos registers, this could be done automatically with a national database.

Modern technology has substantially reduced the cost of creating a national database. In particular, the costs of large-scale data storage and associated data transmission have gone down dramatically. Based on a small current working prototype and market research the UKNAR CIC have estimated that it would cost less than £1 million to set up and develop a national asbestos register database, working with key stakeholders which would be suitable for up to 500,000 workplaces. This could be completed within one year. Thereafter, it could

be self-financing from duty holders willing to pay between £100 and £200 per year for each premise or asbestos register on the system.

The costs of establishing such a system pale in comparison to the costs of compensation claims and asbestos remedial work. The average award to successful applicants in the fourth year of the Diffuse Mesothelioma Payment Scheme's operation was around £145,000, an increase from £141,000 on the previous year. Since the scheme was launched in April 2014 it has helped just under 1,000 sufferers of mesothelioma with £133.8 million awarded in compensation (Diffuse Mesothelioma Payment Scheme, 2018). While even a small asbestos clean-up costs several thousand pounds and often tens of thousands of pounds, including replacement of furnishings, carpets and remedials. Bigger events can close down buildings including entire schools and in effect, cost millions of pounds – considerably more than it will cost to establish a national asbestos register!

Conclusions

A national asbestos database can and should be established. The HSE's view that this cannot be achieved without significant investment of capital, time and resources in the design and ongoing maintenance of such a system is simply out of date. The fact that the technology already exists, and that current IT platforms and applications can effectively do this job points to the need for an urgent shift in attitude. This is particularly true while there continue to be thousands of avoidable asbestos exposures and duty holder failures. every year. In today's climate, post Grenfell Tower, there are likely to be increasing demands for proof of safe management in public buildings, including the safe management of asbestos where it remains.

This technology can form the basis for a central data source, which could be brought together by HSE/Government so that data captured by apps, such as Asbestos SMART, is integrated and stored centrally. Not only would this provide a more effective and efficient safeguard to public health, but it would also stack up economically by streamlining practice and minimising time intensive, paper-based systems, by reducing unbudgeted and expensive building remedial works and by minimising other long term associated medical expenses and claims. By having data in a consistent and accessible format, we add value to each public pound spent managing asbestos.

Getting the right information to the right people at the right time in a simple, meaningful, and accessible way allows people to protect themselves and can protect them from putting others at risk. Surely both Grenfell Tower and Covid-19 have proven this. Now, with the aid of modern technology a national asbestos database can help us to better achieve this for the safer management of asbestos at minimal cost. We do not see how it can be achieved without it.

Recommendations

1. **Government/HSE should adopt a unique QR Code / signage system as a compulsory requirement for all duty holders.**
2. **Government/HSE should promote, implement and invest in technology which helps with asbestos management, such as Asbestos SMART.**
3. **Government/HSE should commit to collating all asbestos data enabled by applications like Asbestos SMART into a central and shared source – a national database.**
4. **Government/HSE should utilise central stored data to inform the phased removal of asbestos.**
5. **Local authorities should play a key role in managing compliance with the enrolment of buildings in a visible QR Code / signage system.**

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