

## Written evidence from Institute of Occupational Medicine (ASB0006)

### Eradicating asbestos from public buildings in the UK

*The Institute of Occupational Medicine ([www.IOM-world.org](http://www.IOM-world.org)) is an independent not-for-profit scientific research and consulting organisation dedicated to understanding those factors that affect human health in the workplace and in the wider environment and promoting practices that lead to improvements in the health of workers and the wider population. We have a long experience in undertaking research on the health risks from asbestos and other hazardous substances.*

*The IOM recommends improvements in the control of exposure during work with asbestos and a careful scientific review of the pros and cons of any proposals to accelerate the eradication of asbestos from public buildings in the UK. The evidence to sustain the current approach of managing asbestos is limited and outdated, and further research is urgently needed to clarify the best ways to protect the health of the public and workers.*

In 2006 the World Health Organisation concluded that “the most efficient way to eliminate asbestos-related diseases is to stop the use of all types of asbestos” <sup>1</sup>. Many countries have banned the use of asbestos, including the UK in 1999, after playing an important part in introducing an EU-wide ban <sup>2</sup>. There is a movement for a worldwide ban on the use of asbestos <sup>3</sup>, and IOM supports this position.

The IOM is concerned that the cancer risks from asbestos exposure at the current workplace Control Limit (0.1 fibres/ml) are unacceptable. For example, in a recent review undertaken by the European Chemicals Agency it was identified that exposure to 0.1 fibres/ml for a working lifetime might result in around one additional cancer death in every 1,000 workers exposed <sup>4</sup>. In our opinion this is unacceptable, and the UK should reduce the exposure limit for asbestos to 0.01 fibres/ml or less and tighten up the required working methods to ensure that employees have safer conditions of work. This would require a different, more sensitive, measurement method to the one currently in use in the UK; such developments have already been implemented in France and other countries <sup>5</sup>.

In the UK and elsewhere, the important question is what to do about the asbestos that is already *in situ*, for example asbestos in buildings, especially public buildings such as schools, hospitals, administrative buildings and museums, particularly those constructed prior to the mid 1980s where there is a risk of the presence of the more friable types of asbestos building materials. What is an effective, and cost-effective way to ensure that any asbestos present causes as little risk as possible? Without stringent control and management, many groups of people will continue to be exposed: people who work in such public buildings; others who spend long periods there (some of these are vulnerable groups

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<sup>1</sup> [http://www.who.int/occupational\\_health/publications/asbestosrelateddiseases.pdf](http://www.who.int/occupational_health/publications/asbestosrelateddiseases.pdf)

<sup>2</sup> [http://www.ibasecretariat.org/lka\\_uk\\_ban.php](http://www.ibasecretariat.org/lka_uk_ban.php)

<sup>3</sup> Sim, M.R. (2013) A worldwide ban on asbestos production and use: some recent progress, but more still to be done. *Occupational and Environmental Medicine*. 70 (1), 1–2. Available from: doi:10.1136/oemed-2012-101290

<sup>4</sup> RAC. (2021) Opinion on scientific evaluation of occupational exposure limits for Asbestos. Helsinki: ECHA.

<sup>5</sup> <https://www.anses.fr/en/content/asbestos>

like children in schools, patients in hospitals); and even people who visit these buildings only occasionally.

The need for control and good management is especially important during periods of building maintenance or refurbishment, when there are increased risks that any asbestos containing materials present may be disturbed. What is the best way of ensuring the health and safety of people who work on maintenance, refurbishment and demolition? And when is it safe for other workers and the public to use the building? As we have noted, we believe the UK needs to have more exacting procedures to control any work that might disturb asbestos and more effective methods to measure exposures.

In October 2015 the UK All Party Parliamentary Group on Occupational Safety and Health recommended legislation to speed up the eradication of asbestos from buildings in the UK <sup>6</sup>. Their recommendations included the removal of asbestos in buildings to be “completed as soon as is reasonably practical, but certainly no later than 2035. In the case of public buildings and educational establishments, such as schools, this should be done by 2028.” The recommendations of the Group were not implemented.

However, there are potential disadvantages to eradication. It's costly, including the disruption to the use of the building while major works are in progress, and there are currently insufficient experienced workers to undertake such a large-scale programme. There is the potential for exposure during removal, which would need to be carefully controlled. Similarly, the risks posed by disposal of removed asbestos would need to be handled safely, and the long-term curation of the waste needs to be considered (the number of sites that accept asbestos waste has reduced greatly in recent years). A large eradication programme could bring new challenges, both for removal and for disposal; it would be essential to make sure that standards of control didn't slip. After even a well-conducted removal operation, we would expect background levels of asbestos within the building to be higher than before work commenced <sup>7,8</sup>, and a raised environmental background concentration might remain in the building for some time, (potentially weeks or months after the completion of the works); resulting in an increased risk of exposure for the many groups, workers and others, who use the building.

Current policy is based around managing asbestos in buildings, to maintain the materials in good order, removing asbestos whenever reasonably practicable during planned refurbishment, until the building finally needs to be demolished. This is the approach recommended by the HSE through the duty to manage asbestos on those controlling non-domestic buildings <sup>9</sup>. Complete removal is often not possible because asbestos containing components are part of the irremovable structure of some buildings. Such buildings will require stringent ongoing management and a residual risk of exposure will persist until sometime, possibly far into the future. In the short-term, management of asbestos is considered less expensive but may be more costly in the long run. If asbestos is present, there will always be some risk of disturbance and exposure.

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<sup>6</sup> [http://www.ibasecretariat.org/asbestosreadication\\_booklet\\_lo\\_res.pdf](http://www.ibasecretariat.org/asbestosreadication_booklet_lo_res.pdf)

<sup>7</sup> Burdett, G.J., Jaffrey, S.A. & Rood, A.P. (1989) Airborne asbestos fibre levels in buildings: a summary of UK measurements. IARC scientific publications. (90), 277–290.

<sup>8</sup> Mossman, B.T., Bignon, J., Corn, M., Seaton, A., et al. (1990) Asbestos: Scientific developments and implications for public policy. Science. 247 (4940), 294–301.

<sup>9</sup> <http://www.hse.gov.uk/asbestos/duty.htm#comply>

IOM welcomes a renewed debate about the management of asbestos in UK public buildings. However, we do not think that HSE has the scientific information to make an informed and fair-minded choice about the safety of alternative approaches to the current policy. IOM supports a well-designed research programme on comparative risks, to clarify whether and under what circumstances the risks involved in asbestos management outweigh the risks from accelerated removal and re-use of the buildings. This would involve finding out about issues such as the concentrations of asbestos that occur under different scenarios of maintenance or removal; how many people might be exposed, workers and the general public; and for how long that exposure may persist. We think there is limited evidence about these issues, but it should be possible to collect data to estimate the risks to health from different strategies or scenarios to inform the debate.

As in any exercise like this, there will be uncertainties at all stages of the investigation – uncertainties in estimating future exposures, in defining the population at risk, and in determining the risks from exposure, especially in children and in vulnerable adults (because the main evidence of risk currently comes from studies of workers who usually experience much higher exposures over many years). But reasonable assumptions could be made as a basis for comparing the effects of various strategies; and the research could examine if different assumptions would lead to different conclusions about what strategy is the most effective at protecting the health of workers and of the general public.

We think that the research is feasible and there is a responsibility to use the available data as fully as possible, so that policy can be based on real evidence. However, we do not support the integration of this investigation into a cost-benefit framework because the technical aspects of such analyses are designed to downplay future costs and benefits, i.e. technically by discounting things that occur in the future. Since the costs of intervening occur at the start of the process and the benefits in reduced cancer deaths do not accrue for many decades the system is structurally opposed to investment for long-term benefits.

This research is urgently needed to ensure we make the right policy choices for asbestos in the UK. Having done many similar studies in other contexts, we have no doubt that it would be useful to do this. The obvious benefits are in having evidence-based answers about relative risks, together with assessment of uncertainties and checks on the assumptions. But there are benefits also for decision making in having a clear view of the many elements that go into any overall estimation of risks and putting all these together into a coherent overall framework, such as a cost-effectiveness analysis.

In the meantime, there is a continuing need to ensure that whatever asbestos is present in buildings is identified reliably, that its condition is understood and managed properly, and that all potential disruption is identified in advance and suitable precautions are taken. In our view this should include a measurement-based assessment of the potential for exposure to asbestos (whether maintained or removed). In addition, there must be more stringent asbestos management to substantially reduce the exposure of workers and bystanders.

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