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THE CONTINUING DANGER POSED BY ASBESTOS

Introduction

Despite being banned since 1999, asbestos remains a threat, killing around 5,000 people in the UK each year. That figure is more than all of the people in the country who die on the roads annually.

In reporting this shocking figure, The Health & Safety Executive (HSE) state:

"asbestos is not just a problem of the past. It can be present today in any building built or refurbished before the year 2000."

In this Bulletin we will be considering how you may encounter asbestos where you work, what should be being done to protect you, and how you can get involved in taking action, both at work and through established national campaign groups.

What is asbestos?

Asbestos is the name for a variety of naturally occurring silicate minerals which contain fibrous strands or asbestos fibres. Once mined, crushed and milled, the various grades of raw asbestos fibres have been used in a variety of products with required properties such as:

- incombustibility
- high tensile strength
- low thermal conductivity
- flexibility
- water resistance

What are the different types of asbestos?

There are at least six different types of asbestos but the three in this list are the most commonly used:

- Chrysotile (or white asbestos), a member of the serpentine family of asbestos, noted for its softer and more flexible properties when compared to the amphibole category. Chrysotile is the most common form of asbestos;
- Amosite (or brown asbestos), part of the amphibole type, noted for its brittleness;

¹ See: https://www.hse.gov.uk/asbestos/dangerous.htm

• Crocidolite (or blue asbestos), another member of the amphibole family with thin and brittle fibres.2

What has asbestos been used for?

Asbestos has been in use since the Stone Age but first began to be seriously mined in the 19th Century and has subsequently been used in a number for products required by the construction industry, including:

- lagging for pipes and boilers
- in floor and ceiling tiles
- loose fill in cavities and ceilings
- water and sewage pipes
- toilet cisterns and seats
- cement roof panels
- partition walls
- fire proof dry wall compounds and fire blankets³.

Asbestos has also been used in car brakes and as insulation in steam and older diesel railway traction as well as for pipes, boilers and compartments within ships.

As the BMJ comment, asbestos: "came to be viewed, for the first two thirds of the 20th century, as the "indispensable" and even the "magic" mineral."4

The use of asbestos was widespread and not just in industry. In 2011, The Guardian newspaper reported that as many as 50% of UK homes could harbour asbestos containing materials in items that appear in the list above (eg, in ceiling tiles).5

Why is asbestos so dangerous?

As noted previously, the importation, supply and use of asbestos has been banned⁶ in the UK since 1999 but many buildings still have materials that contain this lethal substance.

When those materials are disturbed or damaged, fibres in a fine dust are released into the air. If the fibres are inhaled, they can cause serious diseases. Those diseases will not affect the people who work or live in the premises immediately because they often take a long time to develop, but, as the HSE notes, once diagnosed, it is often too late to do anything.

The types of fatal or serious diseases⁷ that asbestos can cause are:

Mesothelioma, a cancer almost exclusively associated with exposure to asbestos that is usually fatal because it is often not diagnosed early enough;

² See: https://www.oracleasbestos.com/what-is-

asbestos/#:~:text=Asbestos%20is%20the%20name%20for,many%20parts%20of%20the%20world.

³ This list is based on HSE information at: https://www.hse.gov.uk/asbestos/essentials/aib.htm

⁴ https://pmj.bmj.com/content/80/940/72

⁵ See: https://www.theguardian.com/money/2011/may/01/asbestos-hidden-health-hazard

⁶ Amphibole was banned in 1985 and Serpentine was banned in 1999.

⁷ See: https://www.hse.gov.uk/asbestos/dangerous.htm

- Asbestos-related lung cancer that looks the same as smoking related lung cancer. The HSE report that there is one lung cancer death for every mesothelioma death;
- Asbestosis is a serious scarring of the lungs attributed to many years
 exposure to asbestos that can leave victims with increasing shortness of
 breath and can be fatal;
- **Pleural thickening of the lung** caused by heavy exposure to asbestos that results in shortness of breath and chest pain.

How long has this issue been known about?

The negative health effects of exposure to asbestos were first noted in 1898 by Lucy Deane, one of the earliest women employed as an Inspector of Factories in the UK. Deane began monitoring four types of dusty work that year "on account of their easily demonstrated danger to the health of workers and because of ascertained cases of injury to bronchial tubes and lungs medically attributed to the employment of the sufferer."

She went on to observe that: "the evil effects of asbestos dust have also instigated a microscopic examination of the mineral dust by HM Medical Inspector. Clearly revealed was the sharp glass-like jagged nature of the particles, and where they are allowed to rise and to remain suspended in the air of the room in any quantity, the effects have been found to be injurious as might have been expected."

In 1900 a post-mortem conducted at Charing Cross Hospital in London by H Montague Murray on a man who had worked in a textile factory for fourteen years found traces of asbestos fibres in the victim's lungs. Subsequently, the UK's Inspector of Factories included asbestos in a list of harmful industrial substances in 1902.

The first diagnosis of asbestosis was made in 1924 and was followed by other reports that eventually led to a Parliamentary inquiry which published its findings in 1930. Those findings were that:

- the development of asbestosis was irrefutably linked to the prolonged inhalation of asbestos dust; and
- included the first health study of asbestos workers, which found that 66% of those employed for 20 years or more suffered from asbestosis

Subsequently, asbestos control regulations were introduced from 1931 alongside medical surveillance and compensation arrangements. Unchanged until 1969, these arrangements were rarely enforced, nullifying their effect.

Further research was prompted by the discovery in 1932 that asbestos was a cause of lung cancer. Later studies of asbestos workers found that a combination of smoking and asbestos dramatically increased the chance of lung cancer. Asbestos

⁸ Quoted in "Asbestos: from 'magic' to malevolent mineral" by David Gee and Morris Greenberg, Chapter 5 in "Late lessons from early warnings: the precautionary principle 1896–2000" available at: https://www.eea.europa.eu/publications/environmental_issue_report_2001_22

alone increased the risk five times whilst smoking increased it tenfold, but in combination the chance of developing lung cancer rose by a factor of 50!

Another line of research originated from South Africa where in the 1950s it was discovered that the number of cases of mesothelioma, a rare cancer, were rising, particularly in what they referred to as "environmental cases", people who lived in the area of asbestos mining but were not part of the industry. This led to other research that sought to investigate the users of asbestos that found insulation workers were at greater risk that those involved with manufacturing the products (although by that time the latter group increasingly had access to fans in their factories).

What was also discovered through the studies was how different periods of exposure to asbestos and differing latency periods could lead to different health outcomes. For instance, it seems that mesothelioma requires a matter of months of exposure but does not appear for around 40 years whilst lung cancer and asbestosis need ten or more years of exposure to asbestos dust, with the former having a latency period of 20-25 years.

Despite the known issues with asbestos, it was not finally banned in the UK until 1999, a hundred years after Lucy Deane first reported the issue.

A very readable short history of the progress of research and regulation around asbestos is that of "Asbestos: from 'magic' to malevolent mineral" by David Gee and Morris Greenberg.

This history shows how UK regulation before the ban on asbestos was slow and avoided banning the material outright despite the evidence that was being published about how carcinogenic it was.

Instead, regulation largely concentrated on reducing exposure limits, even when in 1986 "the World Health Organisation's s International Agency for Research on Cancer (IARC) had concluded that all three types of asbestos were carcinogenic and, as with other carcinogens, there was no known safe level of exposure to any of them."9

Substitutes for products made from asbestos were available in some forms from the 1940s. Gee and Greenberg, however, attributed the slow spread of asbestos substitutes partly to asbestos industry cartels that worked to inhibit their spread and partly because the market price of asbestos did not reflect the true costs of its full production, health and environmental effects.

Why is asbestos a continuing issue?

Asbestos continues to be an issue in Britain and worldwide.

It might be banned in this country, but many industrial or business (ie, nondomestic) properties still contain asbestos based products because they were built or modified before 2000. For this reason, the HSE estimated in a letter to the House of Commons Work and Pensions Select Committee that there are between 210,000

⁹ Page 57 of "Asbestos: from 'magic' to malevolent mineral" by David Gee and Morris Greenberg. Reps.

and 410,000 nondomestic premises contain asbestos with the best estimate being 310,000¹⁰

Are there regulations about the management of asbestos?

In order to manage the on-going presence of asbestos in non-domestic premises, legislation¹¹ has been enacted that places a duty on the "duty holder" who is either:

- the owner of the non-domestic premises or
- the person or organisation that has clear responsibility for the maintenance or repair of non-domestic premises (eg, through an explicit agreement such as a tenancy agreement or contract.

That duty is exercised by:

- taking reasonable steps to find out if there are materials containing asbestos in non-domestic premises, and if so, its amount, where it is and what condition it is in:
- presume materials contain asbestos unless there is strong evidence that they do not:
- make, and keep up to date, a record (a Register) of the location and condition of the asbestos containing materials - or materials which are presumed to contain asbestos:
- assess the risk of anyone being exposed to fibres from the materials identified:
- prepare a plan that sets out in detail how the risks from these materials will be managed;
- take the necessary steps to put the plan into action;
- periodically review and monitor the plan and the arrangements to act on it so that the plan remains relevant and up to date;
- provide information on the location and condition of the materials to anyone who is liable to work on or disturb them.

This information is taken from the HSE's Website¹² which also gives additional guidance in relation to:

- identifying the duty holder where tenancy agreements and maintenance contracts exist
- a list of types of premises covered by the legislation from which it becomes apparent that nondomestic premises does not cover residential buildings apart from common areas (eg, for access and circulation);
- how duty holders comply;
- the use of licensed contractors.

The Website also has a link to the updated Approved Code of Practice for the Control of Asbestos Regulations 2012. The document gives a lot more information

¹⁰ See Page 10, https://committees.parliament.uk/publications/9112/documents/159424/default/

¹¹ Regulation 4 of the Control of Asbestos Regulations 2012

¹² https://www.hse.gov.uk/asbestos/duty.htm#premises

and guidance and can be downloaded for free from: https://www.hse.gov.uk/pubns/books/l143.htm

Has the asbestos legislation been reviewed?

The 2012 Regulations are reviewed every five years. The first review¹³, in 2017, only suggested some changes in the light of experience that were covered by updating the guidance. A further review is being undertaken during 2022 but is awaiting the outcome of a Parliamentary Inquiry.

Has the Inquiry reported yet?

The Inquiry conducted by the House of Commons Work and Pension Select Committee looked at "The Health and Safety Executive's approach to asbestos management" and published its report in July 2022.¹⁴

The Committee began its Inquiry because of concerns about a lack of awareness of current asbestos exposure levels following accounts of people continuing to be exposed which led to a belief that the HSE should be doing more to gather a systematic picture of the current problem. The Committee also felt that instead of leaving asbestos to be managed in as many as 300,000 nondomestic premises, a strategic plan should be put in place to remove this cancer-causing material.

The objectives were prompted by the TUC and other anti-asbestos campaigners and came at a time when the HSE's funding had been nearly halved in real terms by the Conservative Government between 2010/11 and 2019/20.¹⁵

Following its Inquiry, the Committee's comprehensive report made a series of recommendations including that:

- all asbestos should be removed from non-domestic buildings within 40 years and
- that the HSE should commit to an increased level of inspections and receive greater funding from the Government.

The Government's response, 16 however, rejected the idea of a deadline, was silent on HSE funding and claimed that HSE's Business Plan already included provision for inspections.

Campaign and support groups around asbestos

There are a number of groups that are campaigning about asbestos issues and others that seek to support victims and their families. Amongst those groups are:

 Asbestos Victims Support Groups Forum (AVSGF) holds a list of groups across Britain that can offer support and advice and also participates in campaigning activities. Their website is: https://asbestosforum.org.uk/

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¹³ See:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/598574/post-implementation-review-of-the-control-of-asbestos-regulations-2012.pdf

¹⁴ See: https://committees.parliament.uk/publications/21884/documents/162937/default/

¹⁵ Page 5 of https://committees.parliament.uk/publications/21884/documents/162937/default/

¹⁶ See: https://publications.parliament.uk/pa/cm5803/cmselect/cmworpen/633/report.html#heading-1

- Cape Must Pay An AVSGF campaign that is demanding that Cape Intermediate Holdings (formerly Cape PLC), one of the biggest asbestos companies with mining interests in South Africa and which used to operate in Britain, should pay £10m towards mesothelioma research. Legal action by AVSGF in 2017 uncovered documents that showed Cape knew about the fatal consequences of working with asbestos products but suppressed the information. It also successfully lobbied Governments to weaken exposure limits and product warnings. See: https://asbestosforum.org.uk/cape-case/
- The National Asbestos Helpline which provides advice about asbestos compensation claims. See: https://www.nationalasbestos.co.uk/
 NOTE: TSSA members who think that they have been exposed to asbestos should register that fact with TSSA's lawyers if they develop symptoms and need to make a future claim. Please contact jenksr@tssa.org.uk to register.
- All-Party Parliamentary Group on Occupational Safety and Health
 chaired by Labour MP Ian Lavery and supported by MPs from across the
 political spectrum. It has a sub- committee devoted to asbestos which meets
 regularly with the trade unions and campaigners;
- Trades Union Congress not only provides the secretarial support for the APPG above, it also carries out research and campaigning work on asbestos. The TUC's Union Health and Safety Specialists group is currently researching levels of asbestos that remain in publicly owned nondomestic premises. One work stream concerns various railway buildings but others involve the NHS and local authorities.

What action should reps be taking?

TSSA recommends that in the first instance reps should use the list of duties that duty holders are obliged to undertake under the Control of Asbestos Regulations 2012 (see Page 5 of this Bulletin) and ask for information about:

- premises that still contain asbestos. The dutyholder/ employer should have an Asbestos Register;
- if the asbestos survey has been completed and, if not, what remains outstanding and when it will be completed by
- sight of risk assessments for members working in those buildings
- arrangements for updating information about the condition of asbestos containing products
- whether there is a plan for removal of asbestos
- reporting arrangements if members think asbestos has been disturbed.

Acknowledgements and further reading

In placing footnotes in this Bulletin, TSSA is seeking to gratefully acknowledge each of the publications and webpages that have been consulted to produce this document.

Reps and members should consider engaging in further reading about asbestos by reading the footnote material to obtain a fuller understanding of the issue. Two other sources of information are:

The NHS: https://www.nhs.uk/conditions/asbestosis/

Research by Imperial College, London: https://blogs.imperial.ac.uk/imperial-medicine/2018/02/02/the-asbestos-story-a-tale-of-public-health-and-politics/