vantify CONSULTANCY

Asbestos

Introduction

RESOURCE BROCHURE

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What is Asbestos?

Asbestos is a naturally occurring mineral fibre. It belongs to a group of silicate minerals found in the earth's crust, where it forms naturally over millions of years through heat and pressure.

Due to its fire resistance, insulating properties, and durability, asbestos was commonly used in a wide range of buildings, including offices, schools, hospitals, factories, warehouses, homes etc.

Although its use was banned in the UK once the health risks became known, asbestos containing materials (ACMs) can still be found in buildings which were constructed before the year 2000.

Asbestos containing materials (ACMs) are generally safe when intact and undisturbed. However, if these materials are damaged or their condition deteriorates, they can release microscopic fibres into the air. Inhaling these fibres can lead to severe health issues as detailed below.

Why is Asbestos Dangerous?

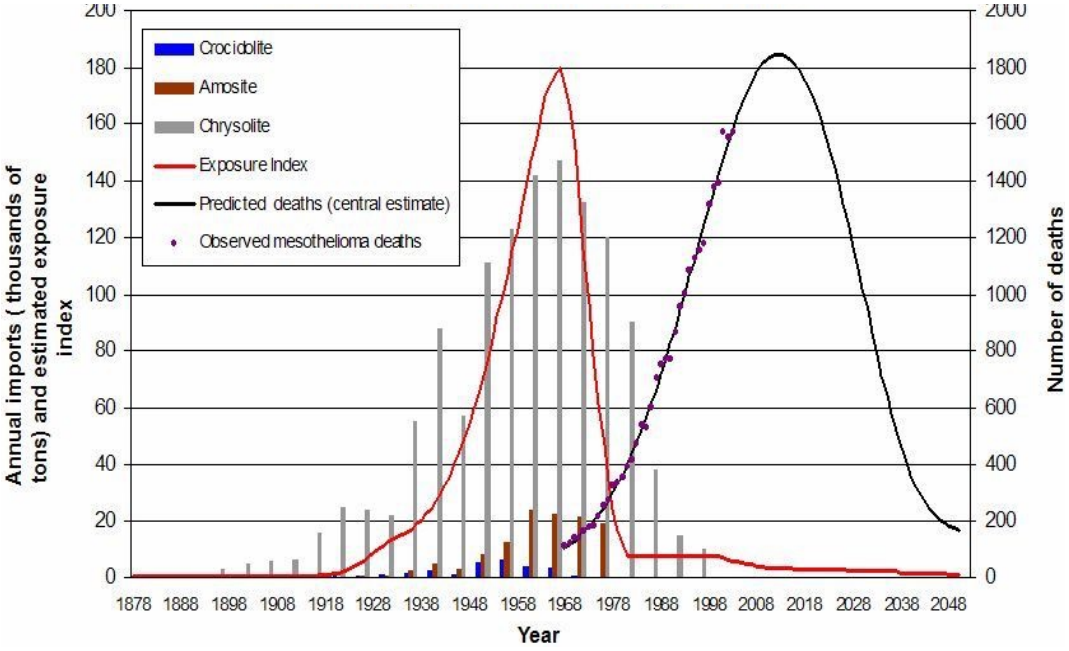
Asbestos becomes hazardous when its fibres are released into the air and inhaled. These fibres can get lodged in the lungs and other parts of the respiratory system, leading to serious diseases, such as:

- **Asbestosis:** A chronic lung condition caused by scarring from asbestos fibres. Symptoms include shortness of breath, persistent coughing, and chest pain. Over time, this condition can lead to heart failure due to the increased strain on the heart from decreased lung function.
- **Lung Cancer:** Asbestos is a known cause of lung cancer, particularly in those who smoke. Asbestos exposure significantly increases the risk of developing lung cancer, often decades after initial exposure.
- **Mesothelioma:** This cancer affects the lining of the lungs (pleura) and abdomen (peritoneum). Mesothelioma is almost exclusively caused by asbestos exposure and has a poor prognosis due to its aggressive nature.
- **Pleural Thickening:** This condition causes the lining of the lungs to thicken and swell, leading to shortness of breath and reduced lung capacity.

Identifying and managing asbestos effectively is essential - not only for legal compliance, but also as a critical health and safety responsibility. Proper asbestos management significantly reduces the risk of exposure, thereby protecting staff, contractors and building occupants.

Some Statistics

- Asbestos still kills around 5500 workers each year. This is more than the number of people killed in road accidents each year.
- Around 20 workers die each week as a result of past exposure to asbestos.
- Asbestos related deaths were predicted to start declining around 2010. However, to this day, the number of deaths is currently still rising.



Types of Asbestos

There are six types of asbestos, but three were commonly used in the construction industry:

- **Chrysotile (white asbestos):** The most commonly used form of asbestos has fine, flexible fibres. While chrysotile asbestos is somewhat less hazardous than other forms, it can still break into sharp particles that when inhaled, lodge in the lungs and remain there for decades. Chrysotile was legally banned in 1999.
- **Amosite (brown asbestos):** Amosite has brittle, spiky fibres that penetrate deeply into the lung tissue. It was commonly used for insulation boards and pipes, and it poses a high risk of causing lung damage due to its fibre structure. Amosite was legally banned in 1985.
- **Crocidolite (blue asbestos):** Crocidolite's thin, needle-like fibres are especially dangerous due to their tendency to easily become airborne and inhaled. Crocidolite is resistant to chemical breakdown in the lungs, making it particularly hazardous. Crocidolite was also legally banned in 1985.

*All forms of asbestos pose **significant health risks** when inhaled. The size, shape, and chemical makeup of the fibres allow them to bypass the body's natural defence mechanisms, leading to serious health conditions over time.*

Where Can You Find Asbestos?

Asbestos-containing materials (ACMs) were used in a wide variety of buildings, particularly in areas where heat resistance, strength, and durability were required.

ACMs can typically be found in:

- **Roofing Materials:** Asbestos was commonly added to roof tiles, felts, and flashing to enhance durability and weather resistance.
- **Insulation:** Pipe, boiler, and duct insulation in older buildings may contain asbestos, particularly in plant rooms and around heating equipment.
- **Floor Tiles and Adhesives:** Asbestos was often used in vinyl tiles and the adhesives that fix them to the floor, as well as in older linoleum products.
- **Ceiling Tiles:** Acoustic tiles, frequently used in ceilings for soundproofing, commonly contain asbestos.
- **Cement Products:** Asbestos-cement sheets and pipes were widely used in walls, roofs, and drainage systems due to their strength and fire resistance.
- **Window Glazing and Caulking:** In many older buildings, asbestos was added to improve weather resistance and strength in window caulking and glazing compounds.
- **Insulating Boards:** Asbestos insulating boards was used in many forms, including in walls and ceilings. Boards were often cut to size and installed wherever required, so the possible locations of asbestos insulating boards are endless.
- **Sprayed Coatings:** Sprayed-on fireproofing materials and insulation, commonly found on structural beams and ceilings, often contained asbestos for enhanced fire resistance.
- **Textiles, Ropes and Gaskets:** Asbestos was used in various textile products, including fire blankets, protective clothing, and insulation wraps for pipes and equipment. Rope seals, rope gaskets and card gaskets can be found on various plant, services and equipment.
- **Ductwork:** Insulation on ductwork, or rope seals within joints, particularly in older commercial buildings, frequently contain asbestos.
- **Heating Systems:** Some older furnaces and heating systems contain asbestos insulation, especially in the casing and around heat exchangers.
- **Plaster and Textured Paint:** Asbestos fibres were sometimes mixed into plaster and textured paints used on walls and ceilings for added durability.

It is essential to remember that asbestos may be hidden within walls, ceilings, or other structural elements. During refurbishment, repair, or demolition, any disturbance of these materials could release asbestos fibres, making it critical to identify and manage ACMs as early as possible.

Legal Duties

Under **Regulation 4** of the **Control of Asbestos Regulations 2012**, the dutyholder (person or organisation responsible for the maintenance and repair of the property) has a legal duty to manage asbestos in non-domestic premises.

This duty includes:

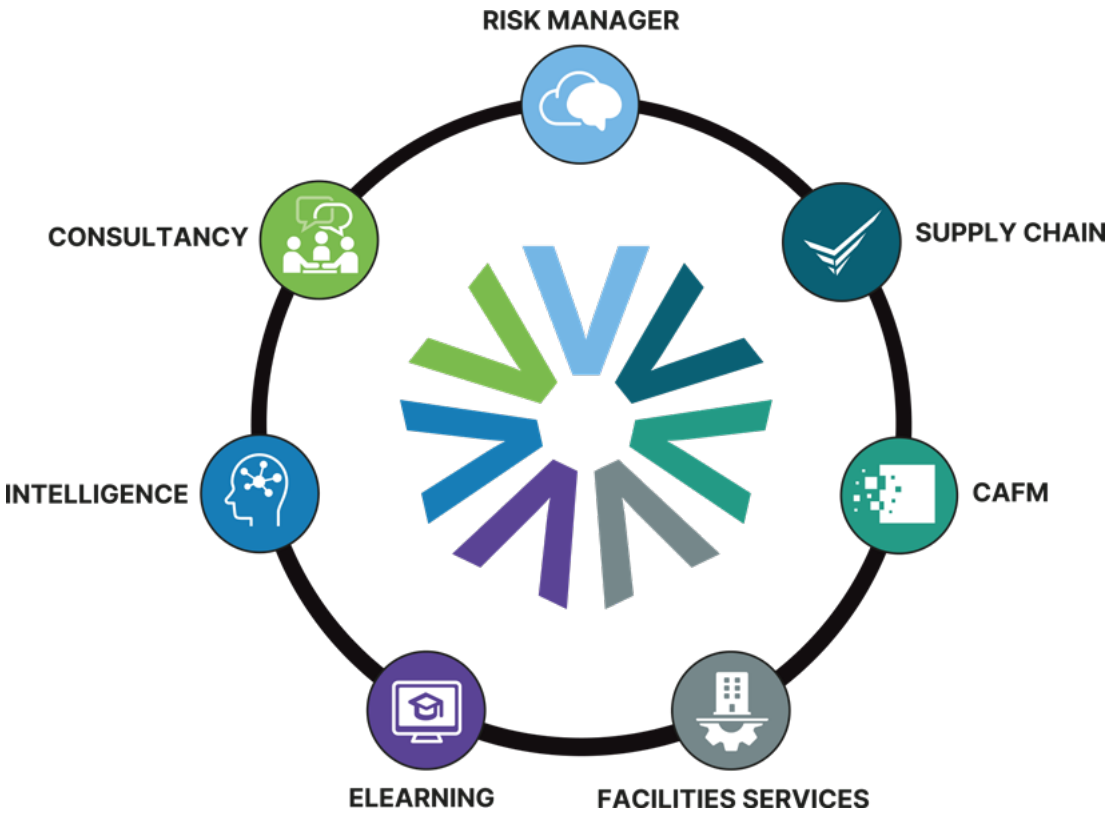
- **Identifying Asbestos:** The HSE recommends that this is achieved by conducting asbestos surveys. Asbestos surveys must be completed by a fully trained, experienced and competent asbestos surveyors. An asbestos survey will identify any asbestos within the relevant parts of the building, assess their condition, and offer appropriate recommendations.
- **Asbestos Management Plan:** Once asbestos is identified, a detailed management plan must be implemented to ensure safety and compliance with regulations. A management plan will ensure that asbestos risks are regularly assessed, properly managed and documented. This significantly reduces the risk of exposure, ensuring the health and safety of all staff, contractors and occupants.
- **Monitoring and Reinspection:** ACMs must be regularly inspected to monitor their condition and ensure they pose no risk. The HSE recommends this is carried out at least annually. However, more frequent inspections may be required depending on the risk and/or likelihood of disturbance.
- **Training and Information:** All employees who may come into contact with asbestos should be provided with appropriate training. This includes staff and maintenance workers.

In addition to the health risks posed by asbestos exposure, failure to manage asbestos in an effective way can result in severe legal consequences, including fines, prosecution, and civil liability.

Vantify Consultancy is accredited by UKAS to undertake Management, Refurbishment, Demolition & Reinspection Surveys in domestic, commercial and industrial properties.

If you require an asbestos survey, guidance or advice, please contact us.

The Vantify Ecosystem



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William Martin, Meridian, Prosure360, and Elogs have joined forces to create Vantify® - our unified ecosystem that provides a single vantage point for compliance and risk management.