

Tool Box Talk – Asbestos Awareness: The Hidden Killer

Introduction

Our work is solely conducted at the Bullring Centre which was completely rebuilt after the year 2000 and we know that this premises does not contain asbestos. But there are many buildings which were constructed or refurbished before the year 2000 which do contain asbestos.

This aim of this tool box talk is to give you an awareness of what asbestos is, the dangers it poses to your health and where it can be found in buildings and the action that should be taken if you come across it in premises and how to avoid the risk of exposure.

Asbestos can be found in any building built before the year 2000, which includes a vast variety of buildings; such as houses, factories, offices, schools, hospitals, etc.

The problem is that asbestos still kills around 5000 workers each year, this is more than the number of people killed on the road. Around 20 tradesman die each week as a result of past exposure. Unfortunately, asbestos is not just a problem of the past, it can be present today in any building built or refurbished before the year 2000.

What is Asbestos?

Asbestos is a naturally occurring mineral fibrous material.

Asbestos is the generic term for a wide range of naturally occurring minerals that crystallise to form long thin fibres and fibre bundles. The most common is the serpentine group, which includes chrysotile (white asbestos) and which has been the most frequently mined. A second asbestos group known as the amphiboles includes crocidolite (blue asbestos) and amosite (brown asbestos).

It is very resistant to heat, electricity and chemical damage, plus, it absorbs sound really well and is as strong as steel when being stretched. It is all of these properties that made asbestos extremely useful as a building/ insulation material.

Asbestos-containing materials are versatile and were used extensively in the UK as building materials (e.g. for fire-proofing and as insulation material), it was used in large quantities from the 1950s onwards. Asbestos has been used extensively in Great Britain and throughout the world.

Why is Asbestos Dangerous?

Asbestos is classified as a category 1 carcinogen, with asbestos related disease causing around 5000 deaths every year in the UK.

When materials that contain asbestos are disturbed or damaged, fibres are released into the air. When these fibres are inhaled they can cause serious diseases. These diseases will not affect you immediately; they often take a long time to develop (between 15 and 40 years), but once diagnosed, it is often too late to do anything.

Generally, asbestos is only a risk if it is disturbed or damaged so that fibres are released into the air where they can be breathed in. Unlike other minerals, asbestos doesn't grind into small grains – it breaks down into tiny fibres. These fibres are smaller than hair, and can only be seen under a microscope. When someone breathes in asbestos fibres, some of them become lodged in delicate lung tissue. The body's immune system tries to break the fibres down, but asbestos is resilient and only breaks down extremely slowly.

Asbestos can cause the following fatal and serious diseases:

Mesothelioma:

Mesothelioma is a cancer which affects the lining of the lungs (pleura) and the lining surrounding the lower digestive tract (peritoneum). It is almost exclusively related to asbestos exposure and by the time it is diagnosed, it is almost always fatal.

Asbestos-related lung cancer:

Asbestos-related lung cancer is the same as (looks the same as) lung cancer caused by smoking and other causes. It is estimated that there is around one lung cancer for every mesothelioma death.

Asbestosis:

Asbestosis is a serious scarring condition of the lung that normally occurs after heavy exposure to asbestos over many years. This condition can cause progressive shortness of breath, and in severe cases can be fatal.

Pleural thickening:

Pleural thickening is generally a problem that happens after heavy asbestos exposure. The lining of the lung (pleura) thickens and swells. If this gets worse, the lung itself can be squeezed, and can cause shortness of breath and discomfort in the chest.

It is also important to remember that people who smoke, and are also exposed to asbestos fibres, are at a much greater risk of developing lung cancer.

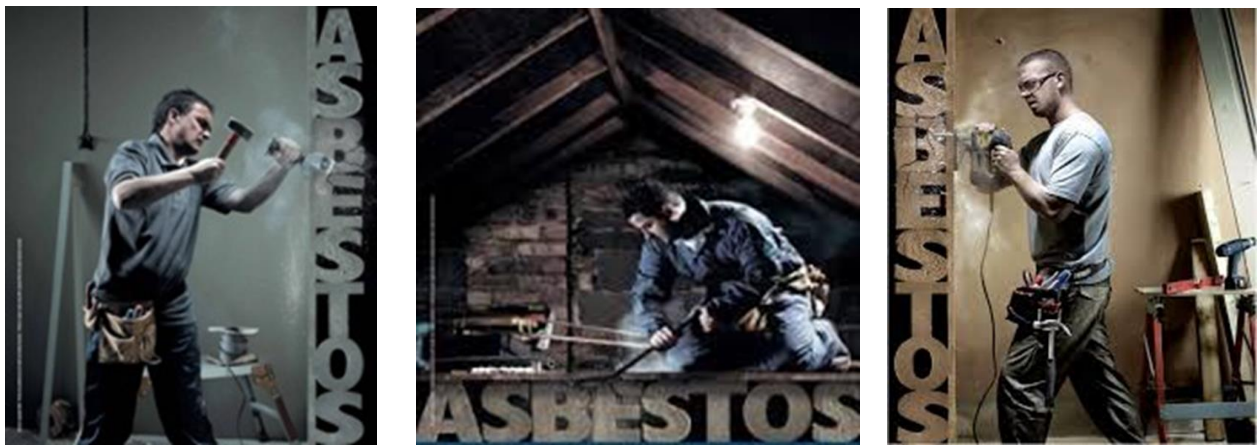
The Problem

- Asbestos is difficult to identify.
- It is often referred to by colour, but this refers to its raw mineral state.
- You cannot generally tell the type of asbestos by simply looking at it.

- Asbestos is usually mixed with another material, e.g. board, insulation or coatings, which often look similar to other materials.
- Asbestos containing materials are often covered or placed behind other building materials, so it's hard to know if you're working with it or not.
- If you work in a building built before the year 2000, it's likely that some parts of the building will contain asbestos.
- You can't see it, taste it or smell it, so you won't know you have been exposed to it.

Where can you find Asbestos?

Any building constructed or refurbished before 2000 may contain asbestos.



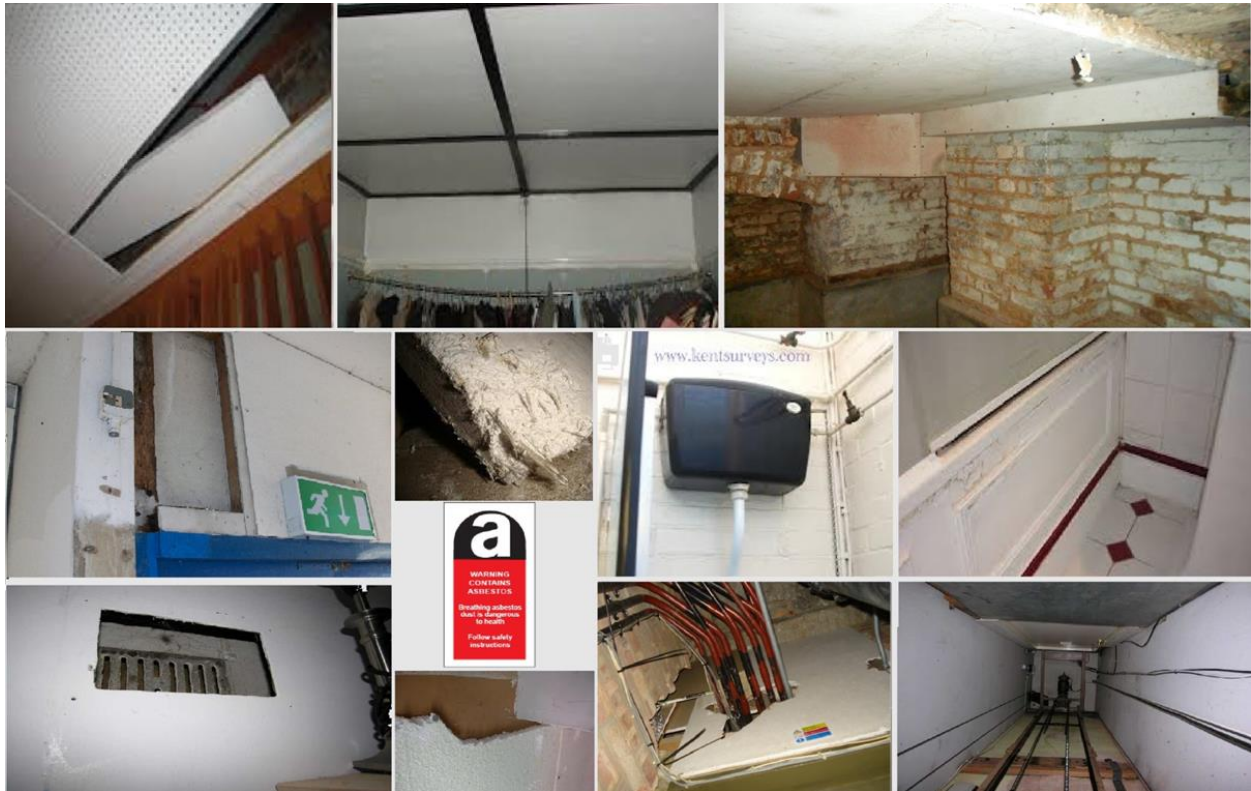
Below are some examples of products containing Chrysotile (white asbestos):



- The flash guard contains asbestos
- The roof sheets are asbestos cement products

- The flue pipe is asbestos cement
- The ceiling is an asbestos textured coating
- The Vinyl floor tiles and sheeting contain asbestos, it is also commonly contained within the adhesives used beneath

Below are some examples of building products containing Amosite (Brown asbestos):



- The ceiling tiles contain asbestos
- The ceiling boards and wall boards are asbestos insulating board
- The toilet cistern contains asbestos
- The bath panel contains asbestos
- The boiler cupboard doors and linings contain asbestos
- The lift shaft contains asbestos boards

Below are some example of Crocidolite (Blue Asbestos):



- Sprayed asbestos (flock) to structural beams, soffits
- Loft insulation – in its pure form (not mixed with other materials)
- Thermal insulation to pipework (lagging)
- Hard-set insulation to pipes, cylinders, calorifiers and boilers
- Asbestos rope (seals and gaskets)
- And also asbestos cement (not pictured above).

How to avoid the risk of disturbing asbestos

Before starting work you should check what asbestos is present as part of your planning. In non-domestic premises, including industrial and commercial buildings, there should be a location plan/ register – ask to see it. Check that the plan covers the area of the building that you will be working in and, if you are doing refurbishment work, that there is a Refurbishment or Demolition Survey, this will include information on the types of asbestos present and their condition.

If there is no register or survey – or the report is not clear – do not start work!

You must also have had appropriate asbestos awareness training to enable you to recognise the types of materials that could possibly contain asbestos and what to do if you accidentally disturb suspect materials.

Only specially trained personnel can carry out work on asbestos containing materials.

What to do if you come across asbestos

- Stop work Immediately
- Keep everyone else out of the area
- Report the problem to the person in charge as soon as possible
- Put up a warning sign 'Possible asbestos contamination'
- Wear PPE (including RPE) and clean up any dust and debris in the area
- Decontaminate anyone who is contaminated with dust and debris
- Dispose of rags, clothing or PPE that is contaminated as asbestos waste.

A sample of the material should be analysed to determine if it contains asbestos. If it does then remedial work should be carried out by an appropriate contractor – licensed asbestos removal contractor if necessary. Then the asbestos management plan should be updated for that site.

Remember you are mostly at risk when:

- You are working on an unfamiliar site
- The building you are working on was built before the year 2000
- Asbestos-containing materials were not identified before the job started
- Asbestos-containing materials were identified but this information was not passed to the people doing the work
- You don't know how to recognise and work safely with asbestos
- You know how to work safely with asbestos but you choose to put yourself and others at risk by not following proper precautions.