

## Control of Asbestos

Asbestos has been the main cause of occupational ill health from about 1950 onwards and is still the greatest single work related cause of death from ill health. Past exposure is now responsible for about 4,000 people dying from asbestos related cancers every year. This figure is expected to rise over the next 10 years and then decline. These deaths are tragic for the people involved, causing immense pain and suffering to them and their relatives, friends and colleagues. You are entitled to be provided with any information you need on asbestos including any risk assessments and surveys. You should also be consulted on your employer's plans to manage asbestos. Asbestos is the name used for a range of natural minerals. There are three main types of asbestos:

- Blue crocidolite
- Brown amosite
- White chrysotile

The type of asbestos cannot be identified just by its colour. Asbestos has been used in a very large number of products many of which have been used in buildings. Some products have one type of asbestos in them while others have mixtures of two or more.

### All types of asbestos can be dangerous

Asbestos is made up of thin fibres. These can break down into much smaller and thinner fibres. The smallest fibres cannot be seen with the naked eye but they can be breathed in. Asbestos fibres are only dangerous if they are made airborne and breathed in, but all types of asbestos fibres are potentially fatal if breathed in. The fibres that are breathed in can become stuck in the lungs and damage them. This can cause scars that stop the lungs working properly (asbestosis) or it can cause cancer. The main types of cancer caused by asbestos are cancer of the lung and cancer of the lining of the lung (mesothelioma). These diseases can take from 10 to 60 years to develop and there is no cure for any of them.

### Where asbestos is found

You are most likely to find it in buildings built or refurbished before 2000. Many thousands of tonnes of asbestos products were used in buildings. Much of it is still there and you cannot easily identify these products from their appearance. The most common uses of asbestos in buildings were:

- Loose packing between floors and in partition walls
- Sprayed (limpet) fire insulation on structural beams and girders
- Lagging (eg on pipework, boilers, calorifiers, heat exchangers, insulating jackets for cold water tanks, around ducts)
- Asbestos insulation board (AIB) eg ceiling tiles, partition walls, soffits, service duct covers, fire breaks, heater cupboards, door panels, lift shaft linings, fire surrounds
- Asbestos cement (AC) eg roof sheeting, wall cladding, walls and ceilings, bath panels, boiler and incinerator flues, fire surrounds, gutters, rainwater pipes, water tanks, floor tiles, mastics, sealants, textured decorative coatings (such as Artex), rope seals, gaskets (eg pipework), millboards, paper products, fire doors, cloth (eg. fire blankets), bituminous products (roofing felt)

How dangerous the asbestos is depends on the type of asbestos and the type of material it is in, the condition of the material and how likely the material is to be disturbed.

Those most at risk to exposure to asbestos fibres

Research has suggested that the groups most at risk are those who carry out building maintenance and refurbishment work (eg demolition contractors; electricians; roofing contractors; painters and decorators; construction contractors; joiners; heating and ventilation engineers; plumbers; telecommunications engineers; gas fitters; fire and burglar alarm installers; plasterers; general maintenance

staff; builders; computer installers; shop fitters and building surveyors.

## Control of Asbestos Regulations 2012

The Control of Asbestos 2012 came into force on 06 April 2012 updating previous asbestos regulations to take account of the European Commission's view that the UK had not fully implemented the EU Directive on exposure to asbestos (Directive 2009/148/EC). In practice the changes are fairly limited. They mean that some types of non-licensed work with asbestos now have additional requirements (ie notification of work, medical surveillance and record keeping). All other requirements remain unchanged.

If existing asbestos containing materials are in good condition and are not likely to be damaged they may be left in place; their condition monitored and managed to ensure they are not disturbed. If you're responsible for maintenance of non-domestic premises, you have a duty to manage the asbestos in them, to protect anyone using or working in the premises from the risks to health that exposure to asbestos causes. If you want to do any building or maintenance work in premises or on plant or equipment that might contain asbestos, you need to identify where it is and its type and condition; assess the risks and manage and control these risks. The requirements for licensed work remain the same: in the majority of cases, work with asbestos needs to be done by a licensed contractor. This work includes most asbestos removal, all work with sprayed asbestos coatings and asbestos lagging and most work with asbestos insulation and asbestos insulating board (AIB). If you are carrying out non-licensed asbestos work, this still requires effective controls.

The control limit for asbestos is 0.1 asbestos fibres per cubic centimetre of air (0.1 f/cm<sup>3</sup>). The control limit is not a safe level and exposure from work activities involving asbestos must be reduced to as far below the control limit as possible. Training is mandatory for anyone liable to be exposed to asbestos fibres at work. This includes maintenance workers and others who may come into contact with or disturb asbestos (eg cable installers) as well as those involved in asbestos removal work.

From 06 April 2012 some non-licensed work needs to be notified to the relevant enforcing authority. Brief written records should be kept of non-licensed work which has to be notified (eg copy of the notification with a list of workers on the job plus the level of likely exposure of those workers to asbestos). This does not require air monitoring on every job, if an estimate of degree of exposure can be made based on experience of similar past tasks or published guidance.

By April 2015, all workers/self-employed doing notifiable non-licensed work with asbestos must be under health

surveillance by a doctor. Workers who are already under health surveillance for licensed work need not have another medical examination for non-licensed work, but medicals for notifiable non-licensed work are not acceptable for those doing licensed work. Some modernisation of language and changes to reflect other legislation eg the prohibition section has been removed as the prohibition of supply and use of asbestos is now covered by Registration Evaluation Authorisation & Restriction of Chemicals Regulations 2006 (REACH).

## Asbestos licence

Work with the most dangerous asbestos containing materials (which give off high fibre levels when disturbed) requires a licence from the Health and Safety Executive (HSE). Work with most asbestos containing materials requires a licence. A licence is required for virtually all work with loose packing, sprayed insulation, lagging and asbestos insulation board. Very minor work (which in total takes one person no more than one hour or more people no more than two hours in any seven-day period) does not require a licence. A licence is not required for work when a risk assessment confirms that the exposure (without a respirator) will not go above 0.6 fibres per millilitre in any ten-minute period or go over the control limit and the work involves certain materials. So, a licence will generally not be required for work involving asbestos cement, textured coatings and other materials where the fibres are firmly held in a matrix (eg vinyl floor tiles and bituminous products such as roofing felt). The regulations apply to all work with asbestos materials carried out by employers, the self-employed and employees. They apply to all work with asbestos whether it requires a licence or not.

## Managing asbestos in buildings

Whoever has control of a building has a duty to manage the asbestos in their buildings – your employer should be able to tell you who this is. The duty holder has to take reasonable steps to find out if there are materials containing asbestos in the premises and if so, how much, where they are and what condition they are in. This can but does not have to involve a survey. A survey can be a management survey (to locate all materials that are likely to contain asbestos). It will usually involve the taking of samples to confirm the presence of asbestos. If no samples have been taken, then it is assumed that all materials contain asbestos. Or refurbishment/demolition survey (these involve getting access full access to all parts of the building using destructive inspection if necessary and will involve the taking of samples which are analysed to confirm whether asbestos is present - this type is usually used before major refurbishment or just before demolition).

The results of all types of survey should be recorded and the information provided to anyone who may work on or disturb these materials. Safety representatives are entitled to this information. A suitable risk assessment should be made before carrying out any work which may expose employees to asbestos. Those who control premises need to manage the risk from asbestos and ensure that an assessment is made as to whether asbestos is or may be present in the building. This includes where the asbestos is or is assumed to be and what condition it is in. It should always be assumed that asbestos could be present until a full survey is done.

### Identifying the presence of asbestos

No employer must carry out demolition, maintenance or any other work which exposes or may expose their employees to asbestos in any premises unless they have found out:

- Whether asbestos is or may be present
- Type of asbestos
- What material it is in and what condition it is in

If there is any doubt about whether asbestos is present, the employer has assumed that it is present and that it is not only white asbestos.

### Planning work

No work should be carried out with asbestos unless a written plan of work detailing how that work is to be carried out has first been prepared. If unsure, presume that material contains asbestos and stop work immediately and report to site management.

### Information, instruction and training

Every employer must give adequate training (which includes information and instruction) to employees who are or may be exposed to asbestos, their supervisors and those who do work to help the employer comply with these regulations. This should make them aware of (among other things):

- Properties of asbestos, its health effects and the interaction of asbestos and smoking
- Type of materials likely to contain asbestos
- Work that could cause asbestos exposure and the importance of preventing exposure
- How work can be done safely and what equipment is needed
- Emergency procedures
- Hygiene facilities and decontamination

The training must be given at regular intervals. It needs to be proportionate to the nature and degree of exposure and so should contain the appropriate level of detail, be suitable

to the job and should use written materials, oral presentation and demonstration as necessary.

### Preventing or reducing exposure

Employers have a duty to prevent exposure so far as is reasonably practicable. If exposure cannot be prevented, it must be reduced so far as is reasonably practicable without workers having to use masks. If that has been done but the exposure would still be above the control limit, the employer has to provide suitable masks which reduce the workers' exposure to below the control limit and as far below it as is reasonably practicable. It is good practice to use masks and other personal protective equipment even at levels below the control limit. If any employee is exposed to more than the control limit, the employer must:

- Inform the employees concerned and their representatives
- Ensure that the work does not continue until adequate action has been taken to reduce exposure to below the control limit
- Find out why the control limit was exceeded and take action to prevent it happening again and take air samples to make sure this action was effective

Employers need to ensure that whatever controls they put in place are properly maintained and used. This includes providing any necessary supervision. Employees need to make sure they use any controls properly.

### Sampling, air tests and clearance certification

All air testing, sampling of asbestos and clearance certification must be carried out by someone who is accredited by an appropriate body. UKAS (United Kingdom Accreditation Service) is the only such national accreditation body recognised by the Government.

### Health records and medical surveillance

Apart from a few exceptions (where exposure is very low) for each employee who is exposed to asbestos, employers have to:

- Keep a health record (or a copy) for at least 40 years
- Ensure the employees are under adequate medical surveillance by a relevant doctor
- Provide a medical examination not more than two years before such exposure and one at least every two years while such exposure continues (certificates of examination need to be kept for four years)
- Tell the employee if the medical shows any disease or ill-health effect from the exposure

Employees have to be available during working hours for medical examination.

### Washing and changing facilities

Employers must provide adequate washing and changing facilities for employees who are or may be exposed to asbestos.

If asbestos materials are suspected or present:

If a safety representative suspects that there are asbestos materials in a building, they should ask the employer what has been done to determine if such materials are present. Safety representatives can ask to see the results of any inspection or survey done to identify the presence and condition of asbestos materials. Remember that there is only a risk if asbestos fibres are made airborne. This can happen when asbestos materials are damaged or disturbed. However, all asbestos containing materials should be clearly marked even if in good condition. If you see material which you have reason to believe contains asbestos, it has been damaged and you believe that there is a serious risk of exposure to asbestos fibres, you should ask everyone to leave the area. But remember not to create more of a risk to people by, for example, causing a panic or leaving something in an unsafe condition. Remember also that minor damage to some asbestos materials does not always mean that there is a serious risk or that immediate evacuation of the area is warranted, for example minor damage to materials securely bound in a matrix such as textured coatings or asbestos cement. However, damaged edges should be coated immediately, and repaired as soon as possible. In any case, you should notify the employer or occupier immediately. No further work should take place until the area is safe. That means that action, appropriate to the risk, has been taken. Such action could be the repair or removal of asbestos or cleaning of the area by a trained person with suitable equipment.

Working in a building built or refurbished before 2000 or with something which may contain asbestos:

Workers can do certain jobs with asbestos which do not require a licence, but the employer must ensure that they are adequately trained and have the right equipment. The employer must ensure that they:

- Received adequate training first
- Provided with a suitable mask (and always wear) and disposable overalls
- Provided with a class HEPA vacuum cleaner to vacuum up dust
- Do not cut or drill into asbestos with power tools (unless it is unavoidable in which case the employer

must ensure that the appropriate controls are in place and used)

- Dispose of all waste properly

The training should help workers to understand, among other things, the dangers of working with asbestos, where they may come across it, and how to work safely with it. Only certain work on asbestos containing materials can be carried out without a licence.

### References

Control of Asbestos Regulations 2012  
Health and Safety at Work Act 1974

*Acknowledgement: This information has been reviewed and updated by Jim Slater (CDM-C and Health & Safety Advisor)*  
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