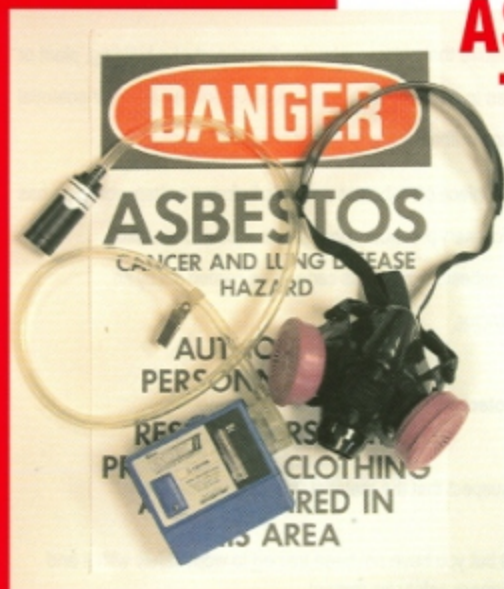


ASBESTOS

The Silent Killer



10 FREQUENTLY ASKED QUESTIONS ABOUT ASBESTOS

1. What is asbestos and why do I need to read this pamphlet?

Asbestos is a naturally occurring fibrous material that, due to its fire protection and thermal insulation properties, has been extensively used in buildings. Despite its excellent properties, asbestos is also a serious hazard to health and causes many thousands of deaths every year, globally.

Although asbestos is now banned in South Africa and other countries, the legacy of asbestos, hidden in various shapes and forms, will remain with us for many years to come, threatening lives at home and at work.

This pamphlet is intended to alert you to the danger of asbestos and give you some guidance on how to protect yourself from this silent killer.

Types of asbestos



Chrysotile (white)



Crocidolite (blue)



Amosite (brown)

2. Where do I find asbestos?

Asbestos, often mixed with cement, was mostly used in buildings and can be found in roofs, gutters, pipes, boilers, ceiling tiles, insulation boards, sprayed coatings and many other products. In fact, asbestos was so popular during the past century that more than 3000 articles contained it, some of which are still found in their original form in our home, work and environment. Some examples of asbestos products are shown above in the next column.

High risk asbestos products



Pipe insulation



Asbestos insulation board (AIB)



Sprayed coating



Loose fill asbestos

Lower risk asbestos products



Asbestos cement roof, gutter and downpipe



Floor tiles containing asbestos



Asbestos fire blanket

3. What is the danger?

Asbestos fibres inhaled into the lungs may cause a range of serious lung diseases, including asbestosis (scarring of the lung), lung cancer and mesothelioma (a malignant tumour that grows on the lining of the lung or the abdominal cavity). Early symptoms of disease may include chest pain and shortness of breath, leading in more advanced stages, to respiratory failure, cardiac arrest and death. What is important to remember is that it may take 15 to 50 years from first contact with the asbestos fibre for disease to develop. During this long "dormant" period no symptoms are experienced and when the disease is diagnosed it is fatal, as there is no cure.

Lung affected by mesothelioma (left) compared to a healthy lung



4. How big is the problem?

The World Health Organization (WHO) estimates that worldwide there are more than 100 000 asbestos related deaths per year and that currently 125 million workers are exposed to the deadly fibre. In the United Kingdom, the death toll is estimated at approximately 3 500 per year and, in the USA, 10 000 per year. This is nothing less than a global epidemic!

In South Africa about 200 mesothelioma cases are reported per year (the number



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of asbestos related lung cancers is unknown), but this is most likely an underestimate considering that South Africa mined and refined all three asbestos types in vast quantities for both the local and export markets. In fact, in the 70's, South Africa was the third largest producer of asbestos globally!

5. How do I recognise asbestos material?

Any building constructed in South Africa, particularly those older than five years, may contain asbestos. Asbestos is usually present in either loose, friable form (such as loose insulation material) or, more often, hidden within another material (such as asbestos cement products). Fibres might be visible in the friable form but are seldom seen in asbestos-cement and similar products. In both cases it is not possible to identify asbestos with certainty by visual examination alone and laboratory analysis is often required. The golden rule is always: when in doubt assume the material contains asbestos!

6. How can I be exposed to asbestos?

Asbestos is a risk to health only when the fibres are dispersed in the air and inhaled into the lungs. When asbestos is contained within another material and fibres are not liberated, the risk to health is minimal. However, any work or process that disturbs the fabric of the **asbestos-containing material (ACM)** and that releases fibres, such as drilling, cutting, high pressure cleaning, demolishing or even natural deterioration and weathering of the ACM, introduces a serious threat to health. Materials that are made from pure asbestos or that contain high percentages of asbestos, such as insulation and lagging material, are far more dangerous than low percentage ACMs, such as asbestos-cement products.

7. Who may be in danger?

Any person that, knowingly or unknowingly, performs work on asbestos or ACM, and any person that happens to be in the vicinity of such work, is in danger. Particularly at risk are people in the building and construction related professions such as roofing contractors, heating and ventilation engineers, building and demolition contractors, electricians, plumbers, joiners, tradesmen, carpenters, painters, etc.

Asbestos: the hidden killer



8. What are the legal requirements related to asbestos?

The South African Asbestos Regulations (No. 155 of 2002) prohibit an employer

or a self-employed individual from carrying out work that will put any person at risk from asbestos exposure.

The Regulations also require that, where asbestos forms part of a building, plant or premises, steps are taken to ensure that the asbestos is identified and that potential exposure of any person to the fibres is prevented or adequately controlled.

No work is allowed to take place on asbestos or ACMs before a written work plan has been devised and the necessary precautionary measures have been taken.

Demolition or removal of asbestos and ACMs can only be carried out by an approved asbestos contractor.

9. What can I do to protect my health?

Don't start work if:

- You are unsure or suspect that the material you will work on might contain asbestos;
- Asbestos is present but you have not been trained to work safely with it and you don't have the proper safety equipment;
- You suspect that high risk material (e.g. lagging, insulation material, sprayed coatings) is present – only approved asbestos contractors can work on these.

Work with asbestos only if:

- You have been properly trained
- The risk to health has been assessed and there is a written work plan
- You have the correct equipment and tools to minimise dust, such as:
 - * Means to wet the material
 - * Hand tools instead of power tools
 - * Vacuum cleaner with a high efficiency dust filtering system
 - * Appropriate means of decontamination and waste disposal
- You have the correct protective equipment, such as:
 - * A properly fitted and suitable respirator
 - * Suitable disposable gloves and overalls
 - * Boots without laces, or disposable boot covers

Don't:

- Create dust
- Use compressed air for cleaning
- Smoke, eat or drink in the work area
- Disturb asbestos if you can help it!

Working safely with asbestos



10. Who can I call for advice?

The Occupational Hygiene Section of the **National Institute**

for Occupational Health (NIOH) provides a comprehensive range of asbestos-related services and advice throughout Southern Africa, including consultation, training, asbestos surveys, monitoring and evaluation.

The NIOH would like to acknowledge the HSE (UK) for some of the information and photographs shown in this pamphlet.

STOP! ASBESTOS KILLS!



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