

ASBESTOS & HEALTH FREQUENTLY ASKED QUESTIONS

What is the purpose of this fact sheet?

The purpose of this fact sheet is to provide information about asbestos and health. This fact sheet will explain the following:

- Asbestos general information
- Asbestos exposure
- Health effects of asbestos exposure
- Tests to diagnose asbestos-related disease
- Treatment of asbestos-related disease
- Reducing your exposure to asbestos



Chrysotile asbestos fibre.

ASBESTOS What is asbestos?

Asbestos is the name given to a group of six different fibrous minerals that occur naturally in the environment. Asbestos fibres are too small to be seen by the naked eye. They do not dissolve in water or evaporate. They are resistant to heat, fire and chemical or biological degradation.

Asbestos is used in many commercial products, including insulation, brake linings and roofing tiles.

What are the types of asbestos?

The two general types of asbestos are chrysotile (fibrous serpentine) and amphibole. Chrysotile asbestos has long, flexible fibres. This type of asbestos is most commonly used in commercial products. Amphibole fibres are brittle, have a rod or needle shape, and are less common in commercial products. Although exposure to both types of asbestos increases the likelihood of developing asbestos-related diseases, amphibole fibres tend to stay in the lungs longer. They are also thought to increase the likelihood of illness, especially mesothelioma, to a greater extent than chrysotile asbestos. This is due to new research which suggests much smaller doses of amphibole exposure are required to develop mesothelioma.

What is naturally occurring asbestos?

Naturally occurring asbestos refers to those fibrous minerals that are found in the rocks or soil in an area and released into the air by one of the following methods:

- Routine human activities
- Weathering processes

If naturally occurring asbestos is not disturbed and fibres are not released into the air, then it is not a health risk. Asbestos is commonly found in ultramafic rock, including serpentine rock, and near fault zones. The amount of asbestos typically present in these rocks ranges from less than 1% up to about 25%, and sometimes more. Asbestos can be released from ultramafic and serpentine rock if the rock is broken or crushed.

Naturally occurring deposits of asbestos tend to be found only in specific areas of the world, including parts of Turkey, Greece, Cyprus, New Caledonia, Corsica and the USA. There is also evidence that other mineral fibres such as erionite can cause mesothelioma, but exposure within Great Britain is unlikely.

Around 20 tradesmen die a week as a result of past exposure.



david@2masbestos.co.uk



daniel@2masbestos.co.uk



www.2masbestos.co.uk/



[@2MAbestos](https://twitter.com/2MAbestos)



[2MAbestos](https://www.facebook.com/2MAbestos)

ASBESTOS EXPOSURE

What is asbestos exposure?

Asbestos exposure results from breaking in asbestos fibres. If rocks, soil or asbestos-containing products are disturbed, they can release asbestos fibres into the air. These fibres can be breathed into your lungs and could remain there for a lifetime. Asbestos exposure is not a problem if solid asbestos is left alone and not disturbed.

Who is at risk for asbestos exposure?

Almost everyone has been exposed to asbestos at some time in their life. Higher levels of asbestos are more common near:

- An asbestos mine or factory.
- A building being torn down or renovated that contains asbestos products.
- A waste site where asbestos is not properly covered up or stored to protect it from wind erosion.
- An area containing naturally occurring asbestos that has been disturbed through activities that crush asbestos-containing rock or stir up dust in soils that contain asbestos fibres.

In indoor air, the concentration of asbestos depends on whether:

- Asbestos was used for insulation, ceiling or floor tiles, or other purposes, and whether these asbestos-containing materials are in good condition or are deteriorated and easily crumbled.
- Activities in the house, such as repairs and home improvements have disturbed asbestos-containing materials.
- Asbestos has been brought into the home on shoes, clothes, hair, pet fur, or other objects.

Outdoor air concentrations of asbestos can also contribute to indoor air asbestos levels.

Any building built or refurbished before 2000 may contain asbestos.

HEALTH EFFECTS OF ASBESTOS EXPOSURE

What is the likelihood of developing health problems from asbestos exposure?

Being exposed to asbestos does not mean you will develop health problems. Many things need to be considered when evaluating whether you are at risk for health problems from asbestos exposure. The most important of these are:

- How long and how frequently you were exposed.
- How long it has been since your exposure started.
- How much you were exposed.
- If you smoke cigarettes (cigarette smoking with asbestos exposure increases your chances of getting lung cancer between 50-90 times).
- The size and type of asbestos to which you were exposed.
- Other pre-existing lung conditions.

A doctor can help you determine whether you are at risk for health problems from asbestos exposure.

Are children at greater risk for asbestos-related diseases?

Children have more time to be exposed and develop asbestos-related diseases, especially since of the 33,600 schools in Britain, 75% of them contain asbestos. Medical experts do not know whether lung differences may cause a greater amount of asbestos fibres to stay in the lungs of a child who breathes in asbestos compared to the amount that stays in the lungs of adult.

What are some types of asbestos-related disease?

Asbestos related diseases can be:

Non-cancerous

- **Asbestosis** is scarring of the lungs. it is typically caused by very high exposure levels over a prolonged period of time, as seen in work-related asbestos exposure. Smoking increases the risk of developing asbestosis. Some late stage symptoms include progressive shortness of breath, a persistent cough, and chest pain.
- **Pleural changes or pleural plaques** include thickening and hardening of the pleura (the lining that covers the lungs and chest cavity). Most people will not have symptoms, but some may have decreased lung function. Some people may develop persistent shortness of breath with exercise or even at rest if they have significantly decreased lung function

Cancerous

- Lung cancer is cancer of the lungs and lung passages. Cigarette smoking combined with asbestos exposure greatly increases the likelihood of lung cancer. Lung cancer caused by smoking or asbestos looks the same. Symptoms for lung cancer can vary. Some late-stage symptoms can include chronic cough, chest pain, unexplained weight loss, and coughing up blood.
- Mesothelioma is a rare cancer mostly associated with asbestos exposure. It occurs in the covering of the lungs and sometimes the lining of the abdominal cavity. Some late-stage symptoms include chest pain, persistent shortness of breath, and unexplained weight loss. Coughing up blood is not common.

Can asbestos-related disease be serious?

Asbestos related disease can be serious, though not everyone exposed to asbestos gets health problems. Health problems that develop may range from manageable to severe- and some may cause death. Repeated exposures increase the likelihood of developing asbestos-related diseases.

How common are asbestos-related diseases?

- **Mesothelioma** is relatively rare. According to the Health and Safety Executive (HSE) there were 2312 mesothelioma deaths in 2011, 2548 in 2012 & 2538 in 2013. It is most common in asbestos-related work exposure though it has been observed in certain communities worldwide where people have had lifetime environmental exposures, especially in regions where asbestos was mined such as Asbest in Russia, Libby, Montana in the USA & Wittenoom in Western Australia.
- **Lung cancer** from all causes affects 74 out of every 100,000 people in the UK a year. According to Cancer Research UK, it is the second most common cause of cancer-related death in the UK and accounts for about 13% of all cancer deaths. Asbestos exposure is only one of the many potential causes of lung cancer, Cigarette smoking is by far the most important risk factor for lung cancer. Cigarette smoking combined with asbestos exposure greatly increases the likelihood of cancer.

In the UK, asbestos still kills around 5000 workers each year, this is more than the number of people killed on the road.

TESTS TO DIAGNOSE ASBESTOS-RELATED DISEASE

What will my doctor typically do?

Your doctor will first take your medical history and perform a physical exam. He or she will then decide if you need additional testing.

What are some tests to help diagnose asbestos-related disease?

On the basis of your medical history and perform a physical exam, your doctor may or may not recommend any of these tests for you:

- **A chest X-ray** is the most common test used to determine whether you have received sustained exposure to asbestos. The X-ray cannot detect asbestos fibres themselves, but it can detect early signs of lung changes caused by asbestos. If the chest X-ray shows spots on the lungs, they may or may not be asbestos-related. They may be normal variations or related to infections and different types of diseases. Only a doctor trained in reading X-rays can determine if a spot is asbestos-related or something else.
- **A pulmonary function test (PFT)** is a simple breathing test to see how well your lungs are working. In this test, a person blows big breaths into a machine. Based on your medical history and physical exam, your doctor may or may not recommend this test for you.
- **A computerised tomography scan (CT)** is a type of X-ray machine that usually delivers a much higher dose of radiation than a chest X-ray. A CT scan may be more sensitive than a chest X-ray in detecting early changes of disease. A CT scan is recommended only when the chest X-ray is inconclusive.
- For a test called **bronchoalveolar lavage (BAL)**, a small flexible tube is inserted through the nose and down the airway. A small amount of saline solution is injected into the tube and then sucked back up. The fluid obtained contains saline plus material from the lung. Illness from asbestos exposure generally cannot be predicted from this test. This test is performed only under special circumstances.
- For a **lung biopsy**, samples of lung tissue are taken through a needle while the patient is sedated. This tissue is examined under a microscope. Lung biopsies are rarely performed because diagnosis is usually based on findings from the medical evaluation and other tests. A lung biopsy is not needed for most people who are diagnosed with an asbestos-related disease.

What about urine and sputum tests?

Sputum is the material that is brought up from the lungs by coughing. Urine and sputum tests are not reliable for determining how much asbestos may be in the lungs. Nearly everyone has low levels of asbestos in these materials. These tests cannot predict the risk of illness. More research may improve the reliability and predictability of these tests.

Should I have my children tested?

Taking X-rays of children's lungs to look for asbestos-related disease is not currently recommended because changes to the lung usually take years to develop. In addition, X-ray radiation may pose a higher risk for children.

TREATMENT OF ASBESTOS-RELATED DISEASE

What are some preventative health guidelines?

If you have an asbestos-related disease or history of significant asbestos exposure, your doctor may recommend that you follow preventative care guidelines listed below:

- Regular medical examinations.
- Regular vaccinations against flu and pneumococcal pneumonia.
- Quit smoking if you are a smoker.
- Limit further asbestos exposure.

Following these preventative care guidelines may help reduce complications from asbestos-related disease or exposure. Your doctor may recommend other supportive care for complications and, if needed, *treatment*.

Supportive care includes interventions that may help the symptoms of the disease, but it does not reverse the disease process. Supportive care is tailored to the symptoms and the disease. For example, a severe cough may be treated with a cough suppressant so that a person can rest or sleep at night.

What is the treatment for asbestosis?

Preventative and supportive care are the primary treatments for asbestosis. Preventative care guidelines are provided in the previous section. Asbestosis can remain stable or increase in severity but rarely gets better. Scarring of the lungs is permanent, and no method currently exists to remove it.

What is the treatment for pleural changes?

Treatment for pleural changes involves preventative and supportive care. Preventative care guidelines are provided in the previous section.

What is the treatment for lung cancer?

Lung cancer treatment depends on the:

- Location of the cancer
- Stage of the disease
- Age of the patient
- General health of the patient

Treatment options include:

- Chemotherapy
- Radiation therapy
- A combination of chemotherapy and radiation therapy
- Removing the diseased part of the lung through surgery

What is the treatment for mesothelioma?

Depending on the stage of the disease, mesothelioma treatment options include:

- Chemotherapy
- Radiation
- Surgery

REDUCING YOUR EXPOSURE TO ASBESTOS

Can asbestos be removed from the lungs?

No known method exists to remove asbestos fibres from the lungs once they are inhaled. Some types of asbestos are cleared naturally by the lungs or break down in the lungs.

What can I do to reduce my exposure to asbestos?

Limit your exposure to airborne asbestos fibres by taking the following steps:

- Inspect your home for deteriorating asbestos-containing materials (ACMs)
- Do not disturb asbestos-containing insulation, boardings or sprayed coatings; hire a trained and licensed asbestos contractor to remove the materials.
- Ask your employer if you are working with materials or in an environment containing asbestos. If you are, make sure you are properly protected from asbestos exposure.