

## Asbestos and your health

Asbestos can cause a number of serious diseases. These include cancers, such as mesothelioma and lung cancer, and other non-malignant lung diseases such as asbestosis, pleural plaques and pleural thickening.

Every year in Australia, hundreds of people die from asbestos-related disease. This material was in common use before the dangers to health were widely known. It is now illegal to use it in any new products in Australia.

### Asbestos was a common building material

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals. It is strong and heat resistant, which is why it was widely used in a range of products.

Asbestos has been used in roofing, asbestos cement sheets and pipes, clutch and brake linings, insulation, building materials, boilers, electrical fittings, gaskets, floor tiles, plastics, textiles and other products.

### Exposure to airborne particles is the greatest risk

When the asbestos fibres become airborne, people working with asbestos may inhale particles. These particles remain in the lungs and, over time, can cause disease. A person's chance of developing asbestos-related disease depends on how much asbestos they were exposed to and for how long.

The use of asbestos was probably at its highest in the mid to late 1970s, but asbestos cement products like asbestos flues and water pipes were still being installed into the 1990s. Asbestos use in brake linings and pads and clutch plates has only recently been phased out.

People who were involved in the following industries in the past were at greatest risk:

- Mining and manufacture of asbestos
- Shipbuilding
- Railway carriage construction
- Office and industrial building construction
- Power industries.

### Workers and families were at greatest risk

Workers involved in the mining, milling or manufacture of asbestos and in the construction, power and shipbuilding industries may have been exposed in the period before stringent controls were enforced.

Families of asbestos workers may also have been exposed to asbestos fibres brought home on workers' clothing.

### Asbestos and the building trades

Workers in the building trades such as plumbers, carpenters and electricians, could still be exposed to asbestos, especially those who are self-employed. People who work on asbestos-containing materials in such a way that fibres are released into the air – for example, when using power tools – are particularly at risk.

When asbestos is not disturbed and the fibres remain contained, this does not pose a risk for people using the building.

## **Asbestos use in new products is now banned**

Since 31 December 2003, asbestos and all products containing asbestos have been banned Australia-wide. They cannot be imported, stored, supplied, sold, installed, used or re-used.

This ban does not extend to asbestos-containing products in existing installations such as vinyl floor tiles and asbestos cement (AC) roofing or sheeting. These products can be left in place until they need to be replaced.

The Occupational Health & Safety Regulations also specify that only licensed asbestos removalists may remove large amounts of fixed or installed asbestos-containing material.

## **Transporting and disposal of asbestos**

The disposal of asbestos waste is controlled by the Environment Protection Authority (EPA). Further information is available in the EPA publication *Asbestos Transport and Disposal*, which describes the safe handling, transport and disposal of asbestos-containing waste.

## **Asbestos in the home**

Asbestos products are still commonly found in homes built or renovated prior to 1990. They can be harmful only if the asbestos fibres are released into the air and breathed in.

If building materials like asbestos cement sheeting (used for walls and roofs) are in good condition, the asbestos fibres are tightly bound and very few escape into the air. These materials are very unlikely to cause health problems. Even if the walls or roof are not in good condition, the number of fibres released is very small.

Asbestos fibres are most likely to be released if asbestos-containing material is disturbed, for example, during home renovations that involve drilling, cutting, sawing or breaking of the asbestos-containing material.

Ways to work safely with asbestos are outlined in *Asbestos in the home*, which is available from the Department of Health.

## **Asbestos and bushfires**

During a fire, the amount of asbestos fibres released into the air is relatively low. Air monitoring after fires has confirmed this. However, asbestos clumps and some fibres may remain in the ash and may present a risk if disturbed while cleaning up after a fire.

Dust should be wetted down and protective personal equipment (dust mask, gloves and coveralls) should be worn. In the event of asbestos-containing materials being burnt on your property, a licensed asbestos removalist should be arranged to perform the clean-up work.

## **Asbestos can cause serious illness**

Asbestos fibres can cause health problems if they are breathed in. The body will remove most fibres that are breathed in, but some may get trapped in the lungs and cause disease many years later.

Breathing in asbestos fibres can sometimes lead to:

- Asbestosis
- Lung cancer
- Pleural disorders
- Malignant mesothelioma.

## **Asbestosis**

Asbestosis is not a cancer. It is a chronic and progressive lung disease caused by inhaling asbestos fibres over a long period of time. It may take five to 20 years before symptoms develop. The accumulated, inhaled asbestos fibres produce scarring (fibrosis) of the lung. The lung develops a 'honeycomb' appearance. The scar tissue, or 'fibrosis', is hard and inflexible – this makes the lungs stiffen and stops them working properly.

Asbestosis causes breathlessness, tightness in the chest, persistent coughing and the skin may have a bluish tinge from lack of oxygen. Getting enough oxygen from each breath needs a much greater effort. Asbestosis usually worsens over time. It can lead to respiratory failure and death. There is no cure for this disease.

Asbestosis can be diagnosed by x-ray (fibrosis looks cloudy in chest x-rays) or a lung function test.

People who smoke are more likely to get asbestosis than people who don't smoke. If you have been exposed to asbestos in the past, it is important to stop smoking to reduce your risk of getting asbestosis. If you stop smoking, you also reduce your risk of getting lung cancer.

## Lung cancer

People exposed to large amounts of asbestos fibres over a long period of time have a significant risk of developing lung cancer. The risk is many times greater in people who also smoke. The tumour, if not treated early, spreads through the lung and eventually to other parts of the body. The most common symptom people first notice is a persistent cough. It usually takes 10 to 20 years for lung cancer to develop after asbestos exposure.

## Pleural disorders

The pleura is the tissue that lines the chest cavity and covers the surface of the lungs. Asbestos may produce thickened patches on the pleura (pleural plaques) or a widespread fibrosis of the pleura and pleural effusions (fluid in the chest cavity). These conditions will show up on chest x-rays but they are not cancerous. They may not cause symptoms but will reduce lung capacity as shown in lung function tests.

## Malignant mesothelioma

This rare cancer affects the pleura, the outer covering of the lungs. It is strongly associated with past exposure to asbestos. The tumour begins in the pleura and spreads to the lung and chest wall. There is no cure currently available. It can take 30 to 40 years after exposure for asbestos to develop and be diagnosed.

Australia has the highest national rate of reported mesothelioma in the world, presumably related to the large amount of asbestos used in the past. It is expected that there may be as many as 11,000 cases still to develop and be diagnosed.

## Where to get help

- **Your local doctor** – for concerns about health
- **Your local council** – for enquiries or complaints about the removal or disposal of asbestos in your neighbourhood
- **Department of Health, Environmental Health Unit** Tel. 1300 761 874 – for a copy of the booklet, *Asbestos in the home*
- **WorkSafe Victoria** Tel. 1800 136 089 – for information about asbestos in the workplace and licensed asbestos removalists
- **Environment Protection Authority Victoria** Tel. (03) 9695 2722 – for enquiries about correct disposal of asbestos-containing materials
- **Asbestos Diseases Society of Victoria Support Line** Tel. 0418 319 757

## Things to remember

- Asbestos exposure has been associated with serious lung disease.
- See your doctor if you think you have been exposed to asbestos.
- Smoking increases the risk of some asbestos-related diseases. If you stop smoking, it will help to protect your health.

**This page has been produced in consultation with, and approved by:**

Department of Health - Environmental Health Unit

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