

ASBESTOS REMOVAL A MAJOR HEALTH HAZARD FOR WORKERS

Why is asbestos still such a serious health problem?

Asbestos has been sprayed in buildings for acoustic (noise-proofing) and decorative purposes since the 1940's. By the late 1950's, it became virtually standard practice for all large multi-storey buildings, and many hospitals and schools, to have asbestos sprayed on their steel girders for fire-proofing. As a result many workers and even children in schools can be at risk from exposure to asbestos insulation in buildings.

The main uses for asbestos were as:

- | insulation material such as pipe lagging
- | asbestos-cement fibro products
- | building insulation materials
- | sprayed on fire-proofing and decorative material

As awareness increases about the serious health effects of asbestos, it has become evident that this widespread use of asbestos in buildings is an enormous problem. For example, sprayed asbestos will deteriorate over time, and if uncontrolled will crumble and send fibres into the air where they could be breathed in by people in the surrounding area and even circulated around a building by air conditioning systems. The demolition of buildings with asbestos insulation or lagging has the potential for the release of massive amounts of asbestos fibre unless stringent precautions are taken.

Who is most at risk?

The most serious risk is for workers involved in the removal of the asbestos itself, the demolition of buildings with asbestos in them, and maintenance or renovation work on the asbestos containing areas of a building. By knowing what precautions are necessary when asbestos work is being done, workers can make sure that their health is not being threatened by exposure to deadly asbestos fibres.

For more specific information on legislative requirements and guidelines on safe asbestos removal see the publications listed under Useful References.

What are the health hazards of asbestos?

There are three types of asbestos - blue (crocidolite), brown (amosite) and white (chrysotile) and they all can cause cancer. Asbestosis (a progressive scarring of the lungs), lung cancer, mesothelioma (cancer of the lining of the lung and body cavity) and other cancers such as in the gastrointestinal tract are known to be caused by exposure to asbestos.

There is no "safe" level of exposure to asbestos. The more asbestos fibres you are exposed to, the greater the risk of getting an asbestos cancer. This is why it is so important to prevent exposure in the first place.

What does the law say about asbestos removal?

In NSW the most important laws covering asbestos removal are the [NSW Occupational Health and Safety Act 2000](#) and the [NSW Occupational Health and Safety Regulation 2001](#).

The [National Code of Practice for the Safe Removal Asbestos](#) (NOHSC Australia, 1988) sets out the minimum industrial hygiene procedures to be used for the removal of asbestos insulation material such as lagging and sprayed asbestos.

The exposure standards are as follows:

1. White Asbestos (chrysotile) 0.5 fibre per millilitre of air
2. Blue Asbestos (crocidolite) 0.1 fibres per millilitre of air
3. Brown Asbestos (amosite) 0.1 fibres per millilitre of air

These are the maximum airborne asbestos fibre levels that workers are allowed to be exposed to,

but remember there is no safe level of exposure. As the death toll from asbestos has increased and governments have been forced to act, the standards have slowly improved.

Since 1973, the standards for blue and brown airborne asbestos have been reduced from 4.0 fibres/ml to 0.1 fibres/ml (by 40 times). In NSW, the exposure standard for white asbestos is 0.5 fibres/ml (NSW OHS Regulation 2001).

Smoking and asbestos

The health effects of asbestos strike at smokers and non-smokers alike. But cigarette smoking greatly increases the risk of death from lung cancer in people who are exposed to asbestos. Workers exposed to asbestos are 10 times more likely to develop lung cancer than unexposed general population. In workers who smoke and have a high exposure to asbestos this risk of lung cancer can be up to 100 times.

What to do about asbestos in buildings

In Australia and overseas, there has been much controversy over what should be done about asbestos in buildings. There are basically four options:

Label it

Leave the asbestos intact (but labelled) if it is in good condition, unlikely to be disturbed and unable to feed fibres into workers' breathing zones.

Enclose it

Enclose the asbestos so that disturbance of the asbestos material and entry into the enclosure is not possible.

Seal it

Encapsulate (or deep seal) the asbestos, if it is in good condition and unlikely to be disturbed.

Remove it

Remove the asbestos if its surface is damaged or crumbling, or it is likely to be disturbed. for example by maintenance work.

Removal of asbestos obviously eliminates the hazard forever - provided it is done with the best control procedures, with competent removal experts, good supervision and a well informed workforce. But often this is not the case in practice.

The Code of Practice for the Safe Removal of Asbestos introduced strict licensing requirements and regulations for, asbestos removal contractors. There was an argument in favour of sealing in the past, but now only electrical equipment can be temporarily sealed.

Medical examinations and asbestos

Under the NSW Occupational Health and Safety Regulation 2001, the constructor (or removal contractor) must arrange for medical examinations for workers exposed to asbestos in removal or other construction work. These must be conducted by an authorised medical officer and the report and x-ray sent to the NSW Dust Diseases Board for its records. The results of the examination must be notified in writing to the constructor and the worker.

The Workers Health Centre has doctors who are authorised medical officers under these regulations and can arrange for medical examinations and workplace screenings for asbestos exposure.

Useful References

- | [National Occupational Health and Safety Commission](#) (phone 132 447)
 - n [National Code of Practice for the Safe Removal Asbestos](#) (NOHSC:2002 - 1988)
 - n [Guidelines for Health Surveillance](#) (NOHSC: 7039)
 - n [Guide to the Control of Asbestos Hazards in Buildings and Structures](#). (NOHSC 3002 - 1988)
 - n [Exposure Standards for Atmospheric Contaminants in the Occupational Environment](#) (NOHSC 1003 - 1995)

- | [NSW WorkCover Authority](#) (Publications Order Line 131 050)
 - n [Guidelines for Licensed Asbestos Removal Contractors](#)
 - n [Your Guide to Working with Asbestos](#)
 - n [Chrysotile Asbestos to be Banned](#)

- | [Asbestos Diseases Foundation of Australia](#) (Phone: (02) 9637 8759)

For further information and advice contact the Workers Health Centre

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This Fact Sheet is one of a series produced by the Workers Health Centre to provide with information on the causes of occupational injury and disease.

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