

1. Purpose

The purpose of the practice note is to provide guidance and raise awareness of the dangers associated with asbestos.

2. Asbestos

Asbestos refers to a set of six naturally occurring fibrous minerals. Asbestos has six primary sub-classifications; chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Among these, chrysotile and amosite asbestos are the most common.

Although asbestos fibers are microscopic in nature, they are extremely durable and resistant to fire and most chemical reactions and breakdowns. These properties of asbestos were the reasons that supported its use for many years in a number of different commercial and industrial capacities. The strength of asbestos, combined with its resistance to heat, allowed it to become the material of choice in a variety of products, including, but not limited to, roofing shingles, floor tiles, ceiling materials, cement compounds, textile products, and automotive parts. Asbestos is now strictly regulated as exposure to this toxic mineral can now be directly and scientifically linked to a number of lung and respiratory health conditions.

The use of asbestos sharply declined in the late 1970s when it became evident that asbestos posed a threat to human health and safety. Today, asbestos is classified as a known human carcinogen.

The property of durability, which made asbestos so desirable to manufacturers is what makes asbestos hazardous. Asbestos fibers are microscopic (roughly .02 the diameter of a human hair), and therefore, are easily inhaled. Once inhaled, the fibers cling to the respiratory system, including the lining of the lungs and inner cavity tissue. As asbestos fibers are typically quite rigid, they become lodged in the soft internal tissue of the respiratory system and are not easily expelled or broken-down by the body.

While asbestos exposure is hazardous, not all asbestos products are inherently hazardous. Because asbestos must be inhaled to represent a health risk, only loose asbestos fibers or those in the air supply (a condition known as friable) represent a true hazard. Stable asbestos compounds, such as intact cement, tiles, or other products are generally not an immediate hazard.

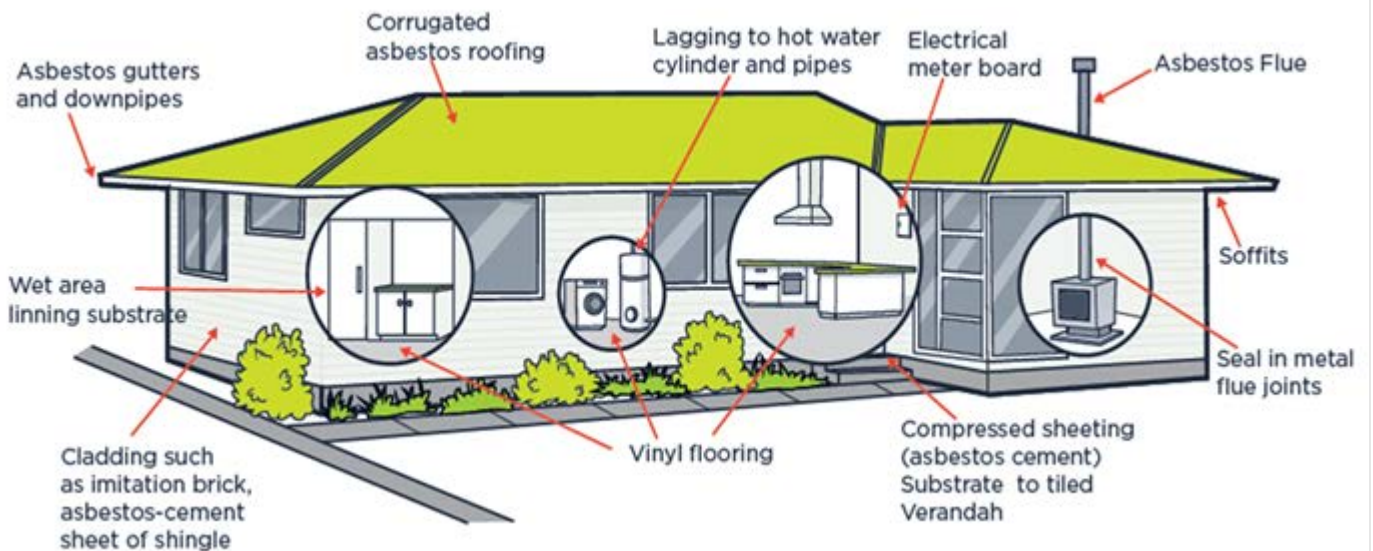
Exposure to friable asbestos fibers was common when grinding, chipping, demolishing, or retrofitting asbestos products. Each of these functions could potentially release asbestos into the air supply where it would be easily inhaled.

3. Buildings likely to contain asbestos

As a general rule, if a building was constructed:

- Before mid-1980s it is **very likely** to have materials containing asbestos
- Between mid-1980s and 1990 it is **likely** to have materials containing asbestos
- After 1990 it is **unlikely** to have material containing asbestos

Asbestos can be found in many building materials, including but not limited to the places depicted in the picture below.



Stringent procedures must be followed if asbestos is discovered during construction. Work methods, equipment and safety procedures must be in accordance with the New Zealand Guidelines for the Management and Removal of Asbestos.

Whatever the circumstances, it is essential that an asbestos removal plan is developed by a Certified Asbestos Remover and implemented whenever any asbestos-contaminated material is to be removed. Asbestos may only be removed by a person holding this license; the contractor must notify WorkSafe NZ when such work is carried out.

Note: WorkSafe NZ is only responsible if work is carried out by contractors; WorkSafe NZ cannot get involved if work is being undertaken by a homeowner.

Homeowner's are often unaware of the existence of asbestos and the serious health risks its removal brings. Materials containing asbestos are often brittle and break easily; if disturbed fibres are released into the atmosphere and can be breathed in up to 30 days after its removal.

Fibre cement sheets containing asbestos are not a health hazard if they are painted and in sound condition. However, unpainted, broken or friable sheets are dangerous and should only be removed by a Certified Asbestos Remover.

Laboratory tests can generally be conducted on materials on the same day. Council strongly recommends that you contact a Certified Asbestos Remover before carrying out any demolition or construction on pre-1990 building stock.

4. Further advice

- WorkSafe NZ - 0800 030 040
- Health and Safety in Employment (Asbestos) Regulations 1998
- New Zealand Guidelines for the Management and Removal of Asbestos (3rd Edition)
- http://www.business.govt.nz/worksafe/information-guidance/all-guidance-items/new-zealand-guidelines-for-the-management-and-removal-of-asbestos-3rd-edition/multipagedocument_all_pages
- List of Certified Asbestos Removers
- <http://www.business.govt.nz/worksafe/information-guidance/all-guidance-items/certified-asbestos-contractors.pdf>