

# Asbestos and fire damaged buildings

Fact sheet

Asbestos is a naturally occurring mineral fibre that was used in many building materials until the late 1980s, such as asbestos cement (fibro).

Asbestos is normally present in the air at extremely low levels. Nearly everyone is exposed to asbestos at these levels but this type of exposure carries very little risk of developing illness.

Building materials containing asbestos are still found in many Queensland houses. Most houses built before 1990 are likely to have asbestos in some building materials, such as wall and ceiling sheeting, eaves and roofing.

Building materials containing asbestos are not made from 100 per cent asbestos. They are commonly 10–15 per cent and rarely more than 50 per cent.

## Fire damage to buildings containing asbestos

During a fire, building materials that contain asbestos will typically crack or spall. Spalling occurs when flakes of the material pop off due to the build-up of pressure inside the material. An example of a flake is shown below.



Asbestos fibres can be released during a fire. Fires involving materials that contain asbestos can produce a range of asbestos debris, including unburnt and partly burnt pieces. Some asbestos containing materials can be severely damaged during the fire when a building collapses.

Monitoring of air during and after fires indicates that asbestos fibre concentrations typically are very low. This is likely to be due to the low numbers of fibres actually released and the large volumes of air circulated by fires.

Asbestos fibres can also become denatured when exposed to high temperatures for a sufficient period of time. This means the asbestos fibres lose their asbestos qualities and no longer pose the same level of health risk.

## Health risks from asbestos and fire damaged buildings

Asbestos fibres are only a health hazard if they are small enough to be breathed into the lower parts of the lungs.

Fires involving building materials containing asbestos have the potential to release tiny fibres into the air. However, air monitoring during and after fires has shown that very low levels of these fibres are generated. After the fire, levels of

airborne asbestos return to typical low levels that were present before the fire incident.

Walking on-site or wind blowing over a site where building materials containing asbestos are present are unlikely to generate significant quantities of airborne asbestos. Large disturbances, such as during clean-up or demolition of the fire-damaged building, must be done safely to ensure the level of asbestos fibres in the air is kept very low.

Overall, asbestos in fire-damaged buildings typically presents a very low risk to public health.

## Who to contact for assistance

Ultimately, the owner of a fire damaged building is responsible for ensuring any public health and safety issues arising from their building or their property are managed. The local council and a number of state government departments may oversee the owner's actions to ensure that public health and safety is protected.

If you are concerned a fire damaged building may not be structurally sound and could collapse, please contact your local council.

If you are concerned a homeowner is not taking precautions to stop asbestos getting into the air when cleaning up after the fire, please contact your local council in the first instance. The local council may seek Queensland Health's assistance on this issue.

If you are concerned a business, contractor or tradesperson is not taking precautions to stop asbestos getting into the air when cleaning up after the fire, please contact Workplace Health and Safety Queensland on 1300 362 128.

For a significant building fire involving asbestos, such as a large commercial or industrial building, a coordinated government response may be carried out to manage public health and safety issues. If you are concerned about a significant building fire involving asbestos, please contact Workplace Health and Safety Queensland on 1300 362 128.



### Further information:

- Department of Health [www.health.qld.gov.au/disaster](http://www.health.qld.gov.au/disaster)
- Queensland Government <http://deir.qld.gov.au/asbestos/publications.htm>
- Contact 13 QGOV (13 74 68) for your nearest Public Health Unit