By **Lauren Prestney**, *Communications Manager, Site Safe New Zealand Inc.*

Managing mould removal

Careful practices are needed on site when managing the removal of potentially mouldy materials from leaky homes. These include adding mould to the hazard plan and covering the issue in project meetings.

HEALTH AND SAFETY considerations are essential on a leaky home building site. Construction workers doing renovations, maintenance workers and people living in mouldy leaky homes are particularly at risk of toxic mould effects.

Mould can be found on almost any surface where water has leaked into houses. This includes water from damaged roofs and tiles, windows and gutters, and where wet silt has been in contact with house structures such as wooden floors, piles or where dampness has entered wall cavities. Mould reproduces by creating tiny spores that float through the air.

Take care if mould is present

Although not all moulds are harmful, to be safe, all moulds should be treated as potentially harmful. Mould can cause a runny nose, eye irritation, cough, congestion, asthma aggravation and respiratory problems, headache, flu-like symptoms, fatigue, skin rash and other allergic reactions.

It's important to send samples of moulds for identification and to arrange for air sampling by a specialist organisation.

Some toxigenic moulds

Stachybotrys atra and some other types of mould are toxigenic, can cause decay and have been implicated in sick building syndrome. It is a greenish-black mould that produces mycotoxins that can suppress the human immune system and can lead to allergic or respiratory problems.

Stachybotrys atra is commonly found on:

- paper lining
- gypsum paper board
- fibre-cement board
- building paper
- cellulose-containing materials.

Mould can destabilise a structure

Moulds digest whatever they land on to survive. In a wood-framed building, it can eat away at the structure, affecting the structural integrity of the building.

Assess the likelihood of imminent structural failure of a building or part of a building, and consult a structural engineer.

Documentation and meetings

At tender stage, ensure the site's health and safety policies are project-specific and presented with the tender. Include the hazard of mould as part of the total hazard management process.

At contract stage, specify special personal protection equipment requirements and special conditions such as water flow supply and storage facilities for toxic materials.

Project meetings

In the initial project meeting, cover health and safety matters such as the:

- introduction of representatives
- communication of site responsibility issues
- discussion of processes for dealing with uncertain work

- discussion of the management of high-level hazards
- owner's concerns and questions.

In on-going meetings, the agenda should include items about managing mould such as:

- unforeseen extra work like decay
- health and safety matters including whether control measures are working appropriately and health monitoring, if required.

Following safe procedures

BRANZ and industry leaders recommend the following if there is mould contamination:

- Establish contamination, decontamination and safe zones.
- Where possible, internal linings and joinery should remain in place until mould decontamination is completed, by working from the outside, removing cladding and then contaminated material.
- If this is not possible, internal air barriers with depressurisation of internal contaminated zones are necessary to maintain other internal safe zones.

Stachybotrys spores are not aerosolised until dry, so mouldy debris should be removed as quickly as possible.

Clothing

- Overalls, safety boots, gloves, helmets, eye protection and respirators must be worn by everyone in contaminated zones during decladding and mould removal work to reduce the level of exposure to potential harmful spores and dust.
- Disposable overalls should be used and disposed of on site after use or at the end of each day.
- Disposable gloves should be used and disposed of after each use.
- Safety boots should remain on site to minimise spore and mycotoxin transfer to vehicles and homes. Alternatively, boots should be thoroughly cleaned before removing them from the site.
- Helmets, respirators and eye protection should be cleaned after each use, with care taken to wipe the inside of respirators and eye protection with disposable wet wipes.

Washing and meal breaks

Spores and mycotoxins stick to workers' hair and unprotected areas of their faces:

- Provide a clean decontamination area for removal of protective equipment and washing.
- On-site basins at least are needed for washing before leaving the contaminated zone and entering safe zones or leaving the site.
- Good practices of overall and glove removal and hand washing must be in place during breaks and after work. Hands and faces must be washed before eating.
- On highly contaminated sites, specialist advice must be sought, and on-site showers may have to be provided.
- Meal breaks must be in safe zones. These should not be in the building where cladding is being removed or next to stored or transported contaminated materials.
- Clean site sheds or separate approved areas such as a garage should be provided.

Disposal

- Material contaminated with mould should be bagged before being placed in skips. Do not break these bags or disturb contaminated waste.
- Truck drivers and others removing skip bins of contaminated materials should also wear protective clothing or respirators when loading and unloading.

If in doubt...

For further advice on mould or the severity of the contamination of a building:

- contact Community and Public Health on (03) 379 9480
- contact the Ministry of Business, Innovation and Employment - Health and Safety Group (www.business.govt.nz/healthandsafetygroup)
- download *Risks to health from mould and other fungi*, Workplace Health Bulletin No. 17: 2002.

For more Contact 0800 SITE SAFE or go to www.sitesafe.org.nz. Site Safe is a membership-based, not-for-profit organisation that promotes a culture of health and safety in the New Zealand construction industry.