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# You've got mould... (and so does everyone else)

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Figure 1: Left: Visible Mould Growth.  
Right: Microscopic Mould Spores and Hyphae

Yes, it's true. Mould is present in your house, your neighbour's house, your children's school, your local shopping centre, your workplace, and even your car. Mould can be found on your skin, in your hair, in your food, and in the air you breathe. The reality is that mould is a term that encompasses both visible fungal growth and the microscopic fungi that are invisible to the naked eye. This includes mould spores (the "seeds" of mould) and tiny fragments of mould growth known as hyphae, which resemble root-like structures.

## Mould is Ubiquitous

Mould is absolutely everywhere. Moreover, it is a completely normal and vital part of nature. You may have noticed how quickly mouldy fruit turns into mush. This is because mould produces digestive enzymes. In fact, the world relies on mould to decompose and recycle dead organic material, allowing all forms of life to exist. Mould naturally finds its way into all buildings through outside air infiltration and can also be present on the organic materials we use for construction. We coexist with a microbiome that includes mites, bacteria, and fungi. Only highly controlled environments such as well-protected clean rooms or operating theatres are able to maintain very low levels of these organisms.

Scientific research has established that certain species of mould, at certain levels, can be harmful to health. Individuals who are mould-sensitive include those with compromised immune systems who cannot mount an immune response to pathogenic mould, as well as those with an overactive immune response that leads to chronic inflammation. For individuals with a healthy immune system, a certain degree of mould exposure is typically manageable.

## When is a Property Deemed “Contaminated” by Mould?

A property (or part thereof) or a surface within a property is generally considered contaminated by mould when there is either actual mould growth present or there is an abnormal microscopic mould spectra (what would not “normally” be present).

Determining what constitutes a “normal indoor mould ecology” largely depends on factors such as the age, construction, and condition of the property, occupant behaviours, occupancy density, and climatic conditions.

The expected mould ecology in a property located in far north tropical Queensland, for example, would differ significantly from that of a property in Hobart or an apartment in metropolitan Melbourne. Therefore, it is erroneous to expect indoor mould ecologies (in terms of mould count or taxonomy) to be similar in all indoor environments. It should be noted that because a property has abnormal or “high” levels of settled or microscopic mould does not necessarily mean it is unsafe to occupy.

Given the ubiquity of mould, the mere presence of settled microscopic mould should not automatically be assumed to be a problem unless the types and levels of settled mould indicate a source of mould growth.



Figure 2: An Indoor Environmental Professional undertaking air sampling.

Indoor environmental consultants generally agree that any mould growth in a property is unacceptable. In such cases, the cause of the excess moisture and mould growth must be identified and rectified; and thereafter the contamination addressed.

The objective of cleaning or mould remediation is to return the property back to a “normal” fungal ecology similar to an unaffected indoor environment.

Unfortunately, what constitutes a “normal indoor fungal ecology” is not easily defined as indoor fungal ecology will vary significantly depending on numerous factors such as the design, age, construction and condition of the property as well as the climatic region and seasonal influences. As such, it will generally be up to an Indoor Environmental Professional to make such a determination in context to all these factors.

## Prevalence of Mould in Residential Properties



'Moisture' refers to high humidity, or diffuse water otherwise bound in material's lattice so that it is not freely available. This is to be differentiated from 'water' which will refer to free (or unbound) water.

In Australia, water damage is prevalent in residential properties, with estimates suggesting that more than half of all residential properties have experienced some form of water damage or excess moisture leading to microbial contamination. [Read more about the difference between 'moisture' and 'water'.](#)

This can result from minor plumbing leaks, roofing material and flashing failures, leaky windows, defective waterproofing membranes, inadequate site drainage, high water tables, condensation, or prolonged high humidity due to climate. There are numerous ways in which water or excess moisture can affect a building, making it challenging to identify the underlying issues.

If you suspect hidden mould growth within your property, consider hiring a professional to assess any current water damage or excess moisture issues and identify mould contamination throughout the premises.

Here are some ways to help prevent water damage and mould contamination in your home:

1. Keep all roofing gutters clear and free from leaves and other foreign objects (including balls etc.). This is especially if your roof is under deciduous trees.
2. Ensure that tiles and grout in the shower and other wet areas are in good condition.
3. Ensure any braided flexi hoses in the house are inspected regularly or replaced with rigid plumbing or plumbing less prone to failure.
4. If you live in a humid climate, install or operate air-conditioning or dehumidifiers to maintain relative humidity levels in the property to less than 65% RH.
5. Have a professional inspect any areas of the property where water stains might appear on walls and ceilings

For more information regarding the services that Restoration Industry Consultants can provide in assisting with decisions regarding mould and moisture in your property, or for general queries on restoration and remediation, please contact us on 1300 376 666 or [info@callricfirst.com](mailto:info@callricfirst.com).



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