Poor indoor air quality – caused in part by dampness and mould – is recognised globally as a common problem and a major cause of ill health.\(^2\,^2\) In Australia, people spend about 90% of their time indoors\(^2\) – even more during the ongoing COVID-19 pandemic. The quality of the air we breathe is an important determinant of health and wellbeing. Dampness and mould in homes are exacerbated by extreme weather conditions such as storms, heavy rainfall, and flooding. These events are set to increase as a result of the climate crisis, making the need to reduce dampness and mould in homes increasingly important.\(^4\)

### What is dampness and mould?

**Dampness**
The presence of excessive moisture. An increase in damp indoor conditions encourages mould growth.

**Mould**
Moulds are microscopic fungi that can grow on surfaces. There are many different species of mould. Some are considered toxic because the chemicals they release affect human health.

Both dampness and mould are affected by:
- the indoor and outdoor environment (temperature, humidity)
- building characteristics (ventilation, dwelling construction type, building materials, quality of build)
- occupants’ behaviour (whether people use the extractor fan while cooking or bathing)\(^4\)

Mould is naturally present in all indoor and outdoor spaces and usually poses no problem to humans. When mould grows where it is unwanted, such as inside a house, it is considered a form of microbial pollution.\(^4\)

### How do dampness and mould affect health?

Many of us know someone whose asthma is triggered by exposure to mould. While the lungs are an obvious target for this airborne irritant, they are not the only system affected by mould.

#### Mental health
LIVING WITH MOLD OR LIVING IN A DAMP HOUSE HAS BEEN ASSOCIATED WITH NEGATIVE MENTAL HEALTH EFFECTS, WITH STUDIES SHOWING THAT PEOPLE WHO LIVE IN MOLDY HOMES REPORT MORE SEVERE DEPRESSION AND ANXIETY SYMPTOMS.\(^8\,^9\)

Of course, this association is likely partly to do with a range of factors correlated with living with damp and mould including poor housing condition, odour, and deterioration in health – nonetheless these indirect pathways are important.

#### Children
Early exposure to indoor mould in childhood has been associated with the development of asthma, allergy, nasal obstruction, and poorer cognitive function.\(^10\,^11\) It is estimated that 7.9% of asthma in Australian children is caused by indoor dampness.\(^12\)

Since asthma and allergies are on the rise, dampness and mould are having a corresponding increase in impact.\(^13\)

#### Respiratory
Evidence demonstrates that exposure to dampness and mould in the home is associated with a range of adverse health outcomes, including increased risks of asthma, respiratory infections and symptoms, hypersensitivity pneumonitis, allergic alveolitis, and immunological reactions.\(^5\,^6\)
There is a lack of consistent, evidence-based guidelines for the assessment of mould in Australia. The main methods for assessing the presence of mould are:

- physical inspection
- air sampling
- surface sampling

However, there is no current global consensus on what level of mould exposure is tolerable or acceptable. The World Health Organization (WHO) stipulates that no level of exposure is considered safe.

In its recently released Housing and Health Guidelines, the WHO recommends that dampness and mould are prevented or fixed early to minimise harmful exposure. This guidance is particularly relevant in Australia, where the WHO suggests that anywhere between 10–50% of households are impacted by this issue.

Without mandated standards, we continue to see practices in design, building and maintenance that exacerbate dampness and mould.

Dampness and mould are likely to be particularly prevalent in:
- poorly maintained, low-income housing
- private rental and social housing tenures where dwellings are in a poor state of repair

Inequal impacts:

Unequal impacts: who is most affected?

Poor housing conditions are more common among people who already experience health issues. Improving housing will likely lead to a significant improvement in public health.

Tenancy regulations vary across Australia. Some states and territories have begun to address the issue of dampness and mould in rental housing. For example, in 2021 Victorian law was changed to mandate that premises ‘must be free from mould and damp caused by or related to the building structure’ and allows tenants to log an urgent repair request where structural issues (such as leaking roofs or plumbing) lead to mould.

Australian state and territory governments provide advice on dealing with dampness and mould in the home, but current building codes do not focus on preventing dampness.

Without mandated standards, we continue to see practices in design, building and maintenance that exacerbate dampness and mould.

Rental regulations

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