

Facts about ventilation, damp and your health

Moisture has a significant impact on your health and the comfort of your home and numerous organisations have published findings about the topic—here is a small selection:

Queensland Health: Temperature and humidity have a significant effect on human comfort and health. The most comfortable humidity range is 40-60%, but air temperature and humidity are related in respect to comfort or perceived temperature. The combinations of temperature and humidity where people report comfort is termed the "comfort zone".

Australasian Society of Clinical Immunology and Allergy (ASCIA):

“Damp houses have a higher mould content than dry homes and indoor mould is a common cause of perennial allergic rhinitis, sinusitis and bronchitis as well as asthma.”

Workers Health Care: “Due to the presence of allergens on spores it appears that all moulds have the potential to cause an allergic reaction in susceptible humans. Mould growth in buildings is associated with an increased prevalence of respiratory symptoms and diseases, such as asthma and bronchitis.”

Archicentre: “Australia has one of the highest asthma rates in the world, with more than two million Australians affected. Many children are affected by dust mites and dust mite allergens and it is critical to take action to remove dampness and humidity, which are ideal for dust mites.”

Workers Health Centre:

The presence of moisture in buildings favours the growth of moulds on surfaces. This can cause high levels of airborne spores that may cause allergic reactions or respiratory problems.

Fungi usually do not grow rapidly indoors or in large amounts if the environment is clean and dry. However, if the environment is damp, high levels of airborne spores can be generated. Condensation is the principal source of moisture that promotes growth of fungi on the internal surfaces of domestic dwellings.

Archicentre:

Condensation will cause mould growth and generate conditions conducive to termite, borer, cockroach, silverfish, dust mite and other infestations all of which may cause diseases or structural damage.

Information compiled in 2006 by:
Global Eco & Environmental Solutions
 205 Elgar Road, Surrey Hills, Vic 3127
 Web: www.ges.com.au Ph: 1300 655 118

NSW Health:

Damp houses have more dust mites and more mould which can also trigger asthma. It's important to try to keep the house well sealed, to avoid leaking gutters and rising damp. Keeping the air dry isn't easy in a humid climate, but good ventilation helps.

The Asthma Foundation and Archicentre, the building advisory service of the Royal Australian Institute of Architects, has warned households, especially those where one or more members suffer from asthma, that rising damp, mould and mildew in winter can trigger allergies and asthma attacks.

New houses

If you live in a new house you may find the below information of interest:

CSIRO Stated in October 2000:

“Occupants of new Australian homes may be exposed to 20 times the maximum allowable limits of indoor toxics” and

“Other studies have found that people living in modern houses are twice as likely to have respiratory problems, as people living in old homes.”

A study conducted by the **Walter Reed Army Institute** of Research in Washington, D.C. found as much as a 50 percent higher incidence of upper-respiratory problems in recruits housed in newer, more energy-efficient buildings, compared with those living in older, less air-tight structures.

Devine houses:

“Condensation is at its maximum in new homes. Many litres of water are contained in timber, bricks, concrete, plasterboard, paint, ceramic tiles & roof tiles. This water comes out of the house by evaporation, which consequently develops air of a higher moisture content than normal. You must see that ventilation is provided whenever possible to bring this normal drying out process to its conclusion as steadily as possible.”

Ten Most Damp Affected Suburbs in each State according to Archicentre:

Victoria	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1. Carlton 67%	1. Erskineville 76%	1. Clayfield 40%	1. Prospect 74%	1. Subiaco 56%	1. Lindisfarne 40%
2. Carlton North 67%	2. Newtown 69%	2. Wilston 40%	2. Unley 73%	2. Nedlands 47%	2. Battery Point 39%
3. Fitzroy 66%	3. Cammeray 68%	3. Coorparoo 39%	3. Parkside 71%	3. Como 46%	3. Launceston 37%
4. West Melbourne 63%	4. Dulwich Hill 63%	4. The Gap 39%	4. Norwood 70%	4. Floreat 44%	4. Hobart 36%
5. East Melbourne 61%	5. Stanmore 61%	5. Norman Park 38%	5. Henley Beach 70%	5. Maylands 43%	5. Sandy Bay 29%
6. Fitzroy North 61%	6. Surry Hills 59%	6. St Lucia 38%	6. Goodwood 70%	6. Mosman Park 43%	6. Blackmans Bay 28%
7. Parkville 60%	7. Lindfield 55%	7. Highgate Hill 37%	7. Hawthorn 68%	7. South Perth 39%	7. N. Hobart 27%
8. Clifton Hill 56%	8. Naremburn 55%	8. Kelvin Grove 37%	8. Stirling 56%	8. Shenton Park 38%	8. Tarooma 24%
9. North Melbourne 55%	9. Marrickville 54%	9. Kenmore 36%	9. North Adelaide 57%	9. Wembley 38%	9. Howrah 23%
10. Richmond 51%	10. Paddington 54%	10. Hamilton 35%	10. Adelaide 55%	10. North Perth 35%	10. West Hobart 23%