

National Center for Healthy Housing releases stunning report

Housing Interventions and Health: A Review of the Evidence
January 2009

[The National Center for Healthy Housing](#) just released its report entitled "Housing Interventions and Health: A Review of the Evidence".

Buried within the 92-page report, the agency acknowledges that mold can cause illness in previously healthy individuals. Perhaps of even greater import is the agency's finding that mold is not just an allergen, it can also have toxic effects. So much for the defense's favorite line: "There's no such thing as *toxic mold*."

The specific language found in the one section of the report reads:

Fungi (Mold) and Excessive Moisture

There is a broad body of epidemiologic and laboratory evidence linking the presence of mold and moisture to poor health outcomes. National and international expert panels have reviewed the evidence, finding consistently that both mold and moisture are associated with a wide variety of adverse health effects in both the general population and in specific vulnerable segments of the population (Institute of Medicine 2000, 2004). From a public health and prevention perspective these clinical findings point to the importance of controlling moisture sources within the home, correcting water damage as soon as it occurs, fixing leaks promptly, and safely cleaning or removing mold-contaminated materials promptly.


In indoor environments, mold originates from two sources, including mold infiltrating from outdoors (e.g., through open windows), and mold colonization on the interior of the home. Molds obtain nutrients and moisture sufficient for growth from water-affected building materials such as wallboard and insulation materials, as well as carpets, furniture, and bedding (Institute of Medicine 2004; Woodcock et al. 2006). The features of a home that increase moisture levels and fungal growth include condensation on cool surfaces, water intrusion from outside, and interior leaks. Mold exposure occurs primarily as spores become aerosolized upon disturbance of a reservoir. Recent research has shown that fungal fragments also contribute to the respirable fraction of inhaled particles (Gorny et al. 2002; Green et al. 2005; Green et al. 2006).

The fraction of current asthma cases attributable to dampness and mold exposure in housing is estimated to be 21% (Mudarri and Fisk 2007). Although the precise causal pathway between mold exposure, allergic sensitization or irritant airway response and asthma development remains undetermined, exposure to mold is associated with the exacerbation of asthma related symptoms in sensitized individuals (Institute of Medicine 2000, 2004). The IOM (2004) report did not find sufficient evidence of a causal relationship with any health outcome, and concluded there was insufficient evidence



to determine an association with many health effects, including asthma development, dyspnea, airflow obstruction (in otherwise healthy persons), mucous membrane irritation syndrome, and pulmonary hemorrhage in infants. These results are not applicable to immunocompromised persons, who are at increased risk for fungal colonization or opportunistic infections.


Molds not only have allergenic effects, but can also have toxic or irritant effects. Evidence from occupational studies suggests that exposure to mycotoxins can result in mucus membrane irritation, skin rashes, dizziness, nausea and immunosuppression (Burge and Ammann 1999). Fungi also produce irritants such as microbial volatile organic compounds (MVOCs) and (1→3)s-D-glucans that may be responsible for some "sick building" symptoms (Douwes 2005; Walinder et al. 2005).

[CLICK HERE](#) for the full report.


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