

## **MOLD AS A HOME ALLERGEN: INFREQUENT, BUT OFTEN CLAIMED**

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For people who have allergies at home, including asthma, mold is near the bottom of the causal list. This is yet another manifestation of the disconnect between clinical medical knowledge and popular indoor air perceptions. The American Academy of Allergy Asthma and Immunology (AAAAI) recognizes dust mites, cat and dog allergens as the primary indoor asthma producers. In a recent International Asthma conference (Sterk, et al. 1999) the increase in asthma was the central topic. Mold was not part of that discussion. Cats, dogs, dust mites and cockroach allergens dominated the meeting. Molds can be indoor allergens, but are relatively minor allergens by comparison with the others. Moreover, because molds are prevalent outdoors, they are widely considered a general (not specifically indoor) environmental factor as are pollens, grasses, trees and other standard aeroallergens. Consequently, indoor environmental testing in homes, schools, office buildings and elsewhere is incomplete if fungi alone are sampled and studied. That is, if one is trying to determine why a person seemingly has indoor allergies, proper testing must include, at minimum, dust mites, dust, cat and dog allergens, as well. Moreover, residents don't have to have cats or dogs for those allergens to be present, since numerous studies have shown that these common pet allergens are ubiquitous in indoor environments. They are tenacious and are carried in from other sources. When a claim of asthma due to mold arises, your data, both for advising occupants and for managing a claim, will be incomplete with mold testing alone. Besides the potential allergenicity, dust mite testing tells you something else—the quality of housekeeping, an important factor for any home allergen levels including mold.

Mold allergen testing in people correlates, only imperfectly, with allergic illnesses. Twenty percent or more of the population tests positive for many aeroallergens. Almost all who are allergic to mold test positive to other allergens as well. In some locations (i.e., the Ohio Valley) and for certain tests, histoplasmosis in this case, the number is closer to 90%. A positive allergy test may, or may not, signify clinical response to the allergen. Many people test positive without having clinical allergies. Also, the nature of the test is important. Prick tests are the standard. Although RAST tests are more sensitive, they pick up false positives. MAST tests are too sensitive, finding allergies when there are none. Only through clinical correlations—objective findings indicative of allergy—can allergy be confirmed. Even then, without specific challenge testing, i.e., getting hives after eating shellfish every time; or, getting sneezing attacks every fall during hayfever season, can a positive allergy to a specific agent be clearly shown. Finally, and critical for mold claims, negative allergy testing for molds is an important

finding. Whereas all people with positive tests are not necessarily clinically allergic; people with negative tests are not, by definition, allergic.

Therefore:

Home mold testing, if done at all, should include testing for other aeroallergens.

Positive mold or other allergy tests mean little without direct, observed correlation between known exposures and identified medical findings

Many people with positive allergy tests do not respond to the allergen. They have antibodies, but are not clinical responders.

But, negative mold allergy testing in people mitigates against a mold allergy, or a claim for that.

Finally, the existence of antibodies or positive skin tests does not tell you when or where those arose. An indoor air connection can rarely be made unless allergy testing was performed and was negative shortly before a particular exposure and then converted to positive following the exposure.

## **Reference**

Sterk, P.J., et al. "The Message from the World Asthma Meeting: Working Group Report." *Eur. Respir J.* 14:1435-53.