Media reports have linked indoor mold exposure to everything from asthma to headaches. But what's the real scientific evidence that exposure to mold in your home actually can cause physical symptoms? A recent review of scientific literature about mold-related diseases found that, while mold can cause certain health problems, many common claims just don't hold up under scrutiny.

Five allergists, including Robert A. Wood, M.D., of the Johns Hopkins University School of Medicine, set out to define what can and can't be proved about mold exposure. Here's what they found in their review:

**Toxic mold.** Popular reports about the health effects of mold are likely to include the term "toxic mold." But that term can be misleading, the experts say. They point out that only certain mold spores produce toxins, and only under certain circumstances. Just because a particular mold can produce toxins doesn't mean it will. Even if the mold is producing toxins, a person must breathe in a sufficient dose to be affected. It is highly unlikely that you could inhale enough mold in your home or office to receive a toxic dose.

**Mold and Asthma.** While allergic responses to inhaling mold are a recognized factor in lower airway disease such as asthma, studies show that outdoor mold is more likely to cause problems for asthmatics than mold found indoors. A better assessment of the effects of indoor mold on people with asthma would require studies that follow people over a long period and take into account factors that could affect the results, such as humidity and other airborne allergens and irritants.

**Mold and Allergies.** The link between mold and allergies is even weaker, the experts say. Current research doesn't provide a persuasive case that exposure to mold in the outdoor air plays a role in allergies, and studies linking indoor molds to upper airway allergy are even less compelling.

**Mold and Skin Rashes.** Exposure to molds doesn’t contribute to atopic dermatitis, or rashes.

**Mold and Sinusitis.** There’s no clear-cut evidence that sensitivity to mold causes chronic sinusitis, nor are there conclusive data to show that mold-killing antifungal drugs such as amphotericin, applied to the nasal passages, are an effective treatment for sinusitis.
**Mold and Infection.** Superficial fungal infections, such as toenail fungus or jock itch, generally result from fungi that develop inside the warm, moist environments found in shoes or tight garments. Thrush can develop inside the mouths of people with weakened immune systems, such as those who have AIDS or cancer. These infections generally are not the result of exposure to mold in the home or workplace.

**Mold and Irritation.** Mold found indoors, even inside damp buildings, is not likely to cause irritation of the eyes or throat -- and if it does, the effects are short-lived. Symptoms or signs persisting weeks after exposure and those accompanied by complaints related to the nervous system, brain, or whole body (such as those attributed to chronic fatigue) can’t be pinned on the irritant effects of mold exposure.

**Mold and Immune System Damage.** There is no credible evidence to suggest that environmental exposure to mold damages the immune system. The experts warn against immune-based tests given to look for intolerance to mold and other substances in the environment—so-called multiple chemical sensitivity. The authors specifically advise against using blood tests that look for a wide range of non-specific changes in the immune system. They also discourage using tests of autoantibodies, which are abnormal antibodies that the body sometimes produces in reaction against its own tissues. These tests are expensive and do not provide useful information that will help to diagnose or manage diseases related to mold, they say.

**Mold and Hypersensitivity Pneumonitis.** This uncommon inflammation of the lungs, an example of which is Farmer’s Lung, is caused by exposure to an allergen, usually organic dust that may come from animal dander, molds, or plants. A person generally develops this condition only after high-dose or prolonged exposure, or both, to mold or other allergens.

Much of the hoopla over mold exposure came in the wake of Hurricane Katrina, the experts note in their report, which appeared in the *Journal of Allergy and Clinical Immunology*. The flood-ravaged areas of the Gulf Coast, sadly, have provided a natural laboratory, which enables medical researchers to address lingering questions about the health effects of mold.

The research cited in this article was:

Bush RK, Portnoy JM, Saxon A, Terr Al, Wood RA.
The medical effects of mold exposure.
PMID: 16514772 [PubMed - indexed for MEDLINE]
