

Comprehensive Analysis with Mold IgE Allergy Test and MycoTOX Profile

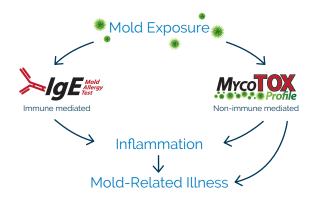


Significance of IgE Mold Allergy testing

- Mold allergy is an abnormal immune reaction to mold spores or mold cell components. People can be exposed to mold spores or byproducts at work, home or outdoors.
- Certain occupations have potential for high mold exposure: crop and dairy farming, greenhouse plant husbandry, logging, carpentry, millwork, furniture repair and commercial baking.
- A high exposure in the home can occur in damp areas such as bathrooms, kitchens and basements.
- In general, working or living in damp buildings with moisture higher than 50% humidity, increases the possibility of mold exposure.
- Immune reactions to mold can be identified by the level of immunoglobulin E (IgE) antibodies to specific mold species.
- Mold IgE Allergy blood test that measures patient antibodies to most common molds. The IgE antibodies are detected in blood serum using an FDA-approved enzyme-linked immunosorbent assay (ELISA).
- The most common molds known to cause allergic conditions include Alternaria, Aspergillus, Cladosporium and Penicillium. Use of both tests allow a wider array of molds to be detected.
- The Mold IgE Allergy panel includes 12 mold allergens, with markers known to be involved in mold-related illnesses.

Comparison of IgE Mold and MycoTOX Profile

- IgE looks at immune response to mold exposure.
- MycoTOX Profile looks at mycotoxin levels excreted from the body.
- Mold allergies and mold mycotoxin toxicity are distinct responses related to mold illness.
- 70% of patients exposed to mold have positive skin tests to those molds, indicating that testing for IgE antibody in blood will complement the mycotoxin test.



Why Both IgE Mold and MycoTOX Profile Are Beneficial

- IgE levels predict individual response, mild or severe, to the molds in the environment.
- IgE levels may indicate reactivity to mold species whose mycotoxin products were not excreted at the time of the mycotoxin test or are not among the mycotoxins included in the MycoTOX Profile.
- The two tests provide a more comprehensive picture of individual mold exposure.
- Mycotoxins predict the effects of toxins on multiple bio-systems in the body.

Mold	Environment and Mycotoxins Produced
Penicillium notatum (chrysogenum)	Found in food and damp buildings. Can cause respiratory conditions like pneumonia, localized granulomas, fungus balls, asthma and systemic infections like endophthalmitis. Species of this mold produce the mycotoxins gliotoxin, ochratoxin, sterigmatocystin, citrinin, and mycophenolic acid, which are measured in the MycoTOX Profile.
Cladosporium herbarum	Common outdoor mold found in 70% of homes tested in the US. Found in food stuffs, paint, windowsills, HVAC systems.
Aspergillus fumigatus	Ubiquitous, common in outdoor air, contaminates foodstuffs such as stored grains and crops, and decaying plant material (compost, peat, hay, soil, wood chips). A. fumigatus readily grows in indoor environments on dampened building materials (plasterboard, wood, chipboard, ceiling tiles, cardboard, and insulation material) usually producing a light to medium growth, grey to greyish-green. Species of Aspergillus produce the mycotoxins aflatoxin, ochratoxin, sterigmatocystin, gliotoxin, and citrinin. All are measured in the MycoTOX Profile.
Mucor racemosus	Found in soil and in foods (moldy cheese, fresh fruits, and smoked foods, yogurt, spices, and nuts). Individuals in agricultural occupations tend to have a high exposure rate.
Candida albicans	A yeast that grows in the gastrointestinal tract as part of the normal GI microbiome. Also found in the genitourinary tract and on skin. Overgrowth of Candida can lead to immune stimulation manifesting as inflammation, gastrointestinal upset, fatigue, brain fog, etc. The mycotoxin produced by C. albicans is gliotoxin and is measured in the MycoTOX Profile.
Alternaria tenuis (alternata)	A common outdoor mold allergen found in soil and on many plants. Commonly associated with asthma. Also found in damp, poorly ventilated or water damage buildings.
Helminthosporium halodes	Found worldwide and a common contaminant of grains and corn. Thrives in a warm moist environment. May contaminate a water-damaged building but not seen as frequently as other molds.
Fusarium moniliforme	Often found in cereal grains: corn, oats, rye, barley, and buckwheat. Though commonly found outdoors, it can grow in water-damaged buildings as well. Can cause hypersensitivity pneumonitis especially in occupational settings. A frequent cause of upper and lower respiratory symptoms. Species of Fusarium produce the mycotoxin zearalenone, roridin E, enniatin B, and verrucarin A which are measured in the MycoTOX Profile.
Stemphylium botryosum	Often found on grains, tomatoes, and other farm crops. Can manifest as brown spots on your lawn. At its peak is during ragweed season.
Phoma betae	A phytopathogen found in aquatic environments and soil; these fungi have been isolated from water sources, food, and crops, acting as opportunistic pathogens when a suitable host is exposed. Contamination of potatoes or corn can contaminate seeds, nuts, soybeans, potatoes, bananas, sorghum, maize, kiwi berries, lemons, tomatoes, eggplants, pomegranates, and cereal grains. Species of Phoma produce the mycotoxin sterigmatocystin, which is measured in the MycoTOX Profile.
Epicoccum purpurascens	Widespread in grasslands and agricultural areas. Found in the Midwest during cool, dry autumns. Can contaminate foodstuffs and textiles.
Bipolaris spicifera	Commonly found in soil and plant materials. May form fungal balls of the sinuses or cause dermatomycosis, keratitis, allergic sinusitis, central nervous system infections, and disseminated infections, as well as allergic bronchopulmonary disease, endarteritis, endocarditis, and peritonitis. Bipolaris species produce the mycotoxin sterigmatocystin, which is measured in the MycoTOX Profile.









