Molds and Mycotoxins

Molds can produce many allergic reactions, like asthma, but can also sometimes produce toxins.

Our urinary mold toxin testing can accurately measure excessive exposure to mold and implicate degrees of exposure, which can cause a variety of diseases.

Some Mycotoxins that might occur in indoor environments

Mycotoxin	Producing Organisms	Health Effects, Primarily from Ingestion, Injection, or Dermal Exposure
Aflatoxins	Aspergillus flavus, other	Forms DNA adducts, hepatotoxic,
	Aspergillus spp.	carcinogenic, immunotoxic
Alternariol	Alternaria spp.	Cytotoxic, teratogenic
Citrinin	Penicillium expansum	Carcinogenic
Chaetoglobosins	Chaetomium globosin	Inhibits cell division
Cytochalasins	Aspergillus clavatus	Inhibits cell division
Epicladosporic acid	Cladosporium spp.	Immunosuppressive
Fumonisins	Fusarium spp.	Inhibits sphingolipid biosynthesis, neurotoxic, hepatotoxic, nephrotoxic, carcinogenic
Fumitremorgens	Aspergillus fumigatus	Tremorgenic
Gliotoxin	Aspergillus fumigatus, Gliocladium	Blocks membrane tiol groups, immunosuppressive, cytotoxic
Griscofulvins	Memnoniella, P. griseofulvum, P. viridicatum	Hepatotoxic, tumorigenic, teratogenic
Myciphenolic acid	Penicillium brevicompactum	Blocks inside monophosphate dehydrogenase, immunosuppressive
Ochratoxins	Aspergillus ochraceus, Penicillium viridicatum	Forms DNA adducts, inhibits protein synthesis (phenyalanyl-t-RNA synthetase), nephrotoxic, carcinogenic
Patulin	Paecilomyces variatii, P. expansum	Inhibits potassium uptake, possible carcinogen
Trichothecenes- satratoxins, verrucarins, roridins	Stachybotrys chartarum, Fusarium spp., Myrothecium	Inhibits protein and nucleic acid synthesis, immunosuppressive, hemotoxic, hemmorrhagic
Sporidesmin	Pithomyces chartarum	Hepatotoxic
Stachybotrylactams and lacones	Stachybotrys chartarum	Immunosuppressive
Sterigmatocystin	Aspergillus versicolor, A. niger, A. nidulans	Hepatotoxic, carcinogenic
Tenuazoic acid	Alternaria alternate, Phoma soghina	Nephrotoxic, hepatotoxic, hemmorrhagic
Verrucosidin	Penicillium polonicum	Neurotoxic