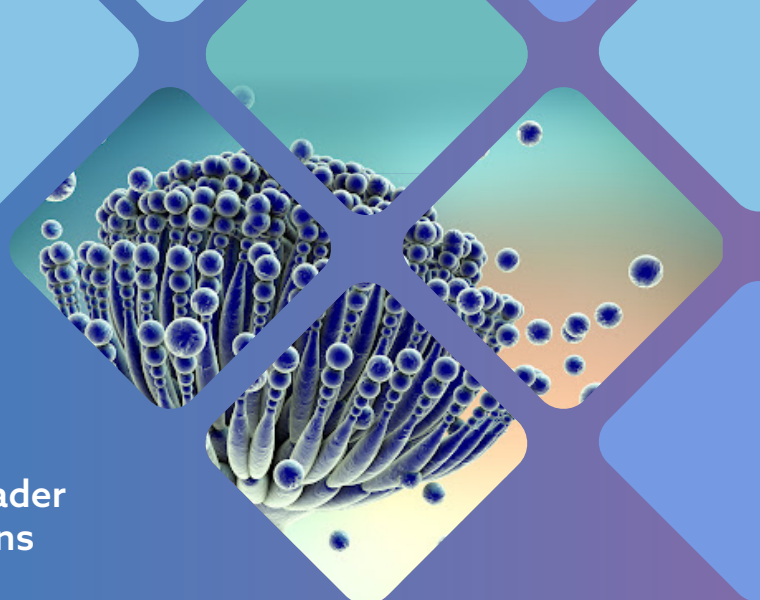


Neurologic & Mental Health

Clarifying mycotoxin exposure within broader neurologic and mental health presentations



Many patients with a history of mold or water-damaged building exposure show up with a mix of symptoms—like brain fog, mood changes, fatigue, and sleep problems—that are hard to pin down to one cause.^[1,2,3] Because these symptoms can overlap with stress, anxiety, or other common conditions, potential contributing factors may not be fully explored, leaving patients without clear answers for a long time.^[2,11]



When Might Providers Consider the MycoTOX Profile

Cognitive & Executive Complaints: Patients presenting with brain fog, word-finding difficulty, impaired memory, or slowed processing—particularly when fluctuating or non-focal in character.^[1,3,7]

Neuropsychiatric & Mood Symptoms: Anxiety, depressive symptoms, irritability, or emotional lability that may not fully respond to standard interventions and co-occur with somatic or environmental triggers.^[1,4,9,11]

Sensory & Headache Syndromes: Recurrent headaches, migraine-like episodes, photophobia, tinnitus, or sensory hypersensitivity, especially when temporally associated with exposure history.^[1,3,7]

Motor & Coordination Changes: Subtle tremor, balance instability, gait irregularity, or fine motor difficulty with no clear structural etiology.^[4,5,8,9]

Neuroimmune / Multisystem Pattern: Chronic fatigue, post-exposure symptom flares, pain amplification, or relapsing-remitting presentations overlapping with cognitive and mood domains.^[1,3,10,11]

Known or Suspected Mold Exposure: History of residence or work in a water-damaged building, or suspected dietary mycotoxin exposure, with any of the above neurologic or neuropsychiatric symptom clusters.^[2,6]

What the MycoTOX Profile Measures

Analyte Class	Everyday Exposure Sources	Neurologic Relevance
Aflatoxins	Peanuts, tree nuts, corn, and other commodities with fungal contamination ^[4]	Associated with oxidative stress and hepatic-CNS interactions; may contribute to systemic inflammatory burden ^[1,4]
Ochratoxin A	Grain-based foods, coffee, dried fruits, spices; indoor mold environments ^[8]	Linked to dopaminergic dysfunction, mitochondrial impairment, and protein aggregation relevant to neurodegeneration ^[5,8,9]
Trichothecenes (e.g., Deoxynivalenol)	Contaminated grains, wheat, corn, barley; water-damaged building materials ^[4,7]	Associated with oxidative stress, neuronal injury, and immune modulation relevant to cognitive and mood pathways ^[1,7]

What the MycoTOX Profile Measures (Cont)

Analyte Class	Everyday Exposure Sources	Neurologic Relevance
Zearalenone	Grains and grain-derived products; water-damaged building environments ^[4]	Exhibits endocrine-disrupting properties; may intersect with neuroendocrine and mood-regulatory pathways ^[4,11]
Other important mycotoxins (e.g., Gliotoxin)	Indoor mold environments, particularly Aspergillus and Stachybotrys species ^[2,6]	Associated with immune modulation, blood-brain barrier interactions, and neuroimmune activation ^[2,3,6]

Clinical Applications & Evidence Context

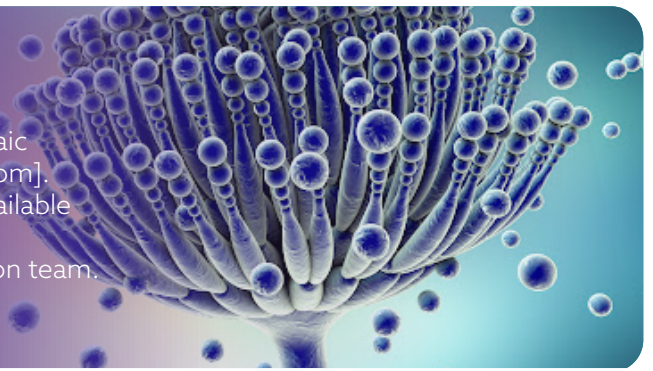
Condition	Clinical Encapsulation
Depression & Anxiety Disorders	Inflammatory signaling, oxidative stress, and neuroimmune activation—all associated with mycotoxin exposure—overlap with biologic pathways implicated in mood and anxiety symptom expression, supporting use of MycoTOX as a contextual exposure marker in treatment-resistant or environmentally triggered presentations. ^[1,3,7,9,10,11]
Autism Spectrum Disorder	Gut–brain axis disruption, mitochondrial dysfunction, and immune dysregulation are active research areas in ASD biology, and may intersect with mycotoxin exposure pathways in subsets of patients with multisystem or sensory-behavioral presentations. ^[1,4,8,11]
Parkinson’s Disease	Ochratoxin A and fumonisin exposure have been associated in experimental settings with dopaminergic dysfunction, impaired autophagy, and protein aggregation relevant to Parkinsonian neurodegeneration. ^[4,5,8,9]
Alzheimer’s Disease / Dementia	Neuroinflammation, oxidative stress, and environmental toxin exposure represent emerging research areas in Alzheimer’s pathophysiology; mycotoxin biomonitoring may provide one biologic data point within a broader neurodegenerative clinical workup. ^[1,6,7,8]
Chronic Fatigue & Neuroimmune Syndromes	Relapsing fatigue, and cognitive slowing associated with neuroimmune activation may be contextually supported by mycotoxin exposure data in patients with overlapping environmental triggers. ^[1,3,8,11]

How the MycoTOX Profile Supports Clinical Reasoning

Adds Exposure Context Adds mycotoxin data that may be considered alongside water-damaged, occupational, or food exposure history. ^[2,4,6,11]	Mechanistic Pathway Context Detection of specific mycotoxin classes may help contextualize biologically plausible mechanisms—including oxidative stress, mitochondrial dysfunction, and neuroimmune activation—that are relevant to the patient’s presenting symptom profile. ^[1,3,4,7,8]	Multi-Route Exposure Assessment MycoTOX evaluates mycotoxin exposure via both inhalational (water-damaged environments) and dietary routes, broadening the clinical utility of exposure history interpretation. ^[2,4,6]
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How to Order

To order the MycoTOX Profile test, contact your Mosaic Diagnostics representative or visit [www.mosaicdx.com]. Specimen collection kits and requisition forms are available through your account portal. For clinical support or interpretation questions, contact our clinical education team.



This document is intended for licensed healthcare professionals and is for informational and educational purposes only. The test results are not intended to diagnose, treat, cure, or prevent disease. All clinical interpretation should be done by a qualified healthcare professional in the context of the individual patient. Statements regarding associations between health symptoms and conditions do not constitute diagnostic claims.

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