Research Summary: Black Mold #1

As featured in Dr. Kenny Mittelstadt's video:
"What Are the Common Symptoms of Black Mold Poisoning?"
Date of Publication: 03/10/2026

Research Context:

This week's topic explores how mold-related illness is often overlooked, not because symptoms are absent, but because they rarely appear in a single obvious way. Instead, people may notice a cluster of issues such as fatigue, brain fog, sinus irritation, headaches, or new sensitivities that do not seem connected at first.

In the video, Dr. Kenny encourages viewers to think beyond single symptoms and look for patterns across body systems while considering environmental context. Research on mold and damp indoor environments helps explain why respiratory, neurological, immune, and mood-related symptoms can appear together, offering clues about how environmental stress can affect the body's communication networks and resilience.

Key Findings from the Research:

Study 1 (S1309104225002363):
A 2025 systematic review in Atmospheric Pollution Research found that indoor fungal exposure is linked most clearly to respiratory problems such as allergic rhinitis, asthma, tonsillitis, adenoid enlargement, and reduced lung function. The review also notes that fungi can trigger immune activation and oxidative stress, which means the body's defense system becomes more active while cells are exposed to higher levels of inflammatory stress. Over time, that type of immune pressure can influence other systems beyond the lungs. For viewers, this means mold-related illness may begin with allergy-like or breathing symptoms, but the broader pattern can sometimes extend to fatigue, brain fog, and other body-wide stress responses.

Study 2 (PMID 32596012):
In a 2020 cohort study of hospital workers exposed to moisture-damaged buildings, respiratory symptoms were reported by 80% of exposed workers compared with 29% of controls. Nervous system symptoms were reported by 81% versus 11%, fatigue by 77% versus 24%, and "brain fog" by 62% versus 11%. These differences highlight how strongly environmental conditions can influence how people feel and function. The findings also show that mold-related illness does not always fit into one simple category. Instead, symptoms may appear across several systems at once, including energy, cognition, immune responses, and respiratory health. This helps explain why people often describe feeling "off" in multiple ways rather than experiencing a single isolated problem.

Study 3 (PMID 39162373):
A 2024 state-of-the-science review in Environmental Health Perspectives examined 19 studies and found a consistent pattern linking damp or mold-affected housing with poorer mental health outcomes. In adults, the strongest patterns included higher rates of depression, stress, and anxiety. In children, researchers found more emotional symptoms and difficulty regulating emotions. Researchers believe this relationship may involve a combination of biological stress responses, inflammation, and the psychological strain of living in unhealthy housing conditions. For viewers, this means the "I just don't feel like myself" experience may not be random. Environmental conditions may be part of the picture, especially when mood, focus, and energy shift alongside physical symptoms.

Functional Medicine Connections:

Here is how these pieces begin to connect.

Your body is constantly coordinating communication between multiple systems, including the immune system, nervous system, metabolism, and the microbiome. When an environmental stressor such as mold enters the picture, those communication networks may shift into a more defensive state.

The immune system may become more reactive. Inflammation signals may increase. Energy production may become less efficient as the body diverts resources toward protection and repair. This helps explain why people often notice fatigue, brain fog, sinus irritation, headaches, or new sensitivities appearing together instead of as isolated problems.

This perspective also helps explain why people respond differently to the same environment. Two individuals may live in the same building, yet one develops symptoms while the other does not. Factors such as stress load, sleep quality, gut health, prior infections, and overall resilience all influence how the body responds to environmental exposures.

Practical Reflections & Takeaways:

Think about your own patterns for a moment. Have symptoms like fatigue, brain fog, sinus irritation, headaches, or new sensitivities started appearing around the same time? When several of these symptoms show up together, that cluster may be more meaningful than any single symptom on its own.

It may also help to consider timing and environment. Did symptoms begin after moving into a new home, changing workplaces, or during a period of higher life stress? Some people notice they feel different in certain buildings or locations. These observations are not random details. They can be useful clues about how your body is responding to its surroundings.

Your lived experience is valuable data. Paying attention to patterns across symptoms, environments, and life stressors can often provide the first hints that something deeper may be influencing how you feel.

Want Dr. Kenny's Eyes on Your Case?

Book Your Health Mystery Map Call

In TX, CA, FL

References:

- Sümer, S., & Özdemir, Ö. Potential respiratory hazards of fungal exposure in the residential indoor environment: A systematic review. Asthma Allergy Immunology. 2025. doi:10.21911/aai.102634.
- Hyvönen, S., Lohi, J., & Tuuminen, T. Moist and mold exposure and neurological symptoms in hospital workers. Safety and Health at Work. 2020;11(2):173–177. doi:10.1016/j.shaw.2020.01.003. PMID: 32596012.
- Gatto, M. R., Mansour, A., Li, A., & Bentley, R. Damp and mold housing and mental health: A state-of-the-science review. Environmental Health Perspectives. 2024;132(8):086001. doi:10.1289/EHP14341. PMID: 39162373.