



Urine Mycotoxin Testing

Navy medical providers conduct medical testing as appropriate (i.e., consistent with evidence-based medicine and currently accepted standard of care), utilizing certified laboratories and Food and Drug Administration (FDA) approved tests. Some molds can produce toxins ("mycotoxins"). There is no FDA-approved test for mycotoxins in human urine, and the Centers for Disease Control and Prevention (CDC) does not recommend biologic testing of persons who work or live in water-damaged buildings.¹ Additionally, there are no established and validated urine mycotoxin levels that predict disease, and no urine mycotoxin reference ranges have been established for normal healthy populations or concentrations associated with adverse effects. Results of non-validated tests for diagnosis can lead to misinformation, fear, and unnecessary or inappropriate medical interventions. Mycotoxin testing or toxic mold testing is not covered by Tricare.²

Currently, there is not sufficient research to validate testing blood or urine for mycotoxin levels except in rare acute poisonings.³ Except in such acute poisonings, mycotoxin tests reflect ingestion (food contamination) rather than inhalation.⁴ The mere presence of mold should not be taken as evidence that the mold was producing mycotoxin. Exposure to mycotoxins sufficient to cause adverse health effects generally occurs only by ingestion (e.g., aflatoxin in peanuts or heavily contaminated foodstuffs) or with significant airborne exposures in industrial (e.g., waste processing) or agricultural settings (e.g., grain silos). Exposures to mycotoxins can also occur from eating fruits, vegetables, cheese, or grain products with mold growth, and drinking coffee or wines. Mycotoxins are not cumulative toxins, and have half-lives ranging from hours to days, depending on the specific mycotoxin. The American Academy of Allergy, Asthma and Immunology and the Institute of Medicine have concluded that the evidence does not support the position that mycotoxin-mediated disease (mycotoxicosis) occurs through inhalation in non-occupational settings.^{5,6}

¹ Notes from the Field: Use of Unvalidated Urine Mycotoxin Tests for the Clinical Diagnosis of Illness — United States, 2014; Morbidity and Mortality Weekly Report, Feb 20, 2015; 64(06): 157-158.

<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6406a7.htm> (accessed 15 November 2024).

² Tricare covered services. <https://www.tricare.mil/CoveredServices/IsItCovered/MycotoxinTesting> (accessed 15 November 2024).

³ Bush KR, Portney JM, et. al. The Medical Effects of Mold Exposure. *J Allergy Clin Immunol* 2006; 117:326-33. <https://pubmed.ncbi.nlm.nih.gov/16514772/> (accessed 15 November 2024).

⁴ Hurrass J, et al. AWMF mold guideline Medical clinical diagnostics for indoor mold exposure-Update 2023 AWMF Register No. 161/001. *Allergol Select*. 2024 May 3;8:90-198. doi: 10.5414/ALX02444E. PMID: 38756207; PMCID: PMC11097193. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11097193/> (accessed 15 November 2024).

⁵ American Academy of Allergy, Asthma, and Immunology, Position Paper on the Medical Effects of Mold Exposure, Feb 2006.

<https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Practice%20and%20Parameters/Mold-2006.pdf> (accessed 15 November 2024).

⁶ Institute of Medicine, Committee on Damp Indoor Spaces and Health. Washington (DC): National Academies Press; 2004. <https://www.ncbi.nlm.nih.gov/books/NBK215643/> (accessed 15 November 2024).