



TRICOTHECENE MYCOTOXINS (T-2 mycotoxins)

I. Protocol Overview

Tricothecene mycotoxins (T-2 mycotoxins) are nonvolatile compounds produced by filamentous fungi primarily of the genera *Fusarium*, *Myrothecium*, *Trichoderma*, and *Stachybotrys*.

Symptoms are usually observed within 2-4 hours, but significant exposure can cause immediate onset of symptoms. Dermal exposure leads to burning pain, redness, and blisters, and oral exposure leads to vomiting and diarrhea. Ocular exposure may result in blurred vision, and inhalational exposure may cause nasal irritation and cough. Systemic symptoms may include weakness, ataxia (poor coordination), hypotension (low blood pressure), coagulopathy (inability to form blood clots), and death. A more chronic form of exposure results in alimentary toxic aleukia (ATA), which can mimic radiation sickness, including bone marrow suppression, significant leucopenia and granulocytopenia (low white blood cell counts), petechial hemorrhages (capillary bleeding), thrombocytopenia (low blood platelet counts), especially of the mucosal areas, which can be fatal, as well as airway edema and systemic infection.

For all suspected chemical exposures, consult the Poison Control Center (800-222-1222) located at Children's Hospital of Philadelphia. Information and treatment advice is available to the public and healthcare professionals at no charge.

Tricothecene mycotoxins can be detected in urine specimens by an enzyme-linked immunosorbent assay (ELISA) methods and in environmental and food samples using liquid chromatography tandem mass spectrometry (LC/MS/MS) techniques. Samples are extracted and pre-concentrated and then quantified using mass spectrometry analysis.

The Delaware Public Health Laboratory does not perform this testing. Contact the CDC or the Poison Control Center.

II. Contact Information

24/7 CDC Emergency Contact Number: 1-888-295-5156

Poison Control Center: 215-386-2100

III. CDC Website

<http://emergency.cdc.gov/agent/tricothecene/casedef.asp>