

Laboratory

MUSTARD AGENTS

I. Protocol Overview

Mustard compounds, classified as vesicants or blister agents, are highly reactive chemicals that cause cellular level changes. There is no commercial use for mustards. Mustards include distilled mustard (HD), mustard gas (H), mustard/lewisite (HL), mustard/T, sesqui mustard, sulfur mustard (H), and nitrogen mustards (HN-1, HN-2, HN-3). Signs and symptoms are often delayed by several hours after exposure and can include redness and blistering of the skin, ocular irritation, pain, swelling, tearing and blindness, nose and sinus pain, cough, sore throat, shortness of breath, abdominal pain, diarrhea, nausea, and vomiting. Central nervous system effects such as tremors, uncoordination, and seizures are possible following a large exposure.

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.

Mass spectrometry methods are used to detect the urinary, food, and environmental nitrogen and sulfur mustards. Samples are extracted and mustard metabolites are quantified via high pressure liquid chromatography (HPLC) or gas chromatography (GC) separation followed by isotopic dilution mass spectrometry (MS) 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/sulfurmustard/basics/facts.asp

24/7 Emergency Contact Number: 302-223-1520