

Mississippi Public Health Laboratory
Clinical Sample Submission Guidelines for Terrorism Agents

Chemical Terrorism Agents

Prior to submitting suspect chemical terrorism samples for laboratory testing, call 601-576-7400 (24/7). Ask for the Laboratory Chemical Terrorism Coordinator or the Division of Biochemistry.

Directions: Collect all of the following samples (blood, urine, and blanks) for any chemical terrorism laboratory testing unless instructed otherwise by the MPHL. Send blood samples on ice packs and urine samples on dry ice. (For a child, send a urine sample only.)

Blood: Collect three (3) tubes of EDTA (purple-top, 4 mL) and one (1) gray-top or green-top tube.

Urine: Collect 40 to 60 mL in a screw-cap urine cup.

Blanks: Send two (2) empty tubes for each lot number of blood tubes and send two (2) empty urine containers for each lot of urine containers used.

Prepare, maintain and send chain of custody form. Also use the Miscellaneous Laboratory Examination Request Form #402.

Analyte	Test	Sample Types	Minimum Acceptable Quantity	Turn-around Time	Sample Storage & Transport Temperature
1,2-Dichloroethane; Benzene; Carbon Tetrachloride; Chloroform; Ethylbenzene; M- & P-zylene; O-zylene; Styrene; Tetrachloroethylene; Toluene	VOC (Volatile Organic Compounds)	Blood	≥ 3 mL	48 hours	Refrigerate/Ice Pack
4-hydroxy-3-nitrophenylacetic acid - Metabolite of Tetranitromethane	HNPA	Urine	≥ 1.2 mL	48 hours	Frozen/Dry Ice
Metabolites of Abrin/Ricin	L-Abrine/ Ricinine	Urine	> 0.2 mL	48 hours	Frozen/Dry Ice
Arsenic	Toxic Element Screen	Urine	≥ 1 mL	48 hours	Frozen/Dry Ice
Beryllium, Barium, Cadmium, Lead, Thallium, Uranium	Toxic Element Screen	Urine	≥ 1 mL	48 hours	Frozen/Dry Ice
Cyanide	Cyanide	Blood	≥ 1 mL	48 hours	Refrigerate/Ice Pack
Lead, Mercury, Cadmium	Toxic Metals	Blood	≥ 0.25 mL	48 hours	Refrigerate/Ice Pack
Monofluoroacetate; Monochloroacetate	Metabolic Toxins Panel	Urine	> 0.5 mL	48 hours	Frozen/Dry Ice
Methylphosphonic Acid - Metabolite of Sarin (GB), Soman (GD), Cyclohexyl Sarin (GF), Russian VX (rVX), VX	OPNA (Organophosphate Nerve Agents)	Urine	≥ 1.5 mL	48 hours	Frozen/Dry Ice
Tetramethylene disulfotetramine	Tetramine	Urine	≥ 1.2 mL	48 hours	Frozen/Dry Ice

Chemical terrorism samples should be shipped according to current CDC guidelines at <http://emergency.cdc.gov/chemical/lab.asp>.

IMPORTANT INFORMATION FOR SUSPECT BIOTERRORISM AND CHEMICAL TERRORISM SAMPLES: Before sending a sample for bioterrorism or chemical terrorism testing, always refer to the Mississippi Public Health Laboratory Guide to Services.

Pertinent sections of the Laboratory Guide to Services include:

- Clinical Services: Test Descriptions (*Terrorism agents listed alphabetically with other agents*)
- Guidelines for Clinical Services Specimen Shipping
 - Shipping Guidelines for Non-Health Department Submitters
- Guide for the Referral of Potential Agents of Terrorism
 - Bioterrorism
 - Chemical Terrorism
- Varicella-Zoster Virus PCR Collection Procedure

To locate an electronic version of these guidelines and to locate the Guide to Laboratory Services, go to <http://healthmys.com>. From the menu, click on "Public Services." Below "Other Services" click on "Public Health Laboratory."

NOTE: Hospital laboratories should not receive or process environmental (non-clinical) samples received from a possible bioterrorism or chemical terrorism event, but should contact local law enforcement.



MISSISSIPPI STATE DEPARTMENT OF HEALTH