

Mississippi Public Health Laboratory
Clinical Sample Submission Guidelines for Terrorism Agents

Bioterrorism Agents

Prior to submitting a suspect bioterrorism sample(s) for laboratory testing, call 601-576-7400 (24/7). Ask for the Laboratory Bioterrorism Coordinator or the Division of Special Microbiology. Do not submit any of the following without prior approval. See page 2 of these guidelines for additional information regarding the MPHL Guide to Services and also for the location of these guidelines on the <http://healthmys.com> website. The following list of acceptable samples may not be all inclusive. If available, a pure isolate is preferred.

Analyte	Test	Acceptable Samples	Minimum Acceptable Quantity	Turn-around Time	Sample Storage & Transport Temperature
<i>Bacillus anthracis</i>	Culture	Pure Isolate	N/A	24-48 hours	Room Temperature
		Swab(s)* of Vesicular Fluid or Eschar Material, Stool or Rectal Swab(s)*, Sputum	Stool ≥ 5 g, Sputum > 1 mL	5 days if negative, 2-7 days if positive	RT or 2-8°C if > 1 hr* Stool 2-8°C
		Blood Culture	N/A	Same as above	Room Temperature
	Real-time PCR	Pure Isolate	N/A	24 hours	Room Temperature
EDTA Whole Blood, Plasma, Serum, Pleural Fluid, Aspirates, Tissues, Sputum		0.5 mL	24 hours	RT or 2-8°C if > 1 hr* Tissue - Dry Ice	
<i>Brucella species</i>	Culture	Pure Isolate	N/A	48-72 hours	Room Temperature
		Spleen, Liver, Joint Fluid, Abscesses	1 mL Fluid 0.1 g Tissue	5 days if negative, 2-7 days if positive	2-8°C
		Bone Marrow Culture, Blood Culture	N/A	Same as above	Room Temperature
	Real-time PCR	Pure Isolate	N/A	24 hours	Room Temperature
EDTA Whole Blood, Serum		0.5 mL	24 hours	2-8°C	
<i>Burkholderia mallei/pseudomallei</i>	Culture	Pure Isolate	N/A	3-7 days	Room Temperature
		Sputum, Bronchial, Abscess Material, Wound Swab(s)*, Urine	Urine 1 mL Tissue 1 g	5 days if negative, 2-7 days if positive	2-8°C
		Bone Marrow Culture, Blood Culture	N/A	Same as above	Room Temperature
	Real-time PCR	Pure Isolate	N/A	24 hours	Room Temperature
EDTA Whole Blood, Serum		0.5 mL	24 hours	2-8°C	
<i>Clostridium botulinum**</i>	Culture	Pure Isolate	N/A	4-7 days	Anaerobic at RT
		Enema, Gastric Aspirate or Vomitus - 20 mL, Feces, Tissue, Exudates, Swab(s)*	Feces 1 g Tissue 1 g	4-10 days	2-8°C
<i>Coxiella burnetii</i>	Real-time PCR	EDTA Whole Blood, Serum	0.5 mL	24 hours	2-8°C
<i>Francisella tularensis</i>	Culture	Pure Isolate	N/A	3-5 days	Room Temperature
		Tissue, Scraping of Ulcer, Swab(s)* of Ulcer, Lymph Node Aspirate	1 g	5 days if negative, 2-7 days if positive	RT or 2-8°C if > 1 hr*
		Blood Culture	N/A	Same as above	Room Temperature
	Real-time PCR	Pure Isolate	N/A	24 hours	Room Temperature
Swab(s)*, Aspirates, Tissues, Pleural Fluid, EDTA Whole Blood, Respiratory Sample(s)		1 mL Sputum 0.5 mL Other	24 hours	RT or 2-8°C if > 1 hr*	
Vaccinia (Non-variola Orthopox)	Real-time PCR	Rash Biopsy, Vesicle "Roof" Crust, Skin, Scab, Dry or Wet Swab(s)*	N/A	24 hours	Room Temperature
Varicella Zoster Virus (VZV)	Real-time PCR	Dry Vesicular Swab(s)* Dry Scabs	N/A	24 hours	Room Temperature
<i>Yersinia pestis</i>	Culture	Pure Isolate	N/A	3-7 days	Room Temperature
		Aspirate or Tissue of Lymph Node. Liver, Spleen, or Lung, Respiratory Sample(s)	≥ 1 mL Liquid 1 g Tissue	5 days if negative, 2-7 days if positive	RT or 2-8°C if > 1 hr*
		Blood Culture	N/A	Same as above	Room Temperature
	Real-time PCR	Pure Isolate	N/A	24 hours	Room Temperature
Swab(s)*, Aspirates, Tissues, Pleural Fluid, EDTA Whole Blood, Respiratory Sample(s)		1mL sputum, 0.5 mL Other	24 hours	RT or 2-8°C if > 1 hr*	

*Swab(s) with a synthetic, (e.g. Dacron®) tip and a plastic or metal shaft should be used.

**Authorization from the Office of Epidemiology at 601-576-7725 or after hours at 601-576-7400 should be received prior to submitting samples for *Clostridium botulinum*.

Bioterrorism samples should be packaged and shipped according to current DOT regulations at <http://www.dot.gov> or <http://www.phmsa.dot.gov>. Use "Infectious Substances Brochure" as a keyword to search for the "Transporting Infectious Substances Safely" brochure produced by U.S. DOT PHMSA.

