

		<u>Blood</u> Serum (Red top or marble top tube) unless otherwise specified	<u>Body Fluid or Tissue</u>	<u>Culture</u> Standard techniques unless otherwise qualified
Bacteria and Rickettsia	Anthrax <i>Bacillus anthracis</i>	Acute and convalescent antibody	PCR on bronchial secretions or sputum NP swabs <u>not</u> useful for screening for exposure	Blood, vesicle or bulla fluid, lesion drainage, fluid from under eschar, tissue, ascites, stool, vomitus or gastric aspirate, sputum, CSF
	Brucellosis <i>Brucella abortus, suis, & melitensis</i>	Acute and convalescent antibody	PCR on bronchial secretions or sputum	Blood, bone marrow, tissue aspirate or biopsy, spleen or liver biopsy. Rarely CSF, urine, pleural or peritoneal fluid. May take weeks to grow. Notify lab of R/O brucellosis
	Cholera <i>Vibrio cholerae</i>	N/A	N/A	Feces or rectal swab
	Glanders <i>Burkholderia mallei</i>	Acute and convalescent antibody	PCR on bronchial secretions or sputum	Blood, skin lesion, lymph node
	Plague <i>Yersinia pestis</i>	Acute and convalescent antibody	PCR on bronchial secretions, sputum, or bacterial isolates Direct fluorescent antibody (DFA) on bacterial isolates	Blood, bubo aspirate or drainage, CSF, sputum, bronchial washings, throat culture
	Q-Fever <i>Coxiella burnetii</i>	Acute and convalescent antibody	PCR on bronchial secretions, sputum, or tissue Immunoassay on heart valves	Potentially dangerous to culture
	Tularemia <i>Francisella tularensis</i>	Acute and convalescent antibody	PCR on bronchial secretions or sputum	Blood, lymph node, skin lesion scraping, biopsy, sputum, bronchial washings, pleural fluid Notify lab of R/O tularemia; culture difficult and potentially dangerous
Viruses	Equine Encephalomyelitis VEE, EEE and WEE	Acute and convalescent arbovirus panel <i>Specify suspected organism</i>	CSF: Arbovirus panel <i>Specify suspected organism</i>	Exclude other viral processes with NP, rectal, and CSF viral culture as appropriate
	Pox (smallpox, monkey pox) <i>Orthopoxvirus</i>	Serum Buffy coat (purple top tube)	Scabs for PCR and EM Vesicle fluid touch prep Scrape base of pox for PCR and EM Biopsy of lesion (½ in formalin, ½ without viral transport medium)	Throat culture, vesicle fluid (no viral culture medium) Only lab workers vaccinated against smallpox should work with suspected orthopox samples Culture only in BSL-4 laboratory
	Viral Hemorrhagic Fever (e.g. Ebola)	Acute and convalescent antibody Antigen detection (antigen-capture ELISA) Reverse transcriptase PCR	All body fluids are highly contagious	Notify lab for if viral hemorrhagic fever is suspected Culture only in BSL-4 laboratory
Toxins	Botulism Botulinum toxin from <i>Clostridium botulinum</i>	Serum for toxin <i>Approval for botulism toxin must go through ADHS before submission to CDC</i>	Feces and suspected food for toxin <i>Environmental samples for toxin, if applicable</i>	Wound if suspected source of botulism Feces and/or suspected food NP swab (aerosol exposure)
	Ricin Intoxication Ricin toxin from Castor beans	Serum for toxin Acute and convalescent antibody	NP swab and urine for toxin <i>Environmental samples for toxin, if applicable</i>	N/A
	Staph enterotoxigenesis <i>Staphylococcus Enterotoxin B (SEB)</i>	Acute and convalescent antibody Serum for toxin	NP swab for toxin <i>Environmental samples for toxin, if applicable</i>	If <i>S. aureus</i> is isolated in a patient with suspected SEB, test for toxin production
	T-2 toxicosis Trichothecene mycotoxin	Serum for toxin	NP swab and urine for toxin <i>Environmental samples for toxin, if applicable</i>	N/A

CSF=cerebrospinal fluid NP=nasopharyngeal PCR=polymerase chain reaction EM=electron microscopy
VEE=Venezuelan equine encephalitis EEE=Eastern equine encephalitis WEE=Western equine encephalitis

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