



Bioterrorism Syndromes





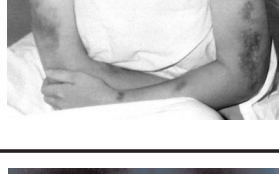
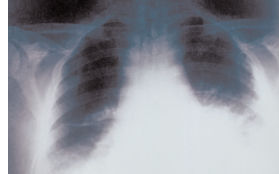
In all cases of suspected bioterrorism activity, immediately notify your local health department and the Illinois Department of Public Health.



1-217-782-2016
1-800-782-7860 (24 hours)



1-800-222-1222

Syndrome	Primary Signs and Symptoms	Diagnostic Tests and Findings	Patient Placement	Isolation	Treatment	Pictures	
Acute Neurologic Syndrome	Botulism	Ptoxis, diplopia, blurred vision, mydriasis, sore throat, dysphagia, dysphonia, descending weakness and paralysis, respiratory distress	Testing available at CDC and state labs. Draw 5 ml in red-top tube; also send sample of stool, gastric aspirate and vomitus.	No restrictions	Standard precautions	Supportive care, including respiratory support and botulinum antitoxin, which is available only from the CDC	
Acute Rash	Cutaneous Anthrax	Localized itching; a painless papule after seven days; within one to two days, papule will enlarge and develop a central vesicle with surrounding non-pitting edema; seven to 10 days after papule formation, a painless central black eschar forms.	Swab exudates for gram stain and culture Punch biopsy of lesion for specialized testing 5 ml red-top tube; 5 ml purple-top tube for PDR testing	No restrictions	Standard precautions	Without systemic signs or surrounding edema and cellulitis, ciprofloxacin or doxycycline for 60 days. With systemic signs or surrounding edema and cellulitis, same as inhalational anthrax (see below).	
	Smallpox	Papular rash with fever that begins on the face and extremities and uniformly progresses to vesicles and pustules; headache, vomiting, back pain and delirium common	Electron microscopy examination or PCR testing of vesicular or pustular fluid and/or scabs	Private negative pressure room. May place like patients together. Door must be closed at all times.	Standard precautions plus airborne and contact precautions. Gowns, gloves, fit-tested masks and negative pressure room are required.	Supportive care, along with antibiotics as indicated for treatment of secondary bacterial infections	
	Tularemia	High fever, chills, headache, malaise, myalgias, arthralgias and progressive weakness. Incubation period is usually three to five days post exposure.	CXR: peribronchial infiltrates, lobar consolidation, pleural effusions and hilar adenopathy Blood culture and CSF culture as indicated	No restrictions	Standard precautions	Initial parenteral therapy may include streptomycin, gentamicin, doxycycline, ciprofloxacin or chloramphenicol. Therapy should continue for 10 days for streptomycin, gentamicin and ciprofloxacin; 14 days for doxycycline and chloramphenicol.	
	Viral Hemorrhagic Fever	Marked fever, fatigue, dizziness, muscle aches, loss of strength and exhaustion ranging from two days to three weeks post exposure. Severe cases show signs of bleeding under the skin, in internal organs or from body orifices.	Blood cultures; viral cultures; serology tests; stool; nasopharyngeal swab in viral transport medium; complete blood count (CBC), disseminated intravascular coagulation (DIC) panel as indicated clinically	Private negative pressure room. May place like patients together. Door must be closed at all times.	Standard precautions plus airborne and contact precautions. Gowns, gloves, fit-tested masks and negative pressure room are required.	Ribavirin may be useful for a subset of viral hemorrhagic fevers caused by the arenavirus and bunyavirus families.	
Respiratory Symptoms and Fever	Inhalational Anthrax	Low-grade fever, nonproductive cough, malaise, fatigue, myalgias, diaphoresis and chest discomfort. Incubation period is usually one to six days post exposure but may be up to 60 days.	Blood culture and CSF culture as indicated Gram stain: gram-positive bacilli on buffy coat smear or CSF culture CT scan: hyperdense mediastinal and hilar lymph nodes, mediastinal edema, peribronchial thickening and pleural effusions CXR: widened mediastinum and pleural effusions	No restrictions	Standard precautions	Initial intravenous therapy may include ciprofloxacin or doxycycline AND one or two additional antimicrobials such as rifampin, vancomycin, penicillin, ampicillin, chloramphenicol, imipenem, clindamycin or clarithromycin. Switch to oral medications when clinically appropriate. Therapy should continue for 60 days.	
	Plague	Cough, hemoptysis and chest pain; tachypnea, dyspnea and cyanosis. Incubation period is usually two to three days post exposure.	Blood culture and CSF culture as indicated CXR: bilateral infiltrates or consolidation Sputum and throat specimens for microscopy for specialized stains and/or fluorescent antibody tests	Private room. May place like patients together. Door must be closed at all times. Place mask on patient for transport.	Standard precautions and droplet precautions (surgical mask) to avoid respiratory spread	Initial parenteral therapy may include streptomycin, gentamicin, doxycycline, ciprofloxacin or chloramphenicol. Therapy should continue for 10 days.	