BIOTERRORISM SYNDROMES

If you suspect disease from a potential bioterrorism event, call the Public Health Acute Communicable Disease Control Unit (ACDC)

IMMEDIATELY: Tel: (213) 240-7941 or after hours (213) 974-1234

ACDC will arrange for specialized lab testing; guidelines for treatment, prophylaxis, and infection control; and activate local, state, and federal emergency response systems.

Syndrome	Bioterrorism threat disease description	Differential diagnosis	Picture	Initial laboratory & other diagnostic test results	Immediate public health & infection control actions
Acute Respiratory Distress with Fever	Inhalational Anthrax Abrupt onset of fever, chest pain, respiratory distress without radiographic findings of pneumonia, no history of trauma or chronic disease, progression to shock and death within 24-36hours.	Dissecting aortic aneurysm, pulmonary embolism, influenza, community-acquired pneumonia		Chest x-ray with widened mediastinum; pleural effusion; gram-positive bacilli in blood or pleural fluid; definitive testing available at the LAC Public Health Laboratory, (562) 658-1300 or (562) 658-1330.	Call ACDC. Alert your laboratory to possibility of anthrax. No person-to-person transmission. Infection control: standard precautions.
	Pneumonic Plague Apparent severe community-acquir ed pneumonia but with hemoptysis, cyanosis, gastrointestinal symptoms, shock.	Community-acquired pneumonia, Hantavirus pulmonary syndrome, meningococcemia, rickettsiosis, influenza		Gram-negative bacilli or coccobacilli in sputum, blood or lymph node; safetypin appearance with Wright or Giemsa stain; definitive testing available at the LAC Public Health Laboratory, (562) 658-1300 or (562) 658-1330.	Call hospital infection control and ACDC. Ask family members/close contacts of patient to stay at the hospital (if already present) for public health interview/chemoprophylaxis; get detailed address and phone number information. Alert laboratory of possibility of plague. Infection control: droplet precautions in addition to standard precautions.
	Ricin (aerosolized) Acute onset of fever, chest pain and cough, progressing to respiratory distress and hypoxemia; not improved with antibiotics; death in 36-72 hours.	Plague, Q fever, staphylococcal enterotoxin B, phosgene, tularemia, influenza		Chest x-raywith pulmonary edema. Consult with ACDC regarding specimen collection and diagnostic testing procedures.	Call ACDC. Infection control: standard precautions.
	Staphylococcal Enterotoxin B Acute onset of fever, chills, headache, nonproductive cough and myalgia (influenza-like illness) with a NORMAL chest x- ray	Influenza, adenovirus, mycoplasma		Primarily clinical diagnosis. Consult with ACDC regarding specimen collection and diagnostic testing procedures.	Call ACDC. Infection control: standard precautions.
Acute Rash with Fever	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.	Varicella, disseminated herpes zoster, vaccinia, monkeypox, cowpox		Clinical with laboratory confirmation; vaccinated, gowned and gloved person obtains specimens (scabs or swabs of vesicular or pustular fluid). Call ACDC immediately before obtaining specimen; definitive testing available through CDC.	Call hospital infection control and ACDC immediately. Ask family members/close contacts of patient to stay at the hospital (if already present) for public health interview and vaccination; get detailed address and phone number information. Infection control: airborne and contact precautions in addition to standard precautions.
	Viral Hemorrhagic Fever (e. g., Ebola) Fever with mucous membrane bleeding, petechiae, thrombocytopenia and hypotension in a patient without underlying malignancy.	Meningococcemia, malaria, typhus, leptospirosis, borreliosis, thrombotic thrombocytopenic purpura (TTP), hemolytic uremic syndrome (HUS)		Definitive testing available through public health laboratory networkcall ACDCimmediately.	Call hospital infection control and ACDC immediately. Ask family members/close contacts of patient to stay at the hospital (if already present) for public health interview and follow-up; get detailed address and phone number information. Infection control: contact precautions in addition to standard precautions.
rologic dromes	Botulism Acute bilateral descending flaccid paralysis beginning with cranial nerve palsies.	Guillain-Barré syndrome, myasthenia gravis, midbrain stroke, tick paralysis, Mg ⁺⁺ intoxication, organophosphate, carbon monoxide, paralytic shellfish, or belladonna-like alkaloid poisoning, polio, Eaton-Lambert myasthenic syndrome		CSF protein normal; EMGwith repetitive nerve stimulation shows augmentation of muscle action potential; toxin assays of serum, feces, or gastric aspirate available at the LAC Public Health Laboratory. CallACDC to request testing.	Request botulinum antitoxin from ACDC. Infection control: standard precautions.
Neu Syn	Encephalitis (Venezuelan, Eastern, Western, West Nile) Encephalopathy with fever and seizures and/orfocal neurologic deficits.	Herpes simplex, post-infectious, other viral encephalitides		Serologic testing availableat the LAC Public Health Laboratory, (562) 658-1300 or (562) 658-1330.	Call ACDC. Infection control: standard precautions.
Influenza-Like Illness	Brucellosis Irregular fever, chills, malaise, headache, weight loss, profound weakness and fatigue. Arthralgias, sacroiliitis, paravertebral abscesses. Anorexia, nausea, vomiting, diarrhea, hepatosplenomegal y. May have cough and pleuritic chest pain.	Numerous diseases, including Q Fever, brucellosis		Tiny slow-growing, faintly-staining, gram-negative coccobacilli in blood or bone marrow culture. Leukocyte count normal or low Anemia, thrombocytopenia possible. CXR nonspecific: normal, bronchopneumonia, abscesses, single or miliary nodules, enlarged hilar nodes, effusions. Serologic testing and cultur e available at the LAC Public Health Laboratory, (562) 658-1300 or (562) 658-1330.	Notify your laboratory if brucellosis suspectedmicrobiological testing should be done in a biological safety cabinet to prevent lab-acquired infection. Call ACDC. Infection control: standard precautions.
	Tularemia (Typhoidal, Pneumonic) Fever, chills, rigors, headache, myalgias, coryza, sore throat initially; followed by weakness, anorexia, weight loss. Substernal discomfort, dry cough if pneumonic disease.			Small, faintly-staining, slow-growing, gram-negative coccobacilli in smears or cultur es of sputum, blood. CXR may show infiltrate, hilaradenopathy, effusion. Definitive testing available at the LAC Public Health Laboratory, (562) 658-1300 or (562) 658-1330.	Notify your laboratory if tularemia suspectedmicrobiological testing should be done in a biological safety cabinet to prevent lab-acquired infection. Call ACDC. Infection control: standard precautions.

Adapted from California State and Local Health Department Bioterrorism Surveillance and Epidemiology Working Group, 2001.

