

Ten Critical Steps for Handling Possible Bioterrorist Events

1 Maintain an index of suspicion.

In an otherwise healthy population, some associations are very suggestive, especially when seen in clusters, high numbers, or unusual presentations.

Hemoptysis	Plague
Flaccid Paralysis	Botulism
Purpura	Viral Hemorrhagic Fevers (VHF)
Wide mediastinum	Anthrax
Centripetal* rash	Smallpox

*Rash more abundant on face and extremities

2 Protect yourself and your patients.

Use appropriate personal protection equipment (PPE). For **smallpox**, triage and evaluate patient in an isolation room; wear an appropriate respirator (N-95 or higher).

3 Adequately assess the patient.

Review and assess the patient's history. Also, ask:

- Are others ill?
- Were there any unusual events?
- Was there a possible contaminated food item?
- Was there vector exposure?
- Has the patient been traveling?
- What is the patient's immunization record?
- What is the patient's occupation?

Perform a physical examination with special attention to the respiratory system, nervous system, skin condition, and hematologic and vascular status.

4 Decontaminate as appropriate.

Do not use bleach on exposed people. Soap, water and shampoo are perfectly adequate for all biological and most chemical agents. Chemically contaminated clothes should be removed and discarded safely. Biologically contaminated clothes can be laundered with soap, water and, perhaps, bleach.

5 Establish a diagnosis.

Think clinically and epidemiologically; always send specimens for culture.

Symptom (individuals)

Pulmonary
Neuromuscular
Bleeding/purpura
Rash (various types)
Flu-like symptoms

Possible Diagnosis

Anthrax, tularemia, plague, staph enterotoxin B (SEB)
Botulism, Venezuelan equine encephalitis (VEE)
VHF, ricin, plague (late)
VHF, T2 mycotoxin, smallpox, plague
Varies

Immediate Symptoms (large numbers)

Pulmonary
Neurologic

Possible Diagnosis

SEB, mustard, Lewisite, phosgene, cyanide
Nerve gases, cyanide

Delayed Symptoms (large numbers)

Pulmonary
Neurologic

Possible Diagnosis

Biologic agents, mustard, phosgene
Botulism, VEE, other encephalitis

6 Render prompt treatment.

Doxycycline can be used to treat virtually everything (**except virals or toxins**) while awaiting lab results. Inhalational anthrax should be treated with two or more antibiotics, including doxycycline or ciprofloxacin plus one or more other antibiotics. Observe pediatric precautions as appropriate. Prophylaxis (antibiotics and/or vaccines should be administered according to public health recommendations.

7 Provide good infection control.

Recommended isolation precautions (in addition to standard precautions) for biologic agents include:

Anthrax:	Contact precautions for cutaneous anthrax
Pneumonic Plague:	Droplet precautions; contact precautions if draining buboes present
Smallpox:	Airborne and contact precautions
Tularemia:	Contact precautions if lesions present
Viral Hemorrhagic Fevers:	Contact precautions; airborne precautions especially in late stages

8 Alert the proper authorities.

Agency	Telephone Number
FBI	518-465-7551 (Albany) 212-384-1000 (New York City) 716-856-7800 (Buffalo)
Municipal Police/County Sheriff	_____
New York State Police	_____
County Health Department	_____
New York State Health Department	518-473-4436 (days) 518-465-9720 (after hours)
Local Emergency Medical Services Unit	_____
Local Hospitals	_____
Centers for Disease Control and Prevention	770-488-7100
Wadsworth Laboratory	518-474-2821 (days) 518-465-9720 (after hours)

9 Assist in the epidemiologic investigations so as to determine who may be at risk.

Steps in an epidemiologic investigation:	Count cases; Relate to the at-risk population; Make comparisons; Develop hypotheses; Test hypotheses; Make inferences; Conduct studies; Interpret and evaluate.
--	--

10 Know and spread this information.