



TITLE: BIOTERRORISM RESPONSE PLAN

Purpose: To state procedures to respond to and contain diseases resulting from exposure to a biological agent

Supportive Data: The nature of a biologic agent the recognition and notification and response may be very different from that of a chemical or nuclear event.

It is recognized that the pediatric population:

- Is more susceptible to dehydration and shock from biological agents
- Cannot be decontaminated in adult oriented units
- Require different dosages of antibiotics and antidotes
- Have unique psychological vulnerabilities and require special management and
- Are more susceptible to the effects of radiation and chemicals.

Concerns to be aware of include:

- Emergency responders including medical staff and EMS may not have all received specialized training in pediatrics, and that
- Children's developmental ability and cognitive levels may impede their ability to escape danger and communicate with medical professionals.

POLICY:

I. SUSPECTED BIOLOGIC AGENT EVENT

A. Notification may come:

1. By fax to E.D., Infectious Disease Service or Infection Control
2. By phone call or e-mail from state and local agencies
3. By recognition of a cluster of patients in the E.D.
4. By surveillance of ETCH patients

B. Person receiving notification will follow the notification plan as directed in CODE ABLE Immediate Activation of Response and notify the Director of Infectious Disease and the Infection Control Practitioner.

C. If need for negative pressure rooms exceeds that which can be handled on 3rd Floor, the Vice President for Patient Care Services (VP PCS) in consultation with VP for Operations will make the decision as to clearing 4W of current patients.

II. OBSERVATIONS WHICH MAY INDICATE A BIOLOGIC EVENT:

- A. A rapidly increasing disease incidence (e.g., within hours or days) in a normally healthy population.**
- B. An epidemic curve that rises and falls during a short period of time.**



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- C. An unusual increase in the number of people seeking care, especially with fever, respiratory, or gastrointestinal complaints.
- D. An endemic disease rapidly emerging at an uncharacteristic time or in an unusual pattern.
- E. Lower attack rates among people who had been indoors, especially in areas with filtered air or closed ventilation systems, compared with people who had been outdoors.
- F. Clusters of patients arriving from a single locale.
- G. Large numbers of rapidly fatal cases.
- H. Any patient presenting with a disease that is relatively uncommon and has bioterrorism potential (e.g., pulmonary anthrax, tularemia, or plague).

Diagnoses which may signal a biological event:

- Anthrax
- Botulism
- Plague
- Smallpox
- Venezuelan Equine Encephalitis
- Q Fever
- Staph Enterotoxin B Pulmonary Poisoning
- Viral Hemorrhagic Fever
- Brucellosis
- Ricin Poisoning
- Tularemia
- SARS
- Avian Flu (Bird Flu; Type A, H₅N₁)



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III. AFTER CONSULTATION WITH THE DIRECTOR OF ID SERVICE, THE PRESIDENT AND THE CHIEF OF STAFF, the following Agencies should be notified by a person designated by The VP for Patient Care Services:

- A. Regional Hospital Coordinator: (865) 215-5098
- B. Event in Knox County: KCHD Emergency Beeper 597-2671
Stephanie Hall, MD
1-877-405-1734
- C. Outside Knox County: Nursing Beeper 1-888-804-5251
Nights & Holidays: 1-877-630-4612
Paul Erwin, MD: 1-877-749-5347

IV. PROTECTION MEANS TO DECREASE SPREAD AND EXPOSURE

The Method of protection will depend on the biological agent suspected (see ISOLATION POLICY in Infection Control Manual)

- A. Airborne + Contact + Droplet: SARS, Avian flu, N-95 mask, eye protection
- B. Airborne + Contact: Small pox, N-95 mask
- C. Contact: Anthrax (lesions)
Cholera (stool)
Staph Food Poisoning (stool)
- D. Droplet: Plague
Influenza
- E. Standard: Botulism
Brucellosis
Tularemia
Encephalitis



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V. INFORMATION ON SPECIFIC ORGANISMS

- A. See chart attached
- B. For information on specific agents see CDC web site:
www.bt.cdc.gov/agent/agentlist.asp
- C. Information for specific organisms will be distributed as needed by Infection Control staff.

VI. MORE PLANS SPECIFIC TO ONE CERTAIN AGENT MAY BE NEEDED

More plans specific to one certain agent may be needed. Please refer to:

- A. Smallpox Post-Event Vaccination Program
- B. Management of the Smallpox Patient
- C. SARS, Avian Flu Precautions

See Bioterrorism Readiness Plan (next page)

Reference:

Approved: Infection Control Committee, Emergency Preparedness Steering Committee, Acute Care Committee

Distribution: Generic



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AGENT/SYNDR OME	DIAGNOSTICS	ISOLATION	SPECIAL PRECAUTIONS	DECONTAMINATION	TREATMENT PATIENT	TO PROPHYLAXIS FOR HEALTH CARE WORKER EXPOSED TO PATIENT
Anthrax Gram + Bacillus	<ul style="list-style-type: none"> Gram + rod in Gram stain of blood Respiratory failure Papular lesion with depressed black eschar (following 2-6 days) N/V / bloody diarrhea 	Contact Gloves for contact with lesions	Person to person transmission is rare	<ul style="list-style-type: none"> Remove clothes, put in decontam-plastic bag Shower with soap Decontaminate environmental surfaces with 1/10 bleach or EPA registered sporicidal/germicidal agent 	Cipro, Doxycycline	Cipro Vaccination
Botulism Neuro toxin ingested or inhaled	<ul style="list-style-type: none"> Drooping eyelids Weakened jaw clench Difficulty swallowing or speaking Blurred vision Symmetric descending weakness Respiratory dysfunction 	Standard precautions	No patient to patient spread	None	Antitoxin	None
Plague Yersinia pestis; Bubonic, Pneumonic, or Septic	<ul style="list-style-type: none"> Fever, cough Chest pain Hemoptysis Gram Neg rods on sputum gram stain CXR= bronchopneumonia 	Droplet (mask) until 72 hrs. of antibiotic Mask if closer than 3 ft to patient	Spread by Respiratory Droplets, bites from infected fleas Mask if closer than 3 ft to patient		Antibiotic	Doxycycline if unprotected (no mask) exposure to patient has occurred.
Smallpox Virus	Rash on face, arms, legs, flu-like symptoms	Airborne plus Contact Negative Pressure Room N-95 Mask	Door closed; neg. pressure if available	Not necessary	Vaccination or VIG within 3 days of exposure	Same as for patient if "unprotected" exposure has occurred.
Flu	<ul style="list-style-type: none"> Fever, Respiratory symptoms, muscle-aches 	Droplet Isolation mask, if closer than 3 ft. to patient		None	Anti-viral if in early stage of illness	None

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AGENT/SYNDROME	DIAGNOSTICS	ISOLATION	SPECIAL PRECAUTIONS	DECONTAMINATION	TREATMENT TO PATIENT	PROPHYLAXIS FOR HEALTH CARE WORKER EXPOSED TO PATIENT
Brucellosis Probably from aerosolized source Brucella Gram Neg Coccobacilli	Incubation 1-4 wks, chills, sweats, HA, fatigue, myalgia, arthralgias, anorexia, cough in 15-25%, nl CXR, lymphadenopathy in 10-20%, splenomegaly in 20-30%, blood or bone marrow culture	None Standard Precautions	None	None	Doxycycline	None
Cholera Vibrio cholera, Gram neg bacillus	Diarrhea, vomiting, fluid loss	Contact Precautions with stool and vomitus	None	None	Fluid replacement	None
Staphy/ococcal Enterotoxin B Food poisoning	1-6 hrs following exposure, fever, chills, HA, myalgia, cough, fever may reach 103-106°, nausea, vomiting, diarrhea, inflamed conjunctiva, pulmonary edema, elevated sed rate	Contact Precautions with stool until other GI agents are ruled out, Standard Precautions	None	None	Fluid replacement	None
Tularemia, Rabbit Fever, <u>Francisella tularensis</u> , Gram neg bacillus	2-10 days in incubation, lymphadenopathy, fever, chills, HA, malaise, pneumonic if inhaled	None Standard Precautions	None	None	Streptomycin Gentomicin	None
VEE Venezuelan Equine Encephalitis, viral	Incubation 1-5 days, mosquito spread, malaise, spiking fever, HA, photophobia, CNS Sx, leg and lower back pain	Standard Precautions	None	None	Supportive	None