BIOLOGICAL DISEASE OUTBREAK – PLAGUE

SCENARIO

Members of the Universal Adversary terrorist group covertly release pneumonic plague into three main areas of the metropolitan city: in the restrooms of the major airport, at the sports arena during a large event, and at the city’s major train station during commute hours. Your hospital is located near city center. Approximately two days after the release of the biological agent, hospitals in the city and in surrounding areas report a few cases of severe respiratory distress and infection with a tentative diagnosis of pneumonic plague. Public health officials conduct contact tracing and surveillance, and with the few cases, there does not seem to be a common epidemiological link among the cases. Local public and state public health departments issue health alerts to healthcare providers.

Three days after the covert release, city hospitals and surrounding areas are reporting large numbers of cases of pneumonic plague. There are also a number of cases being reported in cities across the nation. Local and state public health departments have determined that the cases originated from your city, and that Yersinia pestis is confirmed and issues a case definition. Terrorism is suspected and the FBI is also investigating the outbreak.

Emergency departments are overwhelmed with large numbers of patients meeting the case definition for pneumonic plague and many require hospitalization and ventilatory support. There are a large number of people that have no symptoms, but are seeking medical care for reassurance and medications to prevent them from becoming ill. Local pharmacies have run out of antibiotics and are unable to re-supply for several days. CDC and the local health department estimate that 10% of the population is infected with pneumonic plague and will require hospitalization.

Law enforcement and the FBI are at hospitals to interview patients and obtain evidence linking the Universal Adversary to the incident. Local and national media, covering this possible terrorism event are out in full force, demanding information from local officials and hospitals.
Does your Emergency Management Plan Address the following issues?

<table>
<thead>
<tr>
<th>Mitigation &amp; Preparedness</th>
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<tr>
<td>1. Does your hospital maintain a stockpile of pharmaceuticals above normal inventories, personal protective equipment, and medical supplies needed for biological outbreaks?</td>
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<td>2. Does your hospital have access to a public health communication system such as the Health Alert Network/ to receive information and alerts from the local public health department?</td>
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<td>3. Does your hospital have a protocol for immediately distributing health alert information and updates to administrative staff, clinical and non-clinical staff and attending physicians?</td>
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<td>4. Does your hospital have an infectious disease/biological terrorism response plan or annex to your Emergency Operations Plan? Is the plan integrated and coordinated with other hospitals, clinics, EMS, public health, public safety and local emergency management agency?</td>
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<td>5. Does your hospital have a protocol/procedure to provide infection control information and just-in-time training to staff about required infection control precautions and personal protective equipment?</td>
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<td>6. Does your hospital have an infectious disease surge plan to expand patient care capacities and capabilities including the following:</td>
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<td>7. Does your hospital have a procedure to monitor ED and clinic activity and inpatient census for trends and to report this information to appropriate partners?</td>
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<tr>
<td>8. Does your hospital identify essential personnel (i.e., medical, nursing, environmental services, facilities, nutrition and food services, administrative, respiratory therapy, radiology technicians, medical records, information technology and laboratory, etc.) that would be priority for receiving prophylaxis, vaccination, treatment and PPE to protect those staff most at risk and to ensure the continuation of essential services?</td>
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<tr>
<td>9. Does your hospital have defined strategies for rapidly providing vaccines and medications to staff (mass vaccination/mass prophylaxis plan)?</td>
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</table>
10. Does your hospital have a communications plan to notify and maintain communication and exchange appropriate information with:
   - Internal experts, including Infection Control, Hospital Epidemiology, and Engineering/Facilities?
   - External experts, including local, regional, and state public health, local EOC/emergency management?
   - Other local hospitals?
   - Law enforcement?

11. Does your hospital have a plan for communicating with the media, in conjunction with the local EOC and Joint Information Center?

12. Does your hospital security plan include limiting hospital access to designated entrances and establishing screening for illness (e.g., temperature checks) of patients, staff, and visitors entering the facility?

13. Does your hospital have procedures to ensure infection control measures when transporting infectious patients throughout the facility (i.e., patient wearing mask)?

14. Does your hospital maintain a contact directory (i.e., call-back lists) for essential personnel and exercise the call-back system?

15. Does your hospital maintain and regularly service the negative pressure isolation rooms to ensure functionality?

16. Does your hospital have a plan to re-supply or augment supplies of medications, including antibiotics?

17. Does your hospital have a plan for providing personal protective equipment to laboratory personnel when required?

18. Does your hospital have a plan for safely packaging, identifying, maintaining the chain of evidence/custody and transporting laboratory specimens to testing sites, including local, state and federal labs?

19. Does your hospital have a plan for increasing capability to perform specific screening tests for designated pathogens?

20. Does your hospital have a fatality management plan that addresses:
   - Integration with local/state medical examiner/coroner?
   - Mass fatality?
   - Management of contaminated decedents?
   - Family notification procedures?
   - Mental health support for family and staff?
   - Documentation?
## BIOLOGICAL DISEASE OUTBREAK – PLAGUE
### INCIDENT PLANNING GUIDE

### Response & Recovery

1. Does your hospital monitor personnel health status and absenteeism rates?

2. Does your hospital have triggers and criteria for implementing the infectious patient surge capacity plan?

3. Does your hospital have a plan to monitor medical care issues for patients and exposed or ill staff?

4. Does your hospital monitor the safe and consistent use of personal protective equipment, isolation precautions and infection control measures?

5. Does your hospital security plan include the augmentation of security personnel and provide personal protective equipment?

6. Does your hospital have a plan to adjust staff schedules to reassign staff at high risk for complications from plague (e.g., pregnant women, immunocompromised persons) to low risk/exposure duties?

7. Does your hospital have a protocol for updating the Incident Action Plan and for reviewing decisions made and actions undertaken to accomplish the mission?

8. Does your hospital have a plan and process for incident demobilization and system recovery?

9. Does your hospital’s continuity of operations plans include the continuation of essential non-patient care services (i.e., trash pick-up, food service delivery, linen and laundry services, etc.)?

10. Does your hospital have a plan to provide regular staff, family and visitor briefings and updates?

11. Does your hospital have a plan to provide regular media briefings and provide appropriate clinical/patient information, in conjunction with the JIC?

12. Does your hospital have a plan to provide medical and mental health support to staff, patients, and their families?

13. Does your hospital have processes to document staff exposures and injuries and provide appropriate follow up?

14. Does your hospital have plans to restore normal medical care operations?

15. Does your hospital have plans for restoring facility visitation?

16. Does your hospital have plans for restoring non-essential service operations (i.e., gift shop)?

17. Does your hospital have a procedure for Security Branch Director to safely maintain custody of contaminated evidence for release to proper (verified) authority?

18. Does your hospital have procedures for reordering, restocking and returning borrowed supplies, equipment, medications and personnel?
Mission: To effectively and efficiently identify, triage, isolate, treat, and track a surge of potentially infectious patients; and manage asymptomatic patients, family members, and the media.

Directions

☐ Read this entire response guide and review incident management team chart.

☐ Use this response guide as a checklist to ensure all tasks are addressed and completed.

Objectives

☐ Identify, triage, isolate, and treat infectious patients.

☐ Safely admit a large number of infectious patients while protecting other (non-infected) inpatients.

☐ Accurately track patients throughout the healthcare system.

☐ Assure safety and security of the staff, patients, visitors, and facility.

☐ Address issues related to infectious patient surge capacity.

Immediate (Operational Period 0-2 Hours)

COMMAND

(Incident Commander):

☐ Activate the Medical/Technical Specialist – Biological/Infectious Disease to assess the incident

☐ Activate Command staff and Section Chiefs

☐ Implement regular briefing schedule for Command staff and Section Chiefs

☐ Implement the infectious patients surge plan and other emergency management plans

☐ Cancel elective surgeries and outpatient clinics/testing

☐ (Medical/Technical Specialist – Biological/Infectious Disease):

☐ Verify the following from the Emergency Department and outpatient clinics and local public health officials:

☐ Number and condition of patients, including the asymptomatic patients

☐ Type of biological/infectious disease and the case definition

☐ Medical problems present besides biological/infectious disease involved

☐ Measures taken (i.e., cultures, supportive treatment)

☐ Potential for and scope of communicability

☐ Appropriate isolation precautions and recommended personal protective equipment
External Scenario 4

BIOLOGICAL DISEASE OUTBREAK – PLAGUE

INCIDENT RESPONSE GUIDE

Immediate (Operational Period 0-2 Hours)

COMMAND

(Liaison Officer):

- Contact local/state authorities (public health, public safety, emergency management agency) for infectious agent information (identification, assessment, treatment requirements, and patient reporting expectations)

- Collaborate with the Medical/Technical Specialist to consult with or communicate with external agencies as appropriate

- Communicate with EMS/Public Health to determine the possible number of infectious patients

- Communicate regularly with Incident Commander and Section Chiefs regarding operational needs and integration of hospital function with local Emergency Operations Center

(Public Information Officer):

- Monitor media outlets for updates on the biologic disease outbreak and possible impacts on the hospital

- Communicate information via regular briefings to Section Chiefs and Incident Commander

(Safety Officer):

- Conduct ongoing analysis of existing response practices for health and safety issues

OPERATIONS

- Notify the Emergency Department of possible numbers of incoming infectious patients, after consultation with the Liaison Officer

- Establish screening (i.e., temperatures) of staff, visitors, families and others at all facility entrances to prevent ill persons from entering the facility.

- Ensure safe collection, transport, and processing of laboratory specimens

- Conduct hospital census and determine if discharges and appointment cancellations are required

- Implement facility security/lockdown to prevent infectious patients from entering the facility, except through designated routes
BIOLOGICAL DISEASE OUTBREAK – PLAGUE
INCIDENT RESPONSE GUIDE

OPERATIONS

- Ensure proper implementation of infectious patients surge plan, including:
  - Location for off-site triage
  - Rapid screening and triage of people presenting requesting evaluation; coordinate with Security
  - Implementation of infection control measures
  - Monitoring and maintaining function of negative pressure isolation rooms
  - Restrict number of staff providing care to or in contact with infectious patients

PLANNING

- Implement patient, materiel, personnel and bed tracking
- Establish operational periods in collaboration with the Incident Commander
- Develop and distribute the Incident Action Plan

LOGISTICS

- Implement plans and procedures to meet the need for additional medical supplies, medications including antibiotics, IV fluids, oxygen, ventilators, suction equipment, personal protective equipment, and personnel
- Implement mass prophylaxis/vaccination plans for employees, their families, and others, as appropriate, in collaboration with the Medical Care Director
- Prepare for receipt, distribution and tracking of pharmaceutical resources from external sources (i.e., local, regional, state and federal caches)

Intermediate (Operational Period 2-12 Hours)

COMMAND

(Incident Commander):

- Activate and implement emergency operations plans, including mass fatality plan, as needed
- Consider deploying a Liaison Officer to the local EOC

(Public Information Officer):

- Establish a patient information center in coordination with the Liaison Officer and local emergency management
BIOLOGICAL DISEASE OUTBREAK – PLAGUE
INCIDENT RESPONSE GUIDE

COMMAND
(Liaison Officer):
- Establish the patient information center in coordination with the PIO and local emergency management
- Ensure integrated response with local Emergency Operations Center and Joint Information Center
- Communicate resource needs to local Emergency Operations Center
- Notify the local public health department of medical issues and trends identified, in collaboration with the Medical Care Branch Director and the Medical/Technical Specialist – Biological/Infectious Disease
- Communicate the hospital’s operational status with area hospitals and officials

OPERATIONS
- Continue infection control and isolation activities
- Continue disease surveillance, monitoring and reporting
- Consult with Infection Control for disinfection of equipment and facility
- Continue patient management activities
- Coordinate the implementation of mass vaccination/mass prophylaxis plan, in conjunction with the Logistics Section
- Determine need for supplies, equipment and personnel and report to the Logistics Section
- Implement mass fatality plan, as needed, including activation of temporary morgue sites,
- Review and modify as needed, the security plan and family visitation policy

PLANNING
- Continue patient, materiel, personnel and bed tracking
- Update and distribute the Incident Action Plan
- Plan for demobilization of incident and system recovery

LOGISTICS
- Monitor the health status of staff who are exposed to infectious patients and provide appropriate medical care and follow up
- Consider reassigning staff at high risk for complications of plague (e.g., pregnant women, immunocompromised persons) to low risk/exposure duties
### External Scenario 4

**BIOLOGICAL DISEASE OUTBREAK – PLAGUE**

**INCIDENT RESPONSE GUIDE**

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#### FINANCE/ADMINISTRATION

- Track response expenses

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**Extended (Operational Period Beyond 12 Hours)**

**COMMAND**

- (Incident Commander):
  - Continue regular briefing of Command staff/Section Chiefs. Address issues identified.

- (Public Information Officer):
  - Continue patient information center
  - Continue media and staff briefing in coordination with the JIC

- (Liaison Officer):
  - Continue communication and coordination with local Emergency Operations Center
  - Notify public health of medical issues or trends identified
  - Communicate patient status and location information with appropriate external agencies

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**OPERATIONS**

- Continue patient management and facility monitoring activities
- Ensure proper disposal of infectious waste, including disposable supplies/equipment
- Continue to control traffic and crowds and access to the facility
- Ensure delivery of necessary supplies and food

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**LOGISTICS**

- Continue monitoring the health status of staff exposed to infectious patients and providing medical and mental health support and follow up as needed
- Provide mental health support for patients, visitors and staff
- Providing needed equipment, supplies, medications and personnel

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**FINANCE/ADMINISTRATION**

- Continue to track response expenses
Demobilization/System Recovery

COMMAND

(Incident Commander):

- Provide appreciation and recognition to solicited and non-solicited volunteers, staff, state, and federal personnel that helped during the incident

(Public Information Officer):

- Conduct final briefings for media, in cooperation with the JIC

(Liaison Officer):

- Communicate hospital status and final patient condition and location information to appropriate authorities (i.e., local and state public health, local EOC)

OPERATIONS

- Restore normal facility operations and visitation
- Provide mental health and information about community services for patients and families

PLANNING

- Write after-action report and improvement plan, including the following:
  - Summary of actions taken
  - Summary of the incident
  - Actions that went well
  - Area for improvement
  - Recommendations for future response actions
  - Recommendations for correction actions
LOGISTICS

- Conduct stress management and after-action debriefings and meetings for staff
- Monitor health status of staff exposed to infectious patients and provide appropriate medical and mental health follow up, as needed
- Restock all supplies and medications
- Restore/repair/replace broken equipment
- Return borrowed equipment after proper cleaning/disinfection
- Restore normal non-essential services (i.e., gift shop, etc.)

FINANCE/ADMINISTRATION

- Compile final response expense reports, submit to IC for approval and to appropriate authorities for reimbursement

Documents and Tools

Emergency operations plan, including:

- Infectious patient surge plan
- Mass prophylaxis plan
- Risk communication plan
- Hospital security plan
- Patient/staff/equipment tracking procedures
- Behavioral health support for staff/patients plan
- Mass fatalities plan

- Infection control plan
- Employee health monitoring/treatment plan
- All other relevant protocols/guidelines relating to biological/infectious disease/mass casualty incidents
- HICS forms
- Hospital organization chart
- Television/radio/internet to monitor news
- Telephone/cell phone/radio/satellite phone/internet for communication
BIOLOGICAL DISEASE OUTBREAK – PLAGUE

INCIDENT MANAGEMENT TEAM CHART - IMMEDIATE

Legend

Activated Position

Incident Commander

Public Information Officer

Safety Officer

Liaison Officer

Medical/Technical Specialist

Operations Section Chief

Planning Section Chief

Logistics Section Chief

Finance/Administration Section Chief

Staging Manager

Personnel
Medical Care Branch Director

Infrastructure Branch Director

HazMat Branch Director

Security Branch Director

Business Continuity Branch Director

Resources Unit Leader

Situation Unit Leader

Documentation Unit Leader

Demobilization Unit Leader

Service Branch Director

Support Branch Director

Personnel Tracking

Patient Tracking

Financial Tracking

Communications Unit

Staff Food & Water Unit

Patient Registration Unit

Facilities Management Unit

HR Unit

Labor Pool & Credentialing Unit

Inpatient Unit

Outpatient Unit

Casualty Care Unit

Mental Health Unit

Clinical Support Services Unit

Patient Registration Unit

Detection and Monitoring Unit

Spill Response Unit

Victim Decontamination Unit

Facility/Equipment Decontamination Unit

Access Control Unit

Crowd Control Unit

Traffic Control Unit

Search Unit

Law Enforcement Interface Unit

Information Technology Unit

Service Continuity Unit

Records Preservation Unit

Business Function Relocation Unit

Personnel Vehicle Equipment/Supply Personnel Tracking Materiel Tracking Patient Tracking Bed Tracking Communications Unit IT/IS Unit Staff Food & Water Unit Patient Registration Unit Facilities Management Unit HR Unit Labor Pool & Credentialing Unit Inpatient Outpatient Casualty Care Mental Health Clinical Support Services Patient Registration Detection and Monitoring Spill Response Victim Decontamination Facility/Equipment Decontamination Access Control Crowd Control Traffic Search Law Enforcement Information Technology Service Continuity Records Preservation Business Function Relocation