

BIOLOGICAL DISEASE OUTBREAK – PANDEMIC INFLUENZA

SCENARIO

An outbreak of unusually severe respiratory illness is occurring in China. The US Centers for Disease Control (CDC) has identified the particular strain as Type A H7N3, a subtype never before isolated from humans. The CDC also reports that the H7N3 virus has been isolated from ill airline passengers and large numbers of cases are now being reported in Hong Kong, Singapore, South Korea, Japan and the United States. Young adults are most severely affected and case-fatality rates approach 50%. State and local agencies are asked to intensify influenza surveillance and implement airborne protection measures for staff. News agencies have issued alerts for anyone experiencing flu-like symptoms to immediately contact their health care providers.

There is an increase in the number of persons presenting to emergency rooms with symptoms consistent with influenza. More people are seeking medical care than actually need it. Personnel in key positions are absent due to illness, fear of illness or caring for ill family members. Local pharmacies have run out of antiviral medications and are unsure whether they can expect to receive more. Estimates indicate that 10% of the population is ill with H7N3 influenza. Local hospitals and outpatient clinics are extremely short-staffed; an estimated 30-40% of physicians, nurses and other healthcare workers are absent. Intensive care units are overwhelmed, and there is a shortage of mechanical ventilators for patients with severe respiratory syndromes or postoperative needs. Family members are distraught and outraged when loved ones die within a matter of days. All essential services have personnel shortages, resulting in major reductions in routine services. There are shortages of food supplies due to the nationwide impact.

BIOLOGICAL DISEASE OUTBREAK – PANDEMIC INFLUENZA

INCIDENT PLANNING GUIDE

Does your Emergency Management Plan Address the following issues?

Mitigation & Preparedness

1. Does your hospital provide information and education to staff on infection control precautions, personal protective equipment, exposure prophylaxis and family/dependent care options?

 2. Does your hospital have a procedure to provide personal protective equipment (PPE), including respirators, to designated work locations?

 - Does your hospital have a plan to expand patient care capabilities in the face of a rapid surge of infectious patients? Does the plan include:
 - Rapid identification, triage, and isolation practices in ED and clinics?

 3.
 - Expanding isolation capability (cohorting, portable HEPA filtration, etc.)?
 - Canceling elective surgeries and outpatient clinics/testing?
 - Establishment of alternative treatment sites?
 - Integration with other local hospitals, clinics, public health and emergency management?

 4. Does your hospital have a plan to manage dispensing antiviral medications to staff (mass vaccination/mass prophylaxis plan) and in administering vaccines (when available)?

 - Does your hospital have a plan to notify and maintain communications and exchange appropriate information with:
 - Internal experts, including infection control, hospital epidemiology, and engineering/facilities?

 5.
 - External experts, including local, regional and state public health, EOC/emergency management?
 - Other local hospitals?

 6. Does your hospital have a plan to provide situation and risk communication briefings to staff, patients, and community in conjunction with local public health and emergency management?

 7. Does your hospital have policies and procedures to track ED and clinic activity and inpatient census data for trends and report information to the appropriate partners?

 8. Does your hospital have a procedure to limit hospital access to a small number of monitored entrances so that patients and visitors entering the facility can be screened for illness (e.g., temperature checks)?

 9. Does your hospital have a procedure to monitor staff and volunteers for symptoms and a policy for “fitness for duty” procedures?

 10. Does your hospital plan for ensuring safe transportation routes and infection control procedures (e.g., patients wearing masks) when transferring patients through the hospital (i.e., from ED to inpatient units)?
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11. Does your hospital have a policy to determine appropriate amounts of PPE and hand hygiene/washing supplies available and to supplement those supplies as required?
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12. Does your hospital have a policy to determine appropriate numbers of essential personnel (e.g., medical, nursing, environmental services, facilities, nutrition and food services, administrative, ancillary clinical staff – e.g., respiratory therapy, radiology technicians, medical records, information technology and laboratory) that would be priority for receiving prophylaxis, vaccine and PPE to protect those staff most at risk and to ensure the continuation of essential services?
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13. Does your hospital maintain stockpiles of antiviral medications and antibiotics to treat bacterial complications to treat or provide prophylaxis to staff, patients and volunteers?
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14. Does your hospital plan for adequate numbers of security personnel to maintain hospital security?
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15. Does your hospital have a plan for providing appropriate personal protective equipment to laboratory personnel when required?
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16. Does your hospital have a plan for safely packaging, identifying, and transferring lab specimens to external testing sites, including local, state and federal labs?
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17. Does your hospital have a plan for increasing capability to perform specific screening tests for designated pathogens?
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18. Does your hospital have the capability of handling the documentation associated with a surge in designated testing?
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- Does your hospital have a plan for relaying laboratory results to:
19.
 - Internal clinical sites?
 - External partners (public health, law enforcement, other)?
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Response & Recovery

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1. Does your hospital have a policy to monitor the health status and absenteeism of staff during the pandemic?
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2. Does your hospital have a plan to track ED, inpatient and clinic census and symptoms?
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3. Does your hospital have triggers to implement the infectious patient surge capacity plan?
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4. Does your hospital have a plan to manage mass fatalities and address fatality issues in conjunction with law enforcement/medical examiner/coroner/local EOC?
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5. Does your hospital monitor medical care issues for patients and exposed or ill staff?
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6. Does your hospital monitor safe and consistent use of PPE?
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7. Does your hospital have a plan to maintain facility security?
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Does your hospital have a plan to adjust staff schedules to meet the needs of the response including:

- 8.
- Reassigning staff who have recovered from flu to care for flu patients?
 - Reassigning staff at high risk for complications of flu (e.g., pregnant women, immunocompromised persons) to low risk duties (e.g., no flu patient care or administrative duties only)?
-

Does your hospital have inventory procedures for:

- 9.
- Current hospital supplies of medications, equipment and supplies?
 - Receiving medications, equipment and supplies from outside resources (i.e., federal, state or local stockpiles, vendors, other facilities) and returning those medications or supplies upon termination of the event?
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INCIDENT RESPONSE GUIDE

Mission: To effectively and efficiently identify, triage, isolate, treat and track a surge of potentially infectious patients and staff; and manage the uninjured/asymptomatic persons, family members, and the media.

Directions

- Read this entire incident response guide and incident management team chart.
 - Use this Incident Response Guide as a checklist to ensure all tasks are addressed and completed.
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Objectives

- Identify, triage, isolate and treat infectious patients.
 - 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.
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INCIDENT RESPONSE GUIDE

Immediate (Operational Period 0-2 Hours)

COMMAND

(Incident Commander):

- Activate the appropriate Medical/Technical Specialists 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, as indicated
- Cancel elective surgeries and outpatient clinics/testing, if required

(Medical Technical Specialist - Biological):

- Verify from the ED attending physician and other affected clinics, in collaboration with Public Health officials, and report the following information to the Incident Commander
 - Number and condition of patients affected, including the worried well
 - Type of biological/infectious disease involved (case definition)
 - Medical problems present besides biological/infectious disease involved
- Measures taken (e.g., cultures, supportive treatment)
 - Potential for and scope of communicability
 - Implement appropriate PPE and isolation precautions

(Liaison Officer):

- Communicate with local emergency management and other external agencies (e.g., health department) to identify infectious agent
- Communicate with EMS/Public Health to determine the possible number of possible infectious patients
- Communicate regularly with Incident Commander and Section Chiefs regarding operational needs and integration of hospital function with local EOC

(Public Information Officer):

- Monitor media outlets for updates on the pandemic 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 related to staff, patients, and facility, and implement corrective actions to address.
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INCIDENT RESPONSE GUIDE

COMMAND

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

- Coordinate with the Operations Section Chief to verify from the ED attending physician and other affected physicians' offices, in collaboration with regional officials, and report the following information to the Incident Commander and Section Chiefs:
 - Number and condition of patients affected, including the asymptomatic
 - Medical problems present besides infectious disease involved
 - Measures taken (e.g., cultures, supportive treatment)
 - Potential for and scope of communicability
-

OPERATIONS:

- Provide just-in-time training for both clinical and non-clinical staff regarding the status of the event, precautions they should take, and rumor control.
- Notify the ED of possible numbers of incoming infectious patients, in consultation with the Liaison Officer who is in communication with external authorities (e.g., health department)
- Ensure proper implementation of infectious patients surge plan, including:
 - Location for off-site triage, as appropriate
 - Proper rapid triage of people presenting requesting evaluation. Coordinate with Security, if necessary
 - Staff implementation of infection precautions, and higher level precautions for high risk procedures (e.g., suctioning, bronchoscopy, etc.), as per current CDC guidelines
- Proper monitoring of isolation rooms and isolation procedures
 - Limit patient transportation within facility for essential purposes only
 - Restrict number of clinicians and ancillary staff providing care to infectious patients
- Evaluate and determine health status of all persons prior to hospital entry
- Ensure safe collection, transport, and processing of laboratory specimens
- Report actions/information to Command staff/Section Chiefs/IC regularly, according to schedule
- Conduct hospital census and determine if discharges and appointment cancellations required

(Security):

- Implement facility lockdown to prevent infectious patients from entering the facility, except through designated route. Report regularly to Operations Section Chief
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INCIDENT RESPONSE GUIDE

PLANNING

- Establish operational periods and develop Incident Action Plan:
 - Engage other hospital departments
 - Share Incident Action Plan through Incident Commander with these areas
 - Provide instructions on needed documentation including completion detail and deadlines
 - Implement patient/staff/equipment tracking protocols
 - Report actions/information to Incident Commander, Command Staff, Section Chiefs regularly
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LOGISTICS

- Implement distribution plans for mass prophylaxis/immunizations for employees, their families, and others.
 - Anticipate an increased need for medical supplies, antivirals, IV fluids and pharmaceuticals, oxygen, ventilators, suction equipment, respiratory protection/PPE, and respiratory therapists, transporters and other personnel
 - Prepare for receipt of external pharmaceutical cache(s)/Strategic National Stockpile. Track dispersal of external pharmaceutical cache(s)/Strategic National Stockpile
 - Determine staff supplementation needs and communicate to Liaison Officer
 - Report actions/information to Command staff/Section Chiefs/IC regularly, according to schedule
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Intermediate (Operational Period 2-12 Hours)

COMMAND

(Incident Commander)

- Activate and implement emergency management plans, as indicated, including mass fatality plan
- Continue regular briefing of Command staff/Section Chiefs

(Public Information Officer):

- Establish a patient information center; coordinate with the Liaison Officer and local emergency management/public health/EMS. Regularly brief local EOC, hospital staff, patients, and media
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INCIDENT RESPONSE GUIDE

COMMAND

(Liaison Officer):

- Ensure integrated response with local EOC, JIC
 - Communicate personnel/equipment/supply needs identified by Operations to local EOC
 - Keep public health advised of any health problems/trends identified, in cooperation with infection control
 - Integrate outside personnel assistance into Hospital Command Center and hospital operations
 - Discuss operational status with other area hospitals
 - Brief Command staff/Section Chiefs regularly with information from outside sources
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OPERATIONS

- Conduct disease surveillance, including number of affected patients/personnel
 - Continue isolation activities as needed
 - Consult with infection control for disinfection requirements for equipment and facility
 - Continue patient management activities, including patient cohorting, patient/staff/visitor medical care issues
 - Coordinate with Logistics implementation of mass vaccination/mass prophylaxis plan
 - Determine scope and volume of supplies/equipment/personnel required and report to Logistics
 - Implement local mass fatality plan (including temporary morgue sites) in cooperation with local/state public health, emergency management, and medical examiners. Assess capacity for refrigeration/security of deceased patients
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PLANNING

- Continue patient tracking
 - Document Incident Action Plan, as developed by IC and Section Chiefs and distribute appropriately
 - Collect information regarding situation status and report to IC/Command staff/Section Chiefs regularly
 - Plan for termination of incident
 - Revise security plan and family visitation policy, as needed
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INCIDENT RESPONSE GUIDE

LOGISTICS

- Coordinate activation of staff vaccination/prophylaxis plan with Operations
 - Monitor the health status of staff who are exposed to infectious patients
 - Consider reassigning staff recovering from flu to care for flu patients; reassign staff at high risk for complications of flu (e.g., pregnant women, immunocompromised persons) to low risk duties (e.g., no flu patient care or administrative duties only)
 - Establish Family Care Unit under Support Branch Director to address family/dependent care issues to maximize employee numbers at work.
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FINANCE

- Track response expenses and report regularly to Command staff and Section Chiefs
 - Track and follow up with employee illnesses and absenteeism issues
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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, as necessary. Coordinate efforts with local/state public health resources/JIC

(Liaison Officer): Continue to

- Ensure integrated response with local EOC/JIC
 - Communicate personnel/equipment/supply needs to local EOC
 - Keep public health advised of any health problems/trends identified
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OPERATIONS

- Continue patient management and facility monitoring activities. Communicate personnel/equipment/supply needs to local EOC
 - Ensure proper disposal of infectious waste, including disposable supplies/equipment
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PLANNING

- Revise and update the IAP and distribute to IC, Command Staff and Section Chiefs
-

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INCIDENT RESPONSE GUIDE

LOGISTICS

- Continue monitoring the health status of staff exposed to infectious patients
 - Continue addressing behavioral health support needs for patients/visitors/staff
 - Continue providing equipment/supply/personnel needs
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FINANCE

- Continue to track response expenses and employee injury/illness and absenteeism
-

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):

- Provide briefings as needed to patients/visitors/staff/media, in cooperation with JIC

(Liaison Officer):

- Prepare a summary of the status and location of infectious patients. Disseminate to Command staff/Section Chiefs and to public health/EMS as appropriate
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OPERATIONS

- Restore normal facility operations and visitation
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LOGISTICS

- Conduct stress management and after-action debriefings and meetings as necessary
 - Monitor health status of staff
 - Inventory all EOC and hospital supplies and replenish as necessary
 - Restore/repair/replace broken equipment
 - Return borrowed equipment after proper cleaning/disinfection
 - Restore normal non-essential services (i.e., gift shop, etc.)
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PLANNING

- Conduct after action review with HCC Command staff and Section Chiefs and general staff immediately upon demobilization or deactivation of positions
 - Conduct after action debriefing with all staff, physicians and volunteer
 - Prepare the after action report and improvement plan for review and approval
 - Write after-action report and corrective action plan to include the following:
 - Summary of actions taken
 - Summary of the incident
 - Actions that went well
 - Area for improvement
 - Recommendations for corrective actions and future response actions
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FINANCE

- Compile time, expense and claims reports and submit to IC for approval
 - Distribute approved reports to appropriate authorities for reimbursement
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Documents and Tools

Emergency Operations Plan, including:

- Infectious patient surge plan
 - Mass vaccination/mass prophylaxis plan
 - Risk communication plan
 - Hospital security plan
 - Patient/staff/equipment tracking procedure
 - Behavioral health support for staff/patients plan
 - Mass fatalities plan
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- Infection control plan
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- Employee health monitoring/treatment plan
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- All other relevant protocols/guidelines relating to biological/infectious disease/mass casualty incidents
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- HICS forms
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- Job Action Sheets
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INCIDENT RESPONSE GUIDE

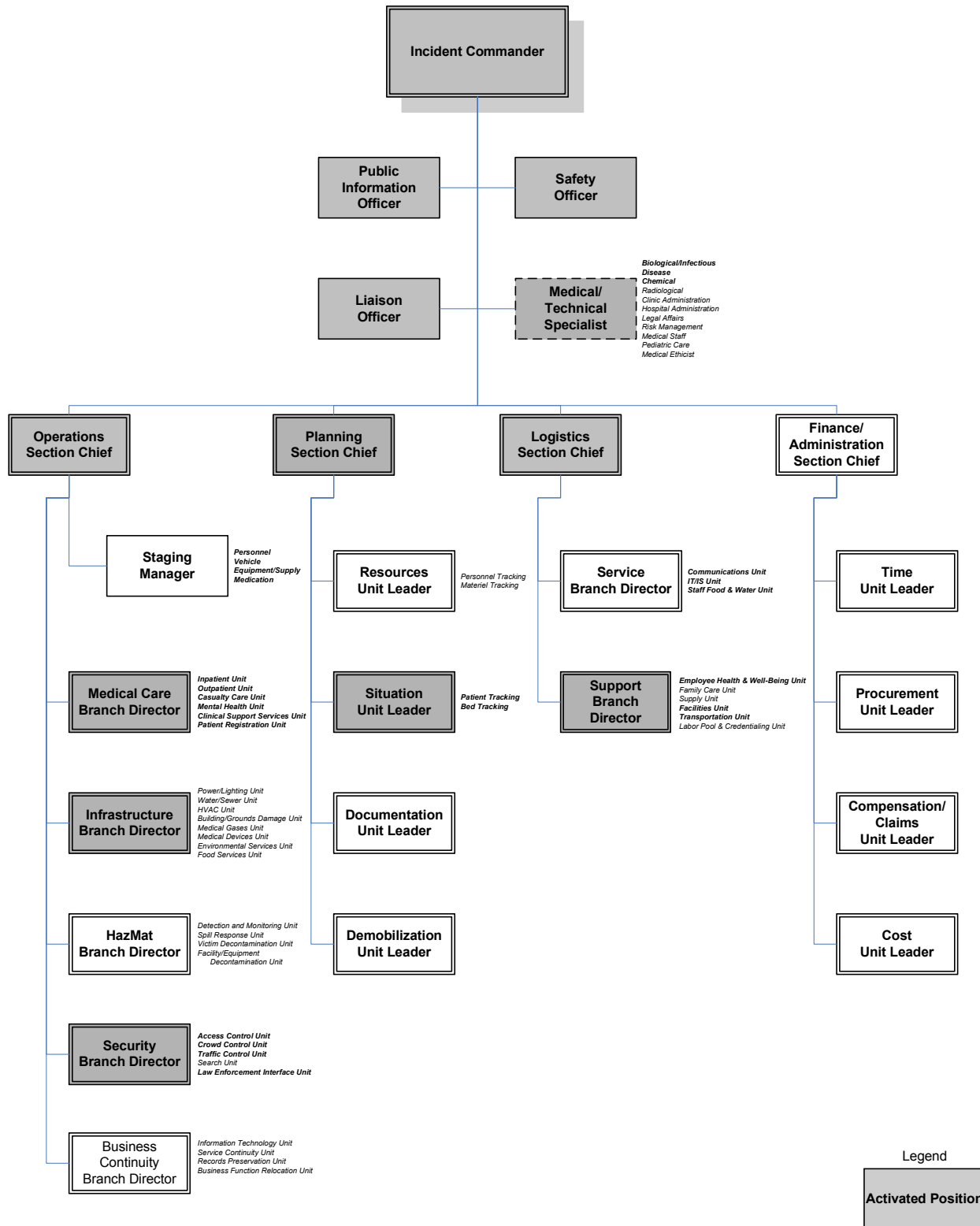
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- Hospital organization chart

 - Television/radio/internet to monitor news

 - Telephone/cell phone/radio/satellite phone/internet for communication

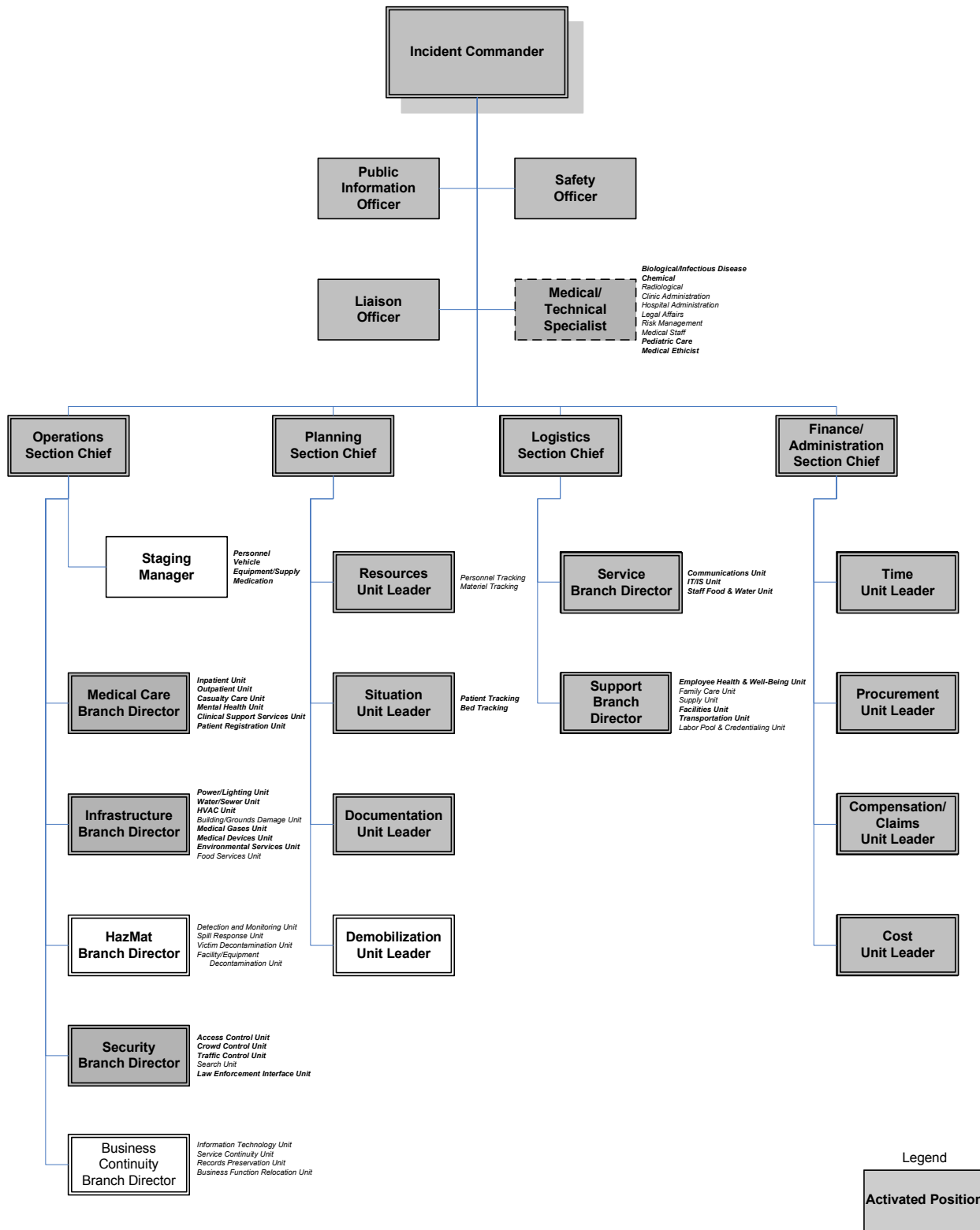
BIOLOGICAL DISEASE OUTBREAK – PANDEMIC INFLUENZA

INCIDENT MANAGEMENT TEAM CHART - IMMEDIATE



BIOLOGICAL DISEASE OUTBREAK – PANDEMIC INFLUENZA

INCIDENT MANAGEMENT TEAM CHART - INTERMEDIATE



BIOLOGICAL DISEASE OUTBREAK – PANDEMIC INFLUENZA

INCIDENT MANAGEMENT TEAM CHART - EXTENDED

