

NATURAL DISASTER – MAJOR EARTHQUAKE

SCENARIO

A 7.2-magnitude earthquake occurs along a fault zone in a metropolitan area approximately 50 miles from your hospital. Ground shaking and liquefaction occurs throughout a widespread area, impacting a six-county region. Moderate to major damage is reported for two hundred square miles. Multiple severe aftershocks are expected for days and weeks after the initial earthquake.

Hundreds of thousands of people sustain mild to severe injuries, and hospitals outpatient buildings sustain moderate to severe damage to their facilities and infrastructure. EMS is overwhelmed with the numbers of calls and injuries and transport to hospitals is difficult due to debris in the streets blocking access.

Your hospital has sustained moderate to severe damage. The Emergency Department and outpatient surgery areas have been impacted the most, rendering the area non-functional. All services in these areas will need to be relocated. Main water and power services are disrupted, but emergency power from the generators is functioning. Landlines are non-functional rendering telephone, fax and internet unavailable to the hospital. Large numbers of injured are presenting to the hospital for care and many who are not injured seek shelter and reassurance from medical providers.

NATURAL DISASTER – MAJOR EARTHQUAKE

INCIDENT PLANNING GUIDE

Does your Emergency Management Plan Address the following issues?

Mitigation & Preparedness

1. Does your hospital have a process to assess damage to hospital structure and infrastructure: HVAC, water, sewage, lighting, power, information systems, communications, medical gases, hazardous materials?

2. Does your hospital have procedures to establish redundant communications with public safety officials and local emergency management in the event of loss of normal communications?

3. Does your hospital have defined criteria and procedures to evacuate all or sections of the facility based on damage assessments?

4. Does your hospital have criteria and triggers to cancel elective surgeries and procedures and all non-essential services in the event of an earthquake?

5. Does your hospital have a plan for contacting personnel (i.e., staff call back lists) and a backup system if primary systems fail?

6. Does your hospital have procedures to manage volunteers and donated items?

7. Does your hospital have procedures for augmenting staff levels or managing with limited staff available?

Response & Recovery

1. Does your hospital have procedures to determine the status of communication systems outside of the hospital in order to communicate with local emergency management, police, fire within city, county and operational area?

2. Does your hospital have a plan to establish alternate care sites and relocated services provided in damaged areas?

3. Does your hospital have protocols to manage injuries to patients, staff and visitors?

4. Does your hospital have a plan to secure unsafe areas of the facility?

5. Does your hospital have a plan to communicate facility and situation status to staff, patients and visitors?

6. Does your hospital have a surge capacity plan to manage an influx of large numbers of victims?

7. Does your hospital have a process to assess current hospital surge capacity and initiate discharge planning or move less acute patients to other areas (i.e., alternate care sites within the facility) to free up acute beds?

8. Does your hospital have a procedure for managing discharged patients whose residences are damaged or when roadways are unsafe?

9. Does your hospital have a process to inventory available supplies, equipment and personnel for both short and long term operations?

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10. Does your hospital have procedures to track patients and beds?

 11. Does your hospital have a process for obtaining supply and equipment supplementation?

 12. Does your hospital have a process for determining food and water needs for patients, visitors and staff for 72 hours and plan for obtaining needed supplies?

 13. Does your hospital have procedures for assessment, documentation of and action plan for facility damage, system restoration and repair?

 14. Does your hospital have a process for reporting all injuries, system failures, and long term damage to state licensing and certification authorities as required?

 15. Does your hospital have a process for submitting cost for disaster reimbursement from insurance carriers, local, state, and FEMA disaster relief?

 16. Does your hospital have a process for regularly reassessing the status of the facility, patient care, and staffing and adjusting the Incident Action plan and operations accordingly?

 17. Does your hospital have a plan to resupply fuel for the generators to maintain power to the facility?

 18. Does your hospital have procedures and forms to track costs, expenses and provide reports?

 19. Does your hospital have procedures to prepare a report of all patients evaluated, treated, and discharged from hospital?

 20. Does your hospital have procedures for preparing final damage reports and long term restoration and repair plans?

 21. Does your hospital have criteria to confirm restoration of the facility to normal function?

 22. Does your hospital have procedures for resuming normal operations such as surgeries, procedures, and out patient services?

 23. Does your hospital have a plan for providing mental health support and stress management services to employees, patients and families?

 24. Does your hospital have a plan for providing staff dependent care services such as elder and child care?

 25. Does your hospital have a plan to participate in after action review with local emergency management and community partners?

 26. Does your hospital have a process for conducting an after action review and develop after action report and improvement plan?

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INCIDENT RESPONSE GUIDE

Mission: To maintain hospital operations for a minimum of 72 hours following a major earthquake that may impact the structural integrity of the facility, and to ensure the continuum of care for patients, visitors, and casualties of the event.

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
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Objectives

- Damage Assessment
 - Patients, visitors, staff assessed for injuries and accounted for
 - Patient tracking
 - Hospital facility self-sustainment for a minimum of 72 hours
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Immediate Actions (Operational Period 0-2 Hours)

COMMAND

(Incident Commander):

- Activate the facility Emergency Operations Plan
- Appoint Planning, Operations and Logistics Section Chiefs
- Appoint Medical Technical Specialists – Hospital Administration, Clinic Administration and Risk Management, as appropriate

(Liaison Officer):

- Communicate with local Emergency Operations Center and officials to determine extent damage to critical infrastructure and services
 - Communicate with other hospitals to determine status
 - Coordinate and communicate with RHCC or equivalent; notify as appropriate

(Public Information Officer):

- Obtain information from Situation Unit Leader to provide situation briefing to hospital patients, visitors, and staff
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INCIDENT RESPONSE GUIDE

COMMAND

(Safety Officer):

- Conduct, in conjunction with Operations Section, an assessment of the facility to identify damaged and/or non-functional areas
 - Determine safe evacuation procedures and routes
 - 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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OPERATIONS

- Activate alternate care sites for evacuated patients
 - Implement evacuation of unsafe/unstable areas of the facility
 - Assess facility for damage, initiate repairs as appropriate or secure unsafe areas
 - Activate search procedures as appropriate
 - Assess status of security systems, access and egress from facility, and implement security plan
 - Prepare to receive incident casualties; establish triage and treatment areas, discharge areas and appropriate protocols
 - Conduct an census of inpatients, clinic patients, those available for discharge
 - Ensure continued functioning of emergency power generators
 - Consider activating HazMat Branch if any facility damage resulting in hazardous materials spill or incident
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PLANNING

- Initiate patient, bed, materiel and personnel tracking procedures
 - Establish operational periods and develop Incident Action Plan in collaboration with the Incident Commander
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LOGISTICS

- Inventory and assess for damage all supplies, equipment, food and water stores
 - Activate alternate communication systems and establish contact with local EOC, EMS and ensure intra-hospital communications with walkie talkies, runners, etc.
 - Project needs for 72 hours and institute rationing, if appropriate
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INCIDENT RESPONSE GUIDE

Intermediate (Operational Period 2-12 Hours)

COMMAND

(Incident Commander):

- Consider deploying a Liaison Officer to the local EOC, as appropriate
- Ensure evacuation procedures are being conducted

(PIO):

- Continue briefings to media, staff and patients
 - Establish the patient information center, in collaboration with the Liaison Officer
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COMMAND

(Liaison Officer):

- Continue communications with local EOC to relay critical issues, needs and requests for assistance
- Establish the patient information center, in collaboration with the PIO

(Safety Officer):

- Continue monitoring evacuation of damaged areas, ensure safety practices in alternate care sites
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OPERATIONS

- Continue patient care and management of inpatients, clinic patients and new casualties
 - Continue to manage alternate care sites and establish new sites as needed to accommodate evacuated or arriving patients
 - Determine need for on-site housing and feeding of staff, in collaboration with Logistics Section
 - Institute alternate care standards of practice (austere care) as appropriate to prioritize and manage the patient surge and lack of resources
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PLANNING

- Update and distribute the Incident Action Plan
 - Revise incident objectives as needed to meet the mission, in collaboration with the Incident Commander
 - Continue patient, bed, materiel and personnel tracking
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INCIDENT RESPONSE GUIDE

FINANCE

- Track response expenses and compile estimates of repairs for facility damage
 - Facilitate procurement of supplies, equipment, medications and personnel for response
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Extended (Operational Period Beyond 12 Hours)

COMMAND

(Incident Commander):

- Review and revise incident objectives and the Incident Action Plan to reflect current status and critical issues
 - Consult with Medical/Technical Specialists – Hospital and Clinic Administration to ensure continuity of operations
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COMMAND

(PIO):

- Continue regularly scheduled and as needed briefings to media
- Provide information updates to staff, patients and families
- Continue patient information center activities

(Safety Officer):

- Continue to oversee safety of operations, repair and recovery operations
 - Continue to ensure the safety practices in alternate care sites, if activated
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OPERATIONS

- Continue patient care and management activities
 - Reassess facility integrity after any earthquake aftershocks occur, and evacuate additional areas, if necessary
 - Reassess status of utilities (power, water, sewer) and modify response plan as needed
 - Ensure staff food, water and rest periods
 - Continue security operations and activities
 - Provide mental health support services to patients, families and staff
 - Assess the need for activating the Continuity Branch Director to ensure business operations are maintained
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INCIDENT RESPONSE GUIDE

LOGISTICS

- Continue to monitor inventory of supplies, equipment, medications, food and water, and institute/continue rationing as necessary
 - Maintain contact with vendors to ascertain re-supply timelines
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FINANCE

- Continue tracking, monitoring and reporting response costs and personnel hours
 - Communicate with local, state and federal emergency management to begin reimbursement procedures for cost expenditures related to the event
 - Contact insurance carriers to assist in documentation of structural and infrastructure damage and initiate reimbursement and claims procedures
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Demobilization/System Recovery

COMMAND

(Incident Commander):

- Receive status reports from Section Chiefs to determine if normal hospital operations can be restored and the incident declared terminated

(Liaison Officer):

- Communicate facility status and demobilization status to the local EOC, other area hospitals and response partners
- Demobilize the patient information center, in collaboration with the PIO

(PIO):

- Conduct final media briefing to update facility status, provide appropriate patient information and inform of return to normal operations
- Demobilize the patient information center, in collaboration with the Liaison Officer

(Safety Officer):

- Determine the safety of the facility, ability to inhabit damaged but repaired areas, and protection of staff, patients and visitors
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INCIDENT RESPONSE GUIDE

OPERATIONS

- Restore normal medical care operations
 - Oversee the movement of patients from alternate care sites into the hospital facility/repaired areas
 - Continue to secure damaged, unsafe areas
 - Restore communication systems and utilities
 - Provide for mental health support services and stress management for patients, families and staff
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PLANNING

- Prepare a summary of response operations, including number of patients received, status and current census
 - Write an after-action report including these topics:
 - Summary of the incident
 - Response activities that went well
 - Response activities that need improvement
 - Recommendations for future actions
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LOGISTICS

- Restock supplies, equipment and medications to normal levels
 - Compile a final facility damage and repair report
 - Conduct stress management services and debriefings for staff, as appropriate
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FINANCE

- Prepare a final summary of response costs and expenditures for approval by the Incident Commander
 - Submit claims to insurance companies, as appropriate
 - Submit patient records and other appropriate information for reimbursement
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Documents and Tools

- Hospital Emergency Operations Plan
 - Hospital Damage Assessment procedures and documentation forms
 - Discharge Policy
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INCIDENT RESPONSE GUIDE

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- Emergency procurement policy

 - Patient Tracking

 - Staff activity forms

 - Interoperable communications plan

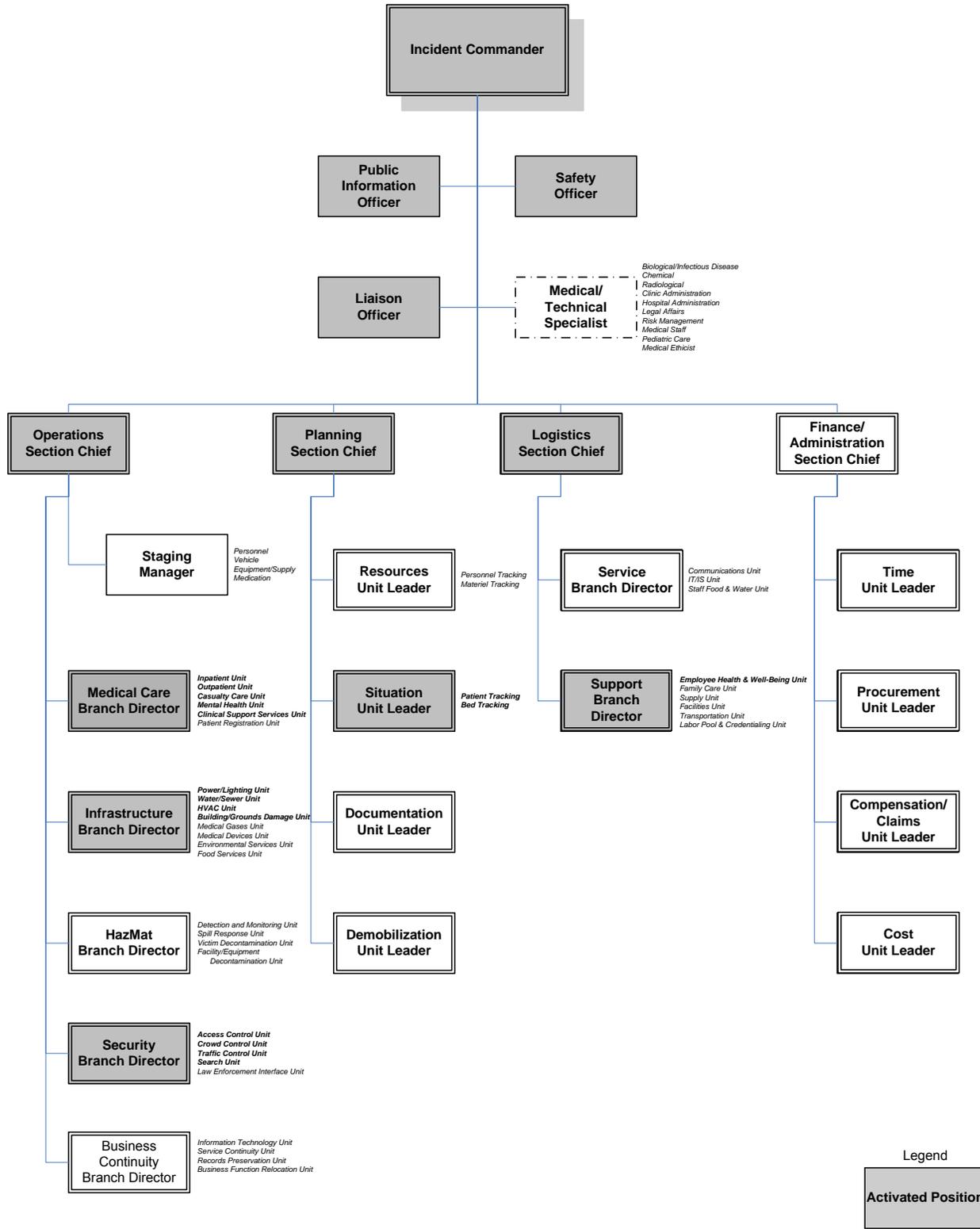
 - Utility Failure Plans

 - Evacuation Plan

 - Departmental Business Continuity Plans

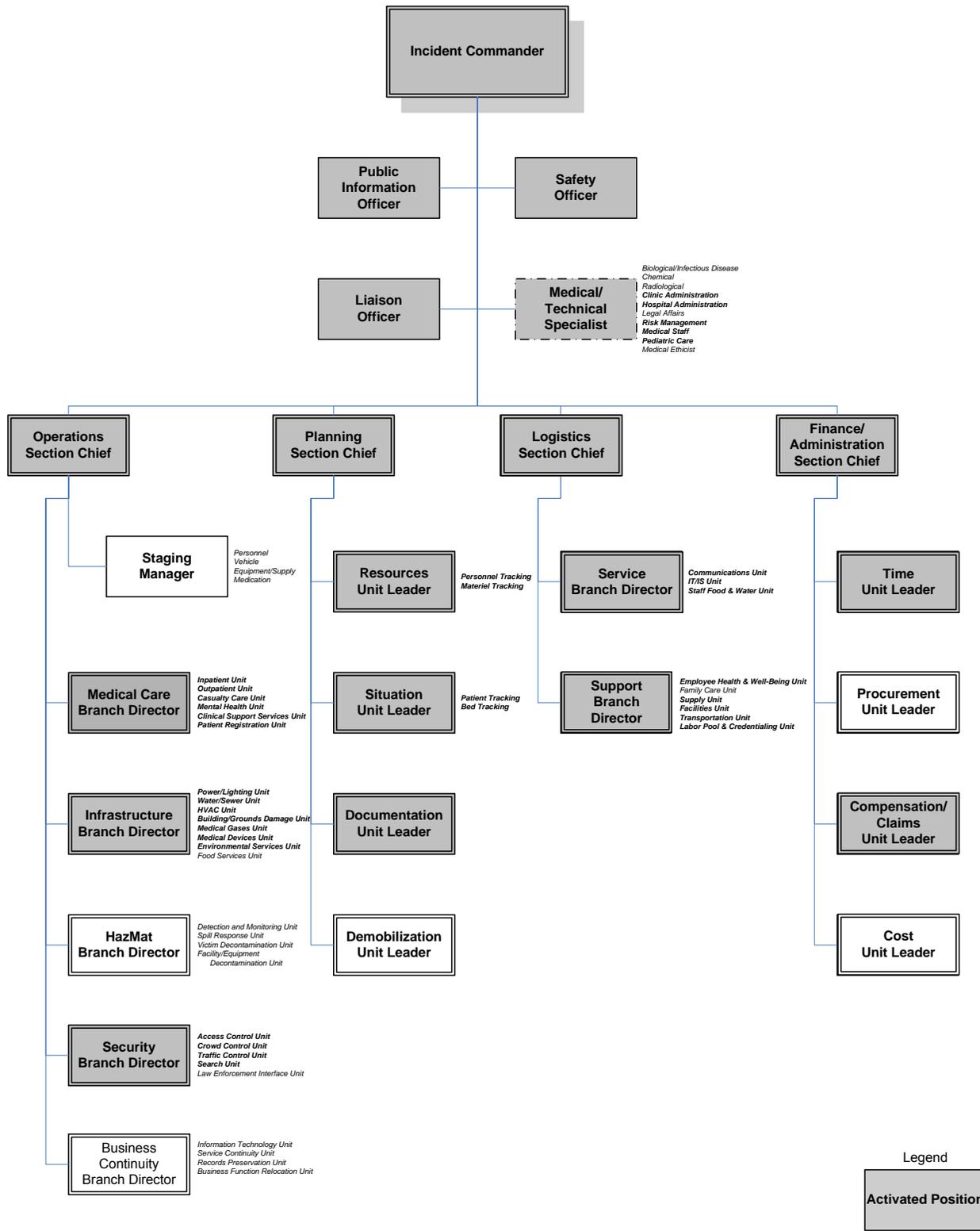
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INCIDENT MANAGEMENT TEAM CHART -- IMMEDIATE



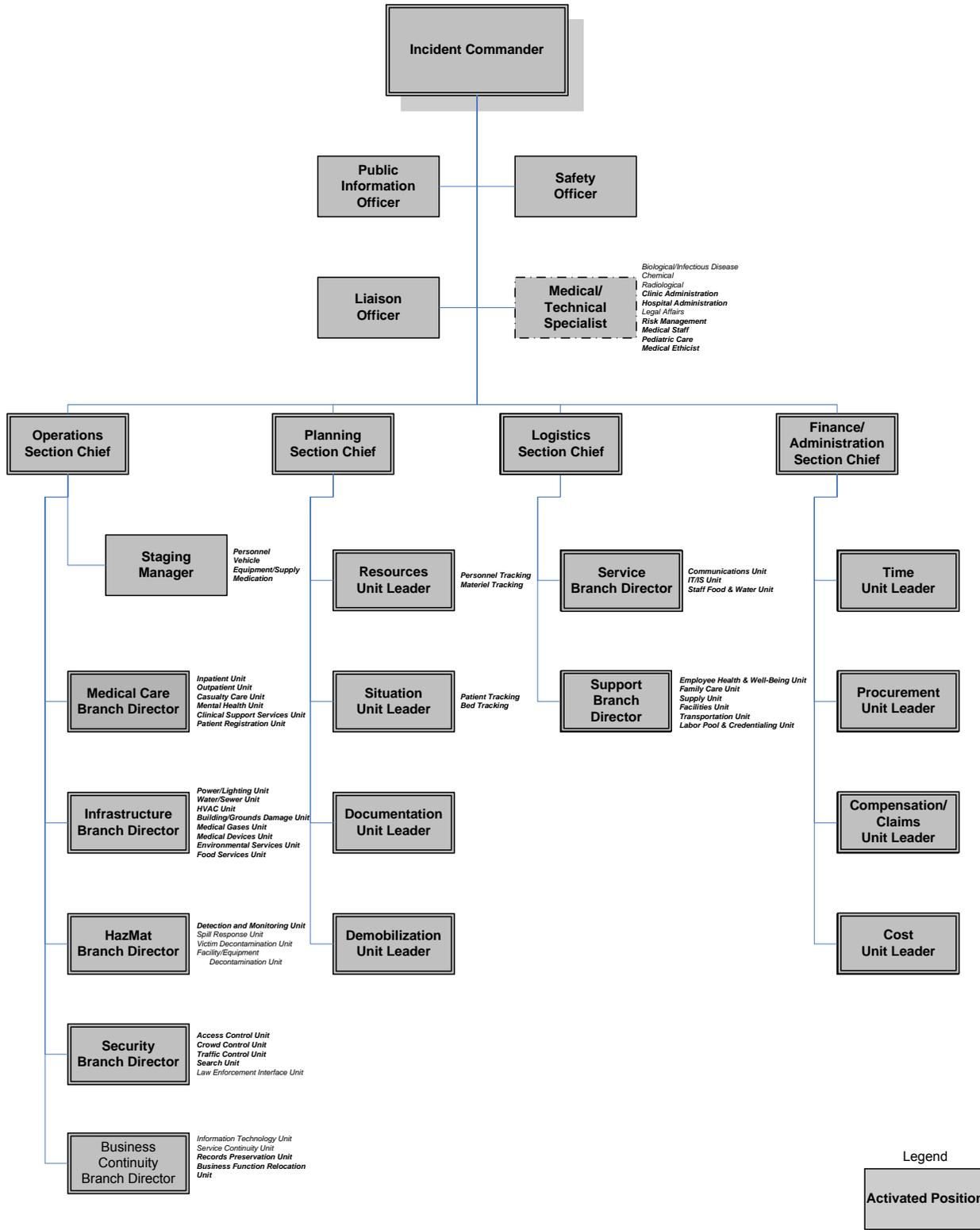
NATURAL DISASTER – MAJOR EARTHQUAKE

INCIDENT MANAGEMENT TEAM CHART -- INTERMEDIATE



NATURAL DISASTER – MAJOR EARTHQUAKE

INCIDENT MANAGEMENT TEAM CHART -- EXTENDED



Legend

Activated Position

NATURAL DISASTER – MAJOR EARTHQUAKE

INCIDENT MANAGEMENT TEAM CHART -- DEMOBILIZATION

