Incident Response Guide: Earthquake

Mission

To provide a safe environment for patients, staff, and visitors either within the hospital or while evacuating the hospital following an earthquake that impacts the structural integrity of the hospital or availability of services. To provide the continuation of care for patients, visitors, and those seeking care post-incident.

Directions

Read this entire response guide and review the Hospital Incident Management Team Activation chart. Use this response guide as a checklist to ensure all tasks are addressed and completed.

Objectives

- ☐ Provide for patient care and management
- ☐ Provide for the safety of patients, staff, families, and visitors
- ☐ Provide for continuing operational status of the hospital or safe evacuation from the hospital

Immediate Response (0 – 2 hours)

Section	Officer	Time	Action	Initials
Command	**Incident Commander**		Activate Emergency Operations Plan, Earthquake Plan, Hospital Incident Management Team, and the Hospital Command Center.	
			With input of Operations Section, determine the need for partial or full hospital evacuation.	
			Establish operational periods, objectives, and a regular briefing schedule. Consider the use of the Incident Action Plan Quick Start for initial documentation of the incident.	
			Notify the hospital Chief Executive Officer, Board of Directors, and other appropriate internal and external officials of situation status.	
	Public Information Officer		Contact the media to gather situational assessment.	
			Monitor media outlets for updates on the incident and possible impacts to the hospital. Communicate the information via regular briefings to Section Chiefs and Incident Commander.	
	Liaison Officer		Notify community partners in accordance with local policies and procedures (e.g., consider local Emergency Operations Center, other area healthcare facilities, local emergency medical services, and healthcare coalition coordinator), to determine incident details, community status, estimates of casualties, and establish contacts for requesting supplies, equipment, or personnel not available in the facility.	
			Communicate with other hospitals to determine their situation status, ability to accept patients if they are transferred from you, or if your hospital's evacuation and abandonment is ordered.	
	Safety Officer		Identify safety hazards and mitigation strategies based on hospital assessment; complete HICS 215A for distribution.	
			Notify the Incident Commander and Operations Section Chief of any internal or external areas that are unsafe for occupancy or use.	

| | | | With the Infrastructure and Security Branch Directors, ensure that unsafe areas are restricted by signage or barrier tape, or by posting staff to monitor entry points. | |
| | | | Monitor the Infrastructure Branch for compliance with safety equipment and actions during damage assessment and search procedures. | |

Immediate Response (0 – 2 hours)

Section	Branch/Unit	Time	Action	Initials
Operations	**Section Chief**		Refer to the Job Action Sheet for appropriate tasks.	
	Medical Care Branch Director		Initiate surge and response specific treatment plans: ☐ Activate triage and treatment areas and teams ☐ Assess injuries to current patients, visitors, and staff ☐ Activate the Surge Plan ☐ Initiate the discharge of patients if community infrastructure allows ☐ Activate the Fatality Management Plan ☐ Assess scheduled outpatient appointments and procedures for postponement	
	Infrastructure Branch Director		Assess damage to hospital infrastructure, including: ☐ Status of all utilities ☐ Ability to sustain operations with current impact on infrastructure and utilities ☐ Activate utility contingency plans ☐ Activate Memorandums of Understanding as needed for generator and fuel support, water and sewage services, and medical gas deliveries ☐ Safety status of external sites including landing zones, exterior shelter sites, all buildings on campus, parking structures, fences and gates, external lighting, roadways, and sidewalks ☐ Status of negative pressure isolation rooms	
			With Safety Officer and Security Branch, identify areas of hospital and campus to be secured against access by patients, staff, and visitors; ensure notification of Command Staff for dissemination of information	
			Provide situational specific information to Public Information Officer for messaging to all staff.	

			Determine the need for subject matter expertise (e.g., structural or seismic engineer) and request personnel.	
	Security Branch Director		Secure all entry and exit points.	
			Assess the status of all alarms, cameras, and security systems internal and external to the hospital.	
			With the Safety Officer and Infrastructure Branch, identify areas of hospital and campus to be secured against access by patients, staff, and visitors; ensure notification of Command team for dissemination of information.	
			Activate search teams if needed; integrate efforts with local public safety personnel.	
Planning	**Section Chief**		Establish operational periods, incident objectives, and the Incident Action Plan in collaboration with the Incident Commander.	
	Resources Unit Leader		Gather internal situation status including supply and equipment status, current staff and visitor census.	
	Situation Unit Leader		Gather internal situation status including patient census and bed status.	
			Initiate the gathering of situational status, hospital census data, and infrastructure status for inclusion in Incident Action Plan.	
Logistics	**Section Chief**		Refer to the Job Action Sheet for appropriate tasks.	
	Service Branch Director		Assess the status of information technology systems; initiate repairs and downtime procedures if necessary.	
	Support Branch Director		Coordinate the transportation services (ambulance, air medical services, and other transportation) with the Operations Section (Medical Care Branch) to ensure safe patient relocation, if necessary.	
			Inspect all onsite supplies and equipment for inventory and for damage and necessary repairs.	
			Assess all onsite communications equipment for operational status; activate contingency plans as needed.	

			Track all costs including those associated with personnel time, loss of revenue, repairs, acquisition of supplies and equipment, and altered operations.	
Finance/ Administration	Section Chief			

Intermediate Response (2 – 12 hours)

Section	Officer	Time	Action	Initials
Command	Incident Commander		Activate the Evacuation Plan if needed.	
			Consider alterations in the provision of patient care services.	
	Public Information Officer		Continue briefings to patients, staff, visitors, and media as appropriate.	
	Liaison Officer		Continue ongoing communications and information sharing with local response partners, public safety, and emergency management officials.	
			Provide information regarding the hospital's operational status to public safety and healthcare partners as approved by Incident Commander.	
			Communicate with local emergency management and utility providers to determine the projected length of outage, if applicable.	
	Safety Officer		Monitor ongoing operations to ensure the safety of patients, staff, and visitors as well as response personnel.	
			Ensure that safe work practices, including use of personal protective equipment, are utilized in search and rescue operations and at alternate care sites.	
			Assess onsite caches of chemicals and other hazardous materials; initiate measures to render safe any spills or damages. Update HICS 215A based on the evaluation.	

Intermediate Response (2 – 12 hours)

Section	Branch/Unit	Time	Action	Initials
Operations	Section Chief		Refer to the Job Action Sheet for appropriate tasks.	

	Medical Care Branch Director		If evacuation is required: ☐ Prioritize areas for evacuation based on the Safety Officer's evaluation of the threat to life For partial (lateral or vertical) evacuation: ☐ Prepare and ensure transfer of patient records, medications, and valuables to transfer location ☐ Provide patient information as appropriate ☐ If evacuation is from secondary fire or explosion, evacuation must be to a fire compartment at least two compartments away (horizontally or vertically) from the fire or explosion ☐ Reassign personnel to ensure adequate staffing in area receiving patients For complete evacuation: ☐ Prepare and ensure the transfer of patient records, medications, and valuables to holding or assembly areas ☐ Confirm the transfer and timeline with the receiving hospital, providing patient information as appropriate ☐ Establish safe holding or assembly areas to place patients, patient belongings, and staff until transferred ☐ Reassign staff to accompany patients to alternate locations to ensure adequate staffing for patient care	
			Continue patient care services; expand triage and treatment teams as needed.	
			As needed, activate crisis standards of care guidelines for patient services.	
			Activate Fatality Management Plan, if appropriate.	
	Infrastructure Branch Director		Continue to monitor the need for partial or complete hospital evacuation.	
			Consolidate damage reports and initiate repairs.	
	Patient Family Assistance Branch Director		Activate the patient information center.	
Planning	**Section Chief**		Continue to gather hospital status information as well as external community status information and advise the Command Staff as indicated.	
			Begin a projection of the situational status and impact for a minimum of 96 hours of operations without community support.	

Section	Officer	Time	Action	Initials
	Resources Unit Leader		Track staff and equipment; develop projected usage patterns.	
	Situation Unit Leader		Track patients and beds; develop projected usage patterns.	
<mark>Logistics</mark>	Section Chief		Refer to the Job Action Sheet for appropriate tasks.	
	Support Branch Director		Activate the labor pool to assess personnel resources, receive volunteers, and provide personnel support to operations as needed.	
			Establish sheltering and feeding services for staff, family members, and if necessary, people seeking shelter.	
Finance/ Administration	Section Chief		Refer to the Job Action Sheet for appropriate tasks.	
	Time Unit Leader		Continue to track personnel hours associated with the emergency response.	
	Procurement Unit Leader		Activate the policy and procedures to procure additional supplies and equipment.	
	Compensation / Claims Unit Leader		Activate the documentation of all damages, prepare insurance and other claim reports, and work with state and federal partners on documentation and tracking of all costs.	
	Cost Unit Leader		Continue tracking of all costs and project costs for continued operations without community support.	

Extended Response (greater than 12 hours)				
Section	**Officer**	**Time**	**Action**	**Initials**
Command	Incident Commander		Review and revise the Incident Action Plan based on the continued assessment of hospital, status of patient care operations, and community impact from the event.	
			Continue to assess the hospital status based on information from Operations Section; determine need for increased evacuation or, if possible, repatriation of clinical sites.	
			Activate the Business Continuity Plan.	
	Public Information		Continue media and staff briefings as indicated.	

Section	Branch/Unit	Time	Action	Initials
	Officer		Address social media issues as warranted; use social media for messaging as situation dictates.	
	Liaison Officer		Communicate with outside response partners, healthcare organizations, mutual aid providers, and local officials on status of community healthcare infrastructure, community status, projected impacts, and availability of mutual aid.	
	Safety Officer		Continue monitoring of operations for site safety.	
			Initiate a reassessment of hospital and campus if aftershocks occur.	
	Medical Technical Specialist: Seismic or Structural Engineer		Assess the entire hospital and campus for seismic safety and provide assessment data, safety issues, repair needs and long term impacts to the Incident Commander.	

Extended Response (greater than 12 hours)				
Section	**Branch/Unit**	**Time**	**Action**	**Initials**
Operations	**Section Chief**		Refer to the Job Action Sheet for appropriate tasks.	
	Medical Care Branch Director		Continue the monitoring of patient care services and the need for alteration of service delivery.	
			Identify additional supply, equipment, and personnel needs to maintain patient care services.	
	Infrastructure Branch Director		Continue or reactivate a damage assessment based on hospital size, occurrence of aftershocks, and impact on infrastructure.	
	Security Branch Director		Assess the event impact on security systems and the ability to maintain safe and secure operations.	
	Patient Family Assistance Branch Director		Assess the need for continued operations based on long-term impacts to the hospital and community.	
Planning	**Section Chief**		Ensure that updated information and intelligence is incorporated into the Incident Action Plan. Ensure the Demobilization Plan is being readied.	
	Resources Unit Leader		Continue staff, equipment, and materials tracking.	
	Situation Unit		Continue patient and bed tracking.	

Section	Officer	Time	Action	Initials
	Leader		Maintain and update the situational status boards, Incident Action Plan, and other documentation tools for timeliness and accuracy of information received.	
	Documentation Unit Leader		Collect and archive all data and paperwork generated during response and recovery actions.	
Logistics	Section Chief		Refer to the Job Action Sheet for appropriate tasks.	
	Service Branch Director		Reassess the status of communications and information technology services if aftershocks occur.	
	Support Branch Director		Assess the status of onsite supplies and equipment and ability to maintain services for up to 96 hours without community support.	
Finance/ Administration	Section Chief		Coordinate with Risk Management for additional insurance and documentation needs, including photographs of damages, etc.	
	Cost Unit Leader		Continue tracking of expenses and expenditures (e.g., personnel, equipment, and supplies).	

Demobilization/System Recovery				
Section	**Officer**	**Time**	**Action**	**Initials**
Command	**Incident Commander**		Initiate the repatriation of all evacuated patients, staff, and services.	
			Determine the ability to resume pre-incident services, including elective procedures and appointments, and direct activation of recovery plans for clinical operations.	
			Activate the Demobilization Plan and initiate system recovery.	
			Determine the ability to resume normal operations based on input from all sections, community providers, and regulatory agencies.	
	Public Information Officer		Provide a closing briefing to the media.	
			Notify patients, staff, and visitors of the return to normal operations.	
	Liaison Officer		Notify external partners and stakeholders of the operational status, including the repatriation of patients and the return to normal operations.	

	Safety Officer		Provide a final briefing to Command Staff.	
			Determine the need for continued alterations in operations to ensure a safe workplace.	
			Assess if all areas used in expansion of services are safe for the return to normal operations.	
			Prepare final HICS 215A for inclusion in Demobilization Plan.	

Demobilization/System Recovery				
Section	**Branch/Unit**	**Time**	**Action**	**Initials**
Operations	**Section Chief**		Ensure that all documentation, including damage assessments, repair costs, and tracking materials, are submitted to the Planning Section.	
	Medical Care Branch Director		Ensure all patients have been repatriated, discharged, or transferred.	
			Deactivate all sites used to support clinical operations and return them to pre event status, including cleaning and repairs as needed.	
			Deactivate the triage and treatment areas for return to normal services.	
			Reschedule canceled surgeries, procedures, and outpatient appointments.	
			Repatriate transferred patients, if applicable.	
	Infrastructure Branch Director		Prepare a final report of damage assessment and a plan for repairs, as needed.	
			Complete a damage report, progress of repairs, and estimated timelines for restoration of hospital to pre-incident condition.	
	Business Continuity Branch Director		If record keeping included use of paper based records, ensure all clinical information is entered into electronic medical records.	
	Patient Family Assistance Branch Director		Ensure a notification of status to all family members; demobilize patient notification center.	
Planning	**Section Chief**		Finalize and distribute the Demobilization Plan.	

			Conduct debriefings and a hotwash with: ☐ Command Staff and section personnel ☐ Administrative personnel ☐ All staff ☐ All volunteers	
			Write an After Action Report and Corrective Action and Improvement Plan for submission to the Incident Commander, including: ☐ Summary of the incident ☐ Summary of actions taken ☐ Actions that went well ☐ Actions that could be improved ☐ Recommendations for future response actions	
	Situation Unit Leader		Deactivate the patient and bed tracking units and provide a final report to Demobilization Unit.	
	Documentation Unit Leader		Ensure all electronic and paper documents created in event response are collected and archived.	
			Prepare a summary of the status and location of all patients, staff, and equipment. After approval by the Incident Commander, distribute it to appropriate external agencies.	
	Demobilization Unit Leader		Ensure the documentation of all data, actions, and situational status is addressed and incorporated into the Demobilization Plan.	
Logistics	**Section Chief**		Inventory the Hospital Command Center and hospital supplies and replenish as necessary, appropriate, and available.	
	Support Branch Director		Deactivate nontraditional areas used for sheltering and feeding and return to normal use.	
			Assess all deployed supplies and equipment for necessary repairs, cleaning, and restocking.	
			Prepare a report of staff injury and illness for follow up by employee health provider.	
Finance/ Administration	**Section Chief**		Document all costs, including claims and insurance reports, lost revenue, and expanded services, and provide report to Command Staff.	

Documents and Tools

Emergency Operations Plan, including:
- ☐ Earthquake Plan
- ☐ Evacuation Plan
- ☐ Surge Plan
- ☐ Triage Plan
- ☐ Patient, staff, and equipment tracking procedures
- ☐ Business Continuity Plan
- ☐ Behavioral Health Support Plan
- ☐ Alternate Care Site Plan
- ☐ Search and Rescue policy and procedure
- ☐ Security Plan
- ☐ Fatality Management Plan
- ☐ Volunteer Utilization Plan
- ☐ Utility Failure Plan
- ☐ Emergency Patient Registration Plan
- ☐ Risk Communication Plan
- ☐ Interoperable Communications Plan
- ☐ Demobilization Plan

Forms, including:
- ☐ HICS Incident Action Plan (IAP) Quick Start
- ☐ HICS 200 – Incident Action Plan (IAP) Cover Sheet
- ☐ HICS 201 – Incident Briefing
- ☐ HICS 202 – Incident Objectives
- ☐ HICS 203 – Organization Assignment List
- ☐ HICS 205A – Communications List
- ☐ HICS 214 – Activity Log
- ☐ HICS 215A – Incident Action Plan (IAP) Safety Analysis
- ☐ HICS 221 – Demobilization Checklist
- ☐ HICS 251 – Facility System Status Report
- ☐ HICS 253 – Volunteer Registration
- ☐ HICS 254 – Disaster Victim/Patient Tracking
- ☐ HICS 255 – Master Patient Evacuation Tracking

Job Action Sheets

Paper forms for down-time documentation, data entry, etc.

Access to hospital organization chart

Hospital and campus floor plans, maps, and evacuation routes

Television/radio/internet to monitor news

Telephone/cell phone/satellite phone/internet/amateur radio/2-way radio for communication

Position	Immediate	Intermediate	Extended	Recovery
Incident Commander	X	X	X	X
Public Information Officer	X	X	X	X
Liaison Officer	X	X	X	X
Safety Officer	X	X	X	X
Medical-Technical Specialist: Seismic or Structural Engineer			X	X
Operations Section Chief	X	X	X	X
Medical Care Branch Director	X	X	X	X
Infrastructure Branch Director	X	X	X	X
Security Branch Director	X	X	X	X
Business Continuity Branch Director				X
Patient Family Assistance Branch Dir.		X	X	X
Planning Section Chief	X	X	X	X
Resources Unit Leader	X	X	X	X
Situation Unit Leader	X	X	X	X
Documentation Unit Leader			X	X
Demobilization Unit Leader			X	X
Logistics Section Chief	X	X	X	X
Service Branch Director	X	X	X	X
Support Branch Director	X	X	X	X
Finance /Administration Section Chief	X	X	X	X
Time Unit Leader		X	X	X
Procurement Unit Leader		X	X	X
Compensation/Claims Unit Leader		X	X	X
Cost Unit Leader		X	X	X