Mat-Su Regional
Earthquake
Preparedness and
Response

Kara Cahill, Emergency Management
Scenario:
Mat-Su Borough experiences a large magnitude earthquake. The earthquake causes damage and disruption to the Hospital’s infrastructure and operations. The surrounding community is impacted by the event causing the injured to surge the Emergency Department.

Objectives:
Respond to the community’s medical needs following a natural disaster. Respond and recover the facility’s infrastructure back to safe and operational. The exercise is conducted in a no-fault learning environment wherein plans, systems and processes will be evaluated.
Full Scale Earthquake Drill Events

- Overhead announcement of the earthquake drill
  - Instructed staff to Drop, Cover and Hold (ShakeOut recommendation)
- Code Black announced, Hospital Incident Command setups
- Facilities assessment reported to IC
  - Multiple utilities down including Electric and Natural Gas
  - Computer Network is down
- Facilities convert boilers to diesel
- ER and Admissions go to computer downtime for patient surge
- Food Service with limited utilities

Continued ..
Full Scale Earthquake Drill Events, continued

- Notification from Borough EOC of MCI throughout MSB
- Triage and treatment area Setup
- Labor Pool activated
- Patients start surging the ER. 2 Red, 13 Yellow, 15 Green (over 2hrs)
- Fire in Staff parking lot due to Natural gas line break
- Water-main pipe burst in Labor and Delivery Department
- Communications and reporting established for off-site departments and clinics
- Sustainability evaluated for Materials, Pharmacy, EVS, Food Service and utilities
After Action Report

- Communications between treatment areas and Incident Command
- ER Triage and treatment area setup (alternate locations)
- MCI Policy
- Patient tracking
- Admissions downtime policy and packets
- Centralized Labor Pool

Lessons Learned

- Green area in MOB is too far removed for ancillary services
- Cath Lab can safely take and monitor 8 patients
- One boiler had a small leak after running for an extended period
- Revision to the Lab/ER Mass Blood Transfusion Protocol
- Staff evaluated their work areas for safest places to Cover during an earthquake
- Many more....
8:29am staff took cover during the earthquake. Clinical staff covered patients or ensured patient’s safety

Administration called Code Black after 2nd earthquake and set up Incident Command.

Next actions

- Rapidly assessed and anticipated our needs and available resources
- Triage and treatment areas opened and staffed
- Labor Pool activated
- Communication with Borough and State EOC (Trying to get full situational awareness)
- Rumor Control
Facility Assessment- HICS 251 form completed

- Minor structural damage
- Utilities- Electricity and Natural Gas are off
- Boilers converted to diesel but now both are off due to broken boiler line with Glycol spills; currently no heat
- Air handlers turned off to reserve internal heat
- 3rd floor sprinkler line rupture, currently being repaired with no impact to patient care.
- All elevators inoperable but cleared
- Attached Medical Office Building has natural gas leak and water-main break on 4th floor with flooding all the way down to the first floor surgery center. Building evacuated
- Outpatient center and urgent care evacuated due to structural damage and boiler line glycol spill.
Nov. 30th 2018
Cook Inlet Earthquake

Needs

• Situational awareness (possible casualties, road updates, etc.)
• Blood Products from Anchorage blood bank (to bring us up to par)
• 200+ gallons of Glycol for Heating system
• Elevator contractor to turn on our elevator
• Shelter for displaced patients or those with AFN

Summary

• 200 patients in the first 24hrs. (120 disaster related and 80 deemed regular ER patients)
• All systems and utilities restored within 12 hours
• Returned to normal hospital operations on Monday Dec. 3rd 2018
Lessons Learned

- Slightly under-estimated the amount of patients that came by private vehicle.
- Green area was moved twice. The use of the Radiology Waiting area had close proximity to many ancillary departments and access to additional exam rooms.
- Overlooked our Birthing center as a 4th treatment area.
- Reaffirm partnerships, communications and vendor resources.
- Establish leadership for each treatment area to help with a unified communication.
- Shorter shift rotation for staff in natural disasters (allows staff to check on family and home, insure food and bathroom breaks).
- More practice with minimal support of services and equipment (Pen and paper, 2-way radio, etc.).
- We received a lot of valuable information by holding small group hotwashes along with all staff anonymous survey.
After Action Report
Same as identified in the Drill

• Communications between treatment areas and Incident Command
• ER Triage and treatment area setup (alternate locations)
• MCI Policy
• Patient tracking
• Admissions downtime policy and packets
• Centralized Labor Pool

Due to the real earthquake being shortly after the drill, many of the above items were not in place. From the hotwashes after the drill and the start of focus groups, we were able to identify and have discussions on the areas that needed improvement. During the actual earthquake we knew what not to repeat and what to improve upon.
Positive Earthquake Detection

Earthquake Detection Device
Thank you

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