



Hospital Evacuation May 2023

Santa Rosa, California

- Fall of 2017, wildland fire caused evacuation of the Kaiser Permanente Hospital in Santa Rosa, CA
- Power went out in the evening in the community
- Transformers were exploding
- Hospital staffs' houses were on fire (in total over 200 staff members lost their homes)
- As the night wore on, the fire spread and grew closer to the hospital
- They began prepping for a surge event, calling in additional staff and trying to figure out how to move patients out of the emergency department into other areas of the hospital to create more capacity in the ER
- By 2:00 am they opened the command center
- The nearby hospital about a mile away had just evacuated
- After about 1.5 hrs. of command center opening, they made the decision to evacuate the whole hospital
- Hospital lost power after 2:00 am, and generators were run
- They triaged patients determining who were mobile; patients continued to come through the doors
- Smoke abatement became an issue, and it became very hot and stuffy inside the hospital; also lost water and gas pressure
- Evacuation transport was done to their sister facility (Kaiser San Rafael)
- Patients who could walk, walked, others were wheeled in wheelchairs, desk chairs, and hospital beds
- Four city buses were provided to help with evacuation and higher acuity patients were transported by ambulance; privately owned vehicles were used as well
- A staff person (not necessarily clinical) was assigned to every patient waiting in the halls to be monitored – this worked very well
- Within 3 hours, before 6:30 am, all patients were evacuated
- Evacuated a total of 122 patients, including ED patients; three women in early labor were transported by private vehicle and the manager from the maternal/child unit
- No staff had had any experience in hospital evacuation prior to this incident
- The use of personal vehicles and rolling desk chairs worked well
- They took pictures of patients arm bands to track them
- They left an emergency physician and a nurse in the facility to handle any additional patients walking in
- Hospital remained in evacuation zone for several days afterwards; due to smoke damage, every piece of supply from the hospital was removed and then the hospital was totally restocked, which took eight days; all the vents and terminals had to be cleaned to mediate smoke and soot damage to the HVAC system
- Luckily the sister hospital that patients were evacuated to runs at half or less their capacity, so they were able to accommodate all the additional patients

- Lessons learned:
 - Prep “go packs” that can readily follow patients and nurses onto busses
 - Have physicians as well as nurses on the buses
 - Have a way (and someone trained) to print medical records to go with the patient
- HR ran Employee Assistance Program parallel to the event to help staff that needed places to stay, financial assistance, etc.

Impacts:

- Evacuating current patients, while new patients are incoming
- Likely that staffs’ families and homes are impacted by the incident
- Tracking patients
- Moving supplies with the patient
- Transport vehicles
- Possible construction needs after event; moving patients back if feasible

Preparedness:

- Have a solid evacuation and shelter-in-place plan for both patients and staff
 - Decision guides to include whether to shelter-in-place or evacuate
 - Patient prioritization
 - Sequence of evacuation
 - Methods of evacuation (public or private transport, etc.)
 - Patient tracking
 - Patients with known or suspected to be infected with special pathogens
 - Decision-making post event
- Assure plans incorporate pre-established community incident command and management structures
- Identify who in your facility can activate an evacuation
- Identify alternate care sites that are available to accommodate your patient population
- Critical role of water
- Security

Sources:

<https://files.asprtracie.hhs.gov/documents/aspr-tracie-the-last-stand-evacuating-a-hospital-in-the-middle-of-a-wildfire.pdf>

Resources:

- ASPR TRACIE: [Healthcare Facility Evacuation/Sheltering](#)

- [Harvard School of Public Health Hospital Evacuation Toolkit](#)
- FEMA: [Hospital Evacuation Guide](#) (PP slides)