

Urban Shield: BIDMC Operating Room Evacuation Exercise

The Problem

In 2010, the emergency evacuation training program began throughout Beth Israel Deaconess Medical Center. Throughout performing these sessions, it became apparent that additional education, training and testing would be useful for future emergencies; especially when an extremely vulnerable patient population was involved:

- Operating room and PACU (post-anesthesia care unit) staff raised concerns over the location and usage of emergency equipment, such as Med Sleds, for critical patients and those undergoing surgery.
- If a situation was to arise in which a patient was mid-procedure and needed to be safely evacuated due to an emergent event, staff would need to be prepared and able to utilize available resources properly.

Exercise Goals

- Test emergent evacuation of BIDMC Operating Rooms (ORs)
- Test continuity of care of OR patients in holding areas after initial evacuation: PACUs, Pre-Op, Conference Room, TSICU (West Campus)
- Intelligence and information sharing with external partners and agencies
- Test patient tracking and use of 2-way radios during a large scale movement of patients

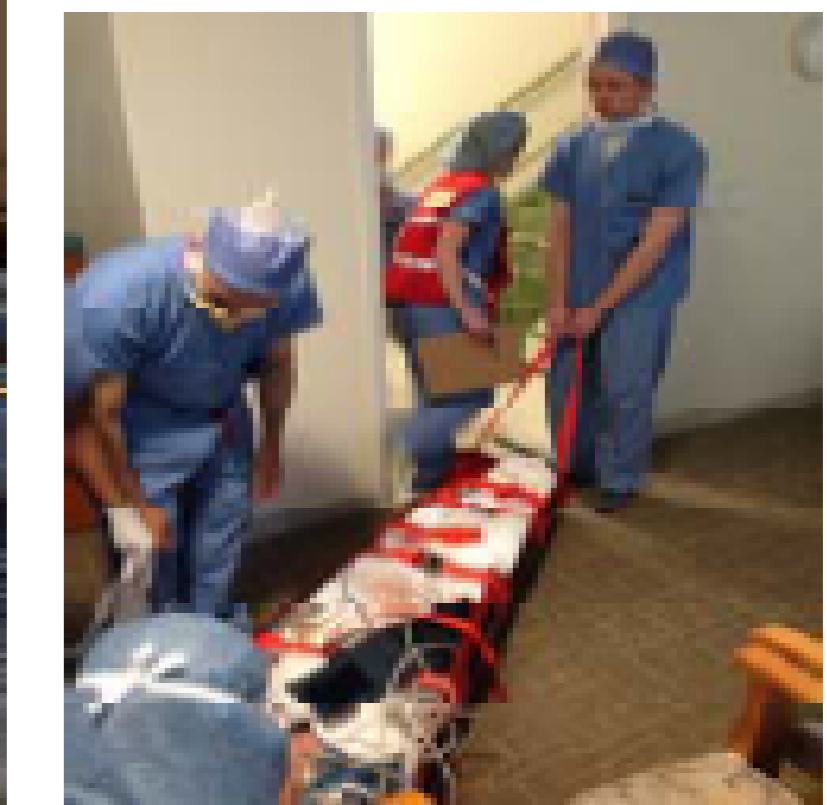
The Team

Emergency Management, OR Administration, Perioperative Services, Dept. of Surgery, Dept. of Anesthesia, Trauma Service, Materials Management, Public Safety/BIDMC Police, Communications, Environmental Health & Safety, Critical Care, Patient Care Services, Nursing Administration, Surgical residents, UMass Medical Students, Emergency Department

Setting the Stage

The Urban Shield OR Evacuation involved multiple operating areas and had many moving parts during both the planning phase of the exercise and the execution:

- **Operating Areas:** ORs (Feldberg & Shapiro), PACU/Pre-Op (Feldberg & Shapiro), TSICU (West Campus), and Command Center (East Campus)
- **Cases:** 7 simulated OR cases were evacuated during the exercise. Each case had a volunteer that acted as a patient. Each volunteer was fully moulaged with makeup, fake incisions, IVs, etc. to simulate a real OR case.
- **Evacuation:** There was a large simulated explosion near the OR areas. This caused the OR teams to evacuate their cases/patients emergently. All of the cases were first horizontally evacuated into the PACU/Pre-Op areas. 4 of the cases were then evacuated vertically downstairs on Med Sleds. Additionally, one case was transferred from the East Campus to the West Campus TSICU to continue the procedure.



The Results of the Exercise

The scenario and response was very complex and all staff that participated handled it to the best of their ability. The teamwork and communication that occurred between the OR staff and teams was paramount.

Staff treated the “patients” as if they were real and simulated interventions, care, and procedures that they would have performed realistically.

Leadership amongst the OR teams transitioned very well during the different phases of evacuation; beginning with the surgical and anesthesia staff in the OR, on to the nurses in the PACU, and while vertically evacuating patients in Med Sleds.

Lessons Learned

- Once all patients were evacuated from the OR and moved to the PACU, they were not re-triaged/ sequenced properly for vertical evacuation.
- There was no clear mode of patient or staff tracking due to the fast pace of the event
- Some staff members were unfamiliar with where their potential evacuation routes and equipment were located.
- Practicing these low frequency, high impact drills is extremely critical in order for staff to develop response “muscle memory”

Next Steps

- Continue to provide training on the Med Sled and emergent evacuation for all departments across the medical center.
- Roll-out the “Life Safety Square” project to the ORs and PACUs
- Emphasize the importance of having a liaison between the Command Center and evacuated area in order to maintain patient tracking and staff accountability

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**Beth Israel Deaconess
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EYE WASH

SAFETY OFFICER

NO ONE LEFT BEHIND
EVACUATION

333























CAUTION

CAUTION

 Beth Israel Deaconess
Medical Center 

This is a Drill!

**SEVERE
DAMAGE!**

**STRUCTURAL DAMAGE
TO CEILING & WINDOWS.
FLOOR PARTIALLY
COLLAPSED**

Property of BIDMC Emergency Management
If found please contact EM
On Call Pager: 35271







SAFETY OFFICER

SAFETY OFFICER



































