Operation Ophelia: Hurricane Response Drills

The Problem
New England does not experience catastrophic hurricanes on a regular basis. As a result, it was unclear on how prepared staff felt on measures taken to protect themselves and patients, if they had to shelter in place during a significant storm. After seeing what occurred at several hospitals impacted during Hurricane Sandy, we felt it was important to drill and train staff on severe weather response tactics, including:

- Emergency command center operations and coordination
- Shelter in place versus evacuation decisions
- Specific concerns (including patient prioritization) during an evacuation
- Continuity of care during emergency situations
- Resource allocation for inpatient units (including where to locate emergency response information during an event)

Aim/Goal
Our goal was to survey, test, and educate each inpatient area and evaluate if they were able to identify key life safety resources within their unit(s) and protective actions for patients and staff during a hurricane.

The Team
The Emergency Management Program, Disaster Medicine Fellowship, Environmental Health and Safety Department, and the Emergency Department made up our drill teams.

- This exercise involved the majority of inpatient floors and departments within the medical center, including: General Medicine, Cardiac Medicine, Vascular Intermediate Care Unit, Cardiac Surgery, Cardiac Care Unit, Thoracic, Transplant, Dialysis, Bariatric, Med/Surg, Neurosurgery, Ante Partum, Post-Partum & Nursery, Medical Inpatient/BMT, NICU, Labor & Delivery, Hem/Onc, MICU, SICU, TSICU, and the Emergency Department.

Exercise Scenario
During the drill, the four teams presented a scenario to all participating staff in order to set the scene. The following situation was explained to staff:

- BIDMC's Emergency Operations Plan (Code Triage) has been activated, after days of preparing for Hurricane Ophelia
- The storm, currently a major Category 4 Hurricane, finally made landfall and has made a direct hit in Boston and Eastern Massachusetts
- BIDMC staff and leadership did what they could to decant the medical center and discharge patients before the hurricane hit, but many in-patient units were forced to shelter their patients in place

- Several windows in your unit/ in patient rooms have been blown out and you are currently functioning on generator power

Exercise Results
A total of twenty five inpatient units participated in this exercise. The questions that we asked staff and their responses are shown below:

Lessons Learned
The most important lessons learned during this exercise involved our current evacuation training program and new implementations that the Emergency Management Program has been taking in order to improve staff’s access to emergency response information. The majority of staff who had been trained by EM on Med Sleds (BIDMC’s primary evacuation tool) was evident during the drill. Also, the health care workers that we interviewed used a multitude of means to find emergency information, including Emergency Response flip charts, Life Safety Squares, and the new Code/Emergency Information card on their employee ID.

Next Steps
The next steps we intend to take include expanding our evacuation training program, creating and implementing mini drill exercises for severe weather and other event types, and continuing to implement life safety squares throughout the medical center.

For more information, contact:
Claire G. Berube, HEM, Emergency Management
cgberube@bidmc.harvard.edu