

Lessons Learned from an OB/ Newborn/Neonatal Intensive Care Full-Scale Exercise

Michael Frogel, MD, FAAP^{1,2}, Arthur Cooper, MD, FAAP^{1,2}, John Jermyn, MS^{1,2}

¹New York City Pediatric Disaster Coalition, ²Maimonides Infants and Children's Hospital, Maimonides Medical Center

Background:

Children are frequently victims of disasters. However, gaps remain in disaster planning for pediatric patients. The New York City Pediatric Disaster Coalition (NYCPDC) is funded by the NYC Department of Health and Mental Hygiene (DOHMH) to prepare NYC for mass casualty incidents that involve large numbers of pediatric victims. On April 26, 2018, the PDC conducted a first in NYC, full-scale exercise with the NYC Fire Department testing evacuation, patient tracking, communications, and emergency response of the obstetrics, newborn and neonatal units at one hospital in NYC. The goal of the exercise was to evaluate hospital obstetric/newborn/neonatal plans and assess the ability to evacuate patients during an emergency situation.



Methods: The exercise planning process included a review of existing Ob/newborn/neonatal plans, four group planning meetings, targeted specific area meetings and plan revisions. The exercise incorporated scenario-driven, operations-based activities which challenged participants to employ the existing evacuation plans during an emergency. The exercise assessed the following: communication, emergency operation plans, evacuation, patient tracking, supplies and staffing. Evaluators completed an exercise evaluation guide (EEG) based on the MSEL. An after-action report was written based on the information from the EEG, participant feedback forms, hot-wash session, and after-action review meeting.



Results:

Strengths included the meaningful improvement of plans before the exercise and successful evacuation of the unit. Lessons learned included: addressing gaps in effective internal and external communications, adequate supplies of space, staff, and equipment needed for vertical evacuations; and providing staging and alternate care sites with sufficient patient care and electrical-power resources.

Conclusion:

The PDC's exercise demonstrated the ability for the hospital to identify important areas for improvement in planning and response for Ob/newborn/maternal units.



Study Question:

Will a full-scale evacuation exercise of an obstetric/newborn/neonatal unit identify current gaps and provide lessons learned to improve disaster planning and response?



Take Home Messages:

Conducting a full-scale obstetric/newborn/neonatal evacuation exercise yielded important lessons learned. Special attention should be paid to vertical evacuation in regard to staffing, specialized equipment, and training. These results can be used to enhance preparedness for real-time events.