Managing Surge Needs for Injuries:
Emergency Department Response

PURPOSE

To activate additional emergency department (ED) resources needed within 4 hours of an explosion. These resources are intended to rapidly treat and disposition 300 injured patients for 12 to 24 hours.

BACKGROUND

The terrorist bombings in Madrid, Spain, were used as a model to help develop solutions for managing rapid surge problems during a mass casualty event.

On March 11, 2004, 10 explosions occurred almost simultaneously on commuter trains in Madrid, killing 177 people instantly and injuring more than 2,000. On that day, 966 patients were taken to 15 public community hospitals. More than 270 patients arrived at the closest facility between 8:00 a.m. and 10:30 a.m.

Federal resources should not be expected to arrive sooner than 72 hours from the time of the explosion. Resources can be delayed by the time taken to deploy them and by emergency personnel responding to multiple communities.

GOAL

To establish policies, procedures, didactic training, and drills to improve institutional preparedness for rapidly treating and managing 300 injured patients for 12 to 24 hours.

REQUIRED RESOURCES

- Staff: adequate medical, nursing, and support staff available to provide initial triage, evaluation, and stabilization for 300 persons. This ability includes:
  1. Visually identifying the patients (such as with digital photography),
  2. Tracking patients during their care, and
  3. Maintaining chain of evidence.

▶ ***This document is a resource guide. Local needs, preferences, and capabilities of the affected communities may vary.***

ASSUMPTIONS

- The emergency department will have established the following:
  1. Disaster medical record packets;
  2. Procedures for obtaining additional equipment, supplies, and beds;
  3. Plan for notifying and activating backup personnel;
  4. Procedures for triage, emergency identification of patients, discharge of patients, and quick documentation; and
  5. Temporary disaster log to document basic information.

- Patients will be regularly reassessed for change of status and priority.
- Patients may require decontamination.
- Initial evaluation and triage of self-referred patients should be rapidly facilitated.
- Emergency medical services unit's turnaround and return to service should not be impeded by patient reassessment and ED bed assignment process.
- All patients potentially requiring operative intervention should be prioritized in consultation with the appropriate member of the surgical staff.
- The ED and hospitals closest to the event may be overwhelmed with casualties, and the response may require rapid triage and redistribution of patients to additional hospitals and health care facilities.
- ED staff will be familiar with the hospital disaster plan, their individual roles and responsibilities, and the roles and responsibilities of all essential departments.

ACTION STEPS

1. Conduct drills.

Implement and drill a hospital emergency incident management system (such as the Hospital Incident Command System (HICS)). Clinical care providers should be included in the training and drills.

If hospital personnel (e.g., practitioners, administrators, nurses) have not trained or drilled in a hospital emergency incident management system, learned about the National Incident Management System (NIMS), or understood the function of a hospital incident command center, this information should be included in training sessions.

2. Educate clinical staff.

Instruct clinical staff, especially surgeons and emergency physicians, about the unique aspects of blast-related injuries and care following an attack with a radiation dispersal device (RDD).

3. Establish an institutional lockdown process.

Establish an institutional lockdown process and drill regularly; include radiation detection and decontamination of arriving patients.

4. Update the institutional call-down list and perform a functional call-down exercise.

5. Identify surge staff.

Identify potential institutional surge staffing from employees with clinical training but not currently tasked with clinical jobs.

6. Identify patient supplies.

Identify patient care supplies that would be needed in a surge situation, such as additional intravenous (IV) equipment, bandages/dressings, gowns, gloves, masks, etc.

7. Develop a regional unified command structure.

Develop a regional unified command structure that includes local emergency management and area hospitals. Local emergency managers should guide and lead this development.

8. Identify nonpatient care areas.

Identify nonpatient care areas in the institution that could be converted to patient care to expand surge bed capacity.

9. Conduct drills for early patient discharge.

Establish and drill a procedure for early patient discharge to increase bed capacity in the ED and in critical patient care areas. Drills and procedures should be coordinated with intensive care unit (ICU) staff to appropriately plan for potential early discharge, movement of patients to non-ICU beds, and transfer to alternative care sites.

EVALUATION

- When appropriate, evaluation drills have been incorporated into the action steps listed above. The institutional disaster preparedness plan should be updated based on each drill experience.

For more information, visit **http://emergency.cdc.gov/masscasualties**.