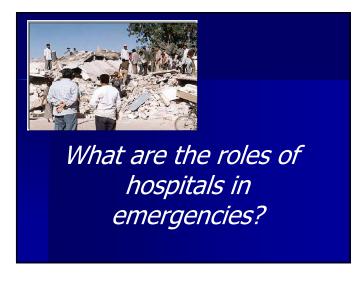


Emergency Medicine, Trauma
Surgery and Disaster Medicine aim
to:

Prevent unnecessary
mortality and morbidity
from disasters and

emergencies



## Hospital roles in an Emergency

- Provision of Disaster Medical Teams
- Acting as the receiving hospital for casualties from a disaster
- Triage to distribute patients across hospitals
- Receiving hospital for patients transferred from other disaster affected health-care facilities

Fill in the Blank

# Hospital Emergency Plans must consider many casualties may arrive quickly.

But if a hospital is unable to handle day to day emergencies in the ED, it will not be able to cope with demands of multiple casualty incidents

The Key is Preparedness

#### **Hospital Emergency Planning**

Developing and implementing plans, procedures and training to ensure that the hospital's capacity to respond to disaster is maximized.



# The Emergency Department

The current trend in Emergency Medicine is to establish the ED as a separate and distinct department within the hospital, complete with its own management and staff.

#### Human Resources in the Emergency Medical Services System in Disaster

Medical First Responder
Emergency Medical Technician - Basic
Emergency Medical Technician - Advanced
EMS/Prehospital Medical Director
Casualty Ward Minor Staff
Casualty Ward Minor Staff
Casualty Ward Nurse
Emergency Medicine Physician
General Surgeon/Trauma Surgeon
Anesthesiologists
Specialized Physicians, e.g. Ortho, Ophtho, etc.
Emergency Department Coordinators

#### **Principles of Managing the Emergency Department**

- Policies and Procedures
- Equipment and Supplies
- Management Unique to the ED
- Staffing requirements unique to the ED
- Overcrowding

#### **Policies and Procedures**

- Emergency Departments must have clearly written policies and procedures.
- This has to be constantly reviewed and revised.
- It must be reviewed after each major emergency.

## **Emergency or Disaster Plan**

Contains elements such as:

- Who needs to be prioritized for definitive care?
- Triage criteria
- Who is in charge?
- What are the functions of each and every member of the emergency team?
- Incident command system (ICS)

## **Emergency or Disaster Plan**

- The goals
  - To control the large number of patients and problems with the best possible care
  - Enhance the capacities for admission and
  - treatment (surge capacity)
    Treat patients based on the rules of good medical practice

  - Ensure an ongoing proper treatment for all patients who are already in the hospital
     A smooth handling of all additional tasks caused by large number of patients in an ED

#### **Staffing Requirements of the ED**

- ED Nurses and Head Nurse
- Minor Staff
- Emergency Medicine Physicians (EMP)
- Registration Staff
- Social Workers
- Trauma Team
  - Surgeons
  - Anesthesiologists
  - Trauma Nurses

# **Operating Theater**

- Access to functioning operating theaters
- Early definitive care
- Minimizes unwanted morbidity or preventable mortality.
- Lack of these in the hospital
   -- system of transport and referral is a must.
- Theater equipment



#### **Airway Devices**

- oxygen tanks
- non-rebreather masks
- nasal cannula
- oropharyngeal airway devices of different sizes
- nasopharyngeal airway devices
- Intubation equipment like laryngoscopes
- endotracheal tubes
- LMA's (laryngeal mask airway)
- tracheostomy instruments
- tracheostomy tubes and suction machines
- cervical immobilization devices

#### **Management of Hypovolemic Shock**

- Devices for hemorrhage control
- Surgical gauze packs
- Elastic and rolled bandages
- IV access, IV cannulas of different sizes, central lines, cutdown sets, intra-osseous infusion needles.
- Crystalloids & colloids for fluid replacement.
- Access to blood bank facilities or blood retrieval.
- Traction splints for long bone fractures.

# Other equipments Defibrillation Monitors Diagnostics Emergency Drugs

## **Contingency**

Planning is the key to the proper response to a multiple casualty incident or disaster.

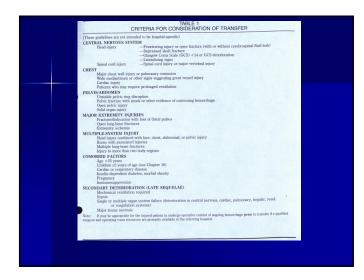
# Observation and Holding Area

Temporary patient care areas

- Lobby
- Conference rooms
- Corridors
- Parking areas
- Gardens
- Cafeterias
- Prayer areas

#### **Referral and Transfer**

- If human resources, logistics or holding areas are not available, transfer patients to other hospitals
- Pre-arranged mutual aid agreement between hospitals



# **Conclusion**

- The Emergency Department is the frontline of the hospital response to a disaster.
- The ED plays a critical role in hospital emergency management system
- Preparedness is the key to maximize capacity in MCI