## Disaster Preparedness

Mark E. Cichon, D.O., FACEP, FACOEP
Director – Emergency Medical Services
Loyola University Medical Center
Professor – Surgery
Stritch School of Medicine

## Did you know?

- This year, July has 5 Fridays, 5 Saturdays and 5 Sundays. This happens once every 823 years.
- SSOM's first curriculum change in 15+ years occurs July 1<sup>st</sup>.

### Why Even Do This?

- AAMC Curriculum requirements
  - "Issues of the 21st Century"
- Core Competency in Medical Education
  - Medical Knowledge
  - Patient Care
  - Communication Skills
  - Professionalism
  - Life-long Learning
  - Social & Community Contex of Healthcare

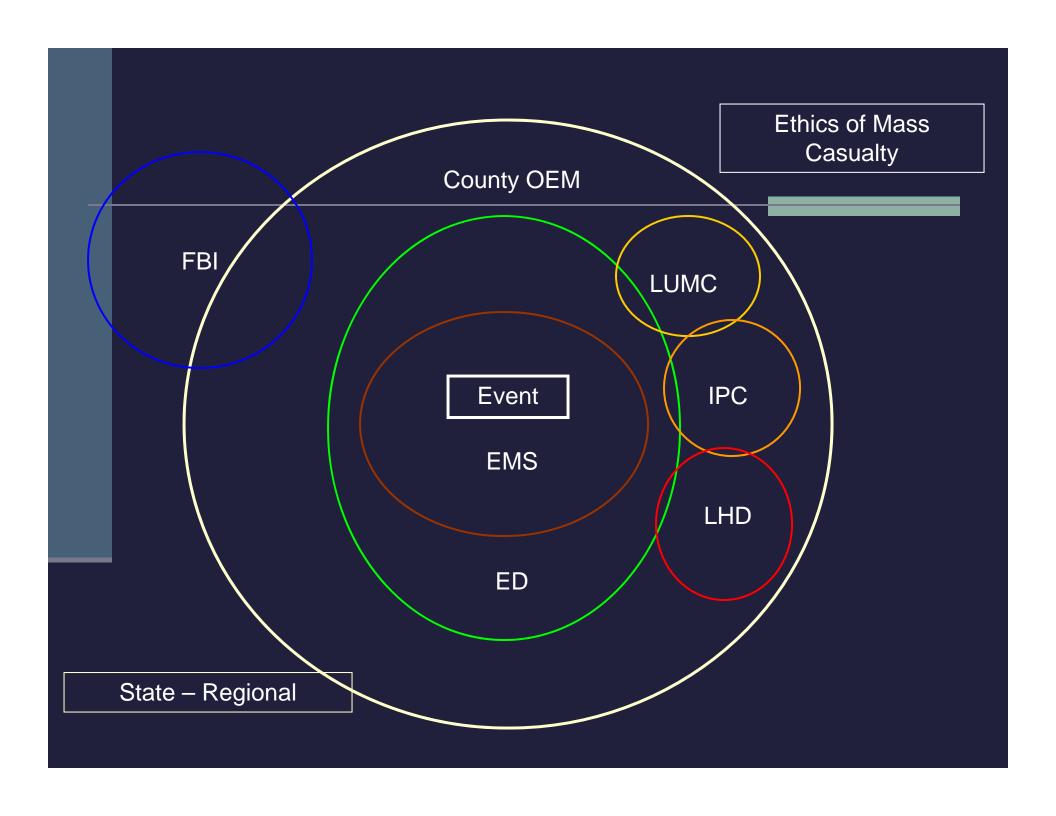
## Goals and Learning Objectives

#### ■ MS3/MS4

- Obtain clinical experience in Triage Scenarios.
- Evaluate the different Triage Methodologies available and application to age and patient settings.
- Enhance classroom and modular learning of Disaster Preparedness by experiencing the roles, operational issues, and organization of a mid-size decontamination process.
- Experience the "hands-on" operation of the decontamination tent.

#### Successful completion:

attendance and participation in the lecture and actual drill.



## Lesson #1: Disaster Planning Does Not Go as Planned

- Formal response system often breaks down.
  - Not chaotic, just not as planned
  - Communication often breaks down.
  - EMS improvises
- Planning for the wrong needs.
  - Trauma instead of large number of minor injuries.
- Disaster drills without externalities
  - At night, with traffic, without administration, without manpower.

## Lesson #2: Victims respond with collective resourcefulness

- "Yellow-tape" effect
  - Public as unwanted nuisance
- Emergent collective behavior
  - Spontaneous groups with roles, rules, leaders, and divisions of labor

#### Lesson #3: Panic is rare

- Exception: Fire where people are trapped
- World Trade center bombing
  - "eerie feeling of calm."
  - Panic happens in disaster films not in real life.
    - Work group mentalities
    - Pre-existing personal knowledge inoculates against panic.
- ??Bioterrorism??

## Lesson #4:The majority of lives are saved by the public

- The "golden 24 hours"
- EMS often arrives late in multisite events
- The public is often the "first responder."

## Lesson#5: Social factors important in planning

- Rumors fill the information gap.
  - Correct, and early, information is extremely important.
- Trust.
  - Patients will go to the hospitals they trust the most: local community hospitals
- Pre-existing social relationships
  - Anticipate 30% reduction in staff, greater if local

## 4 Phases of Emergency Planning

- Mitigation: activities a hospital undertakes to lessen the severity and impact of a potential emergency such as identifying potential hazards, analyzing vulnerability and instituting programs to reduce the threat of these hazards
- Preparedness: activities undertaken to build capacity & identify resources that may be used if an emergency occurs
- □ Response: emergency response plans establish standards for response
- Recovery: activities directed toward restoring normal services and operations.

### What to expect

- Waves of victims
  - 1st Wave: walking wounded, self presenters, least injured.
  - 2<sup>nd</sup> Wave: bystander presentation, vast array of injuries.
  - 3<sup>rd</sup> Wave: EMS presentation: trapped, critical to moribund.

Psychological Impact Injury Risk

#### Patient Volume / Event Size

- Small event:
  - Localized hazardous material
    - <25 people</p>
    - Contained
- Mid-sized event:
  - Rural event
  - 26-100 people
- Large event:
  - Malicious event
  - Large Numbers



### LUHS Departmental Plans

Each department participating in the care of disaster patients has developed a Departmental Mass Casualty Plan which describes their specific responsibilities in detail.

### Emergency Response Plans

Address topics including:

- Implementation
- Notification & Communication
- □ Staffing
- □ Provision of Supplies
- ■Use of Facilities

# Mass Casualty Plan - "All Hazards"

The Mass Casualty Plan may be implemented based on the number of patients in any type of incident.

Other plans may be activated simultaneously based on the nature of the incident - trauma, epidemic, hazardous material exposure, or radiation exposure.

### Mass Casualty Disaster Plan: Levels of Activation

- □ Code Triage Stage I –
   Response to an incident with a limited number of casualties that can be cared for in the ED with supplemental staff and supplies.
- □ Code Triage Stage II Response to an incident requiring mobilization of resources to care for victims in auxiliary locations when they cannot be accommodated in the ED.

## Mass Casualty Disaster Plan

#### Notification

Occurs by overhead page, pager and telephone.

Staff call lists and call trees are maintained by each department.

## Emergency Response Plans

During activation of disaster plan it may be necessary to suspend routine operating procedures while maintaining essential patient services.

#### Mass Casualty Disaster Plan

#### **Incident Command**

A Command Post will be established immediately in Health Care Services Administration.

Requests for staff and supplies are coordinated through the Command Post.

#### Medical Student Mass Casualty Plan

#### Purpose

To coordinate the mobilization of medical student support consistent with the hospital mass casualty disaster plan in a Code Triage.

There are 160 students in each class, thus providing a significant manpower resource in the event of a catastrophic event.

#### Medical Student Mass Casualty Plan

#### **Notification**

- Activated by Dean at request of Command Post
- ☐ Third and fourth year medical students (MS-3, MS-4) will be notified by page
- ☐ First and second year medical students (MS-1, MS-2) will be notified by classroom announcement during normal school hours and contacted by phone during off hours

#### Medical Student Mass Casualty Plan

Information to be provided to students may include:

- Stage of Mass Casualty Plan activation
- Disaster event details
  - Drill scenario or actual event
  - Nature of victim injury and/or illness
  - Potential of contamination with hazardous material
  - Anticipated volume of casualties
- Level of response required
  - Maintain availability
  - Report to assembly site as soon as possible
  - Report to assembly site at scheduled time

#### Assembly

- □ All MS-1's and MS-2's will report to Tobin Hall, Room 190 SSOM
- MS-3's and MS-4's who are not currently on an inpatient clinical service at LUMC will also report to Tobin Hall
- MS-3 and MS-4 assigned to an LUMC inpatient service should report to their routine meeting location or contact their resident

#### Staff Identification

□ An armband must be worn to identify the position of all healthcare providers treating patients in a disaster situation. Medical student armbands will be maintained by the Assistant Dean of Student Life. In addition, personal identification badges must be worn.

Student Assignments & Alternative Roles

- MS-3's and MS-4's may assist with patient care on their service units or as assigned by the Command Post/HEICS.
- MS-3's and MS-4's may be requested to assist in the Operating Rooms.
- MS 1,2,3, & 4's may be requested to assist LUHS staff as needed and directed through the Command Post/HEICS in areas including, but not restricted to:

#### Student Assignments and Alternative Roles

- Cafeteria/ food service assistance
- Child care
- Communication paging and phone calls
- Family support
- Housekeeping tasks
- Runners –
   reports, communications, specimens, supplies, pharmaceuticals
- Security assistance
- □ Transport patients, carts, wheelchairs

## Emergency Response Plans & Resources

Available on the Intranet!

Pathway:

- □ Intranet Home Page
- □ Policy Manuals/Forms
- ☐ Disaster Plans

## Emergency Response Plans

- Chemical
- Biological
- □ Radiation & Nuclear

CBRN – formerly NBC

# Internal Hospital Emergency Response Plans

**Examples:** 

- ☐ Fire Safety
- □ Tornado
- Evacuation
- □ Bomb Threat

### Decontamination Shelter

Demonstration