General Approach to a Mass Casualty Incident
MCE: Facility can handle without straining resources. (ie car wreck with multiple victims)

MCI: Casualties can strain or outstretch resources.

The primary difference as a physician is a change in mindset. You can no longer treat the patient in isolation, it has to be done in the context of treating the entire group. (TRIAGE)
Phases of an MCI

- Chaos
- Response and Reorganization
- Site Control
- Search and Rescue
- Triage, Treat, Transport in the field
- Triage, Treat at the Hospital Level
Hospital Response

- Assess Nature of Incident
- Mobilize Resources
- Secure Facility
- Triage, Treat Patients
Nature of Incident

- Natural or Man Made (B-NICE)
- Location
- Estimate of Casualties
Nature of Incident

- Natural
- Effects more widespread
- Infrastructure Impact
- May potentially be predictable
Nature of Incident

- Manmade
- Biological
- Nuclear
- Incendiary
- Chemical
- Explosive
- Certain Injury Patterns, Anticipate Needs
Nature of Incident

- Location

- Too Close or Too Far

- Transport Issues

- Burden on outlying hospitals
Nature of Incident

- **Estimate of Casualties**

- **MCI rarely over 40**

- **Most arrive early**

- **Fairly Predictable Percentage of patients with Immediate Needs**

- **Israeli estimates for surge capacity**
Mobilize Resources

- Personnel
- Equipment
- Supplies

Know what’s available, where it is, and how to get it.
Mobilize Resources

- Code Yellow

- SORT Team begins to set up Triage outside ED, at Ambulance Bay and far entrance (near decon).

- ER attending communicates with EMS, and mobilizes appropriate staff to ER.

- IC is set up at Mahogany Hall.
Mobilize Resources

- Code Yellow overhead or Alert 1 via pager
  Physicians Respond to Rm H133

- Senior Blue Attending in house will communicate with ER to assess nature of the incident and anticipated needs.

- No elective cases will be started.

- Services will review their census to see who can be immediately moved or discharged.

- Various departments mobilize staff through their own channels.
Mobilize Resources

- Equipment / Supplies and expandability (surge capacity) of various departments
  - Respiratory
  - Blood Bank
  - Pharmacy
  - Radiology
  - Central Supply
  - OR
  - ICU
Secure Facility

- Control Flow of Traffic
- Ideally one road in, one road out

- Control Flow of People
- Separate Injured Patients, Families, Media

- Protect Resources
Triage

- Goal of triage is to utilize resources particularly limiting resources, such that care to the greatest number of people can be provided.

- It should be Continuous, Dynamic, and rely primarily on bedside Judgement.
Triage

- How do we Triage at UK?
Triage

- **GREEN** – Minor
- **YELLOW** – Acute
- **Red** – Critical
- **Black** - Dead
Triage

- How do patients get assigned to a category?
Triage

- There are many methods that attempt to quantify triage, SALT, START, SAVE. While some methods still rely on an experienced provider’s global assessment of a patient and their condition.

- Some have the provider place a patient in one of two categories, in a single or multiple level.

- Regardless of the method the goal is the same, appropriate resource utilization. Minimize over and under triage.
SALT triage scheme. LSI = lifesaving interventions.

Step 1 – Sort: Global Sorting
- Walk
  Assess 3rd
- Wave / Purposeful Movement
  Assess 2nd
- Still / Obvious Life Threat
  Assess 1st

Step 2 – Assess: Individual Assessment

LSI:
- Control major hemorrhage
- Open airway (if child consider 2 rescue breaths)
- Chest decompression
- Auto injector antidotes

Breathing
- Yes
  - Obey commands or makes purposeful movements?
  - Has Peripheral Pulse?
  - Not in respiratory distress?
  - Major hemorrhage is controlled?
- No
  Dead

Likely to survive given current resources
- Yes
  Immediate
- No
  Expectant

Minor Injuries only?
- Yes
  Minimal
- No
  Delayed
Triage

- Given that during the immediate time after a MCI, the most valuable resource is a fully staffed team of trauma providers (Anes, General Surgeon, Surgery Resident, RN), triage should be geared to utilize this resource only for those patients who immediately need them.

- Ideally these teams should function in a central area, under the direction of a senior surgeon to help facilitate patient flow, & decrease Trauma Bay bottle neck.
Conclusion

- Are we prepared?

- Many Positives
  - Tremendous facility / resources
  - Good General Plan
  - Recent experience at mobilizing

- Some Concerns
  - Clear Chain of Command
  - Heavy Reliance on Computers
Summary

- Assess Nature of Incident
- Mobilize Resources
- Secure Facility
- Triage, Treat Patients
Summary

- Code Yellow overhead or Alert 1 via pager
  Respond to H133

- Senior Blue Attending will communicate with ER to assess nature of the incident and anticipated needs.

- No elective cases will be started.

- Services will review their census to see who can be immediately moved or discharged.
Goal of triage is to utilize resources particularly limiting resources, such that care to the greatest number of people can be provided.

It should be Continuous, Dynamic, and rely primarily on bedside Judgement.