Mass Casualty 2019
Indiana State Trauma Care Committee
Bekah Dillon- Director of Trauma, ED, Center of Hope
Kelli Vannatter- Trauma Program Manager

**Some slides have been modified for privacy**
Where are we located?

- ACS Verified Level III Trauma Center since 2014
- 22 miles from the next closest Level III Trauma Center
- 55 miles from the closest Level I Trauma Center
- Located next to Ball State University
- Muncie Population: Roughly 68,529
- Delaware County Population: Roughly 115,389
  - 15th Largest county in Indiana
Trauma Team

- 7 Acute General Surgery/Trauma Surgeons
  - 4 APPS (2 utilized for OR first assists, 2 utilized for inpatient rounding)
- Full time Director of Trauma, ED, Center of Hope
- Full time Trauma Program Manager
- Part time Injury Prevention Coordinator
- 2 Full time Trauma Registrars
- 1 Data Quality Coordinator, RN shared with ED
Education

- ATLS site
  - 2 ATLS Courses offered yearly
- TNCC site
  - 3 TNCC Courses offered yearly
  - 1 TNCC Instructor course offered yearly
- ENPC site
  - 1 ENPC course offered annually
Mass Casualty Preparation

Our journey............
During a Mass Casualty Event your goal is to do the MOST good for the MOST number of people.
Where did we start?
Tiered Approach

- Back Up Trauma Text (BUTT)
- Rapid Response RN to Trauma 1’s and MBTP
- Multiple Casualty Activation
- Mass Casualty Activation
**MULTIPLE CASUALTY ALERT**

⇒ **Multiple Casualty Response**

- This notification is intended to alert key people that a Multiple Casualty situation has occurred **AND** the Emergency Department needs additional resources.
- *Do Not Call ED for information. Information will be pushed out to you.*

**Upon arrival to the scene, Dispatch/EMS notifies IUHBMH of:**

- >10 Injured patients that will need hospital treatment
  
- Or
  
- ≥2 Patients with penetrating injuries

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**≥2 Patients with penetrating injuries**

ED Charge Nurse:

- **Push BLACK “MULTIPLE CASUALTY ALERT” Button**

O.R. Charge Nurse freezes any non-emergent cases from starting

**On-Call Trauma Surgeon responds and is responsible for:**

1. Activating the Back-Up Trauma Text if needed
2. Calling the O.R. Charge Nurse to activate the back-up O.R.
   Team and back up Anesthesiologist if ≥1 patients require emergent surgery
3. Notifying Blood Bank if it is anticipated that multiple patients will require blood transfusion

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**>10 Injured patients that will need hospital treatment**

ED Charge Nurse:

- **Push BLACK “MULTIPLE CASUALTY ALERT” Button**

On-Call Trauma Surgeon responds and is responsible for:

1. Assuming care of the two most injured patients
2. Activating the Back-Up Trauma Text if needed
3. Calling the O.R. Charge Nurse to activate the back-up O.R.
   Team and back up Anesthesiologist if ≥1 patients require emergent surgery
4. Notifying Blood Bank if it is anticipated that multiple patients will require blood transfusion
When a Multiple Casualty Activation has occurred...
Multiple Casualty Form Charge Nurse/AA

Trauma ED Leadership: Person responsible for calling ED and obtaining incident details and determining resource and response needs

Trigger: Trauma ED Leadership receives notification of Multiple Casualty Notification

*Trauma ED Leadership will call Charge Nurse and AA for the following information
  1. Determine Location of Incident (Ex: ESU, I-69, Convention Center, Saints, Football Stadium, etc.)
  2. Determine the mechanism of injury (Ex: OSW’s, Stabbing’s, Stage Collapse, Multi-car/Multi-passerenger MVC, School Active Shooter Situation with shots fired, etc.)
  3. Determine the number of known patients arriving to the ED and anticipation possibility of further patients.

**ED RESOURCES (From Charge Nurse)**

Current ED Census (ED has 41 rooms + 5 Hall beds)

<table>
<thead>
<tr>
<th>Number of patients in rooms/beds</th>
<th>Number of patients in Waiting Room</th>
<th>Number of holding patients in ED</th>
<th>Acuity Mix of patients (How many level IV/III &amp; Psych Pt’s)</th>
</tr>
</thead>
</table>

**ED Staffing Resources**

<table>
<thead>
<tr>
<th>Number of RNs</th>
<th>Number of Paramedics</th>
<th>Number of PCA/EDTs</th>
<th>Number of Physicians</th>
<th>Number of ADD Providers</th>
</tr>
</thead>
</table>

**IN-HOUSE RESOURCES (From AA)**

Inpatient Census

1. Number of Beds Available (Bed Placement - Medical, Progressive, Critical)

2. Inpatient Staffing (Number of available resources to respond to the ED to help)

<table>
<thead>
<tr>
<th>Number of Resource Nurses</th>
<th>General in-house staffing situation (Are these critical staffed units?)</th>
</tr>
</thead>
</table>

**OR RESOURCES (From OR Charge)**

<table>
<thead>
<tr>
<th>Number of open-staffed rooms</th>
<th>Anticipated number of surgical patients</th>
</tr>
</thead>
</table>
Initial Multiple/Mass Casualty Notification List
May 2019

Ball Memorial Hospital
Discoveries

- Communication!
- Communication!
- Communication!
- Recall Process
- Surgeon Confusion
- Blood Bank
- Staff/Patient Safety
  - Preparedness for Retaliation
- Departmental Standard Work
- Multiple vs. Mass
Reason for Action:
Currently, there is inconsistent housewide response practices for a mass casualty event. Therefore we aim to achieve housewide awareness, preparedness and response within a moment of notice when disasters occur. This will enhance the ability of our healthcare team to respond to the challenges imposed in a mass casualty event.

Connection to VSA Metric:

Scope: Housewide - IU Health Ball
Trigger: Mass Casualty Event Has Occurred
Done: 0-2 Hours from Notification

Ball Memorial Hospital
**Target State Attributes**

- Moving patients to correct place with proper provider during mass casualty event
- Standard process on how the hospital continues to provide care
  - Communication plan/Proper information flow across hospital
- Utilization of best practices
- Security & safety of patients, visitors, & staff
- Proper patient identification & tracking
- Departments pulling their patients out of ED
- Standard and consistent response
- Identified alternative treatment sites
- Patients successfully triaged to appropriate level of care
Who Attended the Event?

- Emergency Department
- Trauma
- Emergency Preparedness
- Office of Transformation
- Executive Team
- Trauma Medical Director
- Associate Administrator (AA)
- Communications
- Police Department
- Pharmacy
- Registration
- Radiology (IR, X-ray, CT)
- Respiratory
- OR
- Inpatient (Critical care/medical)
- Hospitalist
- Blood Bank
- Bed Placement
- Quality
- EVS/Transport
- Public Relations
- Distribution
- Human Resources
- Chaplaincy
### Standard Work Sheet

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Key Point / Image / Reason</th>
<th>Who</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mass Casualty page comes through the hospitalist traffic pager and directly to the following leaders: 1. Medical director 2. Associate Director(s) 3. APP Team Lead</td>
<td>Mass Casualty Notification to Hospitalist Team</td>
<td>Traffic Team Directors</td>
<td>Immediately</td>
</tr>
<tr>
<td>2</td>
<td>All onsite hospitalist team members will be notified and expected to report to the office for instructions and assignments</td>
<td>Team Members will be notified via Diagnos with the following message: ‘Mass Casualty Alert – Report to Hospitalist Office Immediately’</td>
<td>Traffic Night MD Directors</td>
<td>Within 10 minutes</td>
</tr>
<tr>
<td>3</td>
<td>Notification will be sent to the on-call wards team resident, intern, and to their attending physician. They will be asked to report to the hospitalist office as well</td>
<td>Residency members will be notified via Diagnos with the following message: ‘Mass Casualty Alert – Report to Hospitalist Office Immediately’</td>
<td>Traffic Directors Resident</td>
<td>Within 10 minutes</td>
</tr>
<tr>
<td>4</td>
<td>Hospitalist Operation Center will be formed in the hospitalist office</td>
<td>Effectively communicate needs to our team throughout the mass casualty situation and address the needs of our hospital.</td>
<td>Directors</td>
<td>Within 30 minutes</td>
</tr>
<tr>
<td>5</td>
<td>Hospitalist Physicians will be asked to facilitate rapid discharges of inpatients and transfers out of critical care and progressive care areas</td>
<td>Patients that meet discharge/transfer criteria.</td>
<td>Providers</td>
<td>Within 45 minutes</td>
</tr>
<tr>
<td>6</td>
<td>Assessment is made of current available resources and additional help will be called if needed. Hospitalist Mass Casualty Response List will be reviewed by the directors who will then make phone calls to physicians, APPs, and support staff as needed, prioritized by their proximity to the hospital. If during day time hours, pre op clinic providers and RN coordinator will be pulled to acute side to assist as needed</td>
<td>This includes physicians, advanced providers, and support staff.</td>
<td>Directors</td>
<td>Within 60 minutes</td>
</tr>
<tr>
<td></td>
<td>A hospitalist leader will be designated to communicate with Hospital Incident Command.</td>
<td>Information reported will include: - Number of MDs and APPs - Current Census - Geographic Assignments</td>
<td>Directors</td>
<td>Within 60 minutes</td>
</tr>
</tbody>
</table>
Call Tree
Current State
Timeline
MASS CASUALTY – ED RESPONSE

ED DECOMPRESSION

- Patients in assigned beds pulled up to unit
- Safe handoff form given to inpatient RN
- EVS/Transport gathering cots
- Taking cots to Endo/Vascular & Cardio-Neuro (10 cots in each location)
- Wheelchairs/Transport cots go to admin hallway (backfill carts from transporting patients to units)
- Discharge patients and level 4 and 5 go to designated location to wait
- Incoming APP to evaluate patients
- Identify patients that can be moved out of ED
- 10 patients to Echo/Vascular - 1st floor by ED
- 10 patients to Nuclear Cardiology - 1st floor past Echo
- *Cardiac Cath lab with be 3rd option for pt holding if appropriate and available
- Hospitalist notified of patients placement & prioritized
Timeline of Standard Work per Department/6 Month Action Plan
Moving Forward

- Meeting weekly to follow our progress.
  - Tracking Standard Work, recall lists, any forms
- Education Department
  - Help with team member education moving forward house wide.
  - Incorporate in competency check list, ELMs, etc.
  - Plan with rolling out to staff
- Drills
  - Department specific Tabletop drills
  - Targeted staff drills and education
- Charge RN and AA education
- Goal for Realistic house wide drill at 6 month mark
Questions?
Thank You!
Bekah Dillon – rdillon@iuhealth.org
Kelli Vannatter - kvannat1@iuhealth.org