

\*\*Some slides have  
been modified for  
privacy

# Mass Casualty 2019

Indiana State Trauma Care Committee

Bekah Dillon- Director of Trauma, ED, Center of Hope

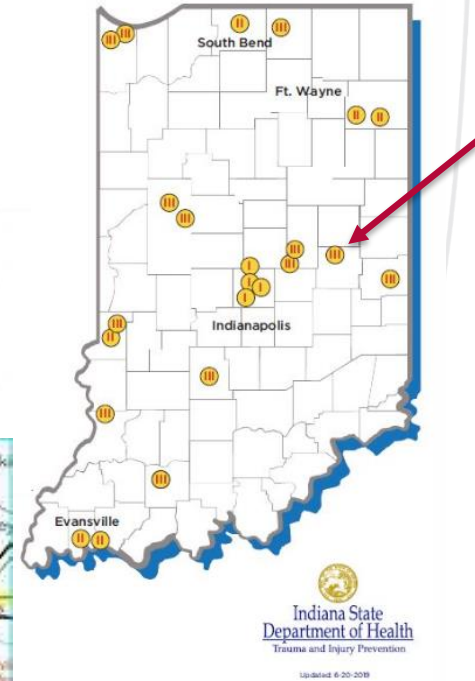
Kelli Vannatter- Trauma Program Manager



Ball Memorial Hospital

## 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
  - 15<sup>th</sup> 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

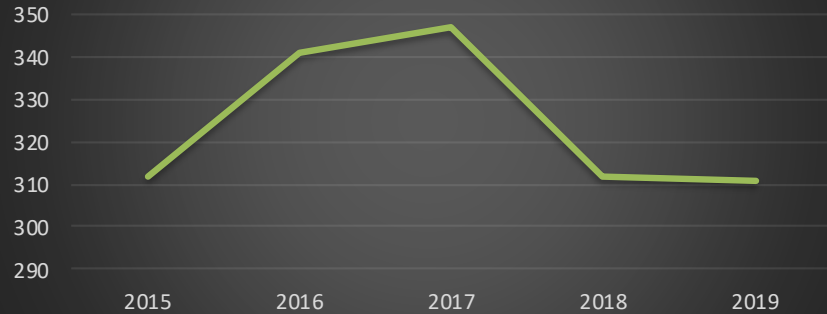
**ATLS**<sup>®</sup>  
ADVANCED TRAUMA LIFE SUPPORT

**ENPC**<sup>™</sup>  
EMERGENCY NURSING PEDIATRIC COURSE  
An **ENP** Course

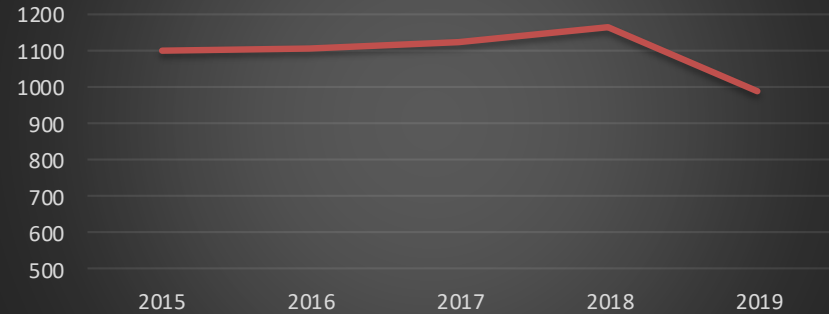
**TNCC**<sup>™</sup>  
TRAUMA NURSING CORE COURSE  
An **ENP** Course

# Volume

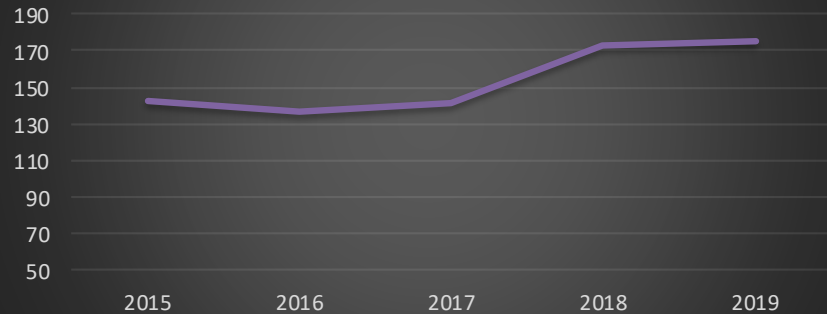
## Trauma 1 Activations



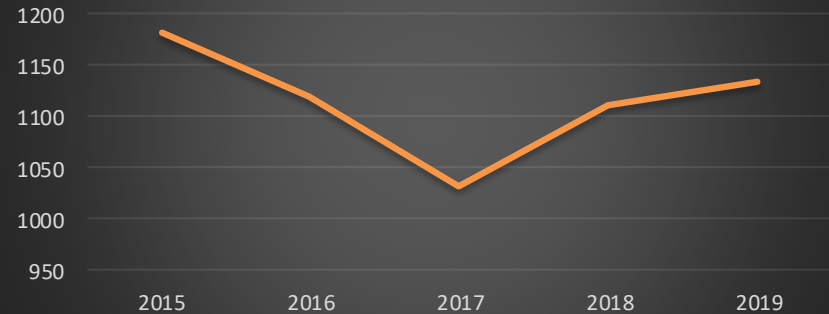
## Trauma 2 Activations



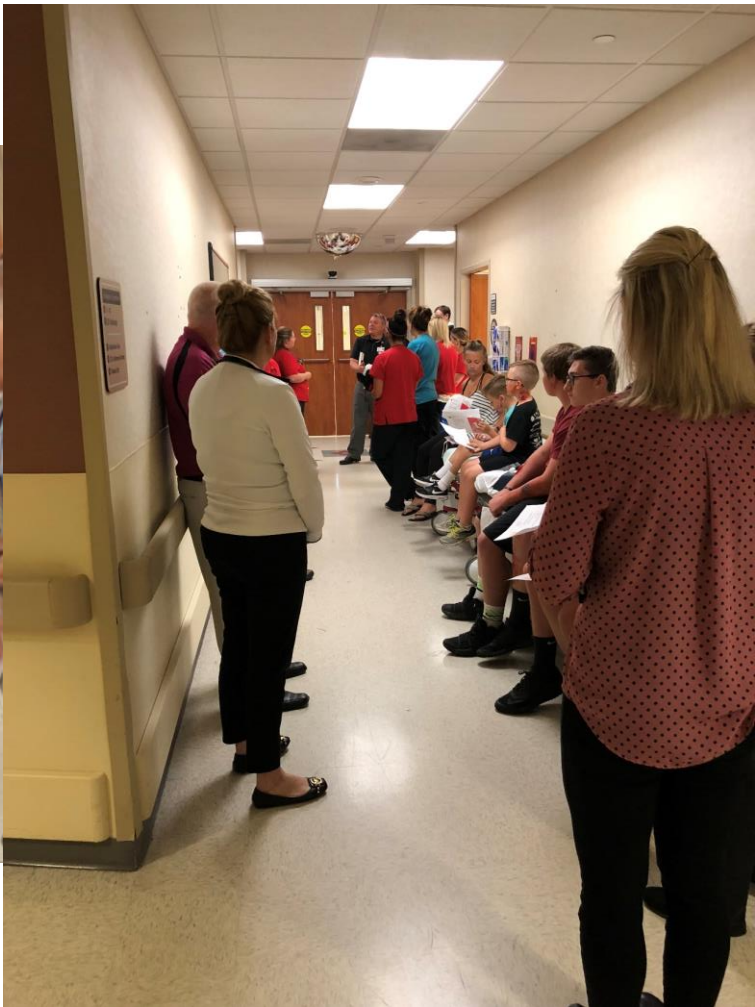
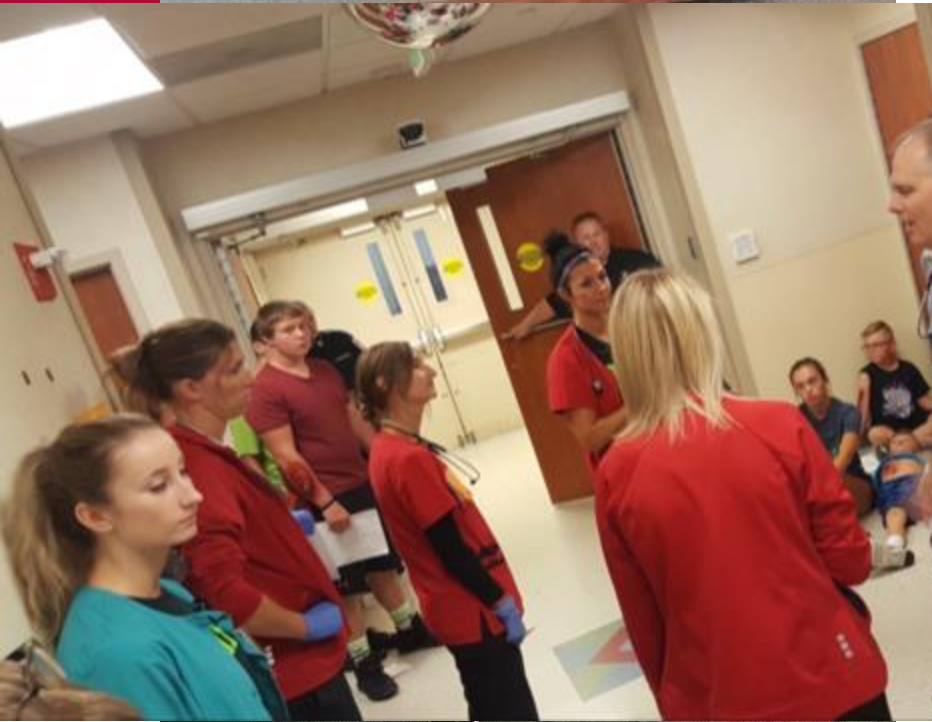
## Transfers



## Registry Volume



Mass



During a Mass Casualty Event your goal is to do the **MOST good** for the **MOST number of people**.



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# Where did we start?



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## 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**

**≥ 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

**≥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...



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## Multiple Casualty Form Charge Nurse/AA

Trauma/ED Leadership: Person responsible for Calling ED and obtaining incident details and determining resources and response needs

**Trigger:** Trauma/ED Leadership receives notification of Multiple Casualty Notification

**\*Trauma/ED Leadership will call ED Charge Nurse and AA for the following information**

1. Determine Location of Incident (Ex: BSU, I-69, Convention Center, Emens, Football Stadium, etc.)

2. Determine the mechanism of injury (Ex: GSW's, Stabbing's, Stage Collapse, Multi-car/ Multi-passenger MVC, Bomb, 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 + 6 Hall beds)

Number of patients in rooms/beds	
Number of patients in Waiting Room	
Number of holding patients in ED	
Acuity Mix of patients (How many level I's/ II's & Psych Pt's)	

### ED Staffing Resources

Number of RNs	
Number of Paramedics	
Number of PCA/EDTs	
Number of Physicians	
Number of APP Providers	

### 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)

Number of Resource Nurses	
General in-house staffing situation (Are there critical staffed units?)	

### OR-RESOURCES (From OR Charge

Number of open/staffed rooms	
Anticipated number of surgical patients	



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May 2019



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# Timeline

**00:44**

**00:51**

**00:53-  
01:05**

**01:05-  
01:11**

**1:17-  
1:30**

**1:30-  
2:30**

**2:30-  
4:30**

**4:30-  
6:30**

**6:30-  
8:30**

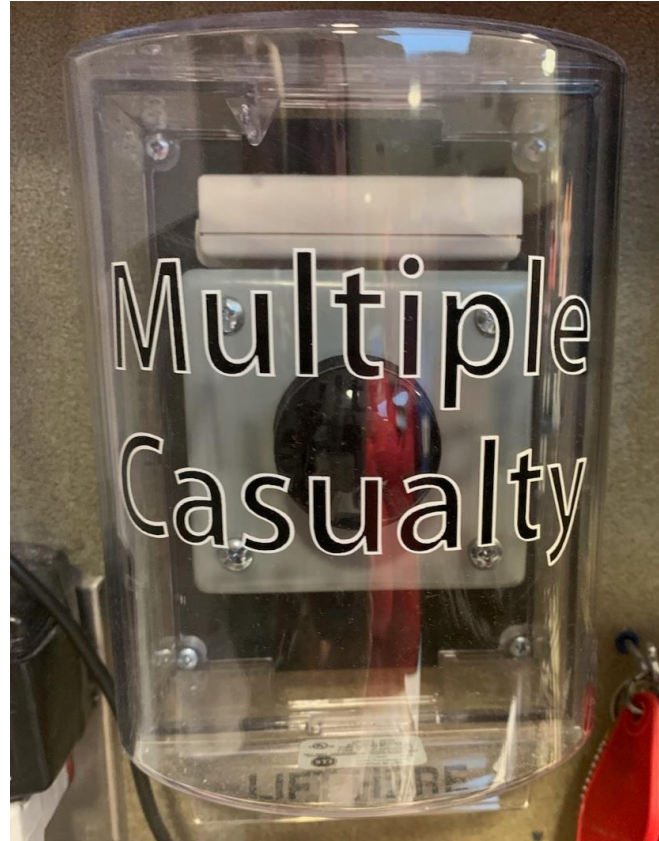
**8:30-  
10:30**





## Discoveries

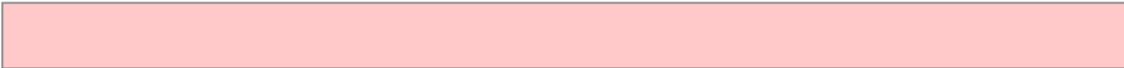
- Communication!
- Communication!
- Communication!
- Recall Process
- Surgeon Confusion
- Blood Bank
- Staff/Patient Safety
  - Preparedness for Retaliation
- Departmental Standard Work
- Multiple vs. Mass



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



## 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





PURPOSE: MASS CASUALTY RESPONSE PLAN

PROCESS: MASS CASUALTY RESPONSE PLAN FOR HOSPITALIST DEPARTMENT

REV. #5, DATE : 9/20/2019

DOCUMENT OWNER: [REDACTED]

Step	Description:	Key Point / Image / Reason	Who	Time
<b>Note:</b>				
1	Mass Casualty page comes through the hospitalist traffic pager and directly to the following leaders: <ol style="list-style-type: none"> <li>1. Medical director</li> <li>2. Associate Director(s)</li> <li>3. APP Team Lead</li> </ol>	Mass Casualty Notification to Hospitalist Team	Traffic Team Directors	Immediately
2	All onsite hospitalist team members will be notified and expected to report to the office for instructions and assignments	Team Members will be notified via Diagnotes with the following message: "Mass Casualty Alert – Report to Hospitalist Office Immediately"	Traffic Night MD Directors	Within 10 minutes
3	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.	Residency members will be notified via Diagnotes with the following message: "Mass Casualty Alert – Report to Hospitalist Office Immediately"	Traffic Directors Resident	Within 10 minutes
4	Hospitalist Operation Center will be formed in the hospitalist office	Effectively communicate needs to our team throughout the mass casualty situation and address the needs of our hospital.	Directors	Within 30 minutes
5	Hospitalist Physicians will be asked to facilitate rapid discharges of inpatients and transfers out of critical care and progressive care areas	Patients that meet discharge/transfer criteria.	Providers	Within 45 minutes
6	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	This includes physicians, advanced providers, and support staff.	Directors	Within 60 minutes
6	A hospitalist leader will be designated to communicate with Hospital Incident Command.	Information reported will include: <ul style="list-style-type: none"> <li>- Number of MDs and APPs</li> <li>- Current Census</li> <li>- Geographic Assignments</li> </ul>	Directors	Within 60 minutes

## Standard Work



Employees with Muncie/Gaston/Yorktown Addresses:

H		1.1 miles (4 mins)
G		1.1 miles (4 mins)
Ja		1.3 miles (5 mins)

# Call Tree

Job Title	Team Member	Cell Phone	City Address	Distance (miles) from IU Ball Memorial
Hospitalist Physicians (F/T/PT/Traditionalists)			Muncie	0.7
			Muncie	2.7
			Muncie	3.1
			Muncie	3.1
			Muncie	3.1
			Muncie	3.4
			Muncie	3.4
			Muncie	3.5
			Muncie	4.3
			Muncie	4.4
			Muncie	4.4
			Muncie	5.2
			Muncie	6.2
			Muncie	7
			Yorktown	8.1
PRN Physicians			Muncie	1.2
			Muncie	2.3
			Gaston	6.7
PRN Residents			Muncie	2.4
			Muncie	2.5
			Muncie	3.1
APPs			Muncie	1.1
			Muncie	3.4
			Muncie	4.5
			Muncie	4.6
			Muncie	6.9
PRN APPs			Muncie	2.3
			Muncie	3.9
Support Staff			Muncie	2.8
			Muncie	3.1
			Muncie	3.2
			Muncie	3.2
			Muncie	4.9

	0 - 10 Miles
	10 - 20 Miles
	More than 20 Miles
	Out of State

Job Title	Team Member	Cell Phone	City Address	Distance (miles) from IU Ball	
Support Staff			Parker City	13.8	
			Losantville	14.6	
Hospitalist Physicians (F/T/PT/Traditionalists)			Fishers	35.9	
			Fishers	37.1	
			Fishers	37.1	
			Fishers	37.6	
			Noblesville	38.3	
			Noblesville	39.2	
			Fishers	39.7	
			McCordsville	40.2	
			McCordsville	40.6	
			Fishers	43	
			Carmel	54.7	
			Fishers	35.6	
	PRN Physicians/Resident			Fishers	37.5
				Fishers	38.3
				McCordsville	39.7
APPs			Knightstown	24.9	
			Daleville	25	
			Marion	30.1	
			Marion	32.4	
			Richmond	35.6	
			Noblesville	36.3	
			Noblesville	37.7	
Support Staff			Parker City	25	
			Anderson	28	

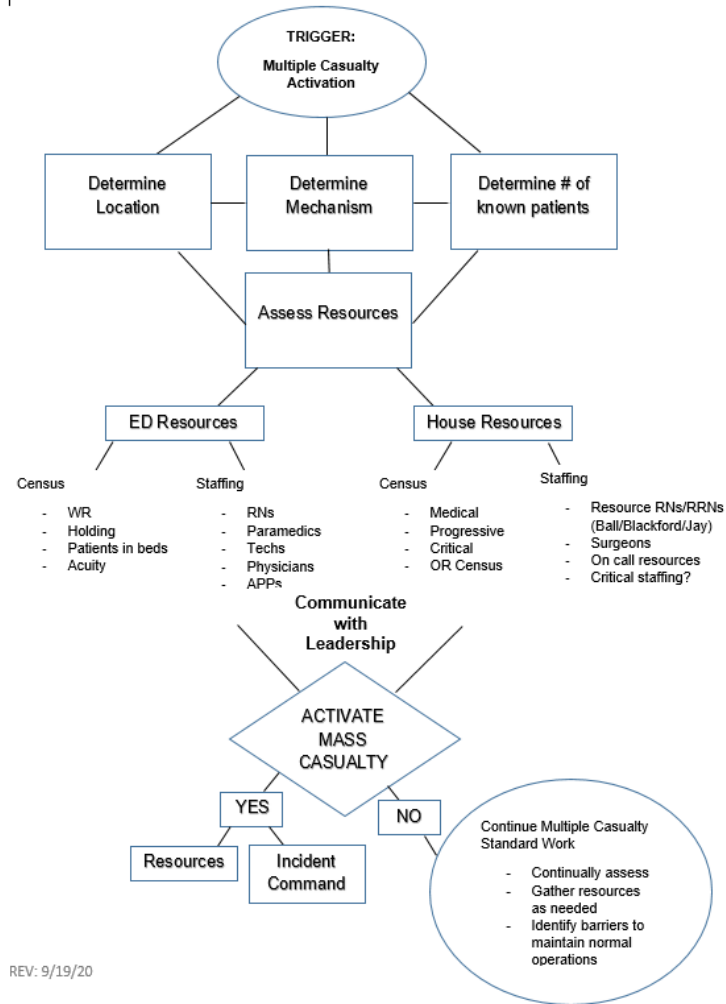
PRN Physicians Out of State		
	3	Canton, MI 228 miles
	0	Keller, TX 946 miles

	0 - 10 Miles
	11 - 20 Miles
	More than 20 Miles
	Out of State



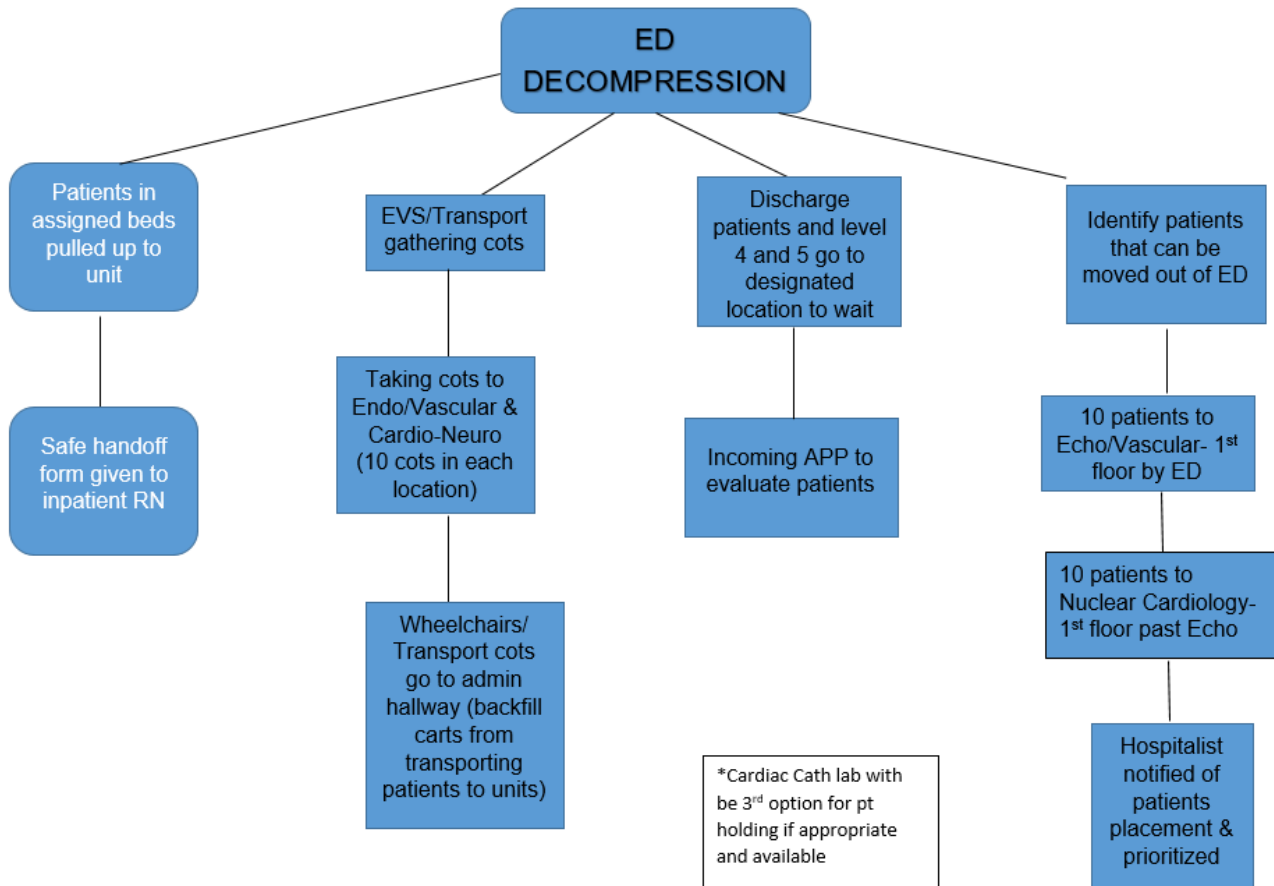


MULTIPLE to MASS CASUALTY Flowchart

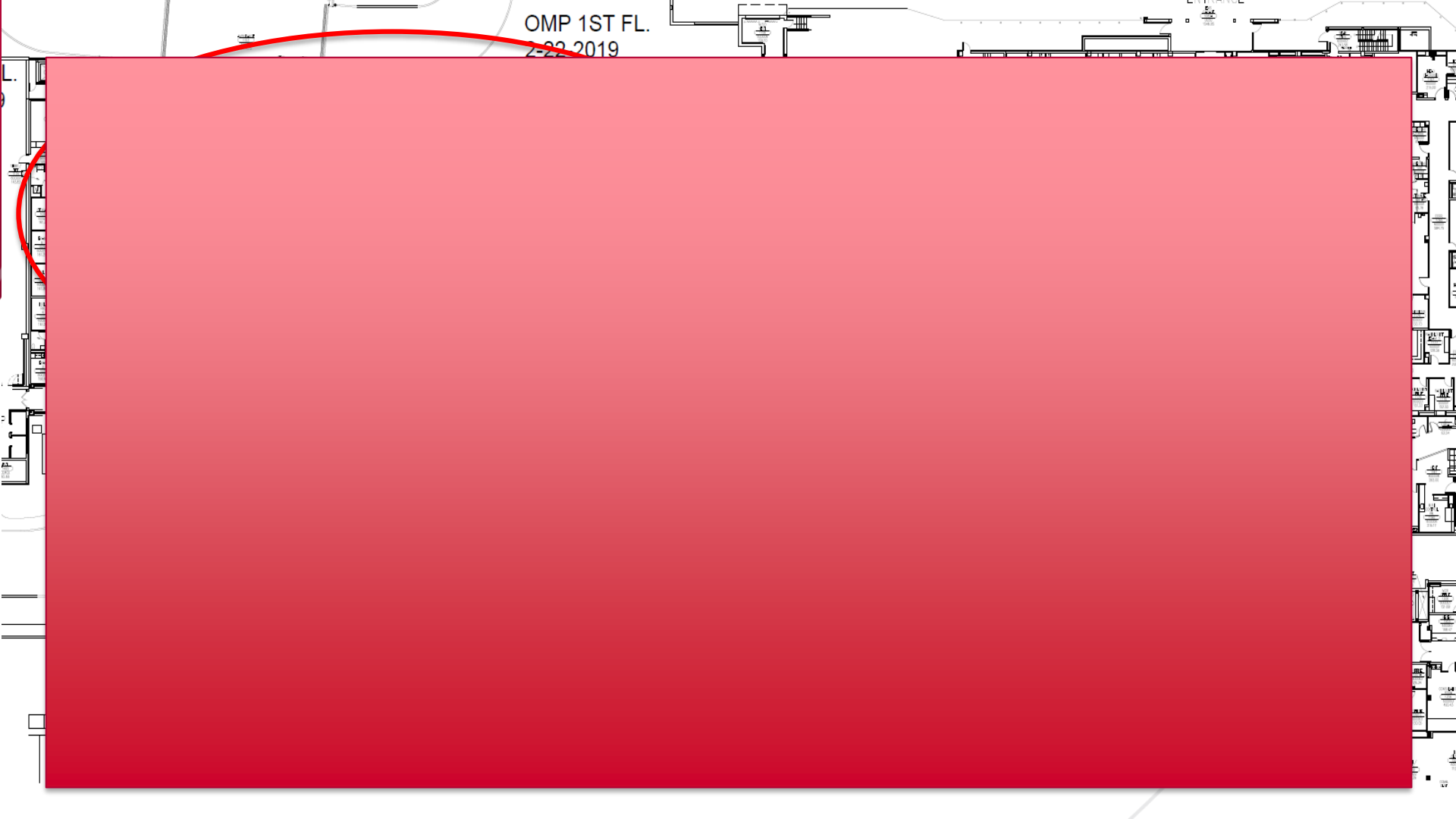




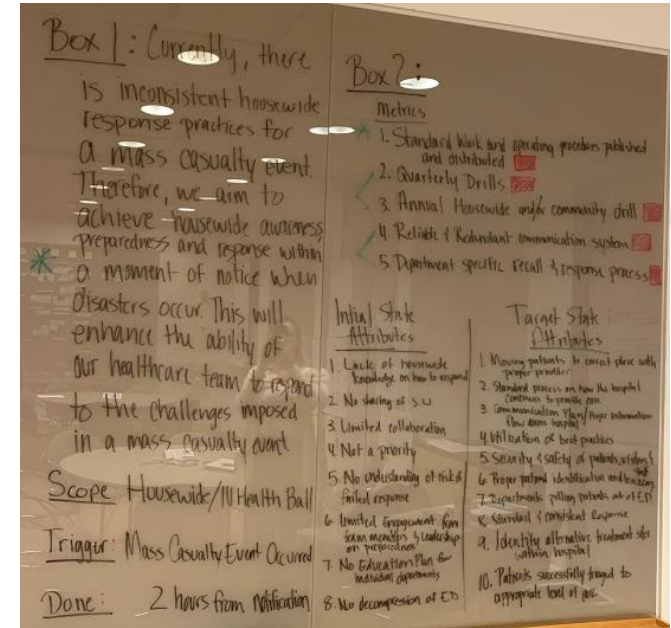
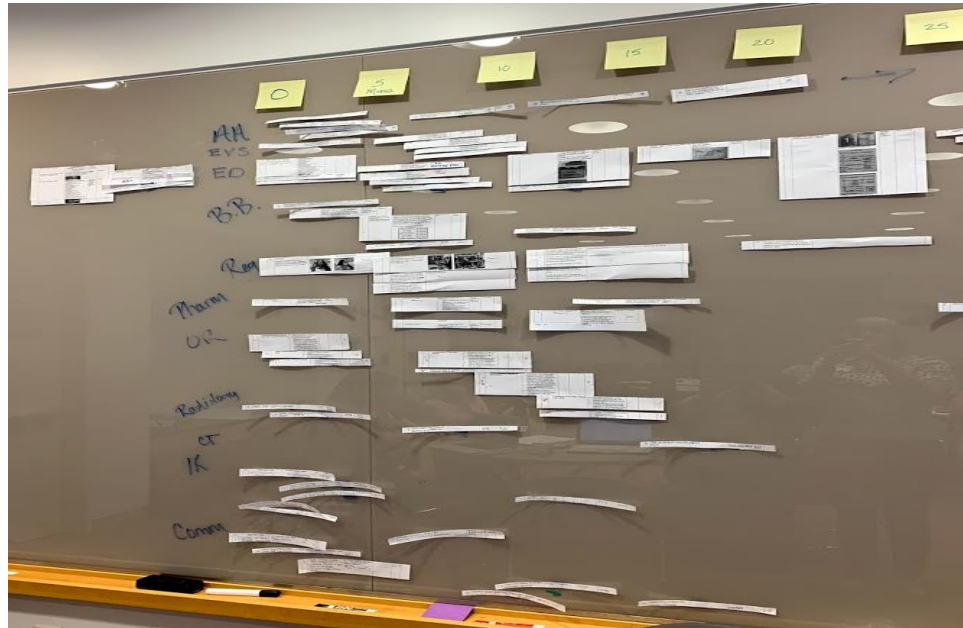
## MASS CASUALTY – ED RESPONSE



OMP 1ST FL.  
7-22-2019



# 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!**

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**Ball Memorial Hospital**