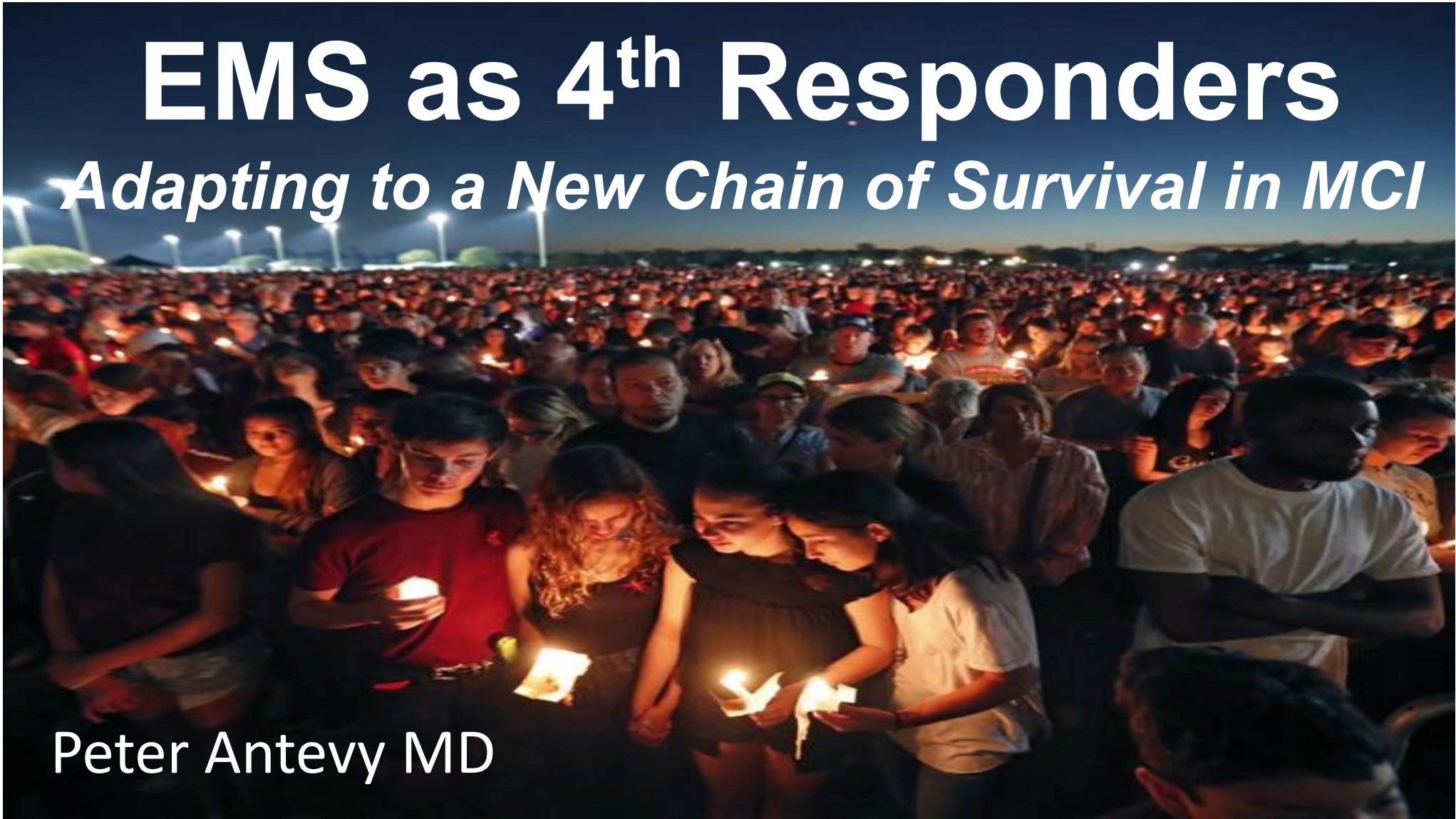


# EMS as 4<sup>th</sup> Responders

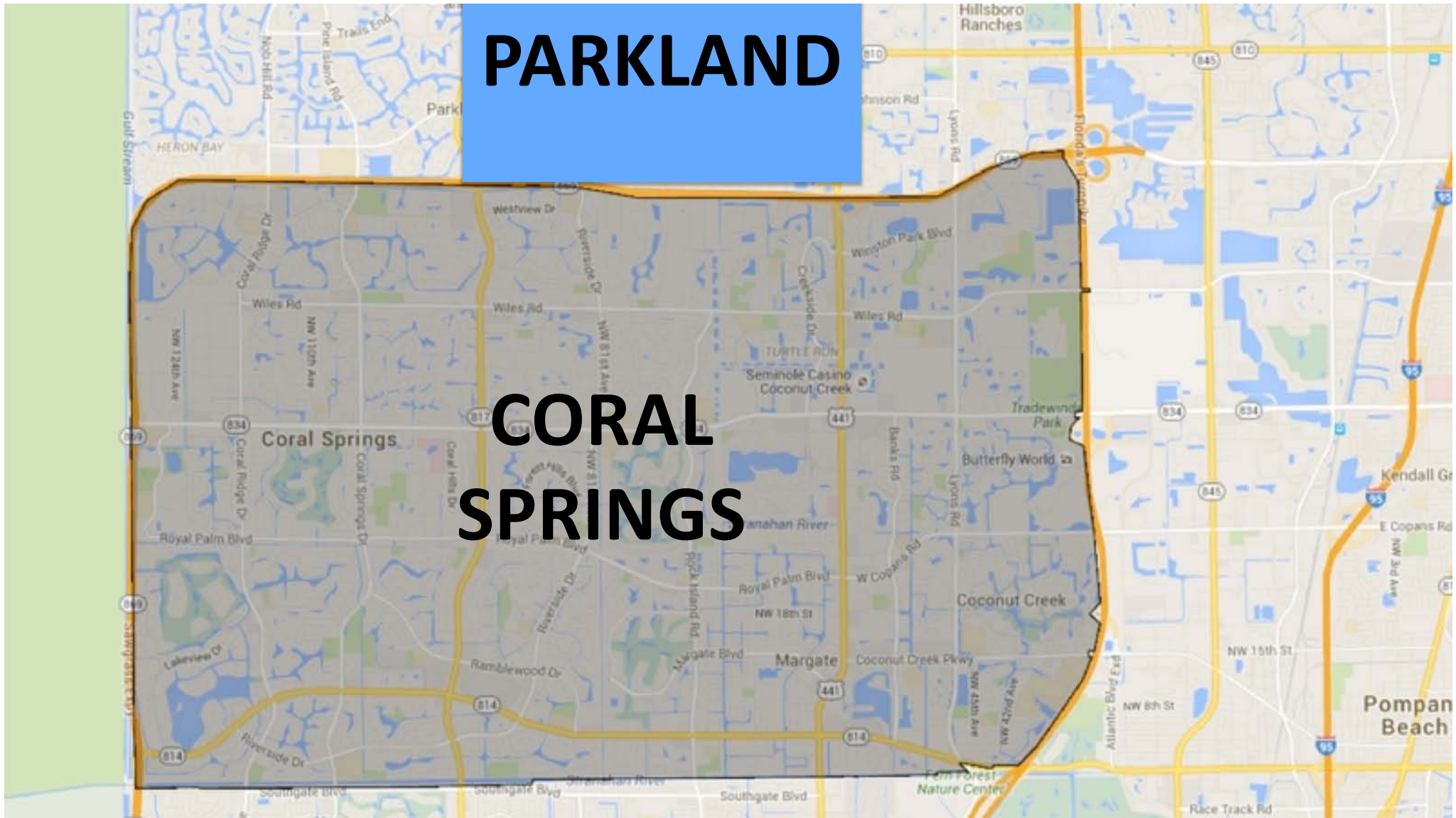
*Adapting to a New Chain of Survival in MCI*

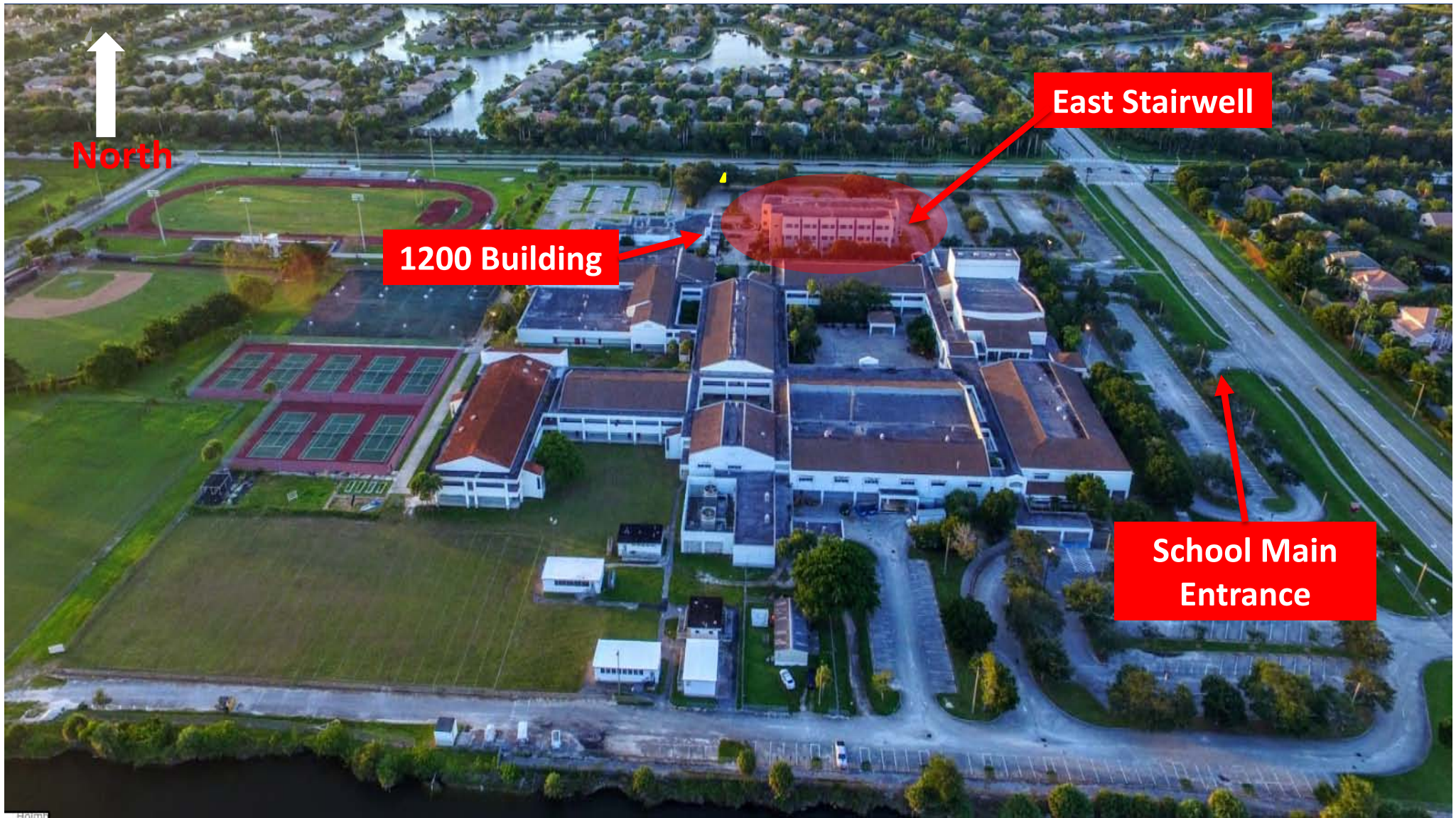
Peter Antevy MD



**PARKLAND**

**CORAL  
SPRINGS**



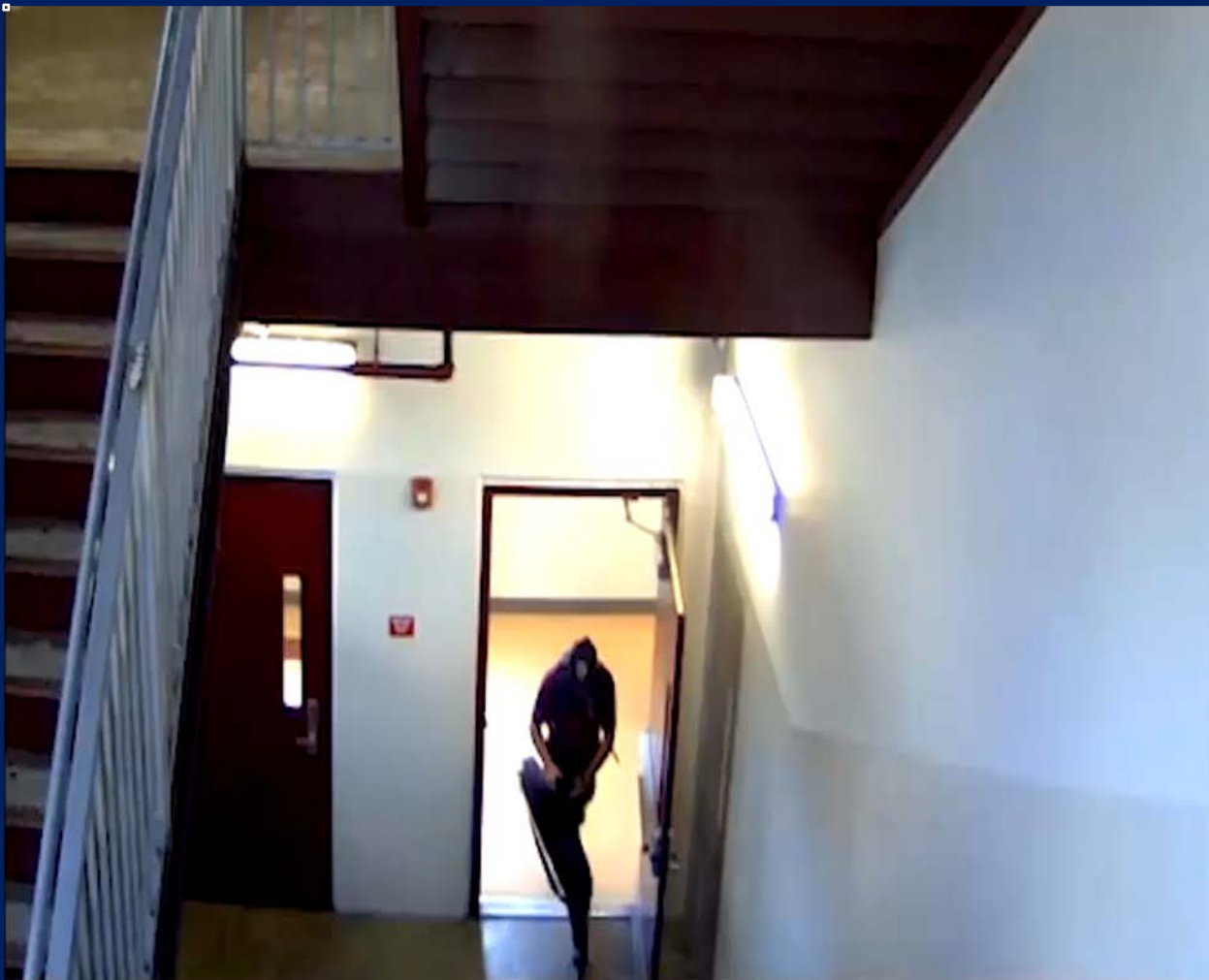


North

1200 Building

East Stairwell

School Main Entrance



14:21:16

# It Begins

**14:21:38**

- The suspect began engaging innocent bystanders.
- The shooter did not enter a single classroom
- The shooter kills 11 and wounds 13 students on the first floor.



# Total Time Elapsed: 4:19

- By 14:25:35 all shots that led to harm had been fired.



**Time Elapsed:  
5:16 – CSPD Arrives**



**Time Elapsed:  
6:38 – Rescue 109  
7:33 – Command Estab.**

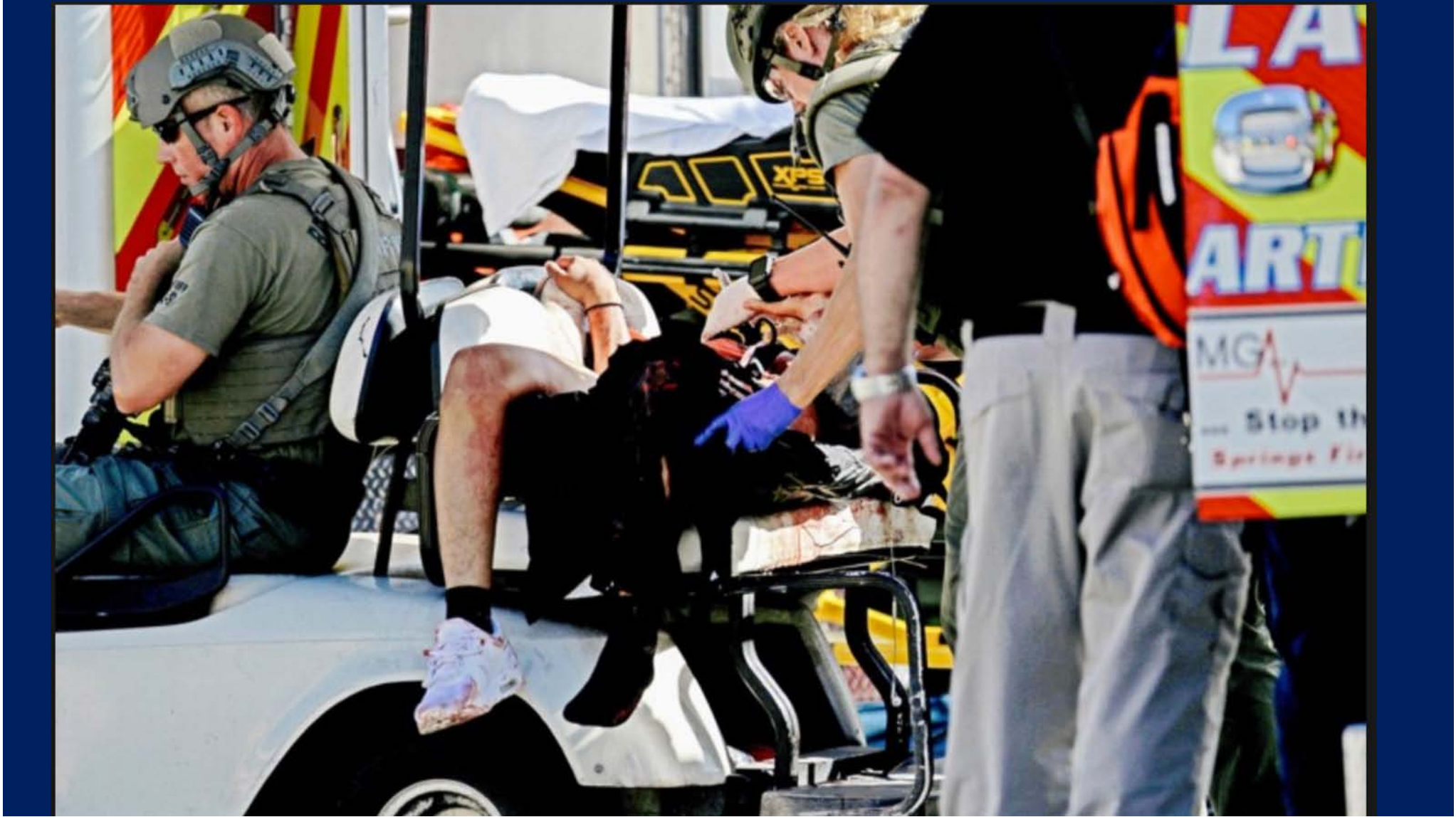


**Time Elapsed:**

**11:04 – CSPD Entry**

**12:05 – CSPD 1<sup>st</sup> Contact**





**Time Elapsed:  
21:58 – First Patient Transported**



**Time Elapsed:  
58:44 – Final Patient  
Transported**

# Who Was There First?

- Students: Time elapsed 0:00
- Dispatchers: Time elapsed 1:00
- Police Officers: Time elapsed 12:05
- RTF: Not permitted to enter
- EMS: Time elapsed 21:58

# Summary

- Lay Public Can Stop the Bleed
- Call Takers Can Stop the Bleed
- LEOs Can Stop the Bleed
- **EMS is the 4<sup>th</sup> Responder**



# Never Forget



# EMS as 4<sup>th</sup> Responders

## *Adapting to a New Chain of Survival in*

A large crowd of people is gathered at night, holding lit candles. The scene is illuminated by the warm glow of the candles and the cool blue light of the twilight sky. In the background, several tall stadium-style lights are visible, suggesting an outdoor venue like a sports field or park. The crowd is dense, with people of various ages and ethnicities visible. Many individuals are looking down at their candles, while others look towards the camera or the horizon. The overall atmosphere is somber and reflective.

Peter Antevy MD



# THE GREEN NEW DEAL

adams

# A JOINT EFFORT



BEA



orial  
SPECIALISTS



Coincidence????





## MCI LOST AND FOUND RE-UNITING PATIENTS AND FAMILIES AFTER ASSAILANT ATTACKS

Kenneth A Schepke, MD  
State EMS Medical Director  
Florida Department of Health  
Chief Medical Officer  
Palm Beach County Fire Rescue

# PATIENT TRACKING SYSTEM FOR MCI AND EVERYDAY USE



FRONT

A1234567 A1234567

8 : 

 \_\_\_\_\_

 \_\_\_\_\_

 \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

 **MET-TAG** Business Solutions X \_\_\_\_\_  
© 2004 - All Rights Reserved 1-800-425-5337 www.metttag.com

0  A1234567

I  A1234567

II  A1234567

III  A1234567

# TRACKING TECHNOLOGY ALREADY EXISTS EVERYWHERE



FedEx



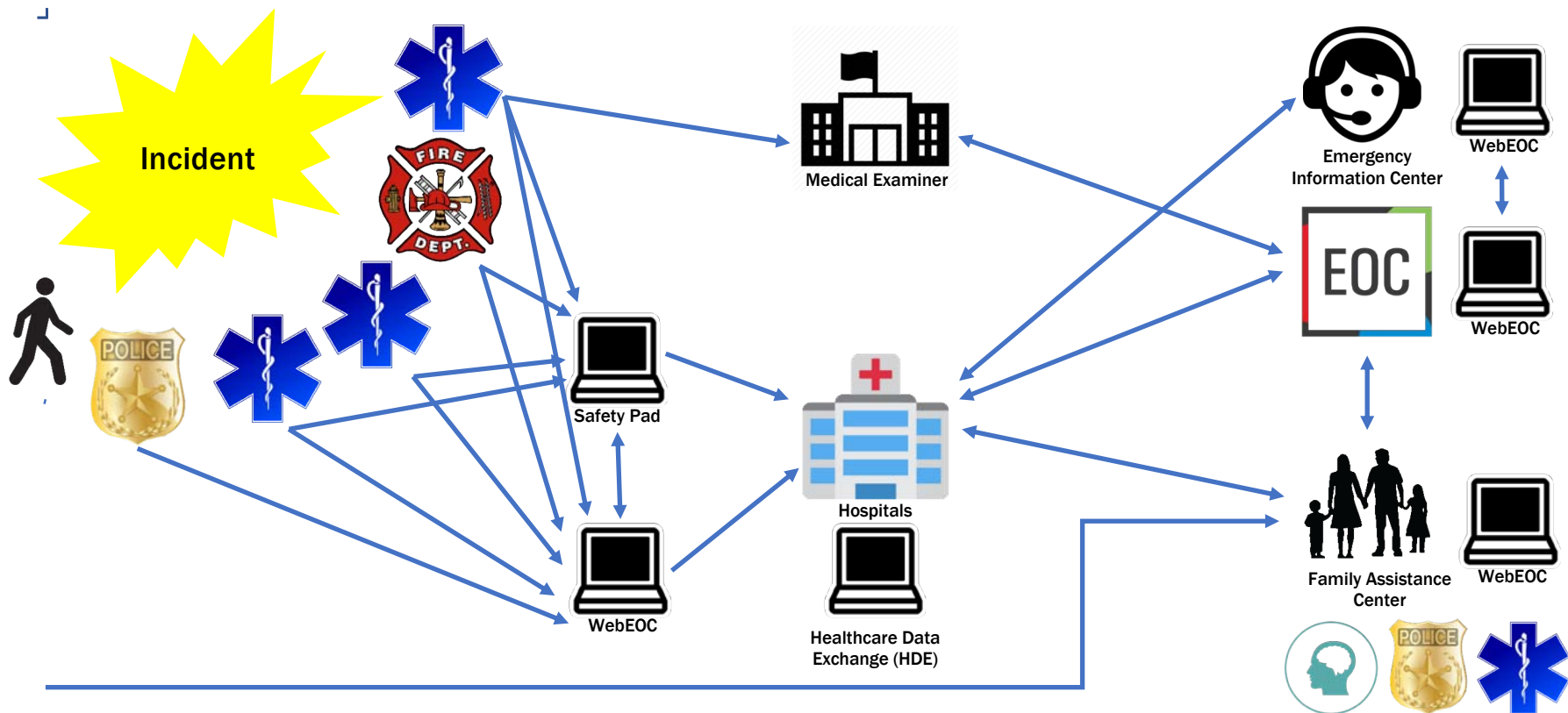
## TRACK YOUR PACKAGE TECHNOLOGY

- Radio frequency ID band
- Useful for day to day ops
- Useful for MCI Family Reunification
- Useful for resource utilization tracking EMS and Hospital
- Useful for outcome data collection across agencies

**Standard Delivery** ☐  
**Next-Day Delivery** ☒



# RADIO FREQUENCY ID CHIP TRACKING



# Correcting Catastrophic Curricula: Re-Thinking Disaster Management Training

*Erica Carney, MD*

KCMO EMS Medical Director/KCFD

UMKC EMS Education System Medical Director

CJCFPD Medical Director

Region A Medical Director

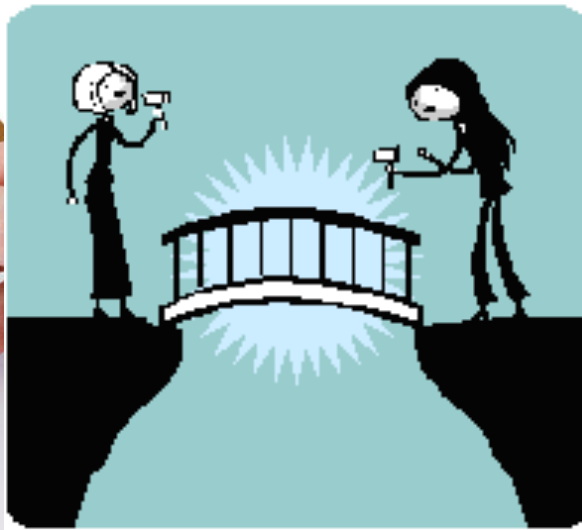
Assistant Professor, TMC-HH EM



# Disaster Management Training...

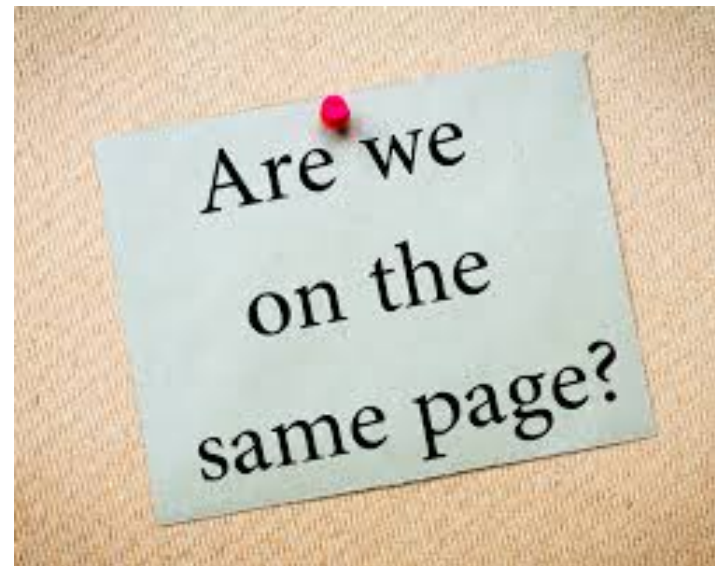


# Administrative Side (v) Ground Level



## Definitions...

- Mass Gathering
- Mass Casualty Incidents
- Disaster
- Disaster Response Goals



What is a Mass Gathering?



What is a Mass Casualty Incident?



What is a Disaster?



# Definition

- Mass Gatherings
  - Most published
- FEMA uses "special incidents"
  - A non-routine
  - Emphasis on control
  - *Exceptional demands*
- WHO says "any event requiring special planning and resources"
- AKA....A Friday night



to strain



# Definitions: Disasters

- “Natural or man-made events cause overwhelming loss of life, injury, destruction of property or loss of infrastructure”



# What are the Issues?

- Training not re
- Takes time an
- Planning conc
- Can never be
- Complacency



# The “Specialists”



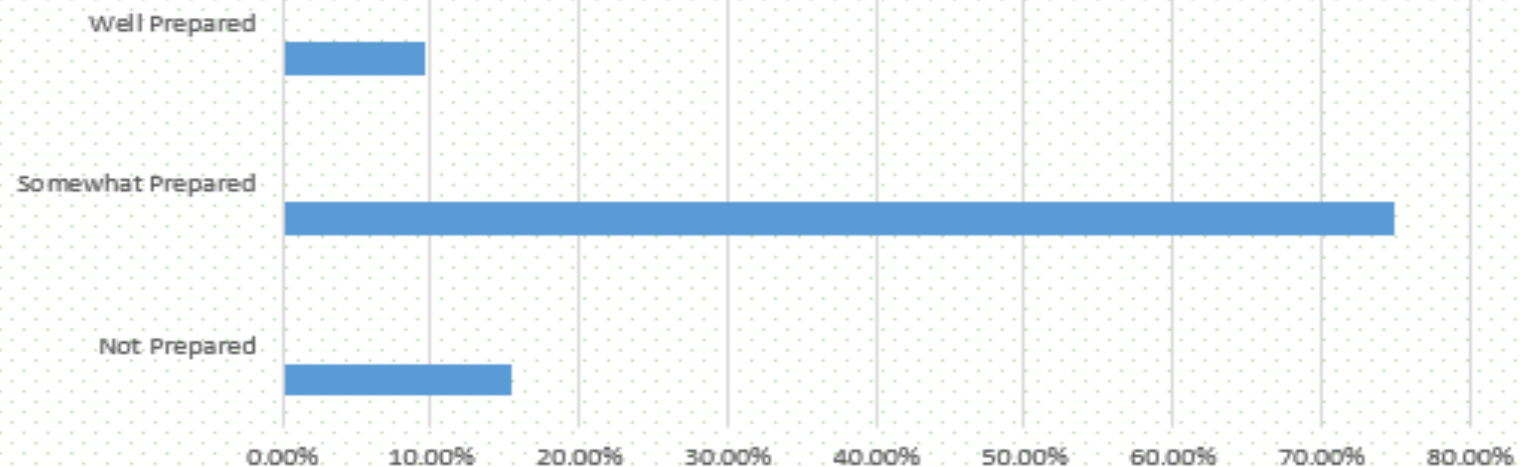
# A Survey to Determine Knowledge of Mass Casualty Policy at a Level-1 Trauma Center

- Knowledge assessment test using REDCap (<https://redcap.umkc.edu/surveys/?s=jjzRkKsH58>)
  - Basic knowledge of hospital's disaster response plan
  - 100% anonymous
  - Count data analyzed using Chi Squared Test of Association, Continuous data assessed using independent t-test and ANOVA
- All ED staff physicians/residents (n=52): 100% response rate
  - Residents scored **54.8**  $\pm$  13.4 points
  - Staff physicians scored **64.5**  $\pm$  13.5 points
  - Training year not a/w test score (p=.104)
- **Only 9.6% of physicians (5/52) felt well prepared for a mass casualty event**



## How prepared to you feel to respond to a mass casualty incident?

Not Prepared (8, 15.4%), Somewhat Prepared (39, 75.0%), Well Prepared (5, 9.6%)



# Current Training Requirements?

- **ED physicians: “receive the most disaster training...”**
  - “Small % of medical schools include in core curriculum”
  - “Not standardized”: “Participate in Disaster/MCI drill(s)”
  - “JCAHO requires accredited hospitals implement response plan **twice a year**”
- **EMS Physicians: ACGME Fellowship Requirements**
  - “Participat(e) in a mass casualty/disaster”
  - “Develop MG medical plan and participate in implementation”
- **EMS Personnel:**
  - CoAEMSP/CAAHEP not yet a separate requirement
  - NR/State statutes, agency requirements...
- **Disaster Medicine Fellowship: Unaccredited by ACGME**

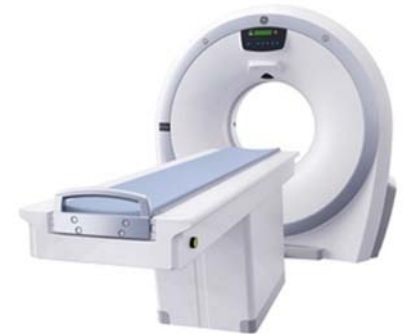


So....Now What?



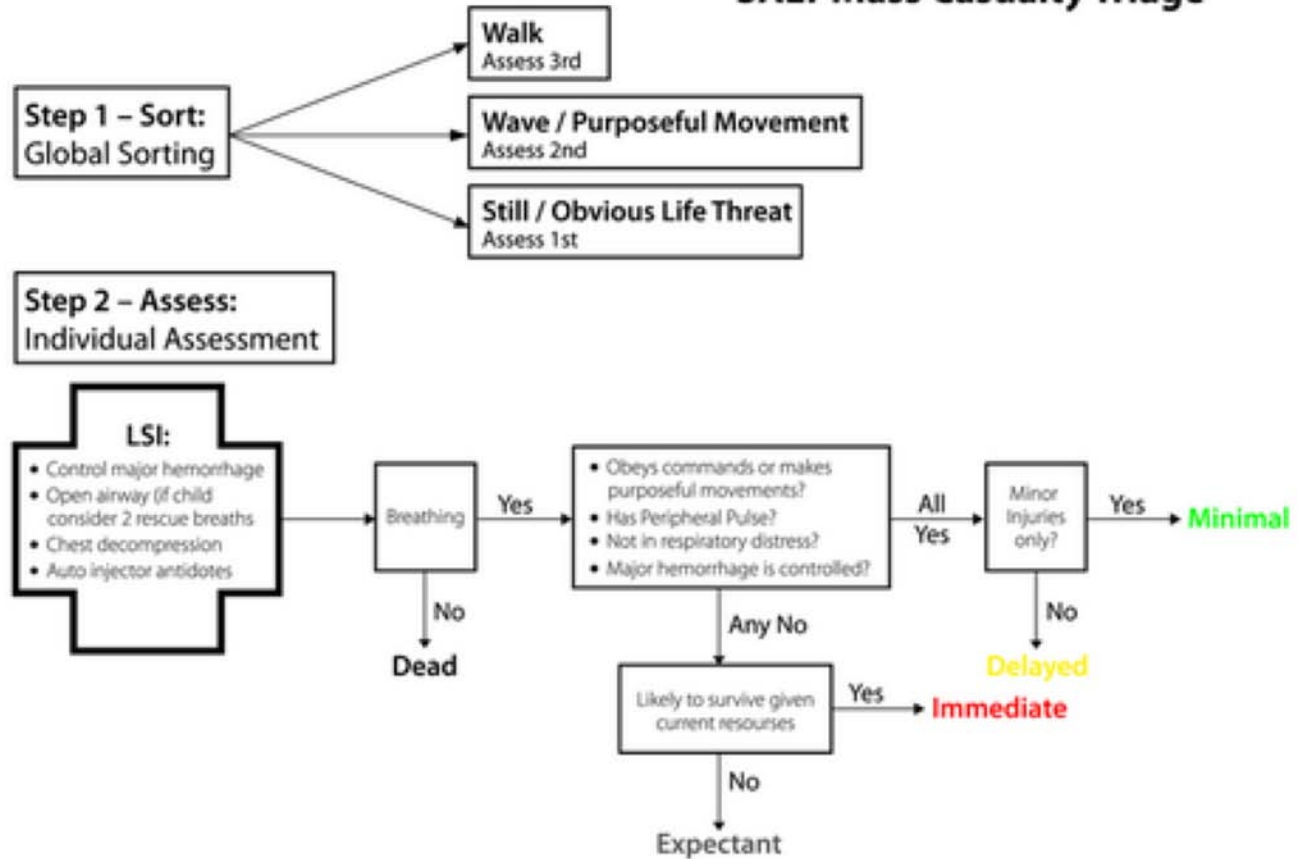
# 5 Areas of Risk Management and Planning Mitigation (Mass Gatherings)

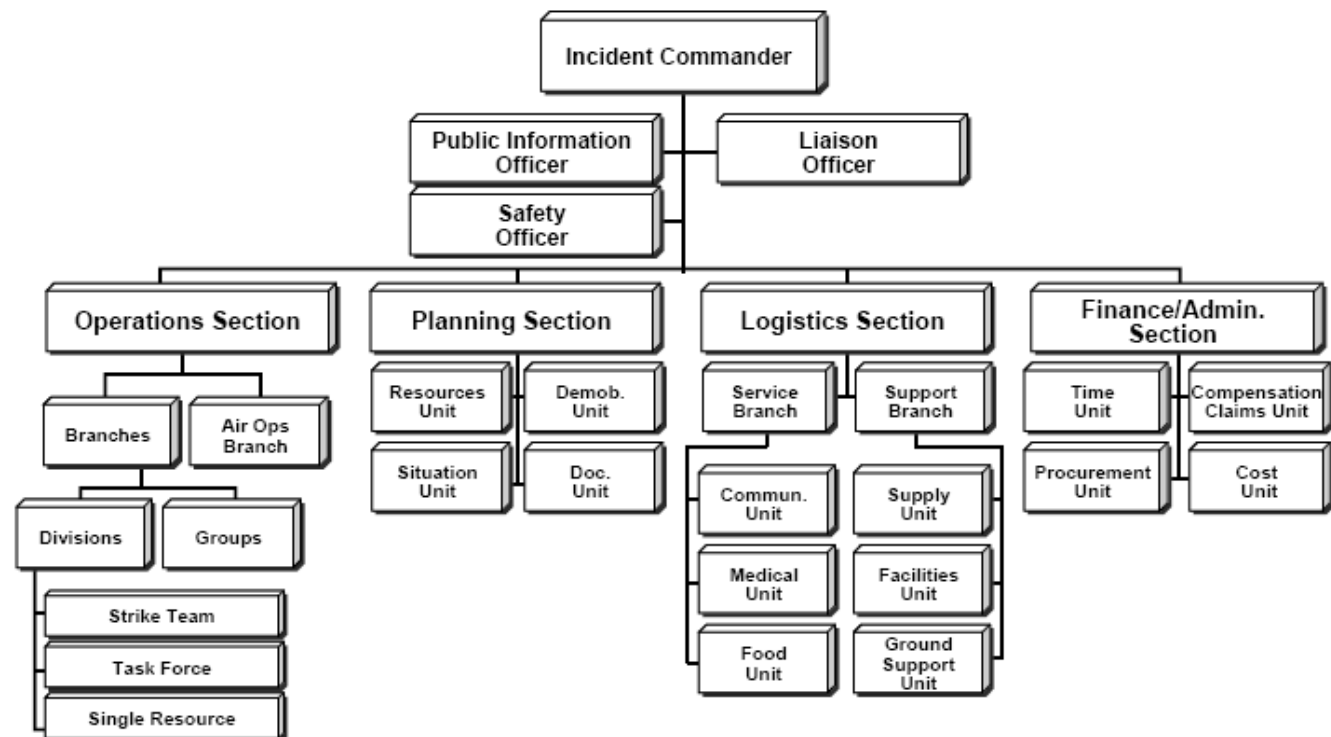
- Soomaroo and Murray:
  - 1) Overcrowding and crowd control
    - Predictable patterns of behavior, bottlenecks
  - 2) Event access points
    - Ingress/Egress, Security. Self-deployed??
  - 3) Fire safety measures
  - 4) Medical preparedness
    - **Prepare/preplan for escalating event**
    - Legal regulations
  - 5) Emergency response
    - COMMUNICATIONS



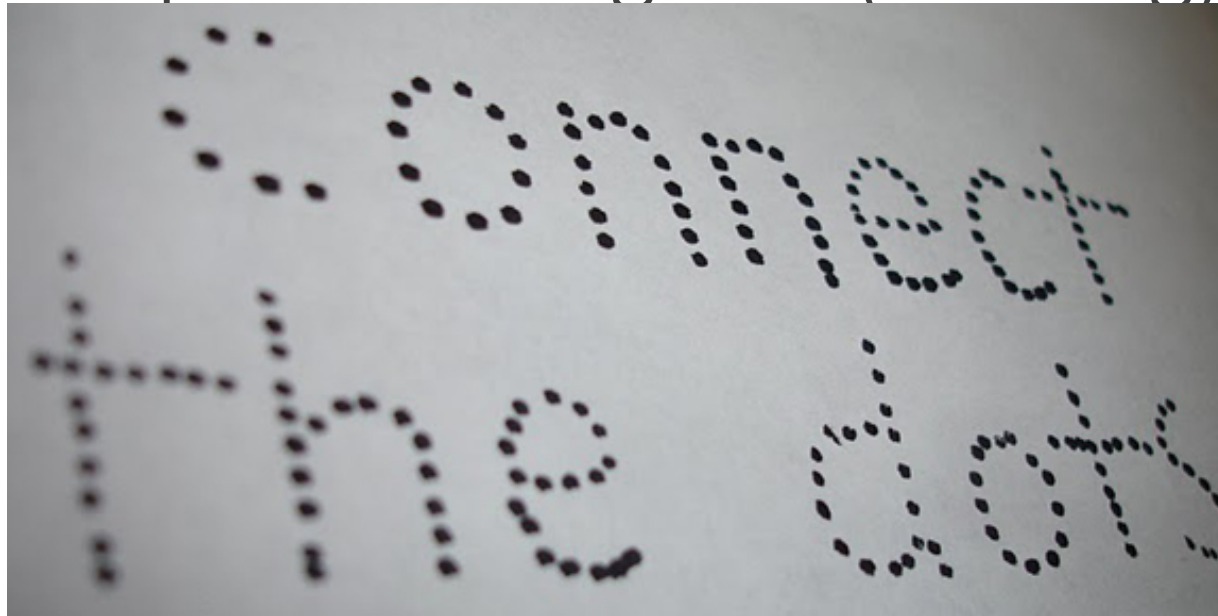
# MCI

## SALT Mass Casualty Triage





KEY to Mitigation of MCIs at MGs =  
Proper Planning and (Training)



# Current Admin Side/Goals of Planning...



# EMS Physician Curricula: Disaster Preparedness and Management

- Federal framework based on Presidential Policy Directive 8
  - “Defined a National Preparedness Goal: A secure and resilient nation with the capabilities...to **prevent**, **protect** against, **mitigate**, **respond** to and **recover** from the threats and hazards”
  - National Response Framework (NRF)
    - Describes “ER support functions”
- Aligned with National Incident Management System (NIMS):
  - Defines command and management structures that allow for scalable, multijurisdictional response
- Incident Command Structure
- Non-governmental organizations, state, NDMS (DMAT), regional, local, agency, hospital



Truman Medical Centers

POLICIES & PROCEDURES Logged in as: Matthew Gratton

eDraw Plug-in/Can't access project document?

Policies & Procedures

Advanced Search

Truman Medical Centers

- Corporate
  - Administrative
  - Anesthesia
  - Behavioral Health Acute Care
  - Behavioral Health Ambulatory Services
  - Clinical Research
  - Compliance
  - Facilities & Equipment
  - General Counsel
  - Health Information Management (HIM)
  - Human Resources
  - Infection Prevention & Control
  - Laboratory & Point of Care Testing
  - Medical Imaging
  - Medical Staff
  - Nursing
  - Occupational Health
  - Patient Care Services
  - Pharmacy
  - Practice Management
  - Safety & Emergency Management**
- Facility
- Department
- Scopes of Service
- Department Emergency Operations Plans
- Resources and Templates

Policies & Procedures Library

50 Page 1 of 1

Print Folder

	Policy Name	Next Review	Last Review
	Code Black - Bomb Threat	03/10/2019	03/10/2016
	Code Pink (Infant/Other Person Abduction)	05/07/2020	05/07/2017
	Code Silver - Active Shooter	03/28/2019	03/28/2016
	Confined Space	04/16/2020	04/16/2017
	Disaster Emergency Operations Responsibilities for Volunteers Who Are Not Licensed Independent Practitioners	05/13/2018	05/13/2015
	Disaster Privileges for Licensed Independent Practitioners and or Allied Health Professionals	03/09/2019	03/09/2016
	Emergency Operations Plan	04/13/2019	04/13/2016
	Emergency Operations Plan Annex B: Biological Emergency	04/15/2019	04/15/2016
	Emergency Operations Plan Annex C: Communications	04/15/2019	04/15/2016
	Emergency Operations Plan Annex D: Direction and Control	04/15/2019	04/15/2016



Ummmm....

- Should we teach this?
- Should we learn this?
- What should we teach?



# Verses What Actually Happens...

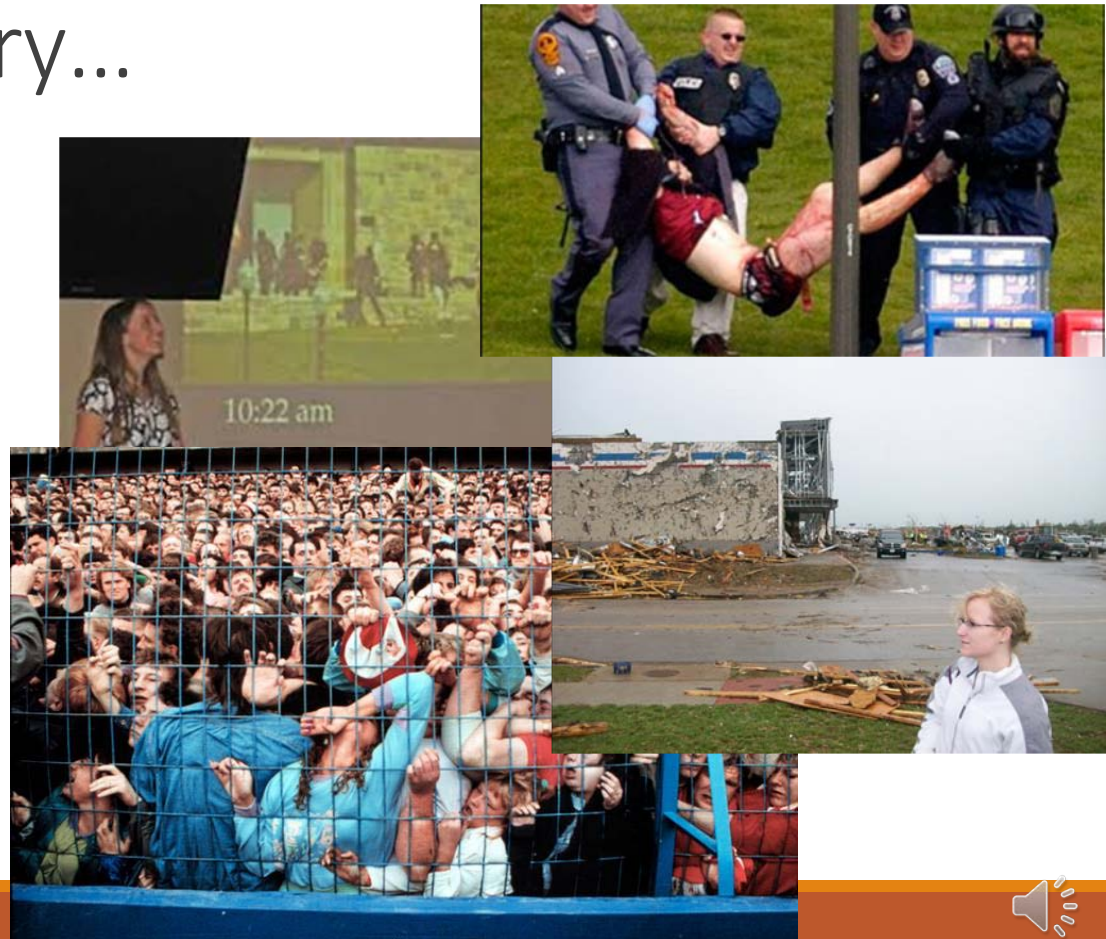


♥ Julia



# Let's Look at History...

- Hillsborough Stadium
- Hyatt Skywalk collapse
- Orlando, FL
- Las Vegas
- Virginia Tech
- Joplin tornado (graduations)



# And Train to Meet These Goals

- ICS Goals:
  - **Life safety, Incident stabilization, Property conservation**
- MCI Medical Management Goals:
  - Rapid **access** to the injured or ill
  - Rapid **triage, stabilization, and transport**
  - On-site care for minor injuries/illnesses
    - Preserve EMS/hospital function
- Did we use SALT/START, etc?
- What are we actually documenting??



# Post Event Reviews

- Responders likely suffer effects of stress
- Post-event operational **debriefing**
  - Identify areas for improvement, successes
- AAR (“lessons learned”)
  - Did it include EVERYONE?
- Guide future events and training...



## Based Off of History

- Prepare
- Plan
- **Practice/Train**
  - Simulation
  - MGs (football, baseball, hockey)
  - US&R, MoDRS
  - EMS/Disaster Fellowship



# Communicate: Hospitals/Communities



## Conclusion

- Acknowledge what actually happens
- Standardize c
- Acknowledge
- Acknowledge
- Plan, Train, a



actually  
masters

ly happens...

