
Planning and Implementing Mass Casualty Drills on College Campuses

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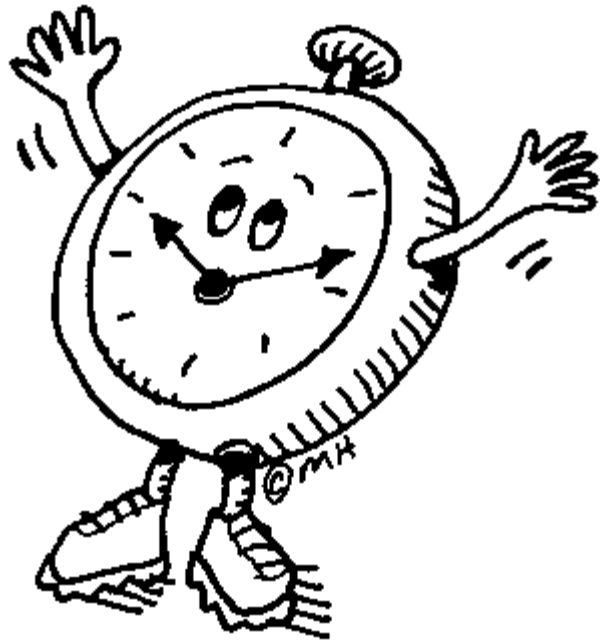
Triage and Mass-Casualty Incidents

- What exactly is “triage” anyways?
 - What are some recent advancements in triage methods and materials?
 - What is a “mass-casualty” incident?
 - How often do “real” mass-casualty incidents happen on college campuses nationwide? What about internationally?
 - How can college EMS providers better prepare for incidents involving multiple victims?
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Objectives

- Upon completion of this lesson, students will be able to:
 - Define the START and SMART triage methods and demonstrate their use in mass-casualty incidents
 - Explain how to utilize the Incident Command System defined by FEMA to handle emergency situations on college campuses
 - Identify the factors that make an event a true mass-casualty incident
 - Plan and conduct a mass-casualty drill on a college campus
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Triage



- “Triage” means “to sort”
 - Looks at medical needs and urgency of each individual patient – Aim for the “Platinum Ten Minutes” and the “Golden Hour”
 - Sorting based on limited data acquisition
 - Also must consider resource availability
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Triage

- Triage is a dynamic process
 - 30 seconds per patient
- Clear and assemble the walking wounded using verbal instructions
- Primary triage assesses respiration, perfusion, and mental status “RPM”
- Secondary triage is a more in-depth assessment usually conducted in the Treatment Unit – Tarps for each tag color



Triage 101

Immediate:



Life-threatening but treatable injuries requiring rapid medical attention

Delayed:



Potentially serious injuries, but are stable enough to wait a short while for medical treatment

Triage 101

Minimum:

Green

Minor injuries that can wait for longer period of time prior to treatment

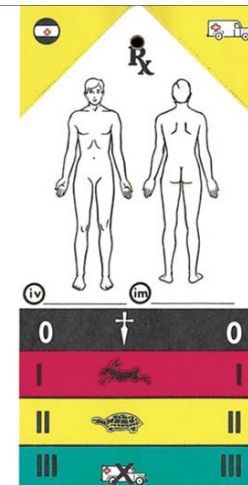
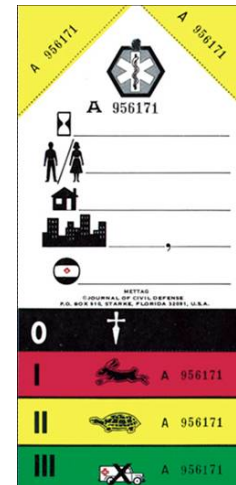
Expectant:

Black

Death or lack of spontaneous respirations after airway is opened

Triage Tags

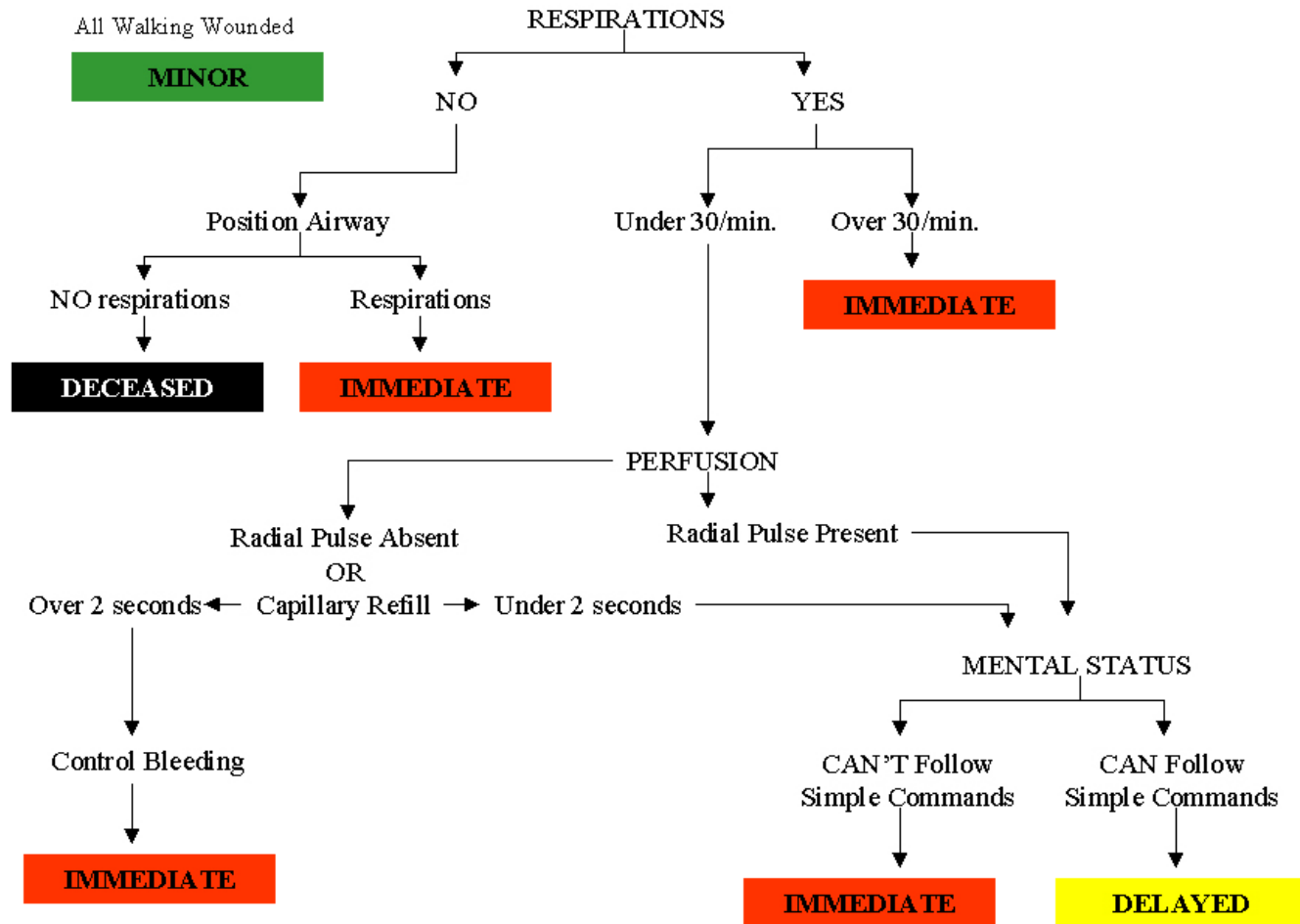
FRONT		BACK	
CONTAMINATED Personal Property Receipt/Evidence Tag: 55555 Destination: 55555 Via: 55555 TRIAGE TAG Gross Decon: <input type="checkbox"/> Yes <input type="checkbox"/> No Secondary Decon: <input type="checkbox"/> Yes <input type="checkbox"/> No Solution: _____ Wound Trauma: _____ Burn: _____ Chemical: _____ Crushing: _____ Fracture: _____ Laceration: _____ Penetrating Injury: _____ Other: _____ VITAL SIGNS Time: _____ BP: _____ Pulse: _____ Respiration: _____ Time: _____ Drug/Solution: _____ Dose: _____ MORGUE Pathless/Non-Evaluating: 55555 IMMEDIATE Life Threatening Injury: 55555 DELAYED Serious, Not Life Threatening: 55555 MINOR Walking/Wounded: 55555 CONTAMINATED		CONTAMINATED Comments/Information: TRIAGE FLOW CHART ALL PATIENTS REGISTERED (Flowchart diagram showing triage process from registration to treatment based on vital signs and injury type) RESPIRATIONS R <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Oriented PERFUSION P <input type="checkbox"/> +2 Sec <input type="checkbox"/> -2 Sec <input type="checkbox"/> Disoriented MENTAL STATUS M <input type="checkbox"/> Can Do <input type="checkbox"/> Can't Do <input type="checkbox"/> Unconscious PERSONAL INFORMATION NAME: _____ ADDRESS: _____ CITY: _____ ST: _____ ZIP: _____ PHONE: _____ COMMENTS: _____ MORGUE IMMEDIATE DELAYED MINOR CONTAMINATED	



Triage Methods

- START – Simple Triage and Rapid Transport
 - Based on the RPM and Jump START Pediatric Models
 - SMART – Combines Triage with elements of ICS and Hazardous Materials Operations
 - Developed in Great Britain
 - Streamlined approach quick and effective
 - Includes **Secondary Triage**
 - Goal of triage – the greatest good for the greatest number of patients
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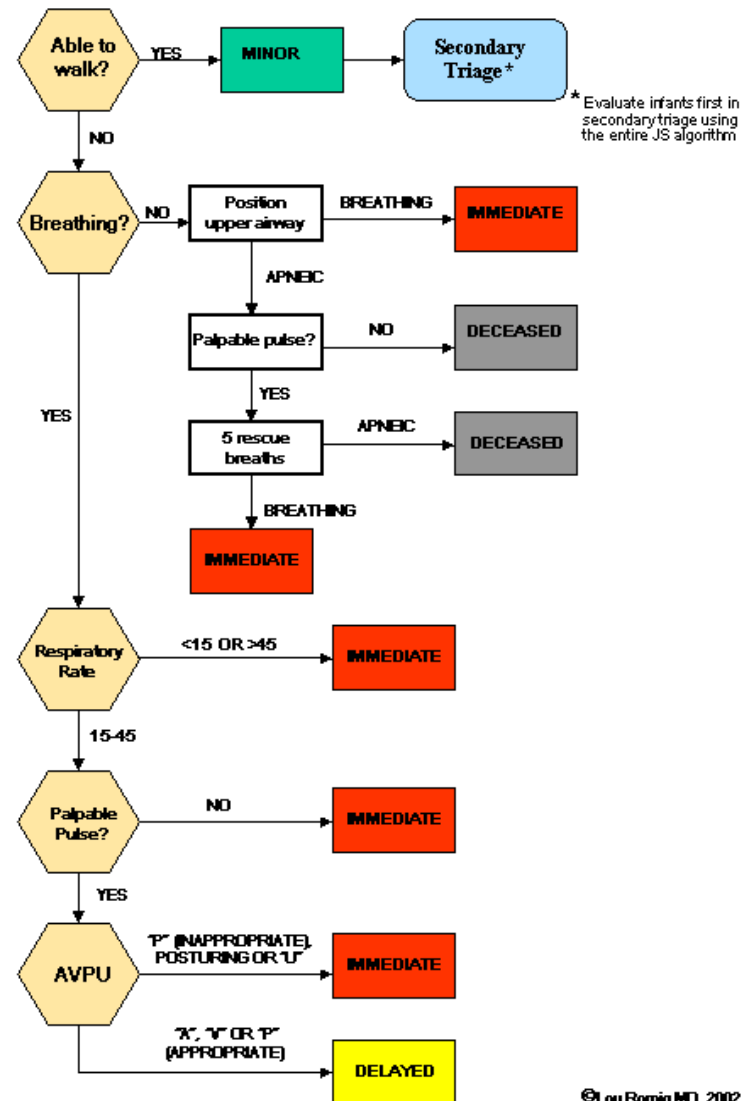
START Triage



Jump START



JumpSTART Pediatric MCI Triage®

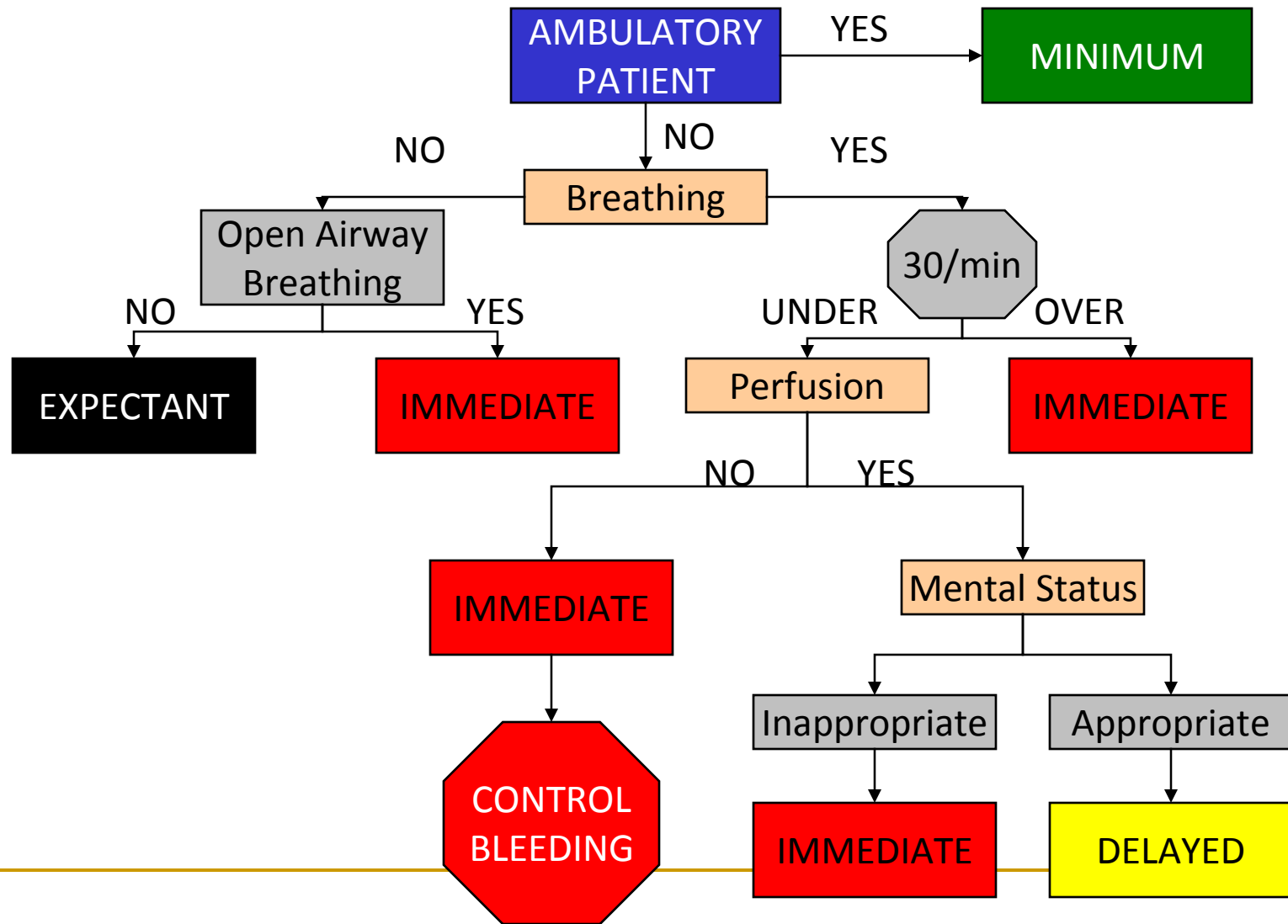


SMART Triage System



- A New Method of Triage
 - Modular Incident Command and Triage Kits
 - SMART Tape for Pediatric Triage
 - Primary and Secondary Triage Cards
 - Contamination Tags for Hazardous Materials
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SMART Triage



Utilizing SMART Triage During an MCI

- Collegiate EMS – First responders on scene
 - Unique role with local knowledge coupled with quick response
- Establish Command Using the NIMS ICS (Do Not Be Afraid!)
- Secure the Scene
- Begin Triage
 - Primary triage done on all patients
 - Move walking wounded and more critical patients to appropriate treatment areas
 - Communicate resource requirements with responding agencies (If they do not know what you need, you will not get it!)
 - Secondary Triage once all patients moved to treatment area!
 - Looking for change in condition (color)



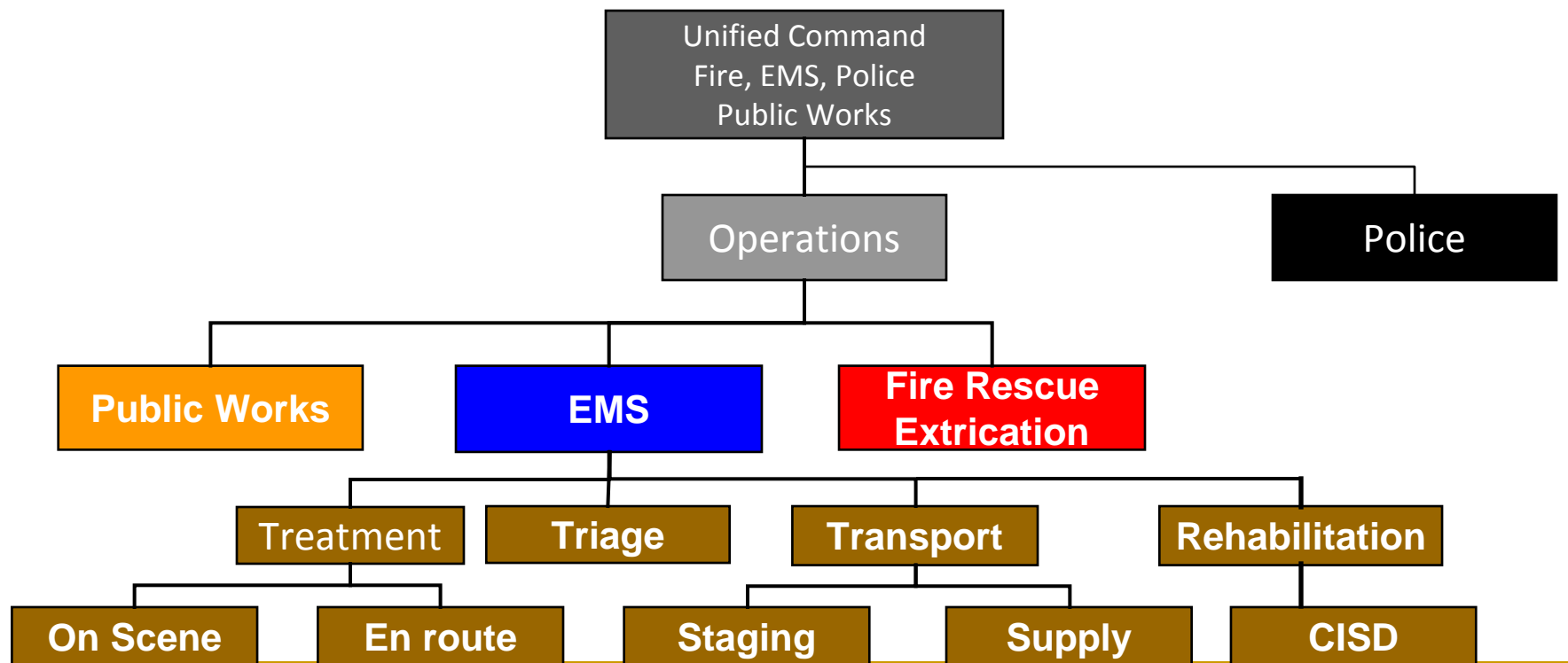
The Incident Command System – What To Remember from All Those NIMS Classes...

- The Incident Command System, or ICS, is a standardized, on scene, all-hazard management concept
 - The ICS is flexible and can grow or shrink to meet the needs of the incident
 - The ICS has a top-down organizational structure which begins when the first responder on the scene becomes the first Incident Commander and expands as necessary
 - The EMS Branch of ICS involves the designation and coordination of elements such as triage, treatment, transport, staging, rehab, and CISD
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The Incident Command System

- Singular Command
 - One person coordinates the incident.
 - Most useful in smaller, single-jurisdictional incidents.
 - Unified Command
 - Officers from different jurisdictions share command.
 - Fire, EMS, Police, Public Works
-

Unified Command



Triage Practice!

- Triage the patients on your handout using the principles of START, SMART, and Jump START



Mass-Casualty Incidents

- No “textbook” definition can truly define an MCI
 - Any event which stretches responders and their resources in treating multiple patients should be considered an MCI – 3 patients or hundreds!
 - College campuses are unique
 - Fewer initial responders to potentially large incidents
 - Resources limited compared to public entities
 - Presents an opportunity for college EMS providers to prove their worth
 - Value of collegiate EMS services is their ability to respond quickly with “local” knowledge of campus and personnel
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- By the previous definition, responders should be prepared for MCI's to occur at any time on campus
- How should your agency prepare?
- Plan and execute an MCI drill to replicate the “real thing”



So We Want to Plan an MCI Drill...

But Where Do We Start?

- Approval by the school's administration and campus/facilities management
 - Type of Drill – The Possibilities Are Endless!
 - Motor Vehicle Accident
 - Stadium/Coliseum Incident
 - Dormitories
 - Academic Buildings
 - Maintenance Areas
 - Ex: Wake Forest Tunnels – Confined Space Rescue
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Motor Vehicle Accident MCI Drill

Wake Forest University, November 2008





So We Want to Plan an MCI Drill...

But Where Do We Start?

- Determine the Drill Location
 - Allocate personnel and resources based on size of drill
 - Table-Top Exercise
 - Estimated timetable and patient locations/types to replicate actual drill
 - Only conducted by drill's planners to maintain element of "surprise" for responders
 - Recruit volunteers for patients
 - Plan patient injuries/conditions beforehand (Moulage)
 - Enlist help of outside agencies (Police, Fire, EMS) to maintain realism of the drill
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So We Want to Plan an MCI Drill...

But Where Do We Start?



- Contact campus and local news agencies well beforehand so that they can cover the event
 - Remember to photograph and video the drill for debriefing purposes
 - Start small, but dream big for future drills
 - Aim to execute at least one drill per semester
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Location, Location, Location

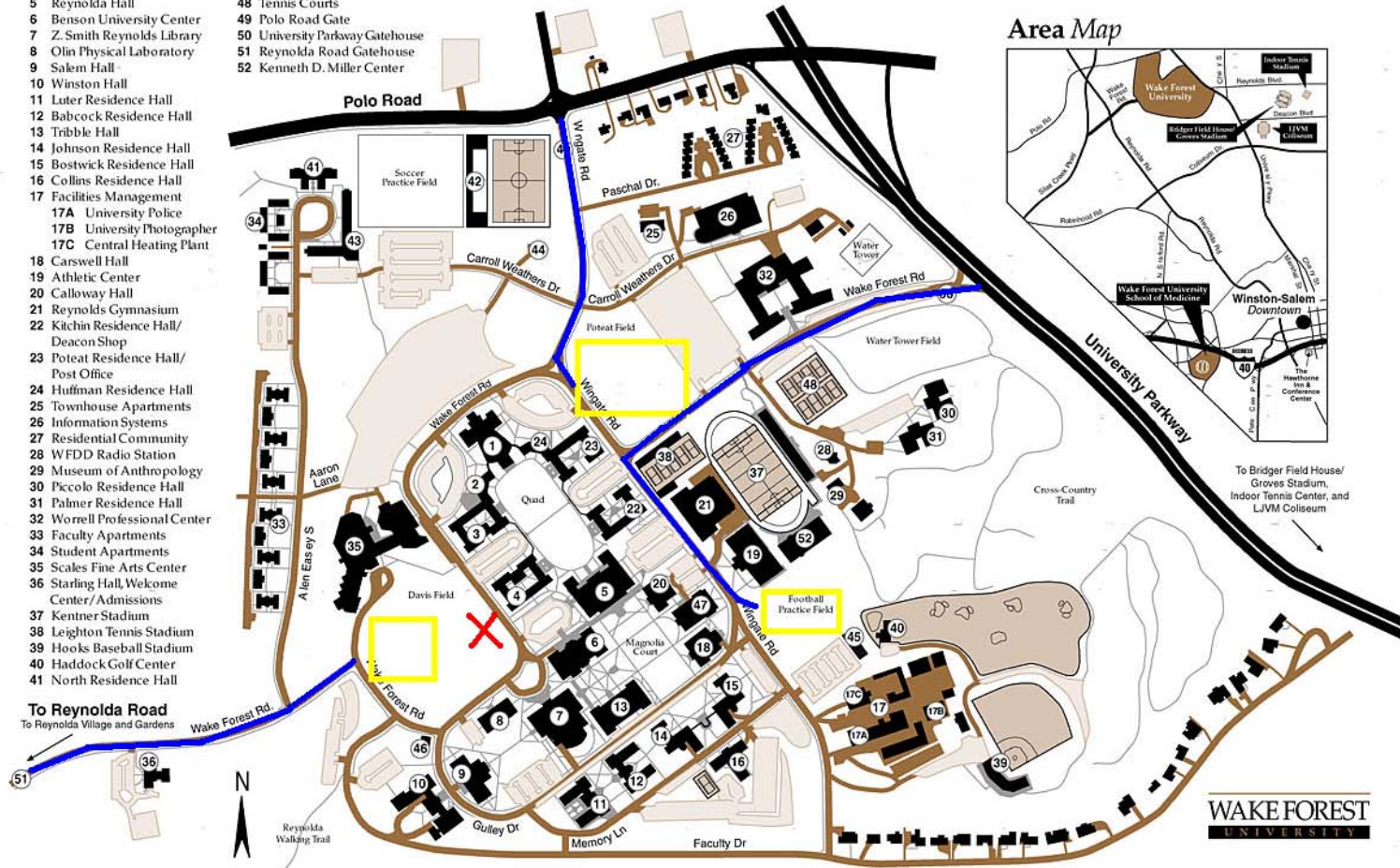
- One of the most important aspects of any drill
 - Consider:
 - ❑ Central location for maximum exposure and realism
 - ❑ Traffic flow for incoming police, fire, and EMS units – utilize campus PD
 - ❑ 100'x100' Landing Zones for helicopters for most critical patients
 - ❑ Perimeter to surround scene and provide crowd control and safety
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Map Legend

- | | |
|--|---------------------------------|
| 1 Wait Chapel/Wingate Hall | 42 Spry Soccer Stadium |
| 2 Efrid Residence Hall | 43 Polo Residence Hall |
| 3 Taylor Residence Hall/Bookstore | 44,45,46 Chiller Plants |
| 4 Davis Residence Hall | 47 Greene Hall |
| 5 Reynolda Hall | 48 Tennis Courts |
| 6 Benson University Center | 49 Polo Road Gate |
| 7 Z. Smith Reynolds Library | 50 University Parkway Gatehouse |
| 8 Olin Physical Laboratory | 51 Reynolda Road Gatehouse |
| 9 Salem Hall | 52 Kenneth D. Miller Center |
| 10 Winston Hall | |
| 11 Luter Residence Hall | |
| 12 Babcock Residence Hall | |
| 13 Tribble Hall | |
| 14 Johnson Residence Hall | |
| 15 Bostwick Residence Hall | |
| 16 Collins Residence Hall | |
| 17 Facilities Management | |
| 17A University Police | |
| 17B University Photographer | |
| 17C Central Heating Plant | |
| 18 Carswell Hall | |
| 19 Athletic Center | |
| 20 Calloway Hall | |
| 21 Reynolds Gymnasium | |
| 22 Kitchin Residence Hall/
Deacon Shop | |
| 23 Poteat Residence Hall/
Post Office | |
| 24 Huffman Residence Hall | |
| 25 Townhouse Apartments | |
| 26 Information Systems | |
| 27 Residential Community | |
| 28 WFDD Radio Station | |
| 29 Museum of Anthropology | |
| 30 Piccolo Residence Hall | |
| 31 Palmer Residence Hall | |
| 32 Worrell Professional Center | |
| 33 Faculty Apartments | |
| 34 Student Apartments | |
| 35 Scales Fine Arts Center | |
| 36 Starling Hall, Welcome
Center/Admissions | |
| 37 Kentner Stadium | |
| 38 Leighton Tennis Stadium | |
| 39 Hooks Baseball Stadium | |
| 40 Haddock Golf Center | |
| 41 North Residence Hall | |

Wake Forest University

Reynolda Campus Map



Executing the Drill

- Set up the scene
- Moulage and place patients
- Dispatch responding units like an actual call
- Have outside agencies stage in staging areas
- Utilize SMART to triage patients
- Stabilize and move patients to treatment area
- Conduct secondary triage
- “Transport” patients according to priority



Debrief!

- Arguably the most critical element of any drill
 - What have we learned from the drill?
 - What did we do right?
 - Where can we improve?
 - How can we plan future training based on what we have learned?
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Questions or Comments?

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