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?
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
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
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: Red
Life-threatening but treatable injuries requiring rapid medical attention

Delayed: Yellow
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
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
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
SMART Triage

1. **Ambulatory Patient**: Check breathing.
   - **Yes**: MINIMUM
   - **No**: Proceed to next step.

2. **Breathing**: Check
   - **Open Airway, Breathing**: NO or YES
     - NO: EXPECTANT
     - YES: Proceed to next step.

3. **30/min**
   - **Under**: IMEDIATE
     - **No**: Proceed to next step.
   - **Over**: IMEDIATE
     - **Yes**: Proceed to next step.

4. **Perfusion**: Check mental status.
   - **Inappropriate**: IMEDIATE
   - **Appropriate**: DELAYED

5. **Mental Status**: Check
   - **Yes**: IMMEDIATE
   - **No**: CONTROL BLEEDING

6. **CONTROL BLEEDING**: Check
   - **Inappropriate**: IMMEDIATE
   - **Appropriate**: DELAYED
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.
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

Unified Command
Fire, EMS, Police
Public Works

Operations

Public Works
EMS
Fire Rescue Extrication

Treatment
Triage
Transport
Rehabilitation

On Scene
En route
Staging
Supply
CISD

Police
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
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
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
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
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
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?
Questions or Comments?

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