Virginia Mass Casualty Incident Management
Module I
Awareness Level

Developed by the
Virginia State EMS Advisory Board
EMS Emergency Management Committee

Version: 2011
INTRODUCTIONS

- Welcome
  - Exit
  - Bathrooms
  - Smoking/Vending

- Instructor Introduction

- Student Introduction
Upon completion of this course students will be able to:

- Define Mass Casualty Incident
- List the three goals of mass casualty incident management
- Describe initial response actions and medical management to mass casualty incidents
COURSE OBJECTIVES (cont.)

- Upon completion of this course students will be able to:
  - Triage simulated patients correctly using START algorithm
  - Understand the critical need for casualty accountability
  - Review Virginia Triage Tags
An Introduction...

- Recognize there are multiple triage methods
- S.T.A.R.T. is the Virginia Recognized Standard
- Course is designed to teach basic S.T.A.R.T. concepts
Course Information

- MCIM provides a small snapshot of National Incident Management System

- This course teaches only one component of ICS. The following courses provide information on the overall system

- Additional Trainings are available
  - ICS 100, 200, 700, 800

- http://training.fema.gov/IS/
MASS CASUALTY INCIDENT

- Virginia’s geographic location, areas of dense population, major transportation routes and unique hazards provide the potential for incidents to occur which could result in significant number of casualties, overwhelming available resources.
MCI vs. DISASTER

- Some people call these types of incidents disasters
- Disaster has specific legal meaning
  - States & localities declare “state of emergency”
  - The President declares “major disaster”
TYPES OF INCIDENTS

Natural Disasters

Technical Hazards

Criminal/Terrorist

Civil Disobedience

Transportation

Mass Gatherings
MCI – MASS CASUALTY INCIDENT

- Any incident that injures enough people to overwhelm resources usually available in a particular system or area
GOALS OF MCIM

- Do the Greatest Good for the Greatest Number
- Manage scarce resources
- Do not relocate the disaster
GREATEST GOOD

- Heroic resuscitative efforts **NOT** appropriate
  - Too much time
  - Takes equipment from salvageable patients
  - Staffing intensive

- Concentrate on salvageable patients

**Do the Greatest Good for the Greatest Number**
RESOURCE DEMANDS

- Equipment
- Responding Personnel
- Facilities
DO NOT RELOCATE THE DISASTER!

- Patient prioritization at the scene important for casualty distribution
  - Don’t send all the patients to one hospital!
  - Remember the impact of those patients who have self-transported to the hospitals
EMS INITIAL ROLES AND RESPONSIBILITIES

- EMS is a specific component of overall incident management system
FIRST ON SCENE

- First responding emergency unit is by default **Incident Command** until relieved

- Must take first steps toward a successful solution to the problem
FIRST ARRIVING UNIT

- Begin the following actions:

5 S's
SAFETY ASSESSMENT

- Assess scene for safety
SCENE SIZE-UP

- How big is incident and how bad is it?
  - Type of incident
  - Approximate number of patients
  - Severity and types of injuries
  - Area involved, focusing on access to the scene
SEND INFORMATION

- Report Situation
- Request Additional Resources
- Ensure Immediate Hospital Notification
- Notify Medical Examiner if necessary
SET UP

- Incident Command Structure
  - Workspace

- Staging

- Secure Access/Egress

- Secure Adequate Space
  - Triage
  - Treatment
  - Transportation
Simple Triage and Rapid Treatment

Assures rapid initial assessment of all patients as basis for assignment to treatment

Triage - French for “to sort”
PURPOSE OF TRIAGE

- Assigns treatment priorities
- Separates victims into easily identifiable groups
PURPOSE OF TRIAGE (cont.)

- Determines required resources
  - Treatment
  - Transportation
  - Definitive care

- Prioritization of patient distribution and transportation
BENEFITS OF TRIAGE

- Identifies salvageable patients
- Provides rational distribution of casualties
PROBLEMS WITH OTHER TRIAGE SYSTEMS

- Rely on specific injuries and assessment findings

- In-depth assessment requires too much time
IDEAL TRIAGE SYSTEMS

- Simple
- Easy to perform
- Easy to teach and learn
- Provide for rapid and simple life-saving interventions
- Does not require a specific diagnosis
- Part of an ongoing process
SIMPLE TRIAGE AND RAPID TREATMENT (START) SYSTEM

- Triage ribbons
  - Surveyors tape may be used to make ribbons
- Universal colors are used
Immediate (highest priority).

Problems with:
- R – Respirations/airway
- P – Perfusion
- M – Mental Status
- Severe burns which compromise airway
Delayed (second priority)

- No significant problems to:
  - R - respiration
  - P - perfusion
  - M – mental status

- Burn patients without airway problems

- Able to follow commands, but unable to self-relocate to pre-designated GREEN area
- Minor (third priority)
  - “Walking wounded”
  - Able to self-relocate to predesignated GREEN area
Dead/non-salvageable (lowest priority)

- Non-breathing patients
  - Resuscitation would normally be attempted
  - Not salvageable given resources available early in MCI response
INTRODUCTION TO S.T.A.R.T. PROCESS

- Begin where you stand
- Identify those injured who can walk
- Send them to an easily recognized place
- Ensure patients are supervised at ALL times
MOVE IN ORDERLY MANNER

- Assess each casualty you come to
- Mark priority using triage ribbons
MAINTAIN COUNT

- Maintain a count of casualties
MINIMAL TREATMENT

- Only three life-saving interventions are:
  - Open the airway
  - Stop gross bleeding

- Safe patient positioning
  - Shock position
  - Recovery position
KEEP MOVING
RELOCATE GREEN

- To a designated area
  - Away from immediate danger
  - Outside initial triage area

- Tape each as GREEN patient
STEPS IN START/JUMPSTART ASSESSMENT

- Step 1 - Moving Green patients to supervised area
  - *Already done*
STEP 2 - RESPIRATION

RESPIRATIONS

NO

Open Airway

Breathing?

NO

BLACK

YES

Red (Immediate)

YES

> 30

Red (Immediate)

< 30

Next Assessment
STEP 3 - PERFUSION

- Stop major bleeding
- Safe patient positioning
STEP 4 - MENTAL STATUS

MENTAL STATUS

FAILS

FOLLOWS COMMANDS

YELLOW (Delayed)
All Walking Wounded

MINOR

RESPIRATIONS

NO

Position Airway

NO Respirations

NO

IMMEDIATE

DECEASED

Respirations

YES

Under 30/min

PERFUSION

Radial Pulse Absent or Cap Refill > 2 secs

Control Bleeding

IMMEDIATE

Can't Follow Simple Commands

IMMEDIATE

Radial Pulse Present or Cap Refill < 2 secs

Mental Status

Can Follow Simple Commands

IMMEDIATE

DELAYED

Over 30/min

IMMEDIATE
Breathing

- Yes
  - Respiratory Rate
    - < 15 or > 45
      - IMMEDIATE
      - Palpable Pulse
        - YES
          - AVPU
            - "P" (INAPPROPRIATE), POSTURING, OR "U" (APPROPRIATE)
              - IMMEDIATE
              - DELAYED
        - NO
          - DECEASED
          - 5 rescue breaths
      - IMMEDIATE
      - Palpable Pulse
        - YES
          - AVPU
            - "A", "V", OR "P" (APPROPRIATE)
              - IMMEDIATE
              - DELAYED
        - NO
          - DECEASED
          - IMMEDIATE
  - No
    - Position Upper Airway
      - APNEIC
      - BREATHING

*evaluate infants first in secondary triage using the entire JumpStart algorithm

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CONTINUOUS TRIAGE PROCESS

- Secondary Triage is an in-depth reassessment based on clinical experience and judgment.

- On-going process

- Can be done
  - Prior to placement in treatment area
  - In treatment area
  - On way to hospital
VIRGINIA TRIAGE TAG

- White, weather resistant material
- Designed for use with ball point pen
CAPABILITIES

- Multiple triage assessments of patient
- Continuous patient information recording
- Continuous patient accountability and tracking
- Designed for easy interface with patient hospital records
FORMAT - FRONT

- Patient Information section
  - Information not always obtainable

- Can be added throughout triage, treatment, transportation, & hospital reception phases
## TRIAGE STATUS SECTION

- **INITIAL** - START assessment
- **SECONDARY** - reassessment at scene or in treatment area
- **BLANK** - used in treatment area or during transportation
- **HOSPITAL** - initial reassessment receiving hospital

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CHIEF COMPLAIN SECTION

- Major obvious injuries or illnesses circled
- Indicate injuries on human figure

- Additional information added on Comments line
TRANSPORTATION LINE

- Transporting unit notes
  - Agency information
  - Destination facility
  - Time patient actually arrived
PULL-OFF LABEL SECTION

- “Treatment” - document on patient information worksheets
- “Hospital” - tie the triage tag & scene patient number to patient’s hospital records

- “Other” labels can be used for:
  - Other tactical worksheet needs on scene
  - Marking personal effects
  - Use within hospital
TRANSPORTATION RECORD SECTION

- Detachable by tear-off or as pull-off label

- Document patients transported to hospital or other facility

- Can be fixed to transportation tactical worksheet
  - Mark facility destination
Vital Signs: three sets of vital signs

Medical History: can be obtained from Medic Alert devices

Treatment: additional treatments and remarks

- Time treatment actions taken & provider initials
Incidents of any kind have potential to overwhelm EMS system personnel, equipment, resources, and medical facilities.

Preparation and preplanning improve efficiency in all elements of patient management at mass casualty incidents.
ALWAYS REMEMBER

Do the Greatest Good
For the Greatest Number
ANY QUESTIONS?

APPLAUSE