INTRODUCTION

- Welcome
  - Exit
  - Bathrooms
  - Smoking/Vending

- Instructor Introduction

- Student Introduction
OBJECTIVES

- Upon completion of this course students will be able to:
  - Relate 5-Ss to Medical Branch and Medical Group operations
  - Identify medical roles in the incident management structure
  - Describe the key roles in the Medical Branch and Medical Group
OBJECTIVES (cont.)

- Describe the organization of the Medical Group

- Describe basic responsibilities, tools, and tactics for Medical Branch positions

- Identify the difference between the Medical Branch and Medical Group

- Identify the focus of Triage, Treatment and Transportation Units

- Perform duties in the Medical Group
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/](http://training.fema.gov/IS/)
What Makes a Mass Casualty?
MASS CASUALTY INCIDENTS

- Generates a large number of injured
- Exceeds system capacity
- Can’t use normal procedures
- Overloads resources
WHAT MASS CASUALTY INCIDENTS DO:

- Force organizational changes
- Task and responsibility sharing
- New responders
- Cross jurisdictional boundaries
- Create new tasks
- Normal facilities or tools unusable
- New organizations emerge
LESSONS LEARNED

- Inadequate alerting of hospitals
- Lack of primary stabilization
- Failure to effectively handle patient collection
- Ineffective triage
- Time consuming care methods
- Premature transportation
LESSONS LEARNED (cont.)

- Improper use of field personnel
- No recognizable command
- No preplanning
- Communications overload, lack of interoperability

- Failure to establish & control staging
- No rescuer accountability
- Lack of ongoing training
GOALS OF MCI MANAGEMENT

- Do the greatest good for greatest number!
- Manage scarce resources!
- Don’t relocate the disaster!
MCI PRIORITIES

- Life Safety
  - Victim & Personnel safety
  - Accountability
  - Welfare

- Incident Stabilization

- Property Conservation
IDENTIFYING THE NEED EXERCISE

Using the Five Ss
THE 5-S STEPS

1. **SAFETY**
2. **SCENE SIZE-UP**
3. **SEND INFORMATION**
4. **SET-UP**
5. **START/JumpSTART**
A DARK AND STORMY NIGHT

- You respond to a traffic collision on River Road (2-lane road). On arrival you see:
  - A van partly crushed by a tractor trailer
  - No flares are out - 7 cars have stopped
  - 2 other cars are involved in the crash
  - 5 passengers are out of the cars - all injured
  - You can see at least 4 others trapped
  - Tractor trailer driver is covered in blood
A DARK AND STORMY NIGHT

- What are your first thoughts?
- What actions do you take?
- What additional resources might you need?
THE 5-S STEPS

1. SAFETY
2. SCENE SIZE-UP
3. SEND INFORMATION
4. SET-UP
5. START/JumpSTART
SIMPLE TRIAGE AND RAPID TREATMENT (START)
START - STANDARD COLOR CODES

- RED
- YELLOW
- GREEN
- BLACK

Colors are standard throughout the system.
START – STANDARD PROCEDURES

- Start where you stand
- Maintain an accurate count
- Triage everyone
- Minimize treatment
- Keep moving
- Report results quickly
**START**

**MINOR**

**NO**

- Position Airway
  - **NO**
    - Respirations
      - **DECEASED**
      - **IMMEDIATE**
  - **Respirations**
    - **IMMEDIATE**

**YES**

- Under 30/min
  - **PERFUSION?**
    - Radial Pulse
      - Absent or Cap
        - Refill > 2 secs
        - **CONTROL BLEDING**
          - **IMMEDIATE**
      - Present or Cap
        - Refill < 2 secs
        - **MENTAL STATUS?**
          - Can’t Follow Simple Commands
            - **IMMEDIATE**
          - Can Follow Simple Commands
            - **DELAYED**

- Over 30/min
  - **IMMEDIATE**
*evaluate infants first in secondary triage using the entire JumpStart algorithm
SECONDARY TRIAGE

- In depth reassessment based on clinical experience and judgment
  - Conducted prior to placement in appropriate treatment area
  - Should be conducted by medically trained personnel
  - Smaller incidents may allow for a more in-depth secondary triage
- Triage Tag should be placed during Secondary triage
SECONDARY TRIAGE

IMMEDIATE – RED Tagged

- Life threatening injuries/illness
- Risk of asphyxiation or shock is present or imminent
- High probability of survival if treated & transported immediately
SECONDARY TRIAGE

DELAYED – YELLOW Tagged

- May include, but not limited to:
  - Burn patients without airway problems
  - Major or multiple bone or joint injuries
  - Back and spine injuries
  - Bleeding that is controlled
SECONDARY TRIAGE

MINOR – GREEN Tagged

- Non life-threatening injuries/illnesses
  - Injuries requiring simple bandaging

- Patients who require a minimal level of care

- May require no medical care
  - Consider “worried well”
SECONDARY TRIAGE

DECEASED/NONSALVAGEABLE – BLACK

Tagged

- Unresponsive, apneic, and pulseless
- Died en-route to the Treatment Area or while in Treatment Area, awaiting transport
Incident Command System

ICS
COMMON APPROACH

- One Incident Commander
  - Accommodates unified command
  - One COMMAND on radio

- One Command Post

- Organization expands as needed
COMMON APPROACH (cont.)

- All necessary responsibilities must be managed
- Common terminology
- Addresses span of control
  - Range is 3-7 (5 ideal)
- Reduces communication load
STEPS IN ESTABLISHING COMMAND

- Initially established by first on-scene unit
- Assume command
  - Over the radio, announce you have command
- Begin 5-Ss
- Control communications
- Identify what has to be done
INCIDENT COMMANDER – RESPONSIBILITIES

- Assess the situation
  - Use the 5 S’s
- Establish immediate priorities
- Determine incident strategies and tactics
- Establish an Incident Command Post (ICP)
- Determine the appropriate command structure
- Develops Incident Action Plan (IAP)
- Assume responsibility of any positions not assigned
HANDED OVER COMMAND

- Face-to-face
HANDING OVER COMMAND

- Good Briefing
  - Situation
  - Resources on scene
  - Actions taken
  - Resources responding

- Formal acknowledgement
  - Done over the radio
UNIFIED COMMAND

- A method for all agencies or individuals who have jurisdictional responsibility, and in some cases those who have functional responsibility at the incident, to contribute to:
  - Determining overall objectives for incident
  - Selection of a strategy to achieve the objectives

Source: National Interagency Incident Management System; Incident Command System
Incident Commander may receive input in establishing overall strategy from other agencies/jurisdictions involved in the incident.
You respond to a night-time fire in an apartment complex. You are first in on the medic unit. Engine 37 is 5 minutes out. You see:

- 3 story apartment fully involved
- At least 40 injured - jumpers, burns, etc.
- Embers on roofs of 2 other buildings
- Spectators milling about
FIRE AT HEATHS APARTMENTS

- What is your first priority?

- Who is in charge? What do you do?

- What steps do you take to initiate development of strategies and tactics for initial stabilization?
COMMAND STAFF
OPERATIONS SECTION
RESPONSIBILITIES

- Management and execution of all tactical actions at the incident

- Normally the first section to be staffed

- Medical Branch/Group operations fall under the Operations Section
LOGISTICS SECTION
RESPONSIBILITIES

- Providing facilities, services, and materials for the incident
- Coordinate and process requests for additional resources
- Rehab and onsite personnel care fall within the Logistics Section
PLANS SECTION
RESPONSIBILITIES

- Collection, evaluation, dissemination, and use of information about the development of the incident and the status of resources

- Receives and analyzes ICS Unit Logs
FINANCE/ADMINISTRATION SECTION RESPONSIBILITIES

- Manage all financial, administrative, and cost analysis aspects of the incident
- Ensure that all personnel time records are completed accurately
- Track personnel injury and liability issues
BELOW THE OPERATIONS SECTION

- BRANCHES
- GROUPS
- DIVISIONS
- UNITS
- AREA
POSITION TITLES

- Incident Commander: Command
- Officer: Command Staff
- Chief: Sections
- Director: Branches
- Supervisor: Group/Division
- Leader: Unit
- Manager: Area
MEDICAL GROUP/
MEDICAL BRANCH
WHICH LEVEL DO YOU CHOOSE?

- When an incident requires establishing multiple Medical Groups, a Medical Branch may be necessary.

- The Medical Branch Director is in charge of the Medical Branch.
FORMING A MEDICAL BRANCH

Operations
Section Chief

Medical Branch
Director

Medical Group
Supervisor
Medical Group
Supervisor
Medical Group
Supervisor
MEDICAL GROUP SUPERVISOR RESPONSIBILITIES
SPECIFIC RESPONSIBILITIES

- Implements assigned objectives
- Participates in Medical Group/Operations Section
- Establishes Medical Group with assigned personnel
- Designates Unit Leaders
- Creates appropriate treatment and morgue areas
- Requests law enforcement/medical examiner
- Establish communication with other sections
- Ensure activation of hospital alert system
- Directs on-scene personnel from support agencies
- Ensures proper security, traffic control, and access (ingress and egress)
- Directs medically trained personnel to appropriate Unit Leader
- Maintains incident documentation
PRIORITIZE

- What do I have to do?
- What order do I have to do things in?
- What things will cause it to grind to a halt unless they get done or get done in a certain order?
FORMULATE TACTICAL DECISIONS

- What strategies and tactics fall under the responsibility of Medical Group?

- How will the Medical Group meet the expectations of the Incident Action Plan (IAP)?
ASSIGN PRIORITIES

- Make assignments based on Incident Action Plan (IAP)
- Maintain resource integrity
- Assign units based on resource capabilities
EVALUATE PROGRESS

- Monitor progress
  - What measurements do you use for evaluation?

- Progress should meet the Incident Action Plan

- Provide feedback to appropriate personnel
INTERVENE

- If progress is not being made
  - Determine cause
  - Redirect resources as necessary

- May need to stop associated activities to reevaluate

- May involve
  - Determining new tactics
  - Sending more resources
REASSIGN RESOURCES

- Reassignment may occur once:
  - A resource completes a task
  - A tactic has changed

- Remember to rehab workers before they are sent to the next objective
COORDINATE

- Ensure all resources work together
- Ensure efforts are not being duplicated by other Branches or Sections
COMMUNICATE

- Maintain communication with appropriate personnel to give and receive updates and changes (vertical communication)

- Maintain communication with other sections/branches to coordinate response efforts (horizontal)
SAFETY/ACCOUNTABILITY

- All personnel responsible for safety
- Work with Safety Officer to ensure that operations are conducted in a safe manner
- Maintain accountability of Medical Group personnel
  - If no accountability system, what do you do?
HEATHS APARTMENT FIRE

- Resources are arriving to assist with response. The following personnel have arrived:
  - Medic 8, 10, 12, 13 (1 ALS, 1 BLS provider each)
  - Ambulance 1, 5, 9 (2 BLS providers each)
- There are currently 50 known patients
- What needs to be done to care for these patients?
MEDICAL GROUP FUNCTIONS
TRIAGE UNIT
TRIAGE DECISION

- Is it safe to triage on scene?
  - Who does triage – where & when?

- Triage in Hazardous Materials Incidents?
  - How do you maintain your safety and triage at the same time?
TRIAGE UNIT LEADER RESPONSIBILITIES

- Triage of patients
- Determines initial triage area
- Determines resources necessary to triage
- Communicates resources to Medical Branch Director (if established)
- Develops triage organization sufficient to handle event
- Ensures safety, security, and accountability of all members
- Ensures efficacy of triage operations
- Provides frequent progress reports
- Ensures maintenance of accurate patient count
- Coordinates movement from triage to treatment area
- Establishes Morgue Operations if needed
- Maintains incident documentation
TRIAGE UNIT LEADER CONSIDERATIONS

- Establish triage teams
- Utilize porter teams at the appropriate time
- Stay ahead of resource problem
- Monitor patient flow
TRIAGE TEAMS

Triage Team 1

Triage Team 2
PORTERING

- Porters

Move Feet First
FATALITY MANAGER

- Coordinates with medical examiner and law enforcement
- Identifies areas for morgue
- Ensures completion of all documentation
- Keeps identity of deceased confidential
- Maintains appropriate documentation
THE BLEACHER COLLAPSE

- You arrive on scene and are immediately assigned as Triage Unit Leader.

- Bleachers have collapsed in a high school gym - there are 400+ injured

- Some are trapped

- At least 250 have escaped/been rescued and are on gym floor

- 100 spectators are available to help
THE BLEACHER COLLAPSE

- What are your priorities as Triage Unit Leader?
- Where do you set up?
- What do you do with bystanders?
- Who do you talk to in the ICS structure?
TREATMENT UNIT
TREATMENT UNIT LEADER

- Establishes area for treatment operations
  - Uphill and upwind
  - Appropriate for weather conditions
  - Sufficient Space
  - Unimpeded access and egress

- Ensure appropriate resources
  - Communications
  - Personnel
  - Treatment area leaders
  - Equipment
TREATMENT UNIT LEADER (cont.)

- Establish Treatment Areas/Leadership positions
- Ensures patients received in the treatment area are
  - Separated by color
  - Reassessed and re-triaged
  - Receive prompt and efficient treatment
- Ensure appropriate application of Triage Tag
- Establishes communication and coordination
- Ensures maintenance of accurate patient count

- Coordinate patient movement to Transportation
- Coordinates and supervises personnel
- Ensures safety, security, and accountability of personnel
- Coordinates movement of patients to ambulance loading area
- Provides frequent progress reports
- Maintains and disseminates incident documentation
TREATMENT AREA

- Immediate
- Delayed
- Minor

- Medical Supply
TREATMENT AREA POSITIONS

- Treatment Area Manager
  - Immediate
  - Delayed
  - Minor
  - Oversee treatment within specified treatment areas
  - Ensures all aspects of treatment (including disposal of medical waste)

- Medical Supply Manager
  - Maintains inventory and equipment in Medical Supply Area
  - Works with Treatment Area Managers to ensure adequate supplies
TREATMENT AREA CONSIDERATIONS

- Layout is critical
- Location is everything
- How much space do you need

- Relationship between areas
- Alternate layouts or locations
THE BACKBOARD PROBLEM
PATIENT FLOW

Incident Scene (Triage)

Patient Count → Treatment

Transport

Hospitals

THE HOUR GLASS EFFECT
TREATMENT AREA
CONSIDERATION

- Helisspot (landing zone) – impact on patient flow
  - Safety concerns on its location

- Location of Medical Morgue to treatment areas
OTHER LAYOUTS

Supply
Cache
STAFFING

- General Staffing numbers:
  - 1 ALS for 2-3 RED
  - 1 ALS for 3-4 YELLOW
  - 1 BLS for 5 GREEN

- What providers should be assigned to each Treatment Area?
PROCEDURE TEAMS

- May be useful

- Examples:
  - ALS  IVs
    Airway
    Drug therapy (if possible)
  - BLS  Immobilize
    Splint
    Bandaging
    Vital Signs
SPECIAL SITUATIONS

- Unaccompanied small children
- Sensory impaired patients
  - Acute sensory impairment
- Emotionally disturbed patients
- Bariatric
- Patient who is medical and trauma
- Injured rescuers
- Non-English speaking persons
- Service Animals
You arrive on scene and are immediately assigned as Treatment Unit Leader.

- Triage says there are:
  - 5 GREEN tagged
  - 8 YELLOW tagged
  - 12 RED tagged
  - 5 BLACK tagged
- You have 4 ALS and 6 BLS personnel
- The GREEN tagged are gathered at a tree 50 yards away
What are your priorities as Treatment Unit Leader?

How do you assign personnel?

Will you need additional help?
  - If so, what type?

Who do you talk to in the ICS structure?
TRANSPORTATION UNIT
“TRANSPORTATION DECISION”

- Right patient at the Right time
  - Right method of transportation to
    - Right facility

- Made by Treatment & Transportation Personnel (combined)
TRANSPORTATION UNIT LEADER

- Directs movement of patients to ambulance loading area
  - Talks to medical, treatment, ambulance staging, and air ambulance coordination

- Ensures safety, security, and accountability of personnel

- Provides frequent progress reports

- Maintains and disseminates incident documentation

- Ensures maintenance of accurate patient count
TRANSPORTATION UNIT

- Directs the transportation of patients
- Requests air ambulance transportation
- Establishes an air ambulance helispot
TRANSPORTATION CONSIDERATIONS

- Number & triage status of patients
- Number, staffing (BLS/ALS/Special) & capacity of transport units
- Number and capacity of hospitals
- Distance and time to hospitals
- Special patients
ROLE OF THE TRANSPORT UNIT

- Maintain appropriate radio communications as dictates by the incident

- Transport patient to the pre-designated medical facility
  - Determined by Medical Control and communicated through Transportation Unit Leader

- Follow local protocols regarding making a patient report to the receiving facility
ADDITIONAL TRANSPORTATION ROLES
- Ambulance Staging Manager
- Air Ambulance Coordinator
- Medical Communications

- Transportation Recorder
- Transportation Loader
AMBULANCE STAGING MANAGER

- Establish staging away from the scene
- Large enough to handle expected vehicles
- Easy access and egress to staging/major roadways/scene
AIR AMBULANCE COORDINATOR

- Locate a safe and adequately sized helipad
- Maintain communications with pilots
- Secure safe routes for ground ambulances to helipad
- Request and supervise additional resources as necessary
- Maintain incident documentation
MEDICAL COMMUNICATIONS

- Establish communications with medical facilities or regional control facility
- Maintain current status of facility availability
- Coordinate off-incident patient destinations
- Maintain appropriate incident documents
**TRANSPORTATION RECORDER**

- Maintain records of where each patient is transported
- Ensures all patients are accounted for as they move from Treatment to transporting unit

**TRANSPORTATION LOADER**

- Similar to porter
- Move patients from Treatment to the ambulance
- Report to Transportation Unit Leader
ADDITIONAL CONSIDERATIONS
INCIDENT DOCUMENTATION

- Job Aides
  - Checklists
  - Worksheets

- Triage Tag
  - Assists in patient tracking

- ICS Forms
PATIENT MOVEMENT AND COMMUNICATIONS

Triage
- How many patients?
- What colors?

Staging
- Type of resource needed

Treatment

Coordinating Facility
- Patient Priority

Transportation
- Which hospital
DISCUSSION EXERCISE
BASIC INFORMATION

- A full assignment has been dispatched for an explosion in the Chemistry department at the local high school. Reports are coming in regarding multiple injuries and building collapse.
  - What are your priorities?
  - What role do you expect to fill if you are first EMS unit on scene?
  - What impact does the potential hazardous materials situation have on your actions?
  - What other actions do you take to begin getting the medical portion of this incident under control?
With triage complete you receive the following numbers:

- 12 BLACK
- 25 RED
- 18 YELLOW
- 40 GREEN

What are the roles that need to be filled?
What are the strategies and tactics that you need to focus on from the medical perspective?
All patient’s have been moved to the Treatment Areas and are preparing for transport.

- What resources are necessary to assist in moving patients to medical facilities?
- How many transport units are necessary?
- What impact does the potential hazardous materials situation have on your actions?
- What are the strategies and tactics that you need to focus on from the EMS perspective?
ICS is an “all-hazards” approach

Putting the right people in the right position can provide good scene management

Incident success is reliant on development of appropriate strategies and tactics
TABLETOP EXERCISE