

Lubbock EMS MCI Plan Review

A Self-Study Program

Click on Slide Show at the lower right and then click Left Mouse Button to move to the next point on the slide. If there are any questions or problems with the program contact Tim Berry at 535-6004.



Objectives

- To review the Mass Casualty Incident Plan
- To review START and 4 Category Triage
- To introduce the DISASTER paradigm
- To Introduce MASS triage
- To review Incident Management System
- To recognize Hazmat Scenes
- To recognize WMD Scenes



Basics of MCI Management

- First arriving EMS unit assumes EMS Command and establishes command and control
- Components which are vital to successful outcome
 - Appropriate triage
 - Appropriate patient management
 - Appropriate patient transport



Basics of MCI Management (cont'd)

- EMS responsibilities
 - Care and transport of sick or injured victims
 - Medical care of responders on the scene
- To have a successful outcome depends on each employee being familiar with the Plan



10 Critical Factors of Successful MCI Operations

- In a MCI, patients outnumber EMS providers.
- The first arriving EMS unit **MUST** establish command and begin triage, not perform treatment.
- The Incident Management System (IMS) establishes an EMS Branch under Operations; the key EMS areas are Triage, Treatment, and Transport.
- Treatment is not effective without effective triage.



10 Critical Factors of Successful MCI Operations (continued)

- The Treatment Area must coordinate with the Triage and Transport Areas.
- The Treatment Area is a noisy, busy place and a major resource consumer.
- On small scale MCI events, EMS Command may be able to coordinate the entire Operation; on large incidents a separate Treatment Area is needed.



10 Critical Factors of Successful MCI Operations (continued)

- On large incidents the Treatment Area is divided into Red, Yellow, and Green treatment units.
- Large-scale incidents or disasters may require separate divisions; each division is a geographic area that is an IMS structure and requires support.
- In terrorism or hazmat incidents, the scene can be dangerous. **Total scene awareness is critical.**



Levels of Activation

- IMS Incident
- EMS Command Incident
- MCI



IMS Incident

- Results from single incident
- Having five (5) or more transportable patients or requiring three (3) or more ambulances
- IMS initiated with one of the initial medics assuming role of EMS Command
- All patients tagged with MCI tag
- The on duty Chief or Assistant Chief will be dispatched to scene to assume EMS Command



EMS Command Incident

- Can be caused by a single incident, but usually multiple incidents.
- Initiated due to the lack of available units.
- Primarily effects dispatch.
- On-Duty Shift Chief initiates EMS Command Incident and authorizes callback of off-duty personnel and use of other transport services.
- Off-duty dispatch personnel can also be called in to assist as needed.



Mass Casualty Incident

- Needs exceed the available resources.
- Activation of the MCI Plan



Initial Response and Notification

- During the initial response it may not be known that an actual incident exists.
- Dispatch should relay any information that leads them to believe that a MCI exists.
- The initial EMS unit **MUST** make a size-up of the scene.
- Determine if a MCI exists.



If MCI exists notify dispatch of the following:

- That a MCI has occurred;
- Type of incident;
- Who is in command of the EMS Branch;
- Approximate number and severity of patients;
- Location of Incident Command Post (ICP);
- Location of the Staging Area;
- Number and types of transport vehicles needed;
- Special hazards.



INITIAL ACTION CHECKLIST

- Position vehicle at safe location that provides good visibility of the incident and easy access. Avoid having to relocate vehicle unless absolutely necessary.
- Quickly "size up" the situation to determine:
 - Nature of incident;
 - Possible number of patients;
 - Severity of patient injuries;
 - Danger zones and nature of hazards present; and
 - Need to establish multiple treatment areas.
- Select Staging Area for EMS vehicles at location which can be easily accessed without having to back-up vehicles to turn them around.
- Select a helicopter landing zone, if need for air transport exists.
 - (Do not use if hazardous materials are involved.)**
- Contact 660 and provide:
 - Your unit number and channel you are operating on;
 - A statement that a MCI has occurred, that the MCI Plan should be activated, and that you are assuming EMS Command;
 - The nature of the incident;
 - The number and types of casualties;
 - The number of EMS and other transport vehicles needed;
 - The location of the Staging Area and helicopter landing zone;
 - The location of the current Command Post;
 - Any additional information needed for a safe, efficient response.



INITIAL ACTION CHECKLIST

Continued

- Coordinate with the police to begin securing the perimeter, routes for EMS vehicles entering and leaving the scene, and the helicopter landing zone.
- Coordinate with the fire department to begin search and rescue, and initial triage.
- Establish locations for one or more Treatment Areas based on environmental conditions, the size of the incident, and your best estimate of the number of casualties.
- As additional personnel arrive, make functional area assignments as needed:
 - Triage Group Supervisor – Triage Strike Teams
 - Staging Area Manager and Deputy – Air Ops Branch Director
 - Treatment Group Supervisor – Treatment Strike Teams
 - Transport Group Supervisor
 - Support Group Supervisor
- EMS Command must remain at Command Post until relieved of command.



Successful management of a MCI can be accomplished by using D-I-S-A-S-T-E-R paradigm

- D – Detection
- I – Incident Command
- S – Scene Security and Safety
- A – Assess Hazards
- S – Support
- T – Triage and Treatment
- E – Evacuation
- R - Recovery



Figure A1
D-I-S-A-S-T-E-R
Paradigm

D – Detect
I – Incident Command
S – Scene Security and Safety
A – Assess Hazards
S – Support
T – Triage and Treatment
E – Evacuation
R – Recovery
The D-I-S-A-S-T-E-R paradigm organizes the responders preparation and response to disaster management.

Assessment Checklist:
Do I detect something, what caused this?
Is a safety or security issue present?
Did we assess the hazards that could be here?
Do we need to triage, how much treatment?
Can we evacuate/transport the victims?
What recovery issues are present?
Do we need an Incident Command, where?
Disaster or MCI present:
Is my need greater than my resources?




Detection

- Awareness and recognition of a situation that will overwhelm resources.
- Must practice detection skill daily.



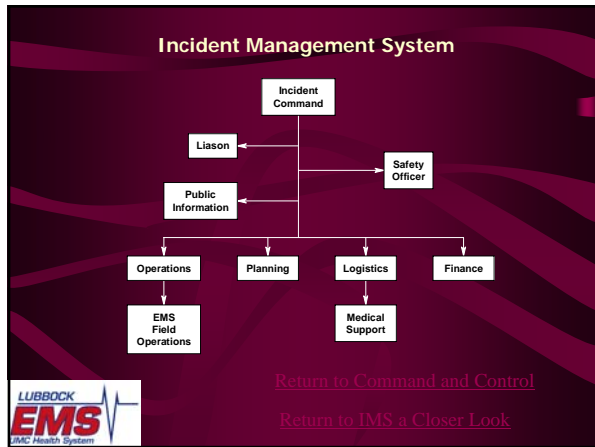
Figure A2
Detection

<p>Goal to Assess if:</p> <ul style="list-style-type: none"> - Disaster or MCI present - All-Hazards cause identified - Identified, but UNSAFE 	<p>Checklist:</p> <ul style="list-style-type: none"> - Are my capabilities or capacity exceeded? - Does need exceed my resources? - Before you step out of the vehicle, look around. - If a threat or agent is suspected, what is it? - What do you see, smell or hear that is different? - What are bystanders saying or doing? - Is everyone coughing, crying, staggering or lying still?
--	---



Incident Command

- National Incident Management System (NIMS) must be used on:
 - MCI
 - Disaster
 - Hazmat
 - Large Incidents
- Allows for early coordination of all assets.
- Standardized terminology

Scene Security and Safety

- Must be the immediate item addressed.
- May require law enforcement or fire services to assure scene safety.
- Begins before you arrive, while enroute think of hazards you might encounter.
- Be flexible, change is the only thing that is certain.
- Protect YOURSELF.
- Scene priorities: Yourself, Your Fellow Personnel, the Public, the Patients, and last the environment.





Figure A3
Scene Security and Safety

Don't be selfish, protect yourself!

- Protect Yourself and Your Team Members FIRST
- Protect the Public
- Protect the Patients
- Protect the Environment



Assess Hazards

- Be aware of EVERYTHING going on around you.
- You must continually reassess the scene for hazards.




Figure A4
Assess Hazards
Examples

<ul style="list-style-type: none"> - Power lines downed - Debris/trauma - Fire/burns - Blood and fluids - Hazardous materials - Flooding/drowning - Explosions 	<ul style="list-style-type: none"> - Smoke or toxic inhalations - Natural gas lines - Structural collapse - Weather conditions - Snipers - Secondary devices - NBC exposures
---	---

LUBBOCK EMS JMAC Health System

Support

- Includes:
 - Personnel
 - Supplies
 - Facilities
 - Vehicles
 - Other Resources
- You must determine what resources are needed.
- Request through appropriate channels.

LUBBOCK EMS JMAC Health System

Figure A5
Support

What do I need to get the job done?

- How do we mitigate the disaster or MCI?
- What **human resources** or skilled teams are needed?
- What **agencies** are needed?
- What **facilities** will be needed?
- What **supplies** do I need?
- What **vehicles** are needed?

LUBBOCK EMS JMAC Health System

Triage and Treatment

- Triage sorts patients into four categories:
 - Immediate – Red
 - Delayed – Yellow
 - Minor – Green
 - Expectant/Dead – Black, Blue, White
- Triage is a continuous process, not just one pass

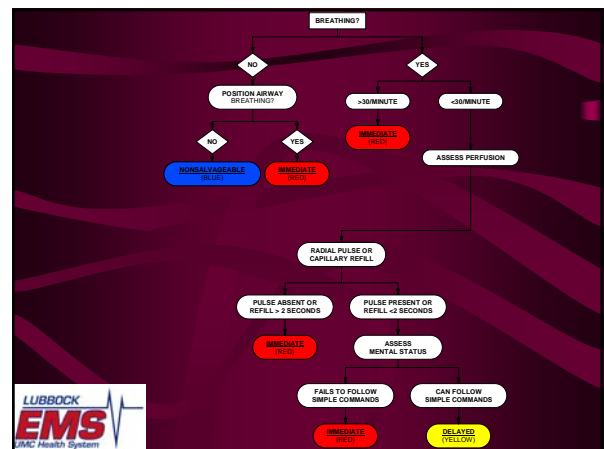
LUBBOCK EMS JMAC Health System

Triage and Treatment (cont'd)

S.T.A.R.T.

- Simple Triage And Rapid Treatment
- Initial Triage
- Works well for less than 100 victims
- Based on ABC's

LUBBOCK EMS JMAC Health System



Triage and Treatment (cont'd) M.A.S.S.

- Move, Assess, Sort, Send
- Based on S.T.A.R.T.
- Works well on 100 or more victims



MOVE Of M.A.S.S. Triage		
Goal:	Action:	Category:
Group ambulatory patients	"Everyone who can hear me and needs medical attention, please move to the area with the green flag." (or other identifier)	Minor initial group
Group awake, follow commands	Ask the remaining victims "Everyone who can hear me please raise an arm or leg so we can come help you."	Delayed initial group
Identify who is left	Proceed immediately to these patients and deliver immediate life-saving interventions (open airway and bleeding control)	Immediate initial group Or Expectant/Dead initial group



Triage and Treatment (cont'd) Four Category System

- Used in Treatment Area and Transport Area
- Based on specific injuries and medical conditions



FOUR CATEGORY TRIAGE SYSTEM	
Priority I (IMMEDIATE- Red)	
<ul style="list-style-type: none"> -All airway problems or potential airway problems -All penetrating chest trauma -Blunt chest trauma associated with shock, significant Dyspnea, paradoxical movement of chest wall, possible pneumo/hemothorax -All penetrating abdominal trauma -Blunt abdominal trauma associated with shock, altered level of consciousness, guarding, rigidity or diffuse tenderness -Uncontrolled or suspected severe hemorrhage -All shock, regardless of cause -All altered level of consciousness regardless of cause -Major medical emergencies (non-traumatic chest pain, dysrhythmias, poisoning, status epilepticus, significant non-traumatic dyspnea, etc) -Obstetrical complications -Burns, if: <ul style="list-style-type: none"> -Third Degree > 10% body surface area (BSA) -Second Degree > 25% BSA -Face or Neck Involved -<11 or >50 years old -Associated with additional major trauma or chronic illness -Electrical 	



FOUR CATEGORY TRIAGE SYSTEM Continued

Priority II (DELAYED- Yellow)

- Burns, if:
 - Third Degree 2-10% BSA
 - Second Degree 15-25% BSA
 - Hands, Feet, or Perineum Involved
- Spinal injuries with or without spinal cord damage
- Blunt chest trauma without shock or significant dyspnea
- Blunt abdominal trauma without shock or signs of peritoneal irritation (guarding, rigidity, diffuse tenderness)
- Major orthopedic or soft tissue injuries, including open fractures, impaired neurological function, or loss of distal pulse



FOUR CATEGORY TRIAGE SYSTEM Continued

Priority III (Minor- Green)

- Burns, if:
 - Third Degree <2% BSA
 - Second degree <15% BSA
 - First Degree
- Minor orthopedic and soft tissue injuries, including closed fractures with distal neurovascular function intact

Priority IV (Expectant – Nonsalvageable: Blue/Black/White)

- Full arrest without adequate manpower
- Neurological death (traumatic coma with areflexia and fixed, dilated pupils)
- Third Degree burns >80% BSA
- Obvious mortal wounds (severe open skull fracture; massive crushing trauma to chest, abdomen, or pelvis, etc.)
- Obvious D.O.S. (Decapitated, burned beyond recognition, dismembered)



Evacuation

- This is Transport
- Overall short term goal
- Be resourceful and creative
- Use the most appropriate available
- **Transport of any patient that could possibly have been exposed to hazardous materials; will NOT be initiated UNTIL the appropriate decontamination can be performed**



Transport Guidelines

- Transport from most severe down.
- Loads can be mixed with delayed and immediate.
- Transport triage based on Four Category System
- The following patients should be considered for immediate transport:
 - Multi-system trauma
 - Penetrating trauma to chest
 - Sustained hypotension <90mm Hg
 - Sustained pulse >120 or <50
 - Pulmonary insufficiency, >35 or <10, or hypoxia
 - GCS ≤ 8
 - RTS ≤ 10
- Traumatic amputation of limb
- Life threatening burns
- Cardiac chest pain
- Other life threatening injuries



Recovery

- Begins when incident occurs
- Attention must be given to long-term implications, costs, and impact to the community
- Recovery is long-term goal and objective of a MCI
- CISM is part of this phase



Command and Control

- On scene EMS Operations fall under three Sections: [IMS Flow Chart](#)
 - Command
 - Operations
 - Logistics
- IMS used to allow organization for all agencies
- Allows for long-term planning and organization of resources

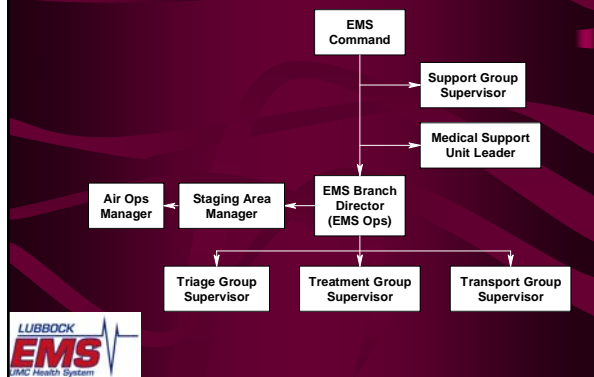


Command and Control (cont'd)

- EMS Command and Control Positions
 - EMS Command
 - EMS Operations or EMS Branch Director
 - Triage Group Supervisor
 - Treatment Group Supervisor
 - Transport Group Supervisor
 - Staging Area Manager
 - Support Group Supervisor
 - Medical Support Unit Leader



EMS Command Structure



Command and Control (cont'd)

- EMS Command fills all roles until they are assigned to someone else
- When appropriate supervisory personnel arrive on scene they will take command, only after being briefed by the current EMS Command
- The following slides describe in more detail each command position



EMS COMMAND

Call Sign: **EMS Command**
ICS Functional Group: Command
Commanded By: Incident Command
Subordinates: EMS OPERATIONS OR EMS BRANCH DIRECTOR, TREATMENT GROUP SUPERVISOR, TRANSPORT GROUP SUPERVISOR, TRIAGE GROUP SUPERVISOR, STAGING AREA MANAGER, SUPPORT GROUP SUPERVISOR, and AIR OPERATIONS BRANCH DIRECTOR.
Function: Establish command, and control on-site EMS activities to insure the best possible care for the greatest number of patients.
Roles and Responsibilities:
Responsible for all EMS operations on the scene.
Establish Command Post, usually at Incident Command Function within the unified command system
Delegate subordinate positions as needed and as personnel become available
Coordinate joint operations with all other commands and INCIDENT COMMAND



EMS OPERATIONS or EMS BRANCH DIRECTOR

Call Sign: **EMS Ops**
ICS Functional Group: Operations
Commanded By: EMS COMMAND OR OPERATIONS SECTION CHIEF
Subordinates: TREATMENT GROUP SUPERVISOR, TRANSPORT GROUP SUPERVISOR, TRIAGE GROUP SUPERVISOR, STAGING AREA MANAGER, SUPPORT GROUP SUPERVISOR and AIR OPERATIONS BRANCH DIRECTOR.
Function: Field supervisor of all on-site EMS activities to insure the best possible care for the greatest number of patients.
Roles and Responsibilities:
Supervise all field operations of EMS Branch
Represents EMS at any Operations meetings
Coordinates with EMS Command on resources needed
Move between EMS functional areas as needed to oversee operations



TRIAGE GROUP SUPERVISOR

Call Sign: **Triage**
ICS Functional Group: Operations
Commanded By: EMS COMMAND or EMS OPS/EMS BRANCH DIRECTOR
Subordinates: Triage Strike Team Leaders
Functions: Assume responsibility for coordination of EMS activities in areas actually impacted by the incident.
Roles and Responsibilities:
Determine in cooperation with the fire department where triage is to be performed
Coordinate with fire department to insure that patients are immediately removed from danger areas
Evaluate resources needed for extrication of trapped patients, initial triage and primary treatment (maintaining airway and bleeding control)
Ensure personnel have tags and are trained in START triage and correct procedure for applying tags
Obtain adequate personnel and equipment to move patients to Treatment Area
Coordinate with fire department on rescue of any trapped patients
Communicate resource requirements to EMS COMMAND
Allocate assigned personnel
Supervise assigned personnel and resources
Report progress to EMS COMMAND
Advise EMS COMMAND when all patients have been delivered to Treatment Area

NOTE: Do not allow bodies of persons killed in the incident to be moved from their original locations unless absolutely necessary. If possible, take pictures and mark locations.



STAGING AREA MANAGER

Call Sign: **EMS Staging**
ICS Functional Group: Operations
Commanded By: EMS COMMAND or EMS OPS/EMS BRANCH DIRECTOR
Subordinates: AIR OPERATIONS BRANCH MANAGER, other personnel as needed
Function: Assume responsibility for coordination of Staging activities for ground and air transport units.
Roles and Responsibilities:
Coordinate with law enforcement agencies to block streets and secure access as required for staging operations
Establishes Staging Area for incoming personnel and vehicles
Enlist a Deputy to assist in tracking incoming personnel
Insure all apparatus and vehicles are parked in an appropriate and orderly manner at Staging
Maintain log of units available and all personnel at Staging Area, and an inventory of all specialized equipment and medical supplies that might be required at the scene
Review with EMS COMMAND and EMS OPS/EMS BRANCH DIRECTOR what minimum resources must be maintained in the Staging Area
Request resources as needed, after coordinating with EMS Command and EMS OPS/EMS BRANCH DIRECTOR
Dispatch EMS vehicles and personnel to areas as requested by EMS COMMAND OR EMS OPS/EMS BRANCH DIRECTOR
Dispatch EMS vehicles to the Transport Area as directed by the TRANSPORT GROUP SUPERVISOR
Keep EMS COMMAND updated on status of staging operations
Establish Air Operations Area if needed and an Air Ops Branch Manager to oversee that area

NOTE: This role can be best filled by a dispatcher. This will free field trained personnel for caring for patients. Initially, it will probably be filled by a field person.



TREATMENT GROUP SUPERVISOR

Call Sign: **Treatment**
ICS Functional Group: Operations
Commanded By: EMS COMMAND or EMS OPS/EMS BRANCH DIRECTOR
Subordinates: Treatment Strike Team Leaders
Function: Assume responsibility for coordination patient care in the Treatment Area
Roles and Responsibilities:
Establish Treatment Area of appropriate size at a location appropriate for weather conditions and the nature of the incident
Oversee treatment personnel
Ensure patients re-triaged as come into Treatment Area
Divide the Treatment Area by triage category: Red, Yellow, and Green
Avoid becoming directly involved in patient care unless absolutely necessary
Request resources as needed
Coordinate with Transport Group Supervisor to transport patients to proper facilities
Keep EMS COMMAND and EMS OPS/EMS BRANCH DIRECTOR updated on the status of treatment operations and report when the last patient has been treated and moved to the Transport Area
Coordinate with the Red Cross and the local or state Health Departments to establish holding areas for the Walking Wounded with OBVIOUS minor injuries
Coordinate with other areas as required
Coordinate with EMS OPS/EMS BRANCH DIRECTOR as needed to establish temporary morgue facilities




TRANSPORT GROUP SUPERVISOR

Call Sign: **Transport**
 ICS Functional Group: Operations
 Commanded By: EMS COMMAND or EMS OPS/EMS BRANCH DIRECTOR
 Subordinates: Personnel, as needed
 Functions: Coordination of patient transportation and maintenance of records relating to patient identification, triage category, mode of transport, and destination
 Roles and Responsibilities:
 Establish a Transport Area near the Treatment Area
 Communicate with Comm Center to obtain medical facility status and treatment capability
 Coordinate with Treatment Group Supervisor on transport of patients Re triage patients, and determine appropriate transport vehicle and destination
 Enlist person to assist in documenting each transport, and to notify receiving facility of incoming patients
 Request vehicles from Staging Area Manager as needed
 Direct transport of patients to hospitals capable of providing appropriate treatment without exceeding hospital capabilities
 Contact receiving facilities, via radio, and advise them of triage categories for each patient they are receiving and the estimated time of arrival as patients are transported, and notify EMS COMMAND of the same information
 Maintain record of patient destinations
 Notify EMS COMMAND and EMS OPS/EMS BRANCH DIRECTOR when the last patient has been transported
 Coordinate with EMS OPS/EMS BRANCH DIRECTOR as needed to provide transport for the dead




SUPPORT GROUP SUPERVISOR

Call Sign: **EMS Support**
 ICS Functional Group: Operations, during initial phases
 Commanded By: EMS COMMAND or EMS OPS/EMS BRANCH DIRECTOR
 Subordinates: Personnel, as needed
 Function: Acquire and distribute appropriate medical equipment medical equipment and supplies as dictated by nature of incident and number and types of patients
 Roles and Responsibilities:
 Establish suitable location for Support Area operations – normally near the Treatment Area
 Determine the medical supply and equipment needs of other areas
 Coordinate procurement of medical supplies from hospitals with TRANSPORT GROUP SUPERVISOR, AIR OPS BRANCH DIRECTOR, and EMS OPS/EMS BRANCH DIRECTOR
 Works in the Resource Group of IMS
 Coordinate procurement of additional supplies not available at hospitals
 Ensures that requested resources are distributed to needed area
 Report progress to EMS COMMAND and EMS OPS/EMS BRANCH DIRECTOR
 Coordinate with other areas



MEDICAL UNIT LEADER

Call Sign: **Medical Support**
 ICS Functional Group: Logistics
 Commanded By: INCIDENT COMMAND and LOGISTICS SECTION CHIEF
 Subordinates: Rehab Team members
 Function: Responsible for the physical and emotional health of the rescuers through all phases of the incident
 Roles and Responsibilities:
 Establish Medical Support Area in proper location, out of direct view of incident
 Enlist personnel to man the Medical Support Unit that will monitor and log the vital signs of all personnel going through the area, at least upon entering and leaving the area
 See that personnel are monitored for critical incident stress and notify SAFETY OFFICER when signs are observed
 Ensure rescuers are fit to return to duty prior to leaving Medical Support Unit
 Coordinate with the American Red Cross and the Salvation Army for fluid and dietary needs of the rescuers




IMS a Closer Look

- You only have to expand IMS out as far as you need it, then it can shrink back down when positions are no longer needed
- Five functional areas: [IMS Flow Chart](#)
 - Command
 - Operations
 - Logistics
 - Planning
 - Finance




Command

- Incident Commander responsible for all incident or activity
- Will always have an Incident Commander
- Can be single commander or Unified Command
- Unified Command allows all agencies having jurisdictional or functional responsibility to jointly develop a common set of incident objectives and strategies



Command (cont'd)

- Unified Command is accomplished without losing or giving up
 - Authority
 - Responsibility
 - Accountability
- Command Staff
 - Liaison
 - Public Information
 - Safety Officer



Unified Command

- During Unified Command the following applies:
 - The incident will function under a single, coordinated Incident Action Plan (IAP)
 - One Operations Section Chief will have responsibility for implementing the IAP
 - One Incident Command Post will be established



Operations Section

- Responsible for directing the tactical actions to meet incident objectives
- Covering actual area of incident or event
- EMS functioning is care of injured and ill



Logistics Section

- Responsible for providing adequate services and support
- This can include:
 - Food
 - Shelter
 - Personnel
 - Vehicles
 - Communication
 - Medical Support



Planning Section

- Responsible for:
 - Incident Information
 - Collection
 - Evaluation
 - Display
 - Maintaining status of resources
 - Preparation of Incident Action Plan



Finance Section

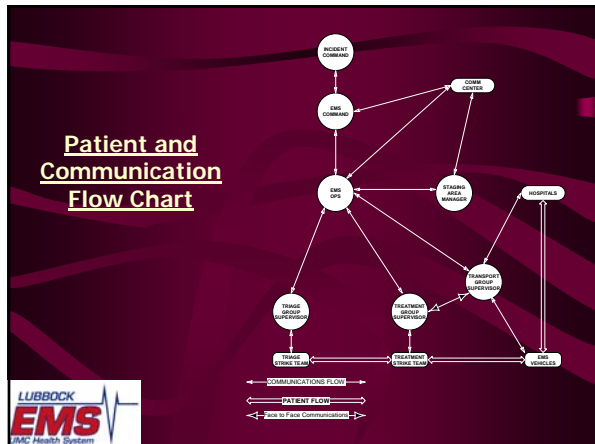
- Responsible for:
 - Incident related costs
 - Personnel and equipment records
 - Administering purchase contracts associated with the incident or event



Span of Control

- Important aspect of IMS
- Relates to the number of individuals that a person is responsible for
- Rule of Thumb is one supervisor to three (3) to seven (7) persons, usually five (5)
- As this span is exceeded adjustments must be made to the organizational structure





MCI Fatality Management

- Persons found dead at the scene of a major EMS incident will be the responsibility of the Medical Examiner or Justice of the Peace for the affected jurisdiction(s).
- Bodies will not normally be moved unless the responsible authority or his authorized deputy gives permission.
- Obviously dead bodies will be tagged by the TRIAGE GROUP SUPERVISOR, then covered with a sheet or blanket until removal. While first priority will be given to the living, efforts will be made to safeguard bodies.
- Personal belongings will be left on the bodies to aid in identification.

LUBBOCK EMS I/MC Health System

MCI Fatality Management (cont'd)

- Bodies may be moved prior to the arrival of the responsible authority to provide patient care, to prevent further damage, or at the direction of law enforcement. Under these circumstances the following procedures must be followed:
 - Do not remove any personal effects from the body;
 - Attach a tag to the body with the following information:
 - Date and time found
 - Exact location where found
 - Name and address of decedent, if known
 - If identified, how and when
 - Name of person making identification or filling out tag
 - Place body in disaster pouch or in plastic sheeting securely tied to prevent unwrapping. Attach a second tag to sheeting or pouch.
 - If personal effects are found near the body and thought to belong to the body, place them in a separate container and tag. Do not assume that any loose articles belong to a specific body.
 - If possible take photographs or mark location of body with stake and tag.
 - Move the properly tagged bodies with their personal effects to one location, preferably one with refrigeration. Avoid exposure of bodies to heat or direct sunlight. If at all possible, do not locate temporary morgue facilities at or near Treatment Area(s). Do NOT use vehicles or storage area with a floor that can be permeated with body fluids, such as the wooden floor of a gymnasium. If refrigerated trucks or rail cars are used, COVER THE COMPANY NAME ON THE VEHICLE.

LUBBOCK EMS I/MC Health System

MCI Fatality Management (cont'd)

- EMS COMMAND will coordinate with POLICE COMMAND, the authority responsible for the dead, and local health authorities in arranging for temporary morgue facilities and transportation of bodies.
- EMS COMMAND will consult with local or state health authorities, if they are present, on appropriate procedures to safeguard the health of personnel assigned to move the dead. In absence of such advice, universal precautions against communicable disease will be exercised.
- Release of information about persons killed in an incident will be the responsibility and prerogative of the Medical Examiner, Justice of the Peace, or authorized law enforcement officials.

LUBBOCK EMS I/MC Health System

Hazardous Materials

- Recognition
 - Always be alert for possibility
 - Can be single person to large release
 - Recognition clues:
 - Occupancy/Location
 - Container shape
 - Markings and color
 - Placards and labels
 - Shipping papers/Manifests
 - Senses

LUBBOCK EMS I/MC Health System

Hazardous Materials (cont'd)

- Recognition is the key to responder safety and effective management of the incident
- "Rule of Thumb"
 - Stay far enough away from scene so that your thumb covers the entire scene
- Occupation/Location
 - First and safest clue
 - Examples
 - Laboratory
 - Manufacturing plant
 - Construction sites
 - Agricultural sites

LUBBOCK EMS I/MC Health System

Hazardous Materials (cont'd)

- Distinctive containers
 - Solids
 - Liquids – Usually rounded ends
 - Gases – Rounded ends
 - Corrosives – Plastic containers
- Markings can indicate
 - Poisons
 - Flammable substances
 - Corrosives
 - Explosives
 - Radioactive materials



Hazardous Materials (cont'd)

- Colors of compressed gas cylinders can indicate contents
- Placards/Labels
 - Required on quantities of 1,001 pounds or more
 - Observe from a distance
- Shipping papers should list what is being carried
 - Ask the operator or
 - Look in the cab of truck or engine of train



Hazardous Materials (cont'd)

- Senses
 - Visual signs
 - Vapor clouds, visible liquids, or solid products
 - Dead or incapacitated people or animals
 - Dead vegetation
 - Vehicle with visible placards
 - If you experience skin, eye or nasal irritation, you have been exposed
 - The only sense that should be used due to safety is vision.
 - Never use taste
 - Hazardous Materials can be colorless, odorless, and tasteless



Hazardous Materials (cont'd)

- Triage Issues
 - Access to patients and treatment may be delayed
 - Decontamination will delay treatment and transport
 - Chemicals can modify the physiologic response to trauma by:
 - Amplifying signs and symptoms, or
 - Decreasing the efficiency of various protective mechanisms



Hazardous Materials (cont'd)

- Some chemicals may delay symptoms due to differing absorption rates
- Triage **MUST** be a continuous process and patient's condition charted so that exposure history can be obtained
- Decontamination
 - **Any potentially contaminated patients MUST be decontaminated prior to being placed in an ambulance**



Hazardous Materials (cont'd)

- Consult *Emergency Response Guide* for proper procedure, and coordinate with fire department to achieve decontamination
- A large portion of contaminants can be removed by removing patient's clothing
- All clothing should be bagged and sealed until it can be decontaminated or disposed of
- **Under NO circumstances should a patient arrive at the emergency department still wearing potentially contaminated clothing**



Hazardous Materials (cont'd)

- Medical Surveillance
 - EMS may also be called to provide medical support to the HazMat Team
 - Goals
 - Obtain pre-entry vital signs
 - Obtain exit vital signs
 - Monitor current medical conditions of rescuers
 - Assess and manage problems during the response
 - All information becomes part of incident report



Hazardous Materials (cont'd)

TRANSPORT OF ANY PATIENT THAT COULD POSSIBLY HAVE BEEN EXPOSED TO HAZARDOUS MATERIALS WILL NOT BE INITIATED UNTIL THE APPROPRIATE DECONTAMINATION CAN BE PERFORMED.



Weapons of Mass Destruction

- Emergency Response Challenges – A WMD Event is a:
 - Hazardous Materials Scene
 - Mass Casualty Incident
 - High Incidence of a Secondary Device
 - Crime Scene with Evidence that **MUST** be Preserved



Weapons of Mass Destruction

- Recognizing Suspicious Incidents
 - Index of Suspicion should increase if any of the following exists:
 - Occupancy
 - Symbolic or Historical Structures
 - Public Building or Assembly Areas
 - Controversial Business
 - Infrastructure



Weapons of Mass Destruction

- Type of Event
 - Explosion
 - Fire
 - Firearms
 - Non-Traumatic MCI
 - » Chemical
 - » Biological
 - » Nuclear



Weapons of Mass Destruction

- Timing of Event
 - Significant Date
 - Weekend
 - Night
- Scene Warning Signs
 - Unexplained Patterns of Illnesses or Deaths
 - Unexplained Signs and Symptoms
 - Skin, Eye, or Airway Irritation
 - Containers in Unusual Locations



Weapons of Mass Destruction

- Self Protection
 - Best Done by Three Components
 - Time
 - Spend Shortest Time Possible in Hazard Zone
 - Protects Crime Scene
 - Limits Exposure
 - Distance
 - Maximize Distance
 - » “Rule of Pinkie”
 - Shielding
 - PPE
 - Buildings
 - Vehicles



Weapons of Mass Destruction

- Staying SAFE
 - S – Safety is First
 - A – Assess before acting
 - F – Focus on avoiding the hazard
 - E – Evaluate the situation and report



Weapons of Mass Destruction

- *Don't* rush in
- *Don't* assume anything
- *Don't* TEST
 - Taste
 - Eat
 - Smell
 - Touch
- *Don't* become a victim



Weapons of Mass Destruction

- Remember RAIN
 - R – Recognize a potential threat exists
 - A – Avoid that threat, and make sure others avoid it as well
 - I – Isolate the area and any exposed persons or materials
 - N – Notify the appropriate authorities



Weapons of Mass Destruction

- Decontamination
 - All patients **MUST** be decontaminated before being placed in a transport vehicle by gross decon.
 - A definitive decon should then be performed at the receiving facility.



Weapons of Mass Destruction

- Types of Harm
 - Thermal
 - Radiological
 - Asphyxiation
 - Chemical
 - Etiological
 - Mechanical



Weapons of Mass Destruction

- Establish Control Zones
 - Obtain safe, secure area
 - Control Access
 - Self-Protection #1 Priority
 - Anticipate multiple hazard locations
 - Recognize and Evaluate Dangers




Weapons of Mass Destruction

- Transportation Guidelines
 - Loads should be mixed as appropriate
 - Transport Triage based on Four Category System
 - Immediate transport should be done for:
 - Multi-system trauma
 - Penetrating chest trauma
 - Sustained hypotension
 - Sustained pulse <50 or >120
 - Pulmonary insufficiency
 - GCS ≤ 8
 - RTS ≤ 10
 - Traumatic amputation
 - Life threatening burns
 - Cardiac chest pain
 - Other life threatening injuries



Comm Center Check List

- Pre-Command Mode
 - Possible MCI has occurred
 - Notify
 - On Duty Shift Chief
 - Lubbock EMS Emergency Preparedness Coord.
 - Extra Dispatcher
 - If NOT a MCI, notify those above




Comm Center Check List

- If MCI HAS occurred notify:
 - Those previously listed
 - All On-Duty Lubbock EMS stations and crews
 - Other public safety agencies via direct lines
 - Off-Duty Chiefs, Assistant Chiefs, Training Officer, Senior FTO, and Off-duty personnel
 - Lubbock County services
 - Aeromedical Services
 - Non-emergency transport services
 - Medical Director
 - House Supervisor at all Lubbock hospitals
 - Salvation Army D.A.R.T. Team
 - Red Cross




Rehab Protocol

Review on Page 41 of the MCI plan.



Organized Citizens Response

- Since 9/11 there have been a number of Citizen groups organized for disaster response.
- Citizens Corp consists of:
 - CERT Community Emergency Response Team
 - MRC Medical Reserve Corp
 - VIPS Volunteers in Police Services
 - NWP Neighborhood Watch Program



Forms

- Lubbock EMS uses the currently recognized IMS forms.
- Forms start at Page 43 in the MCI Plan



MCI Plan

Click for
Plan

