

## REGIONAL STANDARD OPERATING PROCEDURES

### Medical Operations

#: 104.00

REV: 05/2015

**SCOPE:** This procedure establishes a standard structure and guideline for the operation of Fire Department units at multi-patient/mass casualty incidents. The system may be applied to any multi-patient or mass casualty incident regardless of the number of patients or incident size. This procedure shall be integrated into the overall incident management system and may include major transportation incidents, explosions or fire with multiple injuries, hazardous materials incidents with exposure victims and structural collapse incidents.

**PURPOSE:** The policy is to integrate the multi-patient/mass casualty procedures within the framework of the incident management system. It is the responsibility of the first-arriving company officer to implement these procedures on EMS incidents requiring the commitment of a 1<sup>st</sup> Alarm Medical or greater. The first arriving company officer should balance up to a full Second Alarm as soon as the need for additional units is noted. Ground transport or Air Transport units are considered a “consumable resource” and are not counted for in the 1 Alarm Medical Assignments or greater. Command will need to specify the number and types of transportation units they will need.

The IC may request as many as the IC sees fit. For the purposes of this procedure, a “multi-patient incident” is defined as any incident with fewer than ten (10) patients. A “mass casualty incident” is defined as any incident involving 11 to 50 patients. A “disaster” is defined as any incidents involving more than 50 patients.

**SAFETY:** The purpose of this procedure is to enhance safety to both the public and to emergency workers by enhancing accountability and division of labor.

**PROCEDURE:** The first-arriving company officer at the scene of a multi-patient or mass casualty incident shall establish Command. The initial Incident Commander (IC) shall remain in Command until Command is transferred or the incident is stabilized and Command is terminated. Command is responsible for the completion of the tactical objectives. The general tactical objectives, listed in order of priority, are:

1. Remove endangered occupants and treat the injured.
2. Stabilize the incident and provide for life safety.
3. Ensure the functions of triage, extrication, treatment and transportation are established as needed and performed appropriately.
4. Provide for the safety, accountability and welfare of rescue personnel and victims.
5. Conserve property.

In addition, the EMS TACTICAL objectives to be completed during any multi-patient/mass casualty incident include:

1. Completion of a "Triage Report"
2. Declaration that extrication is complete
3. Declaration of "All IMMEDIATE Patients have been Transported"
4. Declaration that all remaining patients have been transported or released.

The Incident Management System is used to facilitate the completion of the tactical objectives. The IC is the person who drives the Command system towards that end. The IC is responsible for building a command structure that matches the organizational needs of the incident to achieve the tactical priorities.

When possible, patients should be treated and transported in the following priority order:

1. IMMEDIATE
2. DELAYED patients upgraded to IMMEDIATE
3. DELAYED
4. MINOR

### **Basic Operational Approach**

The initial actions of the first arriving officer shall be directed toward scene size-up, requesting appropriate resources and initial organization of the scene. Initial actions include:

1. Give an on-scene report and assume Command (consider establishment of Unified Command if appropriate).
2. Initiate triage.
3. Perform a rapid hazard assessment and establish a safe zone to operate. Initiate traffic control and provide a safe work/treatment area.
4. Provide for occupant protection.
5. Call for additional resources.
6. Radio a Triage Report to Dispatch.
7. Stabilize hazards and/or remove patients to a treatment area.
8. Assign crew(s) specific task(s) to accomplish.
9. Establish Groups (triage, extrication, treatment, and transportation) or Divisions (north, south, east, west), early and as appropriate.
10. Initiate patient assessment and treatment functions.
11. Coordinate patient transportation.

Responding personnel are encouraged to use triage tags, ribbons and/or labels on smaller multi-patient incidents. Triage tags should be used any time there are three (3) or more IMMEDIATE patients or more than ten (10) patients. In the multi-patient incident scenario, most often a multiple vehicle collision, use of the START triage system can greatly improve initial scene organization, and enhance its use during mass casualty incidents.

## Arrival

The first arriving company officer at a multiple patient incident will assume Command and give an on scene report which will answer the question. . . *What do I have? What action will I take? What resources do I need?* The type of situation and the approximate number and condition of patients should be communicated to Dispatch as soon as possible.

Command should rapidly survey the scene to identify any hazards or safety concerns and establish a safe zone for crews to operate. This can be accomplished through proper defensive rig positioning, use of flashing lights and the placement of cones or reflectors. Traffic control should be requested from law enforcement through Dispatch.

Command should immediately request additional assistance if the need is indicated. Dispatch will begin to notify other agencies and medical facilities based on the amount of assistance requested at the scene and the progress reports from Command. The initial reports should indicate the scale of the incident to allow Dispatch to notify other agencies.

Command should initiate Triage early in an incident, especially when the number of patients and/or the severity of their injuries exceed the capabilities of the on scene personnel to provide effective extrication, treatment and transportation.

Once triage is complete, a Triage Report should be collected from the Triage group supervisor and radioed to Dispatch. A Triage Report at a two-vehicle collision may sound like: *“Dispatch from Command, Triage is complete. We have 9 total patients: 2 IMMEDIATES, 3 DELAYED and 4 MINORS.”*

A Triage Report signifies that triage has been completed and communicates to all responding crews the size of the major medical incident. It also provides essential information regarding decisions to call for additional resources or to scale back the response. The first arriving company officer needs to quickly determine the most effective means to treat patients. In incidents with few patients, it may be more effective to treat patients “in place.” At EMS incidents with a greater number of patients, a treatment area should be established. In a case where two or more distinct groups of patients are separated by distance, multiple treatments areas may be needed.

Treatment area(s) can be clearly identified by using colored salvage covers (red, yellow and green) to designate treatment areas for IMMEDIATE, DELAYED or MINOR patients. If the incident involves a building collapse or a hazardous material release, it may be more effective to remove victims to a safe area rather than stabilize hazards. This is also true of motor vehicle collisions involving a train wreck or bus. In these cases, triage will be performed at the entrance to the treatment area.

## **Staging**

Additional Resources should be requested using standard assignments and alarms as much as possible (e.g. 1st Alarm Medical, 2nd Alarm Medical, etc.) This will facilitate an incremental approach to the incident, similar to firefighting operations, and provide predictable resources. The first arriving company will go to the scene, as well as the first medic unit, first extrication-capable unit, and first chief officer. All other companies will use Level I staging upon their arrival. Command should consider implementing Level II Staging early in the incident. All First-Alarm-Medical Incidents (or greater) require a Level II Staging Area for all fire department resources, including medic units. All outside agencies responding to a medical incident should be sent to the Staging Area. This area should be at a sufficient distance to keep the scene clear and maintain access. The Staging officer will assign units as directed by Command.

Units assigned to divisions/groups, unless carrying special equipment, should park at a distance from the scene. This parking area should be located out of the access paths. Crews should report to Extrication or Treatment Groups, carrying their medical equipment. If a treatment area is designated, medical equipment and supplies should be stockpiled there. Apparatus with extrication tools or other heavy equipment needed at the scene should be brought up closer to the actual incident site.

## **Command Responsibilities**

The Incident Commander (IC) is responsible for the strategic level of the command structure and should:

- Determine the appropriate strategy
- Establish overall incident objectives
- Set priorities
- Develop an action plan, and communicate the plan.
- Obtain and assign resources.
- Planning—based on evaluating interventions and predicting outcomes
- Communicate specific objective to tactical level units
- Initiate a Unified Command with other agencies

## **Basic Organization into Divisions/Groups**

Most multiple-patient incidents require patient **triage, extrication, treatment, and transportation**.

Because of potential vehicle congestion at the site, a staging location/area for apparatus is also a major consideration during larger incidents. These needs form natural basic divisions, groups, or branches for the Incident Management System. Additional divisions, groups, or branches may be assigned depending on the situation, consistent with the Incident Management System.

The purpose of **Triage** Group is to determine, in close coordination with Extrication, the location, number and condition of patients and whether triage should be performed before or after patients are extricated from the site. Triage is also responsible to assign and supervise triage teams, ensure that patient triage is done in accordance with standard operating procedures and provide Command with a “Triage Report” when triage is completed. Triage Group should also forward triage tracking slips to Command.

The purpose of **Extrication** Group is to determine, in conjunction with Triage, the location, number and condition of patients and whether triage will be performed before or after patients are extricated from the impact area. Extrication is also responsible to assign and supervise extrication teams, extricate and deliver patients to the treatment area, and notify Command when all patients have been removed from impact area. MINOR patients who were directed earlier in the incident by triage teams to an Assembly Area will be assessed by Extrication and delivered to the treatment area if further medical care is warranted.

The purpose of **Treatment** Group is to first determine whether patient treatment will occur “in place” or in a designated treatment area. Generally, a centralized treatment area is preferred, as patient care and site operations are substantially enhanced.

If a treatment area is designated, Treatment Group may decide to treat patients in a common area. However, if the incident is large enough treatment may designate separate "IMMEDIATE" and "DELAYED" treatment areas.

Treatment is responsible to assign and supervise treatment teams, ensure that all patients have been triaged, assessed and treatment needed. Treatment Group Supervisor should coordinate patient allocation with Transportation Group and notify Command when all patients have been treated.

The purpose of **Transportation** Group is to obtain all modes of transportation needed to take patients to the hospital. Transportation should determine, in conjunction with Command, the location of the staging area, patient loading area and helicopter landing zone. Transportation group is also responsible to determine hospital availability through the Dispatch Center, coordinate patient allocation with Treatment and supervise the movement of patients from the treatment area to the ambulance loading area or helicopter landing zone.

Transportation Group should also determine hospital destination and notify hospitals of ambulance arrival (through Dispatch). Transportation should also remove patient tracking slips from the triage tag prior to transport, notify Command when all Immediate patients have been transported (an EMS Tactical benchmark) and maintain an accounting of all patients.

## **ADDITIONAL Divisions, Groups, Branches or Officers**

### **Incident Safety Officer**

Command should assign an Incident Safety Officer as soon as the basic groups or divisions have been established.

### **Staging Officer**

As the incident escalates, a Staging Officer may be required. To avoid scene congestion, a Level II staging area will be identified for any First Alarm Medical incident.

### **Medical Supply Officer**

The Medical Supply Officer is responsible for the procurement, delivery and stockpiling of medical supplies needed at the scene. This function should be established on 1st Alarm Medical or greater incidents, as the MMRS trailer will automatically be dispatched. This unit has an abundance of additional medical supplies.

### **LZ Officer**

If helicopters are used, an LZ Group Officer will be established with a landing zone at a safe distance from the scene. The LZ Officer will keep track of patient destination, communicate landing instructions with incoming and outgoing aircraft and enforce established safety standards for landing zones.

### **Branches**

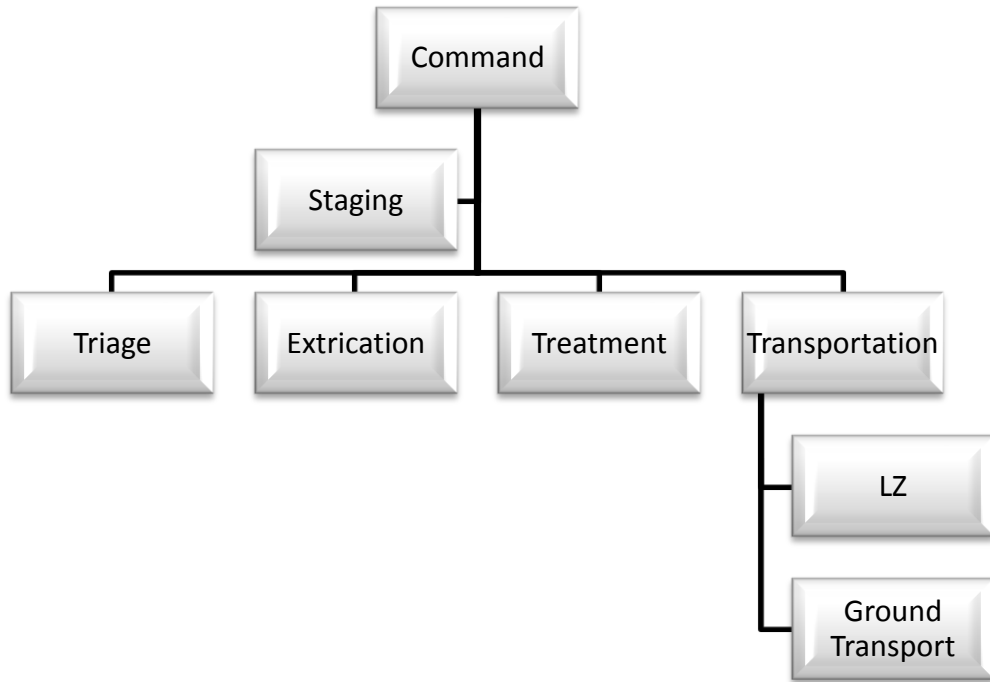
A mass casualty incident may require the implementation of a separate "Medical Branch" and a "Transportation Branch." Each would direct all groups/divisions assigned and report to Command. The Medical Branch Director is responsible to ensure that the functions of triage, extrication, and treatment are carried out. The Medical Branch Director should supervise and coordinate personnel assigned, determine and request resources needed and recommend the expansion of the command organization as needed. Medical Branch should communicate direction and objectives to tactical units, ensure objectives are completed and maintain incident documentation. Additional positions within the Medical Branch may include an IMMEDIATE, DELAYED and MINOR Treatment Group Supervisors, Medical Communications Officer, Medical Supply Officer, Ground Ambulance Coordinator and Morgue Officer.

## **Resource Commitment and Flow**

Resource commitment typically follows patients. Initially, Extrication will require a large resource commitment. As patients are extricated and moved to Treatment, resources for extrication will decrease. These crews can be re-allocated to the Treatment function.

In a disaster level incident, some fire department resources may need to be allocated to receiving hospitals until those facilities can obtain adequate hospital staff. Additional fire department staffing may need to be called utilizing a “call back” in order to help mitigate the incident or backfill fire stations. Command should also consider requesting a Chief Officer to respond to the dispatch center to help coordinate communications and availability of resources during MCIs or Disasters (e.g. 2<sup>nd</sup> Alarm or greater). Command may also need to consider requesting a command van, MMRS Trailer, and HAZMAT or TRT Teams for certain incidents that may need these special units to better assist in the mitigation of the incident. In the event special teams (HAZMAT/TRT) are needed, Command should include that component while upgrading the assignment. (e.g. First Alarm Medical with a HAZMAT component)

Basic Organizational  
Structure for an initial incident  
balanced to a  
1<sup>st</sup> Alarm Medical  
(5-10 Patients)

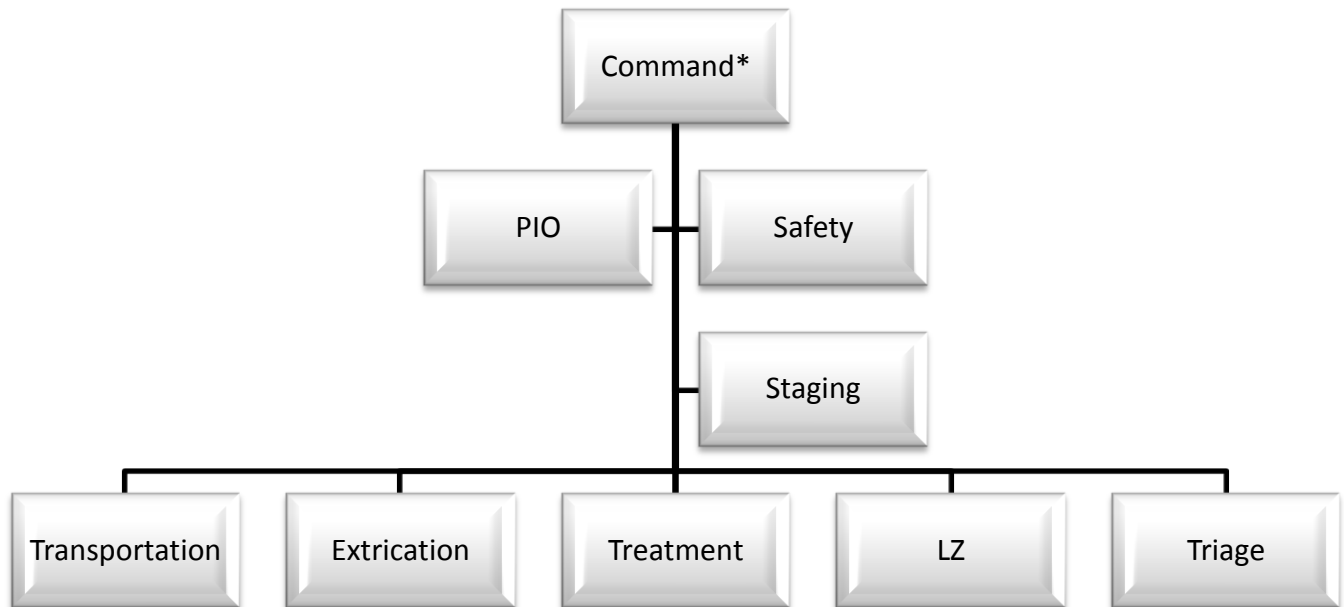


Notes:

1. The triage function should be performed by the first arriving company. Normally it will last 4-6 minutes. A group assignment may not be needed and the personnel can quickly be reassigned.
2. Extrication may be needed when physical disentanglement or patient removal to a treatment area is needed.
3. Treatment is preferred in a designated treatment area such as green, red, or yellow. When circumstances dictate, it can also be performed in place when designated by command.
4. The Transportation group function may be managed by Command or assigned to a designated member, depending on the complexity of the incident.
5. A level II staging area should be created and utilized for the balance of the assignment. All additional incoming units should report to a level II staging area for assignment.
6. The MMRS unit will be dispatched to the scene when a First or Second alarm is requested.



Reinforced Multi-Patient  
Response  
Second Alarm Medical

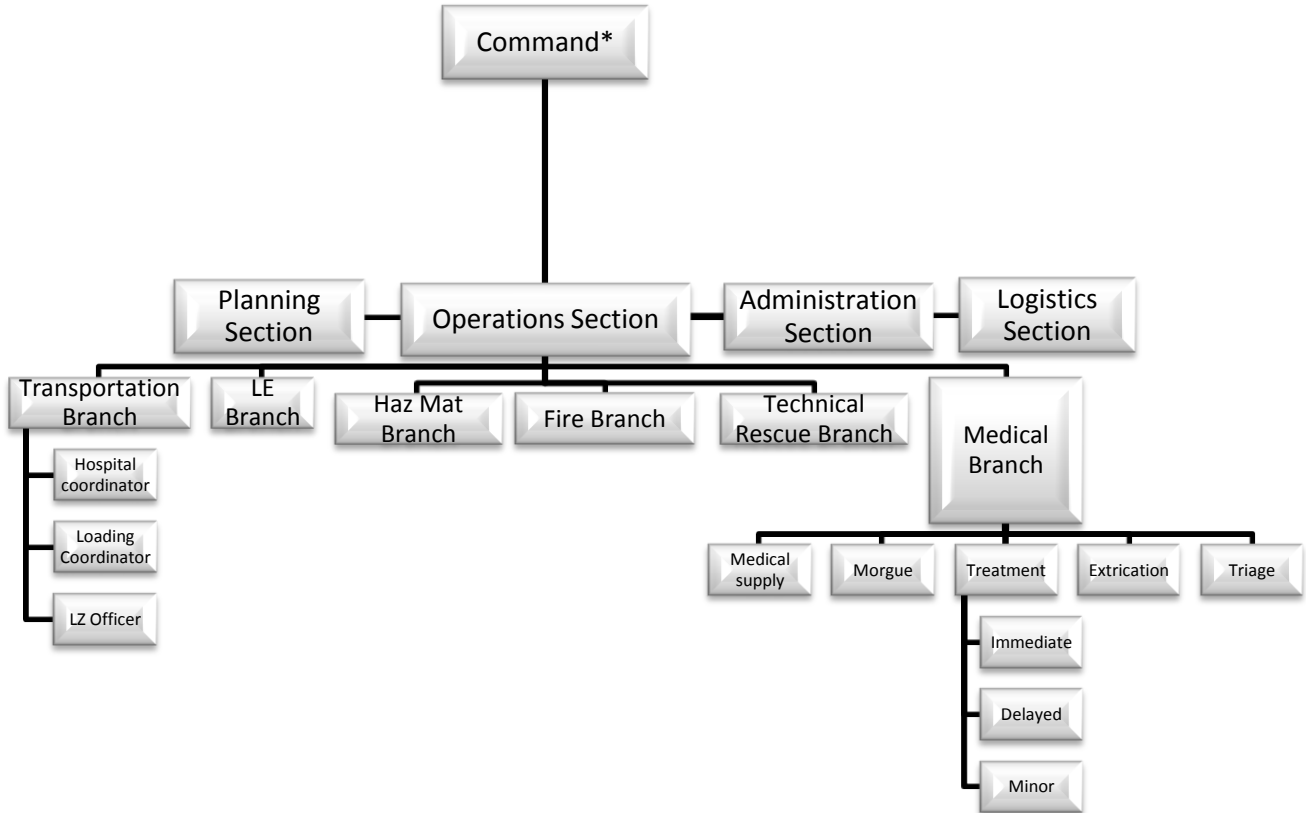


*\* Consider establishing **Unified Command** with LE and other resource type supervisors as appropriate.*

Notes:

1. A Triage Group should be assigned
2. The Extrication Group should be assigned to manage the physical disentanglement or removal of patients from the impact site to a treatment area.
3. The Treatment Group should be established with colored salvage covers to identify Immediate, delayed, and minor treatment areas.
4. The Transportation Group will need a minimum of one company assigned to manage its functions. They may be assigned a separate tactical channel for communications.
5. A level II staging area must be established with incoming units reporting to the staging officer.
6. A LZ group should be established to manage helicopter operations.
7. The MMRS unit will be dispatched to the scene when a First or Second alarm is requested.

Mass Casualty Incident  
Response  
Third Alarm Medical



\* Consider establishing **Unified Command** with LE and other resource type supervisors as appropriate.

Notes:

1. Triage should continue as a group and may involve more than one company.
2. The treatment area should be identified early and must include patient re-evaluation
3. The Medical and Treatment Branch should be considered with a large number of patients.
4. The Transportation Branch has a Loading Coordinator assigned to the treatment area.
5. The Hospital Coordinator should check and recheck hospital availability through dispatch or direct phone calls.