



Scarborough Fire Department Scarborough, Maine



Standard Operating Procedures

Book:	Emergency Operations
Chapter:	Medical Emergencies
Subject:	3430 Mass Casualty Incident Plan
Revision Date:	08/31/2012
Approved by:	<i>B. Michael Thurlow</i>

PURPOSE

The purpose of this policy is to outline procedures for command and control of Multiple and Mass Casualty Incidents (MCI) to ensure efficient treatment and transport of the ill and injured victims. The primary goal of any MCI is to provide the most appropriate care for the greatest number of patients given the available resources, and to realize that no single patient should consume resources at the expense of the entire scene.

To integrate EMS Sector functions within the Incident Command Structure (ICS) to assure operational efficiency regardless of the size of the incident or the number of agencies involved in an MCI.

POLICY

This policy is implemented as a tool to provide the best treatment for the most patients possible given the available resources, in a safe and organized manner. It is intended to provide responders with an understanding of the procedures, components and tasks required to effectively triage, treat and transport multiple patients from a single or multiple incident(s).

These procedures, components and tasks are intended to be used as guidelines to be implemented as required by the needs of the specific incident. Not every incident will require the use of all of the procedures, components or tasks outlined in this policy.

SCOPE

This policy applies to all department members regardless of assignment or EMS license level. It is critical that all public safety responders work together, using the ICS to implement this plan.

ASSUMPTIONS

The Department has participated in the design and supports the use of the Metro Fire Chief Coalition's Strike Team plan for MCIs which is designed to deploy ambulances in groups (levels or tiers) of 3 ambulances responding as a single strike team. Unless otherwise requested by the IC, these strike teams will be assigned to a Level I staging location with a Staging Officer.

Additionally when this plan is activated, fire/EMS officers from area departments will be stationed at each emergency department (ED) to act as a coordinator between the EMS operations on scene and the EDs. One of the primary goals of this position is to interface with EMS crews at the hospitals to assure they are ready to respond in a timely manner either back to the MCI scene or to another unrelated EMS call in the area.

The department has elected to use the SMART® Triage system using the standard tag color matrix of: Red indicating category 1 (Rapid Transport), Yellow indicating category 2 (Delayed Transport), Green indicating category 3 (Last to be Transported), and Black indicating category 0 (Clinically Dead) patients.

DEFINITIONS

- A. A Multiple Casualty Incident will be an incident with more than two patients but no more than 8 patients. It may require mutual aid ambulances to respond, and the incident is generally handled like any day-to-day call without activating all the EMS Groups (triage, treatment, and loading/transport).
 - a. Requires no more than Level 3 Strike Team activation.
 - b. Assumes the Department's ambulances will transport at some stage of the incident.
- B. A Mass Casualty Incident (MCI) will be an incident that produces enough patients (9 or more), or when circumstances warrant the establishment of all of the EMS Groups as outlined in this policy.
 - a. Requires more than Level 3 Strike Team activation.
 - b. Assumes that some of the department's ambulances will not transport.
 - c. Assumes the 1st in ambulance crew will remain committed to the scene to provide for triage.
 - d. Assumes the 2nd in ambulance crew will remain committed to the scene to establish and provide care in a treatment area.
 - e. The on-duty Lt. may fill the role of the EMS Scene Control Officer until relieved, and then may be reassigned to the Loading Officer position.
- C. Reunification Center, a location established to provide assistance to the families/friends of the victims.
- D. Level I Staging – the primary staging area closest to the incident
- E. Level II Staging – A secondary staging area away from the incident where resources assemble to prepare for move-up to Level I staging.

PROCEDURE

- A. Safety:
 - a. MCI incidents can be potentially dangerous. All members operating at these incidents should keep safety as a primary focal point throughout the event.
 - b. It must be recognized that many, if not all, MCI's are potential crime scenes. Patient care should remain the primary focus however attempts should be made to minimize disturbing the scene as much as possible.
 - c. In the event of a violent and/or terrorist related MCI, consider requesting law enforcement to secure the triage, treatment and loading areas.

- d. These incidents are rare and potentially emotionally demanding. Members should expect that an After Action Review (AAR) will be conducted as well as some form of Critical Incident Stress Debriefing (CSID) may be offered if necessary.

B. Operations:

- a. Upon completing an initial size up, the IC will declare the incident as either a Multiple or Mass Casualty Incident according to the definitions outlined above.
- b. The first arriving EMS crew will establish Primary Triage and when necessary Secondary Triage (as a team). The ambulance that this crew arrived on may need to be placed out of service to be used for a supply depot and/or initial communications unit, depending upon the extent of the incident and the estimated time triage will require.
- c. The standard practice will be that the paramedic assigned to the 1st arriving unit will take the role of the Primary Triage Officer.
- d. Staging is a critical aspect of an efficient MCI operation. Whenever mutual aid EMS units have been requested, but do not have an immediate assignment, the IC should assign these units to a staging area.

C. EMS Branch Positions:

a. EMS Sector Officer:

Radio call name: EMS - white ICS vest with EMS Control Officer logo

- i. Assigned by and reports to IC. Dons ICS vest, follows the check list and provides periodic updates to the IC.
- ii. Is responsible for overall EMS operations to include but not limited to: patient triage, treatment, and transport. Identifies problem areas, requests and assigns resources as needed.
- iii. Considers requesting an ER doctor familiar with EMS operations to the scene for treatment area support if necessary.
- iv. Requests “stretcher” bearers from IC as needed.
- v. Requests the additional ambulances/strike teams needed from IC (specify if these units should go direct to the scene or report to the primary staging area).
- vi. Makes initial and ongoing communications with REMIS (Regional Emergency Medical Information Service – 207-662-2950) to inform and update them on the estimate of casualties and overall status of the incident.
- vii. Assigns and supervises all other EMS Sectors working the scene including Primary Triage Officer, Secondary Triage Officer, Treatment Officer and Loading Officer.
- viii. Assures supplies and equipment are available to carry out the EMS sector functions (consider deploying the closest MCI trailer if necessary).
- ix. Coordinate with IC to ensure a safe landing zone is established and maintained when needed. If established the IC should consider assigning a Landing Zone Officer.

b. Primary Triage Officer:

Radio call name: Primary Triage - light green ICS vest with Primary Triage logo
(Will usually be the paramedic assigned to the first in ambulance)

- i. Assigned by and reports to the EMS Sector Officer. Dons light green vest and follows the position check list.

- ii. Upon completion of tasks, may be reassigned to treatment area.
- iii. Begin the triage process by stating: “Anyone who can walk, please move to (designate a location)”.
- iv. At Multiple Casualty Incidents (8 patients or less):
 - 1. Rapidly assesses all patients and assigns transport priority. May elect to use SMART® tags.
 - 2. Gives immediate treatment to life threatening emergencies limited to:
 - Bleeding (apply pressure)
 - Airway (reposition patient’s airway)
 - Shock (elevate extremities)
 - 3. Provides patient count and priority to EMS Control Officer.
- v. At Mass Casualty Incident (MCIs) (9 patients or more):
 - 1. Works with Secondary Triage Officer to carry out triage.
 - 2. Rapidly assesses and tags all patients and **MUST** use the SMART ® tags
Assign and supervise arriving personnel to provide immediate treatment of life threatening emergencies limited to:
 - Bleeding (apply pressure)
 - Airway (reposition patient’s airway)
 - Shock (elevate extremities)
 - 3. Provides patient count and priority to EMS Sector Officer.
- c. Secondary Triage Officer: Used for MCIs only – 9 patients or more
Radio call name: Secondary Triage - dark green ICS vest with Secondary Triage logo
(Will usually be the intermediate assigned to the first in ambulance)
 - i. Assigned by and reports to the Primary Triage Officer. Dons dark green vest and follows the position checklist.
 - ii. Along with the Primary Triage Officer, triages patients by:
 - 1. Viewing all patients,
 - 2. Classifying all patients according to their need for treatment and transport using the SMART® Triage algorithm and tags from the SMART® tag fanny pack,
 - iii. Supervises patient immobilization on LSBs and coordinates with the Treatment Officer to efficiently transfer the patients to a Treatment or Loading area.
- d. Treatment Officer:
Radio call name: Treatment – yellow ICS vest with Treatment Officer logo)
(Will usually be the paramedic assigned to the second in ambulance)
 - i. Assigned by and reports to EMS Sector Officer. Dons yellow vest and follows the position check list.
 - ii. Request personnel to staff the treatment areas from the EMS Sector Officer.
 - iii. Is responsible for overall patient care and the assignment of personnel based on need vs. license level
 - iv. Establishes and supervises the patient treatment areas with the 4 colored triage tarps, flags, cones and barrier tape found on Squad 7, right side, 2nd rear most coffin compartment.
 - 1. Using the colored tarps and other supplies the Treatment Area should be set up such that the Red area is closest to the Loading Area followed by the Yellow and then the Green.

2. Whenever possible, the Green area should be spaced away from the Red and Yellow areas.
 3. The Black area should be completely remote from any treatment area.
 - v. Requests sufficient supplies to provide patient care.
 - vi. Conducts or oversees ongoing triage within the Treatment Area and records patient information on SMART Tags®.
 - vii. Coordinates the movement of patients to the Loading Area with the Loading Officer.
 - viii. Deals with the security of the treatment area as needed.
 - ix. Gives periodic updates to the EMS Control Officer.
- e. Loading Officer:
Radio call name: Loading - navy blue ICS vest with Loading Officer logo
(Will usually be the On-Duty Paramedic/Lieutenant)
- i. Assigned by and reports to EMS Sector Officer. Dons navy blue vest and follows the position check list.
 - ii. Identifies and marks Loading Area as near as practical to the patient treatment area using blue cones. Attempts to create a drive-through ambulance traffic flow pattern whenever possible to avoid ambulances backing up.
 - iii. Requests ambulances directly from the Staging Officer to respond to the Loading Area and assigns patients and hospital destinations to the ambulances. Whenever possible deliver patients to EMS crews to avoid having EMS crews come to the patient.
 - iv. Communicates with the hospital(s), each patient's status. Advise individual ambulance crews **NOT** to contact the hospital **UNLESS** patient status changes.
 - v. Communicates to hospital information from the SMART® tag Command Board:
 1. Patient Priority (by color) and Injury Type
 2. Patient Age
 3. Patient Sex
 4. SMART® Tag Number
 5. Transporting Unit Name, Number, and ETA
 - vi. Logs time ambulances left for hospital
 - vii. Retain the tear-away section of the tag for the SMART® Command Board to track the overall patient census and destinations.
 - viii. Requests a bus to the scene for transport of Priority 3 (Green tagged) patients as appropriate or to be used as a climate control and holding area.
 - ix. Gives periodic reports to the EMS Control Officer.
- f. Staging Officer: Radio call name: Staging
- i. The IC must assign a Staging Officer early in an MCI requiring a staging sector.
 - ii. It is essential that the Staging Officer and location(s) be established primarily to avoid the scene from being overcrowded and difficult to manage.
 - iii. The scene may require both a Level I (near to the Loading Area) and Level II (distant from the scene) Staging Area.
 - iv. The release of resources to the Loading or Primary Staging area(s) will be based on operational needs as requested by the Loading/Transportation Officer.

- v. The Staging officer will be assigned a radio frequency to use exclusively for staging operations (normally State Fire).
 - vi. The Staging Officer may request additional units (consider another level of strike teams) to respond to the staging area directly from dispatch.
- D. Hospital Destination:
- a. In Mass Casualty Incidents will be determined by REMIS based on information provided to them by the Loading Officer
 - b. In Multiple Casualty Incident will be determined by the EMS Control officer in coordination with REMIS based upon patient's condition or patient's choice in hospital when appropriate.
- E. Documentation:
- a. For Multiple Casualty Incidents, crews shall complete an ePCR on all patients.
 - b. For Mass Casualty Incidents, the crew shall enter as much information about the patient that is possible in an MCI log i.e., tag number, patient name/ID etc. One ePCR will be completed for entire call.
 - c. A bus tracking form may be used as needed
 - d. The SMART® Commander will not be cleared until all necessary information is transferred to the ePCRs and/or fire report.
- F. Communications:
- a. On Scene: The IC will assign an operational frequency (usually Scarborough Fire Tactical 155.775).
 - b. Enroute to the hospital: Use Hospital (155.325) or a cell phone.
 - c. Staging: The IC will assign the staging frequency (usually State Fire 154.310)
 - d. EMS Sector operations: Use EMS 1 (155.385) or EMS 2 (155.160) as assigned by IC.
- G. Media Relations:
- a. A PIO will be assigned by the IC.
 - b. The release of any information to the media will be the responsibility of the IC or his designated PIO.
 - c. HIPAA regulations apply to PHI (Protected Health Information).
- H. Resources:
- a. Note the attached METRO Fire Chief's MCI (ambulance) Strike Team plan.
 - b. The Department also has access to the regional MCI trailer deployment plan. Each trailer is designed to handle 75 or more patients. These trailers are set up primarily to assist agencies with the basic on scene treatment and movement of patients.
 - c. The Department has elected to use the SMART® triage system. During a Mass Casualty Incident, the Primary and Secondary Triage officers will function as a team during the triage process. The Secondary Triage Officers role will be to apply the SMART® triage tags after the Primary Triage Officer categorizes the patients. The SMART® tags are stored on each ambulance, the On-Duty Lieutenant's and D/C of EMS SUVs and S-7.
 - d. The SMART® Commander patient and EMS Sector tracking boards are stored on each ambulance, the On-Duty Lieutenant's and D/C of EMS SUVs and S-7.
 - e. The MCI kits are on each ambulance. These kits will contain the clip boards with the tasks and associated vests as listed within this policy.

- f. The Trauma Intervention Program (TIPS) is available to respond to MCIs to assist families and friends deal with the necessary initial emotional support that is needed as a result of these events.
- g. The American Red Cross is available to assist with any relocation needs.
- h. Consider the establishment of a Rehab Sector as needed
- i. Consider decontamination if necessary due to a WMD/Haz Mat situation
- j. Critical Incident Stress
 - i. MCI's can be one of the most stressful and demanding types of calls for even the most seasoned provider. It must be recognized that CISD must be an integral part of these calls as the need dictates.
 - ii. The Department has the ability to request its designated Chaplin and TIPS.
 - iii. The Southern Maine EMS Critical Incident Stress Management team can also be contacted at: 207-791-7371 as needed.
- k. Mobile or Fixed Morgue facilities:
 - i. If the incident produces a large number of fatalities that need to be kept on scene or nearby for a long period of time due to ongoing investigations, it may become necessary to provide for either mobile (refrigerated tractor trailers) or fixed (cafeteria or food storage facility) morgue facilities to be established.
 - ii. The authorization of morgue facilities should come from the Medical Examiner's office in Augusta.
- l. Family Assistance Center:
 - i. A Family Assistance Center or Reunification Center may need to be established in order to deal with the families and victims of an MCI.
 - ii. If either of these is established, EMS presence should be required in a stand-by mode.

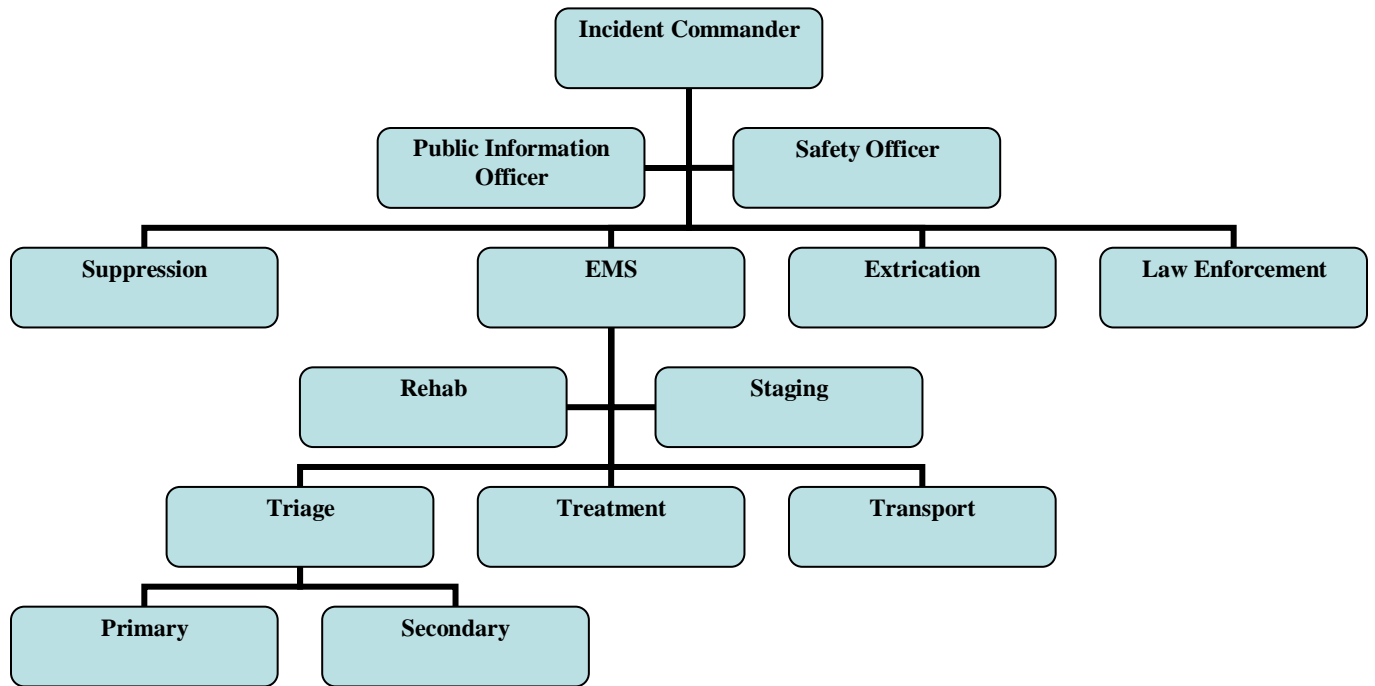
RESPONSIBILITIES

- A. It is the responsibility of every department member to be familiar with this guideline.
- B. It is the responsibility of EMS crews assigned to each ambulance and the On-Duty Paramedic Lieutenant to be knowledgeable of the specific EMS Branch functions and the accompanying task sheets, vest, and their locations.
- C. It is the responsibility of the Incident Commander to be familiar with these guidelines and assign the EMS Control Officer who in turn will assign the remaining EMS Branch officers as needed.
- D. It is the responsibility of the Incident Commander to assign other related branches and sectors such as Operations, Extrication, Staging, Public Information, and any related EMA functions as well as coordinate with law Enforcement as necessary.
- E. It is the responsibility of the Incident Commander to obtain necessary resources as requested by the EMS Sector Officer.

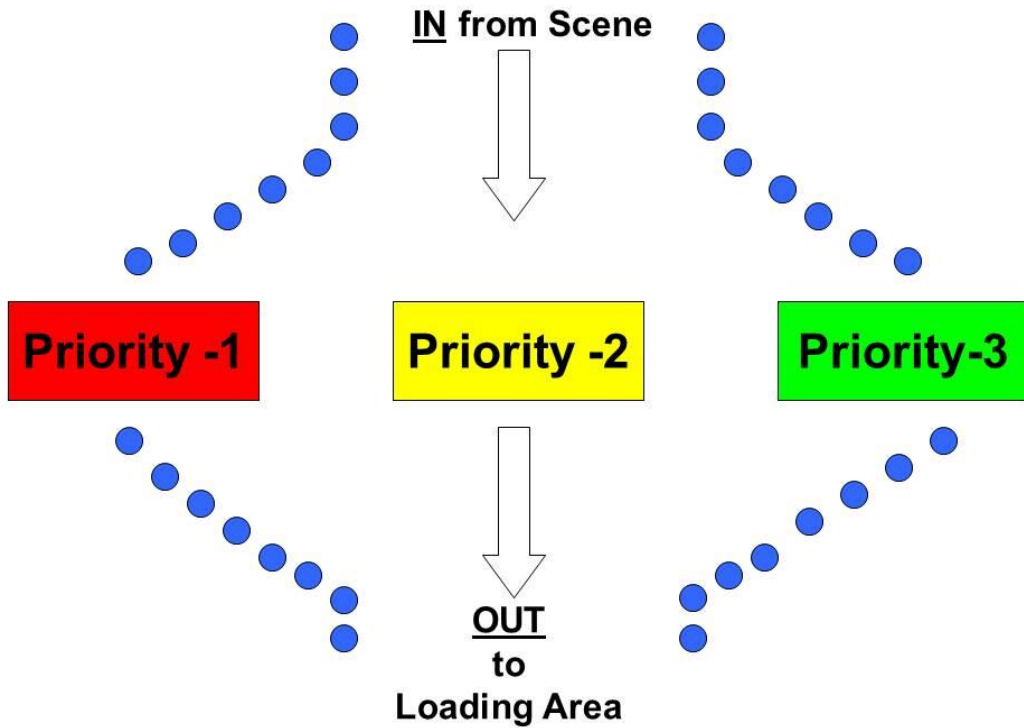
REFERENCES

- A. Maine EMS Protocols
- B. SMART Triage program
- C. New England EMS Council on MCI response
- D. SOP # 1125 NIMS

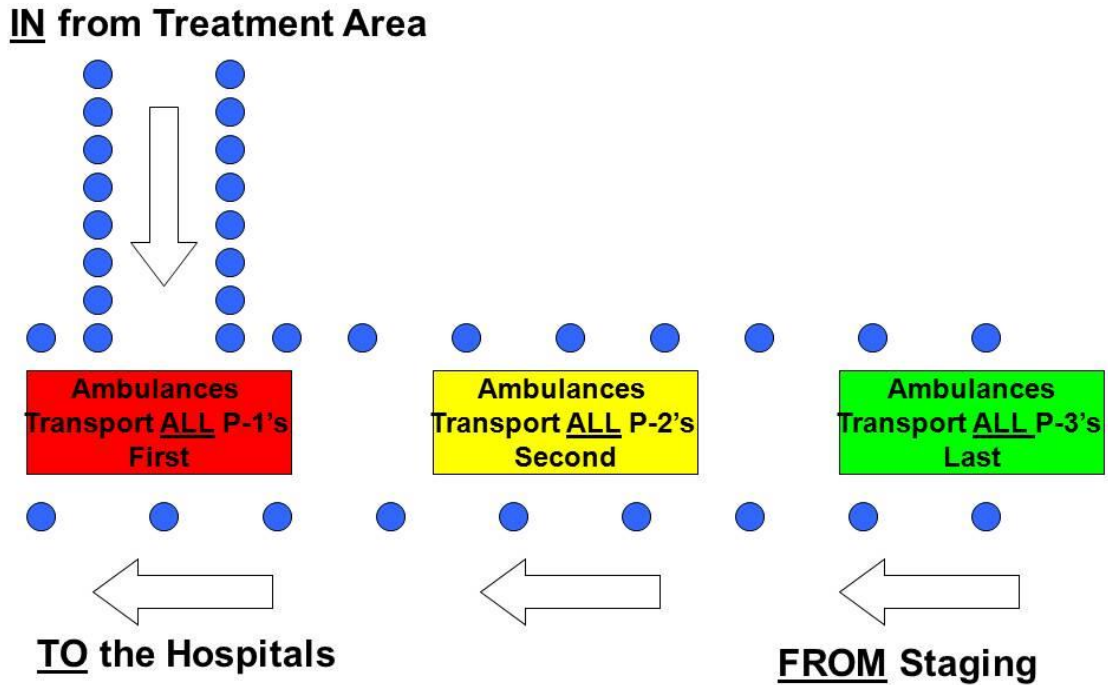
Typical ICS Organizational Line Chart for an MCI Operation



Treatment Area Layout



Loading Area Layout



SCARBOROUGH STRIKE TEAM LIST
(Ambulance)

COMMUNICATIONS CENTER VERSION
 11-03-2010

TEIR 1	Scarborough R-1	Scarborough R-2	Scarborough R-3
TEIR 2	South Portland	Old Orchard	Gorham
TEIR 3	Portland	Saco	Westbrook
TEIR 4	Cape Elizabeth	Buxton	Biddeford
TEIR 5	South Portland	Gorham	Portland
TEIR 6	Falmouth	North East	Standish
TEIR 7	Cumberland	North East	Windham
TEIR 8	Old Orchard	North East	Westbrook
TEIR 9	Cape Elizabeth	Kennebunk	Portland
TEIR 10	Cumberland	Freeport	Yarmouth

Position Checklist - EMS SECTOR OFFICER

(Stays in one location, does not move around)

- Assigned by and reports to Incident Commander. Dons White vest, follows this check list and provides periodic updates to IC
- Is responsible for the overall emergency medical operations to include but not limited to: patient triage, treatment and transport. Identifies problem areas, requests and assigns resources as needed
- Considers requesting an ER MD familiar with EMS operations to the scene for treatment area support
- Requests “stretcher” bearers from IC as needed
- Declares /confirms an MCI with an approximate # of patients reported by Primary Triage Officer
- Requests of the IC, the initial number of additional ambulances/strike teams needed. (Specify if these units should go direct to the scene or report to a staging area)
- Make initial and ongoing communications with REMIS (Regional Emergency Medical Information Service – 207-662-2950) to inform and update them on the estimate of casualties and on the overall status of the incident
- Assures supplies and equipment are available to carry out the EMS sector functions. (Consider deploying the closest MCI trailer).
- When needed, works with IC to ensure a safe landing zone is established and maintained (The IC should consider assigning a Landing Zone Officer)
- Assigns and supervises all other EMS Sector personnel:
 - Primary Triage Officer _____
 - Secondary Triage Officer _____
 - Treatment Officer _____
 - Loading Officer _____

Position Checklist – PRIMARY TRIAGE OFFICER (Generally the Paramedic on the 1st in ambulance)

- Assigned by and reports to EMS Sector Officer. Dons light green vest and follows this check list
- Upon completion of tasks, may be reassigned to Treatment Area
- Begin the triage process by stating: “Anyone who can walk, please move to (designate a location)”.
- Multiple Casualty Incidents (as a guideline - 8 patients or less):
 - Rapidly assesses all patients and assigns transport priority. May elect to use SMART® tags
 - Gives immediate treatment to life threatening emergencies *limited to*:
 - Bleeding – apply pressure
 - Airway -- reposition patient’s airway
 - Shock -- elevate extremities
 - Gives approximate patient count and priority to EMS Sector Officer
- Mass Casualty Incidents MCI (as a guideline - 9 or more patients):
 - Works with Secondary Triage Officer to carry out triage
 - Rapidly assesses all patients and MUST use SMART® tags
 - Assign and supervise arriving personnel to provide immediate treatment of life threatening emergencies *limited to*:
 - Bleeding – apply direct pressure
 - Airway - reposition patient’s airway
 - Shock - elevate extremities
 - Gives approximate patient count and priority to EMS Sector Officer

Position Checklist – SECONDARY TRIAGE OFFICER

(Generally the Intermediate assigned to the 1ST in ambulance)

[Used for Mass Casualty Incidents only – as a guideline - 9 or more patients]

Assigned by and reports to Primary Triage Officer. Dons dark green vest and follows this check list

Along with Primary Triage Officer, triages patients by:

1. Viewing all patients
2. Classifying all patients according to their need for treatment and transport using the SMART® Triage algorithm and applies tags from the SMART® tag fanny pack,
3. Supervises patient immobilization on LSBs and coordinates with the Treatment Officer to efficiently transfer the patients to a Treatment or Loading area.

SMART Tag color coding system is as follows:

Category	Color	Indication
1	Red	Rapid Transport
2	Yellow	Delayed Transport
3	Green	Last to be Transported
0	Black	Clinically Dead

Position Checklist - TREATMENT OFFICER

(Generally the Paramedic on the 2nd in ambulance)

- Assigned by and reports to EMS Sector Officer. Dons yellow vest and follows this check list
- Requests personnel to staff the treatment areas from the EMS Sector Officer,
- Establishes and Supervises: the patient treatment areas with the 4 colored triage tarps, flags, cones and barrier tape found on Squad 7, overall patient care, the assignment of personnel based on need vs. license level and supplies for patient care. Security of the Treatment Area must be accounted for and dealt with as needed.
- Using the colored tarps (etc.) the treatment area should be set up such that the Red area is closest to the Loading Area followed by the Yellow and then the Green. Whenever possible, the Green area should be spaced away from the Red and Yellow areas. The Black areas should be completely remote from any treatment area.
- Conducts or oversees ongoing triage within the Treatment Area and records patient info on SMART Tag®.
- Coordinates the movement of patients to the Loading Area with the Loading Officer.
- Gives periodic updates to the EMS Sector Officer

Position Checklist - LOADING OFFICER

(Generally the On-Duty Paramedic Lieutenant)

- Assigned by and reports to EMS Sector Officer. Dons Blue vest and follows this check list
- Identifies and marks Loading Area adjacent to patient Treatment Area using blue cones. Attempts to create a “Drive-Through” ambulance traffic flow pattern whenever possible
- Requests ambulances to Loading Area directly from Staging Officer and assigns patients and hospital destinations to ambulances (whenever possible bring patients to EMS crew, not EMS crew to patient!)
- May request supplies from incoming ambulances be stockpiled
- Communicates with the hospital(s), each patient’s status (Advise individual ambulance crews NOT to contact the hospital UNLESS patient status changes)
- Information from SMART tag to share with hospital:
 - Tag Number
 - Patient Sex and Age
 - Patient Priority and Injury Type
 - Transporting Unit Name, Number and ETA
- Logs time ambulances left for hospital
- Retains the tear-away section of the tag for the SMART® Command Board to track the overall patient census and destinations
- Requests as appropriate, a bus to the scene for transport of Priority 3 (Green tagged) patients or to be used as a climate controlled holding area.
- Provides periodic reports to the EMS Sector Officer