Survival Factors Attachment 4. Baltimore City Fire Department MOP 807-1

Mass Casualty Incident Operations

Baltimore, Maryland

HWY17MH007

(10 pages)

	MANUAL OF PROCEDURE **DETAIL PROCEDURE**	**SECTION** EMERGENCY MEDICAL SERVICES **SUBJECT** OPERATIONS MASS CASUALTY INCIDENTS (MCI)

BACKGROUND:

Incidents with a large number of sick or injured people can require extensive Fire Department resources and pose challenging tactical and command situations. The following procedure has been established as a guideline for the triage, treatment, and transportation of patients at such incidents.

RESPONSIBILITY:

It shall be the responsibility of each member to exercise the appropriate control dictated by his/her rank for the implementation of this operational procedure. All members shall be familiar with the Mass Casualty Response Plan, Incident Command System (ICS), MIEMSS Triage Tag System, Simple Triage and Rapid Transport (START), and electronic patient tracking system procedures. These plans/procedures provide the basic guidelines for mitigating mass casualty incidents in the City of Baltimore, but they cannot address all issues. Members should access readily available resources within the Baltimore City Fire Department and, if necessary, outside of the Department to assure maximum operational effectiveness and treatment standards of care.

PROCEDURE:

The first arriving unit at an incident where a large number of people appear to be sick or injured will make a rapid, approximate assessment of the number and severity of patients using the five (5) S's of initial scene management during a mass casualty incident (MCI).

1. Safety Assessment

- Assess the scene for safety

2. Size-up

- Type and cause of incident
- Approximate # of victims
- Severity of injuries (ambulatory vs. non-ambulatory)
- Area involved (perimeter control and access issues)
- Pertinent demographics

3. Send Information

- Establish command
- Size up to communications
- Official declaration of MCI (Level I, II, III)
- Request notification of EMRC/ FRED alert
- Request Additional Resources
- Request Tactical Channel/ NPSPAC

4. Set-up

- Establish staging area (1st)
- Identify best ingress and egress
- Establish work areas with adequate space
  - Triage, Treatment, Transport, Morgue

5. START

- Simple Triage and Rapid Transport
- Jump START

The first arriving suppression or EMS district officer (which may or may not be assigned to the first arriving unit) will conduct a more thorough size-up of the situation and categorize the incident as outlined below. **Any incident involving more than 10 patients requiring treatment and transport will be classified via radio as a "Mass Casualty Incident."** Mass casualty incidents will be further classified as "Level 1," "Level 2," or "Level 3" based on the number of patients as follows:

Mass Casualty Incident—Initial Report

- **More than 10 patients**
- 1 Medic Unit
- 1 EMS District Officer
- 1 Suppression Company

Mass Casualty Incident—Level 1 Response

- **11 to 25 patients**
- Initial Response (see above)
- Box Alarm (including 1 Medic Unit)
- One Additional EMS District Officer (for a total of 2)
- Four Additional Medic Units (for a total of 6)
- Rescue 1
- BC EMS
- Medical Director

Mass Casualty Incident—Level 2 Response

- **26 to 50 patients**
- Level 1 Response (see above)
- Four Suppression Companies
- One Additional Battalion Chief (for a total of 2)
- Five Additional Medic Units (for a total of 11)
- One additional EMS District Officer (for a total of 3)
- One EMS MULE with Mass Casualty Trailer
- EMS Command Unit
- EMS Supply Coordinator
- PIO

Mass Casualty Incident—Level 3 Response

- **51 or more patients**
- Level 2 Response (see above)
- Deputy Chief EMS
- Four additional Suppression Companies (for a total of 8)
- Five Additional Medic Units (for a total of 16)
- Apparatus Coordinator

Additional Resources

The incident commander may at any time request additional resources required to assure patient care, including, but not limited to, the following:

- MD State Police Medevac helicopter(s)
- MTA bus(es)
- Commercial ambulance(s) (via MIEMSS)
- Baltimore City Health Department (to establish Off-Site Triage, Treatment, and Transport Centers(OST3C))
- Mutual aid from surrounding jurisdictions
- Go Team
- Medical Examiner
- CISM Team
- Chaplain Corps

EMS Branch Tactical Procedures

The following sequenced procedures shall be adhered to on all Mass Casualty Incidents and initiated by the incident commander.

1. Establish an EMS Branch Director (usually the highest ranking EMS officer on the scene). Have the EMS Branch Director put on a vest identifying him/her as such.
2. Designate Staging Area Manager and establish an EMS vehicle staging area and advise inbound units where to stage. Crews should stay with their units until given further instructions.
3. Designate a Triage Group Supervisor
4. Designate a Treatment Group Supervisor
5. Designate a Transportation Group Supervisor
6. Designate a Supply Group Supervisor (as needed)
7. Establish an EMS Branch radio talk group and have EMS units switch to it.
8. Establish a progress report interval based on the duration of the incident (e.g., every 15 minutes).

Staging Area: The Staging Area is an area designated by the Incident Commander and located in the vicinity of the actual incident. The incident commander will consider available access, egress, and adequate size to accommodate large numbers of vehicles and personnel. The incident commander will assign a Staging Area Manager. The Staging Area Manager reports to the Operations Section Chief or the Incident Commander if the Operations Section has not been designated. The Staging Area Manager will complete the following:

1. Update incident command as units check-in and become available for assignment
2. Identify and separate ALS providers from arriving suppression companies for pending assignment to **IMMEDIATE** and **DELAYED** treatment areas
3. All companies should check-in with their EMS equipment in tow
4. All Medic units arriving to the staging area must be positioned for rapid deployment to the Transport Area.
5. All Medic crews are to **STAY** with their units until deployed to the Transport Area
6. Arriving Medic units will be the initial source of additional triage kits and Immobilization/Transfer equipment.
7. Keep a log of all apparatus in Staging Area
8. Have units turn off emergency lights when entering Staging Area.
9. Staging Area Manger will be located near his/her vehicle with the emergency lights activated.

Triage Group Supervisor:

1. Designate a Triage Team
2. Designate a Transfer Team
3. Establish Triage Sorting Area using color coded tarps and flags in Mass Casualty Kit located on EMS district officers' vehicles.
   Red: Immediate – Priority 1
   Yellow: Delayed – Priority 2
   Green: Minor – Priority 3
   Black: Deceased – Priority 4
4. Ensure that patients are rapidly and accurately identified and designated for the appropriate category using color-coded triage tape.
5. Report progress to EMS Branch Director, Operation Section Chief, or IC.
6. Coordinate with the Transfer Team to have patients moved to the Treatment Areas
7. Re-deploy Triage Team to Treatment area after initial triage is complete and patients are moved
8. Re-deploy Transfer Team members to Treatment Area after triage is complete and all patients are moved
9. Update IC or EMS Branch Director with patient census if not previously ascertained

Triage Team Responsibilities

1. Use color coded tape **ONLY**. (Primary Triage)
2. No triage tags are applied
3. The Triage Team should be staffed with a 1:5 provider patient ratio
4. All providers in the triage group should be equipped with triage kits containing colored tape
5. All walking wounded should be regarded and taped as **MINOR** patients.
6. Direct **MINOR** patients to the treatment area for further evaluation
7. Begin Triaging all Non-ambulatory patients
8. Identify life-threatening problems using three categories: **"START" (Simple Triage and Rapid Transport) or "JUMP START" (Pediatric Triage)**
   - Ventilation (Airway, Breathing)
   - Circulation (Hemorrhage, inadequate pulse or Perfusion)
   - Mental Status
     - Cardiac arrest patients are usually classified as Priority 4 unless the EMS Branch Director or the incident commander makes the decision that sufficient resources are available and orders an on-site resuscitation effort.

Transfer Team Responsibilities

1. Escort MINOR patients to treatment area or MTA bus for transfer to a OST3C
2. Transfer Teams move taped patients to the triage sorting area.
3. Later, Transfer Teams move patients from triage sorting area to treatment area.

Treatment Group Supervisor:

1. Locate a suitable Treatment Area **(Strong consideration should be given to a sheltered area or building)** and report location to EMS Branch Director, Operation Section Chief or IC and Triage Group Supervisor.
   - When appropriate deploy inflatable structures or shelter systems to provide protection from the elements
2. Evaluate resources required for patient treatment; report the needs to EMS Branch Director, Operations Section Chief, or IC.
3. Utilize equipment from Rapid Response Kits to clearly identify **IMMEDIATE, DELAYED, MINOR** and **DECEASED** Treatment Areas.
4. Establish suitable "Immediate" and "Delayed" Treatment areas.
   Recommended Ratio: Minimum - 1 provider per 1 immediate patient
   Minimum - 1 provider per 3 delayed patients
   Minimum - 1 provider per 5 minor patients
5. Assign, direct and coordinate resources within the group
6. Coordinate closely activities with Triage, Transport and Supply groups.
7. Report progress to EMS Branch Director, Operations Section Chief, or IC.
8. Prepare logs for Treatment Area and supervise proper utilization of MIEMSS triage tags.

Immediate, Delayed, and Minor Treatment Teams

1. Each patient encountered by the Treatment Teams will be tagged with the approved uniquely numbered and bar-coded Maryland Triage Tag and scanned into the system using the Emergency Patient Tracking System (EPTS) if available.
   - Tag Bar code stickers from that tag will be placed on the patient care reports, OST3C records, hospital records and any belongings, containers or packages separated from the patient.
2. Attach MIEMSS Triage Tag to the color-coded ribbon
3. Remove *Treatment Bar Code* from the tag and place on the *Treatment* Log
4. Reassess patient
5. Provide gross stabilization
6. ABC's
7. Backboard
8. Major fractures
9. Note assessment & treatment interventions on tag
10. Prepare patient for transport to appropriate facility
11. Ensures patient can be transported safely

Off-site Triage, Treatment, and Transport Centers (OST3C)

Off-site health and medical service coordination in support of a mass casualty response is a critical part of the "Mass Casualty Response" concept. By providing alternative treatment sites at non-hospital locations away from the incident scene, critical in-hospital resources will be conserved for definitive care. The goal of the OST3C is to provide care for the patients triaged as "minor " (triage color code green) by EMS or first responders at the scene of an incident or by the triage mechanism at established health care facilities, the worried well who have no physical injury, and those citizens who self-refer to the center.

1. OST3C centers will be established to further manage the casualty population of the incident, and to prevent the area hospitals from being overwhelmed with affected persons who do not need inpatient care.
2. The Incident Commander will request an OST3C to be established through communications. Communications will contact the 24 hour Health Department Duty Officer. The IC will identify a suitable location for the OST3C and have all **MINOR** patients transported to the location via MTA bus or other conveyance.
    - The IC should consider the two "Super" firehouses as primary OST3C locations and Health Department Clinics as secondary OST3C locations.
3. The Baltimore City Health Department will activate its Emergency Response Team (ERT).
    - The team will report to the OST3C location and be prepared to accept patients within two hours of notification.
    - The OST3C is capable of handling 2,000-3,000 non-critical patients during a 24-hour period (80-125 patients per hour).
4. The Baltimore City Fire Department will provide three (3) medic units to staff the OST3C.
    - The first two (2) units will assist the ERT in providing care for the sick and injured inside of the OST3C.
    - The last medic unit will be stationed outside of the OST3C in order to transport critical patients to traditional emergency departments.
5. Patients not tagged by EMS, but determined to have been involved in the mass casualty incident upon arrival at an OST3C site, or at a hospital, will receive a Maryland Triage Tag and will be included in reports of the incident.

Temporary Morgue

1. A morgue area will be designated by Incident Command.
2. Decontamination and removal of the deceased will be coordinated through the Office of the Chief Medical Examiner (OCME) site liaison representative and EMS Branch Director, Operation Section Chief or IC.

Transportation Group Supervisor

1. Establish patient transportation vehicle staging area and patient loading area (if not already done so by EMS Branch Director, Operations Section Chief, or IC).
2. Establish Transportation Group near the exit of the Treatment Group to allow for close coordination of transportation of patients.
3. Establish a helicopter landing zone (as needed).
4. Establish communication with area hospitals; maintain record of hospitals utilized and handling capabilities.
5. Direct the transportation of patients as determined by Treatment Group Supervisor.
6. Establish an accurate patient tracking mechanism.
7. Report resource requirements to EMS Branch Director.
8. Coordinate closely with Treatment Group Supervisor and Staging Area Manager.
9. Report progress to EMS Branch Director, Operations Section Chief, or IC.

Transportation Team Responsibilities

1. All patients will be decontaminated, triaged and tagged with a Maryland Triage Tag prior to transport.
2. Patients transported to hospitals or OST3Cs will be tagged with a pre-numbered Maryland Triage Tag and scanned into the system using the Emergency Patient Tracking System (EPTS) if available.
3. Medic units and ambulances will be used to transport non-ambulatory critically ill patients to area hospitals directly from the scene after decontamination, triage and stabilization has been completed.
4. Ambulatory patients may be transported from the scene to OST3C centers using non-traditional methods.
5. Ambulatory patients needing further medical care will be transported from OST3C to local hospitals by ambulance or by non-traditional methods, depending upon patient need and equipment availability.
6. Non-traditional methods may include the use of:
   - Maryland Mass Transit Administration buses.
   - City-owned vehicles of various types.
   - Military vehicles of various types.
7. The BCPD will coordinate with other law enforcement agencies and the Incident Commander to design and control routes from the incident to the OST3C.

Supply Group Supervisor

1. Establish a suitable location for supply operation.
2. Determine medical supply needs of the other groups.
3. Coordinate the delivery, set up and dispersal of supplies and equipment from Mass Casualty Trailer(s).
4. Allocate additional supplies and equipment as needed.

5. Coordinated closely with other Group Supervisors.
6. Report progress to EMS Branch Director, Operations Section Chief, or IC.

Related Procedures

[**MOP 617**] HELICOPTER OPERATIONS
[**MOP 650**] CRITICAL INCIDENT STRESS MANAGEMENT TEAM
[**MOP 650-1**] CHAPLAIN CORPS
[**MOP 808-3**] OPERATIONS- COMMANDEERING M.T.A. VEHICLES
[**MOP 808-4**] OPERATIONS- GO TEAM
[**MOP 809-2**] PATIENT CARE- ECHELONS OF TRAUMA CARE