

Multi-Casualty Incident Plan



Prepared by:

Orange County Fire Chiefs' Association

Orange County Fire Services

Operational Plan

MULTI-CASUALTY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

Revised: January 2019

INTENT

It is the intent of this plan to provide a system for managing Multi-Casualty Incidents that will provide the best care possible with the resources available and make certain that a multi-agency response can effectively work together.

DEFINITIONS

Ground Ambulance Coordinator (GAC) – The GAC manages the Ambulance Staging Area(s), and dispatches ambulances as requested.

Incident Commander (IC) – Establishes overall command of the incident. The IC controls all functions of an incident until assignments are given.

JUMP START – Pediatric mass Casualty Incident (MCI) Triage Tool that is an objective triage system that addresses the needs of children and can be a resource tool when planning a triage process for pediatric patients. See Attachment B.

Medical Branch Director – Responsible for the implementation of the Incident Action Plan within the Medical Branch.

Medical Communications Coordinator (Med Com) – Establishes communications with the Base Hospital or other coordinating facility/agency to maintain status of available hospital beds to ensure proper destination.

Medical Group Supervisor – Establishes command and controls the activities within a Medical Group.

Multi-Casualty Incident (MCI) – An incident with sufficient patients such that additional resources are required, and command is established.

Patient Loading Coordinator – The Patient Loading coordinator is responsible for coordinating with the Patient Transportation Unit Leader / Medical Communications Coordinator, and the transportation of patients out of the Treatment Areas. There can be multiple Patient Loading Coordinators.

Patient Transportation Unit Leader (PTUL) – On larger incidents the Patient Transportation Unit Leader is responsible for the coordination of patient transportation.

Treatment Unit Leader (MCUL) – Reports to the Medical Group Supervisor and supervises the Treatment Area Managers and the Patient Loading Coordinator. The Treatment Unit Leader assumes responsibility for treatment, preparation for transport, and the movement of patients to loading areas from the treatment areas.

Triage Unit Leader (MCTL) – The Triage Unit Leader assumes responsibility for providing triage management and movement of patients from the Triage Area.

MULTI-CASUALTY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

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POLICY

A. BASIC CONSIDERATIONS

A Multi-Casualty Incident is an organizational plan that will aid in assigning treatment teams and quickly moving patients off scene to an appropriate receiving center. The design of the system is to be modular and used when the first arriving units are overwhelmed.

1. Treatment at MCIs should take place while en-route to the hospital. Getting the patient to a hospital takes precedence over treating at the scene when transportation is available. (On rare situations, patients requiring decontamination such as organophosphate poisoning, will need to be treated on scene).
2. Paramedics shall use standing orders, when possible, to expedite patient care and transportation.
3. Ordering adequate resources early is critical.

Initial Response Organization: The Incident Commander manages initial response resources as well as all Command and General Staff responsibilities. The Incident Commander assigns the Medical Communications Coordinator with the appropriate communications capabilities to establish communications with the appropriate hospital or other coordinating facility. In addition, the Incident Commander assigns a Triage Unit Leader, establishes treatment areas, and assigns a Ground Ambulance Coordinator.

Reinforced Response Organization: In addition to the initial response, the Incident Commander may establish a Safety Officer, a Treatment Unit Leader, and a Patient Transportation Unit Leader. An Air Ambulance Coordinator is established based on the complexity of the air ambulance operation, and a Helispot Manager is established to manage the designated Helispot. Immediate, Delayed, and Minor Treatment Areas are established and staffed. Ambulance Strike Teams may be requested through the local EMS system to support local resources.

Multi-Division/Group Response Organization: All positions within the Medical Group are now filled. A Rescue Group can be established to free entrapped victims. A Fire Suppression Group can be established to control any hazardous conditions. A Medical Unit and Responder Rehabilitation may be established to support incident personnel.

Multi-Branch Response Organization: A fully expanded incident organizational chart shows the Medical Branch and other Branches. The Medical Branch has multiple Medical Groups due to incident complexity but only one Patient Transportation Group. This is because all patient transportation must be coordinated through one point to avoid overloading hospitals or other medical facilities. The Air Operations Branch is shown to illustrate the coordination between the Patient Transportation Unit and the Air Operations Branch.



B. MCI LEVELS

The leveling of an MCI allows for the rapid deployment of resources and increased situational awareness of surrounding cities and departments. All numbers in the leveling system are estimates and the complexity of an incident can drive an increase in the level (active shooter event with 20 gunshot victims may be designated a level 3 MCI due to the overload of our trauma system).

MCI Level (1) 3 - 9 patients (approximate) A suddenly occurring event that overwhelms the routine first response assignment. The number of patients is greater than can be handled by the usual initial response. Depending on the severity of the injuries the system may have adequate resources to respond and transport the patients. Duration of the incident is expected to be less than 1 hour. Examples: Motor vehicle accident, pepper spray event.

MCI Level (2) 10 - 29 patients (approximate) A suddenly occurring event that both overwhelms the first response assignment and, additional resources requested within the Operational Area or neighboring counties. The Regional medical mutual aid system is activated. An adequate number of additional ambulances are not likely to be immediately available, creating a delay in transporting patients. The duration of incident is expected to be greater than an hour. Examples: Bus crash, train accident, active shooter, improvised explosive device (IED).

MCI Level (3) 30 + patients (approximate) A suddenly occurring event that overwhelms the first response assignment, additional resources requested within the Operational Area, and mutual aid from neighboring counties. It is not possible to respond with an adequate number of ambulances to the incident and promptly respond to other requests for ambulance service. Regional medical mutual aid system is activated. Air and ground ambulance and other resources from outside the county are required and receiving hospitals will be overwhelmed. In an incident of this size and complexity, the operational area EOC and disaster plan may be activated. Examples: Commercial airline crash, building collapse, active shooter. A Level (3) MCI could also deal with the complexity of the event, for example; an active shooter incident with 20 gunshot victims could be a Level (3) MCI due the complexity of the event and the overwhelming of the trauma system.

C. ICS POSITIONS, FUNCTIONS, AND RESPONSIBILITIES

There are four basic functions of an MCI: Command, Triage, Treatment, and Transport. Each of these functions have different ICS positions that fall within them and can be expanded to meet the needs of any size MCI. This does not mean that every overhead position must be filled on each incident. For example: During a four patient Multi-Casualty Incident, the first-in officer may assign two personnel to triage and due to the number of patients, never establish a Triage Unit Leader. Conversely, as the incident gets larger or more complex, additional positions can be established per Fire Scope. See (**Attachment A**) for a further explanation of ICS positions in an expanded MCI.



COMMAND

Command of an MCI could be at different levels depending on the size and complexity of the incident. The Incident Commander could directly command the MCI on a smaller isolated event or that function could be the responsibility of the Medical Branch Director or Medical Group Supervisor for larger more complex incidents. Below are the basic functions of Command on an MCI:

1. Establish Command and identify the incident as a Multi-Casualty Incident (MCI).
2. Assign triage as soon as possible using the START Method of triage.
3. Estimate the number of patients, declare the Level of MCI, and report to dispatch.
 - Exact numbers or patient triage category are not required at this point.
 - Estimates like: 3-5, 4-8, 10-15, 30-50, 100 plus are adequate in the early stages. A more accurate count can be communicated when available.
 - The level of the MCI can be derived from the number of the patients and/or a combination of the number of patients and the complexity of the event.
 - o An active shooter event of 10 gun-shot victims will overwhelm the nearest trauma centers, require extra resources on scene, and cooperation from multiple agencies, this could be designated a level 3 MCI.
4. Request additional resources
 - Order resources based on initial estimates. Special consideration must be given to ordering an adequate number of ALS units and ambulances.
 - Paramedic/EMT and Ambulance Resources
 - o (1) Paramedic, (1) EMT, and (1) ambulance should be assigned to each Immediate patient.
 - o (1) Paramedic, (1) EMT, and (1) ambulance should be assigned to each Delayed patient.
 - o A minimum of (1) EMT should be assigned to each small group of Minor patients.

Note: When paramedic resources are depleted, patients can be evaluated and transported by EMT's and on large incidents, multiple patients can be transported in one ambulance.

Note: Paramedics that respond on ambulance transport units should be considered treatment teams. Additional private transports should be requested if necessary.



5. Assign ICS positions

- The IC / Medical Branch / Medical Group will assign the positions in an MCI based on the size and complexity of the incident.
- Basic positions that should be established on each MCI are:
 - o IC
 - o Triage Unit Leader (Triage)
 - o Medical Communications Coordinator (Med Com)
 - o Patient Transportation Unit Leader (PTUL)
 - o Ground Ambulance Coordinator (GAC)

TRIAGE

Triage will be performed using the Simple Triage and Rapid Treatment (START) Triage System by the initial resources on scene (**Attachment B**). When resources become available a Triage Unit Leader is established (usually the first in Captain, after being relieved by BC). The Triage unit leader is responsible for the patient triage, treatment, and movement while in the triage area. Below are basic functions of Triage on an MCI:

1. Inform Medical Group Supervisor/IC of resource needs.
2. Implement the triage process using START and JUMP START.
 - Triage ribbons should be used for initial triage of patients on Multi-Casualty Incidents. This is considered the Primary Triage. Patients triaged with ribbons will be assigned a triage tag once a treatment team is committed or before they leave the scene, this is considered Secondary Triage.
 - If appropriate resources are available, provide immediate spinal motion restriction (SMR) when dealing with potential spinal injuries.
 - Triage personnel will report the number of patients and triage category to their supervisor as soon as that information is available.
3. Coordinate movement of patients from the Triage Area to the appropriate treatment areas or directly to the transport areas (smaller incidents).
4. Ensure adequate patient decontamination and proper notifications are made.
5. Assign resources as triage personnel, litter bearers, or treatment teams.
6. Give periodic status reports to Medical Group Supervisor/IC.



TREATMENT

The main goals of treatment on an MCI are to stabilize life-threatening injuries and prepare the patient for transport to the hospital. Treatment can take place in the triage area if the patients have not been moved (small traffic collisions) or in an area set aside specifically for treatment (red, yellow, green tarps). If a treatment area is established a Treatment Unit Leader should be established. The Treatment Unit Leader is responsible for establishing Immediate, Delayed, and Minor treatment areas, and the movement of patients from the treatment area to the ambulance loading area. Below are basic functions of Treatment on an MCI:

1. Perform a secondary triage on all patients.
2. Place a triage tag on each patient for tracking.
3. Set up defined areas for treatment of Immediate, Delayed, and Minor patients.
4. Treat patients, stabilizing life-threatening injuries, and prepare patients for transport.
5. Assign (1) Paramedic and (1) EMT for each Immediate and Delayed patient as resources are available. All Delayed and Immediate patients should be evaluated by a Paramedic if resources allow.
6. On large, spread out incidents with multiple treatment areas, a Patient Loading Coordinator can be utilized to prepare patients for transport and move them to the loading areas. The Patient Loading Coordinator reports to the Treatment Unit Leader.

TRANSPORTATION

The transportation function in an MCI is made up of the Patient Transportation Unit Leader (PTUL), Medical Communications Coordinator (Med Com), and the Ground Ambulance Coordinator (GAC). It is important to establish a Med Com early in the incident to ensure proper notification to the hospitals. The Patient Transportation Unit Leader is responsible for the coordination of patient transportation and maintenance of records relating to patient identification and destination. Below are some basic functions of Transportation on an MCI:

1. Establish communications with OCC / Base Hospital through a single Med Com.
2. Identify the Receiving Centers for each patient leaving the scene, utilizing: OCC, the Base Hospital, or the Patient Care Capacity Inventory established by OCEMS. Tracking of all patients leaving the scene is critical for the overall incident.
3. Establish a clear path for ambulance ingress and egress.



D. COMMUNICATIONS

MEDICAL COMMUNICATIONS COORDINATOR

The Medical Communications Coordinator (Med Com) is responsible for maintaining communications with the Base hospital to assure appropriate patient destinations. Med Com reports to the Patient Transportation Unit Leader. It is important to start this process of determining patient destinations early, it takes the Base Hospital a few minutes to identify the closest receiving centers, specialty centers, and the number of patients each can take.

It is important to note, there should only be one Medical Communications Coordinator on an MCI, regardless of the size, complexity, or geography. This will prevent the overloading of hospitals where possible. If additional patient treatment or loading areas are necessary (spread out incident), a Patient Transportation Unit Leader can be established at remote locations and destinations will be received from Med Com on a medical tactical frequency. The following are basic functions of Med Com:

1. Consider establishing a position forward of Ambulance Loading. Med Com should not be a mobile position, establish a position near the patient loading area.
2. Contact OCC on 6 Alpha & ID themselves as "(incident name) Med Com" and request a frequency.
3. Provide incident description, estimated number of patients, and level of MCI.
4. Give Patient Report based on level of MCI, reporting should be limited to pertinent information and only if available.
5. On level 3 MCIs, if the Base becomes overwhelmed, OCC may relay destinations directly to Medical Communications or assist the Base Hospital.
6. Relay hospital destinations to Paramedic/EMT treatment teams directly or through the Patient Transportation Unit Leader.
7. For large or spread out incidents a medical tactical frequency should be requested and utilized to coordinate destination needs between Patient Transportation Unit Leader(s) and Med Com.
8. In the event of communications failure, destinations will be determined per OCEMS's Patient Care Capacity Inventory (PCCI), or utilizing ReddiNet through dispatch centers.

MULTI-CASUALTY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

Revised: January 2019

Level (1) Radio Report

- Triage Tag #
- Major injuries
- Ambulance identifier
- A destination or specialty request
- Need of a Trauma center (priority given to the most severe traumas first)
- Patient age
- Patient gender
- Vitals
- Patient category (Immediate, Delayed, Minor)

Level (2) Radio Report

- Triage Tag #
- Patient category (Immediate, Delayed, Minor)
- A destination or specialty request
- Ambulance identifier
- Additional information when available

Level (3) Radio Report

- On large or complex incidents, little to no information will be given to the base hospital or receiving center. The Base will monitor ReddiNet and be ready to assist Med Com with the distribution of patients.
- If time and resources allow, give Level #2 report.

Additional Level (3) Explanation:

Base Hospital Responsibilities – Open ReddiNet and poll all effected hospitals. Using the Incident City as a reference be ready to give the closest hospitals and the number of beds available, emphasis should be given to trauma beds first.

Med Com Responsibilities – Identify the Level of MCI with the Base Hospital and approx. number of patients. Communicate needs clearly to the Base Hospital and obtain bed availability for surrounding hospitals. If known, identify nearest receiving centers. Example:

- **AE1** - “UCI, Anaheim Engine 1 is establishing Anaheim Med Com, we have a Level 3 MCI with 30 plus patients. This is an active shooter event with multiple gunshot victims. I will get back to you in a minute for bed availability in the area. BASE- “UCI copy level 3 MCI, active shooter event.”
- **AE1** - “UCI, Anaheim Med Com, I need trauma bed availability for the nearest trauma centers (specify hospitals, if known) for UCI, OC Global, and Mission.” BASE – “UCI can take (4), OC Global can take (3), and Mission can take (4).” **AE1** - “UCI, Anaheim Med Com copy that, I need bed availability for the nearest receiving centers (specify hospitals, if known); Anaheim Regional, WAMC, Anaheim Global, and Garden Grove.” BASE – “Regional can take (3), Anaheim Global can take (2), WAMC can take (3), and Garden Grove can take (2).” **AE1** - “Anaheim Med Com copy.”

MULTI-CASUALTY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

Revised: January 2019

- **AE1** - "UCI, Anaheim Med Com, standby for a run-down of what has left the scene and then I need an update on bed availability. We have sent 4 pts to UCI, 3 pts to OC Global, 4 pts to Mission, 3 pts to Regional, 2 pts to Anaheim Global, 3 pts to WAMC, and 2 pts to Garden Grove. We have about 15 patients left on scene, all gun-shot victims..."

Note: If possible, the transporting unit will call the receiving hospital to give a more detailed patient report or update.

Note: If a paramedic needs additional medical direction while en-route to the receiving center, they may contact OCC and get a separate frequency for base contact.

E. PROCEDURES

1. Fire Resources Initial Actions

The first arriving fire officer will take command of the incident and declare an MCI. Assign triage as soon as possible to ensure proper resources are requested and cooperating agencies are notified. As patient numbers and incident complexity are established, the level of the MCI should be communicated to the Dispatch center. On larger incidents, where command has been established, the IC shall declare an MCI and establish a Medical Group or Medical Branch when appropriate.

When resources are available, a Triage Unit Leader is established to manage the personnel assigned to triage. Triage personnel shall report back with the number of patients and acuity levels (Immediate, Delayed, Minor, Deceased).

Medical Communications Coordinator (Med Com) will be established as early as possible to prevent delays in moving patients off the scene. Med Com should establish a position forward of the ambulance staging area. On large or spread out incidents, multiple Triage, Treatment, and Transport positions can be established but there should be only one (1) Medical Communications Coordinator talking with one (1) Base Hospital.

A Patient Transportation Unit Leader is responsible for tracking of patients off scene and will work closely with Med Com and the Ground Ambulance Coordinator to ensure patients are transported smoothly and tracking is accurate. The Ground Ambulance Coordinator can be assumed by a supervisor from ground ambulance providers.

2. ORANGE COUNTY COMMUNICATIONS

Upon receipt of the initial notice of an identified Multi-Casualty Incident, Orange County Communications (OCC) will:

MULTI-CASUALTY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

Revised: January 2019

- a. Notify the base hospital normally assigned to the area of the Multi-Casualty Incident and provide the type of incident, incident location, and estimated number of patients.
- b. Monitor communications and provide necessary assistance as needed.
- c. During a level 3 MCI or complex level 2 MCI, contact with the Base Hospital might not be practical. In collaboration with Med Com, the Base, and/or OCC, OCC will run the communications for the MCI and give destinations to Med Com directly. OCC will poll the local receiving centers via ReddiNet to determine the number and types of patients each hospital can handle.

3. BASE HOSPITALS

The MICN will:

- a. Immediately assess the current Patient Care Capacity Inventory (PCCI) of the Trauma Centers and Paramedic Receiving Centers via ReddiNet or phone.
- b. Use the Base Hospital Multi-Casualty Incident Worksheet. Individual Base Hospital Reports are not required.
- c. Ensure the number of Trauma beds is known to the Incident Med Com.
- d. Receive destination requests from Med Com and assign hospital destinations without delay when possible.
- e. MICN's will notify receiving centers via landline unless OCC assistance is requested.
- f. Determine if the Base Hospital can manage the complexity of the incident and collaborate with Med Com and OCC

4. AMBULANCE PROVIDERS

Once the ambulance receives destination information, and departs the scene, the ambulance must monitor the assigned tactical frequency or Med-9 radio in case Med Com, OCC, or the Base Hospital needs to change the hospital destination.

5. AGENCY DISPATCH CENTERS

Upon identification of the Multi-Casualty Incident, the fire dispatcher center shall make the following notifications based on the level of MCI. When a level is not announced, the dispatcher can prompt

MULTI-CASUALTY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

Revised: January 2019

the IC.

Level 1 Notifications –

- Overhead notifications to affected departments (Department specific policies used)

Level 2 Notifications –

- Level 1 notifications
- Regional dispatch notifications
- Op-Area overhead notifications
- Regional Ambulance notifications

Level 3 Notifications –

- Level 1 and 2 notifications
- Medical Task force activation (North/South)
- Op-Area MCI trailer(s)/resources dispatched
- Department FOC / EOC activations (Department Policy Driven)

On larger or complex incidents local dispatch centers should anticipate the need for additional frequencies.

6. DOCUMENTATION

Electronic Patient Care Reports will be completed by agency personnel while en-route to, or at the receiving centers for all ALS transports. A Downtime form can be utilized if ePCRs are not available.

For BLS transports, reports should be completed prior to the patient leaving the scene, if possible, without delaying transport.

If a modified run report is necessary, emphasis should be given to the CAD information, triage tag #, and destination when possible. This information is vital for patient tracking, post-incident.

When agency personnel are no longer available or complexity of the incident dictates (level 3 MCI with multiple patients), Triage Tags in conjunction with ambulance run sheets will be utilized.

7. CONCLUSION OF INCIDENT

Hospitals

Due to the unique impact that an MCI can have on the local receiving centers, consideration needs to be given to the continuation of patient care. Upon completion of a Level 2 and Level 3 MCI the Incident Commander should poll the hospitals in the affected area through direct contact or contact through the Dispatch center to ensure adequate resources are available. If necessary, resources can

MULTI-CASUALITY INCIDENT PLAN



Orange County Fire Services
Operational Plan

PLANS #3

Revised: January 2019

be dispatched from the scene to the Receiving Center(s) to assist with patient treatment and stabilization.

On large incidents, there should be an anticipation of patients self-transporting to hospitals in the area and the possible need for Fire resources to respond and assist with triage and treatment. In these cases, the dispatch centers shall notify the IC for direction.