MANAGEMENT OF MULTIPLE PATIENT INCIDENTS

I. MULTIPLE PATIENT INCIDENT (MPI)

A. Definition: An incident where multiple patients (3 or more) exist and the EMS response is able to provide the adequate numbers of responders, EMS shall provide standard levels of care and transportation. This shall be used to prioritize the on-scene evaluation and treatment of multiple patients based on a primary triage category with the expectation that there is a complete assessment, hospital contact, and transport decision as per Region 11 protocols and policies for each individual patient.

B. MPI General Concepts

1. Scene safety is a universal consideration.

2. Field to hospital communication for each individual patient shall be either Online Medical Control to a Region 11 EMS Base Station or Pre-notification to the receiving hospital (per Field to Hospital Communication policy).

3. Patient care reports to be completed as per policy.

C. Incident Priorities

1. First arriving unit on scene

   a. Scene size-up and activation of additional resources. The first arriving officer (EMS or Fire) may initiate an MPI response.

   b. Primary triage as per Attachment 1 “Region 11 Modified START/JumpSTART Triage Algorithm”:

      i. “Red” (Immediate)
      ii. “Yellow” (Delayed)
      iii. “Green” (Minimal)
      iv. “Black” (Deceased)

2. Life saving (focused) interventions that may be performed during the triage process include: control of major hemorrhage, basic airway opening maneuvers, and chest decompression if within the responder’s scope of practice and only if the necessary equipment is immediately available.

D. Scene Management

1. Goal of Scene Management: Primary triage of patients with focused interventions with further treatment and transport prioritizing the most critical patients first.
2. Triage is a dynamic process and the initially assigned triage category may change subsequent to additional patient assessment.

3. Treatment: Each patient should receive a primary and secondary survey and treatment per Region 11 EMS protocols.
   a. Trauma Patients should have the Trauma Field Triage Criteria applied (per policy) to identify critical patients requiring transport to a Level 1 Trauma Center.
      i. Patients that meet Step 1 (Physiologic) or Step 2 (Anatomic) criteria should be triaged “Red” and be transported to a Level 1 Trauma Center.
      ii. Patients that meet Step 3 (Mechanism of Injury) or Step 4 (Special Consideration) should be triaged “Yellow” and be transported to a Level 1 Trauma Center.
   b. Medical patients should be reassessed and triage level adjusted as indicated.
   c. First responders (EMS, Fire, Law Enforcement, etc.) that become ill or injured during the incident should be triaged and treated as above and will be given priority transport.

4. Transport: Begin transport of the most critical (“Red”) patients to the closest, most appropriate hospital.
   a. After the most critical (“Red”) patients have been transported, the immediate (“Yellow”) patients should be transported next, and then minimal (“Green”) patients.
   b. Ambulances may transport multiple “Green” or “Yellow” patients in the same vehicle for resource utilization subject to the availability of proper safety restraints. This may be done only after primary and secondary survey with medical stabilization. The maximum number of patients transported per ambulance should be one “Red”, two “Yellow”, or four “Green”.
   c. After complete assessment, patients that meet criteria for withholding resuscitation (per policy B.5) may be categorized as deceased (“Black”) and left on scene, unless the situation warrants removal.

5. Communication: Each transporting ambulance shall contact the appropriate hospital for Online Medical Control or pre-notification (per Field to Hospital Communication policy).

II. EMS PLAN RESPONSE

A. Definition: The number of patients exceeds routine operational capacity of a Multiple Patient Incident (per Section I) wherein additional dispatch of resources is required to provide normal levels of care and transportation. This shall be used to prioritize the on-scene evaluation and treatment of multiple patients based on a primary triage category with the expectation that there is a subsequent complete assessment and patient care per Region 11 protocols and policies. Specific hospital contact and transport decisions will be followed as defined in this section.
B. The EMS response is based on the scale of the incident and may include several levels, each corresponding to a specific number of ambulances and support personnel assigned. In the Region 11 EMS System, this is defined as an “EMS Plan 1, 2, or 3”.

C. EMS Plan Response General Concepts:

1. Scene safety is a universal consideration.

2. For larger events such as an EMS Plan 2 or 3, triage tags (or other patient acuity identifier) should be used and patient tracking should be implemented.

3. An EMS Communications Officer will conduct initial field to hospital communication. Additional communication as detailed below (see Communication section).

4. The Resource Hospital (RH) with geographical jurisdiction over the incident will be the Command Hospital for the EMS Plan response unless an alternate RH is designated based on operational needs.

5. Patient care reports to be completed as per policy.

D. Incident Priorities

1. First arriving unit on scene
   a. Scene size-up, activation of additional resources, and communication of need for EMS Plan activation. The first arriving officer (EMS or Fire) or OEMC may initiate an EMS Plan response.
   b. Primary triage as per Attachment 1 “Region 11 Modified START/JumpSTART Triage Algorithm”:
      i. “Red” (Immediate)
      ii. “Yellow” (Delayed)
      iii. “Green” (Minimal)
      iv. “Black” (Deceased)

2. Life saving (focused) interventions that may be performed during the triage process include: control of major hemorrhage, basic airway opening maneuvers, and chest decompression if within the responder’s scope of practice and only if the necessary equipment is immediately available.

3. Establish a Casualty Collection Point (CCP) or treatment area if the situation warrants.

E. Scene Management

1. Goal of Scene Management: To maintain a consistent response structure that can be scaled or adapted for any type and size of incident.
2. **Triage**: All patients should receive a primary triage based on the Region 11 Modified START/JumpSTART Triage Algorithm. Triage is a dynamic process and the initially assigned triage category may change subsequent to additional patient assessment.

3. **Treatment Area**: A Treatment Area should be set up when the number and type of patients exceeds the number of ambulances available for immediate transport. A Treatment Officer at the level of paramedic, should be identified to manage this area and provide repetitive secondary triage and treatment as appropriate. Each patient should receive a primary and secondary survey and treatment per Region 11 EMS protocols.

   a. **Trauma patients** should have the Trauma Field Triage Criteria applied (as per policy) to identify critical patients requiring transport to a Level 1 Trauma Center.
      i. Patients that meet Step 1 (Physiologic) or Step 2 (Anatomic) criteria should be triaged “Red” and be transported to a Level 1 Trauma Center.
      ii. Patients that meet Step 3 (Mechanism of Injury) or Step 4 (Special Consideration) should be triaged “Yellow” and be transported to a Level 1 Trauma Center.

   b. **Medical patients** should be reassessed and triage level adjusted as indicated.

   c. **First responders** (EMS, Fire, Law Enforcement, etc.) that become ill or injured during the incident should be triaged and treated as above and will be given priority transport.

4. **Transport Area**: Begin transport of the most critical (“Red”) patients to the closest, most appropriate hospital. This is managed by the Transport Officer.

   a. After the most critical (“Red”) patients have been transported, the immediate (“Yellow”) patients should be transported next, and then minimal (“Green”) patients.

   b. Ambulances may transport multiple “Green” or “Yellow” patients in the same vehicle for resource utilization subject to the availability of proper safety restraints. This may be done only after completing the primary and secondary survey with medical stabilization. The maximum number of patients transported per ambulance should be one “Red”, two “Yellow”, or four “Green”.

   c. After complete assessment, patients that meet criteria for withholding resuscitation (as per policy) may be categorized as deceased (“Black”) and left on scene unless the situation warrants removal.

5. **Communication**

   a. There should be an initial communication with the Resource (Command) Hospital for Online Medical Control of the incident. There should be secondary individual ambulance communication as a pre-notification report to the receiving hospital. This may be limited in a large incident such as an EMS Plan 3 and above.

   b. An EMS Communications Officer at the level of a paramedic should be identified to contact the Command Hospital. For large, complex, evolving incidents, there should be early notification to the Command Hospital.
c. After triage is complete, or in the case of a large scale event where triage may continue, the EMS Communications Officer will contact the Command Hospital to notify the ECRN/ECP of the EMS Plan Response and convey the following information:
   i. Location of the incident
   ii. Nature of the incident
   iii. Number of patients
   iv. Adult or pediatric
   v. Patient triage category
   vi. Ambulance transporting each patient

d. The EMS Communications Officer, in consultation with the Command Hospital, will discuss a transport plan based on triage category and nature and complexity of the incident.
e. The ECRN/ECP will assist with coordinating destination of special situations including transportation of family groups, unaccompanied minors, to a hospital on diversion, or any complex situation as requested by the Communications Officer.
f. The ECRN/ECP will provide the receiving hospital an initial notification of the incoming patients.
g. The transporting ambulance should provide the receiving hospital a brief, updated pre-notification report while enroute, stating that the patient is from an EMS Plan response.
h. The EMS Communications Officer should notify the Command Hospital when the EMS Plan is secured or completed.

6. Receiving Hospitals

   a. Distribution of patients will be based on the scale of the incident, patient triage category, and hospital capability.
   b. Hospitals may receive a combination of patients in multiple triage categories.
   c. Hospital Distribution for a Plan Response:
      i. Each hospital should be prepared to receive a potential initial distribution of 2 “Red” patients, 2 “Yellow” Patients, and 4 “Green” Patients.
      ii. This initial distribution may be higher to maintain family unification or based on the capacity of a receiving hospital.
      iii. In the event of an incident with a high number of “Green” patients (low speed bus collision or gas inhalation) a hospital may receive multiple “Green” patients.
      iv. Additional transport needs beyond this will be assessed with the individual hospital based on the incident. The EMS Communications Officer will contact the Command Hospital with additional patient updates and the Command Hospital should contact the receiving hospitals as needed to assess capacity.
   d. Hospitals will continue to receive transports from other simultaneous EMS incidents.
   e. Hospitals on ALS bypass may receive patients transported from an EMS Plan Response. Hospitals on trauma bypass shall have capabilities assessed by the Command Hospital. Hospitals on Internal Disaster bypass should not receive patients from an EMS Plan Response (per policy).
f. Trauma patients meeting Field Triage Criteria Step 1-4 criteria (per policy) should be transported to a Level 1 Trauma Center.

7. **Quality Improvement** - All EMS Plans will be reviewed by the responding agency and the Command Hospital with feedback given to involved personnel.

### III. MASS CASUALTY INCIDENT (MCI)

A. **Definition:** The number of patients or type of situation has overwhelmed the operational ability of the provider wherein the number of patients and nature of their injuries make the normal prehospital level of stabilization and care unachievable, and/or available resources are insufficient to manage the scene under normal operating procedures.

B. **MCI General Concepts**

1. Triage tags (or other patient acuity identifier) and electronic tracking are to be used on all patients.

2. Communication will be handled by the EMS Communications Officer and the Command Hospital as defined in the previous section for EMS Plan Response.

C. **Incident Priorities:** Initial incident operations should be per EMS Plan response activation.

1. Primary triage as per Attachment 1 “Region 11 Modified START/JumpSTART Triage Algorithm”:
   a. “Red” (Immediate)
   b. “Yellow” (Delayed)
   c. “Green” (Minimal)
   d. “Black” (Deceased)

D. **Scene Management**

1. **Additional resources** may be requested by the Incident Commander to assist with the incident.

2. **The Chicago Fire Commissioner or designee may request:**
   a. Mutual Aid Box Alarm System (MABAS)
   b. Private Provider Emergency Response System (PPERS)

3. **Communication**
   a. The Command Hospital will manage patient distribution.
b. The Resource Hospital Coordinating Center (RHCC) hospital will be notified by the Command Hospital.
c. The RHCC will assist with incident communications and assessing hospital capacity as the situation warrants.

4. Transportation of the most critically injured trauma patients should be prioritized to Level 1 Trauma Centers unless these hospitals have provided notification they are overwhelmed. Activation of Helicopter EMS (per policy) may assist with distribution.

a. Ambulances may transport multiple patients in the same vehicle for resource utilization.
b. Transportation decisions should attempt to evenly distribute patients to area hospitals and not overburden one facility.
c. PPERS may also be activated for hospital decompression.
d. Alternate transport vehicles and destinations may be utilized and will be coordinated by the EMS Medical Director.

5. Quality Improvement: MCI events will be reviewed by the responding agencies and the Region 11 Medical Director's Consortium.
Life-Saving (Focused) Interventions that may be performed during the triage process include: control of major hemorrhage, basic airway opening maneuvers, and chest decompression if within the responder’s scope of practice and only if the necessary equipment is immediately available.

Triage Categories

- **IMMEDIATE**: Obvious threat to life or limb and requires immediate medical attention
- **DELAYED**: Condition in need of definitive medical care, but is not likely to decompensate rapidly if care is delayed
- **MINIMAL**: Minor injuries and can tolerate extended delays in treatment without increasing the risk of mortality
- **DECEASED**: No respirations following basic airway maneuvers

1- **REGION 11 MODIFIED START/JumpSTART TRIAGE ALGORITHM**

- **Able to walk?**
  - **YES**: MINIMAL → SECONDARY TRIAGE
  - **NO**
    - **Breathing?**
      - **NO**: Position Upper Airway
        - **APNEIC**: Pediatric → Adult
          - **NO PULSE**: DECEASED
          - **PULSE**: 5 Rescue Breaths
            - **APNEIC**: IMMEDIATE
            - **BREATHING**: IMMEDIATE
      - **YES**: Respiratory Distress?
        - **YES**: Rate > 30 (Adult) or Rate ≤ 15 OR > 45 (Pediatric)
          - **IMMEDIATE**
        - **NO**: Peripheral (radial) pulse?
          - **NO**: IMMEDIATE
          - **YES**: Mental Status Appropriate?
            - **NO**: Unable to obey commands or makes non-purposeful movements
              - **IMMEDIATE**
            - **YES**: Obeys commands or makes purposeful movements
              - **DELAYED**

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