MASS CASUALTY UPDATE

- Mass Casualty Triage and Transport
- Bypass
- Termination of Resuscitation
- Behavioral Emergencies

September, 2017

Objectives:
Upon completion of this module, the medic will be able to:

- Understand multiple patient situations
- Discuss the transport decisions of multiple patients to area hospitals
- Discuss bypass and transport decisions
- List termination of resuscitation situations
- Discuss behavioral emergencies and the transport guidelines for these patients.
- Discuss restraint guidelines

Multiple Traumas: Where do I Start?

Mass Casualty Incident (MCI)

vs

Multiple Patient Incident (MPI)

EMS Goal: To save the largest number of people

Multiple Patient Incident - MPI

Definition: *An incident which has many patients involved, however, emergency services, with mutual aid is able to adequately treat and transport to area hospitals within their normal catchment area.*

Mass Casualty Incident - MCI

Definition: *An incident which produces multiple casualties such that emergency services, medical personnel and referral systems within the normal catchment area, cannot provide adequate and timely response and care without unacceptable mortality and/or morbidity.*

In ALL Patient Situations:

REMEMBER: Time is very important:

The GOLDEN Hour for the trauma patient is 60 minutes…….

Time Management is of utmost importance. Be aware of number of ambulances available and number of personnel at the scene.

Is extrication needed? Helicopter transport warranted?

EMS Response:

- Establish Unified Incident Command: This may be a situation where law enforcement, hazardous materials, search and rescue, etc (multiple agencies) are involved.
- Establish Perimeters
- Multiple vehicles- staging area
- The Press
- Community members, on-lookers, etc
- Traffic control

Establish Scene control!

EMS Response (cont'd):

Rapid Triage:
Red – Critical
Yellow – Urgent
Green – "walking wounded"
Blue – Imminent, minimal vital signs
Purple (black) – No vitals, no treatment at this time

Triage is widely knows as the colors red, yellow, green, black.

New terminology that may be more acceptable to those not familiar with EMS triage guidelines, would be to refer to those patients that are not viable as "purple". This new color is not yet widely known. Be aware when used for MCI.

Always be aware of bystanders during triage communications: Color coding may be misunderstood by those not familiar with EMS.

Utilizing triage tags for many multiple patients may be helpful. These tags can be "scanned" if the technology is available. This is very helpful for patient transport and disposition.

On Scene Trauma Management: *Protocols 19-27*

Hemorrhage control:

Consider use of a hemostatic agent –

1. Use of the combat trauma dressing, if available
2. Use of the Israeli bandage, if available

Consider the use of a tourniquet:

1. Note time of placement
2. Apply as close to the injury as possible
3. DO NOT release once applied.

On Scene Trauma Management (cont'd)

Cervical spine control:

If the patient replies 'No' to all questions regarding potential spinal injury, then it is appropriate to not immobilize these patients at the scene.

If the patient were to answer 'yes' to any of the assessment questions, then it is appropriate to only immobilize the cervical spine with a rigid collar (and no backboard).

The medic should use their critical thinking skills when deciding on immobilizing to a backboard. If the patient does not present with the sign/symptoms of a significant spinal injury, a backboard is not always prudent.

Multiple Patient Incident- MPI Guidelines

Things to remember:

- How many patients?
- How many ambulances?
- How many receiving hospitals?

1. Receiving hospital capabilities? How many patients can they receive and at what severity level?
2. What are the ETA's to each receiving hospital

MPI's (cont'd)

1. The medic at the scene should give a brief report on the patient to the resource hospital ECRN. The ECRN assigns a receiving hospital. The transporting medical unit will then call and give a full report to the receiving hospital.
2. *Try to keep family members together and transport them to the same facilities, if able.*
4. The ECRN's will try to not overload any one facility with RED's, if possible. It is important to transport RED's to Trauma facilities first, then spread out others as able.
5. A GREEN patient that is on a backboard and collared, becomes a YELLOW patient in the ED, (due to needing a bed, can't send to Triage or put them in a WC….)

Multiple Casualty Incidents (MCI)

Things to remember:

- How many patients? (initially, this number may not be readily available, it may only be an estimate)
- How many ambulances? (this may also include helicopter transports, etc)
- How many receiving hospitals?

1. Receiving hospital capabilities? Trauma centers, burn units, *urgent aid centers*, etc.
2. Receiving hospital distance from scene. In these cases, hospitals that are further away, may also be used for transport, so as not to overwhelm those that are closest.
3. What are the ETA's to each receiving hospital

THERE IS NO SUCH THING as BYPASS during these situations. Hospitals will be receiving patients regardless of BYPASS status.

MCI's (cont'd)

1. The medic at the scene should give a brief report on the patient to the Resource Hosp ECRN. *i.e. 40 y/o male, RED, head injury, 20 y/o female, YELLOW, bilateral leg injury, etc.* The ECRN assigns a receiving hospital and asks for ETA. The ECRN will tell the transport unit to only call the receiving hospital if there is a significant change in patient status.
2. The ECRN then notifies the receiving hospital that a 40 y/o RED, head injury from the XYZ ambulance unit is enroute, ETA 5-7 min.
4. The ECRN will try to not overload any one facility with RED's, if possible. Transport RED's to Trauma facilities first, then spread out others as able.
5. A GREEN patient that is on a backboard and collared, becomes a YELLOW patient in the ED, (due to needing a bed, can't send to Triage or put them in a WC….)
6. Remember, that depending on the incident, there may be significant "walk in" and "drive up" traffic to each hospital as well.
7. In a MCI that is a declared disaster and hospitals are overwhelmed, the ECRN may direct ambulances to Urgent Aid Centers with GREEN patients only. The ECRN will notify the UA center with a brief (as above) report.

Region VII Trauma Centers -- FYI

- Advocate Christ (Oak Lawn) Level 1
- Silver Cross (New Lenox) Level 2
- Presence St. Joe (Joliet) Level 2
- Presence St. Mary (Kankakee) Level 2
- Riverside (Kankakee) Level 2
- Morris (Morris) Level 2

BYPASS

- Bypass is a courtesy, it is NOT an absolute
- All EMS transports should call their *initially intended receiving hospital,* regardless of bypass status
- If the initial hospital is on bypass, then that hospital will decide on a case-by-case basis on whether to accept the patient or divert. If diverting, the physician in the ED must be consulted and their name provided to the EMS unit.
- EMS units are not to transport greater than 15 minutes to the next (diversion) hospital. You should not be diverted to another hospital that is on bypass! If the only hospitals that this patient can be transported to are all on bypass, then the hospitals are NOT on bypass for this patient and the patient is transported to the closest/requested facility.

Bypass (cont'd)

- EMS providers should not initially call another hospital because their otherwise receiving hospital is on bypass. Knowledge of which hospitals are on bypass does not change the initial communication to the presumably closest hospital.
- A critical patient should not be diverted. This would include, but not limited to, full arrest, STEMI, CVA, and respiratory distress. A patient requiring ventilatory support is NOT stable (all of these cases should be discussed with the ED physician for disposition). Trauma patients have a separate policy and that should be followed.

Trauma Policy: Trauma facilities can go on bypass for:

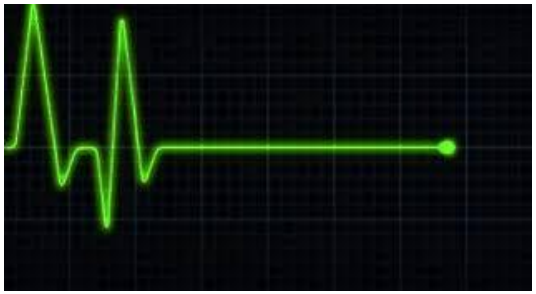
- Lack of staffed operating room availability (trauma only)
- Lack of CT scan availability (trauma only)
- No monitored beds available in the hospital (all hospitals)
- Inadequate number of staff available to safely care for the additional patients (all hospitals)
- The hospital is experiencing an internal disaster (all hospitals)

Termination of Resuscitation

- In all cases, Medical Control is to be contacted.

Considerations:

- 3 rounds of CPR, if able, measured ETCO2 remains below 6mmHg. (not all units have this capability)
- Prolonged extrication (>15min), pulseless, apneic patient with no resuscitation possible
- No return of spontaneous circulation or shockable rhythm after 20 min
- Correctable causes or special resuscitation circumstances have been considered and addressed.



Termination of Resuscitation (cont'd)

In all cases, hypothermia is an exception

Check DNR status

EMS should have law enforcement at the scene if the ALS care is terminated. Disposition of the patient is important.

The patient should not be left unattended for a lengthy time frame and may need to be transported to a hospital until disposition can be decided upon by the family, etc.

If the patient is NOT transported to a medical facility, the hospitals are NOT responsible for equipment/medication exchange. All supplies used by EMS are their responsibility.

Behavioral Emergencies

- Behavioral emergencies should be transported to the closest hospital. Exceptions to this may include:

1. Patient request. The patient is requesting a specific hospital based upon their previous psychiatric admissions.

    a. This does not include a nursing home physician/nurse stating that a patient must be transported to a specific hospital.

2. Behavioral emergencies, in the absence of a life-threating medical emergency, are to be transported to the closest hospital IN ILLINOIS. They are not to be transported across state lines.

Behavioral Emergencies (cont'd)

- If an unruly patient needs to be restrained, the restraints should be applied as loosely as possible to maintain a safe situation, but prevent neurovascular compromise.
- The patient is to be monitored at all times by an EMT in the back of the ambulance. These patients should never be left alone.
- If this patient is a law enforcement "hold", then PD must be available in tandem with the ambulance and remain at the hospital as appropriate.
- No patient should ever be restrained in a prone position
- If the patient is handcuffed, the keys must be readily available to EMS or provided by PD for reasons of medical safety.