

Trauma **EMS Triage and Destination Plan**

The Purpose of this plan:

- Rapidly perform Primary and Secondary Survey, measure Vital Signs, and assess level of consciousness.
- Rapidly identify injured patient presenting to the 911 system and minimize time from injury to definitive trauma care.
- Rapidly identify life or limb threatening injuries for EMS treatment and stabilization.
- Rapidly identify most appropriate hospital destination based on time from injury, severity of injury, and estimated transport time.
- Provide early activation/ notification to the receiving hospital of a trauma patient prior to EMS arrival.
- Minimize scene time to ≤ 15 minutes from patient extrication.
- Provide quality EMS service and patient care to citizens within the EMS system.
- Continuously evaluate the EMS system based on NCOEMS performance measures.

AIRWAY **BREATHING**

- SpO₂ < 90%
- Respiratory Rate < 10 or > 29 breaths/minute
- Respiratory distress or need for respiratory support
- Chest wall instability, deformity, or suspected flail segment

CIRCULATION

Age 10 - 64 years:

SBP < 90mmHg or HR > SBP

Age 0 - 9 years:

SBP < 70mmHg + (2 x age in years)

<u>Age ≥ 65 years:</u>

SBP < 110mmHg or HR > SBP

HEMORRHAGE

- Active bleeding requiring a tourniquet or
 - Requiring wound packing and continuous pressure
- Penetrating injuries to:

Head, neck, chest, back, abdomen Above elbows or knees

- Suspected skull fracture/ skull deformity
- Suspected pelvic fracture
- Suspected fracture of ≥ 2 bones above elbows or knees
- Crushed, degloved, mangled, or pulseless extremity (or any pulse deficit)

Amputation proximal to wrist or ankle

DISABILITY

- GCS Motor Component < 6
 - (Unable to follow commands)
- Suspected spinal injury with new motor or sensory loss (or any motor or sensory deficit)

OTHER CRITERIA

High-Risk MVC:

- Partial or complete ejection
- Significant intrusion into passenger space
 - > 12 inches occupant side or > 18 inches any site Need for extrication
- Death in passenger compartment
- Vehicle telemetry data consistent with severe injury
- Rider separated from vehicle with significant impact
- Pedestrian/bicycle rider:

Ejected, run over, or with significant impact

- Pregnancy > 20 weeks
- ≥ 65 years of age

Low level falls with significant head impact

- Anticoagulant use
- Medically complex patients at baseline

(multiple medical problems/ needs special resources)

- **Pediatrics:**
- Triage preferentially to pediatric capable hospitals
- Suspected child abuse
- Falls with significant head impact when ≤ 5 years of age
- Child (0 9) improperly restrained or secured
- Fall > 10 feet (all ages)

Transport Times to Trauma Centers

YES►

If > 40 minutes - transport to closest community hospital

Transport to:

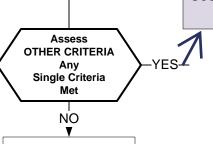
Trauma Center

ECU Health / Vidant

If > 30 minutes via ground utilize closest aeromedical

If no air available - ground to ECU / Lejune depending on location

See Attached Map



Transport to closest appropriate facility

Any Single Criteria

Met

NO

Transport Times to Trauma Centers

If > 40 minutes transport to closest community hospital



Trauma EMS Triage and Destination Plan

All patients meeting trauma center criteria â•fi call Air transport or ground transport if within ECU or Lejune area designated on attached map.

If in CEMC designated area - transport to CEMC. ** In rare occasions, crew may contact Medical Control for permission to bypass CEMC for ground transport to ECU. This is highly dependent on staffing and number of unit available **

Jones Co or Mutual Aid for Jones - If pt meets trauma center criteria â•fi call for air transport. If Air not available then ground transport to Lejune or to ECU in extreme NW corner of Jones Co

Pamlico Co - If pt meets trauma center criteria - call for air transport. If Air not available then ground transport to CEMC - if near Beaufort Co Line consider ground direct to ECU. (No med control needed)

Mutual Aid for Beaufort Co - If pt meets trauma center criteria - call for air transport. If Air not available then ground transport to ECU Greenville

Pearls

- If unstable airway or unstable hemodynamic condition, may divert transport to closest appropriate facility.
- All trauma patients should be triaged and transported using this plan daily.
- Patients not meeting RED or YELLOW criteria should be triaged to most appropriate facility in the usual fashion.
- Expectation: EMS agency will collaborate with their regional Trauma Center/ TRAC resources to establish point-to-point and inter-facility transport workflows for patient requiring higher level of acute care in consideration of potential EMS system impact and regional approach to trauma care.
- Designated Trauma Centers:

Hospital currently designated or with provisional level status by NCOEMS.

Level I, II, or III designated centers are recognized.

Level I and Level II are essentially equivalent in regards to clinical care.

Level I may have specialty care not available at Level II, such as limb reimplantation or spinal care/ rehabilitation. Where differences occur, a plan should be addressed with input from regional trauma centers and the TRAC, for appropriate destination choices.

Free standing emergency departments are not considered part of the trauma center.

• Burns:

Isolated burn patients should be triaged to most appropriate, closest facility.

Burns with other penetrating or blunt trauma should be triaged using this protocol.

• Designated Burn Center:

American Burn Association (ABA) verified Burn Center co-located with a designated Trauma Center.

• EMS Transport Times in Destination Decisions:

EMS transport times should be set based on collaboration with all trauma centers/ TRAC where EMS agency routinely transports in the regional trauma system.

Helicopter EMS (HEMS):

There is no clear evidence that define strict criteria as to which patients may benefit from HEMS transport.

There is no clear evidence that define transport time considerations when assessing the need for HEMS transport.

HEMS service should be incorporated into the regional EMS plan and participate in agency Peer Review.

HEMS utilization is strictly a medical decision and while life saving, can be very costly to the patient.

Considerations when utilizing HEMS:

Patients meeting Trauma Triage and Destination RED criteria:

When transport times are > 30 - 45 minutes from the Trauma Center.

When geographic distance is > 45 minutes from the Trauma Center.

When faced with an entangled or entrapped victim, add estimated extrication time to transport time.

 Modality of transport in acute trauma depends on multiple factors, but safest and fastest should be considered, whether ground EMS, air medical EMS, or specialty/critical care ground transport.

