Trauma System

A. GUIDELINES FOR FIELD TRIAGE OF INJURED PATIENTS:



1

Glasgow Coma Scale ≤ 13 or

Systolic Blood Pressure < 90 mmHg or

Respiratory rate < 10 or > 29 breaths per minute (< 20 in infant aged < 1 year); or need for ventilatory

support.

Yes

No

Take to trauma center. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the trauma system.

Assess anatomy of injury

2

- All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee; or
- Chest wall instability or deformity (e.g., flail chest); or
- Two or more proximal long-bone fractures; or
- Crushed, degloved, mangled, or pulseless extremities; or
- Amputation proximal to wrist or ankle; or
- Suspected pelvic fracture; or
- Open or depressed skull fracture; or
- Motor sensory deficit

Yes

No

Take to trauma center. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the trauma system.

Assess mechanism of injury and evidence of high-energy impact.

Go to Step 3, next page.

Falls

- Adults: > 20 ft. (one story is equal to 10 ft.); or
- Children: > 10 ft. or 2 3 times the height of the child; or

High-Risk Auto Crash

- Intrusion, including roof: > 12 in. occupant site; > 18 in. any site; or
- Ejection (partial or complete) from automobile; or
- Death in same passenger compartment; or
- Vehicle telemetry data consistent with high risk of injury; or

Auto vs. pedestrian/bicyclist thrown, run over, or with significant (> 20 mph) impact; or

Motorcycle or ATV crash > 20 mph



No

Take to closest appropriate trauma center, which depending on ATAB plan, need not be the highest-level trauma center.

Assess special patient or system considerations.

Older adults

- Risk of injury/death increases after age 55 years; or
- SBP < 110 might represent shock after age 65 years; or
- Low impact mechanisms (e.g., ground level falls) might result in severe injury; or

Children

4

• Should be triaged preferentially to pediatric-capable trauma centers; or

Anticoagulants and bleeding disorders

Patients with head injury are at high risk for rapid deterioration; or

Burns

- Without other trauma mechanism: triage to burn facility; or
- With trauma mechanism: triage to trauma center; or

Pregnancy > 20 Weeks; or

EMS provider judgment

Yes

Transport to a trauma center or hospital capable of timely and thorough evaluation and initial management of potentially serious injuries. Consider OLMC contact.

Transport according to protocol

Νo

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B. MEDICAL DIRECTION:

- 1. Off-line medical direction for trauma patients is controlled by the Treatment Protocols.
- OLMC is provided by Medical Resource Hospital (MRH). OLMC may override off-line medical direction. Any instances where this occurs will be reported to the EMS Office.

C. COMMUNICATIONS:

1. Communications with TCC:

The following information will be provided:

- Unit number and the location of the incident.
- Number of patients.
- Age and sex of the patients.
- Trauma system entry criteria and vital signs.
- Glasgow Coma Scale.
- Trauma tag number.
- ETA to Trauma Center.
- Patient destination based on incident location or request.
- 2. Communications from TCC or OLMC to the paramedics in the field will be as follows:
 - a. TCC will inform the paramedic if more information is needed by the trauma center.
 - b. TCC will inform the paramedic if the chosen trauma center is unable to receive the patient and will assist in designating an alternate destination.
 - c. In the event that there are multiple Trauma System entries, TCC will assist the paramedic at the scene in determining the destinations of all patients.

D. TRAUMA CENTER DESTINATION:

- 1. **Emanuel Hospital Service Area:** Patient origin on or north of: Tualatin Valley Highway beginning at the West city limits of Hillsboro, to Canyon Road, Canyon Road to Highway 26, to I-405, I-405 to NW Lovejoy, NW Lovejoy across the Broadway Bridge to the East bank of the Willamette, and South on the riverbank to Burnside. From this point, all patients North of, but not on the following line are to be transported to Emanuel: East on Burnside to NE Sandy Blvd, Sandy To NE Glisan at its intersection with 21st, and then East on Glisan St. to 242nd Ave in Gresham.
- 2. Oregon Health Sciences University Hospital Service Area: Patient origin on or South of Glisan St. beginning at 242nd Street in Gresham, West on Glisan St. to Sandy Blvd at its intersection with 21st, Sandy Blvd. to E. Burnside, then West on Burnside to the East Bank of the Willamette, and North along the riverbank to the Broadway Bridge. From this point, all patients South of but not on the following line will be transported to University: West on the Broadway Bridge to Lovejoy, to I-405, to Highway 26 and then South of but not including Highway 26, to Canyon Road, to Tualatin Valley Highway to the west city limits of Hillsboro.

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- Patients or Guardians Request: If the alert, competent patient or his/her competent guardian demands transport to a specific hospital, the EMT must honor that request and notify the TCC immediately.
- 4. **Multiple Patients:** From the same scene, all patient destinations are to be that assigned by the above service areas unless the designated Trauma Center advises the TCC that the facility cannot accept additional patients. In this instance, the Trauma Communications Center (TCC) will assist the paramedic in determining patient destinations. If there are more than two critical trauma patients (e.g., intubated, significant trauma) ready to be transported from the same scene, only the first two will be sent to the Level 1 facility designated by catchment area. Subsequent patients shall be directed to the next Level 1 center.
- Diversion to Local Hospital: If the paramedic is unable to establish an airway, the
 patient should be transported to the nearest acute care facility. In the event this
 occurs, TCC should be notified of the diversion.

E. MODE OF TRANSPORT:

An air ambulance should be used when it would reduce total pre-hospital time by 10 minutes or greater. This is usually achieved whenever the ground transport time will exceed 25 minutes (Scene is > 15 miles from Portland, or other circumstances exist).

F. PATIENT EVALUATION PROTOCOL:

Treatment priority should be approached in this order:

- 1. Airway Maintenance (Including control of the cervical spine).
- 2. Breathing.
- 3. Control of circulation and hemorrhage.
- 4. Treatment of shock.
- 5. Neurological examinations.
- 6. Complete secondary survey.
- 7. Splinting of fractures.

G. SCENE TIME:

After gaining access to the patient, scene time should not exceed ten minutes for any patient who is entering the Trauma System. Plan to start IV/IOs and initiate other care once in route to the hospital if necessary.