

TRAUMA TRIAGE CRITERIA**PURPOSE**

To maintain a system that allows trauma patients to benefit from receiving Trauma Center services most appropriate to that patient's injuries; in the most expeditious manner possible. Level I or II trauma centers should be utilized when appropriate.

AUTHORITY

CALIFORNIA HEALTH & SAFETY CODE, DIVISION 2.5, 1797.220 and 1798.

GENERAL CONCEPTS

- A. Trauma Centers improve the outcomes for patients with significant traumatic injuries.
- B. Patients with significant traumatic injuries that need to go to the operating room in the first four hours benefit from being transported to an appropriate trauma center immediately.
- C. Level I and Level II Trauma Centers are able to provide emergent neurosurgical intervention; therefore major trauma patients with injuries (definite or suspected) requiring immediate access to a neurosurgeon should bypass a closer Level III center.
- D. Major trauma patients in the pediatric age range (15 years of age and below) should bypass Level III Trauma Centers and be transported to a Pediatric Trauma Center. Pregnant patients meeting criteria as major trauma patients should be taken to a Trauma Center with Obstetric services.
- E. Paramedics have been trained to apply protocols and use judgment to identify major trauma patients. The approved trauma triage algorithm will be used to determine the appropriate trauma center destination.
- F. The use of air ambulances is considered separately from the trauma triage decision. Air ambulances may benefit patients injured in locations distant from Trauma centers, and/or those in need of immediate procedures available to flight nurses but outside the scope of practice of Paramedics. The use of air ambulances is not the default method of transport for major trauma patients. Aircraft should only be used when they offer a measurable advantage to ground transport. Use of air ambulances is covered in Air Ambulance Policy.
- G. This policy does not apply to Multi-Casualty Incidents (MCIs).

I. PATIENTS LIKELY TO BENEFIT FROM TRAUMA CENTER SERVICES:**Transport to Level I or II Trauma Center****A. Trauma patients exhibiting abnormal vital signs:**

- 1. Hypotension – systolic blood pressure < 90mmHg;
- 2. Sustained Tachycardia – heart rate greater than 120bpm;
- 3. Respiratory rate < 10 or > 29 breaths per minute;
- 4. Altered Mental Status – Glasgow Coma Score (GCS) < 14.

TRAUMA TRIAGE CRITERIA**B. Trauma patients with a high likelihood of benefit from neurosurgical services:**

1. GCS 12 or less;
2. Penetrating trauma to head (excluding facial injuries);
3. Suspected open or depressed skull fracture;
4. Paralysis.

C. Trauma patients with the following anatomic injuries:

1. Penetrating injury to neck, torso, buttock, groin, or extremities proximal to knee or elbow;
2. Flail chest;
3. Two or more proximal long bone fractures;
4. Crushed, degloved, or mangled extremity (excluding digits).
5. Amputation proximal to wrist and ankle
6. Pelvic instability or crepitus with a possible fracture from major trauma.

Transport to closest trauma center, does not need to be Level I or II:**A. Trauma patients with mechanisms of injury suggestive of serious injury:**

1. Falls > 20 feet for adults.
2. Children falls > 10 feet, or two times the height of a child or greater than ten feet.
3. High risk vehicles accidents including:
 - i. Intrusion in the passenger compartment > 12 inches on the occupant site or >18 inches any site;
 - ii. Ejection from vehicle (partial or complete);
 - iii. Death of a patient in the same passenger compartment;
 - iv. Vehicle telemetry data consistent with high risk of injury (when available).
4. Vehicle striking a pedestrian or bicyclist with speed at impact greater than 20 mph or involving the torso being run over.
5. Motorcycle crash with estimated speed 20 mph or more with a stationary object.

Contact Base Hospital, and consider transport to a Trauma Center or a specific resource hospital:**A. Special Considerations:**

- a. Age
 - i. Older adults: risk of injury/death increases after age 55 years
 - ii. Children: Should be triaged preferentially to a pediatric trauma center.
- b. Anticoagulation and bleeding disorders
- c. Burns
 - i. Without other trauma mechanism, triage to burn facility.
 - ii. With trauma mechanism, triage to a trauma facility.
- d. Time sensitive extremity injury
- e. End stage renal disease, requiring dialysis
- f. Pregnancy > 20 weeks
- g. EMS provider judgment

When in doubt, transport to a trauma center

TRAUMA TRIAGE CRITERIA**II. TRAUMA DESTINATION**

Patient's not meeting criteria as a trauma patient has injuries that may exceed the capabilities of the usual receiving hospital, then the case should be discussed with the trauma base hospital physician. That trauma base physician, in consultation with the primary scene paramedic, may designate that patient as a trauma patient, and that patient will be transported to the nearest appropriate designated Trauma Center.

UC Davis Medical Center, Level I

Kaiser Vacaville, Level II

III. PATIENTS UNLIKELY TO BENEFIT FROM BYPASSING THE CLOSEST HOSPITAL FOR TRANSPORT TO A TRAUMA CENTER

- A. Trauma patients in cardiac arrest (consider field pronouncement). If transport has begun, transport the closest Trauma Facility;
- B. Trauma patients without a controlled airway;
- C. Major trauma patients with rapid deterioration/impending arrest with Trauma Center transport time greater than 30 minutes.

IV. MAJOR TRAUMA PROCEDURES

- A. The primary Paramedic will determine whether the patient meets criteria as a trauma patient, and what level and type of trauma center care is appropriate for that patient
- B. The Primary Paramedic will determine the mode of transportation to the appropriate Trauma Center, in accordance with policy.
 - 1. If transportation is by ground, the transporting unit's dispatching agency will confirm that the closest destination Trauma Center is open.
 - 2. If transportation is by air ambulance, the air ambulance provider's dispatch will determine the closest appropriate destination Trauma Center, and confirm that it is open to receiving trauma patients.

The transporting unit will contact the designated Trauma Center and advise them of their impending arrival, and provide a report on the patient's injuries and condition.