PURPOSE:

The purpose of this policy is to establish triage criteria for trauma patients, identify appropriate receiving hospital destinations for trauma patients, and direct the actions of the prehospital, base hospital, and disaster control facility personnel.

AUTHORITY:


DEFINITIONS:

A. “Adult major trauma patient” means a patient 15 years of age or older that meets one or more of the major trauma triage criteria.

B. “Base hospital” means the designated level III trauma center for San Joaquin County.

C. “Disaster Control Facility” or “DCF” means San Joaquin General Hospital which is assigned responsibility by the SJCEMSA for determining the destination of patients transported by ambulance from a multi-casualty incident in accordance with the policies and procedures of the SJCEMSA.

D. “Pediatric major trauma patient” means a patient 14 years of age or younger that meets one or more of the major trauma triage criteria.

E. “SJCEMSA” means the San Joaquin County Emergency Medical Services Agency.

F. “Unmanageable Airway” means a patient without the ability to manage their own airway, or a patient without an established BLS or ALS airway, or a patient being ventilated through a needle cricothyrotomy.

POLICY:

I. Prehospital, base hospital, and DCF personnel shall assess all patients suffering acute injury or suspected acute injury using the trauma triage criteria established in this policy; shall document the findings of such an assessment on the patient care record; and direct the transport of injured patients as specified.
II. This policy shall be used in conjunction with the EMS Policy No. 4709 Trauma Center Service Areas and other applicable EMS policies.

III. Major Trauma Triage Criteria:

A. Physiologic:
   1. Glasgow motor score of less than 5.
   2. Glasgow total score of less than 13, with a mechanism attributed to trauma.
   3. Systolic blood pressure of less than:
      a. 90 for age 14 and older.
      b. 80 for age 7 to 14 years.
      c. 70 for age 1 to 6 years.

B. Anatomic:
   1. Penetrating injuries to the head, neck, chest, abdomen, and proximal to the elbow or knee.
   2. Flail chest.
   3. Two or more long bone fractures (humerus or femur).
   4. Crushed, degloved, or mangled extremity.
   5. Amputation proximal to wrist or ankle.
   6. Pelvic fracture.
   7. Open or depressed skull fracture.
   8. Traumatic paralysis.
   10. Partial or full thickness thermal, chemical, or electrical burns greater than 9% total body surface.
   11. Inhalation burns.

C. Mechanism of Injury:
   1. Auto versus pedestrian or bicyclist with the patient being:
      a. Run over.
      b. Thrown a significant distance.
   2. Falls involving a pediatric patient from a height greater than 10 feet or twice the height of the child.

IV. Trauma patients shall be transported to a trauma center or receiving hospital based on the following priorities:

A. Multi-casualty incident – destination based on DCF direction.
B. Unmanageable airway – closest receiving hospital or base hospital direction.
C. Adult major trauma patient – closest trauma center based on assigned trauma service area or base hospital direction.
D. Pediatric major trauma patient – closest pediatric trauma center based on assigned trauma service area or base hospital direction.
E. Non-emergent condition – patient choice.
F. Non-emergent condition no preference specified – closest receiving hospital.

V. Factors affecting transport destinations for major trauma patients.

A. Burns:
   1. Patients with partial or full thickness thermal, chemical, or electrical burns greater than 9% total body surface shall be transported to the level I trauma center at the UC Davis Medical Center.
   2. Inhalation burns with a manageable airway shall be transported to the closest trauma center based on assigned trauma service area.
   3. Paramedics shall consult with the base hospital on all other types of burns injuries to obtain a destination.

B. Neurologic Injuries:
   1. Patients with the following types of neurologic injuries shall be transported as follows:
      a. Spinal cord trauma or traumatic paralysis without comorbid trauma injuries shall be transported to the level I trauma center at the UC Davis Medical Center.
      b. Penetrating trauma to the head without comorbid trauma injuries shall be transported closest level II trauma center based on assigned trauma service area.
      c. Open or depressed skull fractures without comorbid trauma injuries shall be transported closest level II trauma center based on assigned trauma service area.

C. Proximity to Non-assigned Trauma Center:
   1. Prehospital personnel should consult with the base hospital on the efficacy of transporting the patient to the non-assigned trauma center whenever a major trauma patient is within an estimated ground transport time of 10-15 minutes to a non-assigned trauma center.
   2. In such circumstances the base hospital physician shall consider
the stability of the patient and the risks and benefits of transport to the assigned or non-assigned trauma center and direct the actions of the prehospital hospital personnel accordingly.

D. Air ambulance transport considerations:
1. The decision to use an air ambulance to transport a major trauma patient shall be governed by the requirements of EMS Policy No. 4448 EMS Aircraft Utilization.
2. Air ambulance transport is the preferred transport method for any major trauma patient with an estimated ground transport time of greater than 30 minutes, if air transport can be initiated without delay once the patient is ready for transport.
3. Ground ambulance transport of a major trauma patient should not be delayed for the arrival of an air ambulance.
4. Ground ambulance personnel should always be moving toward (closer to) the assigned trauma center when transporting a major trauma patient to a rendezvous location with an air ambulance. The precept of always moving the patient closer to the assigned trauma center is especially important when the rendezvous location is not in extremely close proximity to the scene and the air the ambulance is not already on the ground waiting to accept the transfer of care of the major patient.

E. Trauma Multi-casualty Incidents:
1. During a trauma MCI the DCF shall preferentially assign transport destinations for major trauma patients and immediate patients to designated trauma centers serving San Joaquin County.
2. Immediate patients are identified per START guidelines and are to be considered major trauma patients during a trauma MCI.

VI. Non-Emergent Trauma Patient Destination Considerations:

A. In a non-emergent situation (the patient does not meet trauma triage criteria) the patient may be transported to the receiving hospital of their choice. If the patient is unable or unwilling to express a choice, defer to the wishes of the patient’s private physician and/or family. In the absence of such direction, patients should be transported to the closest receiving hospital.
1. Whenever possible prehospital personnel should determine where the patient normally receives their medical care and encourage the
patient to return to that hospital.
2. Prehospital personnel should only provide the patient and/or family with the available destination options. Prehospital personnel should not endorse a receiving hospital or otherwise provide their personal opinion on the quality or merits of any receiving hospital.
3. If the patient is a member of a health plan with a preferred hospital an attempt should be made to transport the patient to a participating or preferred receiving hospital.

B. Non-emergent trauma patients may choose to be transported to any of the following receiving hospitals in San Joaquin County:
   1. Dameron Hospital.
   2. Doctors Hospital of Manteca.
   4. Lodi Memorial Hospital.
   5. San Joaquin General Hospital.
   7. Sutter-Tracy Community Hospital.

C. Non-emergent trauma patients may choose to be transported to receiving hospitals outside of San Joaquin County as follows:
   1. From Ambulance Zone A (Lodi):
      a. Methodist Hospital, Sacramento.
      b. Kaiser Medical Center South Sacramento.
   2. From Ambulance Zones D (Manteca); E (Ripon); and F (Escalon):
      a. Doctors Medical Center, Modesto.
      b. Kaiser Medical Center, Modesto.
      c. Memorial Medical Center, Modesto.
      d. Oak Valley District Hospital, Oakdale.

VII. Hospital Diversion:

A. Non-emergent patients shall not be transported to a receiving hospital with a facility status of diversion.
B. Patients shall not be transported to a receiving hospital with a facility status of internal disaster/closed.
C. Patients requiring specialty care services (e.g. Trauma) should not be transported to a receiving hospital with a facility status advising that such specialty services are unavailable. In such instances another receiving hospital offering such services should be utilized.

VIII. EMS Policy No. 5121, Neurological Triage Criteria and EMS Policy No. 5122, Pediatric Trauma Triage Criteria are revoked.