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POLICY MEMORANDUM 6105

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REVIEWED/APPROVED BY:

 **MD, MAS**

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SUBJECT: SOLANO COUNTY PREHOSPITAL TRAUMA TRIAGE PLAN

AUTHORITY: CALIFORNIA HEALTH & SAFETY CODE, DIVISION 2.5, 1797.220, 1798.100, 1798.162, and 1798.163

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, II, or III Trauma Centers should be utilized when appropriate.

I. GENERAL CONCEPTS:

- A. Trauma Centers improve the outcomes for patients with significant traumatic injuries.
- B. Level I/II Trauma Centers are able to provide emergent neurosurgical intervention and have in-house trauma surgeons and operating room teams immediately available; therefore major trauma patients with injuries (definite or suspected) requiring immediate access to a neurosurgeon should be transported to the closest Designated Level I/II Trauma Center.

II. PATIENTS LIKELY TO BENEFIT FROM TRAUMA CENTER SERVICES:

A. Trauma patients with a high likelihood of benefit from neurosurgical services (Level I/II Trauma Centers):

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

B. Trauma patients exhibiting abnormal vital signs or conditions (for adult patients only):

1. Hypotension – systolic blood pressure less than 90mmHg;
2. Tachycardia – heart rate greater than 120bpm;
3. Tachypnea – respiratory rate less than ten or greater than 29 breaths per minute;
4. Altered Mental Status – GCS 13 – 14.
5. Pregnant patients \geq 24 weeks with torso trauma.

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. Amputated/crushed/degloved proximal to wrist or ankle;
5. Burns with TBSA $>$ 9%
6. Pelvic instability or crepitus with a possible fracture from major trauma.

D. Trauma patients with mechanisms of injury suggestive of serious injury:

1. Falls greater than 20 feet for adults, or two times the height of a child or greater than ten feet.
2. High risk vehicle accidents including:
 - a. Intrusion in the passenger compartment greater than 12 inches or greater than 18 inches any site;
 - b. Ejection from vehicle, partial or complete, with injury;
 - c. Death of a patient in the same passenger compartment;
 - d. Thrown from animal with injury.
3. Vehicle striking a pedestrian or bicyclist with speed at impact greater than 20 mph or involving the torso being run over.

4. Motorcycle crash with estimated speed 20 mph or more with a stationary object.

III. TRAUMA MEDICAL DIRECTION

- A. Major trauma patients in the pediatric age range (less than 15 years of age) should bypass local Trauma Centers and be transported to a Pediatric Trauma Center unless they meet the criteria of Section V of this policy.
- B. Paramedics have been trained to apply protocols and use judgment to identify Level I/II trauma patients. The approved trauma triage algorithm will be used to determine the appropriate trauma center destination.
- C. When assessing, treating, or transporting a Level I/II trauma patient, Paramedics shall contact the Solano Emergency Medical Services Cooperative (SEMSC) designated Level II Trauma Base Hospital for medical direction if either SEMSC's protocols require securing medical direction or if Paramedics otherwise determine medical direction is necessary.
 1. The SEMSC designated Level II Trauma Center is Kaiser Foundation Hospital, Vacaville.
 2. For trauma patients originating in the Vallejo/Benicia area, factoring in time of day, traffic, weather, etc., trauma patients may be transported directly to John Muir Medical Center (JMMC), Walnut Creek. If a Paramedic is requiring medical direction and is transporting to JMMC, the Paramedic shall contact an in-county SEMSC designated Trauma Base Hospital.
- D. When assessing, treating, or transporting a Level III trauma patient, Paramedics may contact any SEMSC Trauma Center for medical direction. Paramedics may transport Level III patients to the closest Trauma Center.
- E. 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 Policy 5800.
- F. Pregnant patients, greater than 24 weeks gestation, that do not meet Trauma Triage Criteria will be transported to a facility with OB capabilities.
- G. This policy does not apply to Multi-Casualty Incidents (MCIs).

IV. PARAMEDIC IMPRESSION

If the primary Paramedic believes that a patient 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 a Solano County Designated Trauma Base Hospital. The trauma base physician, Mobile Intensive Care Nurse (MICN), or designee, 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 Trauma Center.

V. CRITERIA FOR TRUAMA PATIENT TRANSPORT TO THE CLOSEST RECEIVING FACILITY

The following trauma patients will be transported to the closest receiving facility:

- A. Trauma patients in cardiac arrest (consider field pronouncement);
- B. Trauma patients with an uncontrolled airway;
- C. Trauma patients with uncontrolled bleeding;
- D. Major trauma patients with rapid deterioration/impending arrest should be taken to the closest receiving facility if conditions (traffic, distance, weather) are unfavorable for rapid transport to a Solano County Designated Trauma Center.

VI. 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 (see Trauma Triage Algorithm attachment).
- 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.
- C. 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. Non-designated Out-of-county destination facilities are not authorized to give online medical instructions/orders.

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