

**APPENDIX A.1
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA SYSTEM ORGANIZATION AND MANAGEMENT**

I. PURPOSE

This policy identifies San Luis Obispo County trauma system organization and management including the responsibilities of the EMS Agency.

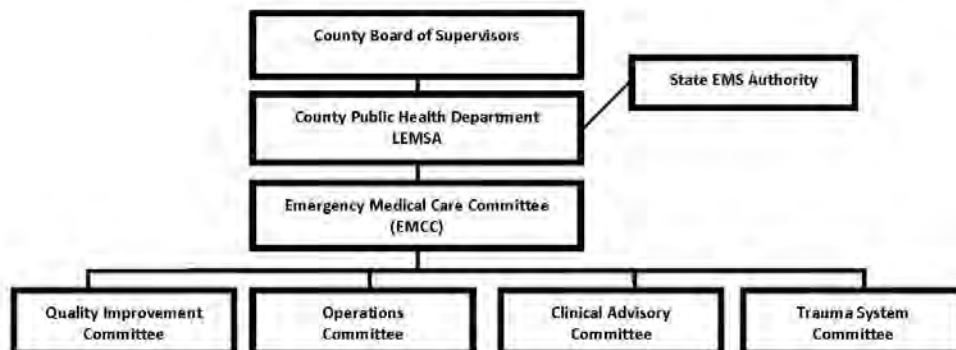
II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7, Section 100255

III. POLICY

- A. The County Board of Supervisors has the right to control, and is solely responsible for, the decision to implement a trauma care system in San Luis Obispo County.
- B. The County Board of Supervisors has designated the San Luis Obispo County Public Health Department (PHD) as the local EMS Agency (LEMSA).
- C. The County maintains the following responsibilities for the trauma system:
 - 1. Contract with designated trauma centers
 - 2. Establish service areas for trauma centers
 - 3. Authorize marketing and advertising related to the trauma system by trauma centers and prehospital providers
- D. The Emergency Medical Care Committee is appointed by the PHD.
- E. The Trauma System Committee (TSC) is advisory to the EMCC.
- G. Ad-hoc sub-committees of the TSC are time-limited with specific functions for the purpose of advising the TSC on specified tasks.

H. SLO County Trauma System Organizational Chart



I. Responsibilities of the local EMS Agency

1. Planning

- a) Develop and maintain/update a written trauma system plan that includes policies that assure compliance with the provisions the California Code of Regulations, Title 22, Division 9, Chapter 7, Article 2.
- b) Establish and coordinate a Trauma System Committee (TSC) to receive information from EMS providers, local hospitals and the local medical community.
- c) Obtain approval of the trauma system plan from the EMS Authority prior to its implementation.
- d) Advise the EMS Authority when there are any changes or revisions in policy or plan development.

2. Implementation

- a) Support the designation process as specified in the Trauma Center Designation policy.
- b) Implement a trauma registry system
- c) Coordinate targeted trauma system training programs for all system participants including prehospital EMS, receiving hospitals and trauma center(s)
- d) Coordinate with system participants to develop and implement a public information and education campaign about the new trauma system
- e) Coordinate with system participants to develop and implement injury prevention programs
- f) Coordinate with neighboring trauma systems:
 - (1) Participate in the Southwest Regional Trauma Coordinating Committee (RTCC)
 - (2) Participate in OES Region I disaster planning and training activities
 - (3) Ensure ongoing communication and cooperation regarding hospital diversion and quality improvement participation and data sharing with neighboring LEMSAs when trauma patients are transported to out-of-county trauma centers

3. Evaluation

- a) Monitor system participants for compliance with Trauma System Evaluation and Quality Improvement policy
- b) Perform monthly analysis of trauma registry data, and provide quarterly reports of aggregate trauma registry data to Trauma System Committee (TSC)
- c) Transmit trauma registry data in specified format and frequency to the EMS Authority
- d) Coordinate TSC meetings to receive information from all trauma system participants on the evaluation of the trauma system
- e) Coordinate multidisciplinary and confidential trauma case reviews

- f) Coordinate trauma center site reviews
- g) Provide annual trauma system status reports to the EMS Authority and system participants
- h) Conduct a trauma system performance evaluation every two years with the report available to all system participants

**APPENDIX A.2
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA SYSTEM EVALUATION AND QUALITY IMPROVEMENT**

I. PURPOSE

This policy establishes the process for ongoing evaluation and quality improvement of the San Luis Obispo County trauma system.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7, Section 100255

III. POLICY

A. Prehospital Data Collection

- 1. Prehospital transport providers shall electronically transmit trauma patient care reports (PCRs) to the EMS Agency within 24 hours.
- 2. Prehospital PCRs shall meet the following data element requirements:
 - a) NEMSIS Data System
 - b) CEMSIS Data System
 - c) California State Trauma Registry Data Dictionary relating to prehospital data
 - e) Title 22 regulations
- 3. Prehospital providers shall also include the following information in PCRs for all patients meeting the trauma patient criteria in the Trauma Patient Triage and Transport policy:
 - a) Trauma patient criteria met: physiologic, anatomic, mechanism of injury, and/or special considerations
 - b) Trauma center notification: time, hospital and contact
 - c) Trauma center consultation: time, hospital, contact and orders
 - d) Destination consultation: time, hospital, contact and destination orders
 - e) Reasons for transport to other than closest trauma center

B. Hospital Data Collection

- 1. Trauma centers shall submit on-call logs of trauma team members to the EMS Agency on a monthly basis.
- 2. Trauma centers shall submit documentation of trauma team member times for the following:
 - a) Activation
 - b) Response

- c) Consultation
- d) Consultation reply/response
- e) Referring hospital notification of intent to transfer
- f) De-activation

C. Trauma Registry System

1. Trauma centers shall utilize the trauma registry software approved by the EMS Agency.
2. Non-trauma center hospitals not utilizing the trauma registry software shall complete a Trauma Registry Data Form for all patients meeting trauma patient triage criteria according to the Trauma Patient Triage and Transport policy.
3. Trauma centers shall enter data into the trauma registry system for all patients who meet the following California and National Trauma Registry data inclusion criteria: At least one of the following injury diagnostic codes defined in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM):
 800–959.9

 AND

 Physically evaluated by trauma or burn surgeon in the ED or resuscitation area

 OR

 Death in emergency department

 OR

 Transfer for trauma services (note: may include inter-facility and intra-facility)

 Exclusion:

 Isolated burn without penetrating or blunt mechanism of injury
4. Trauma data shall be integrated into EMS Agency and State EMS Authority data management systems and include all applicable data elements required of the California State Trauma Registry Data Dictionary.
5. Trauma centers shall transmit trauma registry data on a monthly basis to the EMS Agency and submit reports as requested.
6. Receiving hospitals shall submit completed Trauma Registry Data Forms to the EMS Agency on a monthly basis.
7. Referring hospitals that have repatriated trauma patients from a trauma center shall provide the information required by the trauma registry system to the transferring trauma center for inclusion in the trauma registry system.
8. San Luis Obispo County trauma system participants should coordinate with other county's trauma systems in data collection for trauma patients transported between counties.
9. The EMS Agency shall provide trauma registry reports of system-wide performance to all participants in the trauma registry system.

10. All participants of the trauma registry system shall adhere to the applicable provisions of Evidence Code Section 1157.7 and to the Health Insurance Portability and Accountability Act of 1966 (HIPAA) to ensure patient confidentiality.
- D. Trauma Center Internal Quality Improvement (QI) Program
1. Trauma centers shall have a quality improvement (QI) process to include structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes and take steps to correct the process. In addition, the process shall include the following:
 - a) A multidisciplinary trauma peer review committee that includes all members of the trauma team
 - b) Participation in the trauma registry system
 - c) The development of trauma-specific quality improvement audit criteria
 - d) Participation in the TSC, TSC trauma case reviews when appropriate, and TSC ad-hoc committees as needed
 - e) A written system available for patients and their significant others, as defined in Title 22, Division 9, Chapter 7, Section 100265 (d), to provide input and feedback to hospital staff regarding the care provided
 - f) Compliance with applicable provisions of Evidence Code Section 1157.7 to ensure confidentiality
 2. The trauma program medical director and the trauma program manager/nurse coordinator shall perform the following functions:
 - a) Perform case reviews of all trauma cases
 - b) Identify trauma cases that meet the TSC audit criteria for QI case review or trauma cases that may provide exceptional educational benefit
 - c) Analyze trends
 - d) Perform detailed audits of all trauma deaths, major complications, transfers, unexpected outcomes (positive or negative), and unusual occurrences
 - e) Generate and submit required trauma reports to the EMS Agency as requested
 - f) Investigate all unusual occurrences, as identified internally or referred by the EMS Agency, and report results (including any resolution or identification of further actions required) directly back to the EMS Agency
- E. Trauma System Quality Improvement (QI) Program
1. The EMS Agency and the TSC shall conduct an initial performance evaluation of the trauma system within one year of designation and subsequently every two years.
 2. Results of the trauma system evaluation shall be made available to system participants.
 3. The EMS Agency shall submit a trauma system status report as part of its annual EMS Plan update. The report shall address, at a minimum, the status of the trauma plan goals and objectives.

4. Trauma centers shall be evaluated every three years by a site review team coordinated by the EMS Agency to provide objective confirmation of trauma center compliance with contracts, policies and regulations.
 5. The EMS Agency may schedule a review at any time to assure trauma center contract compliance. The reviews may include chart audit, trauma registry data review, and reviews of other records and documents.
 6. All trauma system participants shall contribute to the Southwest Regional Trauma Coordinating Committee QI program.
- F. Trauma System Committee (TSC)
1. The primary objective of the TSC is to provide the trauma system with a continuous multidisciplinary effort to measure, evaluate, and improve both the process of trauma care and the outcome.
 2. The TSC is advisory to the San Luis Obispo County Emergency Medical Care Committee (EMCC) regarding the following trauma system components:
 - a) Development and revisions of the Trauma System Plan and policies
 - b) Evaluation of trauma center applications for designation
 - c) Performance evaluations of the system at least every two years
 - d) Receiving information about the trauma system and trauma care from EMS providers, hospitals, the local medical community and the public
 - e) Reviewing trauma system data
 - f) Reviewing public information, education, and injury prevention programs
 - g) Monitoring the system for compliance with applicable policy and regulations
 - h) Providing quality improvement recommendations to the EMCC
 3. The TSC shall develop quality improvement (QI) indicators from the following system components:
 - a) Prehospital
 - (1) PCR documentation
 - (2) Scene times
 - (3) Triage
 - b) Trauma alert and destination
 - c) Interfacility transfers
 - d) Trauma team activation and response
 - e) Pediatric trauma care
 - f) Trauma related deaths
 - g) Patient outcomes
 - h) Coordination with neighboring counties

4. TSC membership is determined by the EMCC, and may be comprised of representatives from ground and air transport providers, public providers, consumers, Med-Com, law enforcement and all local hospitals.
- G. Trauma Case Reviews
1. The EMS Agency shall coordinate an outside, ad-hoc multidisciplinary medical advisory panel to conduct periodic mortality and morbidity case reviews
 2. Other cases may also be reviewed that are regarded as having exceptional educational or scientific benefit.
 3. The medical advisory panel shall be comprised of qualified trauma specialists from outside the area with no known conflicts of interest.
 4. The medical advisory panel shall meet with an ad-hoc TSC Trauma Case Review sub-committee.
 5. The purpose of the TSC Trauma Case Review sub-committee includes:
 - a) Serving in an advisory capacity to the EMS Agency and the TSC on trauma care system issues and policies
 - b) Monitoring the process and outcome of trauma patient care and present opportunities for analysis of data and information of scientific value for studies and strategic planning of the trauma system
 - c) Providing educational forums for trauma care when trends are identified
 6. Confidentiality
 - a) Trauma Case Review meetings are closed. Guests may attend only with prior approval of the Chairperson.
 - b) Trauma Case Review meetings and records are confidential and are protected under section 1157.7 of the Evidence Code, State of California.
 - c) Panel members and invited guests are required to sign a Confidentiality Agreement, which is maintained on file at the EMS Agency as a condition of attendance.
 - d) Attendees shall not divulge or discuss information outside the meetings.
 - e) All hard copy information distributed at Trauma Case Review meetings shall be disposed of in an appropriate confidential manner.

**APPENDIX A.3
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA PATIENT TRIAGE AND TRANSPORT**

I. PURPOSE

To establish guidelines for EMS personnel to identify and transport critically injured patients who could benefit from the rapid response and specialized services of a trauma center.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7

III. PROCEDURE

- A. Determine if patient condition meets trauma patient criteria.
- B. Contact trauma center immediately with trauma alert or for destination consultation.
- C. Make every effort to keep scene time under 10 minutes.
- D. Transport to the most appropriate facility.

IV. POLICY

This policy applies to both adult and pediatric injured patients, unless stated otherwise.

A. Trauma Patient Criteria**Step 1 Physiologic Criteria**

Injured patients meeting any ONE of the following criteria:

- Glasgow Coma Scale <12 (based on patient history and attributed to injury)
- Systolic blood pressure <90 mmHg (with hypoperfusion findings; pediatrics under study)
- Respiratory rate <10 or >29 breaths per minute (<20 in infant aged <1year)

Step 2 Anatomic Criteria

Injured patients meeting any ONE of the following criteria:

- All significant penetrating injuries to head, neck, and torso
- Flail chest
- Open or depressed skull fracture
- Paralysis

Step 3 Mechanism of Injury Criteria

For significantly injured patients who do NOT meet any of the Physiologic or Anatomic Criteria but DO meet one of the following mechanism criteria, consult with a trauma center physician to determine if the trauma patient would benefit from direct transport to a trauma center:

- Falls
 - Adults: >20 feet (one story is equal to 10 feet)
 - Children: >10 feet or two or three times the height of the child
- High-risk auto crash:
 - Intrusion of space: >12 inches occupant site; >18 inches any site

- Ejection (partial or complete) from automobile
- Death in same passenger compartment
- Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact
- Motorcycle crash >20 mph

Step 4 Special Conditions

For significantly injured patients who do NOT meet any of the Physiologic, Anatomic or Mechanism of Injury Criteria but DO meet one of the following special conditions criteria, consult with a trauma center physician to determine if the trauma patient would benefit from direct transport to a trauma center:

- Age >65 or <5
- Glasgow Coma Scale 12-13 (based on patient history and attributed to injury)
- Two or more proximal long bone fractures
- Anticoagulation and bleeding disorders
- End-stage renal disease requiring dialysis
- Pregnancy >20 weeks
- Burns with trauma mechanism
- EMS provider judgment

B. Contact Trauma Center

Contact the receiving trauma center immediately upon determining patient meets trauma patient triage criteria with the trauma alert or for destination consultation.

1. Trauma Alert

- a) EMS personnel should provide a trauma alert from the scene. Early contact is critical since the trauma alert is used to activate the trauma team; however, clinical circumstances on-scene may dictate immediate transport with the trauma alert made enroute.
- b) ALS or BLS personnel may contact the trauma center with the trauma alert.
- c) This report should be very brief and include the following:
 - “trauma alert”
 - Unit and medic #
 - ETA
 - Report on individual patient:
 - Age and sex
 - Mechanism of injury
 - Injury and complaints
 - Vital signs
 - GCS
- d) As soon as practical after the initial trauma alert, ALS personnel should provide a more thorough report on patient condition and treatments/procedures performed.

2. Destination Consultation

- a) Consultation with a trauma center physician should be obtained to determine trauma patient identification when mechanism of injury criteria or special conditions are present but physiologic and anatomic criteria are NOT met.
- b) Consultation with a trauma center physician should be obtained to determine if the

trauma patient would benefit from direct transport to a trauma center if ETA to the closest trauma center is more than 20 minutes AND transport would bypass a closer hospital emergency department.

- c) Only ALS personnel may request a destination consultation.
- d) Destination consultation report should include the following:
 - “consultation for trauma patient destination”
 - Unit and medic #
 - ETA to trauma center and ETA to closest ED
 - Patient age and sex
 - Mechanism of injury and scene
 - Injury and complaints
 - Vital signs
 - GCS
 - Physiologic
 - Anatomic
 - Any special conditions
 - Prehospital treatments and response
 - Paramedic concerns

3. Five-minute Update

- a) When practical, a brief updated report should be given when five minutes from the receiving hospital and should include any significant changes enroute in vital signs, GCS, physical findings, or symptoms.
- b) ALS or BLS personnel may contact the receiving hospital with the Update.

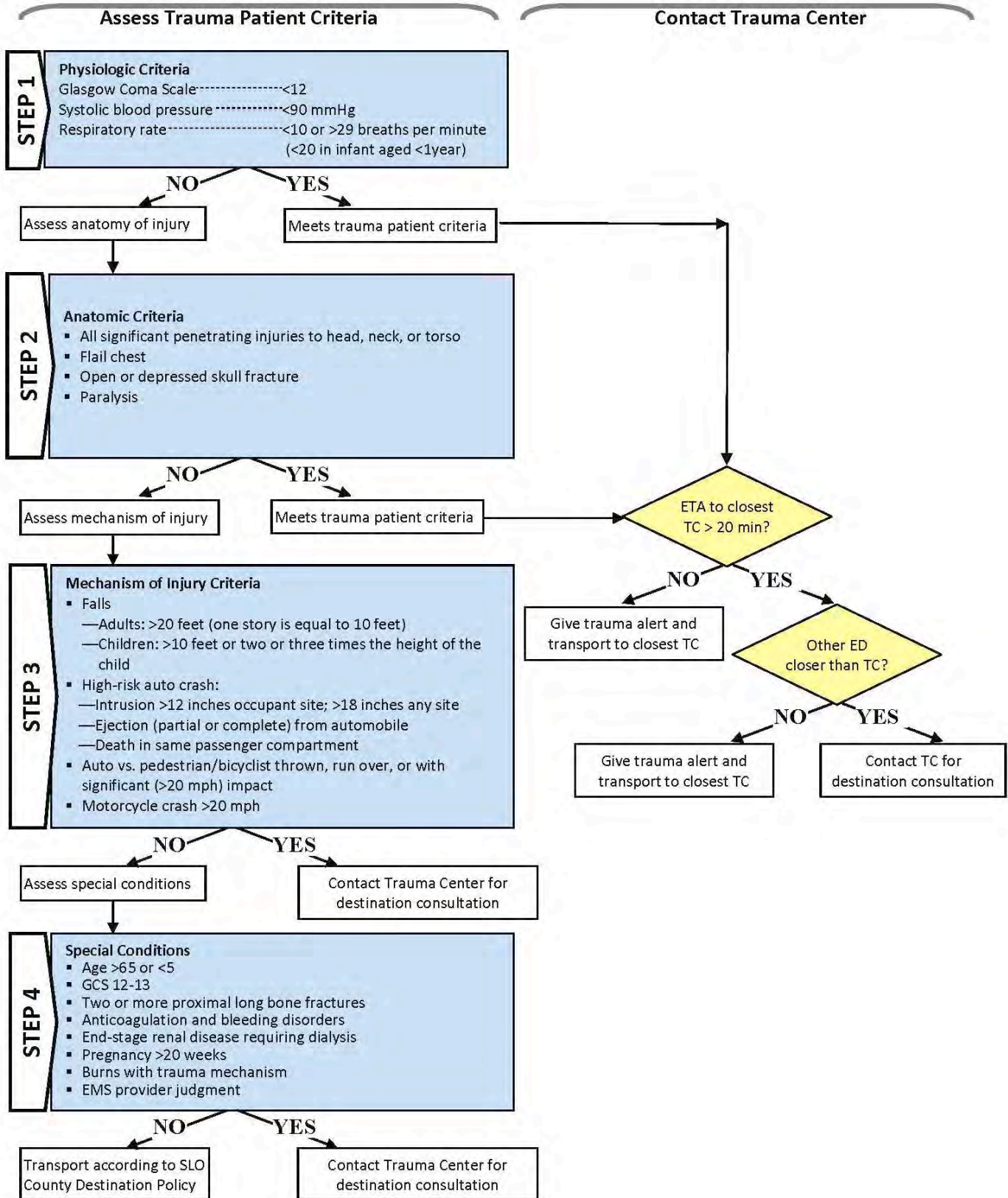
C. Exceptions to Direct Transport to a Trauma Center

Trauma patients shall be transported to the closest ED in the following situations:

1. Patient condition necessitates transport to the closest ED, such as the following:
 - a) Unmanageable airway (intubation attempts are unsuccessful and an adequate airway cannot be maintained with BVM or other device)
 - b) Uncontrollable bleeding with rapidly deteriorating vital signs
 - c) Traumatic cardiac arrest – see *SLO County EMSA Prehospital Policy 116: Prehospital Determination of Death*
2. Trauma center physician destination order
3. Patient refusal – see *SLO County EMSA Prehospital Policy 122: Patient Refusal of Treatment and/or Transport*
4. Trauma center diversion

- D. The utilization of EMS aircraft for the response and transport of trauma patients shall be in accordance with *SLO County EMSA Prehospital Policy 119: EMS Aircraft (Helicopter) Operations*.

Trauma Triage Decision Scheme



**APPENDIX A.4
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA CENTER DESIGNATION**

I. PURPOSE

To establish the process for designation of a trauma center in San Luis Obispo County.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7

III. POLICY

A. Letter of Intent

Hospitals interested in obtaining or changing trauma center designation shall send a letter of intent to the EMS Agency to seek trauma center designation specifying the level of designation.

B. Request for Proposal

- 1. Upon receipt of a hospital's letter of intent, the EMS Agency shall notify all receiving hospitals of the letter of intent and issue a countywide request for proposals (RFP).
- 2. The EMS Agency shall not issue an RFP in response to a letter of intent more than once in a two-year period.
- 3. The RFP shall include, at a minimum, the following:
 - a) Requirements of proposal
 - b) Proposal review process
 - c) General evaluation criteria
 - d) Schedule of fees and expenses
 - e) Deadline for submission
 - f) Detailed description of trauma center requirements for intended designation level

C. Fees and Expenses

- 1. The EMS Agency shall charge fees for trauma center application, designation and re-designation, trauma system monitoring and trauma system evaluation.
- 2. Application Fees
 - a) An application fee is required when a proposal is submitted.

- b) Applicants are responsible for all fees and expenses incurred in the designation process regardless of final outcome.
- c) Application fees and expenses may include, but are not limited to, the following:
 - (1) Application fees to cover the costs directly related to designation and development of the trauma system plan in accordance with the Health and Safety Code, Division 2.5, Section 1798.164.
 - (2) Site review expenses
 - (3) Legal expenses
 - (4) Expenses for the establishment and maintenance of a trauma registry for the trauma center and the EMS Agency
- 3. The EMS Agency shall provide an annual report to the EMS Authority and to trauma centers and applicants that have paid fees. The report shall specify how fees were collected and expended in compliance with the Health and Safety Code, Division 2.5, Section 1798.164.

D. Review, Evaluation and Recommendations

- 1. The EMS Agency shall review proposals for completeness and compliance with the RFP requirements and notify applicants of any missing information or failure to comply with the RFP. Applicants shall submit missing information and revise the proposal for compliance within 30 days of notification.
- 2. Upon receipt of complete proposals, the EMS Agency shall coordinate a site review team to provide objective confirmation of information submitted in the proposal as well as evaluation of the applicant's capability and commitment to serve as a trauma center at the proposed level of designation.
- 3. The site review team shall consist of trauma system experts from outside the county and have no conflicts of interest. The size and expertise of the site review team will be appropriate for the proposed level of designation.
- 4. The site review team shall provide a report of findings and recommendations on designation to the EMS Agency.
- 5. The Trauma System Committee (TSC) shall review proposals and site review reports and forward the TSC's recommendations for designation to the EMCC.
- 6. The EMCC shall review the TSC's recommendations for designation, and forward the EMCC's recommendations for designation to the County Public Health Department.

E. Trauma center designations require an executed contract with the County of San Luis Obispo.

F. Appeal

- 1. Expert judgments or analysis of the site review team are not subject to appeal but may be mitigated by a plan of corrective action to be determined by the EMS Agency.

2. Grounds for appeal are limited to alleged failure to follow the RFP process.
3. Applicants must submit a letter detailing the reasons for appeal to the EMS Agency within 30 days of the notice of denial of designation.

G. De-designation

Failure of a trauma center to comply with SLO County EMSA policies, the trauma center designation contract or applicable laws and regulations may result in de-designation of, or decrease in, trauma center status.

H. Re-designation

Any hospital that has been de-designated as a trauma center may apply for re-designation of, or increase in, trauma center status. The re-designation process is the same as the original designation process.

**APPENDIX A.5
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA CENTER DIVERSION**

I. PURPOSE

To establish standards and a process for the prompt and efficient delivery of emergency health care in San Luis Obispo County in a manner that prevents unnecessary delays or over-burdening of the trauma system when a trauma center is temporarily overwhelmed with patient volume.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7

III. POLICY

- A. This policy is intended to supplement the existing San Luis Obispo County EMS Agency *Prehospital Policy 202: Hospital Diversion*. The *Trauma Center Diversion Policy* shall be terminated once the standards and processes specific to trauma center diversion are incorporated into Policy 202.
- B. The Trauma System Committee shall review monthly accumulated trauma center diversions.
- C. A trauma center initiating diversion status shall notify the following hospitals, in addition to the other receiving hospitals in San Luis Obispo County, of its diversion status by ReddiNet and phone:
 - Marian Medical Center, Santa Maria
 - Santa Barbara Cottage Hospital
 - Community Regional Medical Center, Fresno
 - Kern Medical Center, Bakersfield
 - Mee Memorial Hospital, King City

**APPENDIX A.7
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA CENTER REQUIREMENTS LEVEL III**

I. PURPOSE

To establish the minimum standards for a level III trauma center designation in San Luis Obispo County.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7

III. POLICY

A. All trauma centers in San Luis Obispo County shall adhere to the minimum requirements set forth in the following:

- 1. California Code of Regulations, Title 22, Division 9, Chapter 7. Trauma Care Systems
- 2. California Health and Safety Code, Division 2.5, Chapter 6. Facilities
- 3. San Luis Obispo County EMS Agency Policies and Procedures
- 4. San Luis Obispo County Trauma System Plan

B. Trauma centers shall be designated Base Hospitals and adhere to all requirements in the Base Station Agreements.

C. Level III trauma center shall have at least the following:

- 1. A trauma program medical director who is qualified surgical specialist, whose responsibilities include, but are not limited to, factors that affect all aspects of trauma care such as:
 - a) recommending trauma team physician privileges;
 - b) working with nursing and administration to support the needs of trauma patients;
- c) developing trauma treatment protocols;
- d) determining appropriate equipment and supplies for trauma care;
- e) ensuring the development of policies and procedures to manage domestic violence, elder and child abuse and neglect;
- f) having authority and accountability for the quality improvement peer review process;
 - g) correcting deficiencies in trauma care or excluding from trauma call those trauma team members who no longer meet standards;
 - h) coordinating pediatric trauma care with other hospital and professional services;

- i) coordinating with local and State EMS agencies;
 - j) assisting in the coordination of the budgetary process for the trauma program; and
 - k) identifying representatives from neurosurgery, orthopaedic surgery, emergency medicine, pediatrics and other appropriate disciplines to assist in identifying physicians from their disciplines who are qualified to be members of the trauma program.
2. A trauma program manager/nurse coordinator who is a registered nurse with qualifications including evidence of educational preparation and clinical experience in the care of the adult and/or pediatric trauma patient, administrative ability, and responsibilities that include but are not limited to:
 - a) organizing services and systems necessary for the multidisciplinary approach to the care of the injured patient;
 - b) coordinating day-to-day clinical process and performance improvement as it pertains to nursing and ancillary personnel; and
 - c) collaborating with the trauma program medical director in carrying out the educational, clinical, research, administrative and outreach activities of the trauma program.
 3. A trauma service that can provide for the implementation of these requirements and provide for coordination with the EMS Agency.
 4. A trauma team capable of providing prompt assessment, resuscitation and stabilization of trauma patients.
 5. The ability to provide treatment or arrange for transportation to a higher level trauma center as appropriate.
 6. An emergency department, division, service, or section staffed so that trauma patients are assured of immediate and appropriate initial care.
 7. An Intensive Care Service that:
 - a) shall have appropriate equipment and supplies as determined by the physician responsible for the intensive care service and the trauma program medical director;
 - b) shall have a qualified specialist promptly available to care for trauma patients in the intensive care unit. The qualified specialist may be a resident with two (2) years of training who is supervised by the staff intensivist or attending surgeon who participates in all critical decision making; and
 - c) the qualified specialist in b) above shall be a member of the trauma team.
 8. A trauma team that is a multidisciplinary team responsible for the initial resuscitation and management of the trauma patient.
 9. Qualified surgical specialist(s) who shall be available as defined in the San Luis Obispo County EMS Agency Trauma Team Availability Policy:
 - a) general surgeon
 - b) orthopedic surgeon

- c) neurosurgery (may be provided through a transfer agreement)
10. Qualified non-surgical specialist(s) or specialty availability, which shall be available as defined in the San Luis Obispo County EMS Agency Trauma Team Availability Policy:
- a) Emergency medicine
 - b) Anesthesiology. This requirement may be fulfilled by senior residents or certified registered nurse anesthetists who are capable of assessing emergent situations in trauma patients and of providing any indicated treatment and are supervised by the staff anesthesiologist.
 - c) Available for consultation or consultation and transfer agreements for adult and pediatric trauma patients requiring the following services:
 - (1) Burn care
 - (2) Pediatric care
 - (3) Rehabilitation services
- D. Trauma centers shall have the following service capabilities:
- 1. A radiological service that shall have a radiological technician promptly available.
 - 2. A clinical laboratory service that shall have:
 - a) a comprehensive blood bank or access to a community central blood bank; and
 - b) clinical laboratory services immediately available.
 - 3. A surgical service that shall have an operating suite that is available or being utilized for trauma patients and that has:
 - a) operating staff who are available as defined in the San Luis Obispo County EMS Agency Trauma Team Availability Policy unless operating on trauma; and
 - b) appropriate surgical equipment and supplies as determined by the trauma program medical director.
- E. Written transfer agreements with Level I or II trauma centers, Level I or II pediatric trauma centers, or other specialty care centers, for the immediate transfer of those patients for whom the most appropriate medical care requires additional resources.
- F. An outreach program, to include:
- 1. Capability to provide both telephone and on-site consultations with physicians in the community and outlying areas
 - 2. Trauma prevention for the general public
- G. Continuing education. Continuing education in trauma care shall be provided for:
- 1. Staff physicians
 - 2. Staff nurses
 - 3. Staff allied health personnel
 - 4. EMS personnel
 - 5. Other community physicians and health care personnel

**APPENDIX A.8
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
TRAUMA TEAM AVAILABILITY**

I. PURPOSE

To establish standards for the availability of the trauma team at a level II or level III trauma center in San Luis Obispo County.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7

III. POLICY

A. Prehospital Trauma Alert

- 1. Prehospital trauma alert is based on the determination by prehospital personnel that patient condition meets trauma patient criteria according to the Trauma Patient Triage and Transport Policy.
- 2. It is the responsibility of prehospital personnel to record all relevant information and report it to the trauma center.
- 3. It is the responsibility of the trauma center to request any relevant information that is not volunteered by prehospital personnel.
- 4. Trauma alert may be received by a trauma center MICN or ED physician.

B. Trauma Team Activation

- 1. The trauma center ED physician is responsible for the activation of the trauma team.
- 2. The trauma team shall be activated in the following situations:
 - a) Trauma alert from prehospital personnel
 - b) Notification from a referring hospital of an impending trauma patient transfer
 - c) ED determination that patient condition meets trauma patient criteria
- 3. The trauma team consists of the following resources:
 - a) Trauma/general surgeon: responds with trauma team activation
 - b) ED physician: responds with trauma team activation
 - c) Trauma nurse: responds with trauma team activation
 - d) Respiratory therapy: responds with trauma team activation
 - e) Radiology: responds as requested
 - f) Laboratory: responds as requested
 - g) Operating room and surgical service: responds as requested
 - h) Surgical specialists: responds as requested – see Trauma Team Response Standards for the types of surgical specialists required for level II and level III trauma centers.
- 4. The on-call neurosurgeon may take the place of the trauma surgeon only when the trauma team is activated for patients with isolated head injuries.

5. The trauma center ED physician may de-activate (cancel) the trauma team based on an updated report from prehospital ALS personnel or the initial ED assessment that the patient condition no longer meets trauma patient criteria. The decision to de-activate (cancel) the trauma team shall be documented.
6. Trauma centers shall develop internal trauma team policies that detail trauma team activation and response processes including documentation of all times for alert, activation, response and consultation.
7. Trauma centers shall maintain a log of all trauma team members on-call, including back up on-call coverage.

C. Trauma Team Response Standards

1. Level II

Surgical Specialists:	Response:
Trauma/general surgeon	In ED within 20 minutes or on patient arrival 90% of the time
Neurosurgery	On-call and in ED within 30 minutes Consultation: Reply within 5 minutes
Obstetric/Gynecologic	
Ophthalmologic	
Oral or Maxillofacial or Head and Neck	
Orthopaedic	
Plastic	
Urology	
Surgical Services:	Response:
Operating room service	Available within 30 minutes
Burns	Available for consultation or consultation and transfer agreements
Cardiothoracic	
Pediatric	
Reimplantation/microsurgery	
Non-surgical Services:	Response:
Emergency physician	In-house and immediately available
Trauma nurse	
Respiratory therapy	
Radiology	
Laboratory	
Anesthesiology	Within patient arrival to OR
Available for Consultation:	
Cardiology	
Gastroenterology	
Hematology	
Infectious diseases	
Internal medicine	
Nephrology	
Neurology	
Pathology	
Pulmonary medicine	

2. Level III

Surgical Specialists:	Response:
Trauma/general surgeon	In ED within 30 minutes or on patient arrival 80% of the time
Neurosurgery	In ED within 30 minutes Consultation: Reply within 5 minutes (can be provided through a transfer agreement)
Orthopaedic surgery	In ED within 30 minutes Consultation: Reply within 5 minutes
Surgical Services:	Response:
Operating room service	Available within 30 minutes
Burns	Available for consultation or consultation and transfer agreements
Cardiothoracic	
Pediatric	
Reimplantation/microsurgery	
Non-surgical specialists:	Response:
Emergency medicine	In-house and immediately available
Trauma nurse	
Respiratory therapy	
Radiology	
Laboratory	
Anesthesiology	Within patient arrival to OR
Available for consultation:	
Cardiology	
Gastroenterology	
Hematology	
Infectious diseases	
Internal medicine	
Nephrology	
Neurology	
Pathology	
Pulmonary medicine	

3. On-call back-up coverage is required to meet the same response times, starting at initial trauma activation.

**APPENDIX A.9
SAN LUIS OBISPO COUNTY EMS AGENCY PREHOSPITAL POLICY:
INTERFACILITY TRANSFERS OF TRAUMA PATIENTS**

I. PURPOSE

To establish standards for consistent, timely, proper, and efficient movement of trauma patients between hospitals in and out of San Luis Obispo County.

II. AUTHORITY

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 7

III. POLICY

- A. Trauma centers shall have written interfacility transfer agreements with local referring hospitals.
- B. Interfacility transfer agreements shall, at a minimum, detail the following components:
 - 1. Criteria for transfer of a trauma patient
 - 2. Transferring physician responsibilities
 - 3. Logistics for transfer, evaluation and monitoring of patient
 - 4. Receiving physician responsibilities
 - 5. Compliance with relevant laws and regulations, such as EMTALA
- C. Trauma patients may be transferred between and from trauma centers providing that any transfer shall be, as determined by the trauma center physician, medically prudent and in accordance with San Luis Obispo County EMS Agency policies.
- D. Trauma centers shall have written consultation and transfer agreements with the following facilities (if services are not available at the trauma center):
 - 1. Burn center
 - 2. Pediatric intensive care unit
 - 3. Rehabilitation center
 - 4. Hospitals with the following surgical services for adult and pediatric trauma patients (if not available at the trauma center):
 - a) Cardiothoracic
 - b) Pediatric
 - c) Reimplantation/microsurgery capability
 - d) Spinal cord injury
- E. Hospitals shall establish pre-transfer protocols to identify trauma patients necessitating transfer.
- F. Injured patients in hemodynamically unstable condition but who need transfer to a higher level trauma center may appropriately undergo operative control of ongoing hemorrhage

before transfer if a qualified surgeon and operating room resources are promptly available at the referring hospital.

G. Timeliness of Transfer

1. Trauma patients arriving at non-trauma center hospitals meeting the prehospital physiologic and/or anatomic trauma triage criteria shall be immediately evaluated by an ED physician.
2. Referring hospitals should coordinate early with EMS transport providers to facilitate the rapid transfer of a patient to a trauma center.
3. Once the decision has been made to transfer, the referring hospital shall immediately contact the receiving trauma center ED physician with a notice of intent to transfer a trauma patient and ETA, although transfer may occur at a later time in order to stabilize patient.

H. All health care organizations within the trauma system shall facilitate the transfer and return of an organization member

I. System Evaluation

1. The Trauma System Committee (TSC) shall review interfacility transports of trauma patients as part of its trauma system performance improvement program.
2. Non-trauma center hospitals caring for trauma patients shall:
 - a) Provide the necessary information to the trauma center and the EMS Agency for inclusion in the trauma registry system
 - b) Participate in TSC and trauma center quality improvement activities for those trauma patients in their care