



California Statewide Trauma System Triage and Transfer Resource Guide 2019

**Emergency Medical Services Authority
State Trauma Advisory Committee**





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CONTENTS

INTRODUCTION	1
CALIFORNIA STATUTORY/REGULATORY AUTHORITY	2
Article 1. Local EMS Agency	2
Article 3. Transfer Agreements	2
Code of Regulations, Title 22, Division 9, Chapter 7	2
BACKGROUND	3
RE-TRIAGE AGREEMENTS, GUIDELINES, AND POLICIES	4
PERFORMANCE IMPROVEMENT	5
EDUCATION	6
REFERENCES	7
APPENDICES INTRODUCTION	8
Appendix 1: Hospital Council of Northern & Central California Patient Transfer Agreement	9
Appendix 2: Central California Regional Trauma System Suggested Criteria for Consideration of Transfer to a Trauma Center	18
Appendix 3: Riverside County EMS Agency Continuation of Trauma Care	20
Appendix 4: City and County of San Francisco Trauma Re-Triage	23
Appendix 5: Contra Costa EMS	24

CONTENTS

Appendix 6: Inland Counties EMS Agency Continuation of Care	27
Appendix 7: Los Angeles County EMS Agency Trauma Triage	32
Appendix 8: North Regional Trauma Coordinating Committee Guidelines for Transfer to a Trauma Center	33
Appendix 9: Routine Follow-up Communication Form	37

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INTRODUCTION

This resource is designed to assist the local EMS agencies (LEMSA) in the development of transfer and triage policies, guidelines and processes throughout California.¹ In particular, this resource focuses on the concept of emergency transfer of critical trauma patients also commonly called re-triage. **Re-triage**² is for the urgent/emergent transport of a critically injured patient from a non-trauma facility emergency department or lower level Trauma Center to the appropriate level Trauma Center for definitive care. This document does not address the existing processes for **interfacility transfer**³ of an admitted trauma patient to a Trauma Center in less emergent scenarios.

Research has shown that outcomes for critically injured patients are optimized at Trauma Centers. However, whether for reasons of distance, weather, errors in field triage, or as a result of non-EMS transport, these patients occasionally arrive at a non-trauma facility or a Trauma Center that does not have the necessary resources to treat the injuries of the presenting patient. As a result, EMS providers and local trauma systems professionals need to plan for the rapid secondary transport of critically injured patients.

Preplanning for re-triage focuses on:

- Early identification of critically injured patients who need immediate Trauma Center care
- Advance agreement between each sending facility and partner receiving Trauma Center to expedite the safe and efficient delivery of these critical trauma patients to the necessary definitive care

The American College of Surgeons 2014 *Resources for Optimal Care of the Injured Patient* (chapter 4) states that mutually agreed upon written guidelines for the transfer of trauma patients between institutions is an essential part of a trauma system.

This resource will aid in the development of re-triage processes to help identify those patients most in need of transfer to an appropriate Trauma Center. The first portion of these guidelines includes authorities and core elements for re-triage procedures. The appendices include adapted by LEMSAs and facilities. Appendices also provide examples of agreements, memoranda of understanding, and policies in use locally that facilitate the re-triage process.

¹ 1798.170 A local EMS agency may develop triage and transfer protocols to facilitate prompt delivery of patients to appropriate designated facilities within and without its area of jurisdiction.

² For purposes of this document, re-triage means the immediate evaluation, resuscitation and transport of a seriously injured patient from a lower level Trauma Center or non-trauma facility to a Trauma Center at a higher level of care. This process involves direct ED to ED transfer of patients that have not been admitted to the hospital.

³ Interfacility transfer refers to the transfer of an admitted patient, under the care of an admitting physician-of-record to another.

CALIFORNIA STATUTORY/REGULATORY AUTHORITY

HEALTH AND SAFETY CODE DIVISION 2.5

CHAPTER 4. Local Administration

ARTICLE 1. Local EMS Agency

1797.204 The local EMS agency shall plan, implement, and evaluate an emergency medical services system, in accordance with the provisions of this part, consisting of an organized pattern of readiness and response services based on public and private agreements and operational procedures.

Article 3 Transfer Agreements

1798.170 A local EMS agency may develop triage and transfer protocols to facilitate prompt delivery of patients to appropriate designated facilities within and without its area of jurisdiction.

1798.172 (a) The local EMS agency shall establish guidelines and standards for completion and operation of formal transfer agreements between hospitals with varying levels of care in the area of jurisdiction of the local EMS agency consistent with Section 1317 to 1317.9a, inclusive, and Chapter 5 (commencing with Section 1798.) These guidelines shall include provision for suggested written agreements for the type of patient, initial patient care treatments, requirements of inter-hospital care, and associated logistics for transfer, evaluation, and monitoring of the patient.

CODE OF REGULATIONS, TITLE 22, DIVISION 9, CHAPTER 7

§ 100254

(b) The local EMS agency may authorize the utilization of air transport within its jurisdiction to geographically expand the primary service area(s) provided that the expanded service area does not encroach upon another trauma system, or that of another trauma center, unless written agreements have been executed between the involved local EMS agencies and/or trauma centers.

BACKGROUND

Assuring timely and appropriate re-triage of critically injured patients from a lower level Trauma Center or non-trauma facility to the appropriate level of Trauma Center for definitive care requires thoughtful design, thorough planning, and ongoing monitoring. These patients require a high level of care, and it is critical to minimize the time to definitive Trauma Center care. In developing a re-triage plan, LEMSAs should develop a process for expedient acceptance at the appropriate level of Trauma Center and consider the role and availability of transportation resources. Considerations should include critical care ground ambulances, 9-1-1 system ambulances, air transport, and the scope of practice of the respective staff providing care on each of these transport vehicles.

The federal Emergency Medical Treatment & Labor Act (EMTALA), first enacted in 1986 and revised considerably since, sets the foundation for the compliant movement of patients from one hospital to another: <https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/index.html>.

Below are summaries of relevant EMTALA excerpts:

- The sending physician is responsible for initial patient assessment and determining the level of care for the patient during transport. Hospitals should use local EMS agency policies, guidelines, and contracts as well as transfer agreements with local Trauma Centers to clarify relationships between providers and hospitals, and between hospitals.
- EMS entry on hospital property with a patient to rendezvous with an air medical helicopter does not trigger EMTALA if the hospital is not the recipient hospital.
- The following requirements shall be met for the transfer of a patient who is not stabilized:
 1. The sending facility must provide medical treatment within its capacity that minimizes the risks to the individual's health;
 2. The receiving facility must have available space and qualified personnel for the treatment of the individual, must have agreed to accept transfer of the individual, and to provide appropriate medical treatment;
 3. The sending facility must send to the receiving facility all medical records (or copies) related to the emergency condition available at the time of transfer;
 4. The transfer must be effected through qualified personnel and transportation equipment, as required. This includes the use of necessary and medically appropriate life support measures during the transfer.
- Any [Trauma Center] that has "specialized capabilities or facilities" may not refuse to accept a patient in transfer if it has the capacity to treat the individual. The [Trauma Center] will be obligated to accept the transfer, so long as it has capacity and its capabilities exceed those of the sending facility.

RE-TRIAGE AGREEMENTS, GUIDELINES, AND POLICIES

Documents provided in the appendices are designed to provide support for the establishment of agreements to streamline the re-triage of critically injured patients from emergency departments to the appropriate level of care Trauma Center. Key factors to consider when developing agreements/guidelines/policies are:

1. Transfer agreements and guidelines may expedite the selection of an appropriate destination and mode of transport for critically injured patients.
2. To optimize patient safety and the potential for improved outcome, EMTALA requirements associated with transfers may be met by establishing re-triage agreements in advance, including criteria for automatic Trauma Center acceptance supported by local EMS agency policies.
3. Agreements should address special considerations, including patient selection and destination for pediatric trauma patients.
4. LEMSAs should work with hospitals that lack the level of trauma care needed for critically injured patients, partnering each facility with Trauma Centers capable of providing the needed resources.
5. Re-triage agreements/policies/guidelines should include the following:
 - a. Procedural and administrative policies to identify the critical trauma patient eligible for re-triage
 - b. Processes for selecting the appropriate partner Trauma Center
 - c. Clinical criteria for automatic acceptance for qualifying patients at the appropriate partner Trauma Center (thus meeting EMTALA requirement for receiving hospital acceptance)
 - d. Specific processes for re-triage patients to permit rapid 24/7 access to partner Trauma Center surgeon or other physician to inform the receiving Trauma Center of incoming re-triage referrals
 - e. Common language to be used by the referring hospital and partnering Trauma Center to facilitate rapid transfer of the patient and identifying the minimum expected exchange of patient information
 - f. Guidance for selecting the appropriate transport service to match each patient's needs. Considerations include transport personnel scope of practice and the identification of patients for whom more rapid departure to the Trauma Center (i.e. via 911 ambulance) outweighs the benefit of delaying transport to await providers with broader scope of practice, such as CCT RN
 - g. Plan for transfer of documentation of consent, Emergency Department medical record, initial prehospital care record, and personal belongings
 - h. Plan for provision of directions and Trauma Center information to the family

PERFORMANCE IMPROVEMENT

Monitoring re-triage processes for opportunities to improve and providing follow-up communications on patient outcome and condition are important components for both referring and receiving institutions. Each re-triage case should be reviewed to ensure that it was appropriate and compliant with the transfer agreement and local policy. Performance measures should ask the following questions:

- Considering the presentation of the patient, distance, weather, and other factors, did prehospital personnel initially transport the patient to the most appropriate facility? Should the patient have been transported primarily by ground or air directly from the scene to the Trauma Center?
- Did the first transporting EMS provider leave the patient care record with the patient? Was the EMS documentation complete and appropriate?
- If labs, imaging, or procedures that were done at the sending facility, necessary to meet the patient's needs without causing delay in the re-triage process?
- Did the secondary transporting agency meet the stated ETA to the sending facility?
- Was the selection of the secondary transporting agency appropriate?
- Was the total time in the sending facility within acceptable limits, based on the patient's condition and availability of a transporting provider, to the receiving facility?
- Was the time interval from arrival of the secondary transport provider to departure acceptable?
- Were all of the patient's records sent to the receiving facility?
- Did the receiving facility provide outcome information back to the sending facility?

EDUCATION COURSES

Advanced Trauma Life Support (ATLS): Emergency department staff and trauma team members will learn a systematic, concise approach to the early care of the trauma patient.

Rural Trauma Team Development Course (RTTDC): Health care providers will learn the fundamental elements of injury resuscitation. The course content includes key concepts relative to the organization of the trauma receiving area, utilization of available resources and regional system relationships in a way that is straightforward and easy to understand.

Trauma Outcomes and Performance Improvement Course (TOPICS): Teaches members of the trauma system team who participate in the ongoing assessment, evaluation, and improvement of trauma care. This course focuses on the ongoing assessment of the continuum of trauma care with a structured review process and trauma patient outcomes.

Trauma Nurse Core Course (TNCC): Two-day, intensive, hands-on training that uses both individual and team approach. There are three psychomotor skill stations—trauma nursing process, airway and ventilation, and trauma interventions. These offer students the opportunity to practice the systematic approach of the initial assessment in real life situations.

Transport Nurse Advanced Trauma Course (TNATC): Three-day educational experience focuses on care of the trauma patient during initial resuscitation and transport. Course content includes: transport physiology, safety, neurological trauma, shock, thoracic and abdominal trauma, trauma in pregnancy, pediatric trauma, legal aspects of transport, burn trauma, airway and ventilator management and crisis management.

REFERENCES

American College of Emergency Physicians' Policy Statement "*Appropriate Inter-hospital Patient Transfer*"

American College of Surgeons' "*Resources for Optimal Care of the Injured Patient, 2014*"; Chapter 4: Interhospital Transfer

Emergency Nurses Association, Society of Trauma Nurses, Emergency Medical Services for Children "*Interfacility Transfer Tool Kit for the Pediatric Patient,*" 2013

Garwe T, Cowan LD, Neas B, Cathey T, Danford BC, Greenawalt P "Survival Benefit of Transfer to tertiary Trauma Centers for Major Trauma Patients Initially Presenting to Non-tertiary Trauma Centers. *Acad Emerg Med.* 2010; 17 (11): 1223-1232.

Sorensen, MD, von Recklinghausen, Fulton, Burchard "Secondary Overtriage: The Burden of Unnecessary Interfacility Transfers in a Rural Trauma System." *JAMA Surg.* 2013; 148 (8); 763-768.

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APPENDICES INTRODUCTION

The following pages provide examples of Transfer Agreements and local EMS agency policies. The examples provided were selected to provide different approaches to re-triage and are not meant to illustrate the “best” approach. As policies are updated by the local EMS agencies, they may be found on the individual local websites.

Appendix 1: Hospital Council of Northern & Central California Patient Transfer Agreement	9
Appendix 2: Central California Regional Trauma System Suggested Criteria for Consideration of Transfer to a Trauma Center	18
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Appendix 5: Contra Costa EMS	24
Appendix 6: Inland Counties EMS Agency Continuation of Care	27
Appendix 7: Los Angeles County EMS Agency Trauma Triage	32
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Appendix 9: Routine Follow-up Communication Form	37



Note: This agreement was facilitated by the Hospital Council of Northern & Central California for the hospitals in the Central California EMS agency region (Fresno, Kings, Madera, Tulare counties). All 14 facilities, the Hospital Council, and the Fresno County Health Department Emergency Medical Services Division signed the agreement.

PATIENT TRANSFER AGREEMENT

This Transfer Agreement (“**Agreement**”) is entered into as of _____, 2009 (“**Effective Date**”), by and among the general acute care hospitals (“**Party**” or “**Parties**”) listed in **Exhibit A** to this Agreement.

RECITALS

- A. Each Party operates a licensed general acute care hospital that at times has patients, including emergency patients and inpatients, who may need a transfer to another hospital for specialized care that the Party does not have the capacity or capability, including resources that are temporarily unavailable, or for alignment with the patient’s managed care plan or other responsible payor for services or for other reasons.
- B. In collaboration with the Hospital Council of Northern and Central California (“**HCNCC**”), the Parties have established a Patient Transfer Work Group (“**Work Group**”) to establish an area-wide patient transfer agreement in order to improve access to health care services, facilitate continuity of care, expedite the timely transfer of patients and records, provide for return transfer of stable patients to their communities and maximize the capabilities of available regional resources to meet the needs of patients.

DEFINITIONS

- 1. “**Transferring Hospital**” is the hospital from which the patient is being transferred.
- 2. “**Receiving Hospital**” is the hospital to which the patient is being transferred.
- 3. “**Transferring Physician**” is the physician initiating and responsible for the patient’s transfer at Transferring Hospital.
- 4. “**Receiving Physician**” is the physician who accepts responsibility for the care of the patient at Receiving Hospital.
- 5. “**Stabilize**” and “**Emergency Medical Condition**” have the same meanings as these terms are defined in the EMTALA regulations (42 C.F.R. §489.24) setting forth the responsibilities of hospitals in emergency cases.

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

1. **Duties of Transferring Hospital.** The Transferring Hospital or Transferring Physician, as indicated, shall have the following duties and obligations in connection with a patient's transfer under this Agreement:
 - (a) **Transfer Authorization.** The Transferring Physician shall authorize the transfer of the patient to the Receiving Hospital, including documenting in the patient medical record the medical necessity or other reason for the transfer of the patient to the Receiving Hospital and the medical condition of the patient at the time of transfer. The Transferring Hospital and Physician shall determine that the patient is appropriate for transfer in accordance with all applicable Federal or State laws and regulations regarding patient transfers as well as with applicable requirements of the Transferring Hospital's transfer policies and EMS transfer guidelines.
 - (b) **Obtaining Consent for the Transfer.** The Transferring Hospital or Physician shall obtain the consent of the Receiving Hospital and a Receiving Physician for the transfer:
 - (1) The consent of the Receiving Hospital will be obtained by telephone, facsimile or other electronic means, by contacting the Receiving Hospital in accordance with the terms of this Agreement and any procedures adopted by the Receiving Hospital in accordance with Section 2(a)(1) and disseminated to all Parties by HCNCC.
 - (2) The Transferring Hospital/Physician will use best efforts to provide clear, accurate communication of patient data and clinical status, including assigning clinical personnel, as appropriate and feasible, to provide (or be immediately available to provide) information as to a patient who has a complex or un-stabilized condition or requires a higher level of care. The Parties agree to work collaboratively with the Work Group to develop and implement standards for consistent and accurate reporting of patient information.
 - (3) At the time of initial contact, the Transferring Hospital will provide the following patient information to the Receiving Hospital --
 - The patient's name and date of birth (gender as applicable);
 - Whether patient is an emergency patient or an inpatient;
 - The patient's diagnosis and description of the patient's clinical condition;
 - The patient's clinical status, including whether patient has an Emergency Medical Condition and if so, whether the Condition is Stabilized;
 - The reason for the transfer (i.e., higher level of care, lack of specialty services, lack of beds or inadequate staffing, patient request, etc.);

- Core clinical information (vital signs, intubation, etc.); and
 - The estimated time of arrival of the patient.
- (4) As necessary for the Receiving Hospital and Physician to evaluate the clinical needs of the patient and their respective capability and capacity to meet those needs, the Transferring Hospital or Physician will provide (orally or electronically) pertinent clinical information to the Receiving Hospital and Physician, so long as the Transferring Physician determines that any delay in providing the information will not result in a material deterioration in the patient's medical condition.
- (5) If the Receiving Hospital confirms that it has capacity and capability to accept the patient, the Transferring Hospital or Physician will obtain the consent of the Receiving Physician. The Receiving Hospital will assist the Transferring Hospital or Physician in contacting a qualified Receiving Physician who may be available to accept the patient.
- (6) The Transferring Hospital and Physician will document in the patient record the consent of the Receiving Hospital and Physician, including the time and date and the names of the Receiving Physician and Receiving Hospital representative who have respectively consented to the transfer.
- (c) Insurance Information.
- (1) If the transfer is for a patient with an Emergency Medical Condition that is **not** stabilized, the Transferring Hospital will not provide the Receiving Hospital or Physician any insurance or financial information until the Receiving Hospital and Physician have accepted the patient.
- (2) If the Transferring Hospital/Physician advises the Receiving Hospital that the patient is an inpatient or the patient's condition is stabilized, the Transferring Hospital will provide the Receiving Hospital the patient's insurance information (including the name and telephone number of the patient's health plan, patient ID # or member #)
- (d) **Patient Transportation**. The Transferring Hospital and Physician are responsible to arrange appropriate and safe transportation that is appropriate for the patient's medical condition, including designation of (i) appropriate equipment for the transfer, (ii) treatment orders during transport, and (iii) the level of professional personnel (including physicians and hospital personnel, when appropriate) who should accompany the patient during transfer.
- (1) If there is a delay in the transfer process that will result in the patient's arrival at the Receiving Hospital by more than one (1) hour beyond the estimated time of arrival, or the ambulance or other patient transport is re-directed en route to another hospital, the Transferring Hospital (if aware of the delay or diversion) will immediately notify the Receiving Hospital.
- (2) Except as otherwise agreed by the Parties with respect to a specific transfer, the Transferring Facility shall remain responsible for the patient until he/she arrives at the

Receiving Facility, at which time the responsibility for the patient's care will shift to the Receiving Facility.

- (e) **Transfer of Patient Records**. The Transferring Hospital will forward (with the patient or by electronic means) copies of those portions of the patient's medical record that are relevant to the transfer and continued care of the patient, including copies of records related to the patient's condition, observations of signs or symptoms, preliminary diagnosis, treatment provided and results of tests and procedures.
 - (1) If a patient has an Emergency Medical Condition that has **not** been Stabilized, the records will include (i) a copy of the patient's informed request for the transfer or the physician's certification that the medical benefits of the transfer outweigh the risks of transfer; and (ii) if an on-call physician at the Transferring Hospital failed or refused to examine or treat the patient within a reasonable time, the name and address of the on-call physician.
 - (2) If all necessary and relevant medical records are not available at the time the patient is transferred, the records will be forwarded by the Transferring Hospital within four (4) hours of the transfer.
- (f) **Patient Notice**. The Transferring Facility will comply with patient notice and consent requirements applicable to the transfer. The Transferring Hospital will recognize the right of the patient to make an informed refusal of consent to treatment or transfer in accordance with applicable law;
- (g) **Personal Property**. The Transferring Facility will transfer the patient's personal property (such as money and valuables) and information related to these items, or make other appropriate disposition of personal property, in accordance with its policy and procedure for the inventory and safekeeping of patient valuables.
- (h) **Patient Rights/Preference**. If the patient is an emergency patient whose condition is Stabilized or is an inpatient, the Transferring Hospital will (i) comply with applicable contractual, statutory and regulatory obligations that might exist between the patient and his/her health plan or designated provider; and (ii) recognize the right of the patient to transfer to the hospital and/or physician of his/her choice.

2. **Responsibilities of the Receiving Hospital**. The Receiving Hospital shall have the following duties and obligations in connection with a patient transfer under this Agreement:

- (a) Transfer Acceptance Process.
 - (1) Each Party will centralize, to the extent feasible, the responsibility to receive requests to accept the transfer of patients under this Agreement. A list of contacts and telephone numbers for processing of transfer requests for each Party is attached hereto as **Exhibit B**. Each Party may submit to HCNCC additional information regarding its transfer acceptance process, which HCNCC will disseminate to the Parties.

- (2) Each Party will establish a transfer acceptance worksheet and/or intake forms in order to record (i) the date and time of requests; (ii) the hospital, department and representative making a transfer request; and (iii) the patient information set forth in Section 1.B(2) above.
- (b) **Conditions for Patient Acceptance.** The Receiving Hospital will accept a patient transferred in accordance with this Agreement and provide or arrange for the provision of medical services to the patient, provided –
- (1) The Receiving Hospital has appropriate beds, equipment, staff and service capacity to meet the expected needs of the patient;
 - (2) A Receiving Physician on the Receiving Hospital's Medical Staff has accepted the patient; and
 - (3) The patient meets the Receiving Hospital's admission criteria applicable to the patient.
- (c) **Response Time.** If the transfer involves a patient with an Emergency Medical Condition that is *not* stabilized, the Receiving Hospital will exercise reasonable efforts to respond to the Transferring Hospital within thirty (30) minutes after receiving the request to transfer the patient.
- (d) **Admissions Process.** The Receiving Hospital will be responsible for the admissions and/or registration process for each patient accepted by the Receiving Physician, as follows:
- (1) The admission requirements of the Receiving Hospital will be completed prior to the transfer except if the patient has an Emergency Medical Condition that is not Stabilized at the time of the transfer.
 - (2) Except for the transfer of a patient who has an Emergency Medical Condition that is not stabilized at the time of the transfer –
 - The admission process will include provision by the Transferring Hospital of patient insurance information relating to coverage of medical services (such as Medicare, Medi-Cal HMO, etc.) and pertinent medical and demographic information regarding the patient; and
 - The Transferring Hospital will obtain prior authorization from the patient's payor, or other person for the transfer and the admission or other medical care services to be provided by the Receiving Hospital if (i) obtaining prior authorization is required by the payor prior to the transfer and/or admission; and (ii) requesting such authorization is otherwise permitted by law.
- (e) **Transportation.** When appropriate and within its capabilities, or upon request by the Transferring Hospital, the Receiving Hospital or Physician will consult with the Transferring Hospital or Physician as to the transport of the patient.
- (f) **Patient Valuables.** The Receiving Hospital will maintain policies for the acknowledgement and inventory of any patient valuables transported with the patient.

3. Return Transfers.

- (a) When a patient transferred under this Agreement no longer requires the specialized services of the Receiving Facility and is stable for transfer back to the Transferring Facility, consistent with all applicable requirements under federal and state law (including patient notice and consent requirements), the Transferring Facility shall accept the transfer back of the patient if it has the capability to provide continuing care to the patient, and shall make best efforts to accomplish the transfer within a maximum of forty-eight (48) hours, including, without limitation,
 - (1) Reserving a bed and giving the patient priority over non-emergency admissions in order to ensure prompt placement of the patient;
 - (2) Identifying a physician at the Transferring Facility who will be responsible for the patient; and,
 - (3) Providing appropriate personnel, equipment and services to assist the Receiving Facility with the return transfer of the patient.
- (b) In the event the Transferring Facility is unable to accept the transfer back of the patient within forty-eight (48) hours of the request by Receiving Facility, the Chief Executive Officer (or designee) of the Transferring Facility will promptly confer with the Chief Executive Officer (or designee) of the Receiving Facility about the reasons for such inability, and they shall develop a plan to expedite the transfer back of the patient as promptly as possible.
- (c) In order to facilitate return transfers, each Party shall establish policies and procedures to (i) identify bed availability for returning patients; and (ii) communicate with the Transferring Hospital in a timely manner in order to provide information necessary for assuring bed availability for a returning patient.

4. Disputes.

- (a) If a dispute arises between two Parties during the course of a pending transfer relating to the clinical status and needs of the patient or the method of transportation, the judgment of the Transferring Physician shall take precedence solely for purposes of facilitating a timely decision on the transfer. If a dispute between two Parties arises or continues after a final decision has been made by the Receiving Hospital and Physician on the acceptance of a transfer, the judgment of the Transferring Physician shall not be dispositive in the resolution of the dispute.
- (b) To the extent permitted by law, the Parties to the transfer will cooperate in the mutual review of a transfer that the Receiving Hospital identifies as implemented in a manner that is a possible violation of state or federal law, or this Agreement.
- (c) All patient transfers will be done on an equitable basis, without regard to financial or diagnostic desirability.

5. **Disaster/Emergency Situation**. In the event of an area-wide disaster or national, state or local emergency situation, which requires the evacuation of patients, each Party agrees to admit

evacuated patients from the other Party, to the extent there is physical capacity to do so, and when consistent with local disaster evacuation orders and protocols.

6. **Role of the Work Group.** The Parties agree to continue the activities of the Work Group, and will cooperate with the Work Group in holding quarterly meetings (or other frequency as agreed) to monitor progress and challenges in managing the transfer and re-transfer processes, including reporting data on key indicators developed by the Work Group. Each Party acknowledges and agrees that the Work Group will also monitor, communicate and provide training on changes in EMTALA and other laws and regulations relating to patient transfers and engage other hospitals that have are not Parties to this Agreement to participate in the Work Group and this Agreement. It is the intent of the Parties that the Work Group will develop and disseminate protocols for the transfer of patients requiring specialized procedures (such as NICU, PICU and behavioral health patients); as appropriate, such protocols shall become an exhibit to this Agreement upon the approval of a majority of the Parties hereto in accordance with Section 12 below.
7. Independent Contractor.
 - (a) The Parties are at all times independent contractors with respect to their relationship with one another, the purpose of which is to promote continuity of patient care consistent with applicable laws and regulations. Nothing in this Agreement shall create nor be construed as creating any agency, partnership, joint venture or other corporate relationship between Parties.
 - (b) The governing body of each Party shall have the exclusive control over its policies, management, assets and affairs. Neither Party shall assume any liability by virtue of this Agreement for any debts or obligations of either a financial or a legal nature incurred by the other Party to the Agreement. Nothing in this Agreement shall affect or interfere with the (i) bylaws, rules and regulations of a Party as they relate to medical staff membership and the clinical privileges of the members of each Party's medical staff; or (ii) the services and admission policies of each Party.
8. Charges for Services.
 - (a) Charges for services performed by either Party shall be billed and collected by the Party rendering the services directly from the patient, third party payer or other source legally responsible for payment (including, if applicable, pursuant to Section 8(b) below). Except as set forth in Section 8(b) below, neither Party shall have any liability to the other for such charges unless mutually agreed to in writing in advance.
 - (b) If a Party has a legal obligation (whether imposed by statute or by contract) to provide or pay for care for a patient who is to be transferred under this Agreement, the Party having the responsibility shall be liable for the reasonable charges of the other Party for providing medically necessary services and care.
9. Other Conditions.
 - (a) This Agreement is solely for the purpose of facilitating and expediting the transfer of patients between the Parties. Nothing in this Agreement shall require any Party to transfer any patient or

any number or type of patients to any other Party, or require any Party to accept any patient or any number or type of patients other than as may be required by law or other contractual obligations (such as payor agreements).

- (b) This Agreement shall be non-exclusive between the Parties. Nothing in this Agreement shall be construed as limiting the rights of either Party to contract with any other health facility on a limited or general basis, or implement transfers to any general acute care hospital that is not a signatory to this Agreement.
- (c) The Chief Executive Officer of each Party shall communicate with the Medical Executive Committee and key physicians (including emergency physicians) relating to the roles and responsibilities in making and accepting transfers (especially for specialty services) and re-transfers.
- (d) Each party shall be responsible to provide in-service training to its medical staff and personnel as to the procedures of this Agreement and its internal policies and procedures for making and accepting transfers and re-transfers.

10. **Compliance with Law.** The Parties shall comply with all applicable federal, state and local laws, regulations and ordinances, including applicable standards of the Joint Commission and any other applicable accrediting bodies, and reasonable policies and procedures of the parties.

- (a) To the extent that any provision of this Agreement conflicts with EMTALA or state licensing laws for the provision of emergency services and care, as such laws may be amended, the provisions of EMTALA or the state licensing laws, as applicable, shall take precedence over and/or automatically supersede any inconsistent provisions of this Agreement.
- (b) Each Party shall at all times be licensed by the State Department of Public Health, and certified by the Medicare and Medi-Cal programs.

11. **Term.**

- (1) **Term.** This Agreement shall be effective on the Effective Date and shall continue unless and until terminated.
- (2) **Termination.** A Party may terminate its participation in this Agreement (i) at any time, without cause, upon sixty (60) days prior written notice; or (ii) immediately following the effective date of any amendment to this Agreement under Section 12 below that the Party declines to accept. Notice of termination shall be made in writing to the HCNCC Regional Vice President (Fresno Office), which shall notify all other Parties as to the termination notice and its effective date.

12. **Amendments.** This Agreement may be amended at any time by a written agreement approved and signed by a majority of the then Parties hereto. Nothing in this Agreement shall prevent any Party from entering a separate agreement with another Party for a specific patient transfer between the two Parties.

13. Miscellaneous.

- (a) **Notice**. Any notice required or permitted by this Agreement shall be effective and shall be deemed delivered upon placing in the mail, by certified or registered mail, postage prepaid, or upon personal delivery to the address or addresses set forth in **Exhibit A** hereto.
- (b) **Invalid Provision**. In the event that any portion of this Agreement shall be determined to be invalid or unenforceable, the remainder of this Agreement shall be deemed to continue to be binding upon the parties hereto in the same manner as if the invalid or unenforceable provision were not part of this Agreement.
- (c) **Maintenance of Records**. Each Party shall maintain all documentation relating to transfers under this Agreement, including transfer requests, acceptances and denials, for a minimum period of five (5) years from the date of the request for a transfer.
- (d) **Name Use**. Neither Party shall use the name of the other Party in any promotional or advertising material without the expressed written consent of the other Party. This Agreement shall not constitute an endorsement by either Party of the other Party, and it shall not be so used.
- (e) **Governing Law**. This Agreement shall be construed in accordance with the laws of the State of California.
- (f) **Liability Insurance**. Each Party shall maintain general and professional liability insurance with coverage limits in amounts which are usual and customary for similar health facilities in California in size, complexity and scope of services. Each Party shall give the other Party at least 30 days prior written notice of any proposed reduction or cancellation of such insurance coverage, and shall provide to the other Party evidence of the above described insurance policy or policies upon request.
- (g) **Indemnification**. Each Party agrees to indemnify, defend, and hold harmless the other Party, its directors, officers, employees and agents from any and all liabilities, claims, damages, losses, reasonable attorney's fees, and other reasonable costs of defense (including costs incurred prior to commencement of a lawsuit) resulting solely from or attributable solely to acts or omissions of the indemnifying Party or any of its agents in the performance of this Agreement.
- (h) **Assignment and Delegation**. Neither Party hereto shall assign or transfer this Agreement, in whole or in part, or any its rights duties, or obligations under this Agreement, without the prior written consent of the other Party hereto.
- (i) **Entire Agreement**. This Agreement contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes all prior agreements, oral or written, and all other communications between the Parties relating to such subject matter.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

CENTRAL CALIFORNIA REGIONAL TRAUMA SYSTEM

Suggested Criteria for Consideration of Transfer to a Trauma Center

EMERGENCY TRANSFER: Call Trauma Center immediately for immediate acceptance. **Avoid unnecessary studies that would delay the transfer.** Contact EMS Dispatch and request a “stat” or “immediate” ambulance. The goal is to transfer the patient within 1 hour of arrival.

- **Blood Pressure**
 - Blood Pressure less than 90
 - Labile BP despite 2L of crystalloids
 - Patient requires blood products to maintain their blood pressure
- **GCS**
 - Less than or equal to 8 or lateralizing signs (intubate)
- **Penetrating injuries to the head, neck, chest or abdomen**
- **Fracture/dislocation with loss of distal pulses and/or ischemia**
- **Pelvic ring disruption or unstable pelvic fracture**
- **Vascular Injuries with active arterial bleeding**

URGENT TRANSFER: Call Trauma Center and initiate transfer as soon as any of the following are identified. **Avoid unnecessary studies.** The goal is to transfer the patient less than 4 hours of arrival.

- **Central Nervous System**
 - GCS deteriorating by 2 during observation
 - Open or depressed skull fracture
 - GCS less than 14 with abnormal CT scan (not meeting criteria above)
 - Spinal cord injury
- **Chest**
 - Major chest wall injury with more than 2 unilateral rib fractures
 - Bilateral rib fractures with pulmonary contusion
 - Bilateral pulmonary contusions
 - Wide mediastinum or other signs suggesting great vessel injury
 - Cardiac injury
- **Pelvis/Abdomen**
 - Intra-abdominal injury confirmed by CT scan or ultrasound demonstrating abdominal fluid
- **Major Extremity Injuries**
 - Open long-bone fractures
 - Two or more long bone fractures
 - Crush injury/mangled extremity
- **Multi-System Trauma**
 - Burns with associated injuries (Transfer to a combined Trauma/Burn Center)
 - Major injury to more than two body regions
 - Signs of hypo-perfusion with a base deficit worse than -6
- **Other**
 - Co-Morbid Factors (consider these special circumstances when deciding whether to transfer)
 - Adults greater than 55 years of age with significant trauma
 - Children less than 6 years of age with significant trauma
 - Significant torso injury with advanced co-morbid disease (cardiac or respiratory disease, insulin-dependent diabetes, morbid obesity, or immunosuppression)
 - Pregnancy greater than 20 weeks gestation
 - End Stage Renal Disease requiring dialysis



Administrative Policy		5302
Effective April 1, 2014	Expires March 31, 2015	
Policy: Continuation of Trauma Care	Approval: REMSA Medical Director Daved van Stralen, MD	Signed <i>[Signature]</i>
Applies To: Trauma System, EMS System	Approval: REMSA Director Bruce Barton, Paramedic	Signed <i>[Signature]</i>

PURPOSE

The purpose of this policy is to allow for the expedited transport and care of the critical trauma patient (CTP) that arrives to a non-trauma hospital Emergency Department. The CTP falls within the jurisdiction of the Riverside County EMS Trauma Plan and Trauma System per Title 22, as does the need for coordination of all health care organizations to facilitate the transfer of the CTP. The CTP shall be accepted from the non-trauma hospital by the closest Trauma Center, regardless of the Trauma Center's in-patient census/capacity. The only rationale for the closest Trauma Center to refuse the CTP transfer is due to the same criteria as outlined in the REMSA Policy for Ambulance Diversion.

This policy allows for two levels of triage, the CTP who needs immediate higher of care and the Trauma patient who would benefit from higher level of care to a trauma center. Please refer to the REMSA Policy for Trauma Triage Indicators and Destination.

Trauma Triage Continuation of Care	
<u>Critical Trauma Patient</u> <u>Needs Immediate Higher Level of Care</u> <u>ED to ED</u>	<u>Trauma Patient, needs Higher Level of Care to</u> <u>In-House Trauma Services</u>
<u>Vital Signs:</u>	
Respiratory Compromise SBP less than 90 (greater than 70 y/o SBP less than 100) GCS less than or equal to 13	Within Normal Limits
<u>CNS:</u>	
Penetrating/depressed skull injury Open injury with or without CSF leak Deteriorating GCS or changes in neurological status	Stable Spinal Cord Injury Any head injury w/ combined face, chest, abdomen, or pelvis
<u>CHEST:</u>	
Widened mediastinum on initial XRAY Penetrating injury	Major chest wall injury or pulmonary contusion Prolonged ventilator requirements
<u>ABDOMEN/PELVIS</u>	
Any injury w/ associated Shock (SBP less than 90)	Unstable pelvic ring
<u>EXTREMITIES</u>	
Any injuries w/ associated shock (SBP less than 90)	Open long bone fracture Crush injuries or prolonged ischemia Loss of distal pulses
<u>MULTI SYSTEM</u>	
Any injury w/ associated shock	Possible Co-morbidities with associated traumatic injury: Less than 5, greater than 70 years of age, (RCRMC for Pediatrics) known anticoagulation/anti-platelet therapy pregnancy immunosuppression

Procedure for continuation of trauma care transport:

For Critical Trauma Patient:

The patient should be resuscitated and attempts made to stabilize for transport.

A. Referring Physician:

1. The physician initiating continuation of care transport should call the local ALS ambulance provider. When continuation of care has been initiated the ambulance provider will respond immediately to requesting facility code 3.

OR request the patient's current EMS crew to stand-by on premises for immediate transport of the patient to a trauma center. The stand-by of the EMS crew should not last longer than 20 minutes.

2. Notify directly the ED physician at the receiving Trauma Center. (see #4 for script.)

3. Coordinate diagnostics and interventions w/ receiving ED physician.

4. Suggested script, "This is Dr. ____ at ____ hospital. I want to speak to the ED physician regarding a critical trauma patient for higher level of care." (*Do not use the word "transfer."*)

B. Information to Transporting Personnel:

Information concerning the patient's condition and needs during transport should be communicated to transporting personnel.

C. Documentation: DO NOT Delay Transport

1. All documents are sent including: problem, treatments, status at time of transfer, lab values, X-rays, personal belongings, and EMTALA higher level of care paperwork.

For Trauma Patient:

A. Referring Physician:

Contact closest Trauma Center, speak to accepting Trauma Surgeon.

(Per hospital policy or ED to ED)

B. Information to Transporting Personnel:

Information concerning the patient's condition and needs during transport should be communicated to transporting personnel.

C. Documentation:

All documents are sent including, problem, treatments, status at time of transfer, lab values, X-rays, personal belongings and EMTALA higher level of care paperwork.

D. Prior to Transfer:

The patient should be resuscitated and attempts made to stabilize in respect to ABCDE's.

E. Management during Transport.

Determine if patient needs CCT, ALS or BLS transport.

During transport, continued management of vital functions and continuous re-evaluation are essential.

Reference: American College of Surgeons; Rural Trauma Team Development Course

RIVERSIDE COUNTY EMS AGENCY

Listing of facilities partnering with County's Trauma Centers

Trauma Center name: Riverside County Regional Medical Center

1. Hemet Valley Health Care Center
2. Menifee Valley Medical Center
3. Kaiser Foundation Hospital - Moreno Valley
4. Loma Linda University Medical Center - Murrieta
5. San Geronio Memorial Hospital
6. John F. Kennedy Memorial Hospital (rarely)
7. Temecula Valley Hospital
8. Eisenhower Medical Center

Trauma Center name: Desert Regional Medical Center

1. Eisenhower Medical Center
2. John F. Kennedy Memorial Hospital (rarely)
3. Palo Verde Hospital
4. El Centro Regional Medical Center
5. Pioneers Memorial Healthcare District
6. San Geronio Memorial Hospital
7. Barstow Community Hospital
8. Hi – Desert Regional Medical Center

Trauma center name: Inland Valley Medical Center

1. Rancho Springs Medical Center
2. Menifee Valley Medical Center
3. Temecula Valley Hospital
4. Loma Linda University Medical Center - Murrieta
5. Hemet Valley Medical Center

Trauma center name: Riverside Community Hospital

1. Corona Regional Medical Center
2. Parkview Community Hospital Medical Center
3. Kaiser Foundation Hospital - Riverside



CITY AND COUNTY OF SAN FRANCISCO – TRAUMA RE-TRIAGE GUIDELINES

PROCEDURE FOR EMERGENT RE-TRIAGE OR URGENT TRANSFER OF TRAUMA PATIENTS TO SAN FRANCISCO GENERAL HOSPITAL

★ ★ **THESE PROCEDURES DO NOT APPLY IN TIMES OF DISASTER OR CATASTROPHIC EVENTS** ★ ★

EMERGENT TRAUMA RE-TRIAGE

1. Call 911 and request an EMERGENCY RESPONSE, ALS ambulance for Emergent Re-Triage to SFGH
2. Provide immediate life saving measures (*Airway management, hemorrhage control, tension pneumothorax, etc.*)
3. Call SFGH at 415-XXX-XXXX to notify the ED Attending in Charge (AIC) of the Trauma Re-Triage patient
(*Note: Imaging studies, EMTALA forms or patient records should not delay transport*)

Indications for EMERGENT TRAUMA RE-TRIAGE:

Physiologic: SBP < 90 or need for high volume fluid resuscitation or blood to maintain BP; RR < 10 or > 29; GCS < 13 or GCS deteriorating by 2 or more during observation or blown pupil.

Anatomic: Penetrating injury to head, neck chest or abdomen; Extremity injury with evidence of ischemia or loss of pulses; all blunt trauma with suspected significant chest, abdominal or pelvic injury; flail chest; burns with trauma; two or more proximal long bone injuries; pelvic fractures; limb paralysis; amputation proximal to wrist or ankle; crushed, degloved, or mangled extremity; extremity injury with ischemia evident or loss of pulses; open / depressed skull fracture, multi-system trauma.

Other: Patients, who in the judgment of the evaluating emergency physician, are anticipated to have a high likelihood for emergent life or limb-saving surgery or other intervention within two (2) hours.

URGENT TRAUMA TRANSFER

Call SFGH at 415-XXX-XXXX and speak with ED Attending in Charge (AIC) to discuss patient status and request transfer. *These patients may require limited diagnostic procedures to discover abnormalities—upon findings of significant abnormalities, transfer should immediately be arranged and further extensive workup should not be necessary.*

If transfer accepted, arrange for transport appropriate to patient's condition or potential need.

Prepare patient records and results of any imaging studies and send with the patient.

Indications for URGENT TRAUMA TRANSFER:

Physiologic: GCS < 14 with abnormal CT scan; Spinal cord or major vertebral injury; > 3 rib fractures and/or pulmonary contusion; widened mediastinum or other signs of great vessel injury on CXR; cardiac injury; unstable pelvic ring or pelvic ring disruption; solid organ injury confirmed by U/S or CT scan; 2 or more long bone fractures; suspected crush injury or compartment syndrome; signs of hypoperfusion (e.g. lactate > 4 or base deficit > 10), any pregnant trauma patients (> 20 weeks), elderly (> 65 yrs.) with SBP < 110 and/or on major anticoagulants.

Concerning mechanisms of injury include: Ejection from vehicle; death of another passenger in the same compartment; prolonged extrication; intrusion into passenger space compartment; adult falls > 20 feet or pediatric fall > 10 feet; pedestrian vs auto; motorcycle crash > 20 mph.

PLEASE NOTE: MEDICATION/INTERVENTIONS EXCEEDING PARAMEDIC SCOPE OF PRACTICE MUST BE STOPPED FOR TRANSFER OR AN EXTENDED SERVICE PROVIDER (MD/NP/PA/RN/CCT-PM) MUST ACCOMPANY THE PATIENT

CONTRA COSTA COUNTY EMS AGENCY

Contra Costa County Emergency Medical Services

Emergency “Rapid” Trauma Re-Triage

I. PURPOSE

- A. To outline the criteria and process for re-triage of patients needing trauma care from non-trauma facilities to appropriate trauma centers.
- B. Patients meeting the criteria for Emergency “Rapid” Trauma Re-Triage shall be transferred using 9-1-1 Paramedic IFT emergency transport guidelines. Refer to EMS Administrative Policy 5006 (Hospital Guidelines for Acute Care IFT).

II. EMERGENCY TRAUMA RE-TRIAGE CRITERIA

- A. Adult patients (\geq fifteen [15] years of age) appropriate for Emergency Trauma Re-Triage to a trauma center include:
 - 1. Patients with abnormal blood pressure/perfusion as evidenced by:
 - a. Systolic blood pressure under ($<$) 90 mmHg;
 - b. Need for high-volume fluid resuscitation ($>$ 2 L NS) or immediate blood replacement.
 - 2. Patients with significant neurological findings or injuries, including:
 - a. GCS $<$ 9 or deteriorating by two (2) or more during observation;
 - b. Blown pupil;
 - c. Obvious open skull fracture.
 - 3. Patients meeting anatomic criteria:
 - a. Penetrating injury to head, neck, chest, or abdomen;
 - b. Extremity injury with evident ischemia or loss of pulses.
 - 4. Patients, who in the judgment of the evaluating emergency physician, are anticipated to have a high likelihood for emergent life or limb-saving surgery or other intervention within two (2) hours.
- B. Pediatric Patients ($<$ fifteen [15] years of age) appropriate for Emergency Trauma Re-Triage to a Pediatric Trauma Center (UCSF Benioff Children’s Hospital Oakland (CHO)) include:
 - 1. Hemodynamic criteria:
 - a. Patients with abnormal blood pressure or poor perfusion. Pediatric clinical signs of poor perfusion include: cool, mottled, pale or cyanotic skin or prolonged capillary refill, low urine output, or lethargy;
 - b. Requirement of more than two (2) crystalloid boluses (20 mL/kg each) or requirement of blood transfusion (10 mL/kg).



Standard Policies
Policy 5005

Page 2 of 3

CONTRA COSTA
HEALTH SERVICES
Emergency Medical Services
Effective January 2018

2. Neurologic criteria:
 - a. GCS < 12 (pediatric scale – or deteriorating by two (2) or more during observation;
 - b. Blown pupil;
 - c. Obvious open skull fracture;
 - d. Cervical spine injury with neurologic deficit.
3. Respiratory criteria:
 - a. Respiratory failure resultant from injury;
 - b. Intubation required resultant from injury.
4. Anatomic criteria:
 - a. Penetrating wound to the head, neck, chest, or abdomen
5. Patients, who in the judgement of the evaluating emergency physician, are anticipated to have a high likelihood for emergent life or limb saving surgery or other intervention within two (2) hours.
6. Exceptions:
 - a. Pregnant pediatric patients may be transferred to an adult trauma center;
 - b. Pediatric patients with significant/major burns without traumatic injuries should be transferred to a burn center instead of a trauma center;
 - c. Contact the trauma center to discuss patients with suspected vascular injuries.

III. RE-TRIAGE PROCEDURE

- A. Once the patient has been identified as qualifying for Emergency Trauma Re-triage, the trauma center should be contacted (see contact list and phone numbers below) as soon as possible and the patient should be specifically identified as “Emergency Trauma Re-triage.” Based on that notification (and if the specialty center is not on trauma bypass), the patient will be accepted for transfer.
- B. Have records (and staff and equipment, if necessary) prepared for transport. The ambulance will generally arrive within ten (10) minutes of request and patient should be ready for transport. If delays occur, the 9-1-1 ambulance may be reassigned for other emergency needs. Availability of records should never delay transport.

IV. TRANSFER PROCEDURE (if not Emergency Trauma Re-triage)

- A. Contact the trauma center to discuss patient status and request transfer. See list of hospitals and phone numbers below.
- B. If transfer is accepted, arrange for transport, appropriate to patient condition or potential need.
- C. Patient records and diagnostic imaging disks (if available) should be readied for transport ambulance. Records that are not ready at time of transport departure can be faxed. Availability of records should never delay transport.



V. TRAUMA CENTERS

- A. John Muir Health Medical Center (JMMC) – Walnut Creek is the designated trauma center for adults (> [15] years of age) in Contra Costa County.
- B. CHO is the closest designated trauma center for pediatric patients (, fifteen [15] years of age)/
- C. When JMMC is on trauma bypass status, it is unable to accept patients with emergent need for transfer or field triages because critical hospital resources (e.g. surgeons and operating rooms) are not available. Location and helipad availability are items to consider in choice of other trauma center destinations.
- D. When not on trauma bypass status, trauma centers may also be impacted by bed availability issues and may not be able to accept non-emergent transfers.
- E. Alternate pediatric trauma centers include UC Davis Medical Center in Sacramento and Santa Clara Valley Medical Center in San Jose. Emergency Re-triage Criteria as addressed in this policy, are not utilized at these two (2) facilities.

Other local adult trauma centers include:

LOCAL TRAUMA CENTER CONTACT PERSONS/PHONE NUMBERS

Adult Trauma Centers	Contact Person	Phone Number
*Alameda County Medical Center (Highland) - Oakland	Re-Triage only: ED Physician	(510) 535-6000
	Other transfers: On-call Trauma Surgeon	(510) 437-4800 ext. 0
**San Francisco General Hospital	Attending Physician	(415) 206-8111
John Muir Medical Center – Walnut Creek	Transfer Center	(925) 947-4488
Santa Clara Valley Medical Center – San Jose	ED Physician	(408) 885-3228
Sutter Eden Medical Center – Castro Valley	On-call Trauma Surgeon	(510) 898-6805
UC Davis Medical Center - Sacramento	ED Physician	(916) 734-5669
Kaiser Permanente Medical Center - Vacaville	ED Physician	(707) 624-1161
Stanford Medical Center – Palo Alto	ED Physician	(650) 723-7337

Pediatric Trauma Centers	Contact Person	Phone Number
UCSF Benioff Children's Hospital of Oakland	Transfer Center	(510) 428-3240
UC Davis Medical Center - Sacramento	ED Physician	(916) 734-5669
Santa Clara Valley Medical Center – San Jose	ED Physician	(408) 885-3228
Stanford Medical Center – Palo Alto	ED Physician	(650) 723-7337

** Indicates no helipad on site



INLAND COUNTIES EMS AGENCY CONTINUATION OF CARE

San Bernardino County Only

I. PURPOSE

To develop a system that ensures the rapid transport of patients at the time of symptom onset or injury, to receiving the most appropriate definitive care. This system of care consists of public safety answering point (PSAP) providers, EMS providers, referral hospitals (RH), Specialty Care Centers (Trauma, Cardiovascular ST Elevation Myocardial Infarction (STEMI) or Stroke), ICEMA and EMS leaders combining their efforts to achieve this goal.

This policy shall only be used for:

- Rapid transport of trauma, STEMI and stroke patients from RH to Specialty Care Center.
- Specialty Care Center to Specialty Care Center when higher level of care is required.
- EMS providers transporting unstable patients requiring transport to a Specialty Care Center to stop at any closest receiving hospital for airway stabilization, and continue on to a Specialty Care Center.

It is not to be used for any other form of interfacility transfer of patients.

II. DEFINITIONS

Neurovascular Stroke Receiving Centers (NSRC): A licensed general acute care hospital designated by ICEMA's Governing Board as a NSRC.

Referral Hospital (RH): Any licensed general acute care hospital that is not an ICEMA designated TC, SRC or NSRC.

Specialty Care Center: An ICEMA designated Trauma, STEMI or Stroke Center.

STEMI Receiving Centers (SRC): A licensed general acute care hospital designated by ICEMA's Governing Board as STEMI Receiving Center with emergency interventional cardiac catheterization capabilities.

Trauma Center (TC): A licensed general acute care hospital designated by ICEMA's Governing Board as a trauma hospital in accordance with State laws, regulations and ICEMA policies.

III. INCLUSION CRITERIA

- Any patient meeting ICEMA Trauma Triage Criteria, (refer to ICEMA Reference #15030 - Trauma Triage Criteria and Destination Policy) arriving at a non-trauma hospital by EMS or non-EMS transport.
- Any patient with a positive STEMI requiring EMS transport to a SRC (refers to ICEMA Reference #6070 - Cardiovascular ST Elevation Myocardial Infarction Receiving Centers Criteria and Destination Policy).
- Any patient with a positive mLAPSS or stroke scale requiring EMS transport to a NSRC (refer to ICEMA Reference #6100 - Neurovascular Stroke Receiving Centers Criteria and Destination Policy).

IV. INITIAL TREATMENT GOALS AT RH

- Initiate resuscitative measures within the capabilities of the facility.

- Ensure patient stabilization is adequate for subsequent transport.
- Do not delay transport by initiating any diagnostic procedures that do not have direct impact on immediate resuscitative measures.

➤ GUIDELINES

- < 30 minutes at RH (door-in/door-out).
- < 30 minutes to complete ALS continuation of care transport.
- < 30 minutes door-to-intervention at Specialty Care Center.

- RH shall contact the appropriate Specialty Care Center ED physician directly without calling for an inpatient bed assignment. Refer to Section IV – SRHSRC Buddy System Table.
- EMS providers shall make Specialty Care Center base hospital contact.
- The Specialty Care Centers shall accept all referred trauma, stroke and STEMI patients unless they are on Internal Disaster as defined in ICEMA Reference #8060 - Requests for Hospital Diversion Policy (San Bernardino County Only).
- The Specialty Care Center ED physician is the accepting physician at the Specialty Care Center and will activate the internal Trauma, STEMI, or Stroke Team according to internal TC, SRC or NSRC policies or protocols.
- RH ED physician will determine the appropriate mode of transportation for the patient.
- Simultaneously call 9-1-1 and utilize the following script to dispatch:

“This is a Continuation of Care run from ____ hospital to ____ Trauma, STEMI or Stroke Center”

Dispatchers will only dispatch transporting paramedic units without any fire apparatus.

- RH ED physician will provide a verbal report to the ED physician at the Specialty Care Center.
- RH must send all medical records, test results, radiologic evaluations to the Specialty Care Center. DO NOT DELAY TRANSPORT - these documents may be FAXED to the Specialty Care Center.

V. SPECIAL CONSIDERATIONS

- If the patient has arrived at the RH via EMS field personnel, the RH ED physician may request that the transporting team remain and immediately transport the patient once minimal stabilization is done at the RH.
- If a suspected stroke patient is outside of the TPA administration window (greater than 4.5 hours from “last seen normal”), contact nearest stroke center to determine the best destination. Then follow the 9-1-1 script.
- EMT-Ps may only transport patients on Dopamine, Lidocaine and Procainamide drips. Heparin and Integrillin drips are not within the EMT-P scope of practice and require a critical care

transport nurse to be in attendance. Unless medically necessary, avoid using medication drips that are outside of the EMT-P scope of practice to avoid any delays in transferring of patients.

- The RH may consider sending one of its nurses or physician with the transporting ALS unit if deemed necessary due to the patient’s condition or scope of practice.
- Requests for Specialty Care Transport (SCT) (ground or air ambulance) must be made directly with the EMS provider’s dispatch center. The request for SCT should be made as early as possible or simultaneously upon patient’s arrival so availability of resource can be determined.
- Specialty Care Center diversion is not permitted except for Internal Disaster. However, Specialty Care Center base hospitals are allowed to facilitate redirecting of EMS patients to nearby SRCs, NSRCs or TCs when the closest Specialty Care Center is over capacity to avoid prolonged door-to-intervention times. Specialty Care Center base hospitals shall ensure physician to physician contact when redirecting patients.

VI. SPECIALTY CARE CENTER - REFERRAL HOSPITAL BUDDY SYSTEM TABLE

NEUROVASCULAR STROKE RECEIVING CENTERS (NSRC)	NEUROVASCULAR STROKE REFERRAL HOSPITALS (NSRH)
Arrowhead Regional Medical Center •	<ul style="list-style-type: none"> • Colorado River Medical Center • Community Hospital of San Bernardino • Hi Desert Medical Center • St. Bernardine Medical Center • St. Mary Medical Center
Desert Regional Medical Center	<ul style="list-style-type: none"> • Colorado River Medical Center • Hi-Desert Medical Center
Kaiser Hospital Foundation - Fontana •	<ul style="list-style-type: none"> • Barstow Community Hospital • Victor Valley Global Medical Center • Desert Valley Hospital
Kaiser Hospital Foundation - Ontario •	<ul style="list-style-type: none"> • Chino Valley Medical Center • Montclair Community Hospital
Loma Linda University Medical Center	<ul style="list-style-type: none"> • Bear Valley Community Hospital • Community Hospital of San Bernardino • J.L. Pettis VA Hospital (Loma Linda VA) • Mountains Community Hospital • St. Bernardine Medical Center • Weed Army Community Hospital at Fort Irwin
Pomona Valley Hospital Medical Center	<ul style="list-style-type: none"> • Chino Valley Medical Center • Montclair Hospital Medical Center

Redlands Community Hospital	<ul style="list-style-type: none"> • Bear Valley Community Hospital • J. L. Pettis VA Hospital (Loma Linda VA) • Mountains Community Hospital
San Antonio Regional Hospital ·	<ul style="list-style-type: none"> • Chino Valley Medical Center • Desert Valley Hospital • Montclair Hospital Medical Center • St. Mary Medical Center • Victor Valley Global Medical Center
STEMI RECEIVING CENTER (SRC)	STEMI REFERRAL HOSPITAL (SRH)
Desert Valley Hospital	<ul style="list-style-type: none"> • Barstow Community Hospital • Victor Valley Global Medical Center • Weed Army Community Hospital at Fort Irwin
Loma Linda University Medical Center	<ul style="list-style-type: none"> • Arrowhead Regional Medical Center • Bear Valley Community Hospital • J. L. Pettis VA Hospital (Loma Linda VA) • Redlands Community Hospital
Pomona Valley Hospital Medical Center	<ul style="list-style-type: none"> • Chino Valley Medical Center • Montclair Hospital Medical Center
San Antonio Regional Hospital ·	<ul style="list-style-type: none"> • Chino Valley Medical Center • Kaiser Ontario Medical Center • Montclair Hospital Medical Center
St. Bernardine Medical Center	<ul style="list-style-type: none"> • Colorado River Medical Center • Community Hospital of San Bernardino • Kaiser Fontana Medical Center • Mountains Community Hospital
St. Mary Medical Center ·	<ul style="list-style-type: none"> • Barstow Community Hospital • Bear Valley Community Hospital • Hi-Desert Medical Center • Robert E. Bush Naval Hospital-29 Palms • Victor Valley Global Medical Center
TRAUMA CENTER (TC)	REFERRAL HOSPITAL (SRH)
Arrowhead Regional Medical Center	<ul style="list-style-type: none"> • Barstow Community Hospital • Chino Valley Medical Center • Desert Valley Medical Center

	<ul style="list-style-type: none"> • Kaiser Fontana • Kaiser Ontario • Mammoth Hospital • Montclair Hospital Medical Center • Northern Inyo Hospital • San Antonio Regional Hospital • Southern Inyo Hospital • St. Bernardine Medical Center
Loma Linda University Medical Center •	<ul style="list-style-type: none"> • Bear Valley Community Hospital • Colorado River Medical Center • Hi Desert Medical Center • Mountains Community Hospital • Redlands Community Hospital • J. L. Pettis VA Hospital (Loma Linda VA) • Robert E. Bush Naval Hospital-29 Palms • St. Mary Medical Center • Victor Valley Global Medical Center • Weed Army Hospital
Loma Linda University Children's Hospital	<ul style="list-style-type: none"> • Regional Pediatric Trauma Center

VII. REFERENCES

Number	Name
6070	Cardiovascular ST Elevation Myocardial Infarction Receiving Centers Destination Policy
6100	Neurovascular Stroke Receiving Centers Destination Policy (San Bernardino County Only)
8060	Requests for Hospital Diversion Policy (San Bernardino County Only)
15030	Trauma Triage Criteria

LOS ANGELES COUNTY EMS AGENCY TRAUMA TRIAGE

DEPARTMENT OF HEALTH SERVICES
COUNTY OF LOS ANGELES
MICN)

(EMT, PARAMEDIC,

SUBJECT: **TRAUMA TRIAGE**

REFERENCE NO. 506

PURPOSE: To establish criteria and standards which ensure that patients requiring the care of a trauma center are appropriately triaged and transported.

AUTHORITY: California Code of Regulations, Title 13, Section 1105(c) California Code of Regulations, Title 22, Section 100236 et seq. Health and Safety Code, Div. 2.5, Section 1797 et seq., and 1317.

PRINCIPLES:

1. Trauma patients should be secured and transported from the scene as quickly as possible, consistent with optimal trauma care.
2. Paramedics shall make base hospital contact and/or notification to the receiving trauma center on all injured patients who meet trauma triage criteria and/or guidelines, or if in the paramedic's judgment it is in the patient's best interest to be transported to a trauma center. Contact shall be accomplished in such a way as not to delay transport.
3. Do not delay transport of hypotensive patients with penetrating torso trauma in order to apply spinal motion restriction.
4. EMT personnel may immediately transport hypotensive patients with life-threatening, penetrating injuries to the torso to the closest trauma center, not the Most Accessible Receiving (MAR), when the transport time is less than the estimated time of paramedic arrival. The transporting unit should make every effort to contact the receiving trauma center.
5. When pediatric and adult trauma patients are transported together in one aircraft, the receiving trauma center shall be both a trauma center and a pediatric trauma center.

POLICY:

- I. Trauma Criteria – Requires immediate transportation to a designated trauma center
Patients who fall into one or more of the following categories are to be transported directly to the designated trauma center, if transport time does not exceed 30 minutes.

EFFECTIVE DATE: 6-15-87

PAGE 1 OF 4

REVISED: 07-01-18

SUPERSEDES: 06-01-18

APPROVED: _____
Director, EMS Agency

Cathy Chilesor

Medical Director, EMS Agency

Marianne Pucche Hill, MD

- A. Systolic blood pressure less than 90 mmHg, or less than 70 mmHg in infants age less than one year
- B. Respiratory rate greater than 29 breaths/minute (sustained), less than 10 breaths/minute, less than 20 breaths/minute in infants age less than one year, or requiring ventilatory support
- C. Cardiopulmonary arrest with penetrating torso trauma unless based upon the paramedic's thorough assessment is found apneic, pulseless, asystolic, and without pupillary reflexes upon arrival of EMS personnel at the scene
- D. All penetrating injuries to head, neck, torso, and extremities proximal to the elbow or knee
- E. Blunt head injury associated with a suspected skull fracture, altered level of consciousness (Glasgow Coma Score less than or equal to 14), seizures, unequal pupils, or focal neurological deficit
- F. Injury to the spinal column associated with acute sensory or motor deficit
- G. Blunt injury to chest with unstable chest wall (flail chest)
- H. Diffuse abdominal tenderness
- I. Suspected pelvic fracture (excluding isolated hip fracture from a ground level fall)
- J. Extremity injuries with:
 - 1. Neurological/vascular compromise and/or crushed, degloved, or mangled extremity
 - 2. Amputation proximal to the wrist or ankle
 - 3. Fractures of two or more proximal (humerus/femur) long-bones
- K. Falls:
 - 1. Adult patients from heights greater than 15 feet
 - 2. Pediatric patients from heights greater than 10 feet, or greater than 3 times the height of the child
- L. Passenger space intrusion of greater than 12 inches into an occupied passenger space
- M. Ejected from vehicles (partial or complete)
- N. Auto versus pedestrian/bicyclist/motorcyclist thrown, run over, or with significant (greater than 20 mph) impact
- O. Unenclosed transport crash with significant (greater than 20 mph) impact
- P. Major/Critical Burn (if a recognized Burn Center, e.g., Torrance Memorial Medical Center, West Hills Hospital, is more accessible than the Trauma Center, patient should be transported to the recognized Burn Center):

1. Patients equal to or greater than 15 years of age with 2nd (partial thickness) and 3rd (full thickness) degree burns involving equal to or greater than 20% Total Body Surface Area(TBSA)
 2. Patients less than or equal to 14 years of age with 2nd (partial thickness) and 3rd (full thickness) degree burns involving equal to or greater than 10% TBSA
- II. Trauma Guidelines – Mechanism of injury and patient history are the most effective methods of selecting critically injured patients before unstable vital signs develop. Paramedics and base hospital personnel should consider mechanism of injury and patient history when determining patient destination. At the discretion of the base hospital or approved SFTP provider agency, transportation to a trauma center is advisable for:
- A. Passenger space intrusion of greater than 18 inches into any unoccupied passenger space
 - B. Automobile versus pedestrian/bicyclist/motorcyclist (impact equal to or less than 20 mph)
 - C. Injured victims of vehicular crashes in which a fatality occurred in the same vehicle
 - D. Patients requiring extrication
 - E. Vehicle telemetry data consistent with high risk of injury
 - F. Injured patients (excluding isolated minor extremity injuries):
 1. On anticoagulation therapy other than aspirin-only
 2. With bleeding disorders
- III. Special Considerations – Consider transporting injured patients with the following to a trauma center:
- A. Adults age greater than 55 years
 - B. Systolic blood pressure less than 110 mmHg may represent shock after age 65 years
 - C. Pregnancy greater than 20 weeks gestation
 - D. Prehospital judgment
- IV. Extremis Patients - Requires immediate transportation to the MAR:
- A. Patients with an obstructed airway
 - B. Patients, as determined by the base hospital personnel, whose lives would be jeopardized by transportation to any destination but the MAR
- V. When, for whatever reason, base hospital contact cannot be made, the destination decision for injured patients will be made by paramedics using the principles set forth above.

- VI. 9-1-1 Trauma Re-Triage – This section applies to injured patients in emergency departments of non-trauma centers whose injuries were initially estimated by EMS to be less serious (under triaged) or patients who self-transported (walk-in) to a non-trauma center, and subsequently assessed by the non-trauma center physician to require immediate trauma center care. The referring facility shall utilize the procedure outlined below to expedite transfer arrangements and rapid transport to the trauma center. This process should be reserved for patients with life-threatening traumatic injuries requiring emergent surgical intervention.
- A. Determine if the injured patient meets any of the following 9-1-1 Trauma Re-Triage criteria:
 - 1. Persistent signs of poor perfusion
 - 2. Need for immediate blood replacement therapy
 - 3. Intubation required
 - 4. Glasgow Coma Score less than 9
 - 5. Glasgow Coma Score deteriorating by 2 or more points during observation
 - 6. Penetrating injuries to head, neck and torso
 - 7. Extremity injury with neurovascular compromise or loss of pulses
 - 8. Patients, who in the judgment of the evaluating emergency physician, have high likelihood of requiring emergent life- or limb-saving intervention within two (2) hours.
 - B. Contact the designated receiving trauma center or pediatric trauma center if the patient is less than or equal to 14 years of age and transport does not exceed 30 min. Do not delay transfer by initiating any diagnostic procedures that do not have direct impact on immediate resuscitative measures.
 - C. Contact 9-1-1 for transportation. The paramedic scope of practice (Ref. No. 803) does not include paralyzing agents and blood products.
 - D. Prepare patient and available medical records for immediate transport. Do not delay transport for medical records which could be sent at a later time.

CROSS REFERENCE:

Prehospital Care Manual:

- Ref. No. 501, **Hospital Directory**
- Ref. No. 502, **Patient Destination**
- Ref. No. 503, **Guidelines for Hospitals Requesting Diversion of ALS Units**
- Ref. No. 504, **Trauma Patient Destination**
- Ref. No. 510, **Pediatric Patient Destination**
- Ref. No. 803, **Paramedic Scope of Practice**
- Ref. No. 808, **Base Hospital Contact and Transport Criteria**
- Ref. No. 814, **Determination/Pronouncement of Death in the Field**

Guidelines for Transfer to a Trauma Center

North Regional Trauma Coordinating Committee

Emergency Transfer: Call the Trauma Center for immediate consult and/or acceptance. Avoid unnecessary studies that would delay the transfer. The goal is transfer within 1 hour of arrival.

- Systolic blood pressure <90 mm Hg
- Labile blood pressure despite 2L of IV fluids or requiring blood products to maintain blood pressure
- GCS ≤8 or lateralizing signs
- Penetrating injuries to head, neck, chest or abdomen
- Fracture/dislocation with loss of distal pulses and/or ischemia
- Pelvic ring disruption or unstable pelvic fracture
- Vascular injuries with active arterial bleeding

Urgent Transfer: Call Trauma Center and initiate transfer as soon as any of the following are identified. Avoid unnecessary studies. The goal is transfer within 4 hours of arrival.

<h3>Physiologic</h3> <ul style="list-style-type: none"> • For a child, labile blood pressure despite 20 ml/kg of fluid resuscitation • Patients requiring blood products to maintain their blood pressure <p>Note:</p> <ol style="list-style-type: none"> 1. For pediatric patients, systolic blood pressure less than 70 plus 2 times the age should suggest hypotension 2. Systolic blood pressure <110 may represent shock in patients over 65 years of age 	<h3>Extremity Injuries</h3> <ul style="list-style-type: none"> • Amputation of extremity proximal to wrist or ankle • Open long-bone fractures • Two or more long bone fractures sites* • Crush injury/mangled extremity <p>*A radius/ulna fracture or tibia/fibula fracture are considered one site.</p>
<h3>Neck & Thoracic Injuries</h3> <ul style="list-style-type: none"> • Tracheobronchial injury • Esophageal trauma • Great vessel injury • Major chest wall injury with ≥3 rib fractures and/or pulmonary contusion • Pneumothorax or hemothorax with respiratory failure. • Radiographic evidence of aortic injury • Known or suspected cardiac injury 	<h3>Neurological Injuries</h3> <ul style="list-style-type: none"> • GCS deteriorating by 2 points during observation • Open or depressed skull fracture • Acute spinal cord injury • Spinal fractures, unstable or potentially unstable • Neurologic deficit
<h3>Abdominal Injuries</h3> <ul style="list-style-type: none"> • Evisceration • Free air, fluid or solid organ injury on diagnostic testing 	<h3>Pelvic/Urogenital</h3> <ul style="list-style-type: none"> • Bladder rupture
<h3>Burn Injuries</h3> <ul style="list-style-type: none"> • Second or third-degree thermal or chemical burns involving more than 10% of the total body surface area in patients under 15 years or over 55 years of age • Second or third-degree thermal or chemical burns involving the face, eyes, ears, hands, feet, genitalia, perineum, and major joints • Third-degree burns greater than 5% of the body surface area in any age group • Electrical burns, including lightning injury • Burn injury with inhalation injury 	<h3>Co-Morbid Factors</h3> <ul style="list-style-type: none"> • Adults greater than 55 years of age with significant trauma • Significant torso injury with advanced co-morbid disease (cardiac or respiratory disease, insulin-dependent diabetes, morbid obesity, immunosuppression or End Stage Renal Disease requiring dialysis) • Patients taking anti-coagulant medication or platelet inhibitors • Children less than 14 years of age with significant trauma • Traumatic injury and pregnancy greater than 20 weeks gestation

Note: All transfers must be in accordance with both state and federal EMTALA laws.

Reference: American College of Surgeons, Committee on Trauma, Interfacility Transfer of Injured Patients: Guidelines for Rural Communities, 2002



PRIVATE AND CONFIDENTIAL

ROUTINE FOLLOW-UP COMMUNICATION FORM

Thank you for transferring the following patient to _____ hospital for emergency medical care. Please find a brief summary of the patient's visit below.

Name

DOB

Injury Details

Trauma Alert Level

Attending Physician

Injury Date

Arrival Date

Discharge Date

Hospital Disposition

ISS

Diagnosis

Operative Procedure

We appreciate your confidence in our team to continue the care of this patient. All information in this letter is privileged and is for the sole use of the intended recipient. The recipient is responsible for maintaining the confidentiality of this information and using the information only for authorized purposes. If you have received this communication in error, please notify us immediately and destroy all copies of the original message.