Article 1. Definitions

§ 100236. Abbreviated Injury Scale
“Abbreviated Injury Scale” or “AIS” is an anatomic severity scoring system. For the purposes of data sharing, the standard to be followed is AIS 90. For the purpose of volume performance measurement auditing, the standard to be followed is AIS 90, using AIS code derived or computer derived scoring.


§ 100237. Immediately Available
"Immediately" or "immediately available" means:
(a) unencumbered by conflicting duties or responsibilities;
(b) responding without delay when notified; and
(c) being physically available to the specified area of the trauma center when the patient is delivered in accordance with local EMS agency policies and procedures.


§ 100238. Implementation
"Implementation" or "implemented" or "has implemented" means the development and activation of a trauma care system plan by a local EMS agency, including the actual triage, transport and treatment of trauma patients in accordance with the plan.


§ 100239. Injury Severity Score
“Issue Severity Score” or “ISS” means the sum of the squares of the Abbreviated Injury Scale score of the three most severely injured body regions.


§ 100240. On-Call
"On-call" means agreeing to be available to respond to the trauma center in order to provide a defined service.
§ 100241. Promptly Available
"Promptly" or "promptly available" means:
(a) responding without delay when notified and requested to respond to the hospital; and
(b) being physically available to the specified area of the trauma center within a period of time that is medically prudent and in accordance with local EMS agency policies and procedures.

§ 100242. Qualified Specialist
"Qualified specialist" or "qualified surgical specialist" or "qualified non-surgical specialist" means a physician licensed in California who is board certified in a specialty by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, a Canadian board or other appropriate foreign specialty board as determined by the American Board of Medical Specialties for that specialty.
(a) A non-board certified physician may be recognized as a "qualified specialist" by the local EMS agency upon substantiation of need by a trauma center if:
   (1) the physician can demonstrate to the appropriate hospital body and the hospital is able to document that he/she has met requirements which are equivalent to those of the Accreditation Council for Graduate Medical Education (ACGME) or the Royal College of Physicians and Surgeons of Canada;
   (2) the physician can clearly demonstrate to the appropriate hospital body that he/she has substantial education, training, and experience in treating and managing trauma patients which shall be tracked by the trauma quality improvement program; and
   (3) the physician has successfully completed a residency program.

§ 100243. Receiving Hospital
"Receiving hospital" means a licensed general acute care hospital with a special permit for basic or comprehensive emergency service, which has not been designated as a trauma center according to this Chapter, but which has been formally assigned a role in the trauma care system by the local EMS agency. In rural areas, the local EMS agency may approve standby emergency service if basic or comprehensive services are not available.

§ 100244. Residency Program
"Residency program" means a residency program of the trauma center or a residency program formally affiliated with a trauma center where senior residents can participate in educational rotations, which has been approved by the appropriate Residency Review Committee of the Accreditation Council on Graduate Medical Education.
§ 100245. Senior Resident
"Senior resident" or "senior level resident" means a physician, licensed in the State of California, who has completed at least three (3) years of the residency or is in their last year of residency training and has the capability of initiating treatment and who is in training as a member of the residency program as defined in Section 100244 of this Chapter, at the designated trauma center.

§ 100246. Service Area
"Service area" means that geographic area defined by the local EMS agency in its trauma care system plan as the area served by a designated trauma center.

§ 100247. Trauma Care System
"Trauma care system" or "trauma system" or "inclusive trauma care system" means a system that is designed to meet the needs of all injured patients. The system shall be defined by the local EMS agency in its trauma care system plan as described in Section 100256 of this Chapter.

§ 100248. Trauma Center
"Trauma Center" or "designated trauma center" means a licensed hospital, accredited by the Joint Commission on Accreditation of Healthcare Organizations, which has been designated as a Level I, II, III, or IV trauma center and/or Level I or II pediatric trauma center by the local EMS agency, in accordance with Articles 2 through 5 of this Chapter.

§ 100249. Trauma Resuscitation Area
"Trauma Resuscitation Area" means a designated area within a trauma center where trauma patients are evaluated upon arrival.
§ 100250. Trauma Service
A “trauma service” is a clinical service established by the organized medical staff of a trauma center that has oversight and responsibility of the care of the trauma patient. It includes, but is not limited to, direct patient care services, administration, and as needed, support functions to provide medical care to injured persons.


§ 100251. Trauma Team
"Trauma team" means the multidisciplinary group of personnel who have been designated to collectively render care for trauma patients at a designated trauma center. The trauma team consists of physicians, nurses and allied health personnel. The composition of the trauma team may vary in relationship to trauma center designation level and severity of injury which leads to trauma team activation.


§ 100252. Triage Criteria
"Triage criteria" means a measure or method of assessing the severity of a person's injuries that is used for patient evaluation and that utilizes anatomic or physiologic considerations or mechanism of injury.


Article 2. Local EMS Agency Trauma System Requirements

§ 100253. Application of Chapter
(a) A local EMS agency which has implemented or plans to implement a trauma care system shall develop a written trauma care system plan that includes policies and/or procedures to assure compliance of the trauma system with the provisions of this Chapter.

(b) A local EMS agency may specify additional requirements in addition to those specified in this Chapter.

(c) A local EMS agency that implements a trauma care system on or after the effective date of this Chapter shall submit its trauma system plan to the EMS Authority and have it approved prior to implementation.

(d) A local EMS agency that has implemented a trauma system prior to the effective date of the revisions to this Chapter shall submit its updated trauma system plan to the EMS Authority within two (2) years of the effective date of the revisions to this Chapter which is August 12, 1999.
(e) The EMS Authority shall notify the local EMS agency submitting its trauma care system plan within fifteen (15) days of receiving the plan that:
   (1) its plan has been received, and
   (2) it contains or does not contain the information requested in Section 100255 of this Chapter.

(f) The EMS Authority shall:
   (1) notify the local EMS agency either of approval or disapproval of its trauma system plan within sixty (60) days of receipt of the plan; and
   (2) provide written notification of approval or the reasons for disapproval of a trauma system plan.

(g) If the EMS Authority disapproves a trauma system plan, the local EMS agency shall have six (6) months from the date of notification of the disapproval to submit a revised trauma system plan which conforms to this Chapter or to appeal the decision to the Commission on Emergency Medical Services (EMS) which shall make a determination within four (4) months of receipt of the appeal. If a revised trauma system plan is approved by the EMS Authority the local EMS agency shall begin implementation of the plan within six (6) months of its approval.

(h) If the EMS Authority determines that a local EMS agency has failed to implement the trauma system in accordance with the approved plan, the approval of the plan may be withdrawn. The local EMS agency may appeal the decision to the Commission on EMS, which shall make a determination within six (6) months of the appeal.

(i) After approval of a trauma system plan, the local EMS agency shall submit to the EMS Authority for approval any significant changes to that trauma system plan prior to the implementation of the changes. In those instances where a delay in approval would adversely impact the current level of trauma care, the local EMS agency may institute the changes and then submit the changes to the EMS Authority for approval within thirty (30) days of their implementation.

(j) The local 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 trauma plan goals and objectives.

(k) No health care facility shall advertise in any manner or otherwise hold themselves out to be a trauma center unless they have been so designated by the local EMS agency, in accordance with this Chapter.

(l) No provider of prehospital care shall advertise in any manner or otherwise hold itself out to be affiliated with the trauma system or a trauma center unless they have been so designated by the local EMS agency, in accordance with this Chapter.

§ 100254. Trauma System Criteria

(a) A local EMS agency that plans to implement or modify a trauma system shall include with the trauma plan, a description of the rationale used for trauma system design planning for number and location of trauma centers including:

(1) projected trauma patient volume and projected number and level of trauma centers necessary to provide access to trauma care;
    (A) No more than one (1) Level I or II trauma center shall be designated for each 350,000 population within the service area.
    (B) Where geography and population density preclude compliance with subsection (a)(1)(A), exemptions may be granted by the EMS Authority with the concurrence of the Commission on EMS on the basis of documented local needs.

(2) resource availability to meet staffing requirements for trauma centers;
(3) transport times;
(4) distinct service areas; and
(5) coordination with neighboring trauma systems.

(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.

(c) A local EMS agency may require trauma centers to have helicopter landing sites. If helicopter landing sites are required, then they shall be approved by the Division of Aeronautics, Department of Transportation pursuant to Division 2.5, Title 21 of the California Code of Regulations.

(d) All prehospital emergency medical care personnel rendering trauma patient care within an organized trauma system shall be trained in the local trauma triage and patient care methodology.

(e) All trauma patient transport vehicles shall be equipped with two-way telecommunications equipment capable of accessing hospitals, in accordance with local EMS agency policies regarding communication.

(f) All prehospital providers shall have a policy approved by the local EMS agency for the early notification of trauma centers of the impending arrival of a trauma patient.


§ 100255. Policy Development

A local EMS agency planning to implement a trauma system shall develop policies which provide a clear understanding of the structure of the trauma system and the manner in which it utilizes the resources available to it. The trauma system policies shall address at least the following:

(a) system organization and management;
(b) trauma care coordination within the trauma system;
(c) trauma care coordination with neighboring jurisdictions, including EMS agency/system agreements;
(d) data collection and management;
(e) fees, including those for application, designation and redesignation, monitoring and evaluation;
(f) establishment of service areas for trauma centers;
(g) trauma center designation/redesignation process to include a written agreement between the local EMS agency and the trauma center;
(h) coordination with all health care organizations within the trauma system to facilitate the transfer of an organization member in accordance with the criteria set forth in Article 5 of this Chapter;
(i) coordination of EMS and trauma system for transportation including intertrauma center transfer and transfers from a receiving hospital to a trauma center;
(j) the integration of pediatric hospitals, if applicable;
(k) trauma center equipment;
(l) ensuring the availability of trauma team personnel;
(m) criteria for activation of trauma team;
(n) mechanism for prompt availability of specialists;
(o) quality improvement and system evaluation to include responsibilities of the multidisciplinary trauma peer review committee;
(p) criteria for pediatric and adult trauma triage, including destination;
(q) training of prehospital EMS personnel to include trauma triage;
(r) public information and education about the trauma system;
(s) marketing and advertising by trauma centers and prehospital providers as it relates to the trauma care system; and
(t) coordination with public and private agencies and trauma centers in injury prevention programs.


§ 100256. Trauma Plan Development
(a) The initial plan for a trauma care system that is submitted to the EMS Authority shall be comprehensive with objectives that shall be clearly stated. The initial trauma care system plan shall contain at least the following:
(1) summary of the plan:
(2) organizational structure;
(3) needs assessment;
(4) inclusive trauma system design, which includes those facilities involved in the care of acutely injured patients, including coordination with neighboring agencies;
(5) documentation that any intercounty trauma center agreements have been approved by the EMS agencies of both counties;
(6) objectives;
(7) implementation schedule;
(8) fiscal impact of the system;
(9) policy and plan development process;
(10) written documentation of local approval; and
(11) table of contents identifying where the information in this Section and Sections 100254, 100255 and 100257 of this Chapter can be found in the plan.

(b) The system design shall address the operational implementation of the policies developed pursuant to Section 100255 and the following aspects of hospital service delivery:
   (1) Critical care capability including but not limited to burns, spinal cord injury, rehabilitation and pediatrics;
   (2) medical organization and management; and
   (3) quality improvement.

(c) A local EMS agency shall advise the EMS Authority when there are any changes or revisions in policy or plan development pursuant to the sections of this Article.


§ 100257. Data Collection

(a) The local EMS agency shall develop and implement a standardized data collection instrument and implement a data management system for trauma care.
   (1) The system shall include the collection of both prehospital and hospital patient care data, as determined by the local EMS agency;
   (2) trauma data shall be integrated into the local EMS agency and State EMS Authority data management system; and
   (3) all hospitals that receive trauma patients shall participate in the local EMS agency data collection effort in accordance with local EMS agencies policies and procedures.

(b) The prehospital data shall include at least those data elements required on the EMT-II or EMT-P patient care record, as specified in Section 100129 of the EMT-II regulations and Section 100176 of the EMT-P regulations.

(c) The hospital data shall include at least the following, when applicable:
   (1) Time of arrival and patient treatment in:
      (A) Emergency department or trauma receiving area; and
      (B) operating room.
   (2) Dates for:
      (A) Initial admission;
      (B) intensive care; and
      (C) discharge.
   (3) Discharge data, including:
(A) Total hospital charges (aggregate dollars only);
(B) patient destination; and
(C) discharge diagnosis.

(4) The local EMS agency shall provide periodic reports to all hospitals participating in the trauma system.


§ 100258. Trauma System Evaluation
(a) The local EMS agency shall be responsible for the development and ongoing evaluation of the trauma system.
(b) The local EMS agency shall be responsible for the development of a process to receive information from EMS providers, participating hospitals and the local medical community on the evaluation of the trauma system, including but not limited to:
   (1) trauma plan;
   (2) triage criteria;
   (3) activation of trauma team; and
   (4) notification of specialists.
(c) The local EMS agency shall be responsible for periodic performance evaluation of the trauma system, which shall be conducted at least every two (2) years. Results of the trauma system evaluation shall be made available to system participants.
(d) The local EMS agency shall be responsible for ensuring that trauma centers and other hospitals that treat trauma patients participate in the quality improvement process contained in Section 100265.


Article 3. Trauma Center Requirements

§ 100259. Level I and Level II Trauma Centers
(a) A Level I or II trauma center is a licensed hospital which has been designated as a Level I or II trauma center by the local EMS agency. While both Level I and II trauma centers are similar, a Level I trauma center is required to have staff and resources not required of a Level II trauma center. The additional Level I requirements are located in Section 100260. Level I and II trauma centers shall have appropriate pediatric equipment and supplies and be capable of initial evaluation and treatment of pediatric trauma patients. Trauma centers without a pediatric intensive care unit, as outlined in (e)(1) of this section, shall establish and utilize written criteria for consultation and transfer of pediatric patients needing intensive care. A Level I or Level II trauma center shall have at least the following:
   (1) A trauma program medical director who is a board-certified surgeon, 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 nurse coordinator/manager 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 which can provide for the implementation of the requirements specified in this Section and provide for coordination with the local EMS agency.

(4) A trauma team, which is a multidisciplinary team responsible for the initial resuscitation and management of the trauma patient.

(5) Department(s), division(s), service(s) or section(s) that include at least the following surgical specialties, which are staffed by qualified specialists:

(A) general;
(B) neurologic;
(C) obstetric/gynecologic;
(D) ophthalmologic;
(E) oral or maxillofacial or head and neck;
(F) orthopaedic;
(G) plastic; and
(6) Department(s), division(s), service(s) or section(s) that include at least the following non-surgical specialties, which are staffed by qualified specialists:

(A) anesthesiology;
(B) internal medicine;
(C) pathology;
(D) psychiatry; and
(E) radiology;

(7) An emergency department, division, service or section staffed with qualified specialists in emergency medicine who are immediately available.

(8) Qualified surgical specialist(s) or specialty availability, which shall be available as follows:

(A) general surgeon capable of evaluating and treating adult and pediatric trauma patients shall be immediately available for trauma team activation and promptly available for consultation;

(B) On-call and promptly available:
1. neurologic;
2. obstetric/gynecologic;
3. ophthalmologic;
4. oral or maxillofacial or head and neck;
5. orthopaedic;
6. plastic;
7. reimplantation/microsurgery capability. This surgical service may be provided through a written transfer agreement; and
8. urologic.

(C) Requirements may be fulfilled by supervised senior residents as defined in Section 100245 of this Chapter who are capable of assessing emergent situations in their respective specialties. When a senior resident is the responsible surgeon:
1. the senior resident shall be able to provide the overall control and surgical leadership necessary for the care of the patient, including initiating surgical care;
2. a staff trauma surgeon or a staff surgeon with experience in trauma care shall be on-call and promptly available;
3. a staff trauma surgeon or a staff surgeon with experience in trauma care shall be advised of all trauma patient admissions, participate in major therapeutic decisions, and be present in the emergency department for major resuscitations and in the operating room for all trauma operative procedures.
Available for consultation or consultation and transfer agreements for adult and pediatric trauma patients requiring the following surgical services:

1. burns;
2. cardiothoracic;
3. pediatric;
4. reimplantation/microsurgery; and
5. spinal cord injury.

Qualified non-surgical specialist(s) or specialty availability, which shall be available as follows:

(A) Emergency medicine, in-house and immediately available at all times. This requirement may be fulfilled by supervised senior residents, as defined in Section 100245 of this Chapter, in emergency medicine, who are assigned to the emergency department and are serving in the same capacity. In such cases, the senior resident(s) shall be capable of assessing emergency situations in trauma patients and of providing for initial resuscitation. Emergency medicine physicians who are qualified specialists in emergency medicine and are board certified in emergency medicine shall not be required by the local EMS agency to complete an advanced trauma life support (ATLS) course. Current ATLS verification is required for all emergency medicine physicians who provide emergency trauma care and are qualified specialists in a specialty other than emergency medicine.

(B) Anesthesiology. Level II shall be promptly available with a mechanism established to ensure that the anesthesiologist is in the operating room when the patient arrives. 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. In such cases, the staff anesthesiologist on-call shall be advised about the patient, be promptly available at all times, and be present for all operations.

(C) Radiology, promptly available; and

(D) Available for consultation:

1. cardiology;
2. gastroenterology;
3. hematology;
4. infectious diseases;
5. internal medicine;
6. nephrology;
7. neurology;
8. pathology; and
9. pulmonary medicine.
(b) In addition to licensure requirements, trauma centers shall have the following service capabilities:

(1) Radiological service. The radiological service shall have immediately available a radiological technician capable of performing plain film and computed tomography imaging. A radiological service shall have the following additional services promptly available:
   (A) angiography; and
   (B) ultrasound.

(2) Clinical laboratory service. A clinical laboratory service shall have:
   (A) a comprehensive blood bank or access to a community central blood bank; and
   (B) clinical laboratory services immediately available.

(3) Surgical service. A surgical service shall have an operating suite that is available or being utilized for trauma patients and that has:
   (A) Operating staff who are promptly available unless operating on trauma patients and back-up personnel who are promptly available; and
   (B) appropriate surgical equipment and supplies as determined by the trauma program medical director.

(c) A Level I and II trauma center shall have a basic or comprehensive emergency service which has special permits issued pursuant to Chapter 1, Division 5 of Title 22. The emergency service shall:

(1) designate an emergency physician to be a member of the trauma team;
(2) provide emergency medical services to adult and pediatric patients; and
(3) have appropriate adult and pediatric equipment and supplies as approved by the director of emergency medicine in collaboration with the trauma program medical director.

(d) In addition to the special permit licensing services, a trauma center shall have, pursuant to Section 70301 of Chapter 1, Division 5 of Title 22 of the California Code of Regulations, the following approved supplemental services:

(1) Intensive Care Service:
   (A) the ICU shall have appropriate equipment and supplies as determined by the physician responsible for the intensive care service and the trauma program medical director;
   (B) The ICU 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.

(2) Burn Center. This service may be provided through a written transfer agreement with a Burn Center.

(3) Physical Therapy Service. Physical therapy services to include personnel trained in physical therapy and equipped for acute care of the critically injured patient.
(4) Rehabilitation Center. Rehabilitation services to include personnel trained in rehabilitation care and equipped for acute care of the critically injured patient. These services may be provided through a written transfer agreement with a rehabilitation center.

(5) Respiratory Care Service. Respiratory care services to include personnel trained in respiratory therapy and equipped for acute care of the critically injured patient.

(6) Acute hemodialysis capability.

(7) Occupational therapy service. Occupational therapy services to include personnel trained in occupational therapy and equipped for acute care of the critically injured patient.

(8) Speech therapy service. Speech therapy services to include personnel trained in speech therapy and equipped for acute care of the critically injured patient.

(9) Social Service.

(e) A trauma center shall have the following services or programs that do not require a license or special permit.

(1) Pediatric Service. In addition to the requirements in Division 5 of Title 22 of the California Code of Regulations, the pediatric service providing in-house pediatric trauma care shall have:
   (A) a pediatric intensive care unit approved by the California State Department of Health Services’ California Children Services (CCS); or a written transfer agreement with an approved pediatric intensive care unit. Hospitals without pediatric intensive care units shall establish and utilize written criteria for consultation and transfer of pediatric patients needing intensive care; and
   (B) a multidisciplinary team to manage child abuse and neglect.

(2) Acute spinal cord injury management capability. This service may be provided through a written transfer agreement with a Rehabilitation Center;

(3) Protocol to identify potential organ donors as described in Division 7, Chapter 3.5 of the California Health and Safety Code;

(4) An outreach program, to include:
   (A) capability to provide both telephone and on-site consultations with physicians in the community and outlying areas; and
   (B) trauma prevention for the general public;

(5) Written interfacility transfer agreements with referring and specialty hospitals;

(6) Continuing education. Continuing education in trauma care shall be provided for:
   (A) staff physicians;
   (B) staff nurses;
   (C) staff allied health personnel;
   (D) EMS personnel; and
(E) other community physicians and health care personnel.


§100260. Additional Level I Criteria
In addition to the above requirements, a Level I trauma center shall have:

(a) One of the following patient volumes annually:
   (1) a minimum of 1200 trauma program hospital admissions, or
   (2) a minimum of 240 trauma patients per year whose Injury Severity Score (ISS) is greater than 15, or
   (3) an average of 35 trauma patients (with an ISS score greater than 15) per trauma program surgeon per year.

(b) Additional qualified surgical specialists or specialty availability on-call and promptly available:
   (1) cardiothoracic; and
   (2) pediatrics;

(c) A surgical service that has at least the following:
   (1) operating staff who are immediately available unless operating on trauma patients and back-up personnel who are promptly available.
   (2) cardiopulmonary bypass equipment; and
   (3) operating microscope.

(d) Anesthesiology immediately available. 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 treatment and are supervised by the staff anesthesiologist.

(e) An intensive care unit with a qualified specialist in-house and immediately 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.

(f) A Trauma research program; and

(g) An ACGME approved surgical residency program.

100261. Level I and Level II Pediatric Trauma Centers

(a) A Level I or II pediatric trauma center is a licensed hospital which has been designated as a Level I or II pediatric trauma center by the local EMS agency. While both Level I and II pediatric trauma centers are similar, a Level I pediatric trauma center is required to have staff and resources not required of a Level II pediatric trauma center. The additional Level I requirements for pediatric trauma centers are located in Section 100262. A Level I or Level II pediatric trauma center shall have at least the following:

(1) A pediatric trauma program medical director who is a board-certified surgeon with experience in pediatric trauma care (may also be trauma program medical director for adult trauma services), whose responsibilities include, but are not limited to, factors that affect all aspects of pediatric trauma care such as:
   (A) recommending pediatric trauma team physician privileges;
   (B) working with nursing and administration to support the needs of pediatric trauma patients;
   (C) developing pediatric trauma treatment protocols;
   (D) determining appropriate equipment and supplies for pediatric trauma care;
   (E) ensuring the development of policies and procedures to manage domestic violence and child abuse and neglect;
   (F) having authority and accountability for the pediatric trauma quality improvement peer review process;
   (G) correcting deficiencies in pediatric 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, orthopedic surgery, emergency medicine, pediatrics and other appropriate disciplines to assist in identifying physicians from their disciplines who have pediatric trauma care experience and who are qualified to be members of the pediatric trauma program.

(2) A pediatric trauma nurse coordinator/manager who is a registered nurse with qualifications (may also be trauma nurse coordinator/manager for adult trauma services) including evidence of educational preparation and clinical experience in the care of pediatric trauma patients, administrative ability, and responsibilities that include but are not limited to factors that affect all aspects of pediatric trauma care, including:
   (A) organizing services and systems necessary for the multidisciplinary approach to the care of the injured child;
   (B) coordinating day-to-day clinical process and performance improvement as it pertains to pediatric trauma nursing and ancillary personnel; and
(C) collaborating with the pediatric trauma program medical director in carrying out the educational, clinical, research, administrative and outreach activities of the pediatric trauma program.

(3) A pediatric trauma service which can provide for the implementation of the requirements specified in this section and provide for coordination with the local EMS agency.

(4) A pediatric trauma team, which is a multidisciplinary team responsible for the initial resuscitation and management of the pediatric trauma patient.
   (A) the pediatric trauma team leader shall be a surgeon with pediatric trauma experience as defined by the trauma program medical director;
   (B) the remainder of the team shall include physician, nursing and support personnel in sufficient numbers to evaluate, resuscitate, treat and stabilize pediatric trauma patients.

(5) Department(s), division(s), service(s) or section(s) that include at least the following surgical specialties and which are staffed by qualified specialists with pediatric experience:
   (A) neurologic;
   (B) obstetric/gynecologic (may be provided through a written transfer agreement with a hospital that has a department, division, service, or section that provides this service);
   (C) ophthalmologic;
   (D) oral or maxillofacial or head and neck;
   (E) orthopaedic;
   (F) pediatric;
   (G) plastic;
   (H) urologic; and
   (I) microsurgery/reimplantation (may be provided through a written transfer agreement with a hospital that has a department, division, service, or section that provides this service).

(6) Department(s), division(s), service(s), or section(s) that include at least the following non-surgical specialties which are staffed by qualified specialists with pediatric experience:
   (A) anesthesiology;
   (B) cardiology;
   (C) critical care;
   (D) emergency medicine;
   (E) gastroenterology;
   (F) general pediatrics;
   (G) hematology/oncology;
   (H) infectious disease;
   (I) neonatology;
   (J) nephrology;
   (K) neurology;
   (L) pathology;
(M) psychiatry;
(N) pulmonology;
(O) radiology; and
(P) rehabilitation/physical medicine. This requirement may be provided through a written agreement with a pediatric rehabilitation center.

(7) An emergency department, division, service or section staffed with qualified specialists in emergency medicine with pediatric trauma experience, who are immediately available.

(8) Qualified surgical specialist(s) or specialty availability, which shall be available as follows:

(A) Pediatric surgeon, capable of evaluating and treating pediatric trauma patients shall be immediately available for trauma team activation and promptly available for consultation. This requirement may be fulfilled by:
   1. a staff pediatric surgeon with experience in pediatric trauma care; or
   2. a staff trauma surgeon with experience in pediatric trauma care; or
   3. a senior general surgical resident who has completed at least three clinical years of surgical residency training. When a senior resident is the responsible surgeon:
      a. the senior resident shall be able to provide the overall control and surgical leadership necessary for the care of the patient, including initiating surgical care; and
      b. a staff pediatric surgeon with experience in pediatric trauma care or a staff trauma surgeon with experience in pediatric trauma care shall be on-call and promptly available; and
      c. a staff pediatric surgeon or a staff surgeon with experience in pediatric trauma care shall participate in major therapeutic decisions, be advised of all pediatric trauma patient admissions and be present in the emergency department for major resuscitations and in the operating room for all trauma operative procedures.

(B) On-call and promptly available with pediatric experience;
   1. neurologic;
   2. obstetric/gynecologic. This surgical service may be provided through a written transfer agreement;
   3. ophthalmologic;
   4. oral or maxillofacial or head and neck;
   5. orthopaedic;
   6. plastic;
   7. reimplantation/microsurgery capability. This surgical service may be provided through a written transfer agreement;
   8. urologic;
C) Requirements may be fulfilled by supervised senior residents as defined in Section 100245 of this Chapter who are capable of assessing emergent situations in their respective specialties. When a senior resident is the responsible surgeon:

1. The senior resident shall be able to provide the overall control and surgical leadership necessary for the care of the patient, including initiating surgical care;
2. a staff trauma surgeon or a staff surgeon with experience in trauma care shall be on-call and promptly available;
3. a staff trauma surgeon or a staff surgeon with experience in trauma care shall be advised of all trauma patient admissions, participate in major therapeutic decisions, and be present in the emergency department for major resuscitations and in the operating room for all trauma operative procedures.

D) Available for consultation or consultation and transfer agreements for pediatric trauma patients requiring the following surgical services;

1. burns;
2. cardiothoracic; and
3. spinal cord injury.

9. Qualified nonsurgical specialist(s) or specialty availability, which shall be available as follows:

(A) Emergency medicine, in-house and immediately available at all times. This requirement may be fulfilled by a qualified specialist in pediatric emergency medicine; or a qualified specialist in emergency medicine with pediatric experience; or a subspecialty resident in pediatric emergency medicine who has completed at least one year of subspecialty residency education in pediatric emergency medicine. In such cases, the senior resident(s) shall be capable of assessing emergency situations in trauma patients and of providing for initial resuscitation. Emergency medicine physicians who are qualified specialists in emergency medicine and are board certified in emergency medicine or pediatric emergency medicine shall not be required by the local EMS agency to complete an advanced trauma life support course. Current ATLS verification is required for all emergency medicine physicians who provide emergency trauma care and are qualified specialists in a specialty other than emergency medicine. When a senior resident is the responsible emergency physician in-house:

1. a qualified specialist in pediatric emergency medicine, or emergency medicine with pediatric experience shall be promptly available; and
2. the qualified specialist on-call shall be notified of all patients who require resuscitation, operative surgical intervention, or intensive care unit admission.

(B) Anesthesiology, Level II shall be promptly available with a mechanism established to ensure that the anesthesiologist is in the operating room when the patient arrives. This requirement may be fulfilled by a senior resident or certified registered nurse anesthetists with pediatric experience who are capable of assessing emergent situations in pediatric trauma patients and of providing any indicated treatment and are supervised by the staff
anesthesiologist. In such cases, the staff anesthesiologist with pediatric experience on-call shall be advised about the patient, be promptly available at all times, and be present for all operations.

(C) Radiology, promptly available; and

(D) Available for consultation or provided through transfer agreement, qualified specialists with pediatric experience:
   a. adolescent medicine;
   b. child development;
   c. genetics/dysmorphology;
   d. neuroradiology;
   e. obstetrics;
   f. pediatric allergy and immunology;
   g. pediatric dentistry;
   h. pediatric endocrinology;
   i. pediatric pulmonology; and
   j. rehabilitation/physical medicine.

(E) Pediatric critical care, in-house and immediately available. The in-house requirement may be fulfilled by:
   1. a qualified specialist in pediatric critical care medicine; or
   2. a qualified specialist in anesthesiology with experience in pediatric critical care;
   3. a qualified surgeon with expertise in pediatric critical care; or
   4. a physician who has completed at least two years of residency in pediatrics.

   When a senior resident is the responsible pediatric critical care physician then:
   a. a qualified specialist in pediatric critical care medicine, or a qualified
      specialist in anesthesiology with experience in pediatric critical care, shall be on-call and promptly available; and;
   b. the qualified specialist on-call shall be advised about all patients who may require admission to the pediatric intensive care unit and shall participate in all major therapeutic decisions and interventions;

(F) Qualified specialists with pediatric experience shall be on the hospital staff and available for consultation:
   1. general pediatrics;
   2. mental health;
   3. neonatology;
   4. nephrology;
   5. pathology;
   6. pediatric cardiology;
   7. pediatric gastroenterology;
   8. pediatric hematology/oncology;
9. pediatric infectious disease;
10. pediatric neurology; and
11. pediatric radiology.

(b) In addition to licensure requirements, pediatric trauma centers shall have the following service capabilities:

(1) Radiological service. The radiological service shall have in-house and immediately available a radiological technician capable of performing plain film and computed tomography imaging. A radiological service shall have the following additional services promptly available for children:
   (A) angiography; and
   (B) ultrasound.

(2) Clinical laboratory service. A clinical laboratory service shall have:
   (A) a comprehensive blood bank or access to a community central blood bank; and
   (B) clinical laboratory services immediately available with micro sampling capability.

(3) Surgical service. A surgical service shall have an operating suite that is available or being utilized for trauma patients and that has:
   (A) operating staff who are promptly available unless operating on a trauma patient and back up personnel who are promptly available; and
   (B) appropriate surgical equipment and supplies as determined by the pediatric trauma program medical director.

(4) Nursing services that are staffed by qualified licensed nurses with education, experience, and demonstrated clinical competence in the care of critically ill and injured children.

(c) A Level I and II pediatric trauma center shall have a basic or comprehensive emergency service which have special permits issued pursuant to Chapter 1, Division 5 of Title 22. The emergency service shall:

(1) designate an emergency physician to be a member of the pediatric trauma team;
(2) provide emergency medical services to pediatric patients; and
(3) have appropriate pediatric equipment and supplies as approved by the director of emergency medicine in collaboration with the trauma program medical director.

(d) In addition to the special permit licensing services, a pediatric trauma center shall have, pursuant to Section 70301 of Chapter 1, Division 5 of Title 22 of the California Code of Regulations, the following approved supplemental services:

(1) Burn Center. This service may be provided through a written transfer agreement with a Burn Center;
(2) Physical Therapy Service. Physical therapy services to include personnel trained in pediatric physical therapy and equipped for acute care of the critically injured child;
(3) Rehabilitation Center. Rehabilitation services to include personnel trained in rehabilitation care and equipped for acute care of the critically injured patient. These services may be provided through a written transfer agreement with a rehabilitation center;
(4) Respiratory Care Service. Respiratory care services to include personnel trained in respiratory
therapy and equipped for acute care of the critically injured patient;

(5) Acute hemodialysis capability;

(6) Occupational therapy service. Occupational therapy services to include personnel trained in pediatric occupational therapy and equipped for acute care of the critically injured child;

(7) Speech therapy service. Speech therapy services to include personnel trained in pediatric speech therapy and equipped for acute care of the critically injured child; and

(8) Social Service.

(e) A trauma center shall have the following services or programs that do not require a license or special permit.

(1) A Pediatric Intensive Care Unit (PICU) approved by the California State Department of Health Services California Children Services (CCS).
   (A) The PICU shall have appropriate equipment and supplies as determined by the physician responsible for the pediatric intensive care service and the pediatric trauma program medical director;
   (B) the pediatric intensive care specialist shall be promptly available to care for trauma patients in the intensive care unit; and
   (C) the qualified specialist in (B) above shall be a member of the trauma team.

(2) Acute spinal cord injury management capability. This service may be provided through a written transfer agreement with a Rehabilitation Center;

(3) Protocol to identify potential organ donors as described in Division 7, Chapter 3.5 of the California Health and Safety Code;

(4) An outreach program, to include:
   (A) capability to provide both telephone and on-site consultations with physicians in the community and outlying areas;
   (B) trauma prevention for the general public;
   (C) public education and illness/injury prevention education.

(5) written interfacility transfer agreements with referring and specialty hospitals; and

(6) continuing education. Continuing education in pediatric trauma care shall be provided for:
   (A) staff physicians;
   (B) staff nurses;
   (C) staff allied health personnel;
   (D) EMS personnel; and
   (E) other community physicians and health care personnel.
(7) In addition to special permit licensing services, a pediatric trauma center shall have:

(A) outreach and injury prevention programs specifically related to pediatric trauma and injury prevention;
(B) a suspected child abuse and neglect team (SCAN);
(C) an aeromedical transport plan with designated landing site; and
(D) Child Life program.


100262. Additional Level I Pediatric Trauma Criteria

In addition to the above requirements, a Level I pediatric trauma center shall have:

(a) A pediatric trauma program medical director who is a board-certified pediatric surgeon, whose responsibilities include, but are not limited to, factors that affect all aspects of pediatric trauma care.

(b) Additional qualified pediatric surgical specialists or specialty availability on-call and promptly available:

(1) cardiothoracic;
(2) pediatric neurologic;
(3) pediatric ophthalmologic;
(4) pediatric oral or maxillofacial or head and neck; and
(5) pediatric orthopaedic,

(c) A surgical service that has at least the following:

(1) operating staff who are immediately available unless operating on trauma patients and back-up personnel who are promptly available.
(2) cardiopulmonary bypass equipment; and
(3) operating microscope.

(d) Additional qualified pediatric non-surgical specialists or specialty availability on-call and promptly available:

(1) pediatric anesthesiology;
(2) pediatric emergency medicine;
(3) pediatric gastroenterology;
(4) pediatric infectious disease;
(5) pediatric nephrology;
(6) pediatric neurology;
(7) pediatric pulmonology; and
(8) pediatric radiology.

(e) the qualified pediatric PICU specialist shall be immediately available, advised about all patients who may require admission to the PICU, and shall participate in all major therapeutic decisions and interventions;
(f) Anesthesiology shall be immediately available. This requirement may be fulfilled by a senior resident or certified registered nurse anesthetists who are capable of assessing emergent situations in trauma patients and providing treatment and are supervised by the staff anesthesiologist.

(g) Pediatric trauma research program.

(h) Maintain an education rotation with an ACGME approved and affiliated surgical residency program.


§ 100263. Level III Trauma Centers
A Level III trauma center is a licensed hospital which has been designated as a Level III trauma center by the local EMS agency. A Level III trauma center shall include equipment and resources necessary for initial stabilization and personnel knowledgeable in the treatment of adult and pediatric trauma. A Level III trauma center shall have at least the following:

(a) A trauma program medical director who is a qualified surgical specialist, whose responsibilities include, but are not limited to, factors that affect all aspects of trauma care such as:
   (1) recommending trauma team physician privileges;
   (2) working with nursing administration to support the nursing needs of trauma patients;
   (3) developing trauma treatment protocols;
   (4) having authority and accountability for the quality improvement peer review process;
   (5) correcting deficiencies in trauma care or excluding from trauma call those trauma team members who no longer meet the standards of the quality improvement program; and
   (6) assisting in the coordination of budgetary process for the trauma program.

(b) A trauma nurse coordinator/manager who is a registered nurse with qualifications including evidence of educational preparation and clinical experience in the care of adult and/or pediatric trauma patients, administrative ability, and responsibilities that include, but are not limited to:
   (1) organizing services and systems necessary for the multidisciplinary approach to the care of the injured patient;
   (2) coordinating day-to-day clinical process and performance improvement as pertains to nursing and ancillary personnel, and
   (3) collaborating with the trauma program medical director in carrying out the educational, clinical, research, administrative and outreach activities of the trauma program.

(c) A trauma service which can provide for the implementation of the requirements specified in this Section and provide for coordination with the local EMS agency.

(d) The capability of providing prompt assessment, resuscitation and stabilization to trauma patients.

(e) The ability to provide treatment or arrange for transportation to a higher level trauma center as appropriate.

(f) An emergency department, division, service, or section staffed so that trauma patients are assured of immediate and appropriate initial care.
(g) Intensive Care Service:

(1) the ICU shall have appropriate equipment and supplies as determined by the physician responsible for the intensive care service and the trauma program medical director;

(2) the ICU 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

(3) the qualified specialist in (2) above shall be a member of the trauma team;

(h) A trauma team, which will be a multidisciplinary team responsible for the initial resuscitation and management of the trauma patient.

(i) Qualified surgical specialist(s) who shall be promptly available:

(1) general;
(2) orthopedic; and
(3) neurosurgery (can be provided through a transfer agreement)

(j) Qualified non-surgical specialist(s) or specialty availability, which shall be available as follows:

(1) Emergency medicine, in-house and immediately available; and

(2) Anesthesiology, on-call and promptly available with a mechanism established to ensure that the anesthesiologist is in the operating room when the patient arrives. 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 emergent anesthesia treatment and are supervised by the staff anesthesiologist. In such cases, the staff anesthesiologist on-call shall be advised about the patient, be promptly available at all times, and be present for all operations.

(3) The following services shall be in-house or may be provided through a written transfer agreement:

(A) Burn care.
(B) Pediatric care.
(C) Rehabilitation services.

(k) The following service capabilities:

(1) Radiological service. The radiological service shall have a radiological technician promptly available.

(2) Clinical laboratory service. A clinical laboratory service shall have:

(A) a comprehensive blood bank or access to a community central blood bank; and
(B) clinical laboratory services promptly available.

(3) Surgical service. A surgical service shall have an operating suite that is available or being utilized for trauma patients and that has:

(A) Operating staff who are promptly available; and
(B) appropriate surgical equipment and supplies requirements which have been approved by the local EMS agency.
(l) 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.

(m) An outreach program, to include:
   (1) capability to provide both telephone and on-site consultations with physicians in the community and outlying areas; and
   (2) trauma prevention for the general public.

(n) 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; and
   (5) other community physicians and health care personnel.


§ 100264. Level IV Trauma Center
A Level IV trauma center is a licensed hospital which has been designated as a Level IV trauma center by the local EMS agency. A Level IV trauma center shall include equipment and resources necessary for initial stabilization and personnel knowledgeable in the treatment of adult and pediatric trauma. A Level IV trauma center shall have at least the following:

(a) A trauma program medical director who is a qualified specialist whose responsibilities include, but are not limited to, factors that affect all aspects of trauma care, including pediatric trauma care, such as:
   (1) recommending trauma team physician privileges;
   (2) working with nursing administration to support the nursing needs of trauma patients;
   (3) developing treatment protocols;
   (4) having authority and accountability for the quality improvement peer review process;
   (5) correcting deficiencies in trauma care or excluding from trauma call those trauma team members who no longer meet the standards of the quality improvement program; and
   (6) assisting in the coordination of the budgetary process for the trauma program.

(b) A trauma nurse coordinator/manager who is a registered nurse with qualifications including evidence of educational preparation and clinical experience in the care of adult and/or pediatric trauma patients, administrative ability, and responsibilities that include, but are not limited to:
   (1) organizing services and systems necessary for the multidisciplinary approach to the care of the injured patient;
   (2) coordinating day-to-day clinical process and performance improvement as it pertains to nursing and ancillary personnel; and
   (3) collaborating with the trauma program medical director in carrying out the educational, clinical, research, administrative and outreach activities of the trauma program.
(c) A trauma service which can provide for the implementation of the requirements specified in this Section and provide for coordination with the local EMS agency.

(d) The capability of providing prompt assessment, resuscitation and stabilization to trauma patients.

(e) The ability to provide treatment or arrange transportation to higher level trauma center as appropriate.

(f) An emergency department, division, service, or section staffed so that trauma patients are assured of immediate and appropriate initial care.

(g) A trauma team, which will be a multidisciplinary team responsible for the initial resuscitation and management of the trauma patient.

(h) The following service capabilities:
   (1) Radiological service. The radiological service shall have a radiological technician promptly available.
   (2) Clinical laboratory service. A clinical laboratory service shall have:
       (A) a comprehensive blood bank or access to a community central blood bank; and
       (B) clinical laboratory services promptly available.

(i) Written transfer agreements with Level I, II or III 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.

(j) An outreach program, to include:
   (1) capability to provide both telephone and on-site consultations with physicians in the community and outlying areas; and
   (2) trauma prevention for the general public.

(k) 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; and
   (5) other community physicians and health care personnel.

Article 4. Quality Improvement

100265. Quality Improvement
Trauma centers of all levels shall have a quality improvement 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:
A detailed audit of all trauma-related deaths, major complications and transfers (including interfacility transfer);
(a) A multidisciplinary trauma peer review committee that includes all members of the trauma team;
(b) Participation in the trauma system data management system;
(c) Participation in the local EMS agency trauma evaluation committee; and
(d) Each trauma center shall have a written system in place for patients, parents of minor children who are patients, legal guardian(s) of children who are patients, and/or primary caretaker(s) of children who are patients to provide input and feedback to hospital staff regarding the care provided to the child.
(e) Following of applicable provisions of Evidence Code Section 1157.7 to ensure confidentiality.


Article 5. Transfer of Trauma Patients

100266. Interfacility Transfer of Trauma Patients
(a) Patients may be transferred between and from trauma centers providing that:
   (1) any transfer shall be, as determined by the trauma center surgeon of record, medically prudent; and
   (2) in accordance with local EMS agency interfacility transfer policies.
(b) Hospitals shall have written transfer agreements with trauma centers. Hospitals shall develop written criteria for consultation and transfer of patients needing a higher level of care.
(c) Hospitals which have repatriated trauma patients from a designated trauma center shall provide the information required by the system trauma registry, as specified by local EMS agency policies, to the transferring trauma center for inclusion in the system trauma registry.
(d) Hospitals receiving trauma patients shall participate in system and trauma center quality improvement activities for those trauma patients who have been transferred.