



Emergency Medical Services Agency Prehospital Care Manual **Policy 103**

MULTI-DISCIPLINARY NATURE OF TRAUMA

Effective Date January 22, 2007
Replaces July 1, 1995

Resources
None

I. Purpose

To define the roles of the various participants in the multidisciplinary Santa Clara County Trauma System.

II. Prehospital Phase

A. Access to the Trauma System

1. The Trauma System may be accessed by the enhanced-911 capable Public Safety Answering Point (PSAP) in each city.
2. First response vehicles and ambulances shall be dispatched in accordance with Agency policy.

B. Prehospital Care

1. Local PSAPs may elect to participate in Emergency Medical Dispatch/Pre-Arrival Instructions, as approved by the EMS Medical Director.
2. All paramedics shall be accredited to practice in Santa Clara County and shall meet all trauma training requirements of the County and its Medical Director.
3. Prehospital trauma care shall be administered according to the Policies and Procedure promulgated by the Santa Clara County EMS Agency.

4. When multiple patients are injured at a single site, the Multiple Casualty Incident Plan may be activated according to Agency policy.
5. Trauma Center triage shall be according to approved policy

III. Trauma Centers

- A. Hospital Organization: Trauma centers shall have the following resources available:
 1. Trauma Service
 - a) Within the Department of Surgery
 - b) Directed by a surgeon certified by the American Board of Surgery.
 2. Emergency Department with special permit from the State of California to operate either as a Basic or a comprehensive Emergency Medical Service, Physician-on-duty, Department, and conform to the requirements of Title 22, California Administrative Code, Section 70411 et seq.
 3. Surgery Departments/Divisions/Staffs/Sections, each staffed by qualified specialists in
 - a) Cardiothoracic surgery,
 - b) General surgery,
 - c) Maxillofacial surgery,
 - d) Neurological surgery,
 - e) Obstetrics and gynecology surgery,
 - f) Ophthalmic surgery,
 - g) Oral surgery,
 - h) Otorhinolaryngologic and plastic surgery,
 - i) Pediatric surgery,
 - j) Urologic surgery, and

- k) Vascular surgery.
4. Non-surgical Departments/Divisions/Staffs/Sections, each staffed by qualified specialists, board certified in that specialty
- a) Anesthesia,
 - b) Cardiology,
 - c) Gastroenterology,
 - d) Hematology,
 - e) Infectious disease (required only for level I designation),
 - f) Internal medicine,
 - g) Nephrology,
 - h) Pathology,
 - i) Pediatrics,
 - j) Pulmonary medicine, and
 - k) Radiology.

B. Personnel requirements

1. Trauma Service

- a) Director of Trauma shall:
 - (1) Coordinate in-hospital services and their relationship with the Emergency Department
 - (2) Be Board Certified in General Surgery
 - (3) Be a researcher in trauma care (required only at level I center)
 - (4) Meet the requirements of medical staff below
 - (5) Participate in the County Quality Improvement process and serve as a resource to the EMS

Medical Director in EMS system trauma policy development.

b) Medical Staff shall:

- (1) Be Board Certified in general surgery, or become Board Certified within three years of eligibility, or be a senior surgical resident (minimum PGY 4)
- (2) Have successfully completed an American College of Surgeons/Advanced Trauma Life Support course
- (3) Have current identifiable involvement in trauma care
- (4) Special expertise in trauma care
- (5) Attend continuing medical education in trauma and related fields.

c) Trauma Nurse (or Program) Coordinator shall:

- (1) Be responsible for the trauma center functions as related to nursing care of the trauma patients
- (2) Be a Trauma Nurse Core Course (TNCC) provider
- (3) Be dedicated, full time to this role
- (4) Attend continuing education in trauma and related fields
- (5) Participate in the County Quality Improvement process and serve as a resource to the EMS Medical Director in EMS system trauma policy development.

d) Trauma Resuscitation Nurse shall:

- (1) Be a Trauma Nurse Core Course (TNCC) provider

- (2) Attend continuing education in trauma and related fields.
2. Emergency Department
- a) Designated Medical Director shall:
 - (1) Be Board Certified by the American Board of Emergency Medicine
 - (2) Meet the requirements of medical staff below.
 - b) Medical Staff shall:
 - (1) Be Board Certified by the American Board of Emergency Medicine or become Board Certified within three years of eligibility
 - (2) Have successfully completed an American College of Surgeons/Advanced Trauma Life Support course
 - (3) Attend continuing medical education in trauma and related fields.
 - c) Designated Clinical Supervisor or ED Head Nurse shall attend continuing education in trauma and related fields.
 - d) Staff Nurses shall:
 - (1) Be present in the Emergency Department 24 hours per day. (3 RN minimum)
 - (2) Attend continuing education in trauma and related fields.
 - (3) Complete an approved trauma orientation.
 - e) Nurses' Aides/Orderlies/ED Technicians shall be present in adequate numbers to support the medical and nursing staff.
3. Intensive Care Unit shall have:
- a) Designated Medical Director

- b) Physician on-duty and available 24 hours per day
 - c) Designated Clinical Supervisor or Head Nurse with trauma nursing experience, and meet the requirements of staff nurses
 - d) Staff nurses
 - (1) In adequate number to maintain a nurse-patient ratio of 1:2 on each shift at all times.
 - (2) Attend continuing education in trauma and related fields.
 - e) Paraprofessional staff as required to support the services offered.
4. Postanesthesia Recovery Room (PAR)
- a) Physician supervision in-hospital 24 hours per day
 - b) Registered nurses and other essential personnel on-duty for the PAR 24 hours per day.
5. Other essential personnel
- a) Clinical laboratory and pulmonary laboratory technicians available in-hospital 24 hours per day.
 - b) Certified Radiological Technician available in-hospital 24 hours per day.
 - c) CT Scan Technician available in-hospital 24 hours per day.
 - d) Pharmacist available in-hospital 24 hours per day.
- C. Equipment and Facilities
1. Equipment for resuscitation and diagnosis and to provide advanced life support for the critically and seriously injured adult and pediatric patient shall include but not be limited to that required for a licensed general acute care hospital with a special permit for Basic Emergency Medical Services, Physician-on-duty, Department in accord with the California Administrative Code, Title 22, Section 70411 et seq.

2. Intensive Care Unit (ICU) - for trauma patients- shall
 - a) Have bed must be available within 3 hours of notification of need for use by a trauma patient
 - b) Meet any pertinent statutes and regulations
 - c) Have immediate access to clinical and pulmonary laboratory services
 - d) Have necessary equipment to provide intensive care, monitoring (including invasive monitoring) and resuscitation.
3. Operating Suite shall
 - a) Meet any pertinent statutes and regulations
 - b) Have an operating room staffed and available 24 hours per day
 - c) Have a second operating room staffed and available within 30 minutes should the first room be occupied by a trauma patient
 - d) Have cardiopulmonary bypass pump-oxygenator and team on call back and promptly available.
4. Postanesthesia Recovery Room (PAR) shall have appropriate monitoring and resuscitation equipment
5. Clinical Laboratory Services
6. Radiological Special Capabilities shall be available 24 hours per day include:
 - a) Angiography,
 - b) Sonography,
 - c) Nuclear scanning,
 - d) Computerized tomography, and
 - e) Linear tomography.

7. Pharmacy
8. Acute Hemodialysis Capability in-hospital and immediately available 24 hours per day.
9. Organized Burn Care shall be provided in a Burn Unit, which meets any pertinent statutes and regulations, in-house or by agreement with another Burn Unit
10. Acute Spinal Cord Injury Management Capabilities shall be provided in a Spinal Cord Injury Unit which meets any pertinent statutes and regulations, in-house, or by agreement with another Spinal Cord Injury Unit
11. Rehabilitation Program
 - a) In-hospital consultation for immediate or acute rehabilitation.
 - b) Physical Medicine and Rehabilitation.
12. Human Support Services which meet all pertinent statutes and regulations.
 - a) Occupational Medicine or an agreement with an outside facility to provide this service.
 - b) Physical Medicine.
 - c) Social Services.
 - d) Nutrition Services.

IV. OTHER DESIGNATED RECEIVING FACILITIES

Other facilities in Santa Clara County may receive patients who do not meet the requirements of a Major Trauma Victim, but have non-trivial injuries. Some of these patients are delivered to the hospital through the 911 system, others by private vehicle. The 911 system will deliver patients only to hospitals which have an Emergency Department with a special permit from the State of California to operate either as a Basic or a comprehensive Emergency Medical Service, Physician-on-duty, Department, and conform to the requirements of Title 22, California Administrative Code, Section 70411 et seq.