



California's Emergency Medical Services Personnel Programs

**Emergency Medical Services Authority
California Health and Human Services Agency**

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**HOWARD BACKER, MD, MPH, FACEP
DIRECTOR**

**DANIEL R. SMILEY
CHIEF DEPUTY DIRECTOR**

**SEAN TRASK
DIVISION CHIEF**

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INTRODUCTION

This document is intended to provide an overview of California's EMS Personnel, including eligibility, training requirements and scope of practice highlights for each personnel category. Information about local EMS agencies and certifying entities will assist individuals who are interested in becoming an EMS provider in California.

The California Emergency Medical Services Authority (EMS Authority) is the department within California state government that is empowered to develop and implement regulations governing the medical training and scope of practice standards for the following emergency medical care personnel:

1. Emergency Medical Technician (EMT)
2. Advanced Emergency Medical Technician (AEMT)
3. Paramedic
4. Mobile Intensive Care Nurse (MICN)
5. Public Safety Personnel:
 - a) Firefighters
 - b) Peace Officers
 - c) Lifeguards

Additionally, the EMS Authority operates California's paramedic licensure program. This program coordinates with the National Registry of EMTs to administer written and skills exams to all initial applicants for paramedic licensure in California, and also issues licenses to all qualified initial and renewal paramedic applicants.

LOCAL EMS AGENCIES

Actual day-to-day EMS system operations are the responsibility of the local EMS agencies. EMS systems are administered by either single county or multi-county EMS agencies, which follow regulations and standards established by the State EMS Authority. Local EMS agencies are responsible for certifying EMTs and AEMTs (however, EMTs employed by public safety agencies, such as fire departments and law enforcement agencies, may be certified by their own departments if those agencies maintain an approved EMT training program). Local EMS agencies' certification and accreditation requirements are explained on the following pages.

CALIFORNIA EMS PERSONNEL

In California, public safety personnel (firefighters, peace officers, and lifeguards) often administer prehospital medical assistance. These professionals are required by law to be trained, at a minimum, in first aid and cardiopulmonary resuscitation (CPR).

An emergency medical technician, or EMT, as part of an EMS system, is a specially trained and certified professional who renders immediate medical care in the prehospital setting to seriously ill or injured individuals. The Authority develops and implements regulations governing the medical training and scope of practice standards for the following emergency medical care personnel:

- An Emergency Medical Technician (EMT) is trained and certified in basic life support practices. California law requires all ambulance attendants to be trained and certified to the EMT level and many fire agencies require firefighters to be EMT certified. EMTs are often used as the first dispatched medical responder in an emergency medical system. There are more than 60,000 EMTs certified in California.
- An Advanced EMT (AEMT) is trained and certified in limited advanced life support (LALS) practices. AEMT is used primarily in rural areas, where they may be the only EMS responders. California currently has fewer than 100 AEMTs.
- Paramedics are trained in advanced life support and licensed by the State. A paramedic also must be locally *accredited* in order to practice in any California county. Accreditation includes orientation to local protocols. There are approximately 20,000 licensed paramedics in California.
- Public Safety Personnel (Firefighters, Peace Officers, and Lifeguards) have minimum training standards that include first aid and CPR (and automated external defibrillation when approved by the local EMS medical director).

The following chart provides further information regarding the substantive differences between each of the three EMT categories. However, keep in mind the chart only summarizes the qualifications and requirements for each category.

TABLE 1. Eligibility, Training, and Skill Requirements for Emergency Medical Technicians and Paramedics

	EMT	AEMT	PARAMEDIC
Student Eligibility	<ul style="list-style-type: none"> • 18 years of age 	<ul style="list-style-type: none"> • 18 years of age • High School diploma or equivalent • EMT certificate • CPR Card 	<ul style="list-style-type: none"> • 18 years of age • High School diploma or equivalent • EMT certificate • CPR Card
Minimum Training Requirements	<ul style="list-style-type: none"> • 160 hours total • 136 hours didactic • 24 hours clinical • 10 patient contacts 	<ul style="list-style-type: none"> • 160 hours total • 80 hours didactic & skills lab • 40 hours hospital clinical training • 40 hours field internship • 15 ALS patient contacts 	<ul style="list-style-type: none"> • 1090 hours total • 450 hours didactic & skills lab • 160 hours hospital clinical training • 480 hours field internship • 40 ALS patient contacts

	EMT	AEMT	Paramedic
Minimum Scope of Practice	<ul style="list-style-type: none"> • Patient Assessment • Advanced first aid and OTC Medications with LEMSA approval • Transportation of ill & injured persons • Use of adjunctive breathing aids, administration of oxygen • Automated external defibrillator • Cardiopulmonary resuscitation • Use of tourniquets and hemostatic dressings for bleeding control • Pulse oximetry • Humidifiers • Continuous positive airway pressure 	<ul style="list-style-type: none"> • All EMT skills • Perilaryngeal airways • Tracheo-bronchial suctioning • Institute intravenous (IV) catheters, saline locks, needles or other cannulae (IV lines) • Administer 4 drugs/solutions intravenously • Glucose measuring • Establish and maintain pediatric intraosseous access • Obtain venous and/or capillary blood samples • Measure blood glucose • Administer 7 drugs in a route other than intravenous 	<ul style="list-style-type: none"> • All EMT & AEMT skills and medications • Laryngoscope • Endotracheal (ET) intubation (adults, oral) • Valsalva's Maneuver • Needle thoracostomy & cricothyroidotomy • Naso/orogastric tube insertion/suction • Monitor thoracostomy tubes • Monitor/adjust potassium (≤ 40 mEq/L) IV lines • Utilization & monitoring of electrocardiographic devices • Administer 25 medications • BPAP (Bi-level positive airway pressure)/PEEP (Positive end-expiratory pressure)
Notable Optional Skills (added at the local level)	<ul style="list-style-type: none"> • Perilaryngeal airways • Epi pens • Duodote kits • Naloxone 	<ul style="list-style-type: none"> • Previously certified EMT-IIs have additional medications approved by the local EMS agency. 	<ul style="list-style-type: none"> • Local EMS Agencies may add additional skills and medications if approved by the EMS Authority.
Written and Skills Exams	<ul style="list-style-type: none"> • Administered by the National Registry of EMTs 	<ul style="list-style-type: none"> • Administered by the National Registry of EMTs 	<ul style="list-style-type: none"> • Administered by the National Registry of EMTs
Length of Certification or Licensure	<ul style="list-style-type: none"> • 2 year certification with verification of skills competency every 2 years 	<ul style="list-style-type: none"> • 2 year certification with verification of skills competency every 2 years 	<ul style="list-style-type: none"> • 2 year licensure without retesting
Refresher Course/ Continuing Education	<ul style="list-style-type: none"> • 24 hour refresher course or 24 hours of CE every two years 	<ul style="list-style-type: none"> • 36 hours of CE every 2 years 	<ul style="list-style-type: none"> • 48 hours of CE every 2 years
Certification & License Provisions	<ul style="list-style-type: none"> • Certified locally • valid statewide 	<ul style="list-style-type: none"> • Certified locally • valid statewide 	<ul style="list-style-type: none"> • Licensed by State • valid statewide • local accreditation

EMERGENCY MEDICAL TECHNICIAN (EMT)

California law requires all ambulance attendants to be trained and certified to the EMT level. Many fire agencies also require firefighters to be EMT certified. EMTs are often used as the first dispatched medical responder in a tiered emergency medical system.

Training

Training for EMTs is offered at the local level by approved training programs. A list of approved training programs may be obtained through the EMS Authority via telephone, mail, or from our web page. Training hours consist of 160 hours, broken down into 136 classroom and laboratory hours and 24 hours of supervised clinical experience.

Testing

In order to practice as an EMT, an individual is eligible for certification after passing the National Registry of EMTs' written and skills exams.

Certification

After passing the written and skills certification exams and obtaining a criminal background check, an applicant may be certified through the local EMS agency or through a public safety agency that has been approved as a certifying entity, both of which issue an EMT certification card. Certification is valid for two years from the date of issue and is recognized statewide.

Military personnel with a current NREMT-EMT card or with documentation of successful completion of an emergency medical service training program of the Armed Forces of the United States within the preceding two (2) years that meets the U.S. DOT National EMS Education Standards (DOT HS 811 077A, January 2009) may be eligible for certification as an EMT in California. Interested military personnel are encouraged to contact the local EMS agency for information on taking the course completion challenge exam and exploring other pathways to certification.

Recertification

Every two years, an EMT must provide the certifying entity with proof of 24 hours of refresher course work or 24 hours of EMS approved continuing education units (CEUs), and have documented competency in 10 skills. Proof of completion of these requirements allows the certifying entity to recertify an EMT.

Reciprocity

Individuals from out-of-state who meet one of the following criteria and complete the application requirements of a certifying entity are eligible for certification:

- 1) Pass the NREMT written and skills examination and have either:

- a. Documentation of successful completion of an approved out-of-state initial EMT training course, within the last two (2) years that meets California's EMT training requirements, or
 - b. A current and valid out-of-state EMT certificate.
- 2) Possess a current and valid National Registry EMT-Basic registration certificate.
 - 3) Possess a current and valid out-of-state or National Registry EMT-Intermediate or Paramedic certificate.

Scope of Practice

An EMT is trained and certified in basic life support practices. Basic life support (BLS) means emergency first aid and CPR procedures which, at a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of CPR to maintain life without invasive techniques until the patient can be transported or until advanced life support (ALS) is available. Automated external defibrillator (AED) training is also part of the basic scope of practice.

Optional Skills

EMTs may obtain additional training to supplement their standard scope of practice. EMTs may become locally-approved to use certain medications and skills. The local EMS medical director for each county determines the use of these optional scope items.

ADVANCED EMERGENCY MEDICAL TECHNICIAN (AEMT)

An AEMT is trained and certified in limited advanced life support (LALS) practices. In rural or sparsely populated areas of California, AEMTs may be the only responders who provide immediate medical intervention. California has fewer than 100 AEMTs; contact the county you are interested in working to determine if they use AEMTs, or refer to the attached list on pages 8-11.

Training

Training programs for AEMTs are limited, because AEMTs are not utilized throughout California. To learn which counties use AEMTs refer to pages 11-12. The minimum training hours for AEMTs is 160. The minimum number of hours for each portion of the training program is listed below, although most programs exceed this amount:

Didactic and skills	80 hours
Clinical Training	40 hours
Field Internship	<u>40 hours</u>
TOTAL	160 hours

Testing

In order to practice as an AEMT, an individual is eligible for certification after passing the National Registry of EMTs' written and skills exams.

Certification

After passing both the written and skills exams, an applicant must obtain a criminal background check and may be certified through the local EMS agency. Certification is valid for two years from the date of issue. A small number of EMS agencies recognize AEMTs in their jurisdiction. Certification of AEMTs is recognized only by the local EMS agency that has policies, procedures & protocols for AEMTs. Therefore, AEMT certification is not valid statewide. In order to be certified in a different area by a different EMS agency, an applicant must provide proof of current AEMT certification and employment with a provider in the new area. Be sure to contact the local EMS agency to confirm the availability of practicing as an AEMT in that agency's area of jurisdiction.

Military personnel with a current NREMT- AEMT card, or who are in possession of a course completion record or other documentation of training equivalent to an approved AEMT training program, may be eligible for certification as an AEMT in California. Interested military personnel are encouraged to contact the local EMS agency for information on taking the course completion challenge exam and exploring other pathways to certification.

Recertification

Every 2 years, an AEMT must provide the local EMS agency with proof of completion of 36 hours of EMS approved continuing education units (CEUs), and provide documented competency in 6 skills.

Reciprocity

An individual who possesses or has possessed a valid EMT-Intermediate or Paramedic license from another state or the National Registry of EMTs may be eligible for certification. Again, please contact the local EMS agency in the area you are interested in working, because AEMT certification is not accepted in all jurisdictions.

Scope of Practice

AEMTs are certified in the use of limited advanced life support (LALS) skills. LALS includes all EMT skills, perilyngeal airways, tracheo-bronchial suctioning, institute intravenous (IV) catheters, saline locks, needles or other cannulae (IV lines), administer the 4 drugs/solutions intravenously, establish and maintain pediatric intraosseous access, obtain venous and/or capillary blood samples, measure blood glucose, administer 7 drugs in a route other than intravenous (jurisdictional scope of practice may vary).

Optional Skills

In addition to the LALS scope of practice, AEMTs who were previously certified as EMT-IIs may practice additional skills and administer certain medications. These additional optional skills and medications may be utilized in limited jurisdictions and are approved by the local EMS agency.

PARAMEDIC

A paramedic is trained and licensed in advanced life support (ALS) practices, which include the use of expanded skills and medications. The paramedic is typically employed by public safety agencies, such as fire departments, and by private ambulance companies. Paramedics are employed throughout the state's EMS system to provide ALS prehospital care.

Training

The minimum number of hours for each portion of the training program is listed below, although most programs exceed these amounts:

Didactic and skills	450 hours
Hospital and clinical training	160 hours
Field internship	<u>480 hours</u>
TOTAL	1,090 hours

Testing

In order to become licensed as a paramedic, an individual must pass the National Registry of EMTs' written and skills exams. Tests are given on a regular basis throughout California; contact the EMS Authority or look on our web site to obtain a California test schedule.

Licensure

California law requires an individual to be licensed by the EMS Authority in order to practice as a paramedic. Licensure is valid statewide. Individuals seeking licensure should apply directly to the EMS Authority. All licensees must undergo a California background check and submit proof of U.S. citizenship or legal residency.

Military personnel with a current NREMT-P card, who can provide a paramedic course completion record, or other documented proof of successful completion of an approved paramedic training program within the last 2 years, including approved military paramedic training programs, may be eligible for licensure as a Paramedic in California. Interested military personnel are encouraged to contact the EMS Authority for more information on the steps required for licensure.

Accreditation

In addition to State licensure, a paramedic must be locally accredited in order to practice in any California county. Accreditation is orientation to local protocols and training in any local optional scope of practice for the particular local EMS agency jurisdiction. Paramedics must apply for accreditation directly to the local EMS agency.

License Renewal

Paramedics must complete a minimum of 48 hours of approved continuing education units (CEUs) every two years to maintain licensure.

Reciprocity

Individuals, who possess a current paramedic certificate/license from the National Registry of EMTs, are eligible for paramedic licensure in California when they submit proof of successful completion of a field internship and complete all license requirements.

Scope of Practice

Paramedics are trained and licensed in the use of advanced life support (ALS) skills. ALS includes all EMT and AEMT skills; use of laryngoscope; endotracheal and nasogastric intubation; utilization and monitoring of electrocardiographic devices; external cardiac pacing; use of perilaryngeal airways; CPAP (continuous positive airway pressure); BPAP (Bi-level positive airway pressure); PEEP (positive end-expiratory pressure); use of intraosseous (IO) needles and catheters; use of laboratory devices, including prehospital point of care testing such as glucose, capnometry, capnography, and carbon monoxide when appropriate authorization is received from State and Federal agencies; performance of nasogastric and orogastric tube insertion and suction; Valsalva's maneuver; needle thoracostomy; administration of 25 drugs, and other skills listed in Table 1.

Optional Skills

The EMS Authority can approve the use of additional skills and administration of additional medications by paramedics upon the request of a local EMS medical director.

MOBILE INTENSIVE CARE NURSE (MICN)

Some local EMS agencies also certify Mobile Intensive Care Nurses. Since a State standard for training and scope of practice for this classification has not been established, information concerning this category of prehospital care personnel should be directed to the respective local EMS agency.

PUBLIC SAFETY PERSONNEL

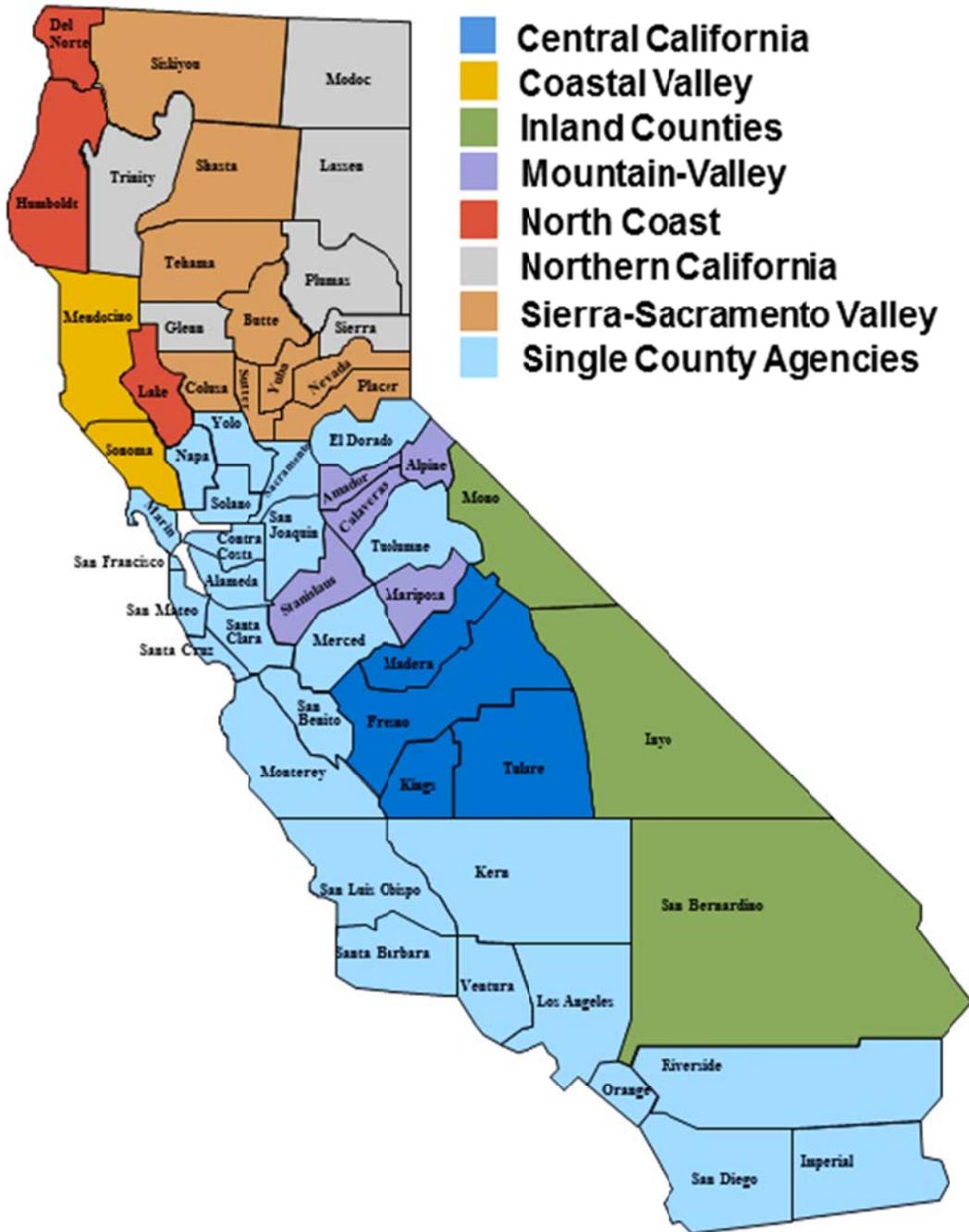
(This includes firefighters, peace officers, and lifeguards.) Minimum training standards are 15 hours of first aid and 6 hours of cardiopulmonary resuscitation (CPR). Training and certification questions should be addressed to the employing state public safety

agency. In addition to first aid and CPR, public safety personnel may also perform the optional skill of defibrillation when approved by the local EMS medical director for the jurisdiction in which the public safety personnel practice.

ADDITIONAL INFORMATION

It is recommended that once an individual has decided where in California he/she wants to work, the individual should contact the local EMS agency in that area to request further information regarding any additional requirements for training, exams, certification, licensing, and accreditation, as well as to obtain information on employment opportunities.

LOCAL EMS AGENCY REGIONAL MAP



LOCAL EMS AGENCY LISTING

MULTI-COUNTY EMS SYSTEMS

Central California (Fresno, Kings, Madera, Tulare)
(EMT, AEMT, Paramedic)
P.O. Box 11867
1221 Fulton Mall, 5th floor
Fresno, CA 93775-1867
(559) 600-3387
www.ccemsa.org

Inland Counties (San Bernardino, Inyo, Mono)
(EMT, Paramedic)
515 N. Arrowhead Ave.
San Bernardino, CA 92415-0060
(909) 388-5823
www.sbcounty.gov/icema/

Mountain-Valley (Alpine, Amador, Calaveras, Mariposa, and Stanislaus)
(EMT, Paramedic)
1101 Standiford Avenue, #D1
Modesto, CA 95350
(209) 529-5085
www.mvemsa.com/

North Coast (Del Norte, Humboldt, and Lake)
(EMT, AEMT, Paramedic)
3340 Glenwood Ave.
Eureka, CA 95501
(707) 445-2081
www.northcoastems.com

Northern California (Glenn, Lassen, Modoc, Plumas, Sierra, and Trinity)
(EMT, AEMT, Paramedic)
457 Knollcrest Drive, Suite 120
Redding, CA 96002 - 0121
(530) 229-3979
www.norcalems.org/

Sierra-Sacramento Valley (Butte, Colusa, Nevada, Placer, Shasta, Siskiyou, Sutter, and Yuba)
(EMR, EMT, AEMT, Paramedic)
5995 Pacific Street
Rocklin, CA 95677
(916) 625-1701
www.ssvems.com/

Coastal Valleys EMS (Sonoma, Mendocino)
(EMT, AEMT, Paramedic)
625 5th Street
Santa Rosa, CA 95404
(707) 565-6501
www.coastalvalleysems.org

SINGLE COUNTY EMS SYSTEMS

Alameda County
(EMT, Paramedic)
1000 San Leandro Blvd. San Leandro, CA 94577
(510) 618-2050
www.acphd.org/ems

Contra Costa County
(EMT, Paramedic)
1340 Arnold Drive, Suite 126
Martinez, CA 94553
(925) 646-4690
www.cchealth.org/groups/ems/

El Dorado County
(EMT, Paramedic)
415 Placerville Drive, Suite J Placerville, CA 95667
(530) 621-6500
www.co.el-dorado.ca.us/ems/

Imperial County
(EMT, AEMT, Paramedic)
935 Broadway
El Centro, CA 92243
(760) 482-4768
www.icphd.org/sub.php?idm=103

Orange County
(EMT, Paramedic)
405 West Fifth Street, Suite 301A Santa Ana, CA 92701
(714) 834-3500
www.ochealthinfo.com/medical/ems/

Kern County
(EMT, Paramedics)
1800 Mt. Vernon Ave. 2nd Floor
Bakersfield, CA 93306
(661) 321-3000
www.co.kern.ca.us/ems/

Riverside County

(EMT, Paramedic)
4065 County Circle Drive, Suite 102
Riverside, CA 92503
(951) 358-5029
www.rivcoems.org/home/

Los Angeles County

(EMT, Paramedic)
10100 Pioneer Blvd., Suite 200
Santa Fe Springs, CA 90670
(562) 347-1500
www.ems.dhs.lacounty.gov/

Marin County

(EMT, Paramedic)
899 Northgate Dr., Suite 104
San Rafael, CA 94903
(415) 473-6871
www.co.marin.ca.us/depts/HH/main/ems

Merced County

(EMT, Paramedic)
260 East 15th Street Merced, CA 95341
(209) 381-1250
www.co.merced.ca.us/index.aspx?NID=581

Monterey County

(EMT, Paramedic)
1270 Natividad Road Salinas, CA 93906
(831) 755-5013
www.mtyhd.org Click 'Emergency Medical Services'

Sacramento County

(EMT, Paramedic)
9616 Micron Avenue, Suite 960
Sacramento, CA 95827
(916)875-9753
www.sacdshs.com/default.asp?WOID=EMS

San Benito County

(EMT, Paramedic)
1111 San Felipe Road, Suite 102
Hollister, CA 95023
(831) 636-4066
www.sanbenitocounty.org/ems/

San Diego County

(EMT, AEMT, Paramedic)
6255 Mission Gorge Road
San Diego, CA 92120
(619) 285-6429
www.sdcounty.ca.gov/hhsa/program/phs/emergency_medical_services/index.html

City and County of San Francisco

(EMT, Paramedic)
30 Van Ness Avenue, Suite 3300
San Francisco, CA 94102
(415) 487-5000
<http://www.sfdem.org/index.aspx?page=58>

San Joaquin County

(EMT, Paramedic)
500 West Hospital Road
Benton Hall, Room 47
French Camp, CA 95231
(209) 468-6818
www.sjgov.org/ems/default.aspx

Santa Cruz County

(EMT, Paramedic)
1080 Emeline Avenue Santa Cruz, CA 95060
(831) 454-4000
www.santacruzhealth.org/phealth/ems/3ems.htm

San Luis Obispo County

(EMT, Paramedic)
2156 Sierra Way
San Luis Obispo, CA 93401
(805) 788-2517
www.sloemsa.org/index.html

Solano County

(EMT, Paramedic)
275 Beck Avenue, MS5-240
Fairfield, CA 94533
(707) 784-8155
www.co.solano.ca.us/depts/ems/

San Mateo County

(EMT, Paramedic)
225 37TH Avenue
San Mateo, CA 94403
(650) 573-2564
www.co.sanmateo.ca.us
Click on A-Z services, then "Health", then
follow links to EMS.

Santa Barbara County

(EMT, Paramedic)
300 North San Antonio Road Santa
Barbara, CA 93110-1316
(805) 681-5274
www.countyofsb.org/phd/ems.aspx?id=20620

Santa Clara County

(EMT, Paramedic)
976 Lenzen Avenue, Suite 1217
San Jose, CA 95126
(408) 885-4250
www.sccemsagency.org/portal/site/ems/

Tuolumne County

(EMT, Paramedic)
20111 Cedar Road North
Sonora, CA 95370
(209) 533-7460
www.portal.co.tuolumne.ca.us/psp/ps/TUP_HEALTH_EMS/ENTP/h/?tab=DEFAULT

Ventura County

(EMT, Paramedic)
2220 E. Gonzalez Road, Suite 130
Oxnard, CA 93036-0619
(805) 981-5301
www.vchca.org/emergency-medical-services/emergency-medical.aspx

Yolo County

(EMT, Paramedic)
137 N Cottonwood Street, Suite 2601
Woodland, CA 95695
(530) 666-8645
www.yolocounty.org/Index.aspx?page=2411

California's Emergency Medical Services Personnel Programs

Edmund G. Brown, Jr.
Governor
State of California

Diana S. Dooley
Secretary
Health and Human Services Agency

Howard Backer, MD, MPH, FACEP
Director
Emergency Medical Services Authority

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www.emsa.ca.gov