

**STATE OF CALIFORNIA
COMMISSION ON EMERGENCY MEDICAL SERVICES**

June 21, 2017

10:00 A.M. – 1:00 P.M.

(Meeting may end early at the completion of all agenda items)

Courtyard by Marriott – Sacramento Cal Expo

1782 Tribute Road

Sacramento, CA 95815

Reservations: (800) 973-1386

- 1. Call to Order and Pledge of Allegiance**
- 2. Review and Approval of March 15, 2017 Minutes**
- 3. Director's Report**
 - A. EMSA Program Updates [DMS] [Personnel] [Systems]
 - B. Legislative Report
- 4. Consent Calendar**
 - A. Administrative and Personnel Report
 - B. EMS Plan Status Update
 - C. EMS Plan Appeals Update
 - D. Enforcement Report
 - E. Legal Report
 - F. Statewide Trauma Planning, STAC Recommendations
 - G. Paramedic Regulations Revision
 - H. EMS for Children Regulations Update

Regular Calendar

- 5. EMS Personnel**
 - A. Community Paramedic Pilot Program Update
 - B. Tactical Casualty Care Training Guidelines Approval
 - C. POLST eRegistry Update
- 6. EMS Systems**
 - A. Stroke Critical Care System Regulations Approval
 - B. STEMI Critical Care System Regulations Approval
 - C. Ambulance Patient Off-load Times
 - D. Wireless 911 Routing Status Update
- 7. Disaster Medical Services Division**
 - A. Disaster Healthcare Volunteers (DHV) / MRC Program Update

8. Items for Next Agenda

9. Public Comment

10. Adjournment

A full agenda packet will not be provided at the meeting; however, you can print a full packet, including the agenda from the Department's website at www.emsa.ca.gov. This event will be held in an accessible facility. Individuals with disabilities requiring auxiliary aids or services to ensure accessibility such as language interpreting, assisted listening device, materials in alternate formats or other accommodation, should contact Sandi Baker at (916) 431-3701, no less than 7 days prior to the meeting.

**STATE OF CALIFORNIA
COMMISSION ON EMS
WEDNESDAY, MARCH 15, 2017
EMBASSY SUITES BY HILTON ANAHEIM SOUTH
11767 HARBOR BOULEVARD, SALON A
GARDEN GROVE, CALIFORNIA
800-605-6578 – Reservation line**

MINUTES

COMMISSIONERS PRESENT:

Steve Barrow, Dan Burch, Steve Drewniany, James Dunford, MD, Nancy Gordon, Mark Hartwig, James Hinsdale, MD, Richard O. Johnson, MD, Daniel Margulies, MD, David Rose, Eric Rudnick, MD, Carole Snyder, Lew Stone, Dave Teter, Atilla Uner, Susan Webb

COMMISSIONERS ABSENT:

Jaison Chand, Jane Smith

EMS AUTHORITY STAFF PRESENT:

Howard Backer, MD, Daniel R. Smiley, Craig Johnson, Jennifer Lim, Tom McGinnis, Lou Meyer, Priscilla Rivera, Sean Trask, Angela Wise

AUDIENCE PRESENT:

Kristi Koenig, MD, FACEP, FIFEM, FAEMS, EMS Medical Director for the County of San Diego

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chairman Dan Burch called the meeting to order at 10:01 a.m. Sixteen Commissioners were present. He asked Commissioner Teter to lead the Pledge of Allegiance and it was recited.

2. REVIEW AND APPROVAL OF DECEMBER 14, 2016, MINUTES

Action: Commissioner Barrow moved approval of the December 14th, 2016, Commission on Emergency Medical Services Meeting Minutes as presented. Commissioner Margulies seconded. Motion carried unanimously.

3. DIRECTOR'S REPORT

Howard Backer, M.D., the EMSA Medical Director, congratulated Commissioner Dunford for being awarded the James O. Page Leadership Award, announced that Jennifer Lim has returned to her former position with additional responsibilities, and welcomed new Commissioner Nancy Gordon and asked her to introduce herself.

A. EMSA Program Updates

Dr. Backer presented his report:

- The impact of the new federal administration is yet unknown.
- The recently-published EMS Industry Profile Report, compiled by the labor centers at the University of California (UC), Berkeley and UCLA, brings greater understanding of the economic and personnel influences on the EMS System.
- The new legislative season includes bills about the EMS workforce, community paramedicine, and automated drug-dispensing devices.
- The independent evaluation of year one of the EMSA Community Paramedicine Pilot Projects has been completed by UC San Francisco's Health Policy Research Group and will be discussed later in today's agenda.
- The EMS Medical Directors Association of California (EMDAC) has expressed concern about the 21st Century Cures Act, which was enacted in December of 2016, particularly if EMS providers in the field and EMS medical directors are required to consult the Cures database prior to prescribing. According to the Department of Justice (DOJ), the answer is no, because they see there is a difference between administering a drug in an emergency situation as compared to prescribing a drug, although controlled substances administered must be documented in the electronic patient care record.
- The transition to NEMSIS 3.4, the new national data standard, continues. The EMSA is just beginning to receive data in the new format.
- The Health Information Exchange Summit will take place in Anaheim the first week in April.
- Federal grant funding has been awarded to at least 12 jurisdictions in California to address the opioid crisis, which provides an opportunity to use first-responder patient access experience. Provider agencies should partner with recipients of these grants and integrate with other health care partners to engage in these projects and link patients to services for treatment.
- The Oroville Dam crisis response was successful. Many health care facilities had to be evacuated, which put the newly-created Statewide Patient Movement Plan to the test and revealed areas that need improvement. This will be discussed later in today's agenda.

Commissioner Barrow suggested partnering with the California Telehealth Network (CTN), which is charged with building out the broadband system and providing technical assistance, financing, and telehealth-level information in rural and underserved areas.

Dr. Backer suggested that a CTN representative attend the Health Information Exchange Summit for a good overview of what the EMS is looking to do with the Information Exchange and about using medical information for EMS and patient care between field and hospital.

4. CONSENT CALENDAR

- A. Legislative Report
- B. Administrative and Personnel Report
- C. Legal Report
- D. Enforcement Report
- E. EMS Plan Status Report
- F. National Registry of EMTs Examination Results
- G. Paramedic Regulations Revision Update
- H. Chapter 13 Workgroup
- I. ePCR Device Grant Update

Commissioner Stone asked to inform the team involved in the update process for Item 4G that adding an introductory level anatomy and physiology class with labs will have a detrimental effect on the fire service's ability to move minority candidates into paramedic training.

Action: Commissioner Rudnick moved approval of the consent calendar. Commissioner Hinsdale seconded. Motion carried unanimously. The item was noted and filed.

REGULAR CALENDAR

5. EMS PERSONNEL

Sean Trask, the Chief of the EMS Personnel Division, presented his report:

A. Trial Studies Review

The 18-month report from Angelo Salvucci, MD, FACEP, FAEMS, on the Santa Barbara County EMS Agencies' Air-Q Trial Study, included in the meeting packet, indicates that the projected paramedic uses of supra-glottic devices fell short. Dr. Salvucci recommended continuing the trial study for another 18 months to study the effect of an improved tube holder, as well as a more effective suctioning device.

Questions and Discussion

Commissioner Uner stated aspiration complications occurred in up to one third of cases. He asked if the improved devices looked promising. Mr. Trask stated Dr. Salvucci seems to think they are promising but they have yet to be implemented.

Dr. Backer stated there is pressure from EMDAC to utilize supra-glottic airways (SGAs) because most of the other states in the country are using SGAs in the pre-hospital environment and they are well documented in the hospital environment, especially in the operating room where they are used for anesthesia. He stated the importance of consistent and ongoing data collection in California.

Dr. Backer stated EMDAC has also been discussing giving up pediatric intubation for children under eight years of age, but they first require additional management

techniques. It is not the Commission's role to approve or disapprove scope of practice issues, but it interfaces with this trial study. He asked Commissioner Rudnick to provide his input on yesterday's EMDAC meeting.

Commissioner Rudnick stated the literature clearly shows that none of the SGAs are great at protecting against aspiration, but the pre-hospital arena is a different environment where SGAs have a role. Many SGAs go down to neonate size. Although bag-valve-mask ventilation (BVM) is a good method of oxygenation, ventilation in the young patient population for a prolonged transport does not work well. He agreed on the need for something other than intubation, and SGAs seem to be a reasonable compromise, but it needs to be done right with consistent and ongoing data collection.

Commissioner Margulies stated an additional concern, other than aspiration, is the failure to ventilate in about 21 percent. He encouraged the continued collection of data because at this point he was unsure that SGAs will be a good substitute.

Action: Commissioner Rudnick moved approval of the extension of the Santa Barbara County Air-Q Trial Study for an additional 18-month period. Commissioner Teter seconded. Motion carried unanimously.

B. EMT Regulations Revisions Approval

Mr. Trask deferred to Priscilla Rivera to provide the presentation on the EMT Regulations revisions approval.

Priscilla Rivera, the Manager of the EMS Personnel Standards Unit, provided an overview of the proposed revisions to Chapter 2 of the California Code of Regulations, included in the meeting packet, the stakeholder process, and issues that arose during the process such as the Skills Verification Form and electronic health record requirements.

Questions and Discussion

Commissioner Barrow stated the need to consider the 14 million individuals who travel and work in diverse rural counties, not just the 5.4 million individuals who live there, when discussing adequate EMS services and other resources necessary to cover the population of each county. Mr. Trask stated most of the proposed revisions to the Regulations are in response to requirements in legislation.

Action: Commissioner Rudnick moved approval of the revisions to the EMT Regulations as presented. Commissioner Johnson seconded. Motion carried unanimously.

C. Community Paramedicine Pilot Project Report

Mr. Trask deferred to Lou Meyer and Dr. Backer to provide the update on the Community Paramedicine Pilot Project.

Lou Meyer, the Project Manager for the Community Paramedicine Pilot Project, presented his report:

- Strong progress continues with all Community Paramedicine Pilot Projects.
- Alternate Destination Urgent Care Centers have experienced an enrollment issue, which is being evaluated.
- The San Francisco City and County Alternate Destination Sobering Center application was approved by the Office of Statewide Health Planning and Development (OSHPD).
- The California Healthcare Foundation hosted a briefing for legislators and staff in Sacramento to review the Community Paramedicine Program. Over one hundred legislators and their staff were in attendance.

Dr. Backer provided an overview, accompanied by a PowerPoint presentation, of the 13 sites and six projects tested, evaluation methodology, interventions, and findings of the UCSF Independent Evaluators Public Report on the Health Workforce Pilot Project, which is posted on the EMSA website. A link to the report was included in the staff summary in the meeting packet. He concluded that all projects except one showed success – they demonstrated patient safety and the possibility of significant cost savings.

Questions and Discussion

Commissioner Hinsdale asked about the level of enthusiasm or resistance for the community paramedics. Mr. Meyer stated the enthusiasm is high. The paramedics know this is the future and they want to do preventive health. Dr. Backer added that it gives paramedics greater responsibilities, provides them with an additional career route, and increases retention.

Commissioner Hinsdale asked if the project focuses on individuals who are persistently drunk in public and tie up emergency rooms. Dr. Backer stated that group will be the focus of the new San Francisco Sobering Center Pilot Project, which will be a part of the data collection.

Commissioner Barrow asked about the difference between paramedicine personnel and an EMS team that arrives at the home of a patient who is connected to a hospice program. Mr. Meyer stated the key is the discussion between the hospice nurse and the community paramedic, which is not the case in a normal 911 response to a hospice patient. The paramedicine personnel approach the hospice situation differently than a regular paramedic, because they have the ability to collaborate with a hospice nurse in a more detailed fashion, and they have training that also allows them to understand comfort care medications, which is not in normal paramedic training.

Commissioner Barrow asked if the EMS unit contacts the urgent care facility en route to determine if they can accept the patient when the Emergency Department (ED) is not required. Mr. Meyer stated the protocol requires them to contact the urgent care center to give a case report and to learn if they can accept the patient. The findings show that

urgent care centers are not ready to deal with the level of care necessary, but the larger issue is the lack of enrollment.

Commissioner Dunford stated the unmeasured benefit to these projects is the psychological wellness of firefighters, police officers, and EMS providers.

Commissioner Johnson stated other models besides the current legislation about replicating the OSHPD pilot program models need to be developed, especially rural models. Dr. Backer agreed and stated there were other models that were not tested, such as rural models that use EMS personnel as an extension of primary care.

Commissioner Johnson asked who is leading the effort to bridge the gap between the EMS world and the hospital and clinic worlds to truly create an integrated mobile system. Dr. Backer stated the findings showed that integration comes at the local project level rather than at the state level.

Commissioner Johnson stated the cost so far has been absorbed by EMS. He asked what the prospect is for reimbursement for what EMS has put in. Dr. Backer stated EMS will not get a reimbursement source prior to enabling these projects. Other states' models had to prove an added benefit to patient care and cost savings before a source of funding was found. There are multiple reimbursement strategies to be worked out among local partners. It is not a state solution, unless payment is approved by Medi-Cal.

Commissioner Uner stated the study showed that urgent care facilities are not prepared to handle even minor emergencies and, since 39 patients were enrolled out of 1,460, that the study is inconclusive. Dr. Backer agreed and stated the evaluation found that recommendations cannot be made about urgent care and that the study would require a much higher volume of patients to understand patient satisfaction, safety, and cost savings.

Mr. Meyer stated the pilot project has shown that the paramedic can make an appropriate triage in the field whether it is an urgent medical situation or not. The piece that needs to be fixed is on the urgent care side.

Public Comment

Kristi Koenig, MD, FACEP, FIFEM, FAEMS, EMS Medical Director for the County of San Diego and former Commissioner, spoke in support of the Community Paramedicine Pilot Projects and stated not all emergency physicians are opposed to community paramedicine. She stated the concern that alternate destination projects may transport patients to a lower level of care. She suggested a designation of an urgent care receiving center, where urgent care centers would need to meet a set of standards that would meet the needs of selected patients in order to participate in receiving these patients.

D. Tactical First Aid/Tactical Emergency Medical Support (TEMS) First Responder Operations (FRO) Guidelines Approval

Mr. Trask gave an overview of the background, intent, and content of the Tactical First Aid/Tactical Emergency Medical Support First Responder Operations Training Standards Guidelines.

Action: Commissioner Hartwig moved approval of the Tactical First Aid/Tactical Emergency Medical Support (TEMS) First Responder Operational (FRO) Training Standards Guidelines document. Commissioner Gordon seconded. Motion carried unanimously.

E. Physician Order for Life Sustaining Treatment eRegistry Guidelines Approval

Mr. Trask deferred to Lou Meyer to provide the update on the Physician Order for Life Sustaining Treatment eRegistry Guidelines.

Mr. Meyer, who is also the POLST eRegistry Coordinator, introduced the guidelines for the POLST eRegistry Project and a revision of the POLST form. The guidelines have gone out for two comment periods and have been appropriately edited. The POLST form has had a minor change to notify individuals that their POLST forms may be uploaded into the state registry for the pilot process.

Action: Commissioner Stone moved approval of the POLST eRegistry Pilot Project Guidelines and amended POLST form as submitted. Commissioner Uner seconded. Motion carried unanimously.

6. EMS SYSTEMS

A. EMS Plan Appeals Update

Tom McGinnis, the Chief of the EMS Systems Division, provided an overview of the current hearings scheduled for EMS Plan appeals. The Commission will be kept informed as that process moves forward.

B. Stroke Regulations Update

Mr. McGinnis deferred to Angela Wise to provide the update on Agenda Items 6B, C, and D.

Angela Wise, the Assistant Division Chief for EMS Systems, stated the 45-day comment period for the Stroke Regulations ended in December. Program staff has a conference call scheduled with the Regulations Writing Group to review comments and possible amendments.

C. STEMI Regulations Update

Ms. Wise stated the STEMI Regulations have had the 45-day comment period; program staff reviewed the comments and will continue to move forward.

D. EMS for Children Regulations Update

Ms. Wise stated the EMSA for Children Regulations are on the last revision of the Initial Statement of Reasons (ISOR). The package will go to the Office of Administrative Law (OAL) in the last week of March.

7. DISASTER MEDICAL SERVICES DIVISION

A. Patient Movement Exercise

Craig Johnson, the Chief of the Disaster Medical Services Division, gave an update on the background and challenges of the Statewide Patient Movement Plan and explained some of the gaps, including allocation of resources, crisis care standards, and statewide patient tracking. He stated the workgroup tested the plan at a tabletop exercise on January 25th, which was successful and yielded good input. The next steps for the plan include a 30-day review for the tabletop exercise participants, completion of the final draft, release of the final draft for public comment, plan rollout, and training and funding acquisition.

Questions and Discussion

Commissioner Gordon asked if the draft plan changed, based on real-life experience with patient movement and closure of facilities, and if the planning was integrated with other state agencies for input on alternative transportation routes. Mr. Johnson stated one issue that is not addressed in the Statewide Patient Movement Plan is cost and reimbursement of transportation resources; this will be addressed in the plan in the future. He stated staff worked closely with the California Department of Transportation (Caltrans), the California Office of Emergency Services (CalOES), the Department of General Services (DGS), and other agencies to address some of these concerns. Additionally, much of this is outside of the scope of the plan.

Commissioner Webb asked if the plan considers nontraditional transportation vendors. Mr. Johnson stated the Statewide Patient Movement Plan considers all transportation resources from the local to federal levels, including working with the National Disaster Medical System, the National EMS Contract Movement Ambulance Strike Teams, and the California National Guard.

Commissioner Barrow stated Caltrans oversees regional traffic and road/highway planning agencies in every region. He asked about the details of roads and bridges. Mr. Johnson stated the Statewide Patient Movement Plan is a framework that will enable development of standards; however, the EMSA coordinates through California Office of Emergency Services with other departments and agencies involved in transportation.

B. EMS Authority Activities in Support of the Winter Storms

Mr. Johnson stated the EMSA was actively involved in the response activities for the consequences of the recent winter storms. He detailed EMSA's involvement with the

Oroville Dam spillway incident, including transportation, staffing, and coordination. There was one state-level request for patient transportation, answered by an ambulance strike team from another region, but much of the coordination was done within the region. EMSA's ambulance strike teams, Disaster Medical Support Unit vehicles, and Task Force were part of the response.

One of the main issues was the transportation of a number of patients to a shelter, which necessitated a second transportation. Another was with costs and reimbursements. EMSA held conference calls with local partners, the CalOES, the California Department of Public Health, the California Association of Health Facilities, and the Centers for Medicare and Medicaid to discuss possible avenues for reimbursement.

Questions and Discussion

Commissioner Barrow stated the federal government has an emergency reimbursement system in place for 211 systems that must transform to disaster communication systems.

8. ELECTION OF OFFICERS

Chairman Burch reminded Commissioners of the officer nominations from the last meeting. No further nominations were made. Chairman Burch declared the nominations closed and that the following Commissioners were voted into office by acclamation:

- Chairman of the EMSA for 2017 is Dan Burch
- Vice Chairman of the EMSA for 2017 is Steve Drewniany
- Jaison Chand and Daniel Margulies, MD, are part of the Administrative Committee as representatives of the EMSA and Lew Stone is Member Emeritus, as past Chair

9. ITEMS FOR NEXT AGENDA

Commissioner Margulies asked to discuss the current status of the State Trauma Plan.

Mr. Smiley reminded Commissioners that Form 700 for the Fair Political Practices Commission is due by the end of the month.

Chairman Burch reminded Commissioners to take the online State Ethics Training.

10. PUBLIC COMMENT

There were no questions or comments from the public.

11. ADJOURNMENT

Action: Commissioner Stone moved to adjourn the meeting. Commissioner Snyder seconded. Motion carried unanimously.

Chairman Burch adjourned the meeting at 12:21 p.m.

**Emergency Medical Services Authority
EMS Personnel Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-9875	Updates
1. First Aid Practices for School Bus Drivers	Mark Olivas, ext. 445	There are 8 School Bus Driver training programs currently approved. There are currently no pending reviews. Technical assistance to school staff and school bus drivers is ongoing. The EMSA Child Care Training website is updated monthly.
2. Child Care Provider First Aid/CPR Training Programs	Mark Olivas, ext. 445	There are currently 17 approved First Aid/CPR programs. Staff are reviewing three program renewals. Technical assistance is being provided to child care training program instructors and directors, licensing staff, and child care providers. EMSA First Aid and CPR sticker sales are ongoing. EMSA is continuing work to revise the Chapter 1.1 Training Standards for Child Care Providers, which includes First Aid and CPR training standards.
3. Child Care Preventive Health Training Programs	Lucy Chaidez, ext. 434	There are 24 preventive health training programs approved. There are 11 programs in the review process. There is one new program awaiting review. EMSA provides technical assistance to CCLD, CDE, and CDPH regarding numerous topics in health and safety training for the child care setting. EMSA has been asked to present at the Child Care Resource and Referral Conference in October. EMSA continues to update its nutrition web page. Technical assistance to instructors, child care providers, and government programs is ongoing. EMSA Preventive Health sticker sales are ongoing.
4. Child Care Training Provider Quality Improvement/Enforcement	Mark Olivas, ext. 445 and Lucy Chaidez, ext. 434	<p>EMSA is continuing its work to revise the Chapter 1.1 Training Standards for Child Care Providers, including First Aid, CPR, and Preventive Health training standards. Technical assistance and education regarding compliance issues is provided to approved training programs, child care providers, DSS community care licensing, and child care resource and referral staff. Review of rosters, an auditing tool, is ongoing. Currently, there are no open complaint cases involving EMSA-approved training programs.</p> <p>EMSA is participating in both the statewide Child Care Regulatory Workgroup and the CDPH (CDC grant) Essentials for Childhood Leadership Team. EMSA is also participating in the CDSS Child Care Licensing stakeholder quarterly meetings to enhance services to families and children.</p>

**Emergency Medical Services Authority
EMS Personnel Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-9875	Updates
<p>5. Automated External Defibrillator (AED) Requirements for EMT's, Public Safety and Layperson</p>	<p>Betsy Slavensky, ext. 461</p>	<p>The EMS Authority has repealed Chapter 1.8, Division 9, Title 22 of the California Code of Regulations effective September 1, 2016 for consistency with recent statutory changes. If there are any questions on requirements for lay rescuer AED, one should refer to the Statutes Section 1714.21 of the Civil Code and Section 1797.196 of the Health and Safety Code.</p> <p>Ongoing technical support and clarification is provided to public safety agencies, LEMSA's and the general public regarding all AED regulations. Review and approval of public safety AED programs according to Chapter 1.5 Section 100021 continues.</p>
<p>6. BLS Training and Certification Issues</p>	<p>Betsy Slavensky, ext. 461</p>	<p>EMSA provides ongoing daily support and technical assistance to EMTs, prospective EMTs and 73 Certifying Entities. The Commission on EMS approved the proposed EMT regulations on March 15, 2017. The regulations have been approved by Office of Administrative Law. The new EMT regulations will go into effect July 1, 2017.</p>
<p>7. State Public Safety Program Monitoring</p>	<p>Betsy Slavensky, ext. 461</p>	<p>EMSA provides ongoing review, approval & monitoring of EMSA approved Public Safety First Aid/CPR, EMR, EMT and CE programs for statutory and regulatory compliance. Revisions to the Chapter 1.5 regulations were approved and took effect April 1, 2015. The regulations require 21 hours of initial training for peace officers, firefighters and lifeguards, and eight hours of retraining every two years. EMSA provides support and clarification to LEMSAs and all statewide public safety agencies regarding the Chapter 1.5 regulations and new approval requirements. EMSA recently approved a new Public Safety First Aid/CPR course for POST and is currently reviewing programs submitted by California State Parks and Recreation as well as Cal Fire.</p>
<p>8. My License Office/ EMT Central Registry Audit</p>	<p>Betsy Slavensky, ext. 461</p>	<p>EMSA monitors the EMT Central Registry to verify that the 73 certifying entities are in compliance with the California Code of Regulations regarding data entry, including background checks and disciplinary notification for all EMT personnel. Correspondence is maintained via Newsletter, email, phone, and EMS Coordinator meetings with certifying entities to disseminate updates, changes and corrections. Website improvements, such as the new EMT page, FAQs, and archived newsletters continue to be implemented for ease of certification staff use and EMT resources. Ongoing development of discipline and certification procedures and continue to support central registry processes and reduce time spent on technical support.</p>

**Emergency Medical Services Authority
EMS Personnel Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-9875	Updates
9. Epinephrine Auto-injector Training and Certification	Corrine Fishman, ext. 927	On January 1, 2016 the EMS Authority began accepting applications for training programs to provide training and certification for the administration of epinephrine auto-injectors to the general public and off-duty EMS personnel. EMSA has approved seven training programs and has issued 320 lay rescuer certification cards.

**Emergency Medical Services Authority
Disaster Medical Services Division (DMS)
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p>1. Ambulance Strike Team (AST) – Medical Task Force (MTF)</p>	<p>Michael Frenn, ext. 435</p>	<p>AST/MTF Leader Trainings are conducted on an ongoing basis, as requested. The curriculum continues to improve based on participant feedback. A standardized method for tracking units working as a strike team is being developed. Information regarding the AST Program can be found at: http://www.emsa.ca.gov/Ambulance Strike Team.</p> <p>The recent use of Ambulance Strike Teams for hospital evacuations due to threat of potential flooding associated with the Oroville dam has raised questions about and the need to review the current understanding about reimbursement for these resources. EMSA-DMS is working with State, Federal and local partners to re-evaluate AST reimbursement.</p> <p>The Disaster Medical Support Units (DMSU), which support and have affiliated ASTs, are strategically placed with local EMS Agencies and ambulance providers throughout the State. All available DMSUs have been distributed, providing a total of 41 DMSUs with affiliated ASTs in the State.</p>
<p>2. California Medical Assistance Teams (CAL-MAT) Program</p>	<p>Michael Frenn, ext. 435</p>	<p>Recruitment by EMSA-DMS for persons interested in participating in the CAL-MAT program officially opened in late April. Initial recruitment is being targeted at existing federal Disaster Medical Assistance Team (DMAT) members (Phase I). The program contemplates up to 8 Units spread throughout the State, trained and equipped for rapid deployment to provide high-caliber medical care in all-hazard disaster events in California.</p>
<p>3. CAL-MAT Cache</p>	<p>Markell Pierce, ext. 1443</p>	<p>EMSA has currently completed the second bi-annual inventory and resupply of the (3) CAL-MAT Medical supply caches for the 2016-2017 fiscal period. This ensures that all medical supplies are 100% accounted for, in date, and ready for immediate deployment. Annual servicing of the CAL-MAT biomedical equipment has been completed for this period and is ready for immediate deployment. The revised CAL-MAT pharmacy formulary has been completed, approved, and implemented to include new medications. The overall goal was met, consisting of a more manageable, cost effective program while maintaining drugs currently prescribed by medical professionals. Inventory management and resupply of the pharmacy is ongoing every month and ready for immediate deployment.</p>

**Emergency Medical Services Authority
 Disaster Medical Services Division (DMS)
 Major Program Activities
 June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
4. California Public Health and Medical Emergency Operations Manual (EOM)	Jody Durden, ext. 702	The Regional Disaster Medical and Health Specialists (RDMHS) conduct EOM training on an ongoing basis. The EOM Workgroup is currently in the process of revising the EOM based on lessons learned since the initial 2011 release. Additional Function Specific topics will be added.
5. California Crisis Care Operations Guidelines	Bill Campbell, ext. 728	EMSA is working with CDPH to acquire funding to develop a Crisis Care/Scare Resources guidance document.

**Emergency Medical Services Authority
Disaster Medical Services Division (DMS)
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p>6. Disaster Healthcare Volunteers (DHV) of California (California's ESAR-VHP program): Registering, Credentialing & Mobilizing Health Care Personnel</p>	<p>Patrick Lynch, ext. 467</p>	<p>The DHV Program has nearly 22,000 volunteers registered. Over 19,000 of these registered volunteers are in healthcare occupations.</p> <p>Over 8,600 of the nearly 22,000 plus DHV registered responders are Medical Reserve Corps (MRC) members. EMSA trains and supports DHV System Administrators in each of the 39 participating MRC units.</p> <p>All 58 counties have trained System Administrators. EMSA provides routine training and system drill opportunities for all DHV System Administrators.</p> <p>DHV System Administrator training, DHV user group webinars, and quarterly DHV drills are ongoing. In April, EMSA conducted a quarterly DHV drill for System Administrators. There were 35 local counties and 16 MRC system administrators that participated in this exercise.</p> <p>EMSA distributed copies of the "DHV Volunteer Handbook." This handbook informs volunteers about the state's DHV Program, and provides information about deploying in response to a disaster.</p> <p>EMSA publishes the "DHV Journal" newsletter for all volunteers on a tri-annual basis. The most recent issue was released on May 30, 2017.</p> <p>The "DHV Journal" is available on the DHV webpage of the EMSA webpage: http://www.emsa.ca.gov/disaster_healthcare_volunteers_journal_page.</p> <p>The DHV website is: https://www.healthcarevolunteers.ca.gov.</p> <p>The DHV Deployment Operations Manual (DOM) is available on the EMSA webpage: http://www.emsa.ca.gov/Media/Default/PDF/DHV_DOMRevisionFebruary21-2012.pdf.</p>

**Emergency Medical Services Authority
Disaster Medical Services Division (DMS)
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p>7. Training</p> <p>Weapons of Mass Destruction (WMD)</p> <p>Medical Health Operations Center Support Activities (MHOCSA)</p>	<p>Bill Campbell, ext. 728</p> <p>Bill Campbell, ext. 728</p>	<p>The California Emergency Medical Response to Weapons of Mass Destruction Incidents (with Med-Plus) course is offered on a continuous basis, requiring a minimum enrollment of 12 students.</p> <p>The initial Medical Health Operations Center Support Activities (MHOCSA) course is being scheduled for Summer 2017. The original course planned for February 23 & 24, 2016 was postponed due to the Winter Storms event. The curriculum will be updated based on feedback received following the class. Additional classes will be scheduled soon.</p>
<p>8. 2017 Statewide Medical and Health Exercise (2017 SWMHE)</p>	<p>Theresa Gonzales, ext. 1766</p>	<p>The 2017 Statewide Medical and Health Exercise (SWMHE) is scheduled for November 16, 2017. The Emergency Medical Services Authority in conjunction with the California Department of Public Health and emergency management partners continue to plan for this event. The exercise is designed as a multiphase exercise program for statewide participants to exercise response to a terrorist incident. In addition, the exercise will include objectives for Ambulance Services, Behavioral Health, Community Clinics, Emergency Medical Services Agencies, Fire Services, Hospitals, Law Enforcement, Long Term Care Facilities, Medical Examiners/Coroners, Offices of Emergency Management, and Public Health. The jurisdiction-specific objectives are designed to further enhance participants' exercise play.</p>
<p>9. Hospital Available Beds for Emergencies and Disasters (HAvBED)</p>	<p>Nirmala Badhan, ext. 1826</p>	<p>Federal requirements for HAvBED reporting have been discontinued. However, EMSA is working with the California Department of Public Health (CDPH) and other partners to determine how to continue to integrate hospital data collection for California use.</p>

**Emergency Medical Services Authority
Disaster Medical Services Division (DMS)
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p>10. Hospital Incident Command System (HICS)</p>	<p>Virginia Osuna-Fowler, ext.413</p> <p>hics@emsa.ca.gov</p>	<p>The Fifth Edition of HICS was released in May of 2014 and is available on the EMSA website for download: http://www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system.</p> <p>The 2014 revision project did not include the development of education and training materials. Refer to the list of HICS Trainers to view vendors which have identified themselves as providing HICS training based on The HICS Guidebook, Fifth Edition: http://www.emsa.ca.gov/media/default/HICS/HICS_Training_7.pdf . The California Emergency Medical Services Authority does not endorse or recommend any provider. If you are a trainer that would like to be added to this list, please send a request to: hics@emsa.ca.gov along with your contact information.</p> <p>EMSA would like to receive copies of After Action Reports (AAR) and presentations on the use of HICS. This information will aid future revisions. These informative documents should be addressed to the HICS Coordinator via email: hics@emsa.ca.gov.</p>
<p>11. Mission Support Team (MST) System Development</p>	<p>Michael Frenn, ext. 435</p>	<p>Position Duty Statements developed as part of the CAL-MAT program also included positions needed to staff MSTs, which would be needed to support EMSA's Mobile Medical Assets when deployed to major events. EMSA-DMS is recruiting persons interested in filling these positions as part of the recruitment for the CAL-MAT Program.</p>

**Emergency Medical Services Authority
 Disaster Medical Services Division (DMS)
 Major Program Activities
 June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
12. Response Resources	Markell Pierce, ext. 1443	<p>The bi-annual inventory maintenance of the Mission Support Team (MST) caches was completed in 2017. The MST caches are constantly being refined based on After Action Reports following exercises and real word deployments. In addition, the Response Resources Unit (RRU) is currently working to add I.T. and telecommunications equipment to improve MST networking infrastructure and Internet functionality in the field.</p> <p>The RRU has completed audits on the 41 Disaster Medical Support Unit (DMSU) vehicles located around the State. During the audits, EMSA verified that all the DMSU vehicles are being properly maintained and utilized according to written agreements. New audits are in progress focusing on Region 4 and Region 5.</p> <p>Annual servicing of the biomedical equipment for the California Medical Assistance Teams (CAL-MAT) caches was completed in 2016. Currently the CAL-MAT cache resupply process is underway for 2017. A multi-year contract to service the CAL-MAT biomedical equipment has been established.</p> <p>Routine maintenance for generators, forklifts, and fleet vehicles is ongoing. There are currently no major problems.</p>

**Emergency Medical Services Authority
Disaster Medical Services Division (DMS)
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p>13. Mobile Medical Shelter Program (MMSP)</p>	<p>Bill Hartley, ext. 18 02</p>	<p>Working with other state agencies, and within existing resources, the EMS Authority has redesigned the Mobile Field Hospital (MFH) program into the California Mobile Medical Shelter program. The purpose of the redesign is to modify and expand the potential uses of the equipment into general staging, stabilization and shelter capacity.</p> <ol style="list-style-type: none"> 1. The structures and durable equipment of the first MFH will be stored at the EMS Authority and utilized to bolster the CAL-MAT program and support local emergencies through the Mobile Medical Shelter program. 2. The EMS Authority has reconfigured the 2nd MFH into six (6) multiuse modules to distribute to local partners. We are working with the RDMHSs and LEMSAs to locate one module in each Cal OES Mutual Aid Region. The modules will include the shelters, infrastructure equipment, and durable equipment, but will not include biomedical equipment and medical supplies. This redistribution of the MFH would allow local partners to rapidly deploy this resource. Potential uses include: field sites for Local/Regional incidents, triage/treatment during flu season surge, medical clinic, medical shelter, emergency operations center, staff quarters, disaster exercise, and any other use that requires a field facility. Deployment would be at the discretion of the locals without requiring a state resource request. Placement of the first two modules in Long Beach and Santa Cruz is being scheduled in June 2017 with the third closely following in Riverside. 3. The third MFH was transferred on September 8, 2016 to the State Military Department for use by the California National Guard.
<p>14. Regional Disaster Medical/Health Specialists (RDMHS) Program and Medical Mutual Aid System</p>	<p>Nirmala Badhan, ext. 1826</p>	<p>The RDMHS program continues to work with EMSA and California Department of Public Health (CDPH) staff in supporting major disaster planning activities in addition to supporting information management processes. The RDMHS, have been instrumental in the response to recent events in California, such as the winter storms and the Oroville Dam Auxiliary Spillway incident.</p>

**Emergency Medical Services Authority
Disaster Medical Services Division (DMS)
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
15. Medical Reserve Corps (MRC)	Sheila Martin, ext. 465	<p>39 MRC units have trained Disaster Healthcare Volunteers (DHV) System Administrators. These MRCs are regular users of the DHV system and active participants in quarterly DHV drills and quarterly DHV user group webinars. Over 8,900 of the DHV Program's 22,000 volunteers are Medical Reserve Corps volunteers.</p> <p>EMSA sponsored a 1½ day Statewide MRC Coordinators Workshop on March 6 & 7 at the Authority's headquarters. Speakers included the Director of the National MRC Office, Capt. Rob Tosatto USPHS, and Katherine Deffer of the National Association of City and County Health Officials (NACCHO).</p>
16. Statewide Emergency Plan (SEP) Update	Jody Durden, ext. 702	The Governor's Office of Emergency Services (Cal OES) is in the process of updating the Statewide Emergency Plan (SEP) and is moving toward better implementation of the Emergency Functions (EFs). EMSA is a lead participant in the development of the Public Health and Medical Emergency Function (EF 8) of the SEP and supports the development of six other EFs.
17. Southern California Catastrophic Earthquake Response Plan	Theresa Gonzales, ext. 755	EMSA continues to participate in the validation of the Southern California Catastrophic Earthquake Plan and will be a key participant in future revisions. EMSA is currently working with the California Department of Public Health to update the Public Health Fact Sheet portion of the plan.
18. Patient Movement Plan	Jody Durden, ext. 702	The Statewide Patient Movement Workgroup met in January 2017 to participate in a tabletop exercise based on the draft plan in development. The exercise provided an opportunity to test the plan and identify gaps. The draft plan was released for comment to the Patient Movement Workgroup members and tabletop exercise participants in March 2017. The comments received will be considered for revisions prior to release for public comment.
19. Bay Area Catastrophic Earthquake Plan	Bill Campbell, ext. 728	EMSA participated in the Medical Planning Group for the Bay Area Catastrophic Earthquake Plan revision. EMSA continues to participate in the socialization of the plan.

**Emergency Medical Services Authority
 Disaster Medical Services Division (DMS)
 Major Program Activities
 June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
20. Northern California Catastrophic Flood Response Plan	Nirmala Badhan, ext. 1826	EMSA is working with the Governor’s Office of Emergency Services (Cal OES) for the development of the Northern California Catastrophic Response Plan. EMSA worked closely with the California Department of Public Health to develop a Public Health and Medical Information Analysis Brief. This document is the basis of the Public Health and Medical section of the response plan. The draft plan was presented to Cal OES Executive leadership on May 31, 2017.

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
1. Trauma	Bonnie Sinz, ext. 460	<p><u>Statewide Trauma System Recommendations from the State Trauma Advisory Committee (STAC) and American College of Surgeons (ACS) Consultation Report</u> Both reports have been released and are now available on the EMSA website. The STAC recommendations are closely aligned with the ACS Report, mainly because they were both based on the same national standards. Both documents are being distributed to system stakeholders to stimulate discussion and elicit interest in working on various objectives.</p> <p><u>State Trauma Advisory Committee (STAC):</u> The STAC met on May 3rd in San Diego. The agenda focus was the release of the Statewide Trauma System Planning Recommendations and the American College of Surgeons' Trauma System Consultation Report.</p> <p><u>Trauma Summit:</u> The Trauma Summit was held at the Holiday Inn Bayside, San Diego on May 2nd and 3rd, 2017. Registration totaled 198 with excellent reviews. The next Summit will be May 8th and 9th, 2018 in San Diego.</p> <p><u>Regional Trauma Coordinating Committees (RTCC)</u> Each Regional Trauma Coordinating Committee hosts its own meetings and conference calls with a schedule provided to EMSA. An EMSA representative participates in these meetings/calls and provides a State of State Trauma Update. The chair of each RTCC provides a report on regional activity updates at the STAC meeting and provides documents approved by the RTCC and available for statewide use. Details of current activities can be found on the EMSA website at www.emsa.ca.gov.</p> <p><u>Performance Improvement and Patient Safety (PIPS) Plan</u> The draft PIPS Plan completed its public comment process with a new draft being completed based on the comments received. The PIPS Work Group will be reconvened to review the revised Plan and a repeat public comment period will be scheduled. The Plan will be submitted to the Commission on EMS for approval once the review/revision process has been completed.</p>

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates												
		<p><u>Regional Trauma Network for Re-Triage Subcommittee</u> The <i>Regional Trauma Network for Re-Triage</i> guidance document draft was submitted to the EMSA executives for review. A revised document will be sent to the committee and STAC when completed. The document provides guidelines for non-trauma centers on early management protocols, data collection and analysis regarding re-triage and IFT patterns throughout the state, to reduce delays on patient transfer, improve communication and care for Trauma patients.</p> <p><u>Re-Triage Project</u> The re-triage project was initiated January 1, 2107 as part of the Strategic Highway Safety Program. Data on re-triaged cases are being collected from 11 Trauma Centers across the state:</p> <table border="0"> <tr> <td>UC Davis Medical Center</td> <td>UCSF Benioff Children’s Hospital Oakland</td> </tr> <tr> <td>Stanford University Medical Center</td> <td>Community Regional Medical Center-Fresno</td> </tr> <tr> <td>Valley Children’s Hospital</td> <td>Loma Linda University Medical Center</td> </tr> <tr> <td>UC San Diego Medical Center</td> <td>Rady’s Children’s Hospital</td> </tr> <tr> <td>Children’s Hospital Los Angeles</td> <td>Children’s Hospital Orange County</td> </tr> <tr> <td>UC Irvine Medical Center</td> <td></td> </tr> </table> <p>Data will be analyzed to determine time to definitive care on re-triaged cases. Areas for improvement will be identified with follow up education as needed.</p>	UC Davis Medical Center	UCSF Benioff Children’s Hospital Oakland	Stanford University Medical Center	Community Regional Medical Center-Fresno	Valley Children’s Hospital	Loma Linda University Medical Center	UC San Diego Medical Center	Rady’s Children’s Hospital	Children’s Hospital Los Angeles	Children’s Hospital Orange County	UC Irvine Medical Center	
UC Davis Medical Center	UCSF Benioff Children’s Hospital Oakland													
Stanford University Medical Center	Community Regional Medical Center-Fresno													
Valley Children’s Hospital	Loma Linda University Medical Center													
UC San Diego Medical Center	Rady’s Children’s Hospital													
Children’s Hospital Los Angeles	Children’s Hospital Orange County													
UC Irvine Medical Center														
<p>2. STEMI/Stroke Systems of Care</p>	<p>Farid Nasr, ext. 424</p>	<p><u>STEMI and Stroke Regulations</u> The Regulations for both STEMI and Stroke were submitted for a 15-day second public comment period starting April 28 – May 12, 2017 after revising the draft based on the comments from the first public comment period. EMSA staff is reviewing and responding to the comments. EMSA staff will revise and update the draft and the other documents in the rule making action process for submission to the Commission.</p>												

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
3. EMS System, Standards, and Guidelines	Lisa Galindo, ext. 423	<p>EMS System Standards and Guidelines #101 - 103 (dated June 1993 and March 1994) are in the process of being updated.</p> <p>An EMS Plan Workgroup was developed in November 2015 to revise the required EMS Plan documentation and update the EMS Plan submission process. The workgroup has met regularly and developed draft changes to the required EMS Plan documentation.</p>
4. EMS Transportation	Laura Little, ext. 412	<p><u>EMS Systems Regulations Work Group / Chapter 13 Task Force:</u> On hiatus, pending outcome of litigation, related to the subject matter involved in the regulation draft.</p> <p><u>Request for Proposals:</u> Request for Proposals (RFPs) for Exclusive Operating Areas continue to go through a dual review process to ensure that they meet statutory requirements as well as address EMSA Guideline #141 "Competitive Process for Creating Exclusive Operating Areas". EMSA continues to provide technical assistance to LEMSAs in order to help them create a RFP that meets all required criteria.</p> <p><u>Bi-Annual Statewide Public Safety Air Rescue Inspections:</u> Bi-Annual inspections of State public safety agencies, specifically the California National Guard Air ALS Rescue vehicles, are to be inspected this year.</p>

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
5. Poison Center Program	Lisa Galindo, ext. 423	<p>The California Poison Control System (CPCS) is one of the largest single providers of poison control services in the U.S. The CPCS is made up of four designated Poison Control Centers. The CPCS receives approximately 330,000 calls a year from both the public and health professionals through a toll-free hotline that is accessible 24-hours a day, 7 days a week.</p> <p><u>Quarterly Reports</u> Reports continue to be submitted to the EMS Authority for evaluation of poison control system operations and to ensure contractual compliance.</p> <p><u>Request for Information (RFI)</u> An RFI has been drafted. The RFI solicits information from prospective service providers interested in serving as the sole provider of poison control services for the State of California.</p> <p><u>Request for Offer (RFO)</u> An RFO has been drafted. The RFO will be used to seek a California Multiple Award Schedules Contractor to perform a comprehensive program and fiscal evaluation of the CPCS.</p>
6. EMS Plans	Lisa Galindo, ext. 423	<p>The EMS Authority continues to review EMS Plans and annual Plan Updates as they are submitted by the LEMSAs. Electronic reminders to the LEMSAs are being provided at a minimum of two months in advance of their scheduled submissions.</p> <p>A quarterly update has been provided to the Commission reflecting the progress and time lines of EMS Plan submissions.</p>

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
7. EMS for Children Program	Heidi Wilkening, ext. 556	<p><u>Regulations:</u> Required changes to the draft EMSC regulations are being processed prior to submitting to Health and Human Services Agency for review.</p> <p><u>Educational Forum:</u> The 20th Annual EMS for Children Educational Forum will be held on Thursday, November 9, 2017 in Sacramento. Speakers have been recruited and the EMSC TAC is in the process of obtaining additional sponsors and vendors.</p> <p><u>Trauma Summit:</u> The EMSC Coordinator attended the 2017 Trauma Summit to provide education on EMSC events and information.</p>

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
8. CEMSIS EMS Data	Adrienne Kim, ext. 742	<p>CEMSIS now has 23 LEMSAs participating at some level in the submission of EMS data. On January 1, 2017, many LEMSAs transitioned to NEMSIS V3 and EMSA is providing technical assistance and guidance to LEMSAs that are still in the process of transitioning to NEMSIS Version 3 consistent with AB 1129 which implemented HSC 1797.227.</p> <p><u>Electronic Mobile Device Grant:</u> EMSA personnel have reviewed the applications submitted. The recipients have been chosen and the funds will be distributed in the near future.</p> <p><u>Key Indicator Reports:</u> Staff is developing reports to confirm the LEMSA data that were submitted into CEMSIS from the previous quarter. These reports will be sent to each individual LEMSA.</p> <p><u>Annual EMS & LEMSA Reports:</u> Staff is developing reports for 2014 and 2015. Work continues on these reports that and they are expected to be available mid-2017.</p>
9. CEMSIS – Trauma Data	Nancy Marker, Ext. 460	<p>There are 27 Local EMS agencies (LEMSA) with designated Trauma Centers. Trauma Centers are located in 37 of the 58 counties. Currently 26 LEMSAs are transmitting into CEMSIS-Trauma representing 77 of the 79 designated Trauma Centers. The State Trauma Coordinator is providing technical assistance to Imperial County (2-level IV Trauma Centers) to obtain their trauma data. The EMS Authority is continuing to develop a report for each LEMSA showing data completion compliance to be shared with their Trauma Centers.</p>
10. Communications	Heidi Wilkening, ext. 556	<p>EMSA personnel attended the APCO Western Regional Conference in Ontario in April 2017. We are continuing to work with the Office of Emergency Services (OES) to address public concerns on issues related to Wireless 9-1-1. This position is currently vacant and a recruitment process will start in the near future.</p>
11. Core Measures	Adam Davis, ext. 409	<p>EMSA received Core Measure submissions from 27 of the 33 LEMSAs. EMSA Staff is developing the submissions into the report format for review by the Core Measures Task Force. The Task Force will be meeting to revise the Core Measures Specifications and Instruction Manual in the NEMSIS 3 data standard.</p>

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
12. HIE Summit	Adam Davis, ext. 409	The 4 th California HIE in EMS Summit hosted 153 stakeholders at the Sheraton Park Hotel, in Anaheim, California. The two-day event included participation from Federal EMS partners as well as showcased demonstrations projects currently being conducted in California as part of a grant from the Office of the National Coordinator. The Summit received excellent reviews from attendees.
13. Grant Activity/Coordination	Lori O'Brien, ext 401	<p><u>Office of Traffic Safety (OTS) Grants:</u> EMSA currently is involved with three (3) OTS grants.</p> <ol style="list-style-type: none"> 1. The CEMSIS project continues to improve the data traffic profile within the EMS and Trauma data that is collected in CEMSIS. 2. The Electronic Mobile Devices grant is moving along, All ten contracts were completed and sent to the LEMSAs for signature. Six of the ten contracts have been returned and fully executed, and first quarter reports have been received from all ten awardees. 3. The Server grant is progressing on track, with the server purchased, installed, and placed into service in February, 2017. <p>Second quarter reports were completed for the three OTS grants and were submitted by EMSA to OTS on April 28, 2017</p> <p><u>Health Resource Services Administration (HRSA) Grant:</u> EMSA staff continues the work associated with the Health Resource Services Administration (HRSA) grant to further integration of the Emergency Medical Service for Children (EMSC) into the State EMS system.</p> <p><u>Preventative Health and Health Services Block Grant (PHHSBG):</u> The State Plan was submitted to CDPH in March, 2017, and accepted by the Advisory Committee on May 10, 2017. Semi-annual reports for FFY 2016 are anticipated to be due in June.</p>

**Emergency Medical Services Authority
EMS Systems Division
Major Program Activities
June 21, 2017**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
14. Office Support	Tiffany Pierce ext. 900	<p>I introduced Spice Works to our unit in order to track assignments.</p> <p>Tasks supported by this office include:</p> <ul style="list-style-type: none"> • Routing letters and process them after they've been approved (copy, scan, mail, etc). • Assisting with editing comments and responses for the Stroke and STEMI Regulations and attended a conference call/meeting concerning the regulations. • Supported preparations for the Trauma Summit. • Other frequent tasks include: scanning, printing, making labels, making folders, making binders, setting up meetings and interviews, submitting FADs, updating and maintaining Spice Works, and other office tasks.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Jennifer Lim
Deputy Director, Policy, Legislative & External Affairs

SUBJECT: Legislative Report

RECOMMENDED ACTION:

Receive information regarding current bills potentially affecting EMS.

FISCAL IMPACT:

None

DISCUSSION:

Due to the dynamic nature of the legislative process, the Legislative Report to the Commission on EMS will be posted on the EMSA website at http://www.emsa.ca.gov/current_legislation. Copies of the printed Legislative Report will also be available at the Commission Meeting on June 21, 2017.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DRIVE, SUITE 400
RANCHO CORDOVA, CA 95670-6073
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Rick Trussell
Chief of Administration

SUBJECT: Administrative and Personnel Report

RECOMMENDED ACTION:

Receive information on EMSA Administration and Personnel

FISCAL IMPACT:

None

DISCUSSION:**EMS Authority Budget****2015/16**

The 2015/16 enacted California State budget included expenditure authority in the amount of \$35.5 million. Of this amount, \$15.3 million is delegated for State operations and \$20.2 million is delegated to local assistance.

The year-end close process through June 30, 2016 has been completed and accounting records indicate that the EMS Authority has expended and/or encumbered \$26.5 million or 74.6% of available budget authority. Of this amount, \$11.7 million or 76.6% of State Operations funding has been expended and/or encumbered and \$14.8 million or 73% of local assistance funding has been expended and/or encumbered.

The Department is still in the process of reconciling posted expenses which occurred after June 30, 2016, performing accounting corrections, as needed, and completing manual data entry into FI\$Cal of financial obligations which were paid through the SCO paper claim process. Once these tasks are completed an updated report will be distributed prior to the next Commission meeting.

2016/17

The 2016/17 enacted California State budget includes expenditure authority in the amount of \$36.1 million. Of this amount, \$15.1 million is delegated for State operations and \$21 million is delegated to local assistance.

Preliminary accounting records indicate that the EMS Authority has expended and/or encumbered \$17.5 million or 76.6% of available budget authority. Of this amount, \$9.5 million or 62.7% of State Operations funding has been expended and/or encumbered and \$18.1 million or 86.6% of local assistance funding has been expended and/or encumbered.

The Department is still in the process of performing accounting corrections, as needed, and completing manual data entry into FI\$Cal of financial obligations which were paid through the SCO paper claim process. Once these tasks are completed an updated report will be distributed prior to the next Commission meeting.

2017/18

The Governor's May Revise Budget for 2017/18 released in May 2015 includes expenditure authority in the amount of \$36.8 million and 68.9 permanent positions. Of this amount, \$15.9 million is delegated for State operations and \$20.9 million is delegated to local assistance. Workload budget adjustments included in the proposed budget include the following:

- **EMT-P Discipline Case Workload:** EMSA is requesting 2 permanent positions (an Attorney I and a Staff Services Analyst) and temporary Emergency Medical Services Personnel (EMSP) Fund Authority (0312) of \$314,000 during Fiscal Year (FY) 2017-18 and FY 2018-19. The requested positions and temporary budget authority will be utilized to address the increased Emergency Medical Technicians–Paramedic (EMT-P) disciplinary legal caseload currently being handled by retired annuitants and student assistants. During FY 2018-19, the EMS Authority will reassess personnel needs and determine the appropriate staffing level based on caseload. There is sufficient revenue within the EMSP Fund to fund this request while still maintaining a 5% reserve, as required by statute.
- **E-Commerce Online Paramedic Licensing Module (eGov):** EMSA is requesting increased expenditure authority from the Emergency Medical Services Personnel-(EMSP) Fund (0312) of \$211,000 in Fiscal Year (FY) 2017-18 and \$71,000 annually thereafter. The one-time funding will be utilized to purchase the propriety software (eGov) required to modify the existing paramedic licensing system, My License Office (MLO), which will enable paramedic license applicants to apply for their license online, submit licensing fees electronically, and provide other program functionality. The on-going funding will be utilized for system administration and hosting costs. There is sufficient revenue within the EMSP Fund to fund this request while still maintaining a 5% reserve as required by statute.

EMS Authority Staffing Levels

The EMS Authority is currently authorized 67 positions and also has 20 temporary (blanket positions and retired annuitants) positions for an overall staffing level of 87. Of the 87 positions, 7 positions are vacant at this time and we are in the process of recruiting to fill the positions.

	Division				
	Admin/Exec	DMS	EMSP	EMS	Total
Authorized	15.0	21.0	22.0	9.0	67.0
Temporary Staff	8.0	3.0	4.0	5.0	20.0
Staffing Level	23.0	24.0	26.0	14.0	87.0
Authorized (Vacant)	-1.0	-3.0	-2.0	-1.0	-7.0
Temporary (Vacant)	0.0	0.0	0.0	0.0	0.0
Current Staffing Level	22.0	21.0	24.0	13.0	80.0

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
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(916) 322-4336 FAX (916) 322-1441



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Lisa Galindo
EMS Plans Coordinator

SUBJECT: EMS Plan Status Update

RECOMMENDED ACTION:

Receive updated information from the EMS Authority (EMSA) on the status of EMS Plan activity and the progress related to the EMS Plan Workgroup.

FISCAL IMPACT:

None

DISCUSSION:**EMS Plan Activity:**

EMSA is providing the Commission with an update on the statewide EMS Plan activity. Please refer to the below matrix for a summary of the following items:

- Appeals and EMS Plan Submissions
- EMS Plan Determinations and Average Review Time of Plans Submitted

EMS Plan Workgroup:

An EMS Plan Workgroup was developed in November 2015 to focus on improving processes related to EMS Plans. The workgroup consists of EMSA and LEMSA Administrators who meet twice a month. To date, the workgroup has discussed meeting goals and objectives, proposed online database configurations, and have finalized the draft changes to the Minimum Standards/Recommended Guidelines section of *EMSA Guidelines, #101*, and the Table section of *EMSA Guidelines, #103*.

EMSA is currently in the process of developing the dataset for the architectural structure of the EMS Plan design; the goal is to complete this section by May 31, 2017.

EMSA will continue to keep the Commission apprised of the activity involving EMS Plans and the progress of the EMS Plan Workgroup.

EMS PLAN ACTIVITY

Report Summary As of April 30, 2017		
Appeals		# of Plans
Plans Not Approved due to Transportation Issues		2
EMS Plan Submissions	# of LEMSAs	Percentage
Timely Submissions	29	88%
Late Submissions	0	0%
Past Due	4	12%

Quarterly Report February 1 – April 30, 2017	
EMS Plan Determinations	# of Plans
Plans Submitted	1
Plans Approved*	3
Plans Not Approved*	1
Average Review Time of Plans Submitted	# of Days
LEMSA Submission of a <u>Complete</u> Plan Through EMSA Plan Determination	24

* May represent plans submitted during a previous quarter.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Laura Little, EMT
Transportation Coordinator

SUBJECT: EMS Plan Appeals Update

RECOMMENDED ACTION:

Receive information on the status of the EMS Plan Appeals.

FISCAL IMPACT:

Unknown specific costs to the EMS Authority and local EMS agencies who request the ability to exercise their right to appeal an EMS plan determination made by the EMS Authority.

DISCUSSION:

Kern County EMS Agency, El Dorado County EMS Agency, and Santa Clara County EMS Agency have filed appeals regarding the EMS Authority's EMS Plan determinations.

Kern County's appeal hearing was scheduled, based on calendaring conflicts it is in the process of being re-scheduled by the Office of Administrative Hearings for determinations made related to the Kern County's EMS Plan.

El Dorado County's appeal hearing is pending, as available dates have not been provided by El Dorado County EMS agency.

Santa Clara County EMS agency has recently informed the EMS Authority they are appealing a recent denial of their EMS Plan. We are in the initial stages of evaluating their appeal.

There are now three EMS Plan denial Appeals in process. The Commission will be updated on the status of appeal hearings at future Commission meetings.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DRIVE, SUITE 400
 RANCHO CORDOVA, CA 95670
 (916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
 Director

PREPARED BY: M.D. Smith
 Supervising Special Investigator
 Paramedic Enforcement Unit

SUBJECT: Enforcement Report

RECOMMENDED ACTION:

Receive information on Enforcement Unit activities.

FISCAL IMPACT:

None

DISCUSSION:**Unit Staffing:**

As of May 1, 2017, the Enforcement Unit has 5 full-time Special Investigators, 1 Retired Annuitant working as Special Investigator and 1 vacant position, Associate Government Program Analyst (AGPA); whose primary functions are Case Management and Probation monitoring.

Investigative Workload:

The following is a summary of currently available data extracted from the paramedic database.

Cases opened since January 1, 2017, including:

Cases opened:	111
Cases completed and/or closed:	128
EMT-Paramedics on Probation:	224

In 2016:

Cases opened:	342
Cases completed and/or closed:	377
EMT-Paramedics on Probation:	226

Status of Current Cases:

The Enforcement Unit currently has 105 cases in “open” status.

As of May 1, 2017, there are 31 cases that have been in “open” status for 180 days or longer: 10 Fire Fighters’ Bill of Rights (FFBOR) cases and 7 California Society of Addiction Medicine CSAM cases (Respondents are directed to a physician who specializes in addiction medicine for an examination/review).

Those 31 cases are divided among 6 Special Investigators and are in various stages of the investigative process, (i.e. awaiting documents, preparing for and/or setting up interviews, report writing and corrections to be made, awaiting action by local law enforcement jurisdictions, the courts, etc.).

[Delays in the interview process are common due to unforeseen difficulties in obtaining certified copies of documents, court records, availability of witnesses and/or the subject(s) of an investigation due to medical action/disability issues, on-going investigations for FFBOR staff or on-going criminal investigations, court actions, plus the routine requirement for two or more follow-up interviews.]

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DRIVE, SUITE 400
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DATE: June 21, 2017
TO: Commission on EMS
FROM: Howard Backer, MD, MPH, FACEP, Director
PREPARED BY: Steven A. McGee, Administrative Adviser
SUBJECT: Legal Report

RECOMMENDED ACTION:

Receive information on Legal Office Activities.

FISCAL IMPACT:

None

DISCUSSION:**Disciplinary Cases:**

From February 17, 2017, to May 19, 2017, the Authority issued twenty new Accusations against existing paramedic licenses, issued two Temporary Suspension Orders, issued four Statements of Issues denying an unrestricted license, and issued three administrative fines. Of the newly issued actions, four of the Respondents have requested that an administrative hearing be set. There are currently six hearings scheduled. There are currently fifty-two open active disciplinary cases in the legal office.

Litigation:

California Fire Chiefs Association, Inc., vs. Howard Backer and Daniel Smiley. The suit pertains to federal anti-trust protections claimed by Calchiefs on behalf of its members pursuant to Health and Safety Code section 1797.201. The case was dismissed by the appellate court on December 27, 2016. However, on January 18, 2017, CalChief's re-filed the suit, claiming that recently filed lawsuits in Orange County now show an actual harm. On April 21, 2017, Calchief's voluntarily dismissed the suit against EMSA.

Kenneth M. Silverman vs. EMSA. This is a petition for writ of mandate, seeking review of an Administrative Law Judge's proposed decision that was adopted without modification by EMSA. Petitioner was denied an unrestricted license and was offered a probationary license by EMSA. Petitioner appealed the denial and a hearing was held. The ALJ granted a license with probationary terms. Petitioner sought to have that decision overturned. The Superior court determined that EMSA's adoption of the ALJ's proposed decision was within the Director's discretion and dismissed the complaint.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Bonnie Sinz, RN, BS
Trauma System Coordinator

SUBJECT: Statewide Trauma Planning, State Trauma Advisory Committee
Recommendations

RECOMMENDED ACTION:

Receive information on the Statewide Trauma Planning Recommendations from the State Trauma Advisory Committee (STAC).

FISCAL IMPACT:

None

DISCUSSION:

The California Statewide Trauma Planning Recommendations from the STAC were released on May 1, 2017. These recommendations are a culmination of 5 years of work by the STAC and are based on an evaluation of California's current delivery of trauma care. The 2006 American College of Surgeons' (ACS) Committee on Trauma *Regional Trauma Systems: Optimal Elements, Integration, and Assessment* guidance document, the 2006 Health Resources Services Administration (HRSA) *Model Trauma System Planning and Evaluation* report, and recommendations from the ACS's Trauma System Consultation Visit were reviewed to address national standards in these Statewide Trauma System Planning recommendations.

In addition to these recommendations, the ACS Trauma System Consultation Report from March 2016 was also released and placed on the EMSA website. These two documents are closely aligned, mainly because they were both based on the same national standards. These are being distributed to system stakeholders to stimulate discussion and elicit interest in working on various objectives. Comments and suggestions may be made to the appropriate organizational representative on the STAC.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR STE 400
RANCHO CORDOVA, CA 95670-6073
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Corrine Fishman, Program Analyst

SUBJECT: Paramedic Regulations Revision

RECOMMENDED ACTION:

Receive information regarding paramedic regulation revisions.

FISCAL IMPACT:

The EMS Authority is proposing to increase paramedic licensing fees by \$50 to be phased in over a two year period starting in 2019. This fee increase is necessary to cover increased costs to the paramedic licensure, enforcement, and legal units. This proposed fee increase would impact approximately 11,000 paramedic applicants per year. The EMS Authority is also proposing to increase out-of-state continuing education (CE) provider fees from the current \$200 to \$2,500. Currently there are two out-of-state CE providers, one in Reno, NV and the other in Dallas, TX. The EMS Authority is also proposing a \$2,500 CE provider fee for statewide public safety agency that have CE approvals from the EMS Authority. This fee increase would cover the EMS Authority's costs of monitoring and ensuring compliance with CE provider requirements. Currently the only statewide public safety agency that has a CE provider approval is the CHP.

DISCUSSION:**Background:**

The last revision to the Paramedic Regulations occurred in 2013. In that revision the EMS Authority:

1. Added a number of local optional scope medications to the paramedic basic scope of practice.
2. Introduced the Critical Care Paramedic training and certification requirements, along with the CCP scope of practice.
3. Introduced controlled substance security policy requirements.

Proposed revisions:

With this rulemaking, the EMS Authority is proposing to:

1. Increase the minimum required course hours from 1090 to 1094 to include tactical casualty care principles.
2. Require paramedic providers to submit an electronic health record consistent with AB 1129.
3. Update the paramedic licensure applications.
4. Update the paramedic licensure process.
5. Clarify licensure testing eligibility as part of the paramedic training program accreditation process.
6. Change the training program approving authority to where the training program is located instead of headquartered.
7. Starting January 1, 2020 require that prerequisites of a college level course in introductory anatomy and physiology with lab and introductory psychology be added to the student eligibility requirements.
8. Increase paramedic licensure fees and the approval fees of out-of-state and California statewide public safety agency CE providers.
9. Provide clarity throughout the chapter through grammatical edits.

IMPLEMENTATION STEPS AND TIMELINE:

June 2017	Submit for approval to Health and Human Services Agency and Department of Finance.
August 2017	Open rulemaking file with Office of Administrative Law for public comment.
August 2017	Release the proposed regulations for 45-day public comment.
June 2018	Submit to Commission on EMS for approval.
October 2018	Revised Paramedic Regulations become effective.

EMERGENCY MEDICAL SERVICES AUTHORITY

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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Heidi Wilkening
EMS for Children Coordinator

SUBJECT: EMS for Children Regulations Update

RECOMMENDED ACTION:

Receive information on the draft EMS for Children Regulations.

FISCAL IMPACT:

No new fiscal impact with the EMS for Children Regulations package.

DISCUSSION:

The EMS Authority is in the process of revising portions of the EMS for Children Regulations. Upon completion of revisions, the draft EMS for Children Regulations will be submitted to the Health and Human Services Agency.

Following approval from Agency, the draft EMS for Children Regulations will be submitted as a rulemaking package to the Office of Administrative Law.

The Commission will be kept informed on our progress with the draft EMS for Children Regulations rule making process.

EMERGENCY MEDICAL SERVICES AUTHORITY

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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Priscilla Rivera, Manager
Personnel Standards Unit

SUBJECT: Community Paramedicine Pilot Program Update

RECOMMENDED ACTION:

Receive information regarding the Community Paramedicine Pilot.

FISCAL IMPACT:

The Community Paramedicine Project Manager and the Evaluator are funded by the California HealthCare Foundation. Local pilot site providers participate with in-kind contributions and any local grants or reimbursement.

DISCUSSION:

Strong progress continues with all of the Community Paramedicine Projects. The data as well as the independent evaluators' public report, shows that most of these projects have improved patient care as well as having reduced Hospital Re-Admissions and visits to Emergency Departments.

Independent Evaluators Activity:

The University of California, San Francisco's Healthforce Center, particularly Dr. Janet Coffman, continues in her role as the Independent Evaluator for HWPP #173. In that role Dr. Coffman filed the 4th Quarter 2016 Report on Implementation of HWPP #173 – Community Paramedicine with OSHPD, on March 30, 2017, as required by regulation. This report summarized the evaluators' findings regarding implementation during the months of October, November, and December 2016. Previous reports addressed implementation in June and July 2015, August and September 2015, October through December 2015, January through March 2016, April through June 2016, and July through September 2016.

The 4th Quarter 2016 data as well as the independent evaluators' public report, continues to show that most of these projects have improved patient care as well as having reduced Hospital Re-Admissions and visits to Emergency Departments.

An exception to this is that the Alternate Destination – Urgent Care projects continue to experience low enrollment. Neither CP001 (UCLA) nor CP009 (Carlsbad) enrolled any patients during the fourth quarter of 2016 and C003 (Orange) enrolled only three patients.

There are believed to be multiple reasons why enrollment in these projects is substantially lower than anticipated, including

- Lower than expected numbers of patients who meet the inclusion criteria (all sites)
- Many 911 calls occur at times of the day during which urgent care centers are closed (all sites)
- Enrollment limited to persons of a single insurance carrier (CP009)
- Enrollment limited to non-elderly adults (CP009)

Additionally, in her role as the Independent Evaluator, Dr. Coffman was requested by Assembly Member Brian Maienschein the author of AB 1650, to testify before the Assembly Health Committee in reference to the findings contained within the UCSF Independent Evaluators Report.

CP 014 San Francisco City and County Alternate Destination Sobering Center Status:

OSHPD's authorization to add CP 014 City and County of San Francisco's Alternate Destination Sober Center Pilot Project to HWPP #173 was contingent upon the City and County of San Francisco successfully meeting all the requirements for implementation inclusive of an approved Institutional Review Board (IRB), which they received on December 4, 2016.

The City and County of San Francisco completed all of their OSHPD and EMSA requirements for inclusion in HWPP #173 and were authorized to implement their Alternate Destination – Sobering Center Pilot Project on February 1, 2017.

EMERGENCY MEDICAL SERVICES AUTHORITY

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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Kim Lew, Manager
Paramedic Program Unit

SUBJECT: Tactical Casualty Care Training Guidelines Approval

RECOMMENDED ACTION:

Approve the *Tactical Casualty Care Training Guidelines* document.

FISCAL IMPACT:

Local fire departments, law enforcement agencies, EMS providers, and local EMS agencies will incur costs associated with curriculum development, review and approval processes, and the delivery of training.

DISCUSSION:

In response to the passage of AB 1598 (Rodriguez, Statutes of 2014) the EMS Authority, along with the California Tactical EMS (CTEMS) Advisory Committee, were tasked with developing tactical casualty care and response training standards to assist training program approval authorities, program providers, first responder agencies, law enforcement, fire, and emergency medical services (EMS) on the development of curriculum related to a coordinated response to active shooter and other terrorism related multi-casualty events.

Two distinct publications, the *Tactical First Aid/Tactical Emergency Medical Support (TEMS) First Responder Operational (FRO) Training Standards Guidelines* (approved by the Commission on March 15, 2017) and the *Tactical Life Saver/TEMS Technician Training Standards Guidelines* were developed.

On April 14, 2017, the CTEMS sub-committee and EMSA personnel reviewed the draft *Tactical Life Saver/TEMS Technician Training Standards Guidelines* course curriculum. The sub-committee recommended a few non-substantive changes to the curriculum and to combine the Tactical Life Saver/TEMS Technician content with the previously approved Tactical First Aid/TEMS FRO Guideline for a single guideline document.

On May 18, 2017, the EMS Authority held their regularly scheduled CTEMS advisory committee meeting where the attached California Tactical Casualty Care Training Guidelines document was reviewed and recommended for approval.

Attachment: California Tactical Casualty Care Training Guidelines: Tactical First Aid/Tactical Emergency Medical Support (TEMS) First Responder Operations (FRO), Tactical Lifesaver/Tactical Emergency Medical Support (TEMS) Technician



California Tactical Casualty Care Training Guidelines:

- Tactical First Aid/ Tactical Emergency Medical Support (TEMS) First Responder Operations (FRO)
- Tactical Lifesaver/ Tactical Emergency Medical Support (TEMS) Technician

Emergency Medical Services Authority
California Health and Human Services Agency

EMSA #370
June 2017



FOREWORD

The California Emergency Medical Services (EMS) Authority recognizes the importance of working with state and local law enforcement in the medical planning and response to active shooter and terrorism incidents. By working closely with EMS, Fire, and Law Enforcement educators and first responders, the EMS Authority has developed this document to assist local California EMS agencies (LEMSA's), EMS training program providers, fire service, and public safety agencies in the development of policies, operational guidelines, and training standards for tactical casualty care and coordination during active shooter and terrorism related incidents in California.

Over the past two decades, there has been significant progress in the development of national and state tactical emergency medical response strategies and training standards to improve casualty outcomes of active shooter and terrorism incidents. The EMS Authority, in collaboration with members from the California Commission on Peace Officer Standards and Training (POST), the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program, and various local California EMS agencies, training program providers, and EMS employers, have collaborated to develop standardized statewide approaches to the training and response of first responder personnel to these incidents. In 2009, POST, through a partnership with the EMS Authority, released the *Tactical Medicine Guidelines for Operational Programs and Standardized Training* for use by law enforcement officers, supervisors, and administrators assigned to perform, supervise, or manage their Special Weapons and Tactics (SWAT) teams. In 2015, members of the FIRESCOPE program released an *Incident Command System Emergency Response to Tactical Law Enforcement Incidents* publication #701, for use by fire service agency personnel.

Pursuant to Health and Safety Section 1797.116, the EMS Authority has developed this document to establish additional medical training standards and guidelines for use by emergency medical care first responders to include, but not be limited to, public safety, Emergency Medical Technician (EMT), Advanced EMT (AEMT), and Paramedic personnel. These guidelines are designed to provide complementary medical training competency standards to those provided by POST and FIRESCOPE.

Core competency and training questions related to this document may be directed to Todd Frandsen at (916) 255-4168 or by email to todd.frandsen@emsa.ca.gov. Questions related to local EMS and tactical operational planning and responses may be directed to the local EMS Agency and law enforcement agencies responsible for the development of specific policies and procedures within that State jurisdiction.

Howard Backer, MD, MPH, FACEP
Director, California EMS Authority

ACKNOWLEDGEMENTS

These guidelines were developed through the steadfast and highly dedicated efforts of emergency medical services (EMS), fire, and law enforcement service providers and educators across California. The California EMS Authority and POST extend sincere appreciation to all those who volunteered their time and expertise.

California Tactical EMS Advisory Committee

The EMS Authority led a California Tactical EMS Advisory Committee to oversee this project with the collaboration by EMS, Fire, and Law Enforcement service and training leaders. The following is a list of organizations that sent representatives to participate as members of this committee:

- ✚ Alameda County Emergency Medical Services Agency (ALCO)
- ✚ Alameda County Sheriff's Office
- ✚ Berkeley Police Department
- ✚ California Ambulance Association (CAA)
- ✚ California Commission on Peace Officer Standards and Training (POST)
- ✚ California State Fire Chiefs' Association (CSFCA)
- ✚ California State Firefighters' Association (CFSA)
- ✚ California Highway Patrol (CHP)
- ✚ California Office of Emergency Services (CalOES)
- ✚ California Office of the State Fire Marshal State Fire Training (CAL-FIRE)
- ✚ California Police Chiefs Association (Cal Chiefs)
- ✚ California Peace Officers' Association (CPOA)
- ✚ California State Sheriffs' Association (CSSA)
- ✚ City of Ontario Fire Department
- ✚ Emergency Medical Services Administrators' Association of California (EMSAAC)
- ✚ EMS Medical Directors' Association of California (EMDAC)
- ✚ Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE)
- ✚ Fremont Police Department
- ✚ International School of Tactical Medicine
- ✚ Los Angeles County Sheriff's Department
- ✚ Los Angeles Fire Department (LAFD)
- ✚ Rancho Cucamonga Fire Protection District
- ✚ San Bernardino County Sheriff's Department
- ✚ San Luis Obispo County Public Health Department

California Tactical EMS Advisory Subcommittee Members

Additionally, the following individuals are recognized for their additional contributions as sub-committee members:

Brendalyn Val Bilotti BS RN
POST Master Instructor
Alameda County Sheriff's Office

Kimberly Petersen, Captain
Patrol Division Commander
Fremont Police Department

Thomas G. Ronay, M.D. FACEP
Medical Director
Emergency Medical Services Agency
San Luis Obispo County Public Health
Department

Gerry Malais
Battalion Chief
Los Angeles Fire Dept. Homeland Security

Jim Morrissey
Terrorism Preparedness Director
ALCO EMS
Senior SF FBI Tactical Medic

Dan Toomey
Special Consultant
Homeland Security Training Program
Commission on POST

Patrick Lewis
Fire Captain/ Paramedic
Tactical Response Program Coordinator
Rancho Cucamonga Fire Protection District

Carlos Mejia
San Bernardino County Sheriff's Department

Christopher D. Waite, Officer
Berkeley Police Department

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1

INTRODUCTION

Purpose

California statutes require the Emergency Medical Services (EMS) Authority to establish additional training standards for first responders to provide emergency medical services during active law enforcement incidents such as active shooter and terrorism events¹. In 2014, working closely with EMS, fire, and law enforcement educators and providers, tactical casualty care training program standards were developed. In 2015, regulations were updated to include basic tactical casualty care training during initial public safety first aid and CPR training². These guidelines, approved in 2017 by the EMS Authority and Commission on EMS, are intended to be used as a reference for EMS training program and continuing education EMS providers to develop comprehensive, stand-alone, tactical casualty care training programs and for the approval of course curriculum by training program approval authorities.

As the framework for tactical casualty care training program development, this document is also designed to provide competency standards for statewide public safety, fire, and EMS agency personnel. These guidelines are intended to harmonize with, and be complementary to, those developed in collaboration with the California Commission on Peace Officer Standards and Training (POST) for the Tactical Medic and/or Tactical Medicine Specialist³ and those identified by members of the organization, Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE).

Additionally, the EMS Authority is responsible for setting the statewide medical training standards utilized by POST; therefore, these guidelines are intended to serve as a template for the development of operational programs by any public safety agency in California, and to serve as the minimum competency training standards for initial emergency medical services training.

Legislative Intent

In enacting AB 1598, the legislature made several important additions or changes to statutory language found in California Health and Safety Code 1797.116, 1797.134, California Government Code 8588.10, California Penal Code 13514.1 and 13519.12 to

¹ California Health and Safety Code 1797.116, 1797.134, California Government Code 8588.10, California Penal Code 13514.1 and 13519.12

² California Code of Regulations, Title 22, Division 9, Chapter 1.5

³ Commission on Peace Officer Standards and Training. *Tactical Medicine: Operational Programs and Standardized Training Recommendations*. West Sacramento, CA. (2009).

better prepare public safety personnel to provide tactical casualty care and coordinate with emergency medical services during terrorism incidents⁴.

For the purposes of AB1598, and this document, a “terrorism incident” includes, but is not limited to, an active shooter incident. An “active shooter incident” is an incident where an individual is actively engaged in killing or attempting to kill people.

The California legislature noted in their intent language that “since the Columbine High School shootings that occurred in 1999, more than 250 people have been killed in the United States during what has been classified as active shooter and mass casualty incidents.” They observed that “these incidents involve one or more suspects who participate in an ongoing, random, or systematic shooting spree, demonstrating the intent to harm others with the objective of mass murder.” Moreover, the legislature said, “It also became evident that these events may take place in any community or venue and that they impact fire and police departments, regardless of their size or capacity. Local jurisdictions vary widely in available emergency response resources, staffing, and equipment allocations.”

In enacting AB1598, the legislature was prescribing that protocols and training for response to active shooter incidents must be established locally to work within the resource capabilities and limitations of each jurisdiction. The legislature intended AB1598 to do the following:

- Require the development of collaborative protocols and relationships between local and state first response entities, including law enforcement agencies, fire departments, and emergency medical services providers and agencies, in order that those entities shall act effectively and in concert to address active shooter incidents across California.
- Require first response entities to seek collaborative training opportunities, including, but not limited to, table top or simulation exercises, to assess plan implementations, and to include other entities that may be involved in active shooter incidents in those trainings, such as schools, city or county personnel, and private businesses.
- Require basic and ongoing training for law enforcement agency personnel, fire department personnel, emergency medical services personnel, and the personnel for other first responders include, as appropriate, training and education on active shooter incidents and tactical casualty care.

It was the intent of the Legislature that each first response entity, in collaboration with other law enforcement agencies, fire departments, and emergency medical services providers and agencies, develop protocols for responding to active shooter incidents.

⁴ California Assemblymember Rodriguez (2014). AB 1598, *Active Shooter: Local Emergency Response Teams*; approved 09/27/2014.

Those protocols must be reviewed annually to ensure that they are current, and address any policy, geographic, or demographic changes that warrant a response strategy review. The Legislature intended that the protocols address all of the following:

- The roles, responsibilities, and policies of each entity in responding to an active shooter incident.
- Pre-assessment and contingency planning that includes identification of potential targets within the jurisdiction.
- Implementation of an Incident Command System (ICS), including emergency protocols for a unified command structure for entities responding to an active shooter incident.
- Interagency communication issues and needs, including, but not limited to, radio interoperability and establishment of common language, terms, and definitions to be used on the scene of an active shooter incident.
- Identification of resources for responding to an active shooter incident, including, but not limited to, primary and secondary needs and hospitals.
- Tactical deployment of available resources for responding to an active shooter incident.
- Emergency treatment and extraction of persons injured in an active shooter incident.

California Tactical Casualty Care and Tactical Medicine

In the State of California, medically trained, certified and/or licensed first responders may respond to an active law enforcement incident as either part of an established EMS system or from within an established law enforcement special operations team. As a result, first responder resources and response protocols to active law enforcement incidents vary greatly and are established through the coordination and collaboration of local EMS, fire, and law enforcement agencies. The EMS Authority, working closely with fire and law enforcement agencies, recognized these differences and identified two distinct categories of specialized tactical field medical response and training needs of first responders during active law enforcement incidents: 1) tactical casualty care and 2) tactical medicine.

Tactical casualty care is the delivery of specialized tactical emergency medical services (TEMS) to casualties of active shooter and terrorism events by first responders from an established EMS system to include, but not be limited to, public safety personnel, EMT's, Advanced EMT's, and paramedics as described by CCR Title 22, Division 9, Chapters 1.5 and Chapters 2-4. EMS providers who have been trained in tactical casualty care respond as medical support to law enforcement incidents and provide field tactical medical care to casualties usually in an area where there is minimal to no direct or immediate safety threat. Medical direction and oversight of the tactical casualty care first responder is provided by the local EMS medical director in coordination with local law enforcement.

In order to provide a range of specialized tactical medical field training to meet a diverse level of statewide public safety personnel, EMT, AEMT, and paramedic service provider needs, tactical casualty training standards were developed to incorporate not only EMS specific medical training, but also include fire and law enforcement response level training recommendations.

As a result, two distinct levels of tactical casualty care training program courses were identified:

- 1) Tactical First Aid/ TEMS FRO, 4 hours minimum
- 2) Tactical Lifesaver/ TEMS Technician, 40 hours minimum

The Tactical First Aid/ TEMS FRO course provides instruction on specialized tactical medical care techniques and a brief overview of tactical response and operations methodologies. The Tactical Lifesaver/ TEMS Technician course provides more advanced life support tactical medicine techniques and comprehensive instruction on the role of EMS in tactical response planning, response, and inter-department operations when providing medical support to law enforcement personnel during active shooter and terrorism incidents. Tactical EMS training courses approved by the EMS Authority prior to the effective date of this document may have different naming conventions. For those courses, training program providers shall modify their course names to reflect the course identification within this document of First Aid/FRO or Tactical Lifesaver/TEMS Technician for continued approval.

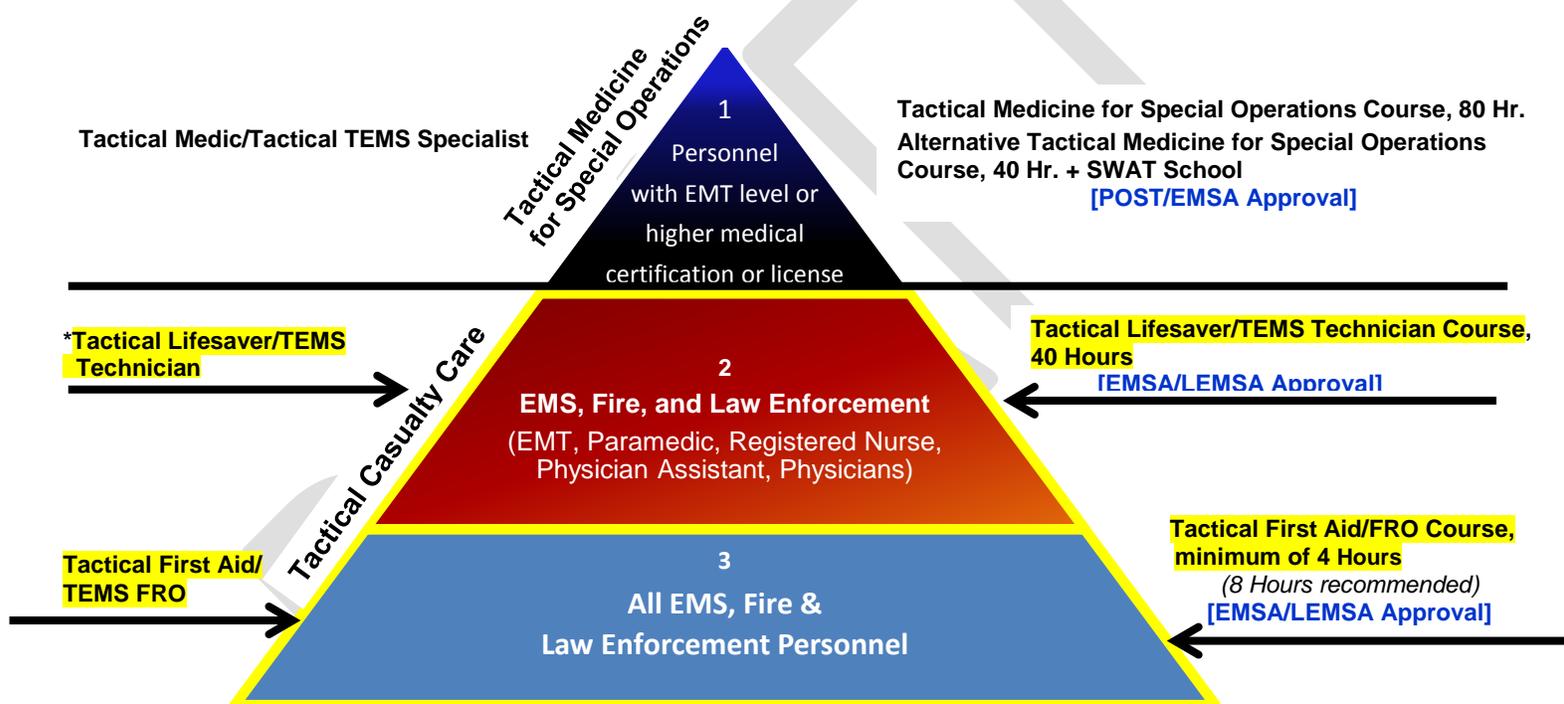
The EMS Authority and local EMS agencies are responsible for monitoring and approving tactical casualty care training programs. Training program or courses administered by statewide public safety agencies, such as the California Commission on Peace Officer Standards and Training, California Department of Parks and Recreation, California Department of Forestry and Fire Protection, and the Department of California Highway Patrol, out of state agencies, or other multi-jurisdictional public safety agencies are approved by the EMS Authority. Training programs or courses administered by local entities are approved by the local EMS agency that has jurisdiction within the area in which the program or course is headquartered.

Separately, Tactical Medicine for Special Operations is the delivery of specialized tactical emergency medical services to casualties of any active law enforcement incident by law enforcement personnel assigned to a Special Weapons and Tactics (SWAT) operations team, as described by California Penal Code 13514.1. Tactical Medicine for Special Operations first responders respond as an integral part of a SWAT operation team and may provide field tactical medical care to casualties in an area where there is a direct and immediate safety threat. Medical direction and oversight of the Tactical Medicine for Special Operations first responders are provided by a licensed physician in coordination with the local EMS agency as part of an established EMS system.

POST is responsible for monitoring and approving Tactical Medicine for Special Operations training programs and courses, in collaboration with review and approval by the EMS Authority. Additional information on the POST Tactical Medicine for Special Operations training and operation program can be found on the POST website at <https://www.post.ca.gov>.

The following diagram describes the spectrum of California tactical field medical response and training courses:

California Tactical Casualty Care and Tactical Medicine for Special Operations Training Programs



*Although the Tactical Lifesaver/TEMS Technician course includes comparable curriculum as the Tactical Medicine for Special Operations alternative 40 hour course, it is not considered an equivalent course for attendance in lieu of the Tactical Medicine for Special Operations courses required to operate as a Tactical Medic or Tactical TEMS Specialist integrated into a SWAT operations team.

Tactical Casualty Care Policies by Local EMS Agencies

Local EMS agencies (LEMSA's) and first responder providers should establish policies on the protocols and coordinated response of first responders to active law enforcement incidents. Policies developed should include ongoing local training needs assessments and the collaboration of joint training and exercises with law enforcement, fire service, and EMS personnel using Incident Command System (ICS) principles and terminology.

2

APPLICATION OF TRAINING STANDARDS

The application of these training standards is designed to provide EMTs, AEMTs, paramedics, and other first responders standardized tactical casualty care training. Although these courses do not require prerequisites to attend, it is recommended that students have prior first aid, CPR, and AED knowledge or experience consistent with public safety first aid training pursuant to CCR, Title 22, Division 9, Chapter 1.5. It is highly recommended that all EMTs, Advanced EMTs, and paramedics are trained to the standards described in these guidelines.

Due to a broad range of potential attendees, tactical casualty care program providers and instructors should assess attendees' current medical knowledge and skills then adjust their course curriculum to meet student needs. Instructors should also emphasize the important role of local EMS and law enforcement jurisdiction protocols, policies, and resources, as well as individual student scope of practices within those jurisdictions, when considering the application of tactical casualty care training.

The Tactical First Aid/TEMS FRO is a course designed to provide first responders basic tactical casualty care techniques and a broad overview of law enforcement tactical operations and first responder rescue operations methodologies. Course content shall include instructor demonstrations and student skills testing to achieve the competency standards identified in Section 3 of this document.

The Tactical Lifesaver/TEMS Technician course is intended for public safety personnel, EMT's, AEMT's, paramedics, and other individuals (such as physicians or nurses) with minimal to no knowledge or experience in Tactical Casualty Care techniques that may either volunteer or be employed to perform medical support in an area deemed safe, or of minimal safety risk, during an active shooter or terrorism incident. Course content shall include instructor demonstrations and student skills testing to achieve the competency standards identified in Section 4 of this document.

Tactical First Aid/TEMS FRO Course Overview

The Tactical First Aid/TEMS FRO is a course designed to provide first responders basic tactical casualty care techniques and a broad overview of law enforcement tactical operations and first responder rescue operations methodologies. Course content shall include instructor demonstrations and student skills testing to achieve the competency standards identified in Section 3 of this document. Although this course does not require prerequisites to attend, it is recommended that students have prior first aid, CPR, and AED knowledge or experience consistent with public safety first aid training pursuant to CCR, Title 22, Division 9, Chapter 1.5.

Upon completion of this course, first responders will possess the basic knowledge and skills to administer tactical casualty care to casualties during an active law enforcement incident. The course may be provided as initial training or as a continuing education course. A minimum of four (4) hours training is required, although eight (8) hours of training is recommended. The course must include the following topics:

- An overview of the California tactical casualty care initiative and its emergency medical and fire agency personnel response to active law enforcement incidents within state EMS systems,
- common tactical and rescue terminology and operations,
- description and demonstration of basic tactical casualty care techniques,
- casualty movement and evacuation techniques,
- medical planning and threat assessment considerations, and
- comprehensive, competency-based student demonstration and, when applicable, student skills testing.

Students that have successfully attended a minimum of four (4) hours of training and demonstrated a level of competency in the topics and skills described in the Curriculum content of this course through written tests and, when applicable, skills testing, shall be issued a Tactical First Aid/TEMS FRO certificate of completion.

Tactical Lifesaver/TEMS Technician Course Overview

Completion of this course should provide first responders thorough knowledge and detailed tactical casualty care skills to administer adjunct basic and advanced medical life support to casualties of an active shooter or terrorism incident. This course may be provided as initial training or as a continuing education course. A minimum of forty (40) hours training is required; and shall include the following topics:

- Introduction and course administration and safety
- An overview of the California tactical casualty care initiative
- The role of California EMS personnel as it relates to medical planning, EMS medical support response, and inter-department operations
- common tactical and rescue terminology and operations,
- casualty movement and evacuation techniques,
- threat assessment considerations,
- Hemostasis: hemorrhage control management skills
- airway and respiration management skills
- circulation management skills
- environmental injuries management
- medication administration and pain management
- medical aspects of tactical operations
- team health management, and
- comprehensive, competency-based student demonstration and skills testing.

Students that have attended a minimum of forty (40) hours of training and have successfully demonstrated, through skills assessments and testing, a level of competency in the course curriculum topics in Chapter 3 of this document shall be issued a Tactical Lifesaver/TEMS Technician certificate of completion.

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Curriculum Content: Tactical First Aid/TEMS FRO

Minimum 4 Hour Course

Learning Domain 1: History and Background

Competency 1.1: Demonstrate knowledge of tactical casualty care historical developments

- 1.1.1 Demonstrate knowledge of tactical casualty care historical developments
- History of active shooter and domestic terrorism incidents
 - Define roles and responsibilities of first responders including:
 - Law Enforcement
 - Fire
 - EMS
 - Review of local active shooter policies
 - Scope of Practice and authorized skills and procedures by level of training, certification, and licensure zone⁵ [Appendix F]

Learning Domain 2: Terminology and definitions

Competency 2.1: Demonstrate knowledge of terminology

- 2.1.1 Demonstrate knowledge of terminology
- Hot Zone⁶, Warm Zone, and Cold Zone
 - Casualty Collection Point (CCP)
 - Rescue Task Force (RTF)
 - Cover and Concealment

Learning Domain 3: Coordination, Command and Control

Competency 3.1: Demonstrate knowledge of incident command and agency integration into tactical operations

- 3.1.1 Demonstrate knowledge of team coordination, command, and control

⁵ NOTE: Always stay within scope of practice for level of certification/licensure and follow the protocols approved by the local EMS agency

⁶ The role of the TEMS technician is primarily focused on operations in the Warm Zone

- Incident Command System (ICS) and National Incident Management System (NIMS)
- Mutual Aid considerations
- Unified Command
- Communications, including radio interoperability
- Command post
 - Staging areas
 - Ingress/egress
 - Managing priorities—some priorities must be managed simultaneously

Learning Domain 4: Tactical and Rescue Operations

Competency 4.1: Demonstrate knowledge of tactical and rescue operations

- 4.1.1 Tactical Operations—law enforcement
 - The priority is to mitigate the threat
 - Contact Team
 - Rescue Team
- 4.1.2 Rescue Operations—law enforcement/EMS/fire
 - The priority is to provide life-saving interventions to injured parties
 - Formation of Rescue Task Force (RTF)
 - Casualty Collection Points (CCP)

Learning Domain 5: Basic Tactical Casualty Care and Evacuation

Competency 5.1: Demonstrate appropriate casualty care at your scope of practice and certification/licensure

- 5.1.1 Demonstrate knowledge of the components of the Individual First Aid Kit (IFAK) and/or medical kit *[Appendix E]*
- 5.1.2 Understand the priorities of Tactical Casualty Care as applied by zone *[Appendix B]*
- 5.1.3 Demonstrate competency through practical testing of the following medical treatment skills:
 - Bleeding control
 - Apply tourniquet
 - Self-Application
 - Application on others
 - Apply direct pressure

- Apply hemostatic dressing, to include wound packing, utilizing California EMSA-approved products
 - Apply pressure dressing
 - Basic airway management
 - Perform Head-Tilt/Chin-Lift Maneuver
 - Recovery position
 - Position of comfort
 - Airway adjuncts, such as nasopharyngeal airway (NPA) and oropharyngeal airway (OFA) insertion, if approved by the Local EMS agency
 - Chest/torso wounds
 - Apply chest seals, vented preferred
- 5.1.4 Demonstrate competency in casualty movement and evacuation
- Drags and lifts
 - Carries
- 5.1.5 Demonstrate knowledge of local multi-casualty/mass casualty incident protocols
- Triage procedures; such as START or SALT⁷
 - CCP
 - Casualty triage and treatment
 - Casualty transport

Learning Domain 6: Threat Assessment

Competency 6.1: Demonstrate knowledge in threat assessment [Appendix C]

- 6.1.1 Understand and demonstrate knowledge of situational awareness
- Pre-assessment of community risks and threats
 - Pre-incident planning and coordination
 - Medical resources available

Learning Domain 7: Student Practical Assessment

Competency 7.1: Demonstrate knowledge and skills through documented cognitive and/or skills evaluation

- 7.1.1 Student demonstration and assessment of the medical skills specified in Learning Domain 5, *Basic Tactical Casualty Care and Evacuation*.

⁷ START- Simple Triage and Rapid Treatment
SALT- Sort, Assess, Lifesaving Interventions, Treatment/Transport

7.1.2 Knowledge of coordinated law enforcement, fire, and EMS response procedures, including the formation of RTF, adhering to ICS and unified command principles as applicable by local jurisdiction. **[Appendix D]**

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Curriculum Content: Tactical Lifesaver/TEMS Technician

Minimum 40 hour course

Learning Domain 1: Introduction and Administration of Tactical Lifesaver/TEMS Technician Course Training

Competency 1.1: Introduction and course administration and safety

- 1.1.1 California EMS Authority and POST administrative policies
 - California Tactical EMS Training Model and Tactical Medicine Pyramid
 - Application of training standards and the diversity of course target audiences
- 1.1.2 Safety guidelines: refer to Peace Officer Standards and Training (POST) Standardized Training Recommendations at <https://www.post.ca.gov>.

Competency 1.2: Introduction to Tactical Casualty Care (TCC)

- 1.2.1 Development of TCC
 - Tactical Combat Casualty Care (TCCC) vs. Tactical Emergency Casualty Care (TECC)
 - History of active shooter and domestic terrorism incidents
 - TCC training program goals

Learning Domain 2: TCC in California

Competency 2.1: EMS personnel and operations

- 2.1.1 Roles and responsibilities of responders
 - Tactical Operations - law enforcement personnel
 - Priority to mitigate the threat, scene safety
 - Tactical equipment
 - Contact team
 - Rescue team
 - Rescue Operations - law enforcement/EMS/fire personnel
 - Priority to provide life-saving interventions to injured parties

- Tactical medical equipment⁸ [Appendix E]
- Rescue Task Force (RTF)
- Casualty Collection Points (CCP)
- Scope of practice and authorized skills and procedures by level of training, certification, and licensure⁹ [Appendix F]
- First Responder and TEMS Technician operations is generally conducted in the Warm Zone or green zone

2.1.2 Tactical and Rescue Operations preparation and coordination

- Community risk assessment and pre-emptive preparation response training
- Medical planning
- Medical control
- Incident Command System (ICS)
- Communications
- Inherent risks

Competency 2.2: TCC environment and casualty care considerations [Appendix D]

2.2.1 Hot Zone [Casualty Care Under Fire (CUF)/Direct Threat Care (DTC)]¹⁰

- Description of CUF/DTC (hot) zone conditions
- Tactical team vs. response team movement and coordination
- Situation and casualty medical threat assessment and prioritization [Appendix C]
- Remote assessment and surrogate care considerations
- Casualty care of external hemorrhages
- Casualty care of airway management vs. deferred airway management
- Casualty recovery position
- Casualty extraction

2.2.2 Warm Zone [Tactical Casualty Care in the Tactical Field Care (TFC)/Indirect Threat Care (ITC)]

- Description of TFC/ITC (warm) zone condition
- Tactical team vs. response team movement and coordination
- Casualty disarmament
- Casualty assessment and treatment using the MARCHE¹¹ acronym
 - Casualty care of massive hemorrhage
 - Casualty care of airway and respiratory distress
 - Casualty care of circulatory conditions
 - Casualty care of head injuries/hypothermia

⁸ Load bearing, backpack, trauma packs/Urban carry cases, medical utility vests, belt systems/Individual First Aid kits (IFAK), Self-help kits, etc.

⁹ See California Tactical EMS Training Model [appendix A], stay within scope of practice for level of certification/licensure, and follow the protocols approved by the local EMS Agency

¹⁰ The role of the TEMS technician is primarily focused on operations in the Warm Zone

¹¹ **M**assive Bleeding-**A**irway- **R**espirations- **C**irculation-**H**ead/**H**ypothermia-**E**verything Else

- Casualty recovery position
 - Casualty extraction
- 2.2.3 Cold Zone [Tactical Casualty Evacuation Care (TACEVAC)/Evacuation (EVAC)]
- Description of the TACEVAC/EVAC zone
 - Casualty MARCHE reassessment and secondary assessment
 - Casualty preparation for ground and air evacuation
 - Casualty spinal motion restriction (SMR), as appropriate
 - Oral and written casualty care reporting during transfer of care
- 2.2.4 Rescue extraction demonstration and student skills assessment
- Ingress, egress, alternative methods
 - Extraction considerations by zone
 - Triage procedures; such as START or SALT¹²
 - Casualty movement and evacuation
 - Drags and lifts
 - Carries
- 2.2.5 Special casualty populations¹³
- Rescue operations vs. tactical operations
 - Extraction considerations
- 2.2.6 Legal considerations
- EMS, fire, law enforcement personnel authorized medical procedures
 - Authorities to act
 - Scope of practices [*Appendix F*]
 - Evidence preservation
 - Local protocols and medical oversight authority by the LEMSA
 - Protection of health information during tactical operations

Learning Domain 3: Hemostasis: Hemorrhage (Bleeding) Control Management and Skills

Competency 3.1: Concepts and principles of hemorrhage conditions

- 3.1.1 Assessment and prioritization of hemorrhage conditions
- Blood loss considerations
 - Signs and symptoms of shock (hypoperfusion)
 - TCC zone considerations

¹² START- Simple Triage and Rapid Treatment

SALT- Sort, Assess, Lifesaving Interventions, Treatment/Transport

¹³ Pediatric, geriatric, mentally disabled, physically disabled, and pregnant women

- 3.1.2 Hemorrhage control management demonstration & student skills assessment
- Direct pressure
 - Tourniquets: commercial and improvised on self and others
 - Wound dressings
 - Hemostatic dressings and wound packing, utilizing California EMSA-approved products (EMSA will add link to EMSA webpage prior to publication)
 - Casualty reassessment/secondary triage

Learning Domain 4: Airway and Respiratory Management and Skills

Competency 4.1: Basic Life Support (BLS) concepts and principles of airway/respiratory management

- 4.1.1 Basic assessment and prioritization of casualty airway/respiratory conditions
- Signs and symptoms of respiratory distress and respiratory failure
 - Scope of Practice level considerations
 - TCC zone considerations
- 4.1.2 Basic casualty airway/respiratory management demonstration and student skills assessment
- Recovery position and position of comfort
 - Chin Lift/Jaw Thrust maneuver
 - Nasopharyngeal Airway (NPA)
 - Chest seals (occlusive dressings), vented preferred
 - Tension pneumothorax treatment, “burping the chest seal”
 - Casualty reassessment/secondary triage

Competency 4.2: Advanced Life Support (ALS) concepts and principles of airway/respiratory management demonstration and student skills assessment

- 4.2.1 Advanced Casualty Airway/Respiratory Management Demonstration and Student Skills Assessment (optional testing of student by level of certification or license)
- Airway adjuncts, if approved by the Local EMS agency
 - Perilaryngeal Airway (PLA)
 - Supraglottic Airway (SGA)
 - Endotracheal (ET) intubation
 - Needle Cricothyroidotomy
 - Surgical Cricothyroidotomy
 - Tension pneumothorax treatment, needle decompression (needle thoracostomy)
 - Casualty reassessment/secondary triage
 - TCC zone considerations

Learning Domain 5: Circulation Management and Skills

Competency 5.1: BLS concepts and principles of circulation

5.1.1 Assessment and prioritization of circulation conditions

- Signs and symptoms of shock
- Transport considerations
- Local trauma system considerations
- TCC zone considerations

5.1.2 Hypothermia prevention and treatment (body temperature control)

Competency 5.2: ALS concepts and principles of circulation

5.2.1 Advanced assessment and prioritization of circulation conditions

- Assessment and vital monitoring equipment; such as blood pressure, pulse oximetry
- Scope of Practice level considerations
- TCC zone considerations

5.2.2 Advanced casualty circulation management demonstration and student skills assessment

- Intravenous (IV) access
- Intraosseous (IO) access
- Review of local protocols for fluid replacement and other treatment modalities
- Casualty reassessment/secondary triage

Learning Domain 6: Environmental Injuries Management

Competency 6.1: Assessment, prioritization, and treatment of environmental injuries

- Hyperthermia and Hypothermia
- Venomous and non-venomous insect, snake, and animal bites
- Chemical, biological, radiological, nuclear contamination
- Chemical, biological, radiological, nuclear decontamination
- Scope of Practice level considerations
- Personal safety protections
- TCC zone considerations

Learning Domain 7: Medication Administration and Pain Management

Competency 7.1: Administration of oxygen.

- Scope of Practice level considerations/adherence
- TCC zone considerations

Competency 7.2: Administration of Over the Counter (OTC) medication

- Scope of Practice level considerations/adherence
- Planning, maintenance, and disposal of medications
- TCC zone considerations

Competency 7.3: Administration of analgesia

- Scope of Practice level considerations/adherence
- Topical agents
- Oral agents
- Injectable agents
- Induction agents
- Rapid sequence intubation drugs
- TCC zone considerations

Learning Domain 8: Medical Aspects of Tactical Operations**Competency 8.1: Distraction devices**

- Purpose/definition of distraction devices
- Psychological/physiological effects
- Personal safety protections
- TCC zone considerations

Competency 8.2: Chemical agent deployment

- Purpose/definition of chemical agents and their tactical deployment
- Psychological/physiological effects
- Environmental exposure risks and conditions
- Personal safety protections

Competency 8.3: Less lethal weapons

- Purpose/definition of less lethal weapons
- Psychological/physiological effects
- Personal safety protections

Competency 8.4: Wound ballistics

- Injury effects by bullet type, velocity, scatter pattern
- Personal safety protections

Competency 8.5: Blast injuries

- Primary blast injuries (overpressure, shock wave)
- Secondary blast injuries (fragmentation, flying objects)

- Tertiary blast injuries
- Quaternary blast injuries
- Personal safety protections

Learning Domain 9: Team Health Management

Competency 9.1: Prevention education

- Monitoring and documentation of team health data (e.g., allergies, prescription medication, chronic conditions)
- Role of the medical director and team commander
- Responder psychological resilience training

Competency 9.2: Preventive medicine

- Team immunizations
- Team fatigue, sleep management, and work/rest cycles
- Team hydration and nutrition
- Team personal protective equipment and gear
- Monitoring team physical and mental well-being

Competency 9.3: Post-incident team health care

- Purpose and description of incident debriefing
- Signs and symptoms of post traumatic stress
- Short and long-term team health care interventions

Learning Domain 10: Student Scenario/Exercise Training & Competency Testing

Competency 10.1: Scenario/exercise training

- Tactical and response team movement and casualty extraction exercises
- Basic tactical medical scenario exercises
- Advanced tactical medical scenario exercises
- Low light tactical medical scenario exercise
- Local EMS system integration (transfer of care, hospital destination, helicopter landing zones, etc.)

Competency 10.2: Competency testing of medical skills specified in Learning Domain 2 through Learning Domain 4

- Mid-course tactical medical written examination
- Mid-course tactical medical scenario/exercise examination
- Final comprehensive capstone tactical medical written examination
- Final comprehensive capstone tactical medical scenario/exercise examination

5

PROGRAM AND COURSE APPROVAL

Tactical Casualty Care training program and/or course review and approval shall be the responsibility of either the local EMS Agency or the EMS Authority. Training program or courses administered by statewide public safety agencies, such as the California Commission on POST, California Department of Parks and Recreation, California Department of Forestry and Fire Protection, and the Department of California Highway Patrol, out of state agencies, or other multi-jurisdictional public safety agencies shall be approved by the EMS Authority. Training programs or courses administered by local entities shall be approved by the local EMS agency (LEMSA) that has jurisdiction within the area in which the program or course is headquartered.

Training program or course approval is valid for four (4) years from the date of approval and shall be reviewed by the applicable approving authority for continued approval every four (4) years. The approving authority has discretion to initiate a review of the program for renewal as early as a year prior to program expiration and may audit, evaluate, or review the program at any time.

Previously Completed Training

AB 1598 provides and allows for agencies or entities that offered previously completed Tactical EMS training to submit to the training program approval authority any relevant training for assessment of curriculum content to determine whether or not the prior training meets these training standards. In making this determination, the EMS Authority or the LEMSA should utilize the guidelines, publications, and recommended existing training programs for guidance.

Continuing Education Credits

Continuing education credits may be issued to students who have successfully completed these courses from training program providers that meet the following:

- Hold current approval from an approving authority as a continuing education training program provider, pursuant to CCR Title 22, Division 9, Chapter 11, EMS Continuing Education; and
- Hold current approval as a tactical casualty care training program provider.

Program and Course Approval Process

Program and Course Content Submission

Initial and renewing training program applicants shall submit to the applicable approving authority the Program Application form, #TCC-1A [Appendix H] and all supporting documents associated to include the following:

- (1) Name of the sponsoring institution, organization, or agency;
- (2) Detailed course outline that meets or exceeds the applicable course content identified in Section 3 or Section 4 of this document.
- (3) Final written examination with pre-established scoring standard for those programs with courses approved to provide CE credits;
- (4) Skill competency testing criteria, with pre-established scoring standards;
- (5) Name and qualifications of instructor(s); and
- (6) Sample of course completion record.

The approving authority may request additional materials or documentation related to course curriculum or staff qualifications.

Training Instructor Eligibility

Training instructor eligibility requirements should include, but not be limited to, instructor knowledge and proficiency in the skills being taught and have either education or experience in teaching adult learners.

The training program provider shall be responsible for validating instructor qualifications.

Training Program Notification

The tactical casualty care training approving authority shall, within twenty-one (21) days of receiving a request for training program approval, notify the requesting training program that the request has been received, and shall specify what information, if any, is missing. Training program approval or disapproval shall be made in writing by the training program approving authority to the requesting training program after receipt of all required documentation. Notification of program approval or deficiencies resulting in disapproval shall be made in writing by the training program approval authority to the requesting training program within a time period not to exceed ninety (90) days.

A certificate of program approval shall be provided to the program provider upon approval of their program and shall contain the following training program information:

- Provider name
- Program or course location
- Type of tactical casualty care course(s)
- Approval effective date

- Approval expiration date

Upon approval, the EMS Authority and LEMSA's are responsible for the entry and updating of their respective tactical casualty care training program approval information in the training program database located on the EMS Authority website.

Withdrawal of Program Approval

Noncompliance with any criterion required for tactical casualty care training approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of these guidelines may result in denial, probation, suspension, or revocation of the tactical casualty care training program or course. For those programs with continuing education approval, the approving authority has discretion to suspend or revoke the tactical casualty care courses specifically without affect to any other EMS courses being provided under the programs continuing education provider approval.

The training program approving authority shall notify the training program course director of the noncompliance in writing, by registered mail. Within fifteen (15) days of receipt of the notification of noncompliance, the training program shall submit in writing, by registered mail, to the training program approving authority one of the following:
1) evidence of compliance with the provisions of these guidelines, or 2) a plan for meeting compliance within thirty (30) days from the day of receipt of the notification of noncompliance.

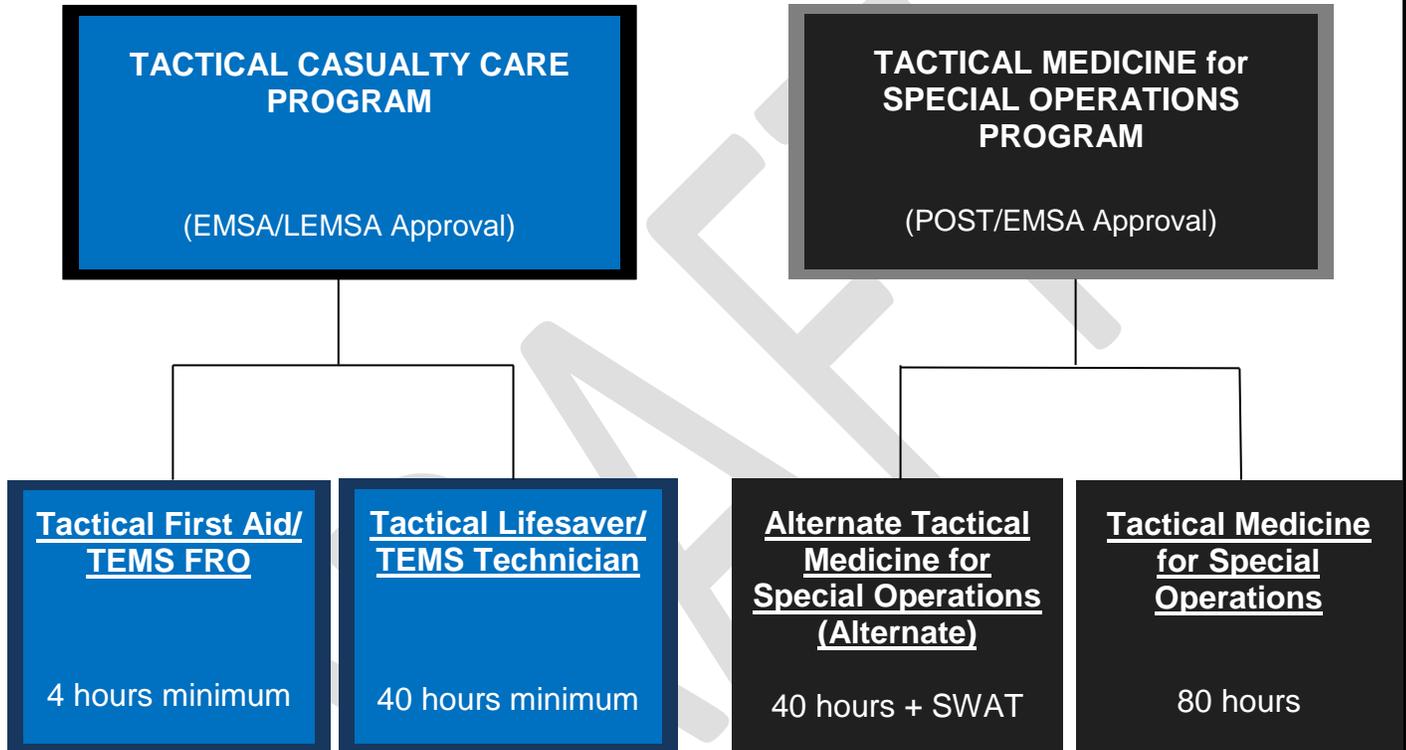
Within fifteen (15) days of receipt of the response from the training program, or within thirty (30) days from the mailing date of the noncompliance notification if no response is received from the training program, the training program approving authority shall notify the Authority and the approved training program in writing, by registered mail, of the decision to accept the evidence of compliance, accept the plan for meeting compliance, place on probation, suspend or revoke the training program approval.

If the training program approving authority decides to suspend, revoke, or place a training program on probation, the notification of decision shall include the beginning and ending dates of the probation or suspension and the terms and conditions for lifting the probation or suspension or the effective date of the revocation.

APPENDIX A

California Tactical EMS Training Model 2017

California Tactical EMS Training Model 2017



California EMS Authority (2017)

APPENDIX B

Basic Tactical Casualty Care (TCC) California Quick Reference Guide



Basic Tactical Casualty Care (TCC) California Quick Reference Guide

<p>HOT ZONE / DIRECT THREAT (DTC) / CARE UNDER FIRE (CUF)</p> <ol style="list-style-type: none"> MITIGATE any threat and move to a safer position. DIRECT CASUALTY to stay engaged in operation, if appropriate. DIRECT CASUALTY to move to a safer position and apply self-aid, if appropriate. CASUALTY EXTRACTION. Move casualty from unsafe area to include using manual drags or carries, or use a soft litter or local devices, as needed. STOP LIFE-THREATENING EXTERNAL HEMORRHAGE, using appropriate personal protective equipment (PPE), if tactically feasible: -Apply effective tourniquet for hemorrhage that is anatomically amenable to application. Consider quickly placing casualty in recovery position to protect airway. 	<ol style="list-style-type: none"> ASSESS FOR HEMORRHAGIC SHOCK: <ol style="list-style-type: none"> Elevate Lower Extremities if casualty in shock. PREVENTION OF HYPOTHERMIA: <ol style="list-style-type: none"> Minimize casualty exposure to the elements. Keep protective gear on if feasible. Replace wet clothing with dry, if possible. Place onto an insulated surface ASAP. Cover casualty with self-heating or rescue blanket to torso. Place hypothermia prevention cap on head. Use dry blankets, poncho liners, etc. to assist in heat retention and protection from exposure to wet elements.
<p>WARM ZONE / INDIRECT THREAT CARE (ITC) / TACTICAL FIELD CARE (TFC)</p> <ol style="list-style-type: none"> Law enforcement casualties should have weapons made safe once the threat is neutralized or if mental status altered. AIRWAY MANAGEMENT: <ol style="list-style-type: none"> Unconscious patient without airway obstruction: -Chin lift / Jaw Thrust maneuver -Nasopharyngeal airway, if approved by LEMSA as an optional skill -Place casualty in recovery position Patient with airway obstruction or impending airway obstruction: -Chin lift / Jaw Thrust maneuver -Nasopharyngeal airway, if approved LEMSA optional skill -Allow patient to assume position that best protects the airway, including sitting up. -Place casualty in recovery position 	<ol style="list-style-type: none"> PENETRATING EYE TRAUMA: <ol style="list-style-type: none"> Perform a rapid field test of visual acuity Cover eye with a rigid eye shield (NOT pressure patch). REASSESS CASUALTY AND TREAT OTHER CONDITIONS AS NECESSARY: <ol style="list-style-type: none"> Complete secondary survey checking for additional injuries or conditions. Consider splinting known/suspected fractures or spinal immobilization, if indicated. Use nerve agent auto-injector (i.e. Duo-Dote) for Nerve Agent Intoxication, if approved by LEMSA as an optional scope skill. Use Epi-Pen for anaphylactic reaction, if approved by LEMSA as an optional scope skill.
<ol style="list-style-type: none"> BREATHING: <ol style="list-style-type: none"> All open and/or sucking chest wounds should be treated by applying a vented chest seal or non-vented occlusive seal to cover the defect and secure it in place. Monitor for development of a tension pneumothorax. 	<ol style="list-style-type: none"> BURNS: <ol style="list-style-type: none"> Aggressively monitor airway and respiratory casualty status with smoke inhalation or facial burns, including oxygen or cyanide antidote treatment when significant symptoms are present. Estimate TBSA and cover burn area with dry, sterile dressings.
<ol style="list-style-type: none"> BLEEDING: <ol style="list-style-type: none"> Assess for unrecognized hemorrhage and control all sources of bleeding. If not already done, use a tourniquet, and appropriate pressure dressing. For compressible hemorrhage not amenable to tourniquet use, apply a CA EMS Authority approved hemostatic dressing with a pressure bandage. Reassess all previous tourniquets. Consider exposing the injury to determine whether a tourniquet is still necessary. If not necessary, use other techniques to control bleeding and remove the tourniquet. Apply emergency bandage or direct pressure to the wound, if appropriate. For hemorrhage that cannot be controlled with a tourniquet, apply CA EMSA-approved hemostatic dressing. 	<ol style="list-style-type: none"> MONITORING: <ol style="list-style-type: none"> Apply monitoring devices or diagnostic equipment, if available Obtain vital signs. PREPARE CASUALTY FOR MOVEMENT: <ol style="list-style-type: none"> Move casualty to site where evacuation is anticipated. Monitor airway, breathing, bleeding, and reevaluate casualty for shock. COMMUNICATE WITH CASUALTY, IF POSSIBLE: <ol style="list-style-type: none"> Encourage, reassure, and explain care. CPR AND AED: <ol style="list-style-type: none"> Resuscitation in the tactical environment for casualties of blast or penetrating trauma that have no pulse or respirations should only be treated when resources and conditions allow. DOCUMENTATION: <ol style="list-style-type: none"> Document clinical assessments, treatments rendered, and changes in casualty status. Forward documentation to the next level of care provider.

BLUE- Authorized Skills for Public Safety First Aid Providers and EMTs
RED- Local Optional Skills which may be added by the Local EMS Agency Medical Director

APPENDIX C

Tactical Medical Planning and Threat Assessment Quick Reference Guide



Tactical Medical Planning and Threat Assessment Quick Reference Guide

MEDICAL INTELLIGENCE (MISSION AND PATIENTS)
1. Mission type:
2. Number of potential patient(s):
3. Ages of potential patient(s):
4. Pre-Existing conditions:
5. Special populations (pediatric, elderly, disabled, language barrier, etc.):
6. Other:

MEDICAL THREAT ASSESSMENT (TEAM)
1. Environment (weather, temperature, precipitation, wind)? Cold/Hot? Rain/Snow? Wind? Wind Direction? Health Considerations?
2. Hazardous Materials? Explosive Threats? Chemicals? Nuclear/Radiological? Improvised Explosive Devices?
3. Biological threats?
4. Animal threats?
5. Plant threats?
6. Regional specific threats?
7. Personal Protective Equipment needs (ballistic vest, helmet, mask)

MEDICAL PLANNING AND RESOURCES
1. Communication: Tactical Frequency: _____ Base Hospital: _____
2. Location of Key Areas: Staging Area: _____ Casualty Collection Point(s): _____ Triage Area/Treatment Area: _____
3. Hospital: Closest Hospital: _____ Trauma/Burn center: _____
4. EMS Transport: Ground Ambulance: _____ - Staging Area: _____ Air Ambulance: _____ - Landing Zone, Lat./Long.: _____
5. Support Services: Poison Control, 1-800-222-1222 Veterinary Services? Animal Control? Mental Health/Chaplain? Social Services/CPS/APS? Public Works?

TEAM HEALTH CONSIDERATIONS
1. Team medical records completed? Access to records?
2. Exposure protection:
3. Hydration:
4. Food/Nutrition:
5. Extended Operation Care (sleep, fatigue):
6. Rehabilitation/First Aid Station needs:
7. Other:

California EMS Authority (2017)

APPENDIX D

EMS Integration With Law Enforcement During Active Shooter Event Quick Reference Guide



EMS Integration with Law Enforcement During Active Shooter Events Quick Reference Guide

PREPARATORY PHASE
1. ARRIVE AND REPORT to Staging Area in Secure Area
2. REPORT TO UNIFIED COMMAND (UC) -Notify UC that an EMS Team/Rescue Group is ready, staged, and awaiting direction.
3. Personal Protective Equipment (PPE): -Ballistic vest, helmet
4. Ensure Clear IDENTIFICATION of Rescue personnel
5. Prepare MEDICAL EQUIPMENT: -Tourniquet, trauma kit
6. Perform Brief MEDICAL INTEL AND THREAT ASSESSMENT -Identify Hot, Warm and Cold Zone areas
7. Establish COMMUNICATION with respective on-scene medical, fire, and law enforcement. -Determine and broadcast response routes for additional responding resources -Obtain duress code

RESCUE TASK FORCE FORMATION AND PRIORITY SETTING PHASE
1. FORM RESCUE TASK FORCE (RTF) -Minimum of two (2) law enforcement officers -Minimum of two (2) EMS personnel -Designate Team Leader
2. FOLLOW law enforcement RTF leader direction -Know Hot, Warm, and Cold Zones -Follow protected access routes
3. BRIEF objective and direction of movement -Identify initial emergency egress routes -Identify secure extraction lane -Identify initial safe refuge area -Identify rally point -Identify "Mayday" operations emergency evacuation
4. IDENTIFY CASUALTY COLLECTION POINTS (CCP), Dynamic and static
5. REINFORCE MISSION PRIORITIES (THREAT) T- Threat suppression H-Hemorrhage control RE-Rapid extrication to safety A-Assessment by medical providers T-Transport to definitive care

INDIRECT THREAT: WARM/YELLOW ZONE OPERATIONS PHASE
1. MAINTAIN COVER AND CONCEALMENT
2. UTILIZE TACTICAL CASUALTY CARE (TCC) PRINCIPLES -Triage as required
3. FINALIZE DIRECTION of MOVEMENT -Identify emergency egress routes -Identify secure extraction lane -Identify safe refuge area
4. MAINTAIN SITUATIONAL AWARENESS
5. IDENTIFY DYNAMIC CCP
6. MOVE CASUALTIES -Warm Zone to Cold Zone treatment areas preferred -Transfer care to additional medical providers for treatment and transport
7. PREPARE TO RE-ENTER WARM ZONE

POST INCIDENT PHASE
1. ENSURE RTF ACCOUNTABILITY
2. COLLECT INCIDENT MANAGEMENT RECORDS AND UNIT LOGS
3. DETERMINE AND ANNOUNCE INCIDENT DEBRIEFING STRATEGY
4. ASSESS MENTAL AND PHYSICAL RESPONDER HEALTH
5. MANAGE A FORMAL UNIT RELEASE PROCESS

California EMS Authority (2017)

APPENDIX E

Tactical Casualty Care (TCC) Individual First Aid Kit Recommendations

First responders and their employers shall adhere to LEMSA medical direction and approval of first responder medical equipment. The following is a list of recommended medical equipment individual responders on a team may carry in their first aid kit.

Quantity	Type of Equipment
1	Medical Pouch
6	Gloves (Trauma, latex-free, 3 pair)
1	Tourniquet, Co-TCCC-Recommended
1	Pressure Bandage
1	Hemostatic Dressing, LEMSA/EMSA approved
1	Nasopharyngeal Airway (28f size with water-based lubricant), if approved by the local EMS agency Medical Director
1	Chest Seal, vented preferred
1	Rescue Blanket (disposable-consider thermal reflective material)
1	Pen, Permanent Marker
1	Shears, Trauma
1	Gauze, Roller Bandage or Elastic Bandage

California EMS Authority (2017)

APPENDIX F

EMS Personnel Scope of Practice Matrix 2017

Public Safety Personnel	EMT	Advanced EMT	Paramedic
<p>Authorized Skills (CCR §100018)</p> <ul style="list-style-type: none"> • Perform CPR & AED • Perform patient evaluation • Treatment for shock • Provide airway support including: Head-tilt/chin lift; jaw thrust; Manage manual airway obstructions; recovery position. • Perform spinal immobilization • Perform splinting • Irrigate eye • Assist with oral glucose administration • Assist with physician-prescribed epinephrine auto-injector and naloxone • Assist in emergency childbirth • Control hemorrhaging by direct pressure, pressure bandages, tourniquets, wound packing, and hemostatic dressings • Apply chest seals and dressings • Perform simple decontamination techniques <p>Optional Skills (LEMSA Approved)</p> <ul style="list-style-type: none"> • Administer Epinephrine Auto- injectors • Administer oxygen • Administer duodote kits for self/peer • Administer naloxone • Institute oropharyngeal & nasopharyngeal airways 	<p>Basic Scope (CCR §100063)</p> <ul style="list-style-type: none"> • All Public Safety Skills • Perform patient assessment • Render basic life support, rescue and emergency medical care • Administer advanced first aid and OTC medications with LEMSAs approval • Transport ill and injured persons • Administer adjunctive breathing aids • Administer of oxygen • Extricate patients • Conduct field triage • Use mechanical restraints • Assist with administration of prescribed devices • Use of pulse oximetry • Administer continuous positive airway pressure <p>Optional Skills (LEMSA Approved)</p> <ul style="list-style-type: none"> • Institute perilaryngeal airways • Administer Epinephrine Auto-injectors • Administer duodote kits • Administer naloxone 	<p>Basic Scope (CCR §100063)</p> <ul style="list-style-type: none"> • All EMT skills • Use of perilaryngeal airways • Use of tracheo-bronchial suctioning • Institute intravenous (IV) catheters, saline locks, needles or other cannulae (IV lines) • Administer IV glucose, isotonic balanced salt solutions, and naloxone • Establish 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"> ○ Nitroglycerine ○ Aspirin ○ Glucagon ○ Inhaled beta 2 agonists ○ Activated charcoal ○ Naloxone ○ Epinephrine <p>Optional Skills</p> <p>Previously certified EMT- IIs have additional medications approved by the local EMS agency</p>	<p>Basic Scope (CCR §100146)</p> <ul style="list-style-type: none"> • All Public Safety, EMT, & AEMT skills and medications • Use of laryngoscope, to remove foreign bodies with magills • Use of lower airway multi-lumen adjuncts, esophageal airway, perilaryngeal airways, stomal intubation, Endotracheal (ET) intubation (adults, oral) • Perform Valsalva’s Maneuver • Perform needle thoracostomy & cricothyrotomy • Perform naso/orogastric tube insertion/suction • Monitor thoracostomy tubes • Monitor/adjust potassium (≤ 40 mEq/L) IV lines • Utilization & monitoring of electrocardiographic devices • Defibrillation • Perform cardiac pacing • Perform synchronized cardioversion • Administer 25 medications • Bi-level positive airway pressure (BPAP) and positive end expiratory pressure (PEEP) • Institute intraosseous (IO) needles or catheters • Use of pre-hospital laboratory devices <p>Optional Skills</p> <p>Local EMS Agencies may add additional skills and medications if approved by the EMS Authority</p>

California EMS Authority (2017)

APPENDIX G

References

Further Suggested Reading on Best Practices

Active Shooter Awareness Guidance:

<http://www.caloes.ca.gov/LawEnforcementSite/Documents/Cal%20OES%20-%20Active%20Shooter%20Awareness%20Guidance.pdf>

American College of Surgeons for more information on management of prehospital trauma care: <http://informahealthcare.com/doi/pdf/10.3109/10903127.2014.896962>

Assembly Bill No. 1598

http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1598

Committee for Tactical Emergency Casualty Care (C-TECC) - IAFF position paper

<http://www.jsomonline.org/TEMS/1401CTECC%20Update.pdf>

C-TECC- <http://www.c-tecc.org/>

FBI Resources for Active Shooter/MCI Incidents -

<https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-resources>

FBI Study of Active Shooter Incidents - <http://www.fbi.gov/news/stories/2014/september/fbi-releases-study-on-active-shooter-incidents/pdfs/a-study-of-active-shooter-incidents-in-the-u.s.-between-2000-and-2013>

FEMA for guidance on the incident command system: <https://www.fema.gov/incident-command-system-resources>

Firescope - Emergency Response to Law Enforcement Incidents ICS 701

<http://www.firescope.org/docs-operational-guidelines/ics%20701.pdf>

Hartford Consensus II for national consensus strategies on improving survivability for mass casualty shooting events: http://www.naemt.org/Files/LEFRTCC/Hartford_Consensus_2.pdf

Integrated response:

<http://www.cffjac.org/go/jac/media-center/video-gallery/tcm-active-shooter-scenario/>

https://www.usfa.fema.gov/downloads/pdf/publications/active_shooter_guide.pdf

POST/EMSA Tactical Medicine Guidelines:

<http://lib.post.ca.gov/Publications/TacticalMedicine.pdf>

Texas State University Study of Active Shooter Events - <http://alerrt.com/>

APPENDIX H

California TCC Training Program/Course Approval Application Form

Please Type or Print Clearly.

TRAINING COURSE(S) INFORMATION			
<input type="checkbox"/> Tactical First Aid/TEMS FRO – minimum 4 hour course <input type="radio"/> Traditional (Stand Alone) Program Approval <input type="radio"/> CE Approval	<input type="checkbox"/> Tactical Lifesaver/TEMS Technician – minimum 40 hour course <input type="radio"/> Traditional (Stand Alone) Program Approval <input type="radio"/> CE Approval		
TRAINING PROVIDER INSTITUTION INFORMATION			
Type of Provider:			
<input type="checkbox"/> Statewide Public Safety and other Multijurisdictional (EMSA approval)		<input type="checkbox"/> Local (LEMSA approval)	
Company/Institution/Agency Name:			
Address:		City:	State:
Business Phone Number:		Website:	
APPLICANT INFORMATION (Program Director)			
Last Name:	First Name:	Middle Initial:	
Address:	City:	State:	Zip Code:
Business Phone Number:		Email Address:	
ADDITIONAL SUPPORTIVE DOCUMENTS PROVIDED			
<i>Submit with this application</i>			
<input type="checkbox"/> Course Schedule w/Hourly Distribution	<input type="checkbox"/> List of Tactical Medical Scenarios		
<input type="checkbox"/> Course Outline	<input type="checkbox"/> Written / Skills Competency Examinations, if applicable		
<input type="checkbox"/> Course Curriculum	<input type="checkbox"/> Written Course Safety Policy		
<input type="checkbox"/> List of Psychomotor Skills	<input type="checkbox"/> Instructor Resume(s)		
SIGNATURE			
I hereby certify <u>under penalty of perjury</u> that all information on this application is true and correct. I understand that any falsification or omission of material facts may cause denial of this program or course approval and that all information on this application is subject to verification.			
	SIGNATURE OF APPLICANT _____		DATE _____

Local EMS Agency / EMS Authority Official Use

Approving Authority:		Date:
Approve/Deny:	<input type="checkbox"/> Approve, Expiration Date: _____	
	<input type="checkbox"/> Deny, reason: _____	
Comments:		

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Priscilla Rivera, Manager
Personnel Standards Unit

SUBJECT: Physician Orders for Life Sustaining Treatment (POLST) eRegistry
Update

RECOMMENDED ACTION:

Receive information regarding POLST eRegistry Pilot Project

FISCAL IMPACT:

The California Health Care Foundation has granted up to \$3 million to fund the different aspects of the POLST eRegistry Pilot Project that includes, but is not limited to, the local pilot sites, the technology vendor, independent evaluator, project director, project consultant.

DISCUSSION:

Decisions on end of life care for oneself and for that of loved ones are difficult for anyone to make. The POLST is a process that encourages open and thoughtful discussion between physicians, and their patients regarding end of life care. To address some of the current limitations with the accessibility to the POLST information, SB 19 (Wolk Chapter 504, Statutes of 2015) was signed by the California Governor authorizing a POLST electronic registry (eRegistry) pilot project under the aegis of the EMS Authority.

Partners/Stakeholders:

EMSA identified the California HealthCare Foundation (CHCF) and the California Coalition for Compassionate Care (the Coalition) as two partners with high level of involvement in the current POLST system. CHCF has worked to promote adoption of the POLST form in California since 2007, with the Coalition being a key grantee for efforts that have helped

California become one of only three states (with OR and WV) to meet national guidelines on POLST adoption.

Pilot site progress:

Two pilot sites were selected: City of San Diego California, led by the San Diego Health Connect (SDHC) and Contra Costa County, led by the Alameda Contra Costa Medical Association (ACCMA). The software vendor contract was awarded to Vynca.

- a) In late 2016, unforeseen barriers between the HIE site and the eRegistry vendor occurred. These barriers have led to the decision that the pilot site will not include a partnership between the HIE site and the current technology vendor. The project management group is currently exploring options on how to move forward.
- b) The pilot site in Contra Costa County being led by the ACCMA, is continuing to move forward and is currently meeting their required milestones.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Farid Nasr, MD
Specialty care Systems Specialist

SUBJECT: Stroke Critical Care System Regulations Approval

RECOMMENDED ACTION:

Approve Stroke Regulations.

FISCAL IMPACT:

Unknown fiscal impact to local EMS agencies and stakeholders upon implementation of these regulations.

DISCUSSION:

The EMS Authority proposes approval of the draft Stroke Critical Care System Regulations Chapter 7.2, Division 9, of Title 22.

The EMS Authority submitted draft Stroke regulations in a rulemaking package to the Office of Administrative Law (OAL) on November 23, 2016. A 45-day public comment period was completed January 23, 2017. Upon closure of the comment period, the EMS Authority reconvened the original Stroke Regulations writing group to assist with considerations for revisions to the draft Stroke Regulations. The EMS Authority reviewed all comments received and revisions were made to the draft regulations.

Based on amendments to the draft Stroke regulations, the EMS Authority held an additional 15-day public comment period, which was completed May 12, 2017. Some comments received proposed alignment with potential future changes in national Stoke standards next year. The EMS Authority supports moving these draft regulations forward to OAL at this time. Until national stroke standards are revised, it is premature to change the regulations. LEMSAs may increase the minimum standards, if future changes are made, until such time as the regulations could be revised.

The one-year rule making timeline for the draft Stroke regulations package will conclude November 2017. The EMS Authority respectfully requests the Commission's approval of the draft Stroke regulations at this time to meet the OAL 1 year deadline.

1 California Code of Regulations
2 TITLE 22. SOCIAL SECURITY
3 DIVISION 9. PRE-HOSPITAL EMERGENCY MEDICAL SERVICES
4 CHAPTER 7.2. STROKE CRITICAL CARE SYSTEM

5 ARTICLE 1. DEFINITIONS

6 § 100270.200. Board-certified

7 “Board-certified” means a physician who has fulfilled all of the Accreditation Council for
8 Graduate Medical Education (ACGME) requirements in a specialty field of practice, and
9 has been awarded a board diploma by an American Board of Medical Specialties
10 (ABMS) approved program.

11 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
12 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

13 § 100270.201. Board-eligible

14 “Board-eligible” means a physician who has applied to a specialty board examination
15 and has completed the requirements and received permission to take the examination
16 by ABMS. Board certification must be obtained within the allowed time by ABMS from
17 the first appointment.

18 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
19 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

20 § 100270.202. Clinical Stroke Team

21 “Clinical Stroke Team” means a team of healthcare professionals who provide care for
22 the stroke patient and may include, but is not limited to, neurologists,
23 neurointerventionalists, neurosurgeons, anesthesiologists, emergency medicine
24 physicians, registered nurses, advanced practice nurses, physician assistants,
25 pharmacists, and technologists.

26 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
27 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

28 **§ 100270.203. Emergency Medical Services Authority**

29 “Emergency Medical Services Authority” or “EMS Authority” means the department in
30 California that is responsible for the coordination and the integration of all state activities
31 concerning Emergency Medical Services (EMS).

32 Note: Authority cited: Sections 1797.107 and 1797.54, Health and Safety Code.

33 Reference: Sections 1797.100, and 1797.103, Health and Safety Code.

34 **§ 100270.204. Local Emergency Medical Services Agency**

35 “Local Emergency Medical Services Agency” or “local EMS agency” means a county
36 health department, an agency established and operated by the county, an entity with
37 which the county contracts for the purposes of local emergency medical services
38 administration, or a joint-powers agency created for the administration of emergency
39 medical services by agreement between counties or cities and which is designated
40 pursuant to the California Health and Safety Code, Division 2.5, Chapter 4, Section
41 1797.200.

42 Note: Authority cited: Sections 1797.94, 1797.107, 1797.176, and 1797.200, Health and
43 Safety Code. Reference: Section 1797.94, Health and Safety Code.

44 **§ 100270.205. Protocol**

45 “Protocol” means a predetermined, written medical care guideline, which may include
46 standing orders.

47 Note: Authority cited: Sections 1797.107, 1797.176, 1797.220, and 1798.150, Health
48 and Safety Code. Reference: Sections 1797.103 and 1797.176, Health and Safety
49 Code.

50 **§ 100270.206. Stroke**

51 “Stroke” means a condition of impaired blood flow to a patient’s brain resulting in brain
52 dysfunction, most commonly through vascular occlusion or hemorrhage.

53 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
54 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

55 **§ 100270.207. Stroke Call Roster**

56 “Stroke Call Roster” means a schedule of licensed health professionals available
57 twenty-four (24) hours a day, seven (7) days a week for the care of stroke patients.

58 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
59 Code. Reference: Sections 1797.103 and 1797.220, Health and Safety Code.

60 **§ 100270.208. Stroke Care**

61 “Stroke Care” means emergency transport, triage, acute intervention and other acute
62 care services for stroke patients that potentially require immediate medical or surgical
63 intervention treatment, and may include education, primary prevention, acute
64 intervention, acute and subacute management, prevention of complications, secondary
65 stroke prevention, and rehabilitative services.

66 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
67 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
68 Code.

69 **100270.209. Stroke Critical Care System**

70 “Stroke Critical Care System” means a subspecialty care component of the EMS
71 system developed by a local EMS agency. This critical care system links pre-hospital
72 and hospital care to deliver treatment to stroke patients who potentially require
73 immediate medical or surgical intervention.

74 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
75 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
76 Code.

77 **§ 100270.210. Stroke Medical Director**

78 “Stroke Medical Director” means a board-certified physician designated by the hospital
79 who is responsible for the stroke service, performance improvement, and patient safety
80 programs related to the Stroke Critical Care System.

81 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
82 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
83 Code.

84 **§ 100270.211. Stroke Program Manager/Coordinator**

85 “Stroke Program Manager/Coordinator” means a registered nurse or qualified individual
86 designated by the hospital with the responsibility for monitoring and evaluating the care
87 of stroke patients and the coordination of performance improvement and patient safety
88 programs for the stroke center in conjunction with the stroke medical director.

89 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
90 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
91 Code.

92 **§ 100270.212. Stroke Program**

93 “Stroke Program” means an organizational component of the hospital specializing in the
94 care of stroke patients.

95 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
96 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
97 Code.

98 **§ 100270.213. Stroke Team**

99 “Stroke Team” means the clinical stroke team, support personnel, and administrative
100 staff.

101 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
102 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
103 Code.

104 **§ 100270.214. Telehealth**

105 “Telehealth” means the mode of delivering health care services and public health via
106 information and communication technologies to facilitate the diagnosis, consultation,
107 treatment, education, care management, and self-management of a patient's health

108 care while the patient is at the originating site and the health care provider is at a distant
109 site.

110 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
111 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
112 Code. California Business and Professions Code Sec. 2290.5

113 **ARTICLE 2. LOCAL EMS AGENCY STROKE CRITICAL CARE SYSTEM**
114 **REQUIREMENTS**

115 **§ 100270.215. General Requirements and Timeframes**

116 (a) The local EMS agency may develop and implement a Stroke Critical Care System.

117 (b) Each local EMS agency implementing a Stroke Critical Care System shall submit
118 to the EMS Authority a Stroke System Plan in accordance with the requirements in
119 section 100270.222.

120 (c) A new Stroke Critical Care System that starts after the effective date of these
121 regulations shall have the Stroke System Plans approved by the EMS Authority prior to
122 implementation. The EMS Authority shall notify the local EMS agency of approval or
123 disapproval of its Stroke System Plan within 30 days of receipt of the Plan. If the EMS
124 Authority disapproves a plan, it shall provide a written notification including the
125 reason(s) for the disapproval and the corrective action items required.

126 (d) The local EMS agency shall provide a corrected plan to the EMS Authority within
127 60 days of receipt of the disapproval letter.

128 (e) A local EMS agency that is currently operating a Stroke Critical Care System
129 implemented prior to the effective date of these regulations, shall submit, to the EMS
130 Authority, a Stroke System Plan as an addendum to its annual EMS Plan update, or
131 within 180 days of the effective date of these regulations - whichever comes first.

132 (f) After the approval of the plan, the local EMS agency shall submit an update to its
133 Stroke System Plan as part of its annual EMS Plan update, consistent with the
134 requirements in section 100270.218.

135 (g) No health care facility shall advertise in any manner or otherwise hold itself out to
136 beaffiliated with the Stroke Critical Care System or a stroke center unless they have
137 been designated by the local EMS agency, in accordance with this Chapter.

138 Note: Authority cited: Sections 1797.107, 1797.173, 1797.176, 1797.250, and 1798.150,
139 Health and Safety Code. Reference: Sections 1797.105, 1797.176, and 1797.220,
140 Health and Safety Code.

141 **§ 100270.216. Stroke System Plan Requirements**

142 The Stroke System Plan submitted to the EMS Authority shall include, at a minimum,
143 the following components:

144 (a) the names and titles of the local EMS agency personnel who have a role in the
145 Stroke Critical Care System,

146 (b) verification of agreements with hospitals for designation of stroke facilities with the
147 list of stroke hospital contracts with expiration dates,

148 (c) description or copy of the local EMS agency's stroke patient identification and
149 destination policies,

150 (d) description or copy of the method of field communication to the receiving hospital
151 specific to stroke patients, designed to expedite time-sensitive treatment on arrival,

152 (e) description or copy of policy that facilitates the inter-facility transfer of stroke
153 patients,

154 (f) description of the method of data collection from the EMS providers and
155 designated stroke hospitals to the local EMS agency and the EMS Authority,

156 (g) a copy of all written agreements with neighboring local EMS agencies to provide
157 stroke care,

158 (h) description of the integration of stroke into existing Quality Improvement QI
159 Committee or description of any stroke specific QI committee, and

160 (i) description of programs to conduct or promote public education specific to Stroke.

161 Note: Authority cited: Sections 1797.103, 1797.105, 1797.107, 1797.176, 1797.220,
162 1797.250, 1798.150, 1798.170, and 1798.172, Health and Safety Code. Reference:
163 Sections 1797.176, and1797.220, Health and Safety Code.

164 **§ 100270.217. Stroke System Plan Updates**

165 The local EMS agency shall submit a Stroke System Plan update as part of its annual
166 EMS plan update. The update shall include, at a minimum, the following:

- 167 (a) any changes in the Stroke Critical Care System since submission of the prior
168 annual plan update or the Stroke System Plan addendum,
169 (b) status of Stroke System Plan goals and objectives,
170 (c) Stroke Critical Care System performance improvement activities, and
171 (d) progress on addressing action items and recommendations provided by the EMS
172 Authority within the Stroke System Plan or status report approval letter if applicable.

173 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.250, 1797.254,
174 1798.150, and 1798.172, Health and Safety Code. Reference: Sections 1797.176,
175 1797.220, 1797.222, and 1798.170, Health and Safety Code.

176 **ARTICLE 3. PRE-HOSPITAL STROKE CRITICAL CARE SYSTEM REQUIREMENTS**

177 **§ 100270.218. EMS Personnel and Early Recognition**

- 178 (a) The local EMS agency shall ensure that pre-hospital stroke assessment and
179 treatment training is available for pre-hospital emergency medical care personnel as
180 determined by the local EMS agency.
181 (b) The local EMS agency shall require the use of a validated pre-hospital stroke-
182 screening algorithm for early recognition and assessment.
183 (c) The local EMS agency's protocols for the use of online medical direction shall be
184 utilized for suspicious or complex findings.
185 (d) The pre-hospital treatment policies for stroke-specific basic life support (BLS),
186 advanced life support (ALS), and limited advanced life support (LALS) shall be
187 developed according to scope of practice and local accreditation.
188 (e) Pre-hospital findings of suspected stroke patients, as defined by the local EMS
189 agency, will be communicated to the Stroke Center of Care facility in advance of arrival,
190 according to the local EMS agency's Stroke System Plan.

191 Note: Authority cited: Sections 1797.92, 1797.103, 1797.107, 1797.176, 1797.189(a)
192 (2), 1797.206, 1797.214, and 1798.150, Health and Safety Code. Reference: Sections
193 1797.176, 1797.220, 1798.150, and 1798.170, Health and Safety Code.

194 **ARTICLE 4. HOSPITAL STROKE CARE REQUIREMENTS**

195 Any stroke center designated by the local EMS agency prior to implementation of these
196 regulations may continue to operate. Upon re-designation by the local EMS agency at
197 the next regular interval, stroke centers shall be re-evaluated to meet the criteria
198 established in these regulations.

199 **§ 100270.219. Comprehensive Stroke Centers**

200 Hospitals designated as Comprehensive Stroke Centers by the local EMS agency shall
201 have the following minimum criteria in addition to the requirements for being Primary
202 Stroke Centers explained in this chapter.

203 (a) Neuro-endovascular diagnostic and therapeutic procedures available twenty-four
204 (24) hours a day, seven (7) days a week.

205 (b) Advanced imaging, including but not limited to, computed tomography (CT),
206 angiography, magnetic resonance imaging (MRI), and diffusion-weighted magnetic
207 resonance imaging, available twenty-four (24) hours a day, seven (7) days a week.

208 (c) Intensive care unit (ICU) beds with licensed independent practitioners with the
209 expertise and experience to provide neuro-critical care twenty-four (24) hours a day,
210 seven (7) days a week.

211 (d) Written policies and procedures for comprehensive stroke services that are
212 reviewed at least every two (2) years, revised as needed, and implemented.

213 (e) Data-driven QI, including collection and monitoring of standardized comprehensive
214 stroke center performance measures

215 (f) Stroke patient research program

216 (g) Satisfy the following staff qualifications:

217 (1) a neurosurgical team capable of assessing and treating complex stroke and
218 stroke-like syndromes.

- 219 (2) a neuroradiologist with a current Certificate of Added Qualifications in
220 Neuroradiology on staff,
- 221 (3) a physician with neuro-interventional angiographic training and skills on staff as
222 deemed by the hospital's credentialing process,
- 223 (4) a qualified neuroradiologist, board-certified by the American Board of Radiology or
224 the American Osteopathic Board of Radiology, and
- 225 (5) a qualified vascular neurologist, board-certified by the American Board of
226 Psychiatry and Neurology or the American Osteopathic Board of Neurology and
227 Psychiatry.
- 228 (h) In the event that tele-radiology is used, all staffing and staff qualification
229 requirements contained in § 100270.223 shall remain in effect and shall be documented
230 by the hospital.
- 231 (i) Provide comprehensive rehabilitation services either on-site or by written transfer
232 agreement with another health care facility licensed to provide such services.
- 233 (j) Written transfer agreements with primary stroke centers in region to accept transfer
234 of patients with complex strokes when clinically warranted.
- 235 (k) Comprehensive Stroke Center shall at a minimum, provide guidance and
236 continuing medical education to hospitals designated as Primary Stroke Centers with
237 which they have transfer agreements.
- 238 (l) Additional requirements may be included at the discretion of the local EMS agency
239 medical director.

240 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220,
241 1798.150, and 1798.172, Health and Safety Code. Reference: Sections 1797.204,
242 1797.220, and 1797.222, Health and Safety Code.

243 **§ 100270.220. Primary Stroke Centers**

244 Hospitals to be designated by the local EMS agency as a Primary Stroke Center shall
245 meet the following minimum criteria to provide care for stroke patients in the emergency
246 department and those patients that are admitted:

- 247 (a) adequate staff, equipment, and training to perform rapid evaluation, triage and
248 treatment for the stroke patient in the emergency department;

- 249 (b) standardized stroke care protocol;
250 (c) twenty-four (24) hours a day, seven (7) days a week stroke diagnosis and
251 treatment capacity;
252 (d) a quality improvement system, including data collection;
253 (e) continuing education in Stroke care provided for staff physicians, staff nurses, staff
254 allied health personnel, and EMS personnel;
255 (f) public education on stroke and illness prevention; and
256 (g) any additional requirements included at the discretion of the local EMS agency
257 medical director;

258 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.220, 1798.150,
259 1798.167, and 1798.172, Health and Safety Code. Reference: Sections 1797.176,
260 1797.220, 1798.150, and 1798.170, Health and Safety Code.

261

262 **§ 100270.221. Evaluation of Primary Stroke Centers**

263 The local EMS agency shall ensure evaluation of the Primary Stroke Center occurs as
264 part of their Stroke Critical Care System including assessment of the following minimal
265 criteria:

- 266 (a) An acute stroke team, available to see in person or via telehealth, a patient
267 identified as a potential acute stroke patient within 15 minutes following the patient's
268 arrival at the hospital's emergency department or within 15 minutes following a
269 diagnosis of a patient's potential acute stroke.
270 (b) Written policies and procedures for stroke services that are reviewed at least every
271 two (2) years, revised more frequently as needed, and implemented. These policies and
272 procedures shall include written protocols and standardized orders for emergency care
273 of stroke patients.
274 (c) Data-driven, continuous quality improvement including collection and monitoring of
275 standardized performance measures.
276 (d) Neuro-imaging services capability that is available twenty-four (24) hours a day,
277 seven (7) days a week, such that imaging shall be initiated within twenty-five (25)
278 minutes following emergency department arrival. Such studies shall be reviewed by a

279 physician with appropriate expertise, such as a board-certified radiologist, board-
280 certified neurologist, a board-certified neurosurgeon, or residents who interpret such
281 studies as part of their training in an ACGME-approved radiology, neurology, or
282 neurosurgery training program within forty-five (45) minutes of emergency department
283 arrival.

284 (1) Neuro-imaging services shall, at a minimum, include computerized tomography
285 (CT) scanning or magnetic resonance imaging (MRI), as well as interpretation of the
286 imaging.

287 (2) In the event that tele-radiology is used in image interpretation, all staffing and staff
288 qualification requirements contained in this sub-chapter shall remain in effect and shall
289 be documented by the hospital.

290 (3) For the purpose of this sub-section, a qualified radiologist shall be board certified
291 by the American Board of Radiology or the American Osteopathic Board of Radiology.

292 (4) For the purpose of this sub-section, a qualified neurologist shall be board certified
293 by the American Board of Psychiatry and Neurology or the American Osteopathic
294 Board of Neurology and Psychiatry.

295 (5) For the purpose of this sub-section, a qualified neurosurgeon shall be board
296 certified by the American Board of Neurological Surgery.

297 (e) Laboratory services capability that is available twenty-four (24) hours a day, seven
298 (7) days a week, such that services may be performed within forty-five (45) minutes
299 following emergency department arrival.

300 (f) Neurosurgical services that are available, including operating room availability,
301 either directly or under agreement with a comprehensive or primary stroke center, within
302 two (2) hours following admission of acute stroke patients to the primary stroke center.

303 (g) Acute care rehabilitation services.

304 (h) Transfer arrangements with one or more higher level of care centers when
305 clinically warranted.

306 (i) There shall be a physician director of a primary stroke center, who may also serve
307 as a physician member of a stroke team, who is board-certified in neurology or
308 neurosurgery or other board certified physician with sufficient experience and expertise

309 dealing with cerebral vascular disease as determined by the hospital credentials
310 committee.

311 (j) At a minimum, an acute care stroke team shall consist of:

312 (1) a neurologist, neurosurgeon, interventional neuroradiologist, or emergency
313 physician who is board certified or board eligible in neurology, neurosurgery,
314 endovascular neurosurgical radiology, or other board-certified physician with sufficient
315 experience and expertise in managing patients with acute cerebral vascular disease as
316 determine by the hospital credentials committee; and

317 (2) a registered nurse, physician assistant or nurse practitioner who has demonstrated
318 competency, as determined by the physician director described in above, in caring for
319 acute stroke patients.

320 (k) Local EMS agencies may identify thrombectomy capable primary stroke centers
321 and preferentially triage and transport patients to those centers.

322 Note: Authority cited: Sections 1797.102, 1797.103, 1797.107, 1797.176, 1797.204
323 1797.220, 1797.250, 1797.254, 1798.150, and 1798.172, Health and Safety Code.

324 Reference: Sections 1797.104, 1797.176, and 1797.204, 1797.220, 1797.222,
325 1798.170, Health and Safety Code.

326 **§ 100270.222. Acute Stroke Ready Hospitals**

327 Acute Stroke Ready Hospitals (Satellite Stroke Centers) are able to provide the
328 minimum level of care for stroke patients in the emergency department, which are
329 paired with one or more hospitals with higher level of services. In these hospitals, the
330 necessary emergency department neurological expertise may be provided in person or
331 through telehealth. The local EMS agency is responsible for evaluation of Acute Stroke
332 Ready Hospitals as part of their Stroke Critical Care System, which includes
333 assessment of the following structural components:

334 (a) An acute stroke team available to see, in person or via telehealth, a patient
335 identified as a potential acute stroke patient within thirty (30) minutes following the
336 patient's arrival at the hospital's emergency department.

337 (b) Written policies and procedures for emergency department stroke services that are
338 reviewed, revised as needed, and implemented at least every three (3) years.

- 339 (c) Emergency department policies and procedures shall include written protocols and
340 standardized orders for emergency care of stroke patients.
- 341 (d) Data-driven, QI including collection and monitoring of standardized performance
342 measures.
- 343 (e) Neuro-imaging services capability that is available twenty-four (24) hours a day,
344 seven (7) days a week, such that imaging shall be performed and reviewed by physician
345 within sixty (60) minutes following emergency department arrival. Such studies shall be
346 reviewed by a physician with appropriate expertise, such as a board-certified radiologist,
347 board-certified neurologist, a board-certified neurosurgeon, or residents who interpret
348 such studies as part of their training in an ACGME-approved radiology, neurology, or
349 neurosurgery training program.
- 350 (1) Neuro-imaging services shall, at a minimum, include computerized tomography
351 (CT) scanning or magnetic resonance imaging (MRI), as well as interpretation of the
352 imaging.
- 353 (2) In the event that tele-radiology is used in image interpretation, all staffing and staff
354 qualification requirements contained in this sub-section shall remain in effect and shall
355 be documented by the hospital.
- 356 (3) For the purpose of this sub-section, a qualified radiologist shall be board-certified
357 by the American Board of Radiology or the American Osteopathic Board of Radiology.
- 358 (4) For the purpose of this sub-section, a qualified neurologist shall be board-certified
359 by the American Board of Psychiatry and Neurology or the American Osteopathic Board
360 of Neurology and Psychiatry.
- 361 (5) For the purpose of this sub-section, a qualified neurosurgeon shall be board-
362 certified by the American Board of Neurological Surgery.
- 363 (f) Laboratory services at a minimum, including blood testing, electrocardiography and
364 x-ray services, available twenty-four (24) hours a day, seven (7) days a week and able
365 to be completed and reviewed by physician within sixty (60) minutes following
366 emergency department arrival.
- 367 (g) Neurosurgical services that are available, including operating room availability,
368 either directly or under agreement with a Primary or Comprehensive Stroke Center,

369 within three (3) hours following admission of acute stroke patients to the Acute Stroke
370 Ready Hospital.

371 (h) Transfer arrangements with one or more primary or comprehensive stroke
372 center(s) that facilitate transfer of patients with strokes to the stroke center(s) for care
373 when clinically warranted.

374 (i) There shall be a director of the Acute Stroke Ready Hospital, who may also serve
375 as a member of a stroke team, who is a physician or advanced practice nurse who
376 maintains at least six (6) hours per year of educational time in cerebrovascular disease;

377 (j) Acute care stroke team for Acute Stroke Ready Hospital at a minimum shall
378 consist of a nurse and a physician with training and expertise in acute stroke care.

379 (k) Additional requirements may be included at the discretion of the local EMS agency
380 medical director.

381 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220,
382 1798.150, and 1798.172, Health and Safety Code. Reference: Sections 1797.204,
383 1797.220, and 1797.222, Health and Safety Code.

384 **§ 100270.223. EMS Receiving Hospitals (Non-designated for Stroke Critical Care**
385 **Services)**

386 Hospitals that are not designated shall do the following at minimum, in cooperation with
387 Stroke Receiving Centers and the local EMS agency in their jurisdictions:

388 (a) Participate in the local EMS agency's QI system, including data submission as
389 determined by the local EMS agency medical director;

390 (b) Participate in the inter-facility transfer agreements to ensure access to the Stroke
391 Critical Care System for potential stroke patient.

392 Note: Authority cited: Sections 1797.88, 1797.103, 1797.107, 1797.176, 1797.220,
393 1798.100, 1798.150, and 1798.172, Health and Safety Code. Reference: Sections
394 1797.176, 1797.220, and 1798.150, 1798.170, Health and Safety Code.

395 **ARTICLE 5. DATA MANAGEMENT, QUALITY IMPROVEMENT AND EVALUATION**

396 **§ 100270.224. Data Management**

- 397 (a) The local EMS agency shall implement a standardized data collection and
398 reporting process for Stroke Critical Care Systems.
- 399 (1) The system shall include the collection of both pre-hospital and hospital patient
400 care data, as determined by the local EMS agency.
- 401 (2) The pre-hospital stroke patient care elements shall be complaint with the most
402 current version of the California EMS Information Systems (CEMSIS) database, the
403 National EMS Information System (NEMSIS) and the hospital stroke patient care
404 elements shall be compliant with the most current national standards published by the
405 U.S. Centers for Disease Control and Prevention, Paul Coverdell National Acute Stroke
406 Program Resource Guide.
- 407 (3) All hospitals that receive stroke patients shall participate in the local EMS agency
408 data collection process in accordance with local EMS agency policies and procedures.
- 409 (4) Stroke data shall be collected and submitted by the local EMS agency to the EMS
410 Authority on no less than a quarterly basis.

411 Note: Authority cited: Sections. 1797.102, 1797.103, 1797.107, 1797.176, 1797.204,
412 1797.220, 1797.227, 1798.150, and 1798.172. Health and Safety Code. Reference:
413 Section 1797.220, 1797.222, 1797.204.

414 **§ 100270.225. Quality Improvement Process**

415 Each Stroke Critical Care System shall have a quality improvement process to include
416 structure, process, and outcome evaluations which focus on improvement efforts to
417 identify root causes of problems, intervene to reduce or eliminate these causes, and
418 taking steps to correct the process. This process shall include, at a minimum:

- 419 (a) a detailed audit of all stroke-related deaths, major complications, and transfers;
420 (b) a multidisciplinary stroke QI Committee including both pre-hospital and hospital
421 members;
- 422 (c) participation in the stroke data management system;
- 423 (d) compliance with the California Evidence Code, Section 1157.7 to ensure
424 confidentiality, and a disclosure-protected review of selected stroke cases.

425 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220, and
426 1798.150, Health and Safety Code. Reference: Sections 1797.176, 1797.204,
427 1797.220, and 1798.150, Health and Safety Code.

428 **§ 100270.226. Stroke Critical Care System Evaluation**

429 (a) The local EMS agency is responsible for on-going performance evaluations of the
430 local or regional Stroke Critical Care System.

431 (b) The local EMS agency shall be responsible for the development of a quality
432 improvement process pursuant to Section 100270.226.

433 (c) The local EMS agency shall be responsible for ensuring that designated Stroke
434 Centers and other hospitals that treat stroke patients participate in the quality
435 improvement process contained in Section 100270.226, as well as pre-hospital
436 providers involved in the Stroke Critical Care System.

437 Note: Authority cited: Sections 1797.102, 1797.103, 1797.107, 1797.176, 1797.204,
438 1797.220, 1797.250, 1797.254, 1798.150, and 1798.172. Health and Safety Code.
439 Reference: Section 1797.104, 1797.176, 1797.204, 1797.220, 1797.222, 1798.170
440 Health and Safety Code.

**COMMENTS for DRAFT STROKE REGULATIONS,
2nd Public Comment Period: April 28, 2017 – May 12, 2017**

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
100270.201 Page 1, Line 19	LA County EMS Agency	Change wording "has completed the requirements and received permission <u>is approved</u> "	Comment acknowledged. No change. The definition intent is more clearly defined with the working in place.
100270.201 Page 1, Line 20	LA County EMS Agency	Change wording "within the allowed timeframe five "	Comment acknowledged. No Change. Addition of this language does not provide any additional clarity.
	LA County EMS Agency	There is no Stroke Technical Advisory Committee designated within the regulations. A TAC is designated for all other specialty programs within the regulations- Trauma, Peds, STEMI.	Comment acknowledged. No change.
32	San Luis Obispo County EMS Agency	CME is defined but it's not found anywhere else in proposed regs. Please align.	Comment acknowledged. Change made.
Page 2 Line 46	Santa Clara EMS	The removed the definition for "immediately available" included the unencumbered language. This is critical for the agency to ensure appropriate coverage for Stroke Centers. Needs to replaced.	Comment acknowledged. No change. The unencumbered language was supportive of the term Immediately Available. If the term is not in the regulations, the supportive language has not place for a term that does not exist.
Article 2. 100270.219. Line 165 State Stroke System Plan Requirements	Contra Costa EMS Agency	Remove requirement for LEMSA submit copies of agreements to EMSA for all written agreements with neighboring EMS agencies to provide stroke care. Letter of verification between LEMSAs is sufficient. Written agreements rarely needed to support normal destination workflows to a higher level of care between stroke	Comment acknowledged. No change. Comment does not match text in draft regulations. Considered reference to Section 100270.217: No change. The proposed Stoke Regulations are to provide statewide consistency with oversight and standards for stroke systems.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		centers and has potential to disrupt stroke system workflows if a formal written agreement was unable to be obtained between jurisdictions which would adversely impact patient care. Regulations would be requiring non-medical stakeholders to potentially influence medical care access. EMSA response during 45 day public comment period not sufficient response to justify no change remarks.	
100270.217 Page 7, Line 180	LA County EMS Agency	Change "a copy of all <u>any</u> written agreements <u>for coordination of stroke transports across county lines, with neighboring local EMS agencies</u> " to provide stroke care Rationale: The statement as it is currently written does not make sense. We designate out-of-county facilities to receive stroke patients if they are the closest. We are unaware of any written agreements between LEMSAs to provide stroke care.	Comment acknowledged. No change. The language as written confirms by the presence of written agreements that LEMSAs sharing common borders have agreed to the receipt of specialty care patients from neighboring systems.
3/8/203	Kula Koenig & Mick Smith - American Heart Association/American Stroke Association	All EMS agencies across the state shall establish pre-hospital care protocols related to the assessment, treatment, and transport of stroke patients by licensed emergency medical services providers in California.	Comment acknowledged. No change. Training and education of prehospital agency personnel follows national standards for each prehospital scope of practice.
Article 4 Page 9, Line 220	LA County EMS Agency	Add the following: "The local EMS agency may choose to designate one	Comment acknowledged. No change. The regulations allow for

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		<p>or more levels of stroke care based upon resources or needs".</p> <p>Rationale: Current wording looks as though the LEMSA must designate all levels of stroke centers within their LEMSA if they decide to develop a stroke system. Some LEMSAs may not have a facility that meets the requirements for comprehensive and others may not need acute stroke ready as they have adequate resources at the higher levels.</p>	<p>the activity described in the comment as drafted.</p>
<p>Article 4. Hospital Stroke Requirements 100270.221 Line 212</p>	<p>Contra Costa County EMS Agency</p>	<p>Primary Stroke Center is a designation term (which may be trademarked) used by The Joint Commission. If hospitals are not designated by TJC or some other credentialing entity, suggest they be called Stroke Receiving Centers. EMSA response not sufficient response to justify no change during 45 day public comment period.</p>	<p>Comment acknowledged. No change. Stroke Receiving Center is too general a term and could apply for all levels of care centers including Primary, Comprehensive, and Acute Stroke Ready.</p>
<p>100270.219 Page 8 Line 212</p>	<p>Eric Bernier, MSN, RN</p>	<p>Please clarify what and how "local accreditation" is applied to BLS, ALS and LLAS. To what is "local accreditation" referring?</p>	<p>Comment acknowledged. No change. Local EMS agencies have process for BLS, ALS and LALS accreditation and vary from county to county such as fee only, or some policy training.</p>
<p>4/9/223</p>	<p>Kula Koenig & Mick Smith- American Heart Association/American Stroke Association</p>	<p>In addition to hospitals designated by local EMS agency, EMSA shall recognize those hospitals designated by nationally certifying bodies without these hospitals having to go through a separate certification process by the local EMS agency.</p> <p>EMSA shall recognize as many</p>	<p>Comment acknowledged. No change. Hospital EMS system designation is the responsibility of the LEMSA.</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		<p>accredited acute care hospitals as Comprehensive Stroke Centers, Primary Stroke Centers, and Acute Stroke Ready Hospitals as apply and are certified as a Comprehensive Stroke Center, Primary Stroke Centers, and Acute Stroke Ready Hospitals as certified by a national certifying body (such as the American Heart Association, the Joint Commission or another department approved nationally recognized guidelines based organization that provides Comprehensive Stroke Center, Primary Stroke Center and Acute Stroke Ready Hospitals certification for stroke care), provided that each applicant continues to maintain its certification.</p>	
<p>Section 100270.220 – Comprehensive Stroke Centers</p> <p>Page 9</p> <p>Lines 228-229</p>	<p>Jay Goldman, MD, FACEP Director of EMS and Ambulance Kaiser Permanente Northern California</p> <p>Lynn Parkinson, Strategic Leader for Accreditation, Regulation and Licensing, Kaiser Foundation Hospitals, Northern California</p>	<p>The regulation is vague as to who at the Comprehensive Stroke Center will perform neuro-endovascular procedures. We would suggest linking this section with language in section (g) below: “(a) Neuro-endovascular diagnostic and therapeutic procedures available twenty-four (24) hours a day, seven (7) days a week, performed by a neuro-radiologist with the qualifications as defined in Section 100.270.220 (g).”</p>	<p>Comment acknowledged. No change. The additional language does not add clarity to the regulations.</p>
<p>100270.220 Page 9 Lines 228-229</p>	<p>Eric Bernier, MSN, RN</p>	<p>Clarification: Will Comprehensive Stroke Centers require Joint Commission Accreditation for county designation?</p>	<p>Comment acknowledged. No change. Hospital EMS system designation is responsibility of the LEMSA.</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		Recommendation: Provide language that requires CSC TJC accreditation for county CSC designation.	
4/9/230	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Comprehensive Stoke Center (CSC) should have diagnostic testing capability available including CT, MRI, labs, CTA, MRA, other cranial and carotid duplex ultrasound, TEE, TTE, catheter angiography 24/7 and cardiac imaging when necessary	Comment acknowledged. No change. There are potentially more detailed lists of requirements for the imaging and diagnostic test for CSC. Language is present that indicates "including but not limited to" so additional considerations can be made by the LEMSA in their system.
100270.220 Page 9 Lines 228-229	Eric Bernier, MSN, RN	Recommendation: Include language that requires a backup call process and how a CSC would address two simultaneous cases. Recommendation: Include language that requires a CSC to have all neuro-interventional capabilities on site.	Comment acknowledged. No change. The service is required 24 hours a day/7 days a week. The LEMSA may establish additional criteria they feel appropriate in their systems.
4/9/232	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Neurologist is accessible and meets concurrently emergent needs of multiple complex stroke patients; Written call schedule for attending physicians providing availability 24/7; 24/7 availability for Neurointerventionalist; Neuroradiologist; Neurologist; Neurosurgeon.	Comment acknowledged. No change. The existing language in the draft regulations provides appropriate detail.
4/9/236	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	There should be on-site certification reviews – two reviewers for two days. CSC must adhere to recommendations from Brain Attack Coalition for CSC in the written policies. Initial assessment of patient by emergency department physician in	Comment acknowledged. No change. The on-site certification review is the responsibility of the LEMSA.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		policies.	
236-237/365-366	San Luis Obispo County EMS Agency	<p>Comprehensive Stroke Centers are required policy & procedure updates every 2 years; Acute Stroke Ready are required policy & procedure updates are required every 3 years.</p> <p>For clarity and standardization, please align (2 year or 3 year)</p>	<p>Comment acknowledged. No change. The timeframes for the types of facilities were based on their levels of care. Comprehensive Centers can benefit from more frequent assessments.</p>
100270.220 Page 9 Lines 238-239	Eric Bernier, MSN, RN	Clarification: "Stroke center performance measures". Please clarify if this statement is referring to the Joint Commission required Comprehensive Stroke Measures.	<p>Comment acknowledged. No change. The reference is not specific to Joint Commission.</p>
4/9/238	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	<p>CSC shall have the following treatment capabilities:</p> <p>IV thrombolytics; Microsurgical neurovascular clipping of aneurysms; Neuroendovascular coiling of aneurysms; Stenting of extracranial carotid arteries; Carotid endarterectomy; Endovascular therapy</p>	<p>Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.</p>
4/9/238	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	<p>Clinical performance measures shall include 8 core stroke measures and 8 comprehensive stroke measures:</p> <p>Core Measures:</p> <ol style="list-style-type: none"> 1. VTE Prophylaxis 2. Discharged on Antithrombotic Therapy 3. Patients with Atrial Fibrillation Receiving Anticoagulation Therapy 4. Thrombolytic Therapy Administered 5. Antithrombotic Therapy By End of Hospital Day Two 6. Discharged on Statin Medication 	<p>Comment acknowledged. No change. The LEMSA may establish more specific standards in their systems.</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		7. Stroke Education 8. Assessed for Rehabilitation Compressive stroke measures: 1.National Institutes of Health Stroke Scale (NIHSS Score Performed for Ischemic Stroke Patients) 2.Modified Rankin Score (mRS at 90 Days) 3.Severity Measurement Performed for SAH and ICH Patients (Overall Rate) 4.Procoagulant Reversal Agent Initiation for Intracerebral Hemorrhage (ICH) 5.Hemorrhagic Transformation (Overall Rate) H 6.Nimodipine Treatment Administered 7.Thrombolysis in Cerebral Infarction (TICI Post-Treatment Reperfusion Grade) 8.Arrival Time to Skin Puncture	
4/9/239	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	CSC must participate in patient-centered research that is approved by the IRB.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/9/241	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Program medical director must have extensive expertise and be available 24/7 with 8 hours of stroke education annually. Acute stroke team must be available 24/7, at bedside within 15 minutes and at least 8 hours of stroke education annually.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
4/9/241	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Education requirement for CSC: Nurses and other ED response team 2 hours annually, stroke nurses 8 hours annually. CSC sponsors at least 2 public educational opportunities annually; LIPs and staff present 2 or more educational courses annually for internal staff or individuals external to the comprehensive stroke center (e.g., referring hospitals)	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
Section 100270.220 Comprehensive Stroke Centers Page 9 Lines 244-245 and Page 10 Lines 250-251	Jay Goldman, MD, FACEP Director of EMS and Ambulance Kaiser Permanente Northern California Lynn Parkinson, Strategic Leader for Accreditation, Regulation and Licensing, Kaiser Foundation Hospitals, Northern California	Lines 244 and 245 (neuroradiologist) are nearly identical to lines 250 – 251 (qualified neuroradiologist) We suggest deleting lines 244-245 and amending lines 250-251 to read “a qualified neuro-radiologist, board- certified by the American Board of Radiology or the American Osteopathic Board of Radiology, with a current Certificate of Added Qualifications in Neuroradiology”	Comment acknowledged. No change. The recommended language creates less clarity than the current language of the regulations.
4/10/255	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Telemedicine is available is necessary.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/10/260	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	CSC has access to protocols used by EMS, routing plans; records from transfer.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/10/261	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Transfer protocol plans in writing including receiving transfers and circumstances for not accepting transferred patients	Comment acknowledged No change. The language provides a minimum level of capabilities statewide. The LEMSA may

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
			establish more specific standards in their systems.
100270.220 Page 10, Line 263	LA County EMS Agency	Add the following: “continuing <u>stroke-specific</u> medical education to hospitals designated as Primary StrokeCenters”	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
100270.220 Page 10 Lines 265-266	Eric Bernier, MSN, RN	Will stakeholders have influence on the “additional requirements may be included at the discretion of the local EMS agency medical director”? Recommendation: Add language that requires approval or consensus from the Stroke System QI committee or other designated oversight committee.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
100270.221 Page 10, Line 276	LA County EMS Agency	“standardized stroke care protocol/ <u>order set</u> ” Rationale: A protocol does not necessarily standardized orders which is critical to ensure timely and appropriate care	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
100270.221 Page 11 Lines 280-281	Eric Bernier, MSN, RN	Clarification: “continuing education in stroke care provided for....and EMS personnel.” Will hospitals be required to provide CE for EMS personnel? Please provide more detail or does this mean required participation in educational outreach to EMS?	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
100270.221 Page 11 Lines 283-284	Eric Bernier, MSN, RN	Clarification: Will stakeholders have influence on the “additional requirements may be included at the discretion of the local EMS agency medical director”?	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		Recommendation: Add language that requires approval or consensus from the Stroke System QI committee or other designated oversight committee.	in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
100270.222 Page 11, Line 289	LA County EMS Agency	<p>These should be requirements not evaluation- for example (g): is the LEMSA supposed to evaluate the acute rehab. Facility or just ensure they have?</p> <p>For the metrics it should be "Evaluation of Stroke Centers" to encompass all and the specific requirements should fall under the individual requirements- primary, comprehensive, ASRH</p> <p>There is only an evaluation of Primary Stroke Centers, no section for evaluation of Comprehensive Stroke Centers.</p>	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
293	San Luis Obispo County EMS Agency	<p>Successful STEMI Programs require commitment from multiple disciplines/departments within the STEMI Hospital, regardless of designation level.</p> <p>Please do not strike language; include/add requiring annual letter of support from PRCs and Acute Stroke Ready.</p>	Comment acknowledged. No change. The sentence was deleted as the concept is not the same in all areas as to what exactly "committed to supporting" would mean. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/11/294	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	<p>An acute stroke team that is available 24/7, at bedside within 15 minutes.</p> <p>The stroke team should have at least 8 hours of stroke education annually.</p>	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
			establish more specific standards in their systems.
4/11/298	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	There should be emergency medical services collaboration with PSC and PSC has access to protocols used by EMS. Facility must have stroke unit or designated beds for the acute care of stroke patients. Initial assessment of patients much be done by emergency department physician.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/11/299	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Included in the written policy should be on-site certification reviews – one reviewer for one day. PSC must adhere to recommendations from Brain Attack Coalition for Primary Stroke Centers.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
4/11/301	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Primary stroke centers (PSC) shall have the following treatment capabilities: IV thrombolytics; May have the ability to perform the following: Neurovascular interventions for aneurysms, Stenting of carotid arteries, Carotid endarterectomy, and Endovascular therapy.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/11/303	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Clinical performance measures shall include evaluation of 8 core stroke measures: 1. VTE Prophylaxis 2. Discharged on Antithrombotic Therapy 3. Patients with Atrial Fibrillation	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		Receiving Anticoagulation Therapy 4. Thrombolytic Therapy Administered 5. Antithrombotic Therapy By End of Hospital Day Two 6. Discharged on Statin Medication 7. Stroke Education 8. Assessed for Rehabilitation	
4/11/304	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Diagnostic testing capability by CT, MRI, labs, CTA, MRA 24/7, and cardiac imaging when necessary.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
4/12/312	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Neurologist accessibility 24/7 via in person nor telemedicine. Neurosurgical services within 2 hours or available 24/7 in primary stroke centers providing neurosurgical services.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
4/12/332	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	PSC shall have transfer protocol plans for neurosurgical emergencies	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
100270.223	LA County EMS Agency	Remove or define "Satellite Stroke	Comment acknowledged. No

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
Page 13, Lines 335 Page 15, Lines 398, 403 and 406		Centers”.	change. Satellite Stroke Centers can be defined by the LEMSA depending on their variable system needs.
4/13/347	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	PSC response team shall have training a minimum of twice a year and provide educational opportunities to prehospital personnel; Provide at least 2 stroke education activities per year to public	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems. The LEMSA may consult knowledgeable stakeholders in the development of their systems for input.
Section 100270.222 Evaluation of Primary Stroke Centers Page 13 Lines 348-349	Jay Goldman, MD, FACEP Director of EMS and Ambulance Kaiser Permanente Northern California Lynn Parkinson, Strategic Leader for Accreditation, Regulation and Licensing, Kaiser Foundation Hospitals, Northern California	This is an amendment that was added into the proposed regulations related to Primary Stroke Centers after the January 2017 comment period. This new proposed regulation allows local EMS the option to “preferentially triage and transport patient to those centers” that are thrombectomy capable. If thrombectomy-capable Primary Stroke Centers are to be called out in regulations, the requirements for these Primary Stroke Centers should be specified in regulations in a parallel manner to those for Comprehensive Stroke Centers (CSC). Otherwise, a Primary Stroke Center with only intermittent or unreliable endovascular capabilities, using endovascular staff not specified in regulations, may become preferred destination without the quality controls of a CSC.	Comment acknowledged. No change. These regulations need to be considerate of what is present and applicable in the system today. Should changes in Stroke Centers come to fruition at a later date, revisions to these regulations can be considered.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		<p>We suggest a new section for thrombectomy-capable Primary Stroke Centers be added to define parallel regulations for a CSC, to include all of the requirements of the CSC EXCEPT for a stroke patient research program and a neurosurgical team</p> <p>Of note: The Joint Commission is preparing its own requirements for this new classification.</p>	
<p>100270.222 Page 13 Lines 348-349</p>	<p>Eric Bernier, MSN, RN</p>	<p>Clarification: Will Thrombectomy Capable Primary Stroke centers be required to meet The Joint Commission Thrombectomy Capable guidelines and/or verify that they have been accredited by The Joint Commission?</p> <p>Clarification: If the Thrombectomy Capable Primary Stroke Centers will not be required to be Joint Commission accredited, will there be the mechanism of oversight and to what specifications or requirements will the sites be measured?</p> <p>Clarification: Will there be a requirement for triage policies for bringing patients to these sites, and will other stakeholders have influence on these policies?</p> <p>Clarification: Will there be a requirement for risk adjusted outcome</p>	<p>Comment acknowledged. No change. These regulations need to be considerate of what is present and applicable in the system today. Should changes in Stroke Centers come to fruition at a later date; revisions to these regulations can be considered.</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		<p>evaluation of these sites, in comparison to comprehensive sites, and what risk model will be utilized?</p> <p>Comment: The Joint Commission guidelines for Thrombectomy Capable Primary Stroke Centers are currently in the public comment phase and there are major concerns from the stroke program community. There are significant gaps regarding minimum volumes, what cases are accepted, how patients are triaged, how sites determine when a higher level of care is needed, what patients are retained, and many more.</p> <p>Recommendation: Require Thrombectomy Capable Primary sites be required to have The Joint Commission accreditation for designation once the guidelines are completed.</p> <p>Recommendation: Develop triage policies, with stakeholder involvement and QI committee oversight that include the ability to care for simultaneous cases, and include risk adjusted outcome measurement.</p>	
Article 4. 100270.222	Contra Costa County EMS Agency	This section has numerous errors and is out of date and not based on current stroke system data/time parameters. Times are calculated from presentation of patient, not order entry. Recommend to not include	Comment acknowledged. No change. The commenter needs to be more specific on the items at issue in the section.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		<p>data/time parameters in regs as these evolve and change based on current research, evidence based medicine. Imaging technologies may also change and would recommend not to specify type of imaging. EMSA response not sufficient response to justify no change during 45 day public comment period. Ignores that all of these parameters out of date. Any regulations based on out of date Joint Commission Primary Stroke Standards are a barrier to appropriate stroke patient care. As soon as these regulations are implemented, they will be 4 years out of date.</p>	
<p>100270.222 Page 13, Line 348-349</p>	<p>LA County EMS Agency</p>	<p>Local EMS agencies may identify “thrombectomy capable primary stroke centers <u>who meet all the requirements herein plus have the capability to perform thrombectomy 24-hours a day/seven days a week, and shall have transfer agreements with comprehensive stroke centers for higher level of care</u> and preferentially triage and transport patients to those centers.” Rationale: Likely to be routed by the same stroke screen as the comprehensive stroke centers and therefore the word ‘primary’ is misleading.</p>	<p>Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.</p>
<p>Article 4. 100270.223</p>	<p>Contra Costa County EMS Agency</p>	<p>Comprehensive Stroke Center is a designation by performed by The Joint</p>	<p>Comment acknowledged. No change. The definition can be</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		Commission. LEMSAs “recognize” that designation as meeting criteria for qualifying to be a Stroke Receiving Center. Regulations should not mandate hospitals to have designations through a specific accrediting body. EMSA response during 45 day public comment period not sufficient response to justify no change remarks.	applied without reference to Joint Commission as has been done in other states.
Article 4. 100270.224	Contra Costa EMS Agency	Acute Stroke Ready is a designation performed by The Joint Commission and should not be used in regulation. LEMSAs “recognize” that designation as meeting criteria for qualifying as a Stroke Ready Center. Times to imaging, treatment, transfer should not be included as these change based on current research and evidence based medicine. EMSA response during 45 day public comment period not sufficient response to justify no change remarks.	Comment acknowledged. No change The definition can be applied without reference to Joint Commission as has been done in other states.
4/13/362	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	In Acute Stroke Ready Hospital (ASRH) Acute Stroke Team is available 24/7, at bedside within 15 minutes and has at least 4 hours of stroke education annually	Comment acknowledged. No change.
4/13/365	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Include in written policies that initial assessment of patients to be done by emergency department physician, nurse practitioner, or physician assistant.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/13/366	Kula Koenig & Mick Smith- American Heart	ASRH has access to protocols used by EMS	Comment acknowledged. No change. The language provides a

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
	Association/American Stroke Association		minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/13/366	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	ASRH has following treatment capabilities: IV thrombolytics; Anticipate transfer of patients who have received IV thrombolytics	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/13/366	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Included in the written policy should be on-site certification reviews – one reviewer for one day. ASRH must adhere to recommendations from Brain Attack Coalition for Primary Stroke Centers.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/14/370	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	ASRH to choose 4 measures of performance, at least 2 are clinical measures related to clinical practice guidelines.	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/13/378	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Neurologist is accessible 24/7 in person or via telemedicine; Neurosurgical Services are available within 3 hours (provided through transferring the patient)	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/14/379	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	ARSH should have CT, MRI, labs available 24/7 for diagnostic testing	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
4/14/382	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Telemedicine is available within 20 minutes of it being necessary	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/15/403	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Director should have sufficient knowledge of cerebrovascular disease	Comment acknowledged. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
4/15/407	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Education requirement for ASRH response team: ED response team a minimum of twice a year. ASRH Provides educational opportunities to prehospital personnel	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
Article 4 100270.225 Line 387	Contra Costa County EMS Agency	Hospital participation in the System of Care is voluntary. Regulations cannot force Hospitals to participate in the System that are not designated. Change Shall to MAY in cooperation with Stroke Receiving Centers and the local EMS agency in their jurisdictions.	Comment acknowledged. No change. While the Stroke System of Care is voluntary, should a facility wish to participate, they shall do so consistent with minimum state standards as described in these regulations.
398/403/406	San Luis Obispo County EMS Agency	Clean up from "Satellite" to "Stroke Ready" verbiage	Comment acknowledged. Typo change made.
Article 5. Quality Improvement Process. 100270.227 Line 421	Contra Costa EMS Agency	Stroke related death audits are the domain of the Stroke hospital QI mobidity and mortality internal QI review process. Revise to an audit of all Stroke related deaths received via EMS. LEMSA QI should focus on review cases that may be associated with pre-hospital care. Regulation is	Comment acknowledged. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		<p>duplicative as hospital processes that are well established in hospital policy, procedure , CMS and Joint Commission Primary Stroke Center requirements.</p>	
<p>100270.225 Page 16 Lines 430-435</p>	<p>Eric Bernier, MSN, RN</p>	<p>Clarification: Please provide more detail for data collection requirements when referencing the <i>Paul Coverdell National Acute Stroke Program Resource Guide</i>. Will all elements be required or only those that could be influenced by a Stroke EMS system?</p> <p>Comment: The data set referenced in the proposed regulations includes many variables not pertinent to a state-wide stroke system, and are not required by The Joint Commission for Primary or Comprehensive accreditation. Please provide more detail as to the specific variables in the 6-page document that the California EMS Authority will require, as they relate to the state or LEMSA Stroke System.</p> <p>Many of the data included in the proposed data set is helpful for research, and is too detailed for process improvement at the state level.</p> <p>Recommendation: Create an evidence based, EMS-relevant, data dictionary and that addresses process improvement that EMS and hospitals, together, can influence.</p>	<p>Comment acknowledged. No change. No change. The language provides a minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.</p>
<p>100270.226</p>	<p>Eric Bernier, MSN, RN</p>	<p>Clarification: "a detailed audit of all stroke-related deaths, major</p>	<p>Comment acknowledged. No change. The language provides a</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
Page 16 Lines 451-455		complications, and transfers". Please provide more details regarding definitions and specifications. Please provide the elements of the detailed audits. This is too vague for mortality and complication review (e.g. How will cases be identified, complications be defined, what is the audit process, who is responsible for transfer audits, etc.?)	minimum level of capabilities statewide. The LEMSA may establish more specific standards in their systems.
100270.226 Page 16, Lines 451-455	LA County EMS Agency	<p>"Each <u>local EMS Agency with a Stroke Critical Care System</u> shall have a stroke quality improvement process <u>plan</u> 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 taking steps to correct the process. This process plan shall include, at a minimum:</p> <p><u>stroke center</u> a detailed <u>audits</u> of all stroke-related deaths, major complications, and transfers"</p> <p>Rationale: The EMS Agency cannot be responsible for reviewing all stroke deaths, major complications and transfers. The stroke center needs to conduct the review and work with the LEMSA to change processes if indicated. This would be something that the LEMSA would review during the designation/re-designation process.</p>	Comment acknowledged. No change. The proposed language does not provide additional clarity to the regulation.

EMERGENCY MEDICAL SERVICES AUTHORITY

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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Farid Nasr, MD
Specialty Care Systems Specialist

SUBJECT: STEMI Critical Care System Regulations Approval

RECOMMENDED ACTION:

Review and approve STEMI Critical Care System Regulations.

FISCAL IMPACT:

No new fiscal impact with the STEMI Critical Care System Regulations package.

DISCUSSION:

The EMS Authority proposes approval of the draft STEMI Critical Care System Regulations, Chapter 7.1, Division 9, of Title 22.

The EMS Authority submitted draft STEMI regulations in a rulemaking package to the Office of Administrative Law (OAL) on December 6, 2016. A 45-day public comment period was completed January 30, 2017. Upon closure of the comment period, the EMS Authority reconvened the original STEMI Regulations writing group to assist with considerations for revision to the draft STEMI Regulations. The EMS Authority reviewed all comments received and revisions were made to the draft regulations.

Based on amendments to the draft STEMI regulations, the EMS Authority held an additional 15-day public comment period, which was completed May 12, 2017. Some comments received proposed alignment with existing national standards from a single source related to cardiac care. EMSA supports moving these draft regulations forward to OAL as drafted. There is more than one national association with guidelines for cardiac care that could be used in STEMI systems in California. Given that there is more than one national source for these types of recommendations, it is appropriate to allow the LEMSA to determine how these standards are utilized at the local level in compliance with the regulations.

The one-year rule making timeline for the draft STEMI regulations package will conclude December 2017. The EMS Authority respectfully requests the Commission's approval of the draft STEMI regulations at this time to meet the OAL 1 year deadline.

1 **California Code of Regulations**
2 **TITLE 22. SOCIAL SECURITY**
3 **DIVISION 9. PRE-HOSPITAL EMERGENCY MEDICAL SERVICES**
4 **CHAPTER 7.1 ST ELEVATION MYOCARDIAL INFARCTION (STEMI) CRITICAL**
5 **CARE SYSTEM**

6 **ARTICLE 1. DEFINITIONS**

7 **§ 100270.101. Cardiac Catheterization Laboratory**

8 “Cardiac Catheterization Laboratory” or “Cath Lab” means the setting within the hospital
9 where laboratory procedures for obtaining physiologic, pathologic, and angiographic
10 data can be performed on patients with cardiovascular disease.

11 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

12 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

13 **§ 100270.102. Cardiac Catheterization Team**

14 “Cardiac Catheterization Team” means the specially trained medical staff that performs
15 percutaneous coronary intervention. It may include, but is not limited to, an
16 interventional cardiologist, mid-level practitioners, registered nurses, technicians, and
17 other health care professionals.

18 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

19 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

20 **§ 100270.103. Clinical Staff**

21 “Clinical Staff” means an individual that has specific training and experience in the
22 treatment and management of ST-Elevation Myocardial Infarction (STEMI) patients.
23 This includes, but is not limited to, physicians, registered nurses, advanced practice
24 nurses, physician assistants, pharmacists, and technologists.

25 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

26 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

27 **§ 100270.104. Door-to-Balloon Time (Also known as Door-to-Device Time)**
28 “Door-to-Balloon Time” or “D2B Time” means the amount of time between a STEMI
29 patient’s arrival at the hospital to the time he/she receives percutaneous coronary
30 intervention, such as angioplasty.

31 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
32 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

33 **§ 100270.105. Door-to-Needle Time**

34 “Door-to-Needle Time” means the time interval between the arrival of a STEMI patient
35 at a hospital to the time fibrinolytic therapy is administered to open a blocked artery.

36 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
37 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

38 **§ 100270.106. Emergency Medical Services Authority**

39 “Emergency Medical Services Authority” or “EMS Authority” means the department in
40 California responsible for the coordination and integration of all state activities
41 concerning EMS.

42 Note: Authority cited: Sections 1797.1, 1797.107 and 1797.54, Health and Safety Code.
43 Reference: Sections 1797.100, and 1797.103, Health and Safety Code.

44 **§ 100270.107. Immediately Available**

45 “Immediately Available” means

- 46 (a) unencumbered by conflicting duties or responsibilities,
47 (b) responding without delay upon receiving notification, and
48 (c) being physically available to the specified area of the hospital when the patient is
49 delivered in accordance with local EMS agency policies and procedures.

50 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
51 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

52 **§ 100270.108. Implementation**

53 “Implementation,” “implemented” or “has implemented” means the development and
54 activation of a STEMI Critical Care System Plan by the local EMS agency, including the
55 pre-hospital and hospital care components in accordance with the plan.

56 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

57 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

58 **§ 100270.109. Interfacility Transfer**

59 “Interfacility Transfer” means the transfer of a STEMI patient from one acute general
60 care facility to another.

61 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

62 Reference: Sections 1797.103, 1797.176 and 1798.170, Health and Safety Code.

63 **§ 100270.110. Local Emergency Medical Services Agency**

64 “Local Emergency Medical Services Agency” or “local EMS agency” means a county
65 health department, an agency established and operated by the county, or an entity with
66 which the county contracts for the purposes of local emergency medical services
67 administration, or a joint powers agency created for the administration of emergency
68 medical services by agreement between counties or cities and which is designated
69 pursuant to Chapter 4 of the California Health and Safety Code, Division 2.5, Section
70 1797.200.

71 Note: Authority cited: Sections 1797.107, 1797.200 and 1798.150, Health and Safety

72 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

73 **§ 100270.111. Percutaneous Coronary Intervention (PCI)**

74 “Percutaneous Coronary Intervention” or “PCI” means a procedure used to open or
75 widen a narrowed or blocked coronary artery to restore blood flow supplying the heart.

76 A PCI is generally done on an emergency basis for a STEMI patient.

77 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

78 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

79 **§ 100270.112. Quality Improvement**

80 “Quality Improvement” or “QI” means methods of evaluation that are composed of
81 structure, process, and outcome evaluations that focus on improvement efforts to
82 identify root causes of problems, intervene to reduce or eliminate these causes, and
83 take steps to correct the process, and recognize excellence in performance and delivery
84 of care.

85 Note: Authority cited: Sections 1797.103, 1797.107, 1797.174, 1797.176 and 1798.150
86 Health and Safety Code. Reference: Sections 1797.174, 1797.202, 1797.204, 1797.220
87 and 1798.175, Health and Safety Code.

88 **§ 100270.113. ST-Elevation Myocardial Infarction (STEMI)**

89 “ST-Elevation Myocardial Infarction” or “STEMI” means a clinical syndrome defined by
90 characteristic symptoms of myocardial infarction in association with ST-segment
91 elevation on ECG.

92 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
93 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

94 **§ 100270.114. STEMI Care**

95 “STEMI Care” means emergency cardiac care, for the purposes of these regulations.

96 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
97 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

98 **§ 100270.115. STEMI Medical Director**

99 “STEMI Medical Director” means a qualified physician as defined by the local EMS
100 agency and designated by the hospital that is responsible for the STEMI program,
101 performance improvement, and patient safety programs related to STEMI Critical Care
102 System.

103 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
104 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

105

106 **§ 100270.116. STEMI Patient**

107 “STEMI Patient” means a patient with characteristic symptoms of myocardial infarction
108 in association with ST-Segment Elevation in an Electrocardiogram (ECG).

109 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

110 Reference: Sections 1797.103, 1797.176 and 1797.220, Health and Safety Code.

111 **§ 100270.117. STEMI Program**

112 “STEMI Program” means an organizational component of the hospital specializing in the
113 care of STEMI patients.

114 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

115 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

116 **§ 100270.118. STEMI Program Manager**

117 “STEMI Program Manager” means a registered nurse or qualified individual as defined
118 by the local EMS agency, and designated by the hospital responsible for monitoring and
119 evaluating STEMI patients, performance improvement, and patient safety programs
120 related to the STEMI Critical Care System.

121 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

122 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

123 **§ 100270.119. STEMI Receiving Center (SRC)**

124 “STEMI Receiving Center” or “SRC” means a licensed general acute care facility that
125 meets the minimum hospital STEMI care requirements pursuant to Section 100270.128
126 and is able to perform primary PCI.

127 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.

128 Reference: Sections 1797.103, 1797.176 and 1797.220, Health and Safety Code.

129 **§ 100270.120. STEMI Referring Hospital (SRH)**

130 “STEMI Referring Hospital” means a licensed general acute care facility that meets the
131 minimum hospital STEMI care requirements pursuant to Section 100270.129.

132 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
133 Reference: Sections 1797.103, 1797.176 and 1797.220, Health and Safety Code.

134 **§ 100270.121. STEMI Technical Advisory Committee**

135 “STEMI Technical Advisory Committee” means a multidisciplinary committee as
136 appointed by the EMS Authority. The STEMI Technical Advisory Committee serves as
137 an advisory committee to the EMS Authority on STEMI related issues.

138 Note: Authority cited: Sections 1797.107, 1797.133 and 1798.150, Health and Safety
139 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

140 **§ 100270.122. STEMI Critical Care System**

141 “STEMI Critical Care System” means a critical care component of the EMS system
142 developed by a local EMS agency. This system of care links pre-hospital and hospital
143 care to deliver treatment to STEMI patients.

144 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
145 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

146 **§ 100270.123. STEMI Team**

147 “STEMI Team” means clinical personnel, support personnel, and administrative staff
148 that function together as part of the hospital's STEMI program.”

149 Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
150 Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

151 **ARTICLE 2. LOCAL EMS AGENCY STEMI CRITICAL CARE SYSTEM**
152 **REQUIREMENTS**

153 **§ 100270.124. General Requirements and Timeframes**

154 (a) The local EMS agency may develop and implement a STEMI Critical Care System.

155 (b) A local EMS agency implementing a STEMI Critical Care System shall submit to
156 the EMS Authority a STEMI System Plan in accordance with the requirements in
157 Section 100270.125.

- 158 (c) A new STEMI Critical Care System that starts after the effective date of these
159 regulations shall have a STEMI System Plan approved by the EMS Authority prior to
160 implementation. The EMS Authority shall notify the local EMS agency of approval or
161 disapproval of its STEMI System Plan within 30 days from receipt of the Plan. If the
162 EMS Authority disapproves a plan, it shall provide written notification including the
163 reason(s) for the disapproval and the corrective action items required.
- 164 (d) The local EMS agency shall provide a corrected plan to the EMS Authority within
165 60 days of receipt of the disapproval letter.
- 166 (e) A local EMS agency currently operating a STEMI Critical Care System
167 implemented prior to the effective date of these regulations, shall submit to the EMS
168 Authority a STEMI System Plan as an addendum to its next annual EMS Plan update,
169 or within 180 days of the effective date of these regulations whichever comes first.
- 170 (f) After approval of the Plan, the local EMS agency shall submit an update to its
171 STEMI System Plan as part of its annual EMS update, consistent with the requirements
172 in Section 100270.126.
- 173 (g) No health care facility shall advertise in any manner or otherwise hold itself out to
174 be affiliated with the STEMI Critical Care System or a STEMI center unless they have
175 been so designated by the local EMS agency, in accordance with this Chapter.

176 Note: Authority cited: Sections 1797.107, 1797.103, 1797.105, 1797.250, 1797.254 and
177 1798.150, Health and Safety Code. Reference: Section 1797.176 and 1797.220, Health
178 and Safety Code.

179 **§ 100270.125. STEMI Critical Care System Plan Requirements**

180 The STEMI System Plan submitted to the EMS Authority shall include, at a minimum,
181 the following components:

- 182 (a) the names and titles of the local EMS agency personnel who have a role in the
183 STEMI Critical Care System,
- 184 (b) verification of agreements with hospitals for designation of STEMI facilities with the
185 list of STEMI hospital contracts and contract expiration dates,
- 186 (c) description or copy of the local EMS agency's STEMI patient identification and
187 destination policies,

- 188 (d) description or copy of the method of field communication to the receiving hospital
189 specific to STEMI patient, designed to expedite time-sensitive treatment on arrival
190 (e) description or copy of policy that facilitates inter-facility transfer of a STEMI patient,
191 (f) description of the method of data collection from the EMS providers and
192 designated STEMI hospitals to the local EMS agency and the EMS Authority,
193 (g) a copy of all written agreements with neighboring local EMS agencies that provide
194 STEMI care,
195 (h) description of the integration of STEMI into an existing QI Committee or description
196 of any STEMI specific QI committee, and
197 (i) description of programs to conduct or promote public education specific to cardiac
198 care.

199 Note: Authority cited: Sections 1797.103, 1797.107, 1797.114, 1797.204, 1797.220,
200 1798.150, 1798.170 and 1798.172, Health and Safety Code. Reference: Section
201 1797.176, 1797.220, 1797.222, Health and Safety Code.

202 **§100270.126. STEMI System Plan Updates**

203 The local EMS agency shall submit a STEMI System Plan update as part of its annual
204 EMS Plan submittal. The update shall include at a minimum, the following:

- 205 (a) any changes in the STEMI Critical Care System since submission of the prior
206 annual plan update or the STEMI System Plan addendum,
207 (b) status of STEMI Critical Care System goals and objectives,
208 (c) STEMI Critical Care System QI activities, and
209 (d) progress on addressing action items and recommendations provided by the EMS
210 Authority within the STEMI System Plan or Status Report approval letter if applicable.

211 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.250, 1797.254,
212 1798.150, and 1798.172, Health and Safety Code. Reference: Section 1797.176,
213 1797.220, 1797.222, 1798.170, Health and Safety Code.

214 **ARTICLE 3. PRE-HOSPITAL STEMI CRITICAL CARE SYSTEM REQUIREMENTS**

215 **§ 100270.127. EMS Personnel and Early Recognition**

216 A local EMS agency with an established STEMI Critical Care System shall have
217 protocols for the treatment of STEMI patients, including paramedic capability to perform
218 a 12-lead ECG, to determine patient destination.

219 (a) When 12-lead ECG equipment is used, those findings shall be assessed and
220 interpreted through one or more of the following methods:

221 (1) direct paramedic interpretation,

222 (2) automated computer algorithm, or

223 (3) wireless transmission to facility followed by physician interpretation or confirmation.

224 (b) Advance notification of pre-hospital ECG findings of suspected STEMI patients, as
225 defined by the local EMS agency, will be communicated to the STEMI facilities, centers
226 or hospitals according to the local EMS agency STEMI System Plan.

227 Note: Authority cited: Sections 1797.103, 1797.107, 1797.114, 1797.176, 1797.206,
228 1797.214 and 1798.150, Health and Safety Code. Reference: Section 1797.176,
229 1797.220, 1798, 1798.150 and 1798.170, Health and Safety Code.

230 **ARTICLE 4. STEMI CRITICAL CARE FACILITY REQUIREMENTS**

231 Any STEMI center designated by the local EMS agency prior to implementation of these
232 regulations may continue to operate. Upon redesignation by the local EMS agency at
233 the next regular interval, STEMI centers shall be reevaluated to meet the criteria
234 established in these regulations.

235 **§ 100270.128. STEMI Receiving Center**

236 The following minimum criteria shall be used by the local EMS agency for the
237 designation of SRC:

238 (a) The hospital shall have established protocols for triage, diagnosis, and Cath Lab
239 activation from field notification.

240 (b) The hospital shall have a single call activation system to activate the Cath Lab
241 team directly.

242 (c) Written protocols and standing orders shall be in place for the identification of
243 STEMI patients. At a minimum, these protocols shall be available in the intensive care
244 unit/coronary care unit and the emergency department (ED).

- 245 (d) The hospital shall be available for treatment of STEMI patients 24 hours per day/7
246 days per week/365 days per year.
- 247 (e) The hospital shall have a process in place for the treatment and triage of
248 simultaneously arriving STEMI patients.
- 249 (f) The hospital shall maintain a STEMI team call roster.
- 250 (g) The Cath Lab team, including appropriate staff determined by the local EMS
251 agency, shall be immediately available.
- 252 (h) The hospital shall agree to accept all STEMI patients according to the local policy.
- 253 (i) SRCs shall comply with the requirement for a minimum volume of procedures for
254 designation by the local EMS agency.
- 255 (j) The hospital shall have a STEMI program manager and a STEMI medical director.
- 256 (k) The hospital shall have job descriptions and organizational charts depicting the
257 relationship between the STEMI medical director, STEMI program manager, and the
258 STEMI team.
- 259 (l) The hospital shall participate in the local EMS agency QI processes related to the
260 STEMI Critical Care System.
- 261 (m) STEMI receiving Centers without cardiac surgery capability on-site shall have a
262 written transfer plan and agreements for transfer to a facility with cardiovascular surgery
263 capability.
- 264 (n) SRCs shall have on-site accreditation reviews conducted every three years.
- 265 (o) Additional requirements may be included at the discretion of the local EMS agency
266 medical director.

267 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.220, and 1798.150
268 1798.167 and 1798.172, Health and Safety Code. Reference: Section 1797.176,
269 1797.220, 1798, 1798.150 and 1798.170 Health and Safety Code.

270 **§ 100270.129. STEMI Referring Hospital (SRH)**

271 The following minimum criteria shall be used by the local EMS agency for designation of
272 an SRH:

273 (a) The hospital shall be committed to supporting and sustaining the STEMI Program.

274 (b) The hospital shall be available to provide care for STEMI patients 24 hours per
275 day/7 days per week/365 days per year.

276 (c) Written protocols and standing orders shall be in place for the identification of
277 STEMI patients. At a minimum, these protocols shall be available in the intensive care
278 unit/coronary care unit and the emergency department (ED).

279 (d) The ED shall maintain a standardized procedure for the treatment of STEMI
280 patients.

281 (e) The hospital shall have a transfer process through interfacility transfer agreements,
282 and have pre-arranged agreements with EMS providers for a higher level of care and
283 rapid transport of STEMI patients to an SRC when considering ground or air transport.

284 (f) The hospital shall have a program to track and improve treatment.

285 (g) The hospital must have a plan to work with SRCs and the local EMS agency on QI
286 processes.

287 (h) SRH shall have on-site accreditation reviews conducted every three years.

288 (i) Additional requirements may be included at the discretion of the local EMS agency
289 medical director.

290 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.220, and 1798.150
291 1798.167 and 1798.172, Health and Safety Code. Reference: Section 1797.176,
292 1797.220, 1798.150 and 1798.170 Health and Safety Code.

293 **ARTICLE 5. DATA MANAGEMENT, QUALITY IMPROVEMENT AND EVALUATIONS**

294 **§ 100270.130. Data Management**

295 (a) The local EMS agency shall implement a standardized data collection and
296 reporting process for STEMI Critical Care Systems.

297 (1) The system shall include the collection of both pre-hospital and hospital patient
298 care data, as determined by the local EMS agency.

- 299 (2) The pre-hospital STEMI patient care elements selected by the local EMS agency
300 shall be compliant with the most current version of the California EMS Information
301 Systems (CEMSIS) database, and the National EMS Information System (NEMSIS).
- 302 (3) The hospital STEMI patient care elements shall be compliant with the most current
303 version of National Cardiovascular Data Registry, Action Registry.
- 304 (4) All hospitals that receive STEMI patients shall participate in the local EMS
305 agency data collection process in accordance with local EMS agency policies and
306 procedures.
- 307 (b) The following minimum elements shall be collected and submitted to the local
308 EMS agency by the hospital and subsequently to the EMS Authority on no less than a
309 quarterly basis to be used to determine pre-hospital and hospital system performance:
- 310 (1) EMS ePCR Number
311 (2) Facility
312 (3) Name: Last, First
313 (4) Date of Birth
314 (5) Patient Age
315 (6) Patient Gender
316 (7) Patient Race
317 (8) Hospital Arrival Date
318 (9) Hospital Arrival Time
319 (10) Dispatch Date
320 (11) Dispatch Time
321 (12) Field ECG Performed
322 (13) 1st ECG Date
323 (14) 1st ECG Time
324 (15) Did the patient suffer out-of-hospital cardiac arrest
325 (16) CATH LAB Activated
326 (17) CATH LAB Activation Date
327 (18) CATH LAB Activation Time
328 (19) Did the patient go to the CATH LAB
329 (20) CATH LAB Arrival Date
330 (21) CATH LAB Arrival Time

- 331 (22) PCI Performed
- 332 (23) PCI Date
- 333 (24) PCI Time
- 334 (25) Fibrinolytic Infusion
- 335 (26) Fibrinolytic Infusion Date
- 336 (27) Fibrinolytic Infusion Time
- 337 (28) Transfer
- 338 (29) SRH ED Arrival Date
- 339 (30) SRH ED Arrival Time
- 340 (31) SRH ED Departure Date
- 341 (32) SRH ED Departure Time
- 342 (33) Hospital Discharge Date
- 343 (34) Patient Outcome
- 344 (35) Discharge Diagnosis

345 Note: Authority cited: Sections 1791.102, 1797.103, 1797.107, 1797.176, 1797.204,
346 1797.220, 1798.150, and 1798.172, Health and Safety Code. Reference: Section
347 1797.220, 1797.222, 1797.204, Health and Safety Code.

348 **§ 100270.131. Quality Improvement Process**

349 STEMI Critical Care Systems shall have a quality improvement process to include
350 structure, process, and outcome evaluations that focus on improvement efforts to
351 identify root causes of problems, reduce or eliminate such causes, and take steps to
352 correct the process. This process shall include, at a minimum:

- 353 (a) an audit of all STEMI-related deaths,
- 354 (b) a multidisciplinary STEMI QI Committee, including both pre-hospital and hospital
355 members,
- 356 (c) compliance with the California Evidence Code, Section 1157.7 to ensure
357 confidentiality, and
- 358 (d) a disclosure-protected review of selected STEMI cases.

359 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220,
360 1798.150, Health and Safety Code. Reference: Section 1797.176, 1798.204, 1797.220,
361 1798.150, Health and Safety Code.

362 **§ 100270.132. STEMI Critical Care System Evaluation**

363 (a) The local EMS agency is responsible for on-going performance evaluation of the
364 local or regional STEMI Critical Care System.

365 (b) The local EMS agency shall be responsible for the development of a QI process
366 pursuant to Section 100270.131.

367 (c) The local EMS agency shall be responsible for ensuring that designated STEMI
368 centers and other hospitals that treat STEMI patients participate in the QI process
369 contained in Section 100270.131, as well as pre-hospital providers involved in the
370 STEMI Critical Care System.

371 Note: Authority cited: Sections 1797.102, 1797.103, 1797.107, 1797.176, 1797.204,
372 1797.220, 1797.250, 1797.254, 1798.150, and 1798.172, Health and Safety Code.
373 Reference: Section 1797.104, 1797.176, 1797.204, 1797.220, 1797.222, 1798.170,
374 Health and Safety Code.

COMMENTS for DRAFT STEMI REGULATIONS
2nd Comment Period: April 28, 2017 - May 12, 2017

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
	Los Angeles County EMS Agency	Review Terms and Definitions to assure they are consistent across all of the different regulations ie Qualified Specialist, Immediately Available etc.	Comment acknowledged. Definitions are consistent.
Page 3/ADD	Los Angeles County EMS Agency	Add: definition for first medical contact to balloon time. Reason for suggested change: These Regulations are to reflect Emergency Medical Services. The time of the first medical contact (outside of the ED) or “when the paramedics first arrive at the patient” to balloon is a critical interval of time that has been excluded. This time is also most critical for EMS Provider QI activities.	Comment acknowledged. No change. This time can calculate by the QI committee or whoever is interested.
100270.101 Page 1 Lines 14-16	Los Angeles County EMS Agency	Delete: “ Laboratory procedures for obtaining physiologic, and angiographic data can be ” Change to: Cath Lab means the setting within the hospital where “ diagnostic and therapeutic procedures are ” performed on patients with cardiovascular disease.	Comment acknowledged. No change. This definition is matched with Title 22, SS 70438
100270.102 Page 1 Lines 20	Los Angeles County EMS Agency	Delete: word “medical”: Change to: special trained staff that “ coordinates ” and performs PCI- Reason for suggested change: Medical Staff is generally considered a physician or mid-level practitioner. Team includes staff that act in a coordinated role, not just those performing PCI.	Comment acknowledged. No change. Medical staff is a general term that applies to the Cath Lab Team.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
100270.103 Page 1 Lines 27	Los Angeles County EMS Agency	Delete: word “an”: Change: “individual that has” to “individuals who have”. To read Clinical Staff means individuals who have specific training and experience...	Comment acknowledged. No change.
35-36	P. Coleman MD	“arrival at the hospital or first diagnostic EKG until first device is across the lesion”. This fits with NCDR definitions.	Comment acknowledged. No change. Definition as drafted is acceptable for varied areas of operation by LEMSA.
107	P. Coleman MD	“on the EKG” not “in”	Comment acknowledged. Modifications will be made.
Section 100270.114 Page 5 Line 111	County of Napa	This should include expanded cardiac life support, which may include PCI during cardiac arrest, implanted pump, or extracorporeal membrane oxygenation (ECMO) Note: Expanded Cardiac Life Support (ECLS) is becoming a “standard of care” in many systems in the US and is well recognized by the AHA and ECC. This level of care should be acknowledged in this policy as many ECLS cases start as a STEMI and/or end up in a STEMI center.	Comment acknowledged. No change. The definitions are in purpose of these regulations. The emergency cardiac care is a general term for all the different treatment methods. Using a general term in these regulations will not exclude the future new treatments and care for this matter.
100270.113 Page 5 Line 106	Los Angeles County EMS Agency	Delete: “characteristic” Reason for suggested change: The term “Characteristic” refers to classic signs of an MI - other symptoms fall into “Atypical” signs such as syncope, shortness of breath,	Comment acknowledged. No change. There are atypical cases in STEMI with the False Negative and False Positive ECG that we cannot explain in STEMI Definition for the purpose of these

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		epigastric pain, pain between the scapulas, nausea or vomiting. Also women over 50 years' old or altered patients may not exhibit any of the above signs but have a STEMI.	regulations.
115	P. Coleman MD	Is it really EMS's job to say who is a qualified MD? I don't think a hospital would have an unqualified MD in this role. Just leave it as appointed by the hospital	Comment acknowledged. No change. The designation is by hospital but defining the roles and qualifications are Local EMS responsibility.
100270.115 Page 6 Line 115-118	Los Angeles County EMS Agency	Include certification by a specialty board of the American Board of Medical Specialties (ABMS). Reason for suggested change: SRCs are a specialty designation with an expectation of higher level of care. Minimally the oversight of the program should be board certified. This implies the highest level of certification-other certified bodies the lesser standard.	Comment acknowledged. No change. The qualifications of Medical Director are define by local EMS and it might vary according to the level of care (SRC or SRH) and the geographic factor (urban or rural).
100270.116 Page 6 Line 123	Los Angeles County EMS Agency	Delete: "characteristic" Reason for suggested change: The term "Characteristic" refers to classic signs of an MI - other symptoms fall into "Atypical" signs such syncope, shortness of breath, epigastric pain, pain between the scapulas, nausea or vomiting. Also women over 50 years old or altered patients may not exhibit any of the above signs but have a STEMI.	Comment acknowledged. No change. There are atypical cases in STEMI with the False Negative and False Positive ECG that we cannot explain in STEMI Definition for the purpose of these regulations.
100270.118	Los Angeles County EMS	Delete: 'patients,through the end of	Comment acknowledged.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
Page 6 Line 135	Agency	the sentence Change to: evaluating the STEMI program. Reason for suggested change: The oversight of specialty programs, in most hospitals, are managers or directors who are not assigned to patient care. Ending at the end of program is all that is necessary as other requirements are included.	No change. The STEMI program manager defined in these regulations is at the hospital and has clinical role for managing the patients; the STEMI program manages the system at the Local EMS agency.
100270.122 Page 7 Line 157-160	Los Angeles County EMS Agency	Delete: the period at the end of the first sentence, and 'This system of care'. Add: "that" links prehospital and hospital care to deliver treatment to STEMI patients. Delete: within the timeframes recommended by the AHA. Reason for suggested change: While the goal is to have guidelines, a STEMI care system may exist for that goal but not meet them; therefore should not be included in the definition. Move to QI	Comment acknowledged. No change. The addition to this language does not provide any additional clarity.
100270.125 Page 9 Line 204	Los Angeles County EMS Agency	Change word "stroke" to "STEMI"	Comment acknowledged. Modifications will be made to the typo.
204	San Luis Obispo County EMS Agency	EMSA identifies STROKE, "with the list of stroke hospital" in STEMI draft regs; Please change to STEMI	Comment acknowledged. Modifications will be made to the typo..
Article 2 Section 100270.125 Page 9 Line 204	County of Napa	"with the list of stroke ..." Should read STEMI	Comment acknowledged. Modifications will be made to the typo..
	P. Coleman MD	Did you really mean "stroke" hospitals	Comment acknowledged.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
204		and not STEMI hospitals?	Modifications will be made to the typo..
100270.125 Page 9 Line 212-213	Los Angeles County EMS Agency	Delete statement: this is onerous and does not improve the system. We allow for transport of patients to other Counties through designation of SRCs in that County.	Comment acknowledged. No change. There should be an agreement with neighboring LEMSAs for any specialty care system patient transfer.
Article 3 Section 100270.127 Page 10 Line 237	County of Napa	“and” is deleted and should be left in	Comment acknowledged. No change. The changes to this language does not provide any additional clarity.
100270.127 Page 9 Line 238	Los Angeles County EMS Agency	Delete: ‘equipment is used those findings shall be assessed and’... Change to : When a 12-lead ECG is acquired it shall be interpreted ...	Comment acknowledged. No change. Using 12 lead ECG is not optional in the STEMI System of Care.
100270.127 Page 9 Line 244-245	Los Angeles County EMS Agency	Delete: centers or hospitals Reason for suggested change: “STEMI Facilities” refers to SRCs and SRHs	Comment acknowledged. No change. This covers the situations that patient have seen in any other hospital than STEMI Facilities(SRC,SRH)
4/10/255	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	In addition to hospitals designated by local EMS agency, EMSA shall recognize those STEMI hospitals designated by nationally accrediting bodies without these hospitals having to go through a separate accrediting process by the local EMS agency.	Comment acknowledged. No change. Hospital designation is Local EMS responsibility.
4/10/255	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	EMSA shall recognize any hospital as a STEMI Receiving Center if that hospital has been accredited as a Mission: Lifeline STEMI Receiving Center by the American Heart Association (AHA) accreditation process or another department	Comment acknowledged. No change. Hospital designation is Local EMS responsibility.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		approved nationally recognized organization that provides STEMI Receiving Center accreditation.	
271	P. Coleman MD	EMS can't tell a hospital what appropriate cath lab staffing is.	Comment acknowledged. No change.
100270.128 Page 11 Line 274-275	Los Angeles County EMS Agency	Delete: This is a credentialing issue. Numbers should be evaluated by accrediting bodies and by the hospital for credentialing individual physicians- not the responsibility of the EMS Agency. Change: for designation to as determined	Comment acknowledged. No change. Minimum volume of procedure is one of the requirements of designation for SRCs; the hospital designation is a responsibility of Local EMS.
274	P. Coleman MD	EMS should adopt the minimum requirements set forth by the American College of Cardiology for labs performing STEMI's without on-site surgical back up. The State may actually supersede by adopting this.	Comment acknowledged. No change. Minimum volume of procedure is one of the requirements of designation for SRCs; the hospital designation is a responsibility of Local EMS.
282	P. Coleman MD	EMS should adopt the minimum requirements set forth by the American College of Cardiology for labs performing STEMI's without on-site surgical back up. The State may actually supersede adopting this.	Comment acknowledged. No change. The hospital designation is a responsibility of Local EMS.
285	San Luis Obispo County EMS Agency	3 year review – is conducted by whom? This may add a substantial cost to the oversight (STEMI & EMS Agencies) if it requires a site team of experts from outside of the system Please change to: If they are meeting the QI and performance indicators, at the discretion of the local EMS Agency Medical Director, no additional site	Comment acknowledged. No change. On-site accreditation review every 3 years is a national requirement for the SRCs.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		visit be required	
285/309	P. Coleman MD	Who does the on-site accreditation and what are the criteria? Does EMS perform the accreditation and are these STEMI Regs the criteria?	Comment acknowledged. On-site accreditation review is a responsibility of Local EMS agency.
291	San Luis Obispo County EMS Agency	Why designate referral hospitals? Would the system not want all non-STEMI hospital to participate? This designation requirement creates unnecessary burdens, including financial, on non-STEMI hospitals (SRH) & LEMSAs Recommend: they be required to be included in the system plan but a formal designation note be used	Comment acknowledged. No change. RSH have role in the system for starting the treatment and based on the needs can transfer to the SRC. Other hospitals without the requirements of SRH can be part of the STEMI system to transfer patients to the right facility in the standard timeframe.
4/13/292	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	EMSA shall recognize any hospital as a STEMI Referring Center if that hospital has been accredited as a Mission: Lifeline STEMI Referring Center by the American Heart Association accreditation process or another department approved nationally recognized organization that provides STEMI Referring Center accreditation.	Comment acknowledged. No change. The hospital designation is a responsibility of Local EMS.
100270.129 Page 13 Line 292-288	Los Angeles County EMS Agency	Add; if applicable. Reason for suggested change: A STEMI System may not include SRHs. More emphasis should be placed on integration of the SRH with the SRC. Instead, it should be the default for all non-SRC 911 receiving hospitals. In that all hospitals should	Comment acknowledged. No change. RSH have role in the system for starting the treatment and based on the needs can transfer to the SRC. Other hospital without the requirements of SRH can be part of the STEMI system to transfer patients to the right facility in the

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		do this. Non-SRC will avoid designation to avoid these requirements- ie, transfer agreements, data submission, etc.	standard timeframe.
100270.129 Page 13 Line 303-304	Los Angeles County EMS Agency	ADD: "ambulance" after EMS " Delete: Everything after SRC Reason for suggested change: Arrangements should be made with private EMS ambulances not 9-1-1 providers.	Comment acknowledged. No change. The change to this language does not provide any additional clarity.
309	San Luis Obispo County EMS Agency	Designation of non-STEMI hospitals creates unnecessary burdens, including financial, on non-STEMI hospitals (SRH) & LEMSAs (oversight and site visits). Please delete designation criteria including site visit requirement.	Comment acknowledged. No change. RSH have role in the system for starting the treatment and based on the needs can transfer to the SRC. Other hospital without the requirements of SRH can be part of the STEMI system to transfer patients to the right facility in the standard timeframe.
331	P. Coleman MD	SRH will not know what the NCDR data points are because they most likely will not have a cath lab. Be prepared to educate them.	Comment acknowledged.
5/14/332	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Add "GWTG-CAD" to this list.	Comment acknowledged. No change.
§ 100270.130/14/336-339	Michael O'Mahoney	Replace lines 336-339 with " <u>The following minimum elements shall be collected by the local EMS agency and subsequently to the EMS Authority on no less than a quarterly basis to be used to utilized determine pre-hospital system performance:</u>	Comment acknowledged. No change.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
§ 100270.130/14/355 (Add prior to current line 355)	Michael O'Mahoney	Add prior to line 355 (c) <u>"The following minimum elements shall be collected and submitted to the local EMS agency by the hospital and subsequently to the EMS Authority on no less than a quarterly basis to be used to utilized determine hospital system performance:"</u>	Comment acknowledged. No change. The change to this language does not provide any additional clarity.
100270.130 Page 14 Line 342-343	Los Angeles County EMS Agency	Delete: Name and Date of Birth from data requirements. Reason for suggested change: Difficult to obtain-We do not provide for other systems such as trauma.	Comment acknowledged. No change. It is necessary to have these variables for accuracy of matching pre-hospital and hospital data
5/14/347	Kula Koenig & Mick Smith- American Heart Association/American Stroke Association	Recommend adding "First Medical Contact (FMC)" as a minimum data element in order to effectively track compliance with current ACC/AHA guideline recommendations found in the 2013 ACCF/AHA Guideline for Management of ST-Elevation Myocardial Infarction.	Comment acknowledged. No change. These are the minimum data elements have chosen by a group of expert to be used to determine pre-hospital and hospital system performance at the state level.
Section 100270.130 (4) (b) elements 10, 11, 12 and 15 Pages 14 - 15 Lines 349-351 and Line 354	Jay Goldman, MD, FACEP Director of EMS and Ambulance Kaiser Permanente NCAL Lynn Parkinson, Strategic Leader for Accreditation, Regulation and Licensing, Kaiser Foundation Hospitals, Northern California	The data elements in these sections are collected by the EMS provider while in the field and not the hospital. These elements they should be provided to the EMS Agency by the EMS provider and not by the hospital.	Comment acknowledged. No change. These data elements are traditionally part of the provider's electronic health record that is provided to the receiving facility as part of transfer of care.
Section 100270.130 (4) (b) elements 13 and 14 Line 351	Jay Goldman, MD, FACEP Director of EMS and Ambulance Kaiser Permanente NCAL	Line 351 specifically states the reportable data element is "Field ECG Performed". Elements 13 and 14 were amended in this second version of the	Comment acknowledged. No change.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
<p>Pages 14 - 15</p> <p>Lines 352-353</p>	<p>Lynn Parkinson, Strategic Leader for Accreditation, Regulation and Licensing, Kaiser Foundation Hospitals, Northern California</p>	<p>proposed regulations where the word "field" was deleted from "1st ECG Date" and "1st ECG Time".</p> <p>If these elements refer are still referring to the field ECG, they should be provided to the EMS agency by the EMS provider and not by the hospital as this ECG is occurring in the field.</p> <p>We suggest either clarify that these elements refer to field ECG, in which case they are to be added to EMS provider data requirement, or hospital ECG, in which case they are appropriately placed in the hospital data requirement section.</p>	
<p>§100270.132 line 354</p>	<p>Contra Costa County</p>	<p>This would be part of the routine internal specialty and hospital based morbidity and mortality review processes which audits -deaths including STEMI deaths. There are current mechanisms are in place to include and address pre-hospital QI issues for those patients under review. There is no need duplicate death review for these patients when sufficient processes are already in place to include prehospital STEMI care. Response from EMSA in 45 day comment period not sufficient to address concern. This was brought forth by multiple LEMSAs with the same concern. Requirement in regulation is a duplication that cannot be supported by LEMSA resources.</p>	<p>Comment acknowledged. No change. The comment does not match with the section and line.</p>

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
359 (20) CATH LAB Arrival Date	Linda Allington on behalf of San Mateo County STEMI Committee	Change to time patient arrived in Cath Lab	Comment acknowledged. No change. The change does not provide any additional clarity.
361 (22) PCI Performed 362 (23) PCI Date 363 (24) PCI Time	Linda Allington on behalf on the San Mateo County STEMI Committee	Change to device instead of PCI	Comment acknowledged. No change. The change does not provide any additional clarity.
100270.131 Page 15 Line 379	Los Angeles County EMS Agency	Delete: 'STEMI Critical Care System' Change to: 'STEMI Receiving Center' Currently it is unclear as to the SRC-level responsibility versus the LEMSA's responsibility-need clarification for both. The LEMSA does not review all STEMI deaths it is the responsibility of the SRC. See below	Comment acknowledged. No change. It is LEMSA's responsibility to oversee this activity for the system QI process.
100270.131/132 Page 15-16 Line 379-400	Los Angeles County EMS Agency	The responsibilities of the LEMSA and the SRCs in the system evaluation and QI sections are unclear. Merge the two sections into one Quality Improvement Process then clearly breakdown into: <ul style="list-style-type: none"> • LEMSA Requirements • SRC Requirements 	Comment acknowledged. No change. The change does not provide any additional clarity.
383	P. Coleman MD	This is fine for all pre-hospital deaths but if the death occurs in the hospital then it is the hospital's peer review and performance improvement department that has jurisdiction. EMS will not be able to obtain the medical record to make any valid evaluation of what happened.	Comment acknowledged. No change. It is LEMSA's responsibility to oversee this activity for the system QI process.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
The following Comments were the remaining comments from the first public comment period which we missed to respond.			
100270.111	Linda Allington, RN San Mateo EMS	Delete "A primary PCI is generally done on an emergency basis for STEMI patient". Rationale: irrelevant, though accurate, addition to definition of PCI	Comment acknowledged. Modifications were done in the first draft before 2 nd public comment period.
100270.114	Linda Allington, RN San Mateo EMS	Delete "and the subsequent release of biomarkers of myocardial necrosis". Rationale: not relevant to diagnosis of STEMI in prehospital or ED settings, and thus not the subject of these regulations	Comment acknowledged. Modifications were done in the first draft before 2 nd public comment period.
100270.123	Linda Allington, RN San Mateo EMS	In place of "the American Heart Association (AHA)", substitute "national standards and approved by the LEMSA STEMI Critical Care System". Rationale: replace AHA as the sole source of this competence with national standards	Comment acknowledged. Change made to allow for variable circumstances and timeframes in various areas of the state.
100270.126 (d)	Linda Allington, RN San Mateo EMS	Add to end "designed to expedite time-sensitive treatment on ED arrival". Rationale: goal of this effort should be sharply focused on reducing time to definitive care	Comment acknowledged. No change. The citation has the same purpose and meaning, the change does not provide any additional clarity.
100270.126 (e)	Linda Allington, RN San Mateo EMS	Add to end "including the role of EMS in these transfers" Rationale: requires clarity within each LEMSA of role of EMS versus other providers in these time-sensitive transfers	Comment acknowledged. No change. It is a local control and they can have it in the local policy.
100270.128 (3)(b)	Linda Allington, RN San Mateo EMS	Add language in bold to read: "Advance notification of prehospital ECG findings of suspected STEMI patients, as defined by the local EMS agency, as well as the suspected STEMI patient's identity, when known, will	Comment acknowledged. No change. The change does not provide any additional clarity.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		be...: Rationale: expedite ED care by prereviewing old ECG, POLST, other documentation when available. No HIPPA obstacle.	
100270.129	Linda Allington, RN San Mateo EMS	Add "cardiac" before "cath lab" in all references for clarity	Comment acknowledged. No change. It is mentioned in the definition section and abbreviated to Cath Lab in the entire document.
100270.129 (f)	Linda Allington, RN San Mateo EMS	Add to end "This process may include thrombolytic treatment and/or rapid retriage to another STEMI Receiving Center, as determined by local EMS agency policy" Rationale: requires these specific options to be clearly addressed by each LEMSA	Comment acknowledged. No change. The change does not provide any additional clarity. These provide only partial steps or details of the treatment; we will not make the entire list in this citation.
100270.129 (j)	Linda Allington, RN San Mateo EMS	Add to end "with references to national standards" Rationale: volumes not arbitrary but guided by AHA, ACC, other national standards as chosen by LEMSA	Comment acknowledged. No change. It is local control. Based on the size of the county and geographic locations.
100270.131 (a)(2)	Linda Allington, RN San Mateo EMS	Delete "2.4 dated March 2014" and substitute "3.4 dated January 2017" Rationale: consistency with all other required EMS data submission standards	Comment acknowledged. Modifications were done in the first draft before 2 nd public comment period.
100270.131 (b)	Linda Allington, RN San Mateo EMS	Modify language: "The following minimum elements shall be collected provided to the SRC by the Prehospital provider and submitted to the local EMS agency by the hospital and ..." Rationale: these data points belong to prehospital provider and submission by SRC adds unnecessary work and potential for error. This applies only to data	Comment acknowledged. No change. These data elements are traditionally part of the provider's electronic health record that is provided to the receiving facility as part of transfer of care. All data elements collected by the SRC shall be submitted to the local EMS agency as part of a complete record for each patient.

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		elements 1-15 following	
100270.131 (b)	Linda Allington, RN San Mateo EMS	Suggest end data elements above at #15 and then add subsection (c) : “The following minimum elements shall be collected by the SRC and submitted to the local EMS agency by the hospital in addition to the prehospital elements in 100270.131 (b) to measure combine prehospital and hospital system performance” , then restart numbering from #1, Include again as #1 “EMS ePCR number”, and then data elements #16-35, renumbered #2-21. Rationale: include EMS ePCR number to link records, limit SRC data submission to hospital data	Comment acknowledged. No change. All data elements collected by the SRC shall be submitted to the local EMS agency as part of a complete record for each patient.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Adam Davis
Quality Improvement Coordinator

SUBJECT: Ambulance Patient Off-load Times

RECOMMENDED ACTION:

Receive information regarding ambulance patient offload time methodology guidelines.

FISCAL IMPACT:

None.

DISCUSSION:

AB 1223 went into effect on January 1, 2016 and mandated that the EMS Authority (EMSA) develop a statewide methodology for calculating and reporting ambulance patient offload times by a local EMS agency (LEMSA). This statewide, standard methodology will be based on input received from stakeholders, including but not limited to: hospitals, LEMSAs, public and private EMS providers and must be approved by the Commission on EMS.

At the June 2016 Commission meeting, the matrix for ambulance patient offload time methodology was approved. Subsequently, the workgroup held additional discussion on the matrix and it became apparent that further revision of the document would be completed to address posed concerns. The matrix is currently being modified with suggested edits.

On August 30th EMSA re-convened the working group, to further discuss amendments to the matrix along with the Standardized Methods for Data Collection and Reporting document that will accompany the matrix.

APOT – 1: Ambulance Patient Offload Time for Emergency Patients?

- Report aggregate values by:
 - 1) LEMSA,
 - 2) Individual hospital

- Report the 90 percentile time calculated and the denominator (number of 911 transports and data available)
- Report Quarterly

APOT – 2: Duration of Ambulance Patient Offload Time for Patients transported to the Emergency Department by 911 response emergency ambulance.

2.1: What percentage of patients transported by EMS personnel experience a transfer of care within 20 minutes of arrival at the Hospital Emergency Department?

2.2: What percentage of patients transported by EMS personnel experience a transfer of care between 21 - 60 minutes of arrival at the Hospital Emergency Department?

2.3: What percentage of patients transported by EMS personnel experience a transfer of care between 61 - 120 minutes after arrival at the Hospital Emergency Department?

2.4: What percentage of patients transported by EMS personnel experience a transfer of care between 121 - 180 minutes after arrival at the Hospital Emergency Department?

2.5: What percentage of patients transported by EMS personnel experience a transfer of care more than 180 minutes after arrival in the Hospital Emergency Department?

- Report aggregate values by:
 - 3) LEMSA,
 - 4) Individual hospital
- Report the % calculated and the denominator used to calculate (number of runs)
- Report Quarterly, within 2 months of the end of the quarter.

EMSA is working with LEMSA Administrators to develop a standardized template (an excel spreadsheet) for APOT reporting. This template will be populated by the LEMSA and submitted to EMSA following the APOT Measure specifications. LEMSAs have expressed interest in submitting this information to EMSA as soon as possible. Upon completion of the APOT data submission template, the EMS Authority will begin accepting APOT data. EMSA is determining the best method to display and publish APOT data on the EMSA website.

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DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Tom McGinnis, EMT-P
Chief, EMS Systems Division

SUBJECT: Wireless 911 Routing Status Update

RECOMMENDED ACTION:

Receive information on Wireless 911 Routing from Budge Carrier.

FISCAL IMPACT:

None known at this time.

DISCUSSION:

The EMS Authority continues to inform stakeholders on issues related to the wireless 911 system.

Budge Carrier, 9-1-1 Branch Manager of Public Safety Communications for California of Emergency Services is here today to provide information on this topic.

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875



DATE: June 21, 2017

TO: Commission on EMS

FROM: Howard Backer, MD, MPH, FACEP
Director

PREPARED BY: Craig Johnson
Chief, Disaster Medical Services Division

SUBJECT: Disaster Healthcare Volunteers (DHV) / Medical Reserve Corps (MRC)
Program Update

RECOMMENDED ACTION:

Receive updated information regarding the Disaster Healthcare Volunteers (DHV) and Medical Reserve Corps (MRC) program.

FISCAL IMPACT:

None

DISCUSSION:**Disaster Healthcare Volunteers:**

Disaster Healthcare Volunteers (DHV), is a statewide program administered by the California Emergency Medical Services Authority (EMSA), and operates in coordination with the Medical Health Operational Area Coordinator (MHOAC) programs to recruit, register, credential, track, identify, deploy, and maintain currently licensed volunteer healthcare professionals for response to emergencies, disasters, and terrorist incidents in California and throughout the nation. The DHV Program is California's model for the federally mandated and funded Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP).

The Disaster Healthcare Volunteers program was established in 2007. At the local level, DHV volunteers are coordinated by County medical/health DHV System Administrators as well as Medical Reserve Corps (MRC) Unit Coordinators. Requests for DHV program volunteers should follow the Standardized Emergency Management System (SEMS). All DHV volunteer healthcare professionals are local volunteers available to their communities in time of need.

DHV System Administrator training has been provided to all 58 counties as well as 39 MRC Units. Currently there are approximately 21,800 active volunteers registered in the system. Of

this number, over 19,000 are medical/health volunteers. Also, of the 21, 800, over 8,500 are Medical Reserve Corps volunteers. DHV electronically verifies the license and certification status of 49 types of health care professionals every 24 hours via the person's licensing or certifying department/agency.

Medical Reserve Corps:

"Medical Reserve Corps is a national network of local groups of volunteers engaging local communities to strengthen public health, reduce vulnerability, build resilience, and improve preparedness, response and recovery capabilities."¹ As previously stated, there are 39 California MRC units in the DHV program, two of which are veterinary MRC units.

EMSA conducts regularly scheduled and ad hoc training for the local DHV System Administrators, and provides technical support. Additionally, EMSA conducts quarterly drills on the DHV system to help local DHV/MRC System Administrators hone their skills on the system, and to help them accomplish their grant deliverables in regard to Volunteer Management. The EMS Authority also prepares and distributes the DHV Journal newsletter three times a year for the benefit of all DHV /MRC volunteers.

During the life of the DHV program EMSA has assisted County MRC units by developing the DHV Deployment Operations Manual, DHV recruitment brochures, and the DHV Volunteer Handbook (in both electronic and spiral bound pocket guide copies). EMSA coordinated the acquisition and distribution of over 1,700 medical supply backpacks to California's MRC units with the assistance of Direct Relief International, a California based humanitarian aid organization.

Over the last three years, DHV and MRC volunteers have participated in 276 real world events. Real world events are generally defined as events at which the public or patients are directly encountered. These events include vaccination clinics, first aid stations at planned events, CPR training, first aid training, and Zika virus blood testing draws. Deployments also included 2015 wildfire incidents such as Lake County's Rocky and Valley fires where volunteers staffed a medical clinic, an animal hospital, and an EOC phone bank. As we have seen from the above mentioned events and deployments, DHV and MRC volunteers help the citizens of California in many ways.

This past March, EMSA hosted a one and a half day workshop for the MRC Coordinators from throughout the state. This workshop brought together approximately 50 MRC Coordinators and deputies to hear from their colleagues as well as presenters from the national MRC office and the National Association of County and City Health Officials (NACCHO). The workshop also allowed an opportunity for new and experienced MRC Coordinators to learn from lessons on recent deployments, share best practices, and receive training. EMSA hopes to have additional MRC workshops in the future.

1. National MRC website. Accessed May 4, 2017.