STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
EDMUND G. BROWN JR., *Governor*

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

October 7, 2015

Steve Carroll, EMS Administrator
Ventura County Emergency Medical Services Agency
2220 E. Gonzales Road, Suite 200
Oxnard, CA 93036

Dear Mr. Carroll:

This letter is in response to the 2014 Ventura County EMS Plan Update, submitted to the EMS Authority on August 7, 2015.

I. Introduction and Summary:

The EMS Authority has concluded its review of Ventura County's 2014 EMS Plan Update and is approving the plan as submitted.

II. History and Background:

The EMS Authority is responsible for the review of EMS Plans and for making a determination on the approval or disapproval of the plan, based on compliance with statute and the standards and guidelines established by the EMS Authority consistent with H&S Code § 1797.105(b).

The California Health and Safety (H&S) Code § 1797.254 states:

> *"Local EMS agencies shall **annually** (emphasis added) submit an emergency medical services plan for the EMS area to the authority, according to EMS Systems, Standards, and Guidelines established by the authority".*

Historically, we have received EMS Plan documentation from Ventura County in 1999, 2004, 2005, 2007, 2008, 2009, 2011, 2012, 2013 and most current, its 2014 plan update submission. Ventura County received its last EMS Plan approval on November 14, 2014 for its 2013 submission.

III. Analysis of EMS System Components:

Following are comments related to Ventura County's 2014 EMS Plan Update. Areas that indicate the plan submitted is concordant and consistent with applicable guidelines or regulations and H&S Code § 1797.254 and the EMS system components identified in H&S Code § 1797.103 are indicated below:

	Approved	Not Approved	
A.	☒	☐	System Organization and Management
B.	☒	☐	Staffing/Training
C.	☒	☐	Communications
D.	☒	☐	Response/Transportation

1. Tables

   - Table 5 (System Standard Response Times)

     - Standard 4.05, in part, directs each LEMSA to develop response time standards for medical responses as part of the minimum requirement. Recommended guidelines provide specific response goals for each classification of response based on area. Table 5 indicates only standard response times for 'Transport Ambulance' with remainder reported as 'Not Defined'. In next submission, please provide indication if plan exists to implement response time standards for all responders.

2. Ambulance Zones

   - Please see the attachment on the EMS Authority's determination of the exclusivity of Ventura County's ambulance zones.

E. ☒ ☐ Facilities/Critical Care

1. System Assessment Forms
   - Standard 5.10 (Pediatric System Design)
     - Currently indicated as not meeting minimum requirements with long-range plan. In next submission, please provide update on progress.
   - Standard 5.11 (Pediatric Emergency Departments)
     - Currently indicated as meeting minimum requirements with long-range plan to meet recommended guidelines. In next submission, please provide update on progress.

F. ☒ ☐ Data Collection/System Evaluation

1. System Assessment Forms
   - Standard 6.08 (Reporting)
     - Currently indicated as not meeting minimum requirements with short-range plan. In next submission, please provide update on progress.

G. ☒ ☐ Public Information and Education

H. ☒ ☐ Disaster Medical Response

1. System Assessment Forms
   - Standard 8.09 (DMAT Teams)
     - Currently indicated as meeting minimum requirements only. In next submission please indicate if plans exist to meet recommended guidelines.

IV. Conclusion:

Based on the information identified, Ventura County may implement areas of the 2014 EMS Plan Update that have been approved. Pursuant to H&S Code § 1797.105(b):

> *"After the applicable guidelines or regulations are established by the Authority, a local EMS agency may implement a local plan…unless the Authority determines that the plan does not effectively meet the needs of the persons served and is not consistent with the coordinating activities in the geographical area served, or that the plan is not concordant and consistent with applicable guidelines or regulations, or both the guidelines and regulations established by the Authority."*

V. Next Steps:

Ventura County's annual EMS Plan Update will be due on October 7, 2016.

If you have any questions regarding the plan review please contact Jeff Schultz, EMS Plans Coordinator, at (916) 431-3688.

Sincerely,

Howard Backer, MD, MPH, FACEP
Director

Attachment

ZONE	EXCLUSIVITY			TYPE			LEVEL										
	Non-Exclusive	Exclusive	Method to Achieve Exclusivity	Emergency Ambulance	ALS	LALS	All Emergency Ambulance Services	9-1-1 Emergency Response	7-digit Emergency Response	ALS Ambulance	All ALS Ambulance Services (includes emergency and IFT)	All CCT/ALS Ambulance Services	BLS IFT	BLS Non-Emergency	Standby Service with Transport Authorization	All Air Ambulance	Emergency Air Ambulance
ASA 1 - City of Ojai		X	Non-Competitive	X				X									
ASA 2 - Cities of Fillmore & Santa Paula		X	Non-Competitive	X				X									
ASA 3 - City of Simi Valley		X	Non-Competitive	X				X									
ASA 4 - Cities of Moorpark & Thousand Oaks		X	Non-Competitive	X				X									
ASA 5 - City of Caramillo		X	Non-Competitive	X				X									
ASA 6 - Cities of Oxnard & Port Hueneme		X	Non-Competitive	X				X									
ASA 7 - City of Ventura		X	Non-Competitive	X				X									

Ventura County Public Health
A Division of the Ventura County Health Care Agency

RIGOBERTO VARGAS, MPH
Director

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STEVEN L. CARROLL, EMT-P
EMS Administrator
ANGELO SALVUCCI, M.D., F.A.C.E.P.
Medical Director

August 7, 2015

Jeff Schultz
Emergency Medical Services Authority
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670-6073

Dear Jeff,

I am pleased to submit the 2014 Ventura County EMS Plan Update for your review including updated Tables 1 through 11 and new system assessment forms for Standards 1.10, 5.10, 5.11, 6.08 and 8.09. Additionally, the Ambulance Zone Summary Forms are being resubmitted, however, there have been no changes to these documents since the last submission.

As identified in our last EMS Plan approval dated November 14, 2014, we have corrected the inconsistencies or omissions in Tables 3, 6 and 9 and have made the following updates or corrections:

1.07 is now listed as meeting the recommended guideline in Table 1.
5.10 and 5.11 have been updated to long-range plans due to other system priorities.
6.08 is now listed in Table 1 as a short-range plan, however, the timeline has been updated to end of FY15-16.
6.09 is now listed as meeting the recommended guideline in Table 1.
6.11 is now listed as meeting the recommended guideline in Table 1 and the short-range plan is removed.
8.09 has been updated to show that we now meet the minimum requirement.

Significant changes in the 2014 reporting period include the full implementation of our new Cardiac Arrest Management Program for all Ventura County based EMS responders and the development of two pilot Community Paramedicine programs, one involving coordinated care for hospice patients and the other involving TB patients that require daily medication administration. We also completed the overhaul of our County AED program to include updated training and deployment of new Physio-Control defibrillators. Other notable accomplishments in 2014 include the relocation of the EMS Agency office to our new, larger and upgraded facility, the coordinated system wide response to the Ebola threat, the implementation of the county wide Sidewalk CPR program through some of our local high schools and the continued roll-out of the Elderly Secondary Fall Prevention program in coordination with the Area Agency on Aging and our local hospitals and EMS providers.

Ventura County EMS plans to review our system design and operations in the current fiscal year and will report on our progress in the next update. Additionally, we remain interested in exploring options to increase pediatric care, however, geographic concerns and minimal patient volumes continue to limit our options at establishing a pediatric specialty care system at this time.

Please feel free to contact me at (805) 981-5305 should you require any additional information or should you have any questions.

Sincerely,

Steve Carroll

SECTION II- ASSESSMENT OF SYSTEM 2014
A. System Organization and Management

Planning Activities

Minimum Standard	Recommended Guidelines
1.10 Each local EMS Agency shall identify population groups served by the EMS system which require specialized services (e.g., elderly, handicapped, children, non-English speakers).	Each local EMS Agency should develop services, as appropriate, for special population groups served by the EMS system which require specialized services (e.g., elderly, handicapped, children, non-English speakers).

Does not currently meet standard		Meets minimum standard	X	Meets recommended guidelines	X	Short-range plan		Long-range plan	

CURRENT STATUS:

Ventura County EMS meets the minimum and recommended standards for this section. We have engaged various County stakeholders to ensure our emergency plans include special populations such as those with access and functional needs. Additionally, VCEMS oversees the Hospital Preparedness Program and the newly established Ventura County Healthcare Coalition, which coordinates emergency preparedness efforts among hospitals, clinics and long term care facilities within our jurisdiction. VCEMS works continuously with the Sheriff's Office of Emergency Services to ensure special populations within our jurisdiction are included in our disaster planning efforts.

COORDINATION WITH OTHER EMS AGENCIES:

N/A

NEEDS:

N/A

OBJECTIVE:

N/A

SECTION II - ASSESSMENT OF SYSTEM 2014
E. Facilities and Critical Care

Enhanced Level: Pediatric Emergency Medical and Critical Care System

Minimum Standard	Recommended Guidelines
5.10 Local EMS agencies that develop pediatric emergency medical and critical care systems shall determine the optimal system, including: a) the number and role of system participants, particularly of emergency departments, b) the design of catchment areas (including areas in other counties, as appropriate), with consideration of workload and patient mix, c) identification of patients who should be primarily triaged or secondarily transferred to a designated center, including consideration of patients who should be triaged to other specially care centers, d) identification of providers who are qualified to transport such patients to a designated facility, e) identification of tertiary care centers for pediatric critical care and pediatric trauma, f) the role of non-pediatric specially care hospitals including those which are outside of the primary triage area, and g) a plan for monitoring and evaluation of the system.	

Does not currently meet standard	X	Meets minimum standard		Meets recommended guidelines		Short-range plan		Long-range plan	X

CURRENT STATUS:

Ventura County EMS does not currently meet the minimum standard for this section. The County of Ventura currently has one certified Emergency Room Approved for Pediatrics (EDAP) located at Los Robles Hospital and Medical Center in Thousand Oaks and one Pediatric Intensive Care Unit (PICU) at Ventura County Medical Center in Ventura and as necessary, local hospitals work with pediatric specialty centers in neighboring counties to coordinate transfers when a higher level of care is needed. We are interested in reviewing options to increase pediatric care capabilities in Ventura County, however, this has been moved to a long range plan due to other EMS System priorities.

SECTION II - ASSESSMENT OF SYSTEM 2014
E. Facilities and Critical Care

5.10 (Cont'd.)

COORDINATION WITH OTHER EMS AGENCIES:

N/A

NEEDS:

Continue to work with local hospitals and prehospital providers to evaluate pediatric care capabilities in Ventura County.

OBJECTIVE:

Plan to revisit the pediatric capabilities in FY16-17.

SECTION II - ASSESSMENT OF SYSTEM 2014
E. Facilities and Critical Care

Minimum Standard	Recommended Guidelines
5.11 Local EMS agencies shall identify minimum standards or pediatric capability of emergency departments including: a) staffing, b) training, c) equipment, d) identification of patients for whom consultation with a pediatric critical care center is appropriate, e) quality assurance/quality improvement, and f) data reporting to the local EMS Agency.	Local EMS agencies should develop methods of identifying emergency departments which meet standards for pediatric care and for pediatric critical care centers and pediatric trauma centers.

Does not currently meet standard		Meets minimum standard	X	Meets recommended guidelines		Short-range plan		Long-range plan	X

CURRENT STATUS:

Ventura County EMS meets the minimum standard for this section. The Ventura County EMS Agency requires all area hospitals to provide basic emergency care for pediatrics. In addition, we have one hospital in the county that has a Pediatric Intensive Care Unit (PICU) and one facility that is a certified Emergency Department Approved for Pediatrics (EDAP). As necessary, hospitals work with pediatric specialty centers in neighboring counties when a higher level of care is needed. We are interested in reviewing options to increase pediatric care capabilities in Ventura County to meet the recommended guidelines, however, this has been moved to a long range plan due to other EMS System priorities.

COORDINATION WITH OTHER EMS AGENCIES:

N/A

NEEDS:

Continue to work with local hospitals and prehospital providers to evaluate pediatric care capabilities in Ventura County.

OBJECTIVE:

Plan to revisit the pediatric capabilities in FY16-17.

SECTION II - ASSESSMENT OF SYSTEM 2014
F. Data Collection and System Evaluation

Minimum Standard	Recommended Guidelines
6.08 The local EMS Agency shall, at least annually report on the results of its evaluation of EMS system design and operations to the Board(s) of Supervisors, provider agencies, and Emergency Medical Care Committee(s).	

Does not currently meet standard	X	Meets minimum standard		Meets recommended guidelines		Short-range plan	X	Long-range plan	

CURRENT STATUS:

Ventura County EMS does not currently meet the minimum standard for this section. The EMS Plan addresses current system design and future improvements, however, annual reports are not consistent. The EMS Agency routinely solicits stakeholder input for the system design and operations and the EMS Advisory Committee is convened every two years, or more frequently, if needed. The EMS Advisory Committee met in early 2015 to review the ambulance contract compliance. Future plan is to have the EMS Advisory Committee meet at least annually to evaluate the system with a subsequent annual report being submitted to the appropriate entities.

COORDINATION WITH OTHER EMS AGENCIES:

N/A

NEEDS:

Schedule the EMS Advisory Committee to annually evaluate the EMS system and produce an annual report.

OBJECTIVE:

Plan to complete by end of FY 15-16.

SECTION II - ASSESSMENT OF SYSTEM 2014
H. Disaster Medical Response

Minimum Standard	Recommended Guidelines
8.09 The local EMS Agency shall establish and maintain relationships with DMAT teams in its area.	The local EMS Agency should support the development and maintenance of DMAT teams in its area.

Does not currently meet standard		Meets minimum standard	X	Meets recommended guidelines		Short-range plan		Long-range plan	

CURRENT STATUS:

Ventura County does not have a local DMAT team, but meets the minimum standards for this section, as we have established working relationships with the nearest DMAT team located in Los Angeles County. A number of our Medical Reserve Corps members are also currently associated with the Los Angeles DMAT team.

COORDINATION WITH OTHER EMS AGENCIES:

N/A

NEEDS:

N/A

OBJECTIVE:

N/A

LEMSA: Ventura **FY: 2014-15**

Standard	EMSA Requirement	Meets Minimum Req.	Short Range (one year or less)	Long Range (more than one year)	Progress	Objective
1.07	Trauma Planning	☑	☐	☐	VCEMS now meets the minimum and recommended guidelines for	
1.1	Special Populations	☑	☐	☐	VCEMS now meets the minimum and recommended guidelines for	
5.1	Pediatric System Design	☐	☐	☑	the minimum standards. We are	
5.11	Pediatric Emergency Departments	☑	☐	☑	options to increase pediatric care	
6.08	Reporting	☐	☑	☐	currently meet the minimum	
6.09	ALS Audit	☑	☐	☐	VCEMS now meets the recommended guidelines for this	
6.11	Trauma Center Data	☑	☐	☐	VCEMS now meets the minimum and recommended guidelines	
8.09	DMAT Teams	☑	☐	☐	local DMAT team, but meets the	
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Standard	EMSA Requirement	Meets Minimum Req.	Short Range (one year or less)	Long Range (more than one year)	Progress	Objective
		☐	☐	☐		
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		☐	☐	☐		
		☐	☐	☐		
		☐	☐	☐		

Column1	
	Each local EMS agency shall have a formal organizational structure which includes both agency staff and non-agency resources and which includes appropriate technical and clinical expertise.
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TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

A. SYSTEM ORGANIZATION AND MANAGEMENT

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Agency Administration:					
1.01 LEMSA Structure		X			
1.02 LEMSA Mission		X			
1.03 Public Input		X			
1.04 Medical Director		X	X		
Planning Activities:					
1.05 System Plan		X			
1.06 Annual Plan Update		X			
1.07 Trauma Planning*		X	X		
1.08 ALS Planning*		X			
1.09 Inventory of Resources		X			
1.10 Special Populations		X	X		
1.11 System Participants		X	X		
Regulatory Activities:					
1.12 Review & Monitoring		X			
1.13 Coordination		X			
1.14 Policy & Procedures Manual		X			
1.15 Compliance w/Policies		X			
System Finances:					
1.16 Funding Mechanism		X			
Medical Direction:					
1.17 Medical Direction*		X			
1.18 QA/QI		X	X		
1.19 Policies, Procedures, Protocols		X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

A. SYSTEM ORGANIZATION AND MANAGEMENT (continued)

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
1.20 DNR Policy		X			
1.21 Determination of Death		X			
1.22 Reporting of Abuse		X			
1.23 Interfacility Transfer		X			
Enhanced Level: Advanced Life Support					
1.24 ALS Systems		X	X		
1.25 On-Line Medical Direction		X	X		
Enhanced Level: Trauma Care System:					
1.26 Trauma System Plan		X			
Enhanced Level: Pediatric Emergency Medical and Critical Care System:					
1.27 Pediatric System Plan		X			
Enhanced Level: Exclusive Operating Areas:					
1.28 EOA Plan		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

B. STAFFING/TRAINING

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Local EMS Agency:					
2.01 Assessment of Needs		X			
2.02 Approval of Training		X			
2.03 Personnel		X			
Dispatchers:					
2.04 Dispatch Training		X	X		
First Responders (non-transporting):					
2.05 First Responder Training		X	X		
2.06 Response		X			
2.07 Medical Control		X			
Transporting Personnel:					
2.08 EMT-I Training		X	X		
Hospital:					
2.09 CPR Training		X			
2.10 Advanced Life Support		X			
Enhanced Level: Advanced Life Support:					
2.11 Accreditation Process		X			
2.12 Early Defibrillation		X			
2.13 Base Hospital Personnel		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

C. COMMUNICATIONS

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Communications Equipment:						
3.01	Communication Plan*		X	X		
3.02	Radios		X	X		
3.03	Interfacility Transfer*		X			
3.04	Dispatch Center		X			
3.05	Hospitals		X	X		
3.06	MCI/Disasters		X			
Public Access:						
3.07	9-1-1 Planning/ Coordination		X	X		
3.08	9-1-1 Public Education		X			
Resource Management:						
3.09	Dispatch Triage		X	X		
3.10	Integrated Dispatch		X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

D. RESPONSE/TRANSPORTATION

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:					
4.01 Service Area Boundaries*		X	X		
4.02 Monitoring		X	X		
4.03 Classifying Medical Requests		X			
4.04 Prescheduled Responses		X			
4.05 Response Time*		X			
4.06 Staffing		X			
4.07 First Responder Agencies		X			
4.08 Medical & Rescue Aircraft*		X			
4.09 Air Dispatch Center		X			
4.10 Aircraft Availability*		X			
4.11 Specialty Vehicles*		X	X		
4.12 Disaster Response		X			
4.13 Intercounty Response*		X	X		
4.14 Incident Command System		X			
4.15 MCI Plans		X			
Enhanced Level: Advanced Life Support:					
4.16 ALS Staffing		X	X		
4.17 ALS Equipment		X			
Enhanced Level: Ambulance Regulation:					
4.18 Compliance		X			
Enhanced Level: Exclusive Operating Permits:					
4.19 Transportation Plan		X			
4.20 “Grandfathering”		X			
4.21 Compliance		X			
4.22 Evaluation		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

E. FACILITIES/CRITICAL CARE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
5.01	Assessment of Capabilities		X			
5.02	Triage & Transfer Protocols*		X			
5.03	Transfer Guidelines*		X			
5.04	Specialty Care Facilities*		X			
5.05	Mass Casualty Management		X	X		
5.06	Hospital Evacuation*		X			
Enhanced Level: Advanced Life Support:						
5.07	Base Hospital Designation*		X			
Enhanced Level: Trauma Care System:						
5.08	Trauma System Design		X			
5.09	Public Input		X			
Enhanced Level: Pediatric Emergency Medical and Critical Care System:						
5.10	Pediatric System Design	X				X
5.11	Emergency Departments		X			X
5.12	Public Input		X			
Enhanced Level: Other Specialty Care Systems:						
5.13	Specialty System Design		X			
5.14	Public Input		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

F. DATA COLLECTION/SYSTEM EVALUATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
6.01	QA/QI Program		X	X		
6.02	Prehospital Records		X			
6.03	Prehospital Care Audits		X	X		
6.04	Medical Dispatch		X			
6.05	Data Management System*		X	X		
6.06	System Design Evaluation		X			
6.07	Provider Participation		X			
6.08	Reporting	X			X	
Enhanced Level: Advanced Life Support:						
6.09	ALS Audit		X	X		
Enhanced Level: Trauma Care System:						
6.10	Trauma System Evaluation		X			
6.11	Trauma Center Data		X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

G. PUBLIC INFORMATION AND EDUCATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
7.01	Public Information Materials		X	X		
7.02	Injury Control		X	X		
7.03	Disaster Preparedness		X	X		
7.04	First Aid & CPR Training		X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

H. DISASTER MEDICAL RESPONSE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
8.01	Disaster Medical Planning*		X			
8.02	Response Plans		X	X		
8.03	HazMat Training		X			
8.04	Incident Command System		X	X		
8.05	Distribution of Casualties*		X	X		
8.06	Needs Assessment		X	X		
8.07	Disaster Communications*		X			
8.08	Inventory of Resources		X	X		
8.09	DMAT Teams		X			
8.10	Mutual Aid Agreements*		X			
8.11	CCP Designation*		X			
8.12	Establishment of CCPs		X			
8.13	Disaster Medical Training		X	X		
8.14	Hospital Plans		X	X		
8.15	Interhospital Communications		X			
8.16	Prehospital Agency Plans		X	X		
Enhanced Level: Advanced Life Support:						
8.17	ALS Policies		X			
Enhanced Level: Specialty Care Systems:						
8.18	Specialty Center Roles		X			
Enhanced Level: Exclusive Operating Areas/Ambulance Regulations:						
8.19	Waiving Exclusivity		X			

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT

Reporting Year: 2014

NOTE: Number (1) below is to be completed for each county. The balance of Table 2 refers to each agency.

1. Percentage of population served by each level of care by county:
(Identify for the maximum level of service offered; the total of a, b, and c should equal 100%.)

County: Ventura

A.	Basic Life Support (BLS)	____%
B.	Limited Advanced Life Support (LALS)	____%
C.	Advanced Life Support (ALS)	100 %

2. Type of agency
   - **a) Public Health Department**
   - b) County Health Services Agency
   - c) Other (non-health) County Department
   - d) Joint Powers Agency
   - e) Private Non-Profit Entity
   - f) Other: _____

3. The person responsible for day-to-day activities of the EMS agency reports to
   - a) Public Health Officer
   - b) Health Services Agency Director/Administrator
   - c) Board of Directors
   - **d) Other**: **Public Health Director**

4. Indicate the non-required functions which are performed by the agency:

Implementation of exclusive operating areas (ambulance franchising)	x
Designation of trauma centers/trauma care system planning	x
Designation/approval of pediatric facilities	x
Designation of other critical care centers	x
Development of transfer agreements	
Enforcement of local ambulance ordinance	x
Enforcement of ambulance service contracts	x
Operation of ambulance service	
Continuing education	x
Personnel training	x
Operation of oversight of EMS dispatch center	x
Non-medical disaster planning	
Administration of critical incident stress debriefing team (CISD)	x

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

Administration of disaster medical assistance team (DMAT)	_____
Administration of EMS Fund [Senate Bill (SB) 12/612]	x
Other: _____	_____
Other: _____	_____
Other: _____	_____

5. EXPENSES

Salaries and benefits (All but contract personnel)	$ 987,221
Contract Services (e.g. medical director)	239,493
Operations (e.g. copying, postage, facilities)	354,263
Travel	34,862
Fixed assets	_____
Indirect expenses (overhead)	_____
Ambulance subsidy	57,575
EMS Fund payments to physicians/hospital	1,659,395
Dispatch center operations (non-staff)	_____
Training program operations	_____
Other: _____	_____
Other: _____	_____
Other: _____	_____
TOTAL EXPENSES	$ 3,332,809

6. SOURCES OF REVENUE

Special project grant(s) [from EMSA]	$ _____
Preventive Health and Health Services (PHHS) Block Grant	_____
Office of Traffic Safety (OTS)	_____
State general fund	_____
County general fund	885,235
Other local tax funds (e.g., EMS district)	_____
County contracts (e.g. multi-county agencies)	412,833
Certification fees	41,292
Training program approval fees	_____
Training program tuition/Average daily attendance funds (ADA)	_____
Job Training Partnership ACT (JTPA) funds/other payments	_____
Base hospital application fees	_____

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

Trauma center application fees	_____
Trauma center designation fees	150,000
Pediatric facility approval fees	_____
Pediatric facility designation fees	_____
Other critical care center application fees	_____
Type: _____	
Other critical care center designation fees	_____
Type: _____	
Ambulance service/vehicle fees	175,287
Contributions	_____
EMS Fund (SB 12/612)	1,659,395
Other grants: _____	_____
Other fees: Health Fees	8,767
Other (specify): _____	_____
TOTAL REVENUE	$ 3,332,809

TOTAL REVENUE SHOULD EQUAL TOTAL EXPENSES.
IF THEY DON'T, PLEASE EXPLAIN.

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

7. Fee structure

_____ We do not charge any fees

__X__ Our fee structure is:

First responder certification	$ N/A
EMS dispatcher certification	N/A
EMT-I certification	127.00
EMT-I recertification	87.00
EMT-defibrillation certification	N/A
EMT-defibrillation recertification	N/A
AEMT certification	N/A
AEMT recertification	N/A
EMT-P accreditation	71.00
Mobile Intensive Care Nurse/Authorized Registered Nurse certification	N/A
MICN/ARN recertification	N/A
EMT-I training program approval	452.00
AEMT training program approval	N/A
EMT-P training program approval	645.00
MICN/ARN training program approval	N/A
Base hospital application	N/A
Base hospital designation	N/A
Trauma center application	15,000.00
Trauma center designation	75,000.00
Pediatric facility approval	N/A
Pediatric facility designation	N/A
Other critical care center application Type: _____	
Other critical care center designation Type: _____	
Ambulance service license	N/A
Ambulance vehicle permits	N/A
Other: _____	_____
Other: _____	_____
Other: _____	_____

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (%of Salary)	COMMENTS
EMS Admin./Coord./Director	EMS Administrator	1.0	59.22 / hr	40%	
Asst. Admin./Admin.Asst./Admin. Mgr.	Senior Program Admin.	1.0	47.99 / hr	44%	Deputy EMS Administrator
ALS Coord./Field Coord./Trng Coordinator					
Program Coordinator/Field Liaison (Non-clinical)	Supervising PHN	1.0	47.25 / hr	42%	EPO Manager
Trauma Coordinator	Senior Program Admin.	1.0	47.60 / hr	45%	Trauma System Manager
Medical Director	EMS Medical Director	0.5	94.41 / hr	0	Independent Contractor
Other MD/Medical Consult/Training Medical Director					
Disaster Medical Planner	Program Assistant	1.0	37.17 / hr	45%	EPO Planning Coordinator
Dispatch Supervisor					
Medical Planner					
Data Evaluator/Analyst					
QA/QI Coordinator	Senior Registered Nurse	1.0	36.65 / hr	45%	Specialty Systems Coordinator
Public Info. & Education Coordinator					
Executive Secretary	Admin. Assistant II	1.0	30.78 / hr	42%	EPO Admin. Asst.
Other Clerical	Administrative Assistant I	1.0	25.66 / hr	44%	

Other Clerical	Office Assistant III	1.0	16.94 / hr	45%	
Other	Program Administrator III	1.0	42.77 / hr	45%	EPO Epidemiologist
Other	Community Services Coordinator	1.0	19.11 / hr	45%	EPO Logistics Coordinator
Other	Program Administrator I	1.0	30.70 / hr	40%	EMS Project Manager
Other	Program Administrator I	1.0	33.75 / hr	40%	EMS Project Manager

Include an organizational chart of the local EMS agency and a county organization chart(s) indicating how the LEMSA fits within the county/multi-county structure.

Ventura County EMS Agency
Organizational Chart
July 1, 2015

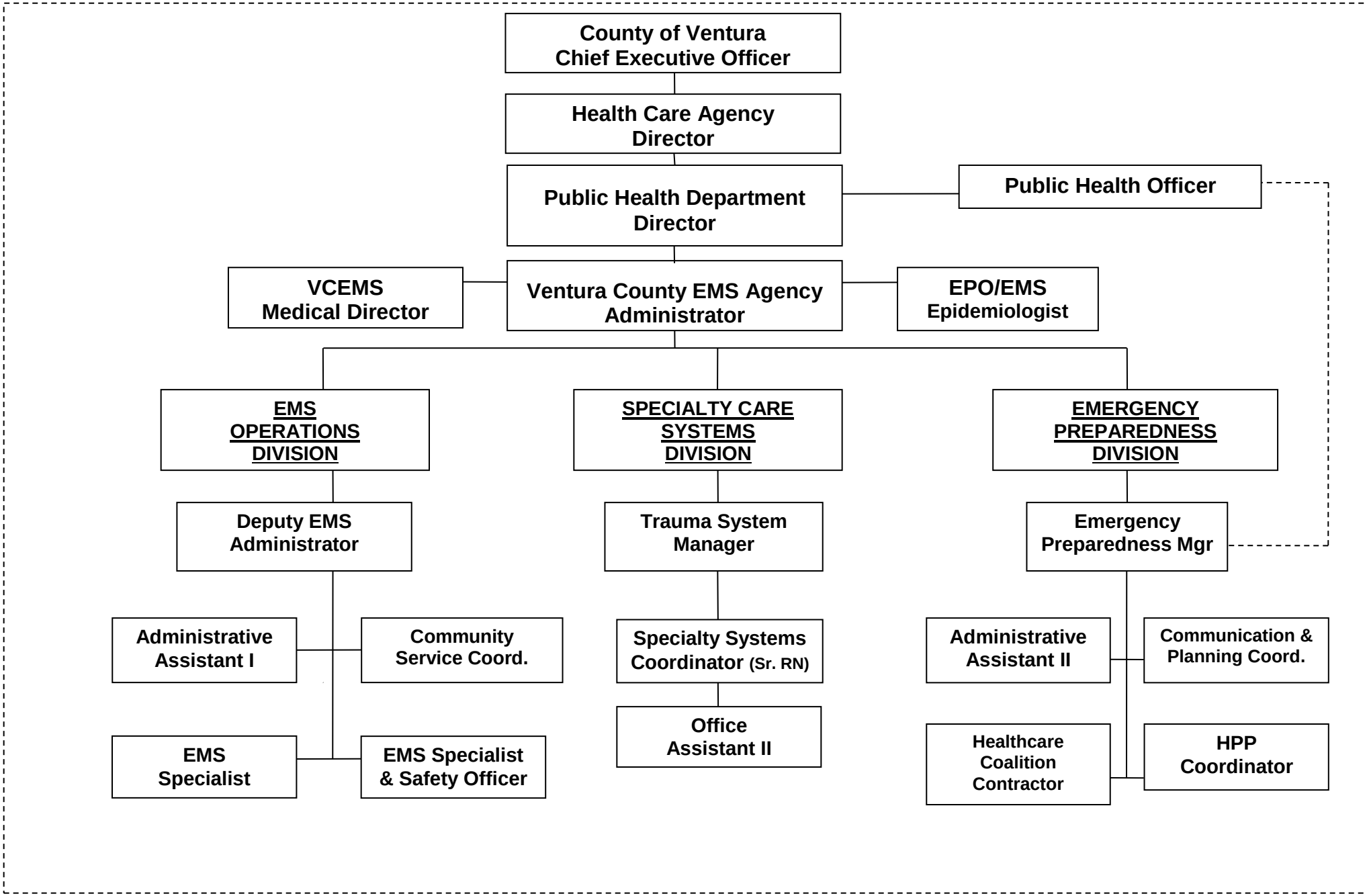


TABLE 3: STAFFING/TRAINING

Reporting Year: __2014_____

NOTE: Table 3 is to be reported by agency.

	EMT - Is	EMT - IIs	EMT - Ps	MICN
Total Certified	650	0		88
Number newly certified this year	296	0		15
Number recertified this year	354	0		73
Total number of accredited personnel on July 1 of the reporting year	1703	0	240	145
Number of certification reviews resulting in:				
a) formal investigations	11	0		0
b) probation	6	0	0	0
c) suspensions	1	0	0	0
d) revocations	4	0		0
e) denials	0	0		0
f) denials of renewal	0	0		0
g) no action taken	0	0	0	0

1. Early defibrillation:
   a) Number of EMT-I (defib) authorized to use AEDs __UNKNOWN__
   b) Number of public safety (defib) certified (non-EMT-I) __UNKNOWN__

2. Do you have an EMR training program ☐ yes **X** no

TABLE 4: COMMUNICATIONS

Note: Table 4 is to be answered for each county.

County: Ventura

Reporting Year: 2014

1. Number of primary Public Service Answering Points (PSAP) 6
2. Number of secondary PSAPs 1
3. Number of dispatch centers directly dispatching ambulances 1
4. Number of EMS dispatch agencies utilizing EMD guidelines 2
5. Number of designated dispatch centers for EMS Aircraft 1
6. Who is your primary dispatch agency for day-to-day emergencies?
   Ventura County Fire Protection District
7. Who is your primary dispatch agency for a disaster?
   Ventura County Sheriff's Dept. and Ventura County Fire Protection District
8. Do you have an operational area disaster communication system? **X** Yes ☐ No
   a. Radio primary frequency 154.055
   b. Other methods _____
   c. Can all medical response units communicate on the same disaster communications system? **X** Yes ☐ No
   d. Do you participate in the Operational Area Satellite Information System (OASIS)? **X** Yes ☐ No
   e. Do you have a plan to utilize the Radio Amateur Civil Emergency Services (RACES) as a back-up communication system? **X** Yes ☐ No
      1) Within the operational area? **X** Yes ☐ No
      2) Between operation area and the region and/or state? **X** Yes ☐ No

TABLE 5: RESPONSE/TRANSPORTATION

Reporting Year: 2014

Note: Table 5 is to be reported by agency.

Early Defibrillation Providers

1. Number of EMT-Defibrillation providers 8

SYSTEM STANDARD RESPONSE TIMES (90TH PERCENTILE)

Enter the response times in the appropriate boxes:

	METRO/URBAN	SUBURBAN/ RURAL	WILDERNESS	SYSTEMWIDE
BLS and CPR capable first responder	Not Defined	Not Defined	Not Defined	Not Defined
Early defibrillation responder	Not Defined	Not Defined	Not Defined	Not Defined
Advanced life support responder	Not Defined	Not Defined	Not Defined	Not Defined
Transport Ambulance	8 min, 0 sec	20 min, 0 sec	30 min, 0 sec or ASAP	Not Defined

TABLE 6: FACILITIES/CRITICAL CARE

Reporting Year: 2014

NOTE: Table 6 is to be reported by agency.

Trauma

Trauma patients:

1. Number of patients meeting trauma triage criteria	2926
2. Number of major trauma victims transported directly to a trauma center by ambulance	907
3. Number of major trauma patients transferred to a trauma center	35
4. Number of patients meeting triage criteria who were not treated at a trauma center	1023

Emergency Departments

Total number of emergency departments	8
1. Number of referral emergency services	0
2. Number of standby emergency services	1
3. Number of basic emergency services	7
4. Number of comprehensive emergency services	0

Receiving Hospitals

1. Number of receiving hospitals with written agreements	0
2. Number of base hospitals with written agreements	2

TABLE 7: DISASTER MEDICAL

Reporting Year: 2014

County: Ventura

NOTE: Table 7 is to be answered for each county.

SYSTEM RESOURCES

1. Casualty Collections Points (CCP)
   a. Where are your CCPs located? Hospital Parking Lots
   b. How are they staffed? Hospital personnel, PH nurses, and Medical Reserve Corps
   c. Do you have a supply system for supporting them for 72 hours? **X** Yes ☐ No

2. CISD
   Do you have a CISD provider with 24 hour capability? **X** Yes ☐ No

3. Medical Response Team
   a. Do you have any team medical response capability? **X** Yes ☐ No
   b. For each team, are they incorporated into your local response plan? **X** Yes ☐ No
   c. Are they available for statewide response? ☐ Yes **X** No
   d. Are they part of a formal out-of-state response system? ☐ Yes **X** No

4. Hazardous Materials
   a. Do you have any HazMat trained medical response teams? ☐ Yes **X** No
   b. At what HazMat level are they trained? _____
   c. Do you have the ability to do decontamination in an emergency room? **X** Yes ☐ No
   d. Do you have the ability to do decontamination in the field? **X** Yes ☐ No

OPERATIONS

1. Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure? **X** Yes ☐ No

2. What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster? 12

3. Have you tested your MCI Plan this year in a:
   a. real event? **X** Yes ☐ No
   b. exercise? **X** Yes ☐ No

TABLE 7: DISASTER MEDICAL (cont.)

4. List all counties with which you have a written medical mutual aid agreement.
__Medical Mutual Aid with all Region 1 and Region 6 counties_____

5. Do you have formal agreements with hospitals in your operational area to participate in disaster planning and response? **X** Yes ☐ No

6. Do you have a formal agreements with community clinics in your operational areas to participate in disaster planning and response? **X** Yes ☐ No

7. Are you part of a multi-county EMS system for disaster response? ☐ Yes **X** No

8. Are you a separate department or agency? ☐ Yes **X** No

9. If not, to whom do you report? Health Care Agency, Public Health Department

8. If your agency is not in the Health Department, do you have a plan to coordinate public health and environmental health issues with the Health Department? ☐ Yes ☐ No

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** American Medical Response **Response Zone:** 2,3,4,5,7

Address: 616 Fitch Ave
Moorpark, CA 93021

Number of Ambulance Vehicles in Fleet: 25

Phone Number: 805-517-2000

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 18

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	**X** Yes ❒ No	**X** Yes ❒ No	**X** Transport ❑ Non-Transport **X** ALS ❑ BLS **X** 9-1-1 **X** 7-Digit **X** CCT **X** IFT **X** Ground ❑ Air ❑ Water	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
❒ Public **X** Private	❒ Fire ❒ Law ❒ Other Explain:	❒ City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

40017	Total number of responses	30390	Total number of transports
36950	Number of emergency responses	27633	Number of emergency transports
3067	Number of non-emergency responses	2757	Number of non-emergency transports

Air Ambulance Services

	Total number of responses		Total number of transports
	Number of emergency responses		Number of emergency transports
	Number of non-emergency responses		Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Gold Coast Ambulance **Response Zone:** 6

Address: 200 Bernoulli Circle
Oxnard, CA 93030

Number of Ambulance Vehicles in Fleet: 19

Phone Number: 805-485-3040

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 12

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	**X** Yes ❒ No	**X** Yes ❒ No	**X** Transport ❑ Non-Transport **X** ALS ❑ BLS **X** 9-1-1 **X** 7-Digit **X** CCT **X** IFT **X** Ground ❑ Air ❑ Water	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
❒ Public **X** Private	❒ Fire ❒ Law ❒ Other Explain:	❒ City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

23212	Total number of responses	18012	Total number of transports
14123	Number of emergency responses	11333	Number of emergency transports
9089	Number of non-emergency responses	6679	Number of non-emergency transports

Air Ambulance Services

	Total number of responses		Total number of transports
	Number of emergency responses		Number of emergency transports
	Number of non-emergency responses		Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** LifeLine Medical Transport **Response Zone:** 1

Address: 632 E. Thompson Ave.
Ventura, CA 93001

Number of Ambulance Vehicles in Fleet: 8

Phone Number: 805-653-9111

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 6

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	**X** Yes ❒ No	**X** Yes ❒ No	**X** Transport ❒ Non-Transport **X** ALS ❒ BLS **X** 9-1-1 **X** 7-Digit **X** CCT **X** IFT **X** Ground ❒ Air ❒ Water	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
❒ Public **X** Private	❒ Fire ❒ Law ❒ Other Explain:	❒ City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

9815	Total number of responses	9132	Total number of transports
1959	Number of emergency responses	1276	Number of emergency transports
7856	Number of non-emergency responses	7856	Number of non-emergency transports

Air Ambulance Services

	Total number of responses		Total number of transports
	Number of emergency responses		Number of emergency transports
	Number of non-emergency responses		Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Ventura City Fire Dept. **Response Zone:** _____

Address: 1425 Dowell Dr.
Ventura, CA 93003

Number of Ambulance Vehicles in Fleet: 0

Phone Number: 805-339-4300

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 0

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	X Yes ❒ No	X Yes ❒ No	❑ Transport X ALS X 9-1-1 X Ground X Non-Transport ❑ BLS ❑ 7-Digit ❑ Air ❑ CCT ❑ Water ❑ IFT	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
X Public ❒ Private	X Fire ❒ Law ❒ Other Explain: _____	X City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

THIS IS NOT A TRANSPORT PROVIDER

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Air Ambulance Services

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Oxnard Fire Dept. **Response Zone:** _____

Address: 360 W. Second St.
Oxnard, CA 93030

Number of Ambulance Vehicles in Fleet: 0

Phone Number: 805-385-7722

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 0

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
❒ Yes **X** No	❒ Yes **X** No	**X** Yes ❒ No	❑ Transport **X** Non-Transport ❑ ALS **X** BLS **X** 9-1-1 ❑ 7-Digit ❑ CCT ❑ IFT **X** Ground ❑ Air ❑ Water	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
X Public ❒ Private	**X** Fire ❒ Law ❒ Other Explain: _____	**X** City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

THIS IS NOT A TRANSPORT PROVIDER

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Air Ambulance Services

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Santa Paula Fire Dept. **Response Zone:** _____

Address: 214 S. 10th St.
Santa Paula, CA 93060

Number of Ambulance Vehicles in Fleet: 0

Phone Number: 805-525-4478

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 0

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
❒ Yes **X** No	❒ Yes **X** No	**X** Yes ❒ No	❑ Transport **X** Non-Transport	❑ ALS **X** BLS
			X 9-1-1 ❑ 7-Digit ❑ CCT ❑ IFT	**X** Ground ❑ Air ❑ Water

Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
X Public ❒ Private	**X** Fire ❒ Law ❒ Other Explain: _____	**X** City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

THIS IS NOT A TRANSPORT PROVIDER

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Air Ambulance Services

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Fillmore Fire Dept. **Response Zone:** _____

Address: PO Box 487
Fillmore, CA 93015

Number of Ambulance Vehicles in Fleet: 0

Phone Number: 805-524-0586

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 0

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	X Yes ❒ No	X Yes ❒ No	❑ Transport X ALS X 9-1-1 X Ground X Non-Transport ❑ BLS ❑ 7-Digit ❑ Air ❑ CCT ❑ Water ❑ IFT	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
X Public ❒ Private	X Fire ❒ Law ❒ Other Explain: _____	X City ❒ County ❒ State ❒ Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

THIS IS NOT A TRANSPORT PROVIDER

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Air Ambulance Services

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Ventura County Fire Dept. **Response Zone:** _____

Address: 165 Durley Ave.
Camarillo, CA 93010

Number of Ambulance Vehicles in Fleet: 0

Phone Number: 805-389-9710

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 0

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	X Yes ❒ No	X Yes ❒ No	❑ Transport X ALS X 9-1-1 X Ground X Non-Transport X BLS ❑ 7-Digit ❑ Air ❑ CCT ❑ Water ❑ IFT	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
X Public ❒ Private	X Fire ❒ Law ❒ Other Explain: _____	❒ City ❒ County ❒ State X Fire District ❒ Federal	❒ Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance ❒ ALS Rescue ❒ BLS Rescue

Transporting Agencies

THIS IS NOT A TRANSPORT PROVIDER

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Air Ambulance Services

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Table 8: Resource Directory

Response/Transportation/Providers

Note: *Table 8 is to be completed for each provider by county.* Make copies as needed.

County: Ventura **Provider:** Ventura County Sheriff's Dept. **Response Zone:** _____

Address: 375A Durley Ave.
Camarillo, CA 93010

Number of Ambulance Vehicles in Fleet: 4

Phone Number: 805-388-4212

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 2

Written Contract:	**Medical Director:**	**System Available 24 Hours:**	**Level of Service:**	
X Yes ❒ No	X Yes ❒ No	X Yes ❒ No	X Transport ❑ Non-Transport X ALS X BLS X 9-1-1 ❑ 7-Digit ❑ CCT ❑IFT ❑ Ground X Air ❑ Water	
Ownership:	**If Public:**	**If Public:**	**If Air:**	**Air Classification:**
X Public ❒ Private	❒ Fire X Law ❒ Other Explain: _____	❒ City X County ❒ State ❒ Fire District ❒ Federal	X Rotary ❒ Fixed Wing	❒ Auxiliary Rescue ❒ Air Ambulance X ALS Rescue X BLS Rescue

Transporting Agencies

_____ Total number of responses
_____ Number of emergency responses
_____ Number of non-emergency responses

_____ Total number of transports
_____ Number of emergency transports
_____ Number of non-emergency transports

Air Ambulance Services

324 Total number of responses
324 Number of emergency responses
0 Number of non-emergency responses

142 Total number of transports
142 Number of emergency transports
0 Number of non-emergency transports

Response numbers are for rescue aircraft only

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: Community Memorial Hospital Telephone Number: 805-652-5011
Address: Loma Vista and Brent
Ventura, CA 93003

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
❒ Yes **X** No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	❒ Yes **X** No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[1]	❒ Yes **X** No		
EDAP[2]	❒ Yes **X** No		
PICU[3]	❒ Yes **X** No	❒ Yes **X** No	❒ Level I ❒ Level II ❒ Level III ❒ Level IV

STEMI Center:	**Stroke Center:**
X Yes ❒ No	**X** Yes ❒ No

[1] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[2] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[3] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: Los Robles Regional Medical Center Telephone Number: 805-497-2727
Address: 215 W. Janss Road
Thousand Oaks, CA 91360

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
X Yes ❒ No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	**X** Yes ❒ No	❒ Yes **X** No

Pediatric Critical Care Center[4]	❒ Yes **X** No	**Trauma Center:**	**If Trauma Center what level:**
EDAP[5]	**X** Yes ❒ No		
PICU[6]	❒ Yes **X** No	**X** Yes ❒ No	❒ Level I **X** Level II ❒ Level III ❒ Level IV

STEMI Center:	**Stroke Center:**
X Yes ❒ No	**X** Yes ❒ No

[4] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[5] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[6] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: Ojai Valley Community Hospital Telephone Number: 805-646-1401
Address: 1406 Maricopa Highway
Ojai, CA 93023

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
❒ Yes **X** No	❒ Referral Emergency **X** Standby Emergency ❒ Basic Emergency ❒ Comprehensive Emergency	❒ Yes **X** No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[7]	❒ Yes **X** No	❒ Yes **X** No	❒ Level I ❒ Level II ❒ Level III ❒ Level IV
EDAP[8]	❒ Yes **X** No		
PICU[9]	❒ Yes **X** No		

STEMI Center:	**Stroke Center:**
❒ Yes **X** No	❒ Yes **X** No

[7] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[8] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[9] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: St. John's Pleasant Valley Hospital Telephone Number: 805-389-5800
Address: 2309 Antonio Ave.
Camarillo, CA 93010

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
❒ Yes **X** No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	❒ Yes **X** No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[10]	❒ Yes **X** No	❒ Yes **X** No	❒ Level I ❒ Level II ❒ Level III ❒ Level IV
EDAP[11]	❒ Yes **X** No		
PICU[12]	❒ Yes **X** No		

STEMI Center:	**Stroke Center:**
❒ Yes **X** No	**X** Yes ❒ No

[10] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[11] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[12] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: St. John's Regional Medical Center Telephone Number: 805-988-2500
Address: 1600 N. Rose Ave
Oxnard, CA 93033

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
❒ Yes **X** No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	**X** Yes ❒ No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[13]	❒ Yes **X** No	❒ Yes **X** No	❒ Level I ❒ Level II ❒ Level III ❒ Level IV
EDAP[14]	❒ Yes **X** No		
PICU[15]	❒ Yes **X** No		

STEMI Center:	**Stroke Center:**
X Yes ❒ No	**X** Yes ❒ No

[13] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[14] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[15] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: Simi Valley Hospital Telephone Number: 805-955-6000
Address: 2975 N. Sycamore Dr.
Simi Valley, CA 93065

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
❒ Yes **X** No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	**X** Yes ❒ No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[16]	❒ Yes **X** No	❒ Yes **X** No	❒ Level I ❒ Level II ❒ Level III ❒ Level IV
EDAP[17]	❒ Yes **X** No		
PICU[18]	❒ Yes **X** No		

STEMI Center:	**Stroke Center:**
❒ Yes **X** No	**X** Yes ❒ No

[16] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[17] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[18] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: Ventura County Medical Center Telephone Number: 805-652-6000
Address: 3291 Loma Vista Road
Ventura, CA 93003

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
X Yes ❒ No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	**X** Yes ❒ No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[19]	❒ Yes **X** No	**X** Yes ❒ No	❒ Level I **X** Level II ❒ Level III ❒ Level IV
EDAP[20]	❒ Yes **X** No		
PICU[21]	**X** Yes ❒ No		

STEMI Center:	**Stroke Center:**
❒ Yes **X** No	**X** Yes ❒ No

[19] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[20] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[21] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 9: FACILITIES

County: Ventura

Note: *Complete information for each facility by county.* Make copies as needed.

Facility: VCMC Santa Paula Hospital Telephone Number: 805-933-8600

Address: 525 N. 10th Street
Santa Paula, CA 93060

Written Contract:	**Service:**	**Base Hospital:**	**Burn Center:**
❒ Yes **X** No	❒ Referral Emergency ❒ Standby Emergency **X** Basic Emergency ❒ Comprehensive Emergency	❒ Yes **X** No	❒ Yes **X** No

		Trauma Center:	**If Trauma Center what level:**
Pediatric Critical Care Center[22]	❒ Yes **X** No	❒ Yes **X** No	❒ Level I ❒ Level II ❒ Level III ❒ Level IV
EDAP[23]	❒ Yes **X** No		
PICU[24]	❒ Yes **X** No		

STEMI Center:	**Stroke Center:**
❒ Yes **X** No	**X** Yes ❒ No

[22] Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
[23] Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
[24] Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 10: APPROVED TRAINING PROGRAMS

County: Ventura **Reporting Year:** 2014

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: Conejo Valley Adult School Telephone Number: 805-497-2761
Address: 1025 Old Farm Road
Thousand Oaks, CA 91360

Student Eligibility*: General Public **Program Level EMT

Cost of Program:
Basic: 950.00
Refresher: 299.00

Number of students completing training per year:
Initial training: 33
Refresher: 0
Continuing Education: 0
Expiration Date: 02/28/19

Number of courses:
Initial training: 2
Refresher: 0
Continuing Education: 0

Training Institution: EMS Training Institute Telephone Number: 805-581-2124
Address: P.O. Box 940514
Simi Valley, CA 93064

Student Eligibility*: General **Program Level EMT

Cost of Program:
Basic: 995.00
Refresher: 200.00

Number of students completing training per year:
Initial training: 246
Refresher: 514
Continuing Education: 0
Expiration Date: 1/30/18

Number of courses:
Initial training: 10
Refresher: 8
Continuing Education: 0

*Open to general public or restricted to certain personnel only.
****** Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.

TABLE 10: APPROVED TRAINING PROGRAMS

County: Ventura **Reporting Year:** 2014

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: St. John's Regional Medical Center Telephone Number: 805-988-2500
Address: 1600 N. Rose Ave.
Oxnard, CA 93033

Student Eligibility*: Private **Program Level MICN

Cost of Program:
Basic: 300.00
Refresher:

Number of students completing training per year:
Initial training: 17
Refresher: 0
Continuing Education: 0
Expiration Date: 11/30/15

Number of courses:
Initial training: 1
Refresher: 0
Continuing Education: 0

Training Institution: Oxnard College Telephone Number: 805-377-2250
Address: 4000 South Rose Avenue
Oxnard, CA 93033

Student Eligibility*: General **Program Level EMT

Cost of Program:
Basic: 295.00
Refresher: 88.00

Number of students completing training per year:
Initial training: 156
Refresher: 34
Continuing Education: 0
Expiration Date: 1/31/16

Number of courses:
Initial training: 2
Refresher: 2
Continuing Education: 0

*Open to general public or restricted to certain personnel only.
****** Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.

TABLE 10: APPROVED TRAINING PROGRAMS

County: Ventura **Reporting Year:** 2014

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: Oxnard Fire Department Telephone Number: 805-385-8361
Address: 360 West Second Street
Oxnard, CA 93033

Student Eligibility*: Fire Personnel **Program Level EMT

Cost of Program:
Basic: 0
Refresher: 0

Number of students completing training per year:
Initial training: 0
Refresher: 0
Continuing Education: 0
Expiration Date: 1/31/16

Number of courses:
Initial training: 0
Refresher: 0
Continuing Education: 0

Training Institution: Simi Valley Adult School Telephone Number: 805-579-6200
Address: 3150 School Road
Simi Valley, CA 93062

Student Eligibility*: General **Program Level EMT

Cost of Program:
Basic: 850.00
Refresher: 325.00

Number of students completing training per year:
Initial training: 51
Refresher: 22
Continuing Education: 0
Expiration Date: 11/30/15

Number of courses:
Initial training: 4
Refresher: 2
Continuing Education: 0

*Open to general public or restricted to certain personnel only.
****** Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.

TABLE 10: APPROVED TRAINING PROGRAMS

County: Ventura **Reporting Year:** 2014

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: Ventura City Fire Department Telephone Number: 805-339-4461
Address: 1425 Dowell Dr.
Ventura, CA 93003

Student Eligibility*: Fire Personnel **Program Level EMT

Cost of Program:
Basic: 0
Refresher: 0

Number of students completing training per year:

Initial training:	0
Refresher:	0
Continuing Education:	0
Expiration Date:	6/30/18

Number of courses:

Initial training:	0
Refresher:	0
Continuing Education:	0

Training Institution: Ventura College Telephone Number: 805-654-6400 ext 1354
Address: 4667 Telegraph Road
Ventura, CA 93003

Student Eligibility*: General **Program Level EMT

Cost of Program:
Basic: 295.00
Refresher:

Number of students completing training per year:

Initial training:	85
Refresher:	0
Continuing Education:	0
Expiration Date:	11/30/15

Number of courses:

Initial training:	3
Refresher:	0
Continuing Education:	0

*Open to general public or restricted to certain personnel only.
****** Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.

TABLE 10: APPROVED TRAINING PROGRAMS

County: Ventura **Reporting Year:** 2014

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: Ventura College – Paramedic Program Telephone Number: 805-654-6400 ext 1354
Address: 4667 Telegraph Road
Ventura, CA 93003

Student Eligibility*: General **Program Level Paramedic

Cost of Program:
Basic: 962.00
Refresher:

Number of students completing training per year:
Initial training: 8
Refresher: 0
Continuing Education: 0
Expiration Date: 4/30/16

Number of courses:
Initial training: 1
Refresher:
Continuing Education:

Training Institution: Ventura County Fire Protection District Telephone Number: 805-389-9776
Address: 165 Durley Dr.
Camarillo, CA 93010

Student Eligibility*: Fire Personnel **Program Level EMT

Cost of Program:
Basic: 0
Refresher: 0

Number of students completing training per year:
Initial training: 0
Refresher: 0
Continuing Education: 0
Expiration Date: 2/28/19

Number of courses:
Initial training: 0
Refresher: 0
Continuing Education: 0

*Open to general public or restricted to certain personnel only.
** Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.

TABLE 11: DISPATCH AGENCY

County: Ventura **Reporting Year:** 2014

NOTE: Make copies to add pages as needed. Complete information for each provider by county.

Name: Ventura County Fire Protection District Primary Contact: Steve McClellen

Address: 165 Durley Ave. Camarillo, CA 93010

Telephone Number: 805-389-9710

Written Contract: ☐ Yes X No

Medical Director: ☐ Yes X No

X Day-to-Day
☐ Disaster

Number of Personnel Providing Services:
27 EMD Training _____ EMT-D _____ ALS
_____ BLS _____ LALS _____ Other

Ownership: X Public ☐ Private

If Public:
X Fire
☐ Law
☐ Other
Explain: _____

If Public: ☐ City ☐ County ☐ State X Fire District ☐ Federal

Name: Oxnard Police/Fire Communications Primary Contact: Cmdr. Andrew Salinas

Address: 251 S. C St., Oxnard, CA 93030

Telephone Number: 805-385-7722

Written Contract: ☐ Yes X No

Medical Director: ☐ Yes X No

X Day-to-Day
☐ Disaster

Number of Personnel Providing Services:
25 EMD Training _____ EMT-D _____ ALS
_____ BLS _____ LALS _____ Other

Ownership: X Public ☐ Private

If Public:
X Fire
☐ Law
☐ Other
Explain: _____

If Public: X City ☐ County ☐ State ☐ Fire District ☐ Federal

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name:	**Ventura County EMS**
Area or subarea (Zone) Name or Title:	**ASA 1**
Name of Current Provider(s):	**LifeLine Medical Transport** **Serving the Ojai Valley since 1935**
Include company name(s) and length of operation (uninterrupted) in specified area or subarea.	
Area or subarea (Zone) Geographic Description:	**Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the City of Ojai.**
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):	**Exclusive**
Include intent of local EMS agency and Board action.	
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):	**Emergency Ambulance for 911 calls only**
Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).	
Method to achieve Exclusivity, if applicable (HS 1797.224):	**Grandfathered**
	LifeLine Medical Transport is a subsidiary of Ojai Ambulance Inc. and has served ASA 1 since 1935. Paramedic service was added to the service area in 1986. Current owner, Steve Frank, purchased the company in 1994 from previous owner, Jerry Clauson. Ojai Ambulance changed it's name to LifeLine Medical Transport in 2001, however no change in scope or manner of service has occurred.
If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service. If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.	

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name: **Ventura County EMS**

Area or subarea (Zone) Name or Title: **ASA 2**

Name of Current Provider(s): **American Medical Response**
Serving since 1962

Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or subarea (Zone) Geographic Description:
Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the Cities of Fillmore and Santa Paula..

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):
Exclusive
Include intent of local EMS agency and Board action.

Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):
Emergency Ambulance for 911 calls only
Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Method to achieve Exclusivity, if applicable (HS 1797.224):
Grandfathered

American Medical Response currently provides service to ASA 2. Paramedic service was added to the service area in 1992. There have been numerous ownership changes in the past 15 years due to ambulance industry consolidations; however no change in scope or manner of service has occurred.

Previous Owners:
Courtesy Ambulance 1962-1991
Pruner Health Services 1991-1993
Careline 1993-1996
Medtrans 1996-1999
American Medical Response 1999-present

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name:	**Ventura County EMS**
Area or subarea (Zone) Name or Title:	**ASA 3**
Name of Current Provider(s):	**American Medical Response** **Serving since 1962**
Include company name(s) and length of operation (uninterrupted) in specified area or subarea.	
Area or subarea (Zone) Geographic Description:	**Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the City of Simi Valley.**
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Include intent of local EMS agency and Board action.	**Exclusive**
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).	**Emergency Ambulance for 911 calls only**
Method to achieve Exclusivity, if applicable (HS 1797.224):	**Grandfathered** **American Medical Response currently provides service to ASA 3. Paramedic service was added to the service area in 1983. There have been numerous ownership changes in the past 15 years due to ambulance industry consolidations; however no change in scope or manner of service has occurred.** **Previous Owners:** **Brady Ambulance 1962-1975** **Pruner Health Services 1975-1993** **Careline 1993-1996** **Medtrans 1996-1999** **American Medical Response 1999-present**
If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service. If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.	

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name: **Ventura County EMS**

Area or subarea (Zone) Name or Title: **ASA 4**

Name of Current Provider(s): **American Medical Response**
Serving since 1962

Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or subarea (Zone) Geographic Description:
Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the Cities of Moorpark and Thousand Oaks.

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):
Exclusive
Include intent of local EMS agency and Board action.

Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):
Emergency Ambulance for 911 calls only
Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Method to achieve Exclusivity, if applicable (HS 1797.224):
Grandfathered

American Medical Response currently provides service to ASA 4. Paramedic service was added to the service area in 1983. There have been numerous ownership changes in the past 15 years due to ambulance industry consolidations; however no change in scope or manner of service has occurred.

Previous Owners:
Conejo Ambulance 1962-1975
Pruner Health Services 1975-1993
Careline 1993-1996
Medtrans 1996-1999
American Medical Response 1999-present

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name:	**Ventura County EMS**
Area or subarea (Zone) Name or Title:	**ASA 5**
Name of Current Provider(s):	**American Medical Response** **Serving since 1962**
Include company name(s) and length of operation (uninterrupted) in specified area or subarea.	
Area or subarea (Zone) Geographic Description:	**Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the City of Camarillo.**
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Include intent of local EMS agency and Board action.	**Exclusive**
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).	**Emergency Ambulance for 911 calls only**
Method to achieve Exclusivity, if applicable (HS 1797.224):	**Grandfathered**

American Medical Response currently provides service to ASA 5. Paramedic service was added to the service area in 1985. There have been numerous ownership changes in the past 15 years due to ambulance industry consolidations; however no change in scope or manner of service has occurred.

Previous Owners:
Camarillo Ambulance 1962-1978
Pruner Health Services 1978-1993
Careline 1993-1996
Medtrans 1996-1999
American Medical Response 1999-present

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name:	**Ventura County EMS**
Area or subarea (Zone) Name or Title:	**ASA 6**
Name of Current Provider(s):	**Gold Coast Ambulance** **Serving since 1949**

Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or subarea (Zone) Geographic Description:

Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the Cities of Oxnard and Port Hueneme.

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):

Exclusive

Include intent of local EMS agency and Board action.

Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):

Emergency Ambulance for 911 calls only

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Method to achieve Exclusivity, if applicable (HS 1797.224):

Grandfathered

Effective May 2010, Gold Coast Ambulance became a wholly owned subsidiary of Emergency Medical Services Corporation. They continue to operate as Gold Coast Ambulance and have served ASA 6 since 1949. Paramedic service was added to the service area in 1984. Prior to May 2010, Ken Cook, owned the company after purchasing it in 1980 from previous owner, Bob Brown. Oxnard Ambulance Service changed it's name to Gold Coast Ambulance in 1991, however no change in scope or manner of service has occurred.

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

Local EMS Agency or County Name:	**Ventura County EMS**
Area or subarea (Zone) Name or Title:	**ASA 7**
Name of Current Provider(s):	**American Medical Response** **Serving since 1962**

Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or subarea (Zone) Geographic Description:

Combination of Metropolitan/Urban, Suburban/Rural and Wilderness areas including the City of Ventura.

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):

Exclusive

Include intent of local EMS agency and Board action.

Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):

Emergency Ambulance for 911 calls only

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Method to achieve Exclusivity, if applicable (HS 1797.224):

Grandfathered

American Medical Response currently provides service to ASA 7. Paramedic service was added to the service area in 1986. There have been numerous ownership changes in the past 15 years due to ambulance industry consolidations; however no change in scope or manner of service has occurred.

Previous Owners:
Courtesy Ambulance 1962-1991
Pruner Health Services 1991-1993
Careline 1993-1996
Medtrans 1996-1999
American Medical Response 1999-present

Beginning July 1, 1996, while waiting for the Supreme Court ruling in the County of San Bernardino v. City of San Bernardino (1997) decision, the Ventura City Fire Dept. began providing transport services within the incorporated city limits of Area 7. The scope of service provided by Medtrans did not change during this time, as it continued to provide emergency paramedic ambulance service to all portions of Area 7. Ventura City immediately ceased transport operations upon the Supreme Court ruling against the City of San Bernardino on June 30, 1997.

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

Ventura County EMS Plan
2014 TRAUMA SYSTEM STATUS REPORT

August 2015

Steve Carroll, EMS Administrator
Katy Hadduck, Trauma System Manager

Trauma System Summary

Ventura County EMSA implemented a county-wide trauma system in 2010, designating two Level II trauma centers which are geographically situated to provide similar access to trauma care for all areas of the County.

Trauma patients are identified by prehospital care providers according to an established algorithm based on current CDC recommendations, as well as system-specific needs. For patients who meet Step 1-3 criteria (vital signs/GCS, anatomy, mechanism), the nearest trauma center is considered to be the base hospital for that incident, and with few exceptions, are transported there. For patients meeting Step 4 criteria (special considerations), the regular catchment base hospital is called and destination is determined after communication between the paramedic and the MICN.

Trauma system components include oversight of prehospital trauma care, as well as the collaboration between all eight hospitals in Ventura County—two Level II trauma centers and six non-trauma hospitals, who work together toward the goal of transporting patients with traumatic injuries to the most appropriate facility for their care. Existing policies address prehospital triage and hospital destination of trauma patients (including patients involved in multiple-casualty incidents with a trauma mechanism), trauma center standards, trauma system committees for improvement of trauma care, and both urgent and emergent interfacility transfer of trauma patients.

For clarification, some of the system changes reported in this 2014 Annual Update reflect modifications made in the first part of 2015, however, they are included to show progress made on the various trauma system elements.

For January to December 2014, Ventura County's EMS transports of patients meeting trauma triage criteria include the following:

	Ventura County Medical Center	Los Robles Hospital	Non-Trauma Hospitals	Total
Step 1-3	663	347	109	1119
Step 4	342	523	1329	2194

Changes in Trauma System

In the August 2014 letter from Dr. Backer approving the VCEMS Trauma System Status Report, we received the following comment:

"Thank you for providing a detailed report on changes made in trauma related policies. This information helps the EMS Authority see the improvements made in your system."

Updates to VCEMS trauma policies include the following policy revisions:

Policy 1402, "Trauma Committees"

This policy remains unchanged. It was reviewed and approved in July 2015 for renewal by the Ventura County Trauma Operational Review Committee (TORC), and the Tri-County Trauma Audit Committee (TAC).

Policy 1404, "Guidelines for IFT of Patients to a Trauma Center" (see attachment)

In March 2014, our trauma centers collaborated to regionalize care for a specific subset of trauma patients.

For patients with an isolated penetrating globe injury needing IFT to a trauma center for ophthalmologic surgery, Ventura County Medical Center (VCMC) was identified as the County's resource.

For patients with an isolated traumatic amputation of the upper extremity, Los Robles Hospital (LRHMC) has several plastic surgeons on staff who are vascular board certified. The policy recommends consultation with LHRMC for patients needing replantation services, and if a qualified plastic surgeon is immediately available, the patient may be transferred there. This provides a service that has heretofore not been available in Ventura County.

Policy 1405, "Trauma Triage and Destination Criteria" (see attachment)

- Step 4, Special Considerations:
  Head injury with loss of consciousness AND on Coumadin
  was revised to:
  Head injury with loss of consciousness AND on an anticoagulant or antiplatelet drug

The list of anticoagulant and antiplatelet drugs was added to the Ventura County EMS Agency website, and provided as a reference list in the ePCR system (ImageTrend). The list will be updated as needed.

- Step 4, Special Considerations, the following were added:
  Amputation or partial amputation of any part of the hand
  Penetrating injury to the globe of the eye, at risk for vision loss

For patients meeting one of these criteria, the Field Triage Decision Scheme directs destinations to trauma centers identified as the regional center for those specific injuries ("Consider LRHMC" or "Consider VCMC").

Additional changes to the trauma system include the following:

Multiple casualty incidents (MCIs) as a result of a trauma mechanism have been addressed in policy and training. Patients who meet trauma criteria are to be transported to a trauma center, to the best ability of the trauma system. MICN-specific training for management of MCI was completed in January 2015 for existing MICNs and will be included in each new course, usually presented annually.

The trauma system for MCI was put to the test in February 2015, when a Metrolink commuter train struck a truck. Responders triaged over 50 patients, which categorized the incident as a Level 3 MCI. Despite the predictably chaotic nature of the scene, all patients were identified and triaged in a timely manner and those meeting trauma triage criteria were transported to a Ventura County trauma center; there were no emergent trauma transfers ("re-triage") from non-trauma hospitals. The "After Action Review: Rice Incident" (see attachment) describes lessons learned from this incident and plans for revision of training and equipment for MCIs.

Due to the departure of the medical director as well as staffing difficulties, VCMC's PICU services were temporarily suspended on March 3, 2015. It is predicted that PICU services will be re-established during fiscal year 2015/2016.

Number and Designation Level of Trauma Centers

In the letter August 2014 EMSA letter, we received the following comment:

"Having both trauma centers verified by ACS provides an excellent mechanism to ensure compliance with national standards. In addition, Ventura County Medical Center is a participant in TQIP which is an outstanding program to ensure quality of care, provide national and local benchmarking, and improve the quality of trauma registry data. The EMS Authority encourages all Level I and II Trauma Centers and Pediatric Trauma Centers to participate in TQIP with Level IIIs to consider participation when TQIP finalizes the rules for their participation.

And the following recommendation: "Work with LRHMC to become a TQIP participant."

There are presently two designated and accredited Level II trauma centers in Ventura County.

East County:
Los Robles Hospital and Medical Center (LRHMC)
215 West Janss Road
Thousand Oaks, CA 91360

West County:
Ventura County Medical Center (VCMC)
3291 Loma Vista Road
Ventura, CA 93003

Currently both Ventura County trauma centers are ACS verified.
LRHMC re-verification visit: January 2016
VCMC re-verification visit: 2017, date to be determined

LRHMC has communicated their goal of participating in TQIP.

2015 Objective: by July 31, 2016, LRHMC will be an active participant in TQIP.

Trauma System Goals and Objectives

In the letter August 2014 EMSA letter, we received the following comment:

"Your revised goals and objectives are well written and provide excellent information on your progress. The objectives are in line with national standards. Please provide a copy of your revised Multi Casualty Incident (MCI) Plan with your next Trauma System Status Update." (see attachment)

In keeping with the context of the EMS System in general, goals and objectives have been established or revised with realistic tasks, stakeholders, and target dates.

1. Identification and Access:

Goal: To monitor and possibly improve injury identification and transport to the most appropriate hospital.

2014 Objective: By the end of 2014, undertriage of trauma patients will be less than 5% of all patients transported to hospitals for care of traumatic injuries.

Update: According to Resources for Optimal Care of the Injured Patient, ACS 2014 (Orange Book), undertriage for prehospital trauma patients may be defined by a variety of ways, including analysis of "major trauma patients who were transported incorrectly to a non-trauma center." For Ventura County's trauma system, we currently track and review each "emergent" trauma transfer for appropriateness of care and transfer criteria. For those who were transported to a non-trauma hospital by EMS and subsequently emergently transferred to a trauma center, the prehospital care and decision making is reviewed as well.

January – December 2014:

302 patients were transported from the field by EMS to a Ventura County trauma center, who had ISS ≥ 16.

LRHMC = 96 patients
VCMC = 206 patients

35 patients who initially arrived at a non-trauma hospital by either POV or EMS were subsequently emergently transferred to a Ventura County trauma center.

Six of these patients arrived by EMS to a non-trauma hospital. None of the six met triage criteria Step 1-3 or had ISS ≥ 16 at the trauma center.

2015 Objective: By July 31, 2016, undertriage analysis of the system will also include a review of patients "who were taken to a non-trauma center hospital and then died of potentially preventable causes" (Orange Book).

Comments: VCEMS bases prehospital trauma triage policy on current research and best practice recommendations from the 2011 MMWR "Guidelines for Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage," as well as a limited set of system-specific criteria (see Policy 1405, "Trauma Triage and Destination Criteria").

2. Prehospital Care/Transportation:

Goal: Assure high quality prehospital treatment and transportation systems for the movement of injured patients.

2014 Objective: VCEMS will plan for trauma-specific education of prehospital care providers.

Update: Trauma-specific education of prehospital care providers was conducted in coordination with first responder fire departments, ambulance providers, and base hospital prehospital care coordinators. The two trauma centers also provide regular presentations on trauma-specific topics. A master calendar is maintained at VCEMS and posted on the website.

Revisions in policies that affect the delivery of prehospital care to trauma patients are brought to a twice-yearly EMS update for EMTs and paramedics. The March 2015 revision of Policy 1405, "Trauma Triage and Destination," was presented in the EMS Spring Update.

EMS will continue to monitor and review prehospital trauma care throughout system using current methods of tracking and loop closure when appropriate.

2015 Objective: by July 31, 2016, EMS will meet with base hospital prehospital care coordinators to assess status and possible gaps in prehospital trauma-specific education.

3. Hospital Care:

Goal: Development of a network of trauma care that meets the needs of an appropriately regionalized system.

2014 Objectives: By the end of 2014:

- *A policy will be established describing and authorizing the appropriate transport of trauma patients to a trauma center that is NOT the regular catchment trauma center for the incident. In some cases, the trauma center may be out-of-county. The policy will be presented to the Trauma Operational Review Committee (TORC) and TAC, for input and approval.*

- *Face-to-face meetings will take place between the Ventura County VCEMS medical director/trauma manager and the medical director/trauma manager of Los Angeles LEMSA and trauma centers outside the County but geographically close to its periphery, to seek collaboration with the policy and discuss conditions in which Ventura County trauma patients may be appropriately transported out-of-county.*

Update: Although the draft for Policy 1408, "Alternate Destinations for Trauma Patients" was in administrative process for approval and face-to-face meetings with trauma medical directors/managers were underway,

unexpected obstacles regarding repatriation of trauma patients occurred prior to its implementation. We have mutually agreed with nearest out-of-county trauma centers that patients may be transported there when most appropriate. The establishment of a formal policy or contract that addresses out-of-county EMS transport, to which multiple counties agree, is not currently feasible. Although most trauma patients may be provided appropriate care in County trauma centers, certain circumstances may exist for which injured patients should be transported to a trauma center that is not the regular catchment County facility. Patients who are injured in multiple casualty incidents (MCIs) and patients injured at locations significantly closer to out-of-county trauma centers, may be appropriately transported to a Los Angeles or Santa Barbara trauma center. Past work of the SWRTCC has included discussion of an intercounty agreement but has not yet been implemented. A "memorandum of understanding" between the LEMSAs of the SWRTCC would help solidify the understanding that trauma patients may be transported across county lines when it best meets the needs of the patient or the incident.

2015 Objective: by July 31, 2016, the subject of an inter-county agreement between LEMSA administrations will be brought forward to the Southwest Regional Trauma Coordinating Committee (SWRTCC).

4. Evaluation:

Goal: To establish a monitoring program designed to assure appropriate access, flow and treatment of the trauma patient and to assist with trauma system refinements.

2014 Objectives: By the end of 2014:

- *VCEMS will ensure the registries in both County trauma centers have identical 2014 National Trauma Data Bank (NTDB) datasets and match the current data dictionary.*

- *VCEMS will work with TAC membership to ensure the registries at all five trauma centers have identical 2014 NTDB datasets and match the current data dictionary.*

- *For Step 1-4 trauma patients transported to non-trauma hospitals in the County, as well as trauma centers out-of-county, VCEMS will establish a system for obtaining a limited dataset (including outcome) that will be used to provide a clearer evaluation of the trauma system.*

Update: Trauma registries are continuous "works in progress." Each trauma center has the latitude to establish their own inclusion criteria and dataset. Designated trauma centers typically collect and report, at a

minimum, the data elements of The National Trauma Data Standard (NTDS).

Currently LRHMC and VCMC, as well as the other trauma centers in the Tri-County Trauma Audit Committee (TAC) membership, are using the Data Dictionary: 2015 Admissions for their minimum registry dataset.

Currently VCEMS obtains outcome data only for trauma patients who are transported emergently to a trauma center.

2015 Objectives: by July 31, 2016:

- *LRHMC and VCMC will have identical inclusion criteria, as defined in EMS policy.*

- *For Step 1-4 trauma patients transported to non-trauma hospitals in the County and trauma centers out-of-county, VCEMS will establish a system for reporting of a limited dataset as defined in EMS policy.*

5. Injury Prevention:

Goal: Integrate injury control program standards into the trauma system that are sensitive to the special needs/epidemiology of Ventura County.

Objectives: By the end of 2014:

- *VCEMS will have fully implemented the EMS portion of the Elderly Fall Prevention Coalition project, which is scheduled to "go live" late summer or fall 2014.*

- *VCEMS will identify and collaborate with all County trauma centers' fall prevention efforts.*

Update: The Elderly Fall Prevention Coalition (EFPC) fall prevention project was fully implemented in the pilot area, which included the catchment area for VCMC, in July 2014. This is primarily a "secondary fall" prevention effort and is directed toward assisting elderly individuals who have already experienced a fall in the home with resources to prevent another fall.

A feature of the Elderly Fall Prevention Program was added in 2015 that directs efforts toward elderly individuals who have been referred from Ventura County Public Health after a fall risk assessment, as well as self-referral of seniors. "Stepping On" is a workshop that provides exercises and strategies to prevent falling. "A Matter of Balance" is a program designed to manage risks of falls and increase activity levels. Both

programs are free of charge, evidence-based, and funded by a grant from the State.

In early 2015, LRHMC joined the EFPC and is collaborating toward extending the pilot area to their own catchment area.

County trauma centers' injury prevention efforts are identified and discussed at specific multidisciplinary trauma center meetings, which the EMS trauma manager attends, as well as EMS-lead meetings of the trauma program managers.

Objective: by July 31, 2016, the Elderly Fall Prevention Program is proposed to be implemented in both trauma centers' catchment areas.

6. Inclusive Trauma System:

Goal: Promote collaboration and partnership in improving trauma care throughout the County. Facilitate the establishment of networks in which trauma care providers may learn, share, and operate as an inclusive system.

Objective: Before the end of 2014: With participation of County trauma centers, VCEMS will approach the six non-trauma hospitals in the County to discuss the presentation of a Rural Trauma Team Development Course (RTTDC).

For non-trauma hospitals who express interest in participating, an RTTDC will be presented.

Update: The Rural Trauma Team Development Course was discussed at both TORC and TAC for presentation at non-trauma hospitals. One non-trauma hospital was specifically identified as potentially achieving the most benefit from collaborating with its catchment trauma center in an RTTDC, and has agreed to work with EMS and the trauma center to schedule a course.

EMS is working with Santa Barbara Cottage Hospital, who has experience in presenting RTTDCs and obtaining grant funding for critical access hospitals.

2015 Objective: by July 31, 2016, at least one RTTDC will be presented at a Ventura County hospital.

7. Disaster Preparedness:

Goal: Integrate disaster/emergency preparedness with the trauma system.

Objectives: By the end of 2014:

- *VCEMS will evaluate the specific impact of disaster emergency incident on the trauma system.*

- *VCEMS will complete training of Mobile Intensive Care Nurses (MICNs) for management of MCIs.*

- *VCEMS will assure adequate trauma surge plans exist for County trauma centers, as well as trauma surge plans for the trauma system.*

Update: This year has seen a number of MCIs with a trauma mechanisms. Although each incident is unique, the MCI policy has proven to address trauma effectively and provides for transport of the most injured patients to a trauma center.

MCI training of MICNs was completed in December 2014. Typically one MICN class is offered in Ventura County annually, and the course outline has been updated to include MCI training for new MICNs.

During an EMS-led trauma program manager's meeting, the trauma centers' surge policies were reviewed. Although both policies address surge plans, updates are needed.

2015 Objective: by July 31, 2016: Trauma surge plans will be updated for both LRHMC and VCMC to specifically address both management of a large-scale disaster and smaller incidents that have the potential of overwhelming standard staffing patterns.

8. Assure Currency of Trauma Policies:

Goal: Assure EMS trauma policies conform to national standards of the American College of Surgeons and Centers for Disease Control and Prevention.

Comments: this is a new goal. The ACS "Orange Book," released last year, includes significant revisions from the previous "Green Book" publication. Prehospital trauma triage policies will be evaluated in the context of CDC recommendations as well as system needs.

2015 Objective: by July 31, 2016, all VCEMS Trauma Policies will be reviewed for consistency with current ACS and CDC recommendations.

Changes to Implementation Schedule

There are no changes to implementation schedule to report at this time.

System Performance Improvement

In the letter August 2014 EMSA letter, we received the following comment:

"Thank you for providing the audit filters used by your Trauma Audit Committee. The focus on interfacility transfers (emergent and urgent) is very timely as the State starts a new workgroup focusing on the development of a Regional Trauma Transfer Network for re-triage. Re-triage is the new term for emergent transfers from the emergency department."

Trauma system performance review currently includes the following:

Trauma Operational Review Committee (TORC): This committee meets tri-annually, to discuss and act upon issues affecting the delivery of trauma care in the County. As an inclusive committee, TORC is a forum for quality improvement activities involving every prehospital care provider and hospital in the County. Case reviews are provided by each trauma center that address system issues.

Trauma Audit Committee (TAC): This committee meets tri-annually to serve as a collaborative forum in which trauma issues and trauma cases that meet specific audit filter criteria may be discussed and reviewed. The committee consists of VC EMS personnel, trauma surgeons, program managers and prehospital coordinators from three level II trauma centers and two Level III trauma center, located in the tri-county region of Ventura, Santa Barbara, and San Luis Obispo Counties.

Pre-TAC: This committee meets tri-annually to provide a working platform for TAC meetings. It involves the trauma managers from three counties and five trauma centers, as well as the medical director who chairs TAC.

RTCC Grand Rounds, presented October 2014, hosted again by VCEMS. For this year's Grand Rounds, BRN and CME credit was provided, sponsored by Santa Barbara Cottage Hospital.

Both TORC and TAC have addressed two PI indicators:

- EMS transport of trauma patients to a non-trauma hospital, with emergent transfer (re-triage) to a trauma center.

- Careful analysis of each incident, including trauma center outcome, has the potential of revealing gaps in prehospital trauma triage policy or training of prehospital care providers.

- Deaths of patients with traumatic injuries in non-trauma hospitals.

  - Working with County Vital Statistics, reports may be generated for patients whose death certificates indicate a traumatic injury as a primary or secondary cause of death. With this data and the collaboration of our non-trauma hospitals, system oversight may be maintained to help assure patients with life-threatening injuries are receiving care in the appropriate facility.

Progress on Addressing EMS Authority Trauma System Plan Comments

Comments included in EMSA letter dated August 11, 2014, have been addressed in their respective sections above.

Other Issues

There are presently no other issues.

Attachments

VCEMSA Policy 1404: Guidelines for IFT of patients to a Trauma Center
VCEMSA Policy 1405: Trauma Triage and Destination
VCEMSA Policy 0131: MCI Response
"Rice Incident" After Action Report

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Guidelines for Interfacility Transfer of Patients to a Trauma Center	Policy Number 1404
APPROVED: Administration: Steven L. Carroll, Paramedic	Date: June 1, 2015
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: June 1, 2015
Origination Date: July 1, 2010 Date Revised: March 3, 2015 Date Last Reviewed: March 3, 2015 Review Date: March 31, 2017	Effective Date: June 1, 2015

I. PURPOSE: To establish guidelines for the transfer of a trauma patient from a hospital in Ventura County to a Level II trauma center.

II. AUTHORITY: Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.

III. DEFINITIONS:

A. **EMERGENT** Transfer: A process by which a patient with potential life-or-limb threatening traumatic injuries is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, and a delay in transfer will result in deterioration of the patient's condition, and the treating physician requests immediate transport to a trauma center.

1. Trauma Call Continuation: A process by which a patient with potential life-or-limb threatening traumatic injuries who has been taken to the emergency department by ALS ambulance is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, the ALS ambulance is still on the premises, and the treating physician requests immediate transport to a designated trauma center.

B. **URGENT** Transfer: A process by which a patient with time-critical traumatic injuries is transferred to a trauma center. The patient requires a timely procedure at a trauma center, and a lengthy delay will result in deterioration of the patient's condition, and the treating physician requests prompt transport to a trauma center.

IV POLICY: The following criteria will be used as a guideline for the transfer of a trauma patient to a trauma center.

A. For patients who are in the emergency department at a community hospital and have one or more of the following injuries, if the referring physician requests transfer to a trauma center, the trauma center will immediately accept the patient.

1. Carotid or vertebral arterial injury
2. Torn thoracic aorta or great vessel
3. Cardiac rupture
4. Bilateral pulmonary contusion with PaO2 to FiO2 ratio less than 200
5. Major abdominal vascular injury
6. Grade IV, V or VI liver injuries
7. Grade III, IV or V spleen injuries
8. Unstable pelvic fracture
9. Fracture or dislocation with neurovascular compromise
10. Penetrating injury or open fracture of the skull
11. Glasgow Coma Scale score <14 or lateralizing neurologic signs
12. Unstable spinal fracture or spinal cord deficit
13. >2 unilateral rib fractures or bilateral rib fractures with pulmonary contusion
14. Open long bone fracture
15. Significant torso injury with advanced co-morbid disease (such as coronary artery disease, chronic obstructive pulmonary disease, type 1 diabetes mellitus, or immunosuppression)
16. Amputations or partial amputations of any portion of the hand[1]
17. Injury to the globe at risk for vision loss[2]

B. Ventura County Level II Trauma Centers:

1. Agree to immediately accept from Ventura County community hospitals, patients with conditions included in the guidelines above.
2. Will publish a point-of-contact phone number for an individual authorized to accept the transfer of a patient with a condition included in the guidelines above, or to request consultation with a trauma surgeon.
3. Will establish a written interfacility transfer agreement with every hospital in Ventura County.
4. Immediately post on ReddiNet and notify EMS Administrator on-call when there is no capacity to accept trauma patients due to:
    a. Diversion for internal disaster
    b. CT scanner(s) non-operational

c. Primary and back-up trauma surgeons in operating rooms with trauma patients

C. Community Hospitals:

1. Are not required to transfer patients with conditions included in the guidelines above to a trauma center when resources and capabilities for providing care exist at their facility.
2. Will enter into a written interfacility transfer agreement with every trauma center in Ventura County.

D. **EMERGENT** Transfers

1. **EMERGENT** transfers are indicated for patients with life-or-limb threatening injuries in need of emergency procedures at a trauma center. Criteria **MUST** include at least one of the following:
   a. Indications for an immediate neurosurgical procedure.
   b. Penetrating gunshot wounds to head or torso.
   c. Penetrating or blunt injury with shock.
   d. Vascular injuries that cannot be stabilized and are at risk of hemorrhagic shock or loss of limb acutely (excluding fingers/toes).
   e. Pregnancy with indications for an immediate Cesarean section.
2. For **EMERGENT** transfers, trauma centers will:

a. Publish a single phone number ("hotline"), that is answered 24/7, for an individual authorized to accept the transfer of patients who have a condition as described in Section D.1 of this policy.

b. Immediately upon initial notification by a transferring physician, accept in transfer all patients who have a condition as described in Section D.1 of this policy.

3. For **EMERGENT** transfers, community hospitals will:
   a Assemble and maintain a "Emergency Transfer Pack" in the emergency department to contain all of the following:
      1. Checklist with phone numbers of Ventura County trauma centers.
      2. Patient consent/transfer forms.
      3. Treatment summary sheet.
      4. Ventura County EMS "Emergency Trauma Patient Transfer QI Form."

b. Have policies, procedures, and a quality improvement system in place to track and review all **EMERGENT** transfers and Trauma Call Continuations.

c. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than ten minutes.

d. Establish policies and procedures to make personnel available, when needed, to accompany the patient during the transfer to the trauma center.

4. For **EMERGENT** transfers, Ventura County Fire Communications Center (FCC) will:

a. Respond to an **EMERGENT** transfer request by immediately dispatching the closest available ALS ambulance to the requesting hospital.

b. Consider Trauma Call Continuation transfers to be a follow-up to the original incident, and will link the trauma transfer fire incident number to the original 911 fire incident number.

5. For **EMERGENT** transfers, ambulance companies will:

a. Respond immediately upon request.

b. For “Trauma Call Continuation” requests, immediately transport the patient to a trauma center with the same ALS personnel and vehicle that originally transported the patient to the community hospital.

c. Not be required to consider **EMERGENT** transports as an “interfacility transport” as it pertains to ambulance contract compliance.

E. **URGENT** Transfers

1. **URGENT** transfers are indicated for patients with time-critical injuries in need of timely procedures at a trauma center.

2. For **URGENT** transfers, trauma centers will:

a. Publish a single phone number, that is answered 24/7, for a community hospital to request an urgent trauma transfer. Additionally, this line may be used to request additional consultation with a trauma surgeon if needed

3. For **URGENT** transfers, community hospitals will:

a. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than twenty minutes.

4. For **URGENT** transfers, ambulance companies will:
    a. Arrive at the requesting ED no later than thirty minutes from the time the request was received.

V. PROCEDURE:

A. **EMERGENT** Transfers

1. After discussion with the patient, the transferring hospital will:
    a. Call the trauma hotline of the closest trauma center to notify of the transfer.
    b. Call FCC, advise they have an **EMERGENT** transfer, and request an ambulance. If the patient's clinical condition warrants, the transferring hospital will call FCC *before* calling the trauma center's hotline.
    c. Complete transfer consent and treatment summary.
    d. Prepare copies of the ED triage assessment form and demographic information form.
2. Upon request for an **EMERGENT** transfer, the dispatch center will dispatch the closest ALS ambulance and verbalize "MEDxxx E MERGENCY Trauma Transfer from [transferring hospital]". The trauma center will be denoted in the incident comments, which will display on the mobile data computer (MDC). If a unit does not have an operational MDC, the transferring hospital will advise the responding ambulance personnel of the destination trauma center.
3. Upon notification, the ambulance will respond Code (lights and siren).
4. FCC will track ambulance dispatch, enroute, on scene, en-route hospital, at hospital, and available times.
5. The patient shall be emergently transferred without delay. Every effort will be made to limit ambulance on-scene time in the transferring hospital ED to ten minutes.
    a. All forms should be completed prior to ambulance arrival.
    b. Any diagnostic test or radiologic study results may either be relayed to the trauma center at a later time, or if time permits, copied and sent with the patient to the trauma center.
    c. Intravenous drips may be discontinued or remain on the ED pump.
    d. The transporting paramedic will contact the trauma base hospital enroute and provide updated patient information.

B. Trauma Call Continuation

1. Upon determination of a Trauma Call Continuation, and after discussion with the patient, the community hospital will:
    a. Direct the ambulance personnel to prepare to continue the transport to the trauma center.
    b. Notify the designated trauma center ED of the immediate re-triage of a trauma patient, and communicate the patient's apparent injuries or reason for the re-triage, after the call is continued and the patient is enroute to the trauma center.
2. Upon notification of Trauma Call Continuation, the ambulance personnel will notify FCC of their assignment to a Trauma Call Continuation. FCC will link the trauma transfer to the original 911 incident and continue tracking en-route hospital (departure from community hospital), at hospital (arrival at trauma center) and available times.
3. When the transferring physician determines the patient is ready and directs ambulance personnel to continue the transport, the ambulance will emergently transport the patient to the trauma center. The transporting paramedic will contact the trauma base hospital enroute and provide updated patient information.

C. **URGENT** Transfers

1. After discussion with the patient, the transferring hospital will:
    a. Call the trauma hotline for the closest trauma center to request an urgent trauma transfer. This call may be used to request additional consultation with the trauma surgeon if needed.
    b. Call the transport provider to request an ambulance.
    c. Complete transfer consent and treatment summary.
    d. Prepare copies of the ED triage assessment form.
    e. Limit ambulance on-scene time in the transferring hospital ED to twenty minutes.
2. Upon request for an Urgent transfer, the transport provider will dispatch an ambulance to arrive no later than thirty minutes after the request.

D. For all **EMERGENT** transfers, the transferring hospital will submit a completed Emergency Trauma Patient Transfer QI Form to the Ventura County EMS Agency within 72 hours. The transfer will be reviewed for appropriate and timely care and

to identify opportunities for improvement. Results will be reviewed and discussed at the Countywide EMS Trauma Operational Review Committee.

[1]For patients with isolated traumatic amputations or partial amputations of any portion of the hand, a community hospital may elect to transfer the patient to a Ventura County trauma center for potential replantation surgery. In these circumstances, the community hospital shall contact Los Robles Hospital and Medical Center (LRHMC) to determine the availability of a hand surgeon trained in microvascular replantation surgery. If a specialty hand surgeon is available the patient shall be preferentially transferred to LRHMC.

[2]Patients with isolated eye injuries needing transfer to a trauma center for potential ophthalmologic surgery shall be preferentially transferred to Ventura County Medical Center.

EMERGENT Trauma Transfer
QI Form
Form: Ventura County EMS Agency Policy 1404

(ALL FIELDS MUST BE COMPLETED)

Date of Incident:_____

Sending Hospital:

☐ SVH ☐ SJPVH ☐ SJRMC ☐ OVCH ☐ CMH ☐ SPH

Treating Physician:_____

Patient arrived at sending ED at _____(time of ED arrival)

☐ Brought by EMS: Fire Incident Number _____

☐ Brought by POV or Walk-In

Destination Trauma Center:

☐ LRHMC

☐ VCMC

☐ Other: _____

Patient Transfer Process:

☐ Ambulance with paramedic ONLY

☐ Ambulance with accompanying healthcare personnel

☐ Trauma Call Continuation

Which of the following Policy 1404 criteria applies?

☐ Indications for an immediate neurosurgical procedure

☐ Penetrating gunshot wound to head or torso

☐ Penetrating wound by any mechanism and presents with or develops shock.

☐ Blunt injury and shock

☐ Vascular injury that cannot be stabilized and is at risk of hemorrhagic shock or loss of limb acutely

☐ Pregnancy with indications for immediate Cesarean section

Comments:

Within 72 hours of transfer, fax or scan/email to VCEMS: Fax--(805) 981-5300 Email—katy.hadduck@ventura.org

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Trauma Triage and Destination Criteria	Policy Number: 1405
APPROVED: Administration: Steven L. Carroll, EMT-P	Date: June 1, 2015
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: June 1, 2015
Origination Date: July 1, 2010 Date Revised: March 3, 2015 Date Last Reviewed: March 3, 2015 Review Date: March 31, 2017	Effective Date: June 1, 2015

I. PURPOSE: To guide out-of-hospital personnel in determining which patients require the services of a designated trauma center. To serve as the EMS system standard for triage and destination of patients suffering acute injury or suspected acute injury.

II. AUTHORITY: Health and Safety Code, §1797.160, §1797.161, and §1798.
California Code of Regulations, Title 22, §100252 and §100255.

III. POLICY: These criteria apply to any patient who is injured or has a physical complaint related to trauma, and is assessed by EMS personnel at the scene.

A. Physiologic Criteria, Step 1:

1. Glasgow Coma Scale < 14
2. Systolic blood pressure < 90 mmHg
   (< 110 in patients older than 65 years of age)
3. Respiratory rate < 10 or > 29 breaths per minute
   (< 20 in infant younger than 1 year of age)

B. Anatomic Criteria, Step 2:

1. Penetrating wounds to the head, neck, torso, or extremities proximal to the elbow or knee
2. Flail chest
3. Two or more proximal long bone fractures (femur or humerus)
4. Crushed, degloved, or mangled extremity
5. Amputations proximal to wrist or ankle
6. Pelvic fractures
7. Open or depressed skull fracture
8. Paralysis

C. Mechanism of Injury Criteria, Step 3:

1. Adults: > 20 feet (one story is equal to 10 feet)
   Children < 15 years old: > 10 feet, or two times the height of the child
2. High-risk auto crash:

a. Intrusion: interior measurement > 12 inches patient site; > 18 inches any occupant site
b. Ejection: partial or complete from automobile
c. Death in same passenger compartment

3. Auto-pedestrian / auto-bicyclist thrown, run over, or with > 20 mph impact
4. Unenclosed vehicle (e.g. motorcycle, bicycle, skateboard) crash > 20 mph

D. Other Criteria, Step 4 (these are considerations to be used by the base hospital in determining the appropriate destination hospital):

1. Age > 65 years old
2. Head injury with loss of consciousness AND on an anticoagulant or antiplatelet drug[1]
3. Burns with trauma mechanism
4. Time sensitive extremity injury (open fracture, neurovascular compromise)
5. Pregnancy > 20 weeks with known or suspected abdominal trauma
6. Prehospital care provider or MICN judgment
7. Amputation or partial amputation of any part of the hand[2]
8. Penetrating injury to the globe of the eye, at risk for vision loss[3]

V. PROCEDURE:

A. Any patient who is suffering from an acute injury or suspected acute injury shall have the trauma triage criteria applied.

B. For patients who meet trauma triage criteria listed in Sections A, B, or C above, the closest trauma center is considered to be the base hospital for that patient. Paramedics shall make base hospital contact and provide patient report directly to the trauma center.

C. Transportation units (both ground and air) shall transport patients who meet at least one of the trauma triage criteria in Sections A or B to the closest appropriate designated trauma center. If the closest trauma center is on internal disaster, these patients shall be transported to the next closest appropriate trauma center. If the closest trauma center is on CT diversion, the paramedic shall make early base contact and the MICN shall determine the most appropriate destination.

D. For patients who meet trauma triage criteria in Section C, the paramedic shall make base hospital contact with the closest designated trauma center. Based on the paramedic's report of the incident and the patient's assessed injuries, the trauma center MICN or ED physician shall direct destination to either the trauma center or the closest appropriate hospital.

E. Paramedics providing care for patients who are injured but meet only the trauma triage criteria listed in Section D above will contact the base hospital in whose catchment area the incident occurred. Destination will be determined by the base hospital MICN or ED physician. If the patient is directed other than to the regular catchment base hospital,

the MICN will notify the receiving hospital or trauma center of an inbound patient and relay paramedic report.

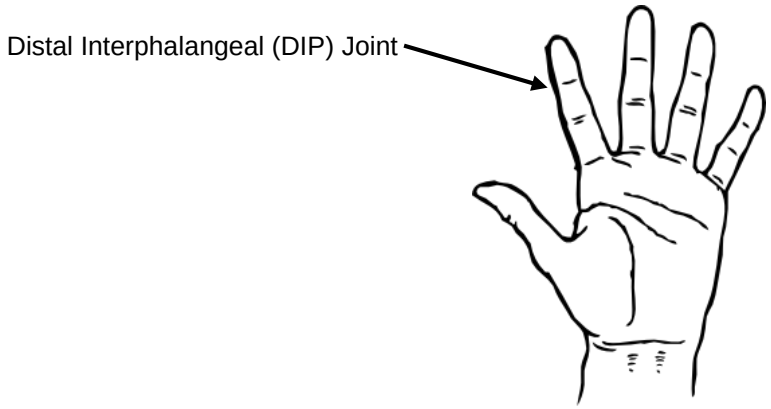
F. A trauma patient without an effective airway may be transported to the closest available hospital with an emergency department for airway management prior to transfer to a designated trauma center. In this rare event, the paramedic will contact the base hospital in whose catchment area the incident occurred.

G. A patient who does not meet trauma triage criteria and who, in the judgment of a base hospital, has a high probability of requiring immediate surgical intervention or other services of a designated trauma center shall be directed to a designated trauma center.

[1]For a complete list of anticoagulant and antiplatelet drugs that should be considered for inclusion criteria in Step 4.2, please consult VC EMSA approved list.

[2]For patients with isolated traumatic amputations, partial or complete, of any portion of the hand (at or proximal to the DIP joint of any finger or any part of the thumb) [see illustration], as long as bleeding is controlled and the amputated part may be transported with the patient, the regular catchment base hospital MICN may contact Los Robles Hospital and Medical Center (LRHMC) to determine the availability of a hand surgeon trained in microvascular replantation surgery. If a specialty hand surgeon is available at LRHMC and not at the regular catchment hospital, the MICN shall direct the patient to LRHMC.

[3]For patients with isolated penetrating injury to the globe of the eye, at risk for vision loss, the regular catchment base hospital MICN may direct the patient to Ventura County Medical Center (VCMC) for specialized ophthalmologic care and possible surgical intervention.



Ventura County Field Triage Decision Scheme

For patients with visible or suspected traumatic injuries

Measure vital signs and level of consciousness

STEP 1

1.1 Glasgow Coma Scale	< 14
1.2 Systolic Blood Pressure	< 90 (< 110 in patients > 65 years)
1.3 Respiratory Rate	< 10 or > 29 breaths per minute (< 20 in infant age < 1 year)

Yes → **Contact base trauma center**

Transport to trauma center

No

Assess anatomy of injury

STEP 2

2.1 All penetrating injuries to head, neck, torso and extremities proximal to elbow and knee
2.2 Flail chest
2.3 Two or more proximal long-bone fractures (femur, humerus)
2.4 Crushed, degloved, or mangled extremity
2.5 Amputation proximal to wrist and ankle
2.6 Pelvic fractures
2.7 Open or depressed skull fracture
2.8 Paralysis

Yes → **Contact base trauma center**

Transport to trauma center

No

Assess mechanism of injury and evidence of high-energy impact

STEP 3

Falls
- **3.1.1** Adults: > 20 feet (one story is equal to 10 feet)
- **3.1.2** Children < 15 years old: > 10 feet, or two times the height of the child

High-risk auto crash
- **3.2.1** Intrusion > 12" patient site or > 18" any occupant site, including roof
- **3.2.2** Ejection: partial or complete from automobile
- **3.2.3** Death in same passenger compartment

3.3 Auto vs. pedestrian/bicyclist thrown, run over, or with > 20 mph impact
3.4 Unenclosed vehicle crash > 20 mph

Yes → **Contact base trauma center for destination decision**

No

Assess special patient or system considerations

STEP 4

4.1 Age > 65
4.2 Head injury with loss of consciousness AND on an anticoagulant or antiplatelet drug[1]
4.3 Burns with trauma mechanism
4.4 Time sensitive extremity injury (open fracture, neurovascular compromise)
4.5 Pregnancy > 20 weeks with known or suspected abdominal trauma
4.6 Prehospital care provider or MICN judgment
4.7 Amputation or partial amputation of any part of the hand[2]
4.8 Penetrating injury to the globe of the eye, at risk for vision loss[3]

Yes → **Contact regular catchment base hospital**

Consider transport to trauma center or specific resource hospital

[1]See list
[2] Consider LRHMC
[3] Consider VCMC

No

Transport to closest ED or by patient preference

Version 4 Revised 3-3-2015

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Multi Casualty Incident Response		Policy Number 131
APPROVED: Administration:	Steven L. Carroll, EMT-P	Date: June 1, 2014
APPROVED: Medical Director:	Angelo Salvucci, M.D.	Date: June 1, 2014
Origination Date: Date Revised: Review Date:	September 1991 May 8, 2014 May 2016	Effective Date: June 1, 2014

I. PURPOSE: To develop a standardized protocol for Multi-Casualty Incident (MCI) response and training in Ventura County.

II. AUTHORITY: California Health and Safety Code, Section 1797.151, 1798, and 1798.220.

III. California Code of Regulations, Sections 100147 and 100169.APPLICATION: This policy defines the on-scene medical management, transportation of casualties, and documentation for a multi casualty incident utilizing the principles of the incident command system as outlined in the MCI Plan.

IV. DEFINITIONS:

A. **MCI/Level I -** a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 3 - 14 victims)

B. **MCI/Level II –** a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 15 - 49 victims)

C. **MCI/Level III -** a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 50+ victims)

V. TRAINING:

The following training will be required:

A. **Basic MCI Training** for fire companies, field EMS providers, and Mobile Intensive Care Nurses (MICNs).

Focus: Hands-on functions as described in the Ventura County EMS (VCEMS) basic MCI curriculum

1. Initial basic course: 4 hours
2. Prerequisite for the course (for fire companies and EMS providers): Introduction to the Incident Command System (ICS 100), and ICS for Single Resource and Initial Action Incidents (ICS 200). There is no prerequisite for MICNs.
3. Course will be valid for two years

B. **Advanced MCI Training** for battalion chiefs, EMS managers, field supervisors, and pre-hospital care coordinators

Focus: command and major function integration as described in the VCEMS advanced MCI curriculum.

1. The advanced MCI course is divided into two modules. The morning session (module 1)

is designed for new supervisory personnel and will cover specific principles of on-scene medical management, transportation of casualties and documentation for multi-casualty incidents. The afternoon session (module 2) will consist of a curriculum review and advanced MCI table top scenarios. Participants attending their initial advanced MCI course are required to attend both module 1 and module 2.

2. Initial advanced MCI training will be offered annually in January.
3. Initial Advanced MCI Course: 8 hours
4. Prerequisite for the Course: Introduction to the Incident Command System (ICS100), ICS for Single Resource and Initial Action Incidents (ICS 200), and National Incident Management System, an Introduction (ICS 700)
5. Course will be valid for two years

C. **Basic MCI Refresher Training**

Focus: Overview of multi-casualty operations as described in the VCEMS MCI Basic Curriculum

1. Refresher Course: 2 hours
2. Course will be valid for two years

D. **Advanced MCI Refresher Training** (Module 2 of the Advanced MCI Course)

Focus: Overview of Command and Major Function Integration as described in the VCEMS Advanced MCI Curriculum

1. Refresher Course: 4 hours
2. Advanced MCI refresher course will be offered twice annually, in January and July.
3. Course will be valid for two years

VI. ACTIVATION OF THE MULTI CASUALTY INCIDENT RESPONSE PLAN:

A. Report of Incident

The report of a multi casualty incident (MCI) will ordinarily be made to a Ventura County Public Safety Answering Point (PSAP) in the following manner:

- Citizen/witness report via 9-1-1 Public Service Answering Point (fire service will activate the MCI plan).
- Hospital personnel alert VCEMS.
- Direct report from law enforcement, or an EMS Provider with capability to contact a PSAP.

B. Prehospital Response

1. The first responder agency or other public safety official will determine that the number and extent of casualties exceeds the capacity of the day-to-day EMS response and/or EMS system (depending on the level of the MCI) and will request their PSAP to contact the EMS Agency and activate the MCI Plan. The Incident Commander (IC) or

appropriate public safety official will request activation and/or response of any supporting public safety/service agencies which may be needed, for example:

- Transportation resources; such as additional ambulances or buses
- Ventura County Chapter American Red Cross
- Public Health/EMS Emergency Preparedness Office
- Disaster Caches

2. The IC will appoint a Patient Transportation Group Supervisor. The Patient Transportation Group Supervisor will retain or delegate the Medical Communications Coordinator (MEDCOMM) position to communicate all casualty transportation information to the base hospital or designated VCEMS representative. Periodically, a request will be made of involved hospitals to update their status in order to accommodate the number of casualties remaining to be evacuated from the scene. (The first responders will provide for the initial triage and treatment of casualties utilizing S.T.A.R.T. criteria.)

C. Ventura County Trauma System Considerations

1. For any level MCI in which a traumatic mechanism exists, the base hospital shall be the trauma center in whose trauma catchment area the incident occurred. On an MCI/Level I, patients with traumatic injuries shall be triaged utilizing the Ventura County Field Triage Decision Scheme, in addition to S.T.A.R.T. triage. On an MCI/Level I, the applicable VC trauma step shall be relayed to the base hospital by MEDCOMM for all patients with traumatic injuries, in addition to S.T.A.R.T triage category, age, and gender.
2. Patients shall be transported in accordance with VCEMS 131 Attachment C ”MCI Trauma Patient Destination Decision Algorithm.”

D. Ventura County EMS Agency

Upon receiving MCI information and a request from scene public safety personnel to activate the MCI Plan, EMS may contact the Base Hospital that MEDCOMM has communicated with during the initial phases of the MCI, and request an update before relieving the Base Hospital of this duty. The EMS Agency may then act as the medical clearinghouse and perform the following:

1. Alert all hospitals that an MCI has occurred and request that they prepare to receive casualties from the scene. This communication will include:
   - The type, size, and location of the incident.
   - The estimated number of casualties involved.
   - Advise area hospitals to be prepared to confirm their status and make

preparations for the possible receipt of patients.

2. Update all hospitals periodically or when new or routine information is received. Hospitals in unaffected areas may or may not be requested to remain in a stand-by readiness mode.
3. Inform MEDCOMM of each hospital's availability.
4. Relay all requests/information regarding hospital resource needs or surplus to the Regional Disaster Medical Health Coordinator (RDMHC) representative, when appropriate. Coordinate response of additional medical equipment and personnel.
5. Inform all hospitals when remaining casualties have been cleared from the MCI scene.
6. Receive MCI information from PSAP and alert the appropriate VCEMS and Ventura County Health Care Agency (HCA) personnel.
7. Initiate the VCEMS Emergency Response plan to a level appropriate to the information provided.
8. Activate the Health Care Agency – Department Operations Center, when appropriate.
9. Inform the Ventura County Sheriff's Office of Emergency Services (OES) and/or the Operational Area EOC of EMS activity, when appropriate.
10. Alert the RDMHC representative, when appropriate.
11. Request out-of-county medical resources, when necessary, with EMS/HCA management approval. Coordinate requests with OES staff and RDMHC representative.
12. Assist in the coordination of transportation resources.
13. Assist in the coordination of health care facility evacuation.
14. Communicate with hospitals, skilled nursing facilities and appropriate EOCs when warranted.
15. Assist in coordination of incident evaluations and debriefings.

E. Hospital Response

1. Receive/acknowledge incident information and inform hospital administration.
2. Activate the hospital's disaster/emergency response plan to an appropriate level based upon the MCI's location type and number of casualties.
3. Hospitals experiencing difficulty in obtaining needed resources to manage casualties should make needs known to the EMS Agency representative.

F. Documentation

1. Level 1 MCI: The care of each patient will be documented using the Ventura County electronic patient care reporting system (VCePCR)

2. Level 2 and 3 MCI: Each patient transported to a hospital shall have their care documented on a multi-casualty patient record (Policy 131, Attachment A).
    a. The transporting agency is responsible for completion of the multi- casualty patient record. The record is designed to be completed by the transporting crew enroute to the receiving hospital.
    b. The transporting agency retains the original of the multi-casualty patient record. A copy shall be left with the patient at the receiving hospital. The triage tag shall be attached to this copy and is included as official documentation in the patient's medical record.
    c. The transporting agency shall distribute copies of the multi-casualty patient record to the base hospital and EMS Agency within twenty-four hours of de-mobilization of the incident.
    d. Patients not transported from a Level II or Level III MCI, may be documented using the multi-casualty non-transport record, (Policy 131, Attachment B).
3. Ventura County EMS Approved MCI Worksheets
    a. Ventura County EMS Providers shall utilize the approved MCI worksheets described in the Basic and Advanced MCI courses and attached to this policy as follows:
        1. Form 131-C MCI Trauma Patient Destination Decision Algorithm (Policy 131, Attachment C)
        2. Form 131-1 Level 1 MCI Worksheet (Policy 131, Attachment E)
        3. Form 131-2 Hospital Worksheet (Policy 131, Attachment F)
        4. Form 131-3 Out of County Hospital Worksheet (Policy 131, Attachment G)
        5. Form 131-4 Treatment Tarp Updates (Policy 131, Attachment H)
        6. Form 131-4A Immediate Treatment Area (Policy 131, Attachment I)
        7. Form 131-4B Delayed Treatment Area (Policy 131, Attachment J)
        8. Form 131-4C Minor Treatment Area (Policy 131, Attachment K)
        9. Form 131-4D Morgue Area (Policy 131, Attachment L)
        10. Form 306 Transportation Worksheet (Policy 131, Attachment M)
        11. Form 310 Staging Manager (Policy 131, Attachment N)
4. Mobile Data Computer (MDC) Equipped Ambulances
    a. In an effort to enhance patient tracking, transport personnel operating ambulances equipped with MDC’s, when able, will document the triage tag

number, patient name, and destination in the comment section of the dispatch ticket on the MDC.

VII. DE-MOBILIZATION OF THE MULTI CASUALTY INCIDENT RESPONSE PLAN:

A. Prehospital de-mobilization

1. The Incident Commander (IC) will notify EMS that the MCI has been cleared when all casualties have been removed from the MCI scene.
2. VCEMS will notify all hospitals that the MCI scene has been cleared.
3. VCEMS will advise hospitals that casualties may still be enroute to various receiving facilities.
4. Hospitals will supply EMS with data on casualties they have received via ReddiNet, telephone, fax or RACES.
5. VCEMS will maintain communication with all participants until all activity relevant to casualty scene disposition and hospital resource needs are appropriately addressed.
6. VCEMS will advise all participants when VCEMS is being de-activated.

VIII. CRITIQUE OF THE MULTI CASUALTY INCIDENT:

A. VCEMS Agency may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. All medically involved participants will be invited.

B. VCEMS Agency may publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available, and written reports.

Ventura County Health Care Agency

EMERGENCY MEDICAL SERVICES
A Division of Public Health

MULTI CASUALTY MEDICAL RESPONSE PLAN

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Ventura County EMS Medical Director

June 2013

County of Ventura
Emergency Medical Services Agency

MULTI CASUALTY MEDICAL RESPONSE PLAN

SECTION I INTRODUCTION

A. Purpose

The proper management of a large number of medical injuries following a natural or human-induced event is imperative if morbidity and mortality are to be minimized. The recognition of the type and number of injured (intelligence), and a rapid dissemination of known information (communication) are necessary elements to begin an effective response to a medical disaster. A well-organized medical community, which has a viable communication system, an effective intelligence-gathering network and scheduled exercises of its disaster response plan, will then be prepared to respond to the needs of the injured community.

The Ventura County Multi Casualty Medical Response Plan is the result of on-going cooperative effort of many public/private agencies and individuals committed to the prevention of further suffering and loss of life following a large medical incident.

The Ventura County Emergency Medical Services Agency (VCEMS) is responsible for leading efforts to define the structure and coordinating various components of the County's Multi Casualty Medical Response Plan. This plan is developed in concert with State, municipal and other Ventura County agencies. It outlines the scope of responsibility for the County's multi casualty responders; however, it does not detail all duties entrusted to a particular organization.

The County of Ventura Multi Casualty Medical Response Plan is modeled after the State's Emergency Medical Services Authority Disaster Medical Response Plan (September 2007), to promote standardization and continuity of response throughout the State of California. Acknowledgement is given herein to the California EMS Authority's commitment to this goal.

B. Goal

It is the goal of this plan to provide definition, structure and coordination to the medical response elements within Ventura County to reduce multi casualty related morbidity and mortality at any time or location within the County.

C. Plan Organization

The County of Ventura Multi Casualty Medical Response Plan is divided into five sections:

- Section I - Introduction
- Section II - Response Organizations
- Section III - Response Narrative
- Section IV - Planning Concepts
- Section V - Information Management
- Section VI - Resource Acquisition

In Section I, the plan goal, organization and authorities are referenced. Also included in this section is a brief discussion on the subject of medical disaster planning and the nature and implications of a medical disaster.

D. Planning for Medical Disasters

1. Levels of Medical Disaster

When a medical disaster occurs it will be important to rapidly ascertain the actual (and projected) number of medical injuries. The number of victims injured will govern the community's medical response. Responsibility lies with responders to accurately report incident information and casualty data. Directors of EMS resources must have reliable knowledge of area and county wide medical capabilities. It is important for decision-makers to know the EMS systems capabilities at any given time during a medical incident response and recovery phase. Together, incident information and resource knowledge can be combined to address the response to medical incidents.

In Ventura County three levels of victim events have been defined. All involve more than one person injured; the separation of levels lies in the resources mobilized to respond to each situation. The listing in Section II begins to delineate the responders and their activities.

The following describes the three levels of victim situations as recognized by VCEMS:

MCI/Level I: a suddenly occurring event that exceeds the capacity of the routine first response assignment (Approx. 3 - 14 victims).

MCI/Level II: a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 15 - 49 victims)

MCI/Level III: a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 50+ victims)

2. Addressing Medical Disasters

When planning the mitigation of a medical disaster, there are certain points which must be assumed prior to beginning the process: The MCI/LEVEL I is practiced regularly by local emergency agencies. An MCI/LEVEL ll is less frequent and occurs several times a year. An MCI/LEVEL lll occurs rarely and the following assumptions are primarily applicable to these situations:

The very nature of a medical disaster will injure and kill a large amount of people within a relatively short period of time. This will create a medical need, which will immediately or very quickly overwhelm the day-to-day EMS response system. This situation may occur in one or more geographical locations of Ventura County, or may include the entire County.

The initial assessment of medical injuries may cause the disaster to be classified as a disaster scene at one level; however, further assessment may call for an upgrade of the size or classification. For example: an accident at a chemical plant, which initially injures 15 people, may be at first classified as an MCI/LEVEL II. However, if a toxic material cloud injures 100 more, the incident may be re-classified.

To assess the medical disaster appropriately, two components must be available to responding officials: 1) intelligence regarding the complexity of the incidents, the numbers and types of injuries, and: 2) communications to relay this intelligence to other supporting agencies.

To respond to a medical disaster appropriately two elements are necessary: 1) anticipation of needed medical resources, and: 2) early request (activation) of those resources (in advance of when they are needed if possible.)

The requested medical resources must be rapidly available at the designated area if life and limb are to be saved. These resources may be found inside Ventura County, or sought outside the County.

F. SECTION II RESPONSE ORGANIZATIONS

The following is a list of the organizations that may play a role in the medical response to an MCI. Included is a brief description of the scope of responsibility of each organization. This inventory reflects the primary charge(s), however, other duties/responsibilities may be undertaken which are not listed here.

1. Ventura County Health Care Agency (HCA)

HCA Is the parent organization of all of the County's health services. In a wide spread, declared medical crisis, policy and the general direction of medical services will come from the Agency's Director and the County Health Officer. The divisions of the Health Care Agency are Public Health, Hospitals (Ventura County Medical Center and Santa Paula Hospital), Clinics / Ambulatory Care, Behavioral Health, and the Medical Examiner.

Health Care Agency responsibilities during an MCI include:

- Providing overall direction of medical and health care response to an MCI.
- Requesting/offering of medical mutual aid from/to other counties through the Health Officer.
- Communicating with State agencies (Department of Health Service, Emergency Medical Services Authority, California Emergency Management Agency (CalEMA) in order to report on conditions and/or request needed services.
- Calling for the activation of a Field Treatment Site (FTS).

2. Ventura County/Emergency Medical Services (VCEMS)

VCEMS is a division of the Public Health department within the HCA. VCEMS coordinates and supports medical resources responding to an MCI; particularly those agencies and institutions offering emergency and acute medical care. EMS maintains working relationships with the State Emergency Medical Services Authority (EMS Authority), Ventura County transport and fire service providers, base and receiving hospitals, the Hospital Association of Southern California, and municipal emergency planning coordinators.

VCEMS responsibilities during an MCI may include some or all of the following:

- Coordinating destinations
- Ascertaining hospital availability
- Coordinating medical resources (in and out of county)
- Communicating with the County Health Officer
- Coordinating the dissemination of Public Health information
- Response to the scene, primary dispatch center, HCA Department Operations Center (DOC) or Emergency Operations Center (EOC)
- Obtaining briefing from base hospital for transition
- Establishing communication with OES (consider EOC activation)
- Working within the Incident Command structure, as the medical/health branch of theOperations Section at the County's EOC
- Advising the County Health Officer as to the status of medical resources in Ventura County
- Establishing a liaison with the EMS Authority through the Region I Regional Disaster

Medical/Health Coordinator (RDHMC)

- Coordinating resource requests and availability between acute care hospitals, advanced life support providers, basic life support transport providers, skilled nursing facilities, and mental health facilities
- Maintain communications with receiving hospitals with Ventura County and throughout the region through the use of the Reddinet hospital communications system.
- Establishing direct communications with the Hospital Disaster Support Communications Radio Amateur Civil Emergency Services (RACES)
- Establishing contact with medical coordinators within city emergency operations centers via the Ventura County EOC to ascertain status and conditions at local Medical Aid Stations (MAS) and any other medically related concerns
- Activate the Ventura County Medical Reserve Corps (MRC) as indicated and coordinate all MRC operations through VCEMS and HCA DOC.
- Requesting Disaster Medical Assistance Teams through the RDMHC to implement a Field Treatment Site (FTS) operation.
- Assisting in the request and coordination of deployment of Critical Incident Stress Management teams
- Gathering information and documentation from Medical Communications (Med Comm)
- Initiating / coordinating an incident review
- Collecting data on casualties

3. Municipal Governments

Have the responsibility and most likely the best capabilities for assessment of local community damage and injury. Public safety, Neighborhood Watch teams, Disaster Assistance Response Teams (D.A.R.T.), Community Emergency Response Teams (C.E.R.T.), and RACES operators are some of the data gathering groups which may report on conditions to city/county EOCs. Maintaining effective communications between VCEMS and the EOC managers/coordinators at the city level through the use of a medical/health branch liaison is essential in verifying emergency medical care and available medical resources within the city or county jurisdictions. The city/county and VCEMS will coordinate efforts to facilitate medical aid stations and hospitals in the management of casualty care.

Responsibilities of municipal governments during an MCI include:

a. Ventura County Office of Emergency Services

- Activating the EOC, coordinate large incidents
- Coordinating notifications and non-medical mutual aid requests (regional, state, etc.)
- Obtaining resources for on scene personnel
- Coordinating resource requests

b. Law Enforcement

- Providing force protection
- Providing Search and Rescue (SAR)
- Providing Scene Control
- Providing Traffic Control
- Assisting with Incident Command System (ICS) establishment / Unified Command
- Providing Body protection (morgue)
- Conducting Investigations

- Providing a Public Information Officer (PIO)
- Conducting Damage Assessment
- Managing Law Enforcement Air Operations

c. Coroner / Medical Examiner

- Response to the scene
- Processing fatalities
- Providing body removal bags
- Investigating with law enforcement
- Designating Morgue Manager
- Conducting family notifications
- Requesting additional personnel or resources through the California Coroner / Medical Examiner Mutual Aid Plan (this includes Federal Disaster Mortuary Teams)

d. Fire Departments

The fire departments will engage in public safety activity. Fire suppression, rescue, medical aid and mitigation of hazardous conditions will occupy their resources along with intelligence gathering operations. Fire agencies will report to municipal and County EOCs as appropriate.

Fire agency responsibilities during an MCI include:

- Providing community assessment of damage and casualties
- Conducting Mitigation of physical hazards
- Performing triage and treatment (including setting up, managing and staffing of treatment areas with First Responder ALS resources.
- Conducting Scene Assessment
- Determining resource needs
- Assisting with ICS establishment / Unified Command
- Conducting Hazard Control
- Providing Rescue
- Providing a Public Information Officer (PIO)
- Setting Incident Objectives
- Providing scene documentation
- Driving transport vehicles as needed
- Providing communications as needed (Notify EMS and Coroner)
- Providing Dispatch (automatic responses, coordinate with other fire dispatch, communicate with IC)
- Managing fire and medical air operations
- Providing comfort measures

4. Media

Local television, radio, and newspapers responsibilities during an MCI include:

- Public awareness (traffic, safety issues, etc.)

- Working with PIOs

5. Transportation Agencies

The transportation agencies are those private air / ground ambulance operators licensed within Ventura County. During a time of medical crisis this definition could be expanded to include private and public providers from outside the county, as well as other medical transportation providers such as wheelchair vans and buses (see Ventura County Transportation Authority below).

Responsibilities of transportation agencies during an MCI include:

a. Ground

- Providing MEDCOMM
- Setting up and staffing treatment areas
- Providing medical supplies (initial and ongoing)
- Conducting triage
- Providing documentation (collect and forward information to VCEMS and base/receiving hospitals as needed).
- Providing transport
- Providing scene assessment
- Determining resource needs
- Providing scene documentation (collect documentation and forward to EMS)
- Providing communications
- Advising receiving hospital of number of patients they will receive

b. Air

Air Ambulance

- Providing transport
- Providing documentation
- Conducting transfers
- Providing additional aircraft as needed

Rescue Aircraft

- Providing transport
- Providing documentation
- Conducting transfers
- Providing additional aircraft as needed

6. Hospitals (Acute Care Health Facilities)

Hospitals are considered by many to be the front line or main health care providers following a medical disaster. The base station hospitals will be responsible to coordinate patient destinations until relieved of that duty by VCEMS staff.

The primary responsibilities of a hospital in a medical crisis include:

Base Hospital

- Communicating with MEDCOMM at the scene(s) of an MCI
- Determining initial bed availability

- Establishing destination decisions
- Providing medical control
- Providing treatment
- Establishing patient tracking
- Activating in-house plan (as determined by hospital protocol)
- Coordinating with VCEMS
- Communicating casualty data to VCEMS
- Providing ongoing resource status and patient transport/destination information through the use of the ReddiNet system

Receiving Hospital

- Providing treatment
- Establishing patient tracking
- Activating in house plan (as determined by hospital protocol)
- Communicating casualty data to VCEMS
- Providing ongoing resource status and patient transport/destination information through the use of the ReddiNet system

7. American Red Cross - Ventura County Chapter

American Red Cross will assist in a variety of humanitarian ways to ease the negative consequences following a medical disaster.

American Red Cross identified duties during an MCI may include:

- Deployment of mental health teams for civilian critical incident stress management (Federal Mandate during air disasters).
- Establishing the disaster welfare inquiry service for the purpose of identifying and tracking medical disaster victims.
- Providing care and shelter for victims left homeless or displaced.
- Providing food / comfort services for emergency responders and victims.

8. Calfiornia EMS Authority Region I Disaster Medical/Health Coordination (RDMHC) Area

RDMHC will act as a contact point for needed resources when an MCI exceeds the capability of the operational area (Ventura County) to manage the injuries.

The RDMHC is a network of regional counties, which are formed together in an effort to access medical mutual aid following a large incident or widespread disaster. This region includes San Luis Obispo, Santa Barbara, Ventura, Los Angeles and Orange Counties. Contact between the Region I RDMHC and Ventura County is the responsibility of the County's Medical Health Operational Area Coordinator (MHOAC), or his designee..

Duties of the RDMHC following an MCI/LEVEL III may include:

- Assessing the disaster-affected county to ascertain needed resources.
- Accessing other counties within Region I to acquire resources for the requesting county.
- Contacting the State EMS Authority to request additional resources and coordinate those already obtained.

9. State of California Emergency Medical Services Authority

The Emergency Medical Services Authority ensures quality patient care by administering an effective, statewide system of coordinated emergency medical care, injury prevention, and disaster medical response.

State EMS Authority identified duties during an MCI may include:

- Activate and/or liaison with the Region I RDMHC.
- Liaison between state and federal medical disaster relief.
- Maintaining communication with VCEMS relative to the status of the medical disaster and affected resources.

10. Hospital Association of Southern California (HASC)

The HASC consists of more than 200 hospitals (public, private, not-for-profit, for-profit and specialty hospitals). The region covers six counties: Los Angeles, Orange, Santa Barbara, Ventura, Riverside and San Bernardino.

HASC identified duties during an MCI may include:

Providing support and liaison to its member hospitals during a time of medical crisis.

11. Ventura County Transportation Authority

VCTA will respond at the request of public safety to assist with the evacuation of medical casualties from the scene. Buses, both large and small, may be used to transport casualties to and from hospitals, medical aid stations or field treatment sites.

12. Salvation Army

Salvation Army is called upon to assist in the feeding and sheltering of emergency workers and those in need.

13. State and Federal Agencies that may be involved in an incident include:

- National Transportation and Safety Board
- Federal Aviation Administration
- State Office of Emergency Services
- State Emergency Medical Services Authority
- Regional Disaster Medical Health Coordinator / Specialist
- Federal Bureau of Investigation
- National Guard
- Military
- Alcohol, Tobacco and Firearms
- Hazardous Materials Organizations
- California Department of Forestry
- Federal Emergency Management Administration
- State Parks
- National Disaster Medical System

(NDMS – DMAT, DMORT, etc).
- Coast Guard

SECTION III RESPONSE NARRATIVE

This section provides a narrative picture of the situations, which may typically unfold in the evolution of the three different types of medical disaster levels.

A. Multi Casualty Incident (MCI) LEVEL I

In the MCI/LEVEL I, first responders such as paramedics, fire service companies or BLS ambulance providers will be dispatched to the scene by the 9-1-1 system. Upon arrival they will be presented with a situation which, by virtue of patient numbers, overwhelms the medical resources initially dispatched. The first responders will notify their agency's dispatch of the need for additional resources. In order to organizationally address this incident, the Incident Command System will be utilized with emphasis upon the Multi Casualty Branch of the Operations Section.

The paramedic base hospital will provide direction primarily by assigning those patients involved to a receiving hospital destination; and when necessary, by directing the medical control of those acutely injured victims.

Patient care information transmitted to the paramedic base hospital will be abbreviated and patients will be placed in "immediate", "delayed" and "minor" categories in keeping with the Simple Triage and Rapid Treatment (S.T.A.R.T.) triage plan. Patients with traumatic injuries will also be triaged into the Ventura County trauma system and will be transported to a trauma center in accordance with VCEMS Policy 131 Attachment C - MCI trauma patient destination decision algorithm. Patient care is focused upon life stabilizing treatments and expeditious transport of victims to appropriate receiving hospitals.

Receiving hospitals receive those casualties as directed by the base hospital and provide emergency hospital care. They will be notified of the number of patients and classifications prior to their arrival and may be given a minimal accounting of the patient's injuries.

Review of the medical component of an MCI/LEVEL I is coordinated and managed by the base hospital. VCEMS will act primarily in a supportive role for this level incident, but may coordinate certain aspects of the incident as needed. VCEMS Agency may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. Should a post-incident analysis be conducted, all medically involved participants will be invited. VCEMS Agency will publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available and written reports.

B. Multi Casualty Incident (MCI) Level II

The initial phase of an MCI/Level II is similar to that of the MCI/Level I; first responders are dispatched to an incident via the 9-1-1 system. However, upon arrival, rescuers are immediately presented with a scenario which provides a large number of patients too numerous to treat definitively in the field. The stabilization and transportation of prioritized casualties to an appropriate receiving hospital is the

most immediate objective. Management of the MCI/Level II is predicated on the assumption that there are enough prehospital medical responders, adequate transportation resources, sufficient casualty receiving hospitals, and an intact coordinated hospital communication system. VCEMS will coordinate with local dispatch centers to assess current resources and determine adequacy.

Additional prehospital medical and public safety resources are requested through the appropriate communication center. The Incident Command System is utilized in management of the casualty scene, in accordance with principles and practices outlined in the National Incident Management System (NIMS). Because of the greater number of injuries, more branches and positions of the ICS will be activated. All scene responders, fire, law enforcement, ALS, BLS, first aid teams, and others will fall under the direction of the Incident Commander or Unified Command.

Initial responders will estimate the number of resources needed to triage and transport the casualties. Among the resources requested by the Incident Commander in the very early stages of the MCI/Level II will be the assistance of VCEMS. When VCEMS is activated, a representative will contact the base hospital MICN for an update and may relieve them at that time. VCEMS will also begin filling requests for additional appropriate resources for on scene support. Hospitals may activate disaster plans and prepare to receive casualties. Victims will be transported from the scene as soon as on scene personnel have classified patients according to the S.T.A.R.T. triage system and when transportation resources are available. Patients with traumatic injuries, who are triaged as immediate, will be prioritized to a trauma center whenever possible, in accordance with VCEMS Policy 131 Attachment C. . Because of the number of patients, trauma centers may become quickly inundated at which point patients should be transported to non-trauma hospitals.

If VCEMS is activated to support the on scene personnel, a representative will respond to the scene, the Health Care Agency Department Operations Center (DOC) or Ventura County Fire Communications Center. The VCEMS representative will then contact the base hospital and MEDCOMM. If the incident requires more medical resources than the county can provide, those resources will be requested by the MHOAC (or designee) through the regional disaster medical health system.

The activation of the County's EOC may or may not take place depending upon the complexity and needs of the incident. Activation of municipal EOC(s) may take place, again, depending upon the complexity and needs of the incident. If affected cities do activate EOCs, a limited activation of the County's EOC is required.

The MCI/Level II will begin demobilization as determined by the Incident Commander. The IC will notify EMS when the scene has been cleared. VCEMS will advise all hospitals that the scene has been cleared of casualties, but there may still be patient’s enroute to participating facilities.

VCEMS may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. All medically involved participants will be invited. VCEMS Agency will publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available and written reports.

C. Multi Casualty Incident (MCI) Level III

The MCI/LEVEL III brings about a situation where one or more of the major components of the emergency medical system are overwhelmed beyond the resources found within Ventura County.

Indications of an MCI Level lll may be identified by many public safety agencies simultaneously. If telephone communications are intact, a flood of 9-1-1 calls will most likely be received. First responders will immediately go into an information-gathering mode in order to attempt to establish the magnitude of the situation. Individual public safety agencies, local municipalities and other emergency medical responders will, in most instances, be the first to recognize the inability of local resources to manage the medical casualties. The County of Ventura Sheriff's Office of Emergency Services will be notified and initiate the opening of the County EOC when directed by the Ventura County Sheriff or Chair of the Ventura County Board of Supervisors.

Similar to that of an MCI/Level II, Initial responders will estimate the number of resources needed to triage and transport the casualties. Among the resources requested by the Incident Commander in the very early stages of the MCI/Level III will be the assistance of VCEMS. When VCEMS is activated, a representative will contact the base hospital MICN for an update and may relieve them at that time. VCEMS will also begin filling requests for additional appropriate resources for on scene support. Hospitals may activate disaster plans and prepare to receive casualties. Victims will be triaged and classified according to the S.T.A.R.T. triage system and when transportation resources become available, transport to the most appropriate location will be initiated. Patients with traumatic injuries, who are triaged as immediate, will be prioritized to a trauma center whenever possible, in accordance with VCEMS Policy 131 Attachment C. Because of the number of patients, trauma centers may become quickly inundated at which point patients should be transported to non-trauma hospitals.

Overwhelming numbers of victims may require non-traditional medical resources such as cities and their local clinics, urgent care centers, MRC, D.A.R.T, C.E.R.T or medical practices in order to provide initial emergency medical assistance. Spontaneous Aid Stations may be activated by cities, clinics, or the county and may be useful for treating walking wounded. The neighborhood medical first aid plan is built upon a three-way partnership between the city and pre-registered/pre-trained volunteers; all of who operate under ICS. Medical Aid Stations (MAS) will be quick to appear, relatively speaking, considering that the staff of participants has been recruited from the local neighborhood. Consideration should be given to the proximity of MAS to public shelters. The MAS form of community EMS may be quite important if the cause of the medical disaster has a significant impact upon transportation systems, communication networks and other infrastructure. Further instruction on utilization will be given at the time of the event.

Hospitals will be completing assessments of their own capabilities. It is presumed that some hospitals may be able to receive patients, while others may already be overwhelmed with casualties or may have become victims themselves. VCEMS will conduct assessments of all hospitals (as well as other medical care resources) to determine each facility's capabilities and needs following a major incident. RACES and VCEMS personnel at the County EOC or HCA DOC will handle the process of hospital assessment.

With data gathered from the hospitals, medical aid stations, EMS providers, skilled nursing facilities and

other information sources, VCEMS will be able to proceed with a number of actions which include the following; 1) Advise the Health Officer to designate Field Treatment Sites (FTS). FTS's will be strategically located around the county, ideally near hospitals. 2) Provide the MHOAC and County Health Officer with a list of medical resources needed and suggest that mutual aid be requested through the Region I RDMH system. The MHOAC will direct medical resources to appropriate locations.

The Health Officer or his/her designee will establish FTSs as needed. The FTS will be a reception site for the patients who have been injured or are ill and unable to receive a hospital disposition. At the FTS, patients will receive a level of medical care commensurate to the level of staff and material resources available. The FTS will also function under the Incident Command System, thus promoting continuity throughout the Ventura County emergency medical care system. Patients sent to a FTS will be treated and held until a receiving hospital can be located. Location of a definitive medical receiving facility will be done through the cooperative efforts of the disposition personnel at the FTS and VCEMS. Telephone or amateur radio with the assistance of a County designated communicator will handle communication between these two entities, if available.

The requested activation of an FTS implies that the magnitude, complexity and duration of the MCI/Level III medical disaster have exceeded all available medical resources within Ventura County. It may also be apparent to local officials at this point that large amounts of out-of-county resources, such as the military may be necessary to assist with the movement of casualties to other sites of definitive medical care. VCEMS may make a request to the County Health Officer to seek the assistance of the State or Federal authorities in the establishment of a Regional Evacuation Point at a designated airport. The Disaster Medical Assistance Team (DMAT) or State/Federal/military operated Regional Evacuation Point (REP) will be that conduit for the relocation outside of the County of casualties needing definitive hospital care. It needs to be emphasized that this endeavor is rather drastic and an extremely large undertaking. It will only be considered when those hospitals in the Southern California area (within range of rotary wing aircraft) have reached a maximum patient saturation level.

The medical operations of the MCI/LEVEL III, unlike those of the MCI/LEVEL I which may last a few hours or the MCI/Level II which may be sustained for a number of hours, may go on for days or weeks before all casualties are dispositioned. The activation and deployment of personnel and material resources necessary to operate a MAS, FTS or REP will require a significant mobilization of equipment and personnel. It will take days to establish the entire medical response matrix, with some components operational before others.

Local officials at the municipal and county levels will direct demobilization of the MCI/LEVEL III. MAS in communication with their individual city EOCs will mutually determine when their services are no longer needed. This information will be passed on from the city EOC to the VCEMS. In turn VCEMS, in contact with the participating hospitals, will request to be advised when hospitals have decided to "stand down" from their disaster or surge modes and have returned to operations as usual. The collective status of the city EOCs, their MAS, the acute care hospitals, and the general state of the public's health will determine when VCEMS medical disaster operations are to be discontinued. The order to demobilize VCEMS medical disaster operations will be issued by the MHOAC or his/her designee.

VCEMS Agency may conduct a post-incident analysis of the MCI at their discretion or at the request of

agencies involved in the incident. All medically involved participants will be invited. VCEMS Agency shall publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available and written reports.

SECTION V INFORMATION MANAGEMENT

VCEMS is dependent upon a multitude of resources for acquiring and processing information; it is called upon to collect credible information and share it with the medical community.

During an MCI/LEVEL I, information will be exchanged through the day-to-day base hospital communications method. Information and data is collected and shared between the base hospital, receiving hospitals and the prehospital care providers. When appropriate, VCEMS will receive data in a post-incident review provided primarily by the base hospital.
This information includes scene description, casualty numbers and acuity which is gathered and reported by the responding fire service (or other public safety agency), will be relayed to hospitals, transport providers and VCEMS officials. Inter-jurisdictional frequencies normally used to coordinate public safety mutual aid will also be employed.

During an MCI /Level II and above, VCEMS may assume communications at the scene, at the Fire Communications Center (FCC) or HCA DOC (Department Operations Center), contact base hospital MICN, and will advise MEDCOMM of hospital availability. Casualty receiving hospitals will receive data about expected patient arrivals and information about events related to the disaster (such as conditions on scene) via ReddiNet, FCC or the HCA DOC. It will be the casualty receiving hospital's responsibility to relay back via the designated radio frequency or phone, information regarding the actual casualties received. RACES Amateur radio operators may provide primary or backup communications, when appropriate, to pass or confirm messages. They may also be used as an alternative means for relaying any data to and from the participating acute care facilities.

The nature of information gathered and transmitted during an MCI/LEVEL III will be different than that of the MCI/Level II. Information will be slower to compile and disseminate because of the magnitude of the disaster and probable disruption to communication systems. It will be the larger MCI/LEVEL III, which will truly test the primary and backup communication paths. There is speculation as to the reliability of the everyday communications systems in an MCI/LEVEL III; if this is true, then there is an urgency to see that those secondary communications pathways are in place. VCEMS plans to act as the medical resource status center after an MCI/LEVEL III. VCEMS will take a proactive posture in assuring that all contacts, State and local, are kept informed with the most current intelligence concerning the disaster and the related medical response.

SECTION VI RESOURCE ACQUISITION

The MCI/LEVEL III scenario assumes a shortage of medical resources within Ventura County. VCEMS will log resource requests and resource availability of health care facilities and medical transportation. With the approval of the MHOAC or designee, VCEMS will direct available medical resources to areas of greatest need based on the best possible intelligence. VCEMS will make resource needs known to the County's EOC, and RDMHC.

GLOSSARY OF TERMS

ARC American Red Cross
The Federally chartered relief organization, which is charged to supply relief services to those with physical and emotional needs in time of war or disaster.

Base Hospital
A hospital that has been approved by the local EMS Agency to provide medical direction to prehospital emergency medical care personnel within its area of jurisdiction.

C.E.R.T. Community Emergency Response Team
An organization of trained volunteers who assist official emergency agencies.

D.A.R.T. Disaster Assistance Response Team
An organization of volunteer Disaster Service Workers serving a governmental agency for the protection of public health, safety and welfare; in accordance with the California Emergency Services Act.

Deceased (patient)
Fourth (last) priority in patient treatment according to the S.T.A.R.T. triage system.

Delayed (patient)
Second priority in patient treatment according to the S.T.A.R.T. triage system. These patients require aid, but injuries are less severe or pose no immediate threat to life.

EOC Emergency Operations Center - City or County
A secured location where disaster / emergency mitigation and recovery efforts may be directed and coordinated by those designated authorities.

EMS Emergency Medical Services
A local government (county) agency with the primary responsibility of coordinating the medical response to a disaster and facilitating the acquisition of additional resources to carry out the medical recovery mission.

EMSA Emergency Medical Services Authority - State of California
That agency within the State Health and Welfare Agency which is devoted to the coordination of policy and practice relative to emergency medical services throughout the State of California. This includes disaster mitigation and planning efforts.

FTS Field Treatment Site
A medical operation called for by the local health officer for the established purpose of collecting injured disaster victims who are in need of definitive medical care.

HCA Health Care Agency - County of Ventura
The local government (county) agency, which is designated to develop, issue and regulate policy in areas of public health and welfare.

HICS Hospital Incident Command System
A generic medical response template developed by Ventura County EMS to provide health care facilities with an incident command based, standardized emergency response plan.

Hospital Inventory
The number of "Immediate" and "Delayed" patients which a hospital has identified that it may care for at any given time as a result of an MCI.

Immediate (patient)
First level of patient priority according to the S.T.A.R.T. triage system. A patient who requires rapid assessment and medical intervention in order to increase chances of survival.

MAS **Medical Aid Station**
A neighborhood disaster medical resource center; which may be organized under a three-way partnership; 1) a sponsoring city,
2) host medical site, and 3) community volunteers.

MCI **Multi Casualty Incident**
A suddenly occurring incident, which injures more than one individual, and presents conditions which may require fire and ambulance service mutual aid resources and the assistance of VCEMS.

Minor (patient)
Third priority of patient in the S.T.A.R.T. triage system. A patient requiring only simple, rudimentary first-aid. These patients are considered ambulatory.

MRC **Medical Reserve Corps**
A group of volunteers primarily comprised of medical personnel that is intended to strengthen the medical and health infrastructure of the community they serve.

NDMS **National Disaster Medical System**
NDMS **is a federally coordinated system that augments the Nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated National medical response capability for assisting state and local authorities in dealing with the medical impacts of major peacetime disasters. Components of NDMS include Disaster Medical Assistance Teams (DMAT), Disaster Mortuary Operational Response Teams (DMORT), International Medical Surgical Response Teams (IMSURT), and National Veterinary Response Teams (NVRT).**

RACES **Radio Amateur Civil Emergency Services**
RACES provides for amateur radio operation for emergency communications purposes only during periods of local, regional, or national emergencies. Members of RACES organizations make their volunteer services available to municipal, county and state governments; additionally, RACES will provide communication services wherever there is a need for life saving and property preserving assistance.

Receiving Hospital
A hospital that has been approved by the EMS Agency to receive patients requiring emergency medical services.

ReddiNet **Rapid Emergency Digital Data Information Network**
Web based computer system to coordinate hospital and paramedic services in the event of a major emergency. In non-emergency situations, ReddiNet provides hospitals with daily diversion status updates to determine which hospitals can provide appropriate patient care.

S.T.A.R.T. **Simple Triage and Rapid Treatment**
A prehospital patient prioritizing system developed by Hoag Hospital and Newport Beach Fire Department for use during an MCI/LEVEL I, II or III. The S.T.A.R.T. system is based on four levels of prioritization: Deceased, Minor, Delayed, or Immediate.

VCEMS **Ventura County Emergency Medical Services**
That agency within the County of Ventura Health Care Agency, which is responsible for those duties, assigned to the local government EMS.

Ventura County
Emergency Medical Services Agency
MULTI-CASUALTY PATIENT RECORD
(For use on declared Level II or Level III MCI's only)

Date:_____**Agency**_____**Unit#:**_____**Location:**_____**Incident #:**_____

Patient Name:	**Injuries**:	**Airway**:	**Cap Refill:**	**Tx Prior to Transport**:	**Base Hospital**:	**Comments:**
_____ **Age**:_____ **Sex**:_____ **Triage Tag #**:_____ ☐ **IMMEDIATE** ☐ **DELAYED** ☐ **MINOR**	_____ _____ _____ _____	☐ Patent ☐ Other (Explain) _____ **Mental Status:** ☐ Follows Simple Commands ☐ Fails to Follow Simple Commands	☐ < 2 Seconds ☐ > 2 Seconds **Skin:** ☐ Normal ☐ Other **Resp Rate**:_____ **Pulse Rate**:_____ **B/P**:_____	☐ C-Spine ☐ Oxygen ☐ IV ☐ Other (Explain) _____ _____ _____ _____	☐ LRHMC ☐ VCMC ☐ SJRMC ☐ SVH **Dest. Hosp**:_____ **Times**: Depart:_____ Destination:_____	_____ _____ _____ _____ _____

Receiving Hospital to Attach Triage Tag Here

_____

PRINTED NAME **LICENSE #** **SIGNATURE**

Distribution: Original – Provider, Copies – Base Hospital, Receiving Hospital & EMS Agency

Copy shall be left with Receiving Hospital at time of arrival and become part of the patient's medical record.
Transport provider to distribute completed copies to Base Hospital and EMS Agency within 24 hours of the incident.

Ventura County
Emergency Medical Services Agency
MULTI-CASUALTY NON-TRANSPORT RECORD
(For use on declared Level II or Level III MCI's only)

Date: ___________ **Agency:** ___________ **Unit #:** ___________ **Location:** ______________________ **Fire Incident #:** __________________

Time: ______ **Patient Name:** ______ **Sex:** ☐ Male ☐ Female **Age:** ______ **Tag #:** ______	**Airway:** ☐ Patent **Mental Status:** ☐ Awake and Alert ☐ Appropriate for Age	**Skin:** ☐ Normal **Resp:** ______ **Pulse:** ______ **B/P:** ______	**Treatment Provided:** ______ ______ ______ ______ ☐ None Indicated	**Comments**: ______ ______ ______ ______	**Disposition:** ☐ AMA Obtained ☐ No AMA Obtained Other: ______ ______
Time: ______ **Patient Name:** ______ **Sex:** ☐ Male ☐ Female **Age:** ______ **Tag #:** ______	**Airway:** ☐ Patent **Mental Status:** ☐ Awake and Alert ☐ Appropriate for Age	**Skin:** ☐ Normal **Resp:** ______ **Pulse:** ______ **B/P:** ______	**Treatment Provided:** ______ ______ ______ ______ ☐ None Indicated	**Comments**: ______ ______ ______ ______	**Disposition:** ☐ AMA Obtained ☐ No AMA Obtained Other: ______ ______
Time: ______ **Patient Name:** ______ **Sex:** ☐ Male ☐ Female **Age:** ______ **Tag #:** ______	**Airway:** ☐ Patent **Mental Status:** ☐ Awake and Alert ☐ Appropriate for Age	**Skin:** ☐ Normal **Resp:** ______ **Pulse:** ______ **B/P:** ______	**Treatment Provided:** ______ ______ ______ ______ ☐ None Indicated	**Comments**: ______ ______ ______ ______	**Disposition:** ☐ AMA Obtained ☐ No AMA Obtained Other: ______ ______

______________________ ______________ ______________________

Printed Name **License #** **Signature**

Distribution: Original – Provider, Copies – Base Hospital & EMS Agency

Agency completing form will distribute completed copies to Base Hospital and EMS Agency within 24 hours of the incident.

MCI TRAUMA PATIENT DESTINATION DECISION ALGORITHM

TRIAGE ALL PATIENTS UTILIZING START TRIAGE

IMMEDIATE | **DELAYED** | **MINOR**

ESTABLISH A TREATMENT AREA ON ALL MASS CASUALTY INCIDENTS

ESTABLISH A TREATMENT AREA ON ALL MASS CASUALTY INCIDENTS

PERFORM A FOCUSED EXAM AND BEGIN TO PROVIDE TREATMENT AS RESOURCES ALLOW

PATIENTS ON A LEVEL I MCI WITH TRAUMATIC INJURIES WILL ALSO BE TRIAGED INTO THE VC TRAUMA TRIAGE DECISION SCHEME

LEVEL I MCI FULL ePCR

- **RED TAG** → ANY TRAUMA STEP - TRANSPORT TO A TRAUMA CENTER (CONSIDER OUT OF COUNTY (O.O.C.), CONSIDER AIR TRANSPORT)
- **YELLOW TAG** → STEPS 1, 2, 3 TRANSPORT TO A TRAUMA CENTER (CONSIDER O.O.C.) STEP 4, NO STEP - TRAUMA BASE HOSPITAL DISCRETION
- **GREEN TAG** → STEP 3 TRANSPORT TO A TRAUMA CENTER (CONSIDER O.O.C.) STEP 4 TRAUMA BASE HOSPITAL DISCRETION NO STEP, TRANSPORT TO ANY HOSPITAL

LEVEL II/III MCI ATTACHMENT "A/B"

- **RED TAG** → TRANSPORT TO A TRAUMA CENTER WHENEVER POSSIBLE (Consider O.O.C., CONSIDER AIR TRANSPORT)
- **YELLOW TAG** → TRAUMA CENTER PREFERRED, IF POSSIBLE (CONSIDER O.O.C.)
- **GREEN TAG** → TRANSPORT TO ANY HOSPITAL

1. When trauma center capacity at local and neighboring county trauma centers has been exhausted, transport to non-trauma hospitals
2. For Level II/III MCI events, red tag patients with traumatic injuries exhibiting the following criteria should be prioritized to trauma centers:
   - Significantly decreased GCS with evidence of neurological trauma
   - Penetrating or blunt injury with signs and symptoms of shock
   - Penetrating wounds to the neck and/or torso

LEVEL 1 MCI WORKSHEET

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

Pt #	AGE	SEX	PATIENT STATUS	VC TRAUMA STEP	INJURIES	DEST	TRANS UNIT ID	TRANS TIME	TRIAGE TAG # (Last 4)
1			I D M						
2			I D M						
3			I D M						
4			I D M						
5			I D M						
6			I D M						
7			I D M						
8			I D M						
9			I D M						
10			I D M						
11			I D M						
12			I D M						
13			I D M						
14			I D M						

	TIME						
VCMC	PCCI: 3I 4D 5M	AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
LRH	PCCI: 3I 4D 5M	AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
Hospital		AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
Hospital		AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
Hospital		AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
		Total		Total		Total	

HOSPITAL WORKSHEET

INCIDENT:_____ **DATE:**_____

Person(s) Filling Out This Form:_____

TIME											TOTAL BEDS USED
	AVAIL	USED	AVAIL	USED	AVAIL	USED	AVAIL	USED	AVAIL	USED	
LRHMC											
IMMEDIATE											
DELAYED											
MINOR											
VCMC											
IMMEDIATE											
DELAYED											
MINOR											
SJRMC											
IMMEDIATE											
DELAYED											
MINOR											
SVH											
IMMEDIATE											
DELAYED											
MINOR											
CMH											
IMMEDIATE											
DELAYED											
MINOR											
PVH											
IMMEDIATE											
DELAYED											
MINOR											
SPH											
IMMEDIATE											
DELAYED											
MINOR											
OVCH											
IMMEDIATE											
DELAYED											
MINOR											

OUT-OF-COUNTY HOSPITAL WORKSHEET

INCIDENT:________________________________ **DATE:**________________

PERSON(S) COMPLETING THIS FORM:__________________________________

SANTA BARBARA COUNTY: Santa Barbara Cottage, Goleta Valley Cottage Hospital, Lompoc Valley Medical Center, Marian Medical Center, Santa Ynez Valley Cottage Hospital

LOS ANGELES COUNTY: Henry Mayo, Kaiser Woodland Hills, LAC+USC, Harbor UCLA, Northridge, Holy Cross, St. Joseph, Ronald Regan – UCLA (Westwood), West Hills, Tarzana, Cedars Sinai, Children's Hospital Los Angeles

TIME											**TOTAL BEDS USED**
	AVAIL	**USED**	**AVAIL**	**USED**	**AVAIL**	**USED**	**AVAIL**	**USED**	**AVAIL**	**USED**	
IMMEDIATE											
DELAYED											
MINOR											
IMMEDIATE											
DELAYED											
MINOR											
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DELAYED											
MINOR											
IMMEDIATE											
DELAYED											
MINOR											

TREATMENT TARP UPDATES

INCIDENT:____ **DATE:**______________________

Person(s) filling out this form:____

TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL

IMMEDIATE TREATMENT AREA

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	INJURIES	TIME OFF TARP

DELAYED TREATMENT AREA

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	INJURIES	TIME OFF TARP

MINOR TREATMENT AREA

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	INJURIES	TIME OFF TARP

MORGUE WORKSHEET

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	NOTES

TRANSPORTATION WORKSHEET

INCIDENT:_____ **DATE:** _____

Person(s) filling out this form: _____

	AGENCY	AMBULANCE ID	TRIAGE TAG (Last 4)	AGE	SEX	PATIENT STATUS	DEST	TRANS TIME
1						I D M		
2						I D M		
3						I D M		
4						I D M		
5						I D M		
6						I D M		
7						I D M		
8						I D M		
9						I D M		
10						I D M		
11						I D M		
12						I D M		
13						I D M		
14						I D M		
15						I D M		
16						I D M		
17						I D M		
18						I D M		
19						I D M		
20						I D M		
21						I D M		
22						I D M		
23						I D M		
24						I D M		
25						I D M		

Staging Area Manager Worksheet
Ambulance Resource Status

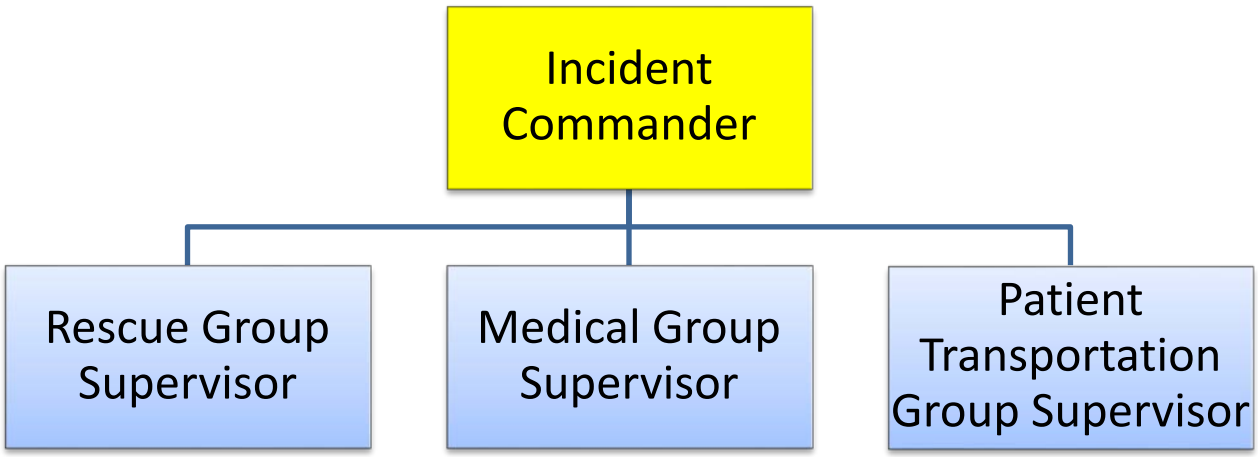
Incident:_____ **Date:**_____

Person(s) Completing Form:_____

AGENCY	UNIT #	ALS/BLS	Time IN	Time OUT

MCI Job Aid

Position: Incident Commander (IC)



Responsibilities:

- The incident commander is the individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources.
- Typically the first engine company captain (red helmet) or the first battalion chief (white helmet) will assume the role of IC
- Once IC has been established, that information needs to be relayed via radio to dispatch as well as other personnel on scene.
- Name the incident (this may be done automatically by dispatch personnel)
- Declare an MCI/Level __ based on the total number of victims involved (transported or not)
    - MCI/Level I 3-14 victims
    - MCI/Level II 14-49 victims
    - MCI/Level III 50+ victims
- The Incident Commander should ensure that the communications center notifies EMSA duty officer of the MCI (automatic for FCC)

Groups will be assigned as needed (e.g. rescue group or HazMat group). Medical group supervisor will be assigned by IC and is typically an early arriving engine company Captain.

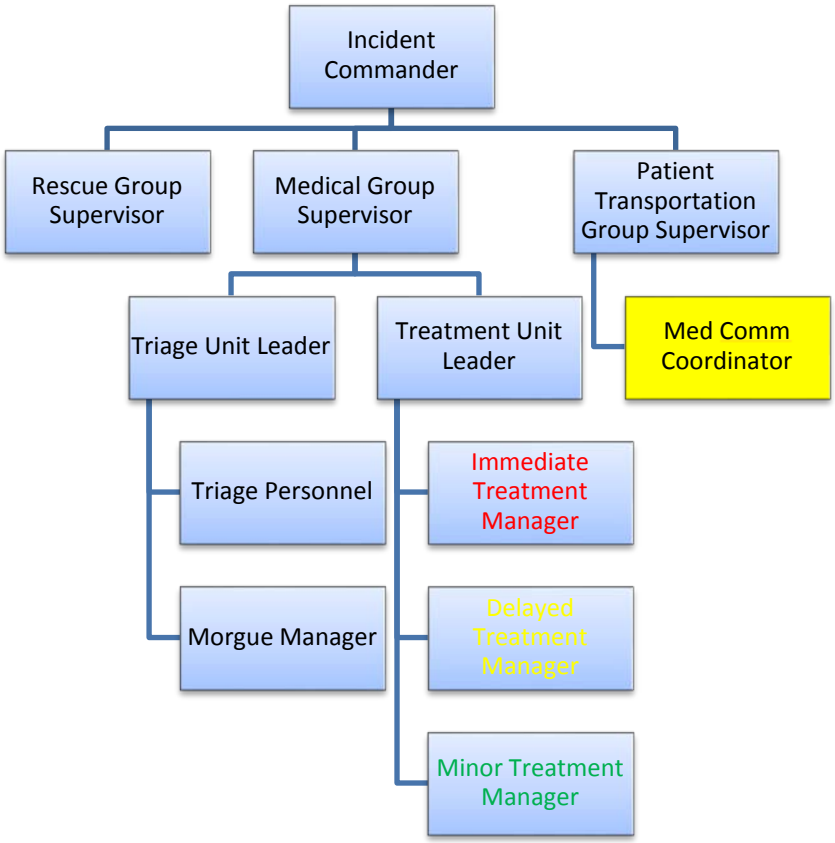
Depending on the level of the MCI, other groups and positions will be assigned. These positions will be assigned by the IC as the incident progresses. The assignment of these groups will be based on need. For MCI, there will always be a need for a medical group and a patient transportation group.

The role of the IC can be passed on as the incident progresses (Captain to Battalion Chief, Battalion Chief to Division/Assistant Chief, etc).

Medical group supervisor may be established on smaller incidents, but the role will likely be under the Operations Section on larger-scale incidents.

MCI JOB AID

MEDICAL COMMUNICATIONS COORDINATOR (MEDCOMM)

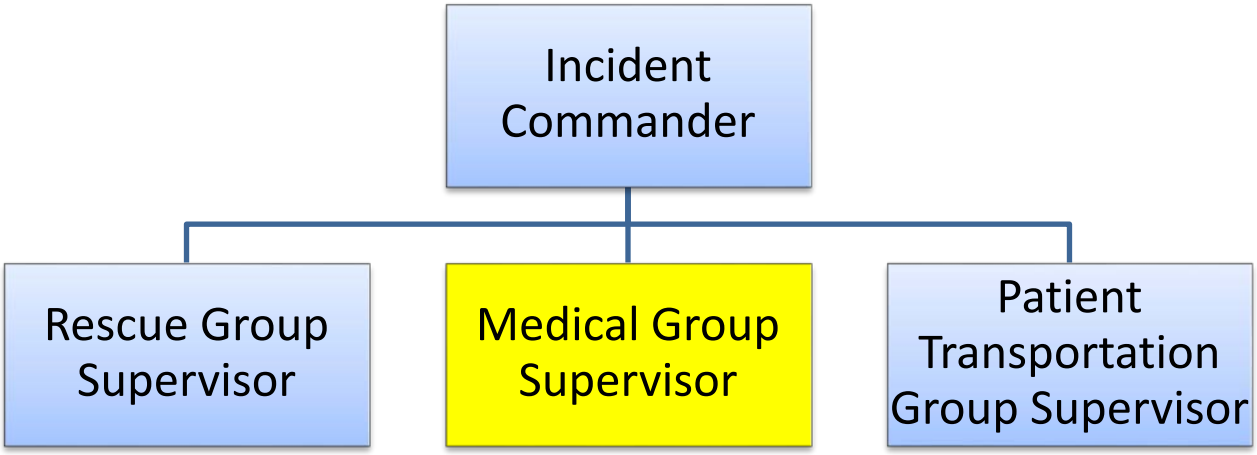


Responsibilities:

- Coordinate method of transport (ground/air) as well as destination for patients being transported. Communicates directly with the Patient Transportation Group Supervisor as well as the Base Hospital to ensure that patients are transported to the most appropriate destination as efficiently as possible.
- Determine and maintain communications with the Base Hospital to ensure that bed availability and destination information remains accurate.
- Receive patient information from Treatment Unit Leader and/or Patient Loading Manager (in larger-scale incidents)
- Maintain accurate records (include triage and transport receipts).
- This position may be held in conjunction with Patient Transportation Group Supervisor, or may be delegated by the Patient Transportation Group Supervisor, depending on scope and scale of the incident.

MCI Job Aid

Position: Medical Group Supervisor

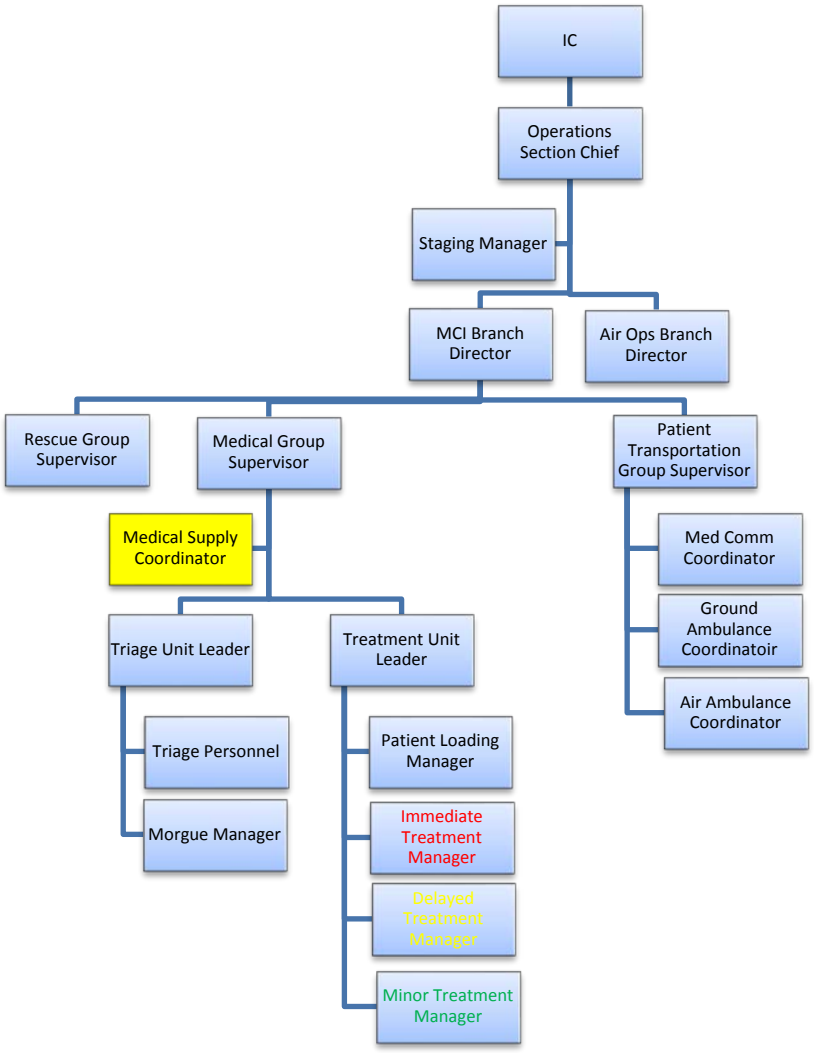


Responsibilities:

- The Medical Group Supervisor reports to the Incident Commander (on smaller incidents) or the Operations Section or Medical Branch Director (on larger incidents) and supervises the Triage Unit Leader, Treatment Unit Leader, and the Medical Supply Coordinator
- Designate treatment and triage unit leaders as well as treatment areas (including morgue)
- Determine amount and type of additional resources and supplies necessary to complete objectives
- Establish face to face communication and coordinate with Patient Transportation Group Supervisor
- Responsible for ensuring adequate medical care to patients is being delivered.
- Maintain a unit log (ICS 214)

MCI JOB AID

POSITION: MEDICAL SUPPLY COORDINATOR

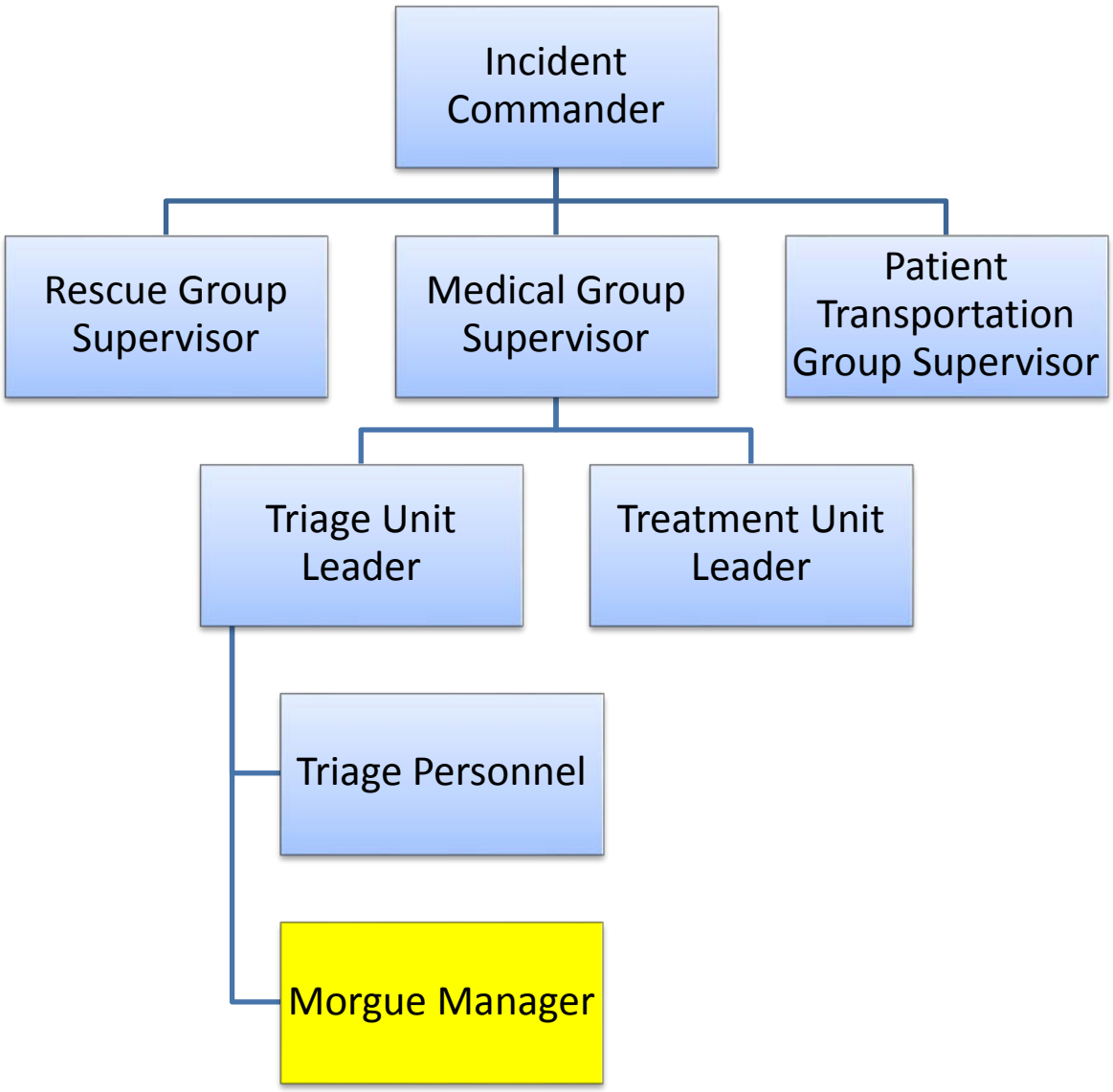


Responsibilities:

- Reports to the Medical Group Supervisor. Acquires, distributes, and maintains the status of medical supplies and equipment within the Medical Group / Division.
- Request additional supplies (MCI caches/trailers, DMSU)
- Distribute medical supplies to Triage and Treatment Units
- Maintain documentation (ICS 214 – Unit Activity Log).

MCI Job Aid

Position: Morgue Manager

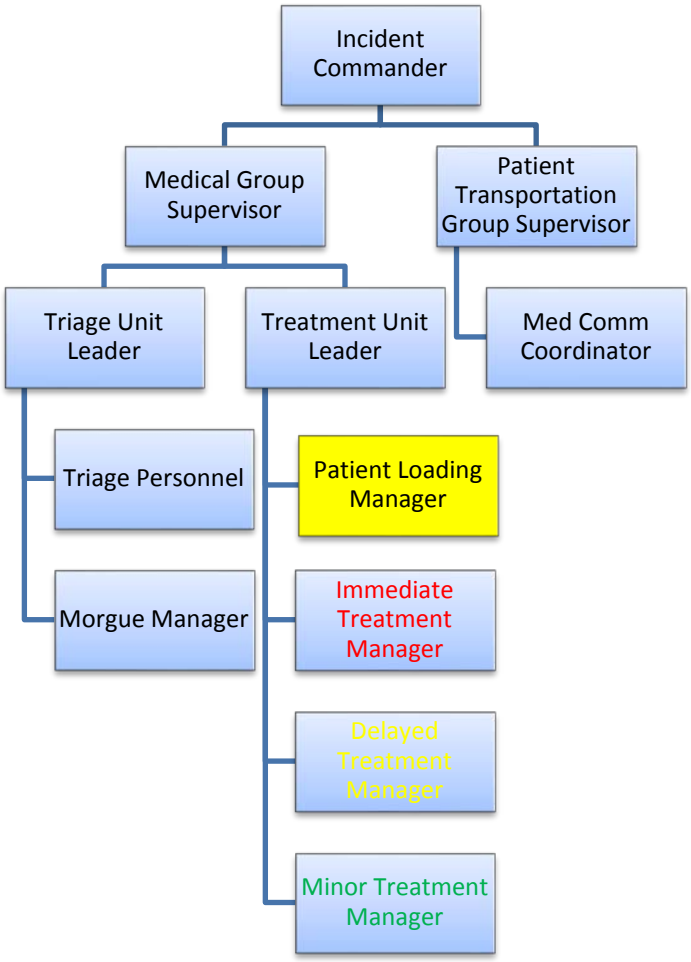


Responsibilities:

- Coordinate and manage all morgue area activities
- Keep area secure and separate from patient treatment areas
- Coordinate with law enforcement and the Medical Examiner's office. Ideally, transition management of the morgue area to one of those entities.
- Maintain accurate records and maintain integrity/privacy of all victim identification/information.

MCI Job Aid

Position: Patient Loading Manager

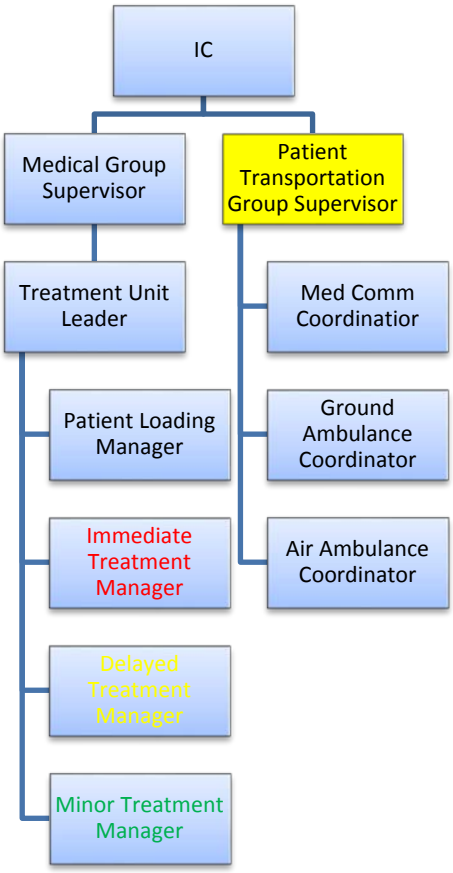


Responsibilities:

- The Patient Loading Manager reports to the Treatment Unit Leader and is responsible for coordinating the transportation of patients out of the treatment area with the Patient Transportation Group Supervisor
- Communicate and coordinate with Immediate, Delayed, and Minor Treatment Area Managers
- Establish communications and coordinate with the Patient Transportation Group Supervisor
- Verify that patients are prioritized for transport
- Coordinate the transport of patients with Medical Communication Coordinator (MEDCOMM) by relaying patient readiness and priority
- Assure appropriate patient tracking
- Coordinate ambulance loading with the Treatment Area Manager(s) and ambulance personnel

MCI Job Aid

Position: Patient Transportation Group Supervisor



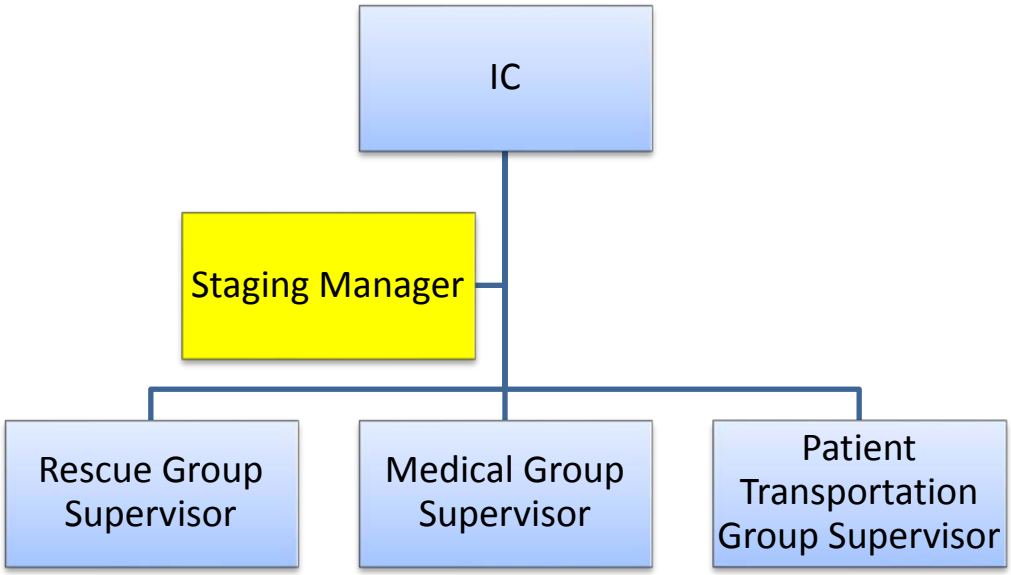
Responsibilities:

Reports to the IC or Operations Section Chief and supervises MEDCOMM as well as the Ground and Air Ambulance Coordinator positions. This is often the first transport paramedic on scene. Responsible for maintaining a wide focus on the incident, as it relates to transporting patients from the incident, to hospitals.

- Ensures MEDCOMM (retain or delegate) has been established and that communications with the base hospital remains efficient and effective.
- Maintain effective communication with IC or Operations Section, as well as the Medical Group Supervisor.
- Ensures that safe and appropriate patient loading area(s) have been established.
- Ensure that ground and air ambulance staging areas/helispots are established.
- Maintain records related to patient transportation and destinations.
- Assign Ground and Air Ambulance Coordinators.
- Utilize Policy 131 Attachments to track patient destinations and unit log.
- Ensures resource and staging needs are communicated effectively through the appropriate chain of command.

MCI Job Aid

Position: Staging Manager

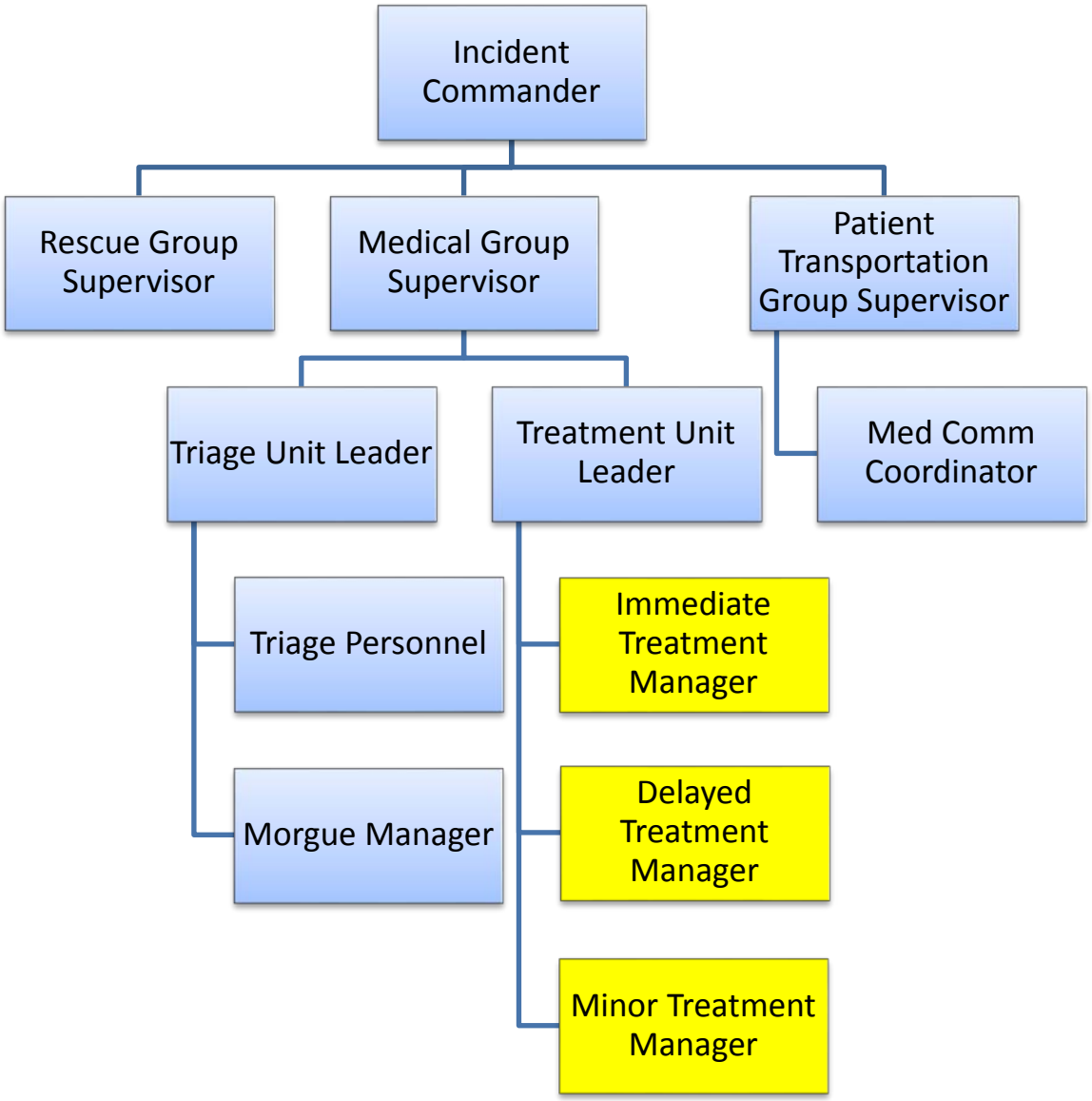


Responsibilities:

- Typically filled on larger incidents (MCI/Level II-III)
- Manages the staging area.
- Communicates with ground ambulance coordinator.
- All personnel should report to staging when arriving at the incident.
- If they are re-assigned to the MCI after transporting a patient, ambulances will return to staging when patient transportation is completed (remain in staging until re-assigned or released).

MCI Job Aid

Position: Treatment Area Managers



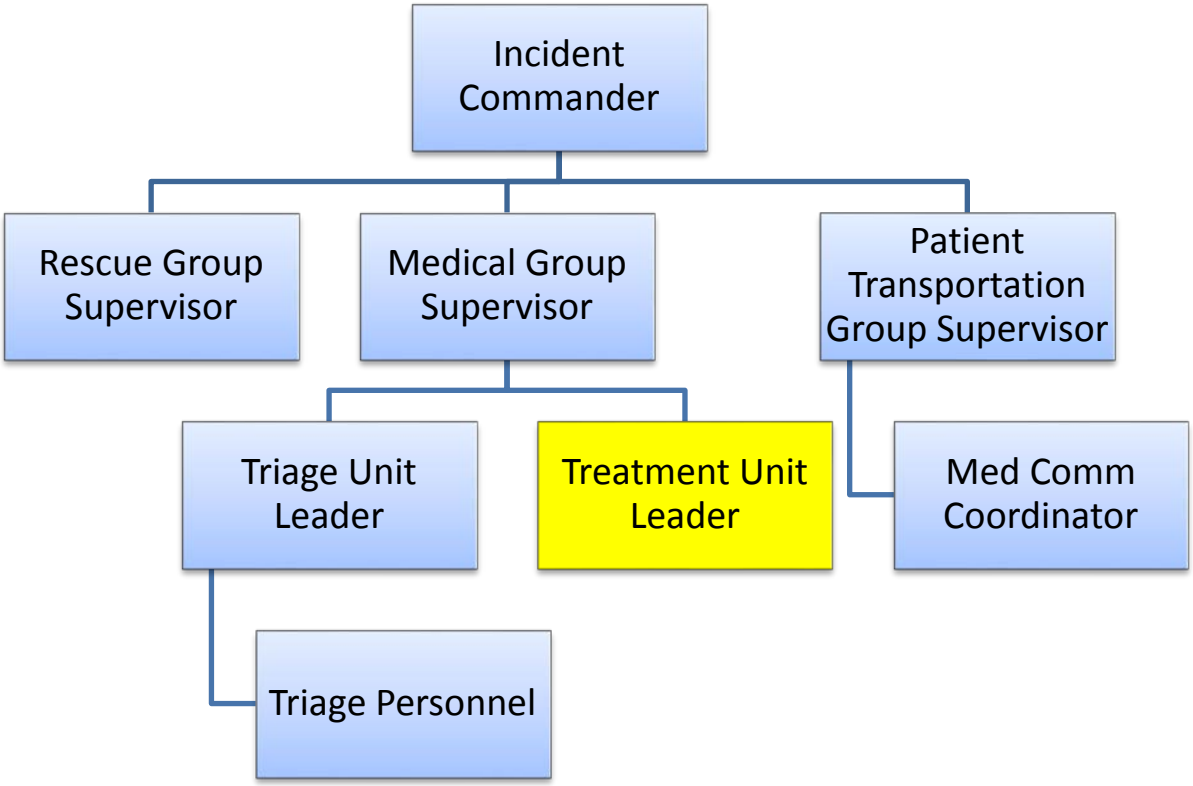
Responsibilities:

- The Treatment Area Managers report to the Treatment Unit Leader and are responsible for the oversight of patient treatment and prioritization of patients assigned to their areas – Immediate, Delayed, and Minor.
- Responsible for requesting and tasking personnel within their given treatment areas.
- Ensure adequate treatment and prioritization of patients in a given treatment area.
- Ensure that personnel within the treatment areas gather and record accurate and detailed patient information and record on the triage tags.
- Minor Treatment Area Manager is responsible for identifying those walking wounded who were initially removed from the triage/hazard area, but who may have potential injuries (sometimes significant).
- **For MCI/Level I – Ensure that patients with traumatic injuries are re-assessed and triaged into the Ventura County Trauma System.**

Note: Minor Treatment Area Manager should coordinate volunteer personnel through Agency reps and the Treatment Unit Leader to assist with care and supervision of the minor category patients.

MCI Job Aid

Position: Treatment Unit Leader

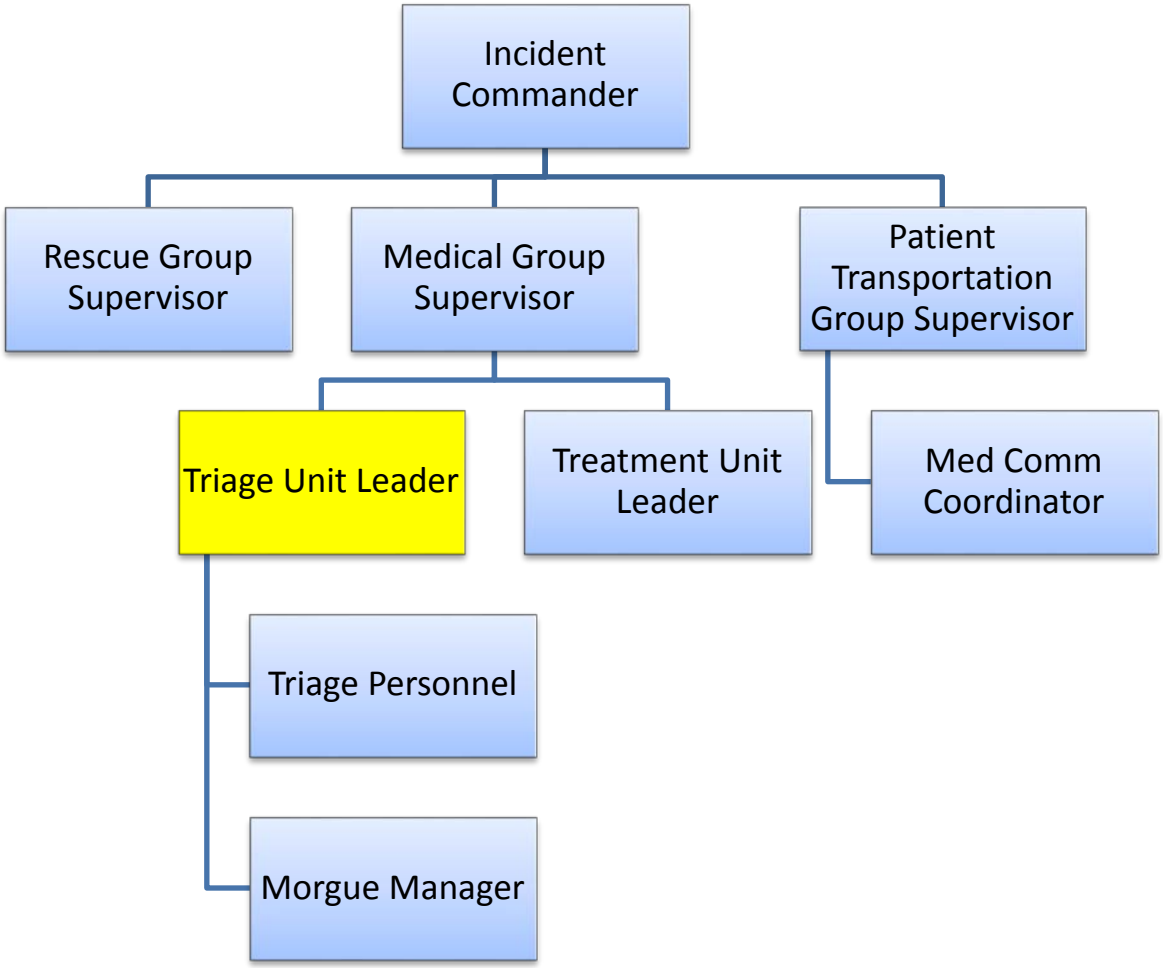


Responsibilities:

- The Treatment Unit Leader assumes responsibility for treatment, preparation for transport, and coordination of patient treatment in the treatment areas and directs movement of patients to loading areas.
- Direct and supervise the Patient Loading Manager as well as the Immediate, Delayed, and Minor Treatment Area Managers.
- Identify a suitable (and safe) area for treatment operations
- Communicate and coordinate the movement of patients from triage to the treatment areas with Triage Unit Leader
- Request additional medical supplies and resources utilizing the proper chain of command
- Establish communication and coordination with the Patient Transportation Group Supervisor
- Direct the movement of patients to the ambulance loading areas
- Retain destination portion of the triage tag (this may be done by the Patient Loading Manager)
- This position can be staffed by fire personnel, and can be an EMT. Ideally, this position will be filled by a fire Captain.

MCI Job Aid

Position: Triage Unit Leader

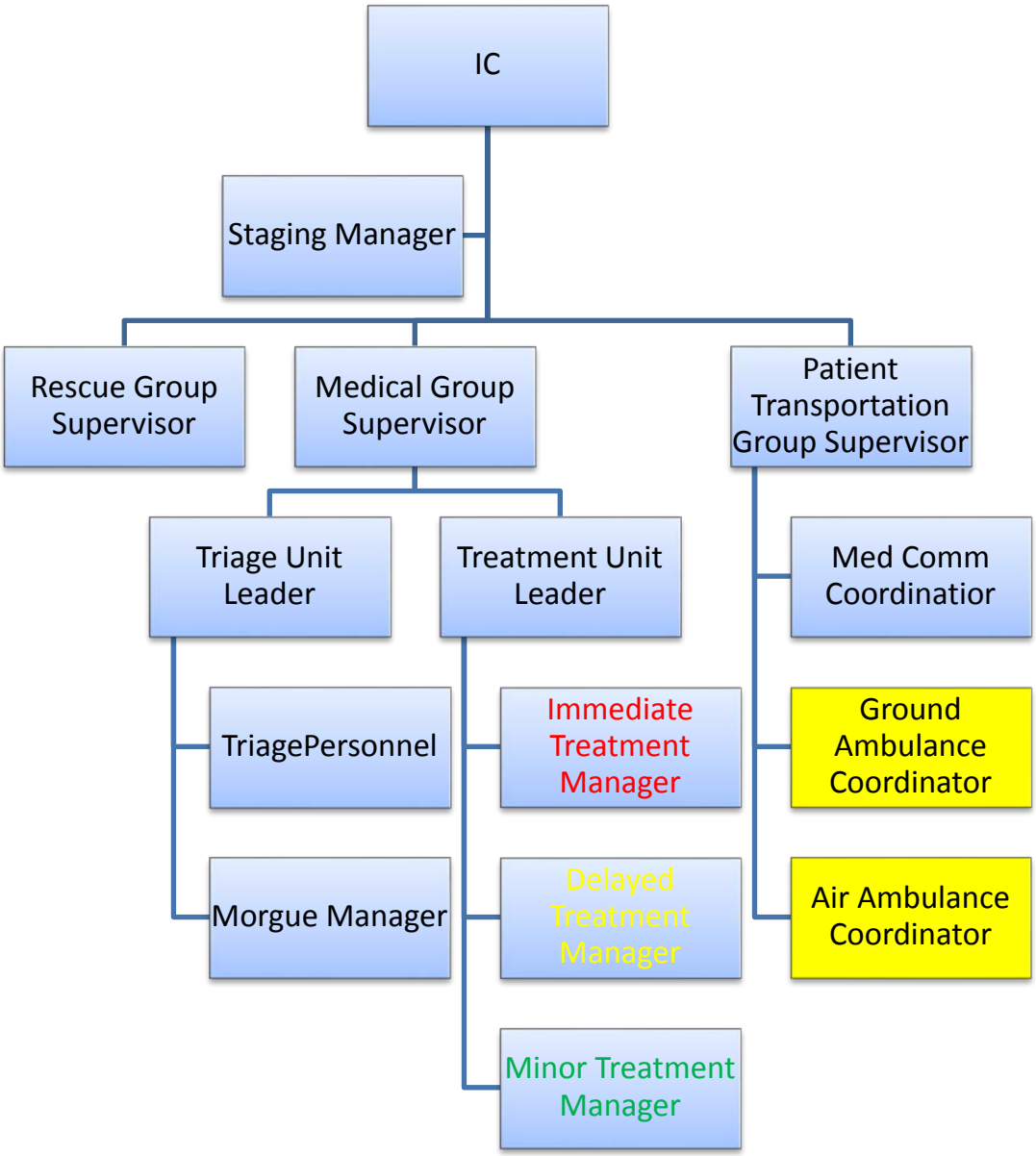


Responsibilities:

- Determine resources required to conduct triage operations
- Communicate resource needs and status reports to the Medical Group Supervisor
- Implement the triage process
- Coordinate movement of patients to appropriate treatment area
- Maintain security and control of the triage area
- Establish a morgue (as needed), an assign a morgue manager

MCI JOB AID

POSITION: AIR/GROUND AMBULANCE COORDINATOR



Responsibilities:

- Maintains effective communications with the Patient Transportation Group Supervisor, MEDCOMM, and Patient Loading Manager. Should also maintain effective communications with the Air Ops Branch (if one is assigned).
- Establish appropriate staging area(s) for ground ambulances and safe helispots for air resources
- Establish safe routes of travel for ambulances to or through the incident
- Request additional transportation resources through the proper chain of command.
- Document resources through VCEMS 310 – Ambulance Staging Area Manager Worksheet.

Ventura County Public Health
A Division of the Ventura County Health Care Agency

RIGOBERTO VARGAS, MPH
Director

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STEVEN L. CARROLL, EMT-P
EMS Administrator
ANGELO SALVUCCI, M.D., F.A.C.E.P.
Medical Director

Multi Casualty Incident (MCI) After Action Report – MCI/Level III

Rice Incident – February 24, 2015

Incident Type:
Train Derailment – MCI/Level III

Location:
Railroad Crossing (Rice Road x 5th Street)
Oxnard, CA 93030

Agencies Involved:
Oxnard Fire Department (OXD)
Oxnard Police Department (OPD)
Gold Coast Ambulance (GCA)
American Medical Response (AMR)
Ventura County Fire Department (VNC)
Ventura City Fire Department (VEN)
Ventura County EMS Agency (VCEMS)

Hospitals Involved:
Community Memorial Hospital (CMH)
Los Robles Hospital and Medical Center (LRHMC)
St. John's Pleasant Valley Hospital (SJPVH)
St. John's Regional Medical Center (SJRMC)
Ventura County Medical Center (VCMC)

Summary

On the morning of February 24, 2015 a Metrolink commuter train was traveling eastbound on the tracks when it struck a commerical vehicle towing a medium sized trailer. The commercial vehicle had turned onto the tracks and was traveling westbound for a short distance before becoming stuck on the tracks. The commuter train struck the vehicle at approximately 60 MPH, causing the locomotive and 4 cars of the train to derail, 3 of which overturned onto

their side. On board the train were 46 passengers and 3 crew. Oxnard Police/Fire Communications received the 9-1-1 call and the first fire units were dispatched at 05:44:41, followed by the first EMS units dispatched through Ventura County Fire Communications (FCC) at 05:46:14. Three additional ambulances were dispatched by FCC within 5 minutes. The first Oxnard Fire unit (E65) arrived on scene to find a large fire burning, and reported they were trying to determine the extent of the train involvement. Due to the dark conditions and poor lighting, initial on scene assessments were rather difficult.

A scene size up was performed by E65, and numerous patients were reported. An MCI/Level II "at least" was declared at 06:04:15. A medical communications officer (MEDCOMM) was assigned at the scene and base hospital contact was initiated with Ventura County Medical Center (VCMC) at ~06:08 (recording time) with a "heads up" call-in that lasted apprixmately 90 seconds and gave a high level overview of the incident, reporting potential for up to 30 patients. Based on this information, the Mobile Intensive Care Nurse (MICN) at VCMC activated an MCI in Reddinet, thereby alerting all hospitals of the incident and polled each emergency room for their bed availability.

The Ventura County EMS Agency received notification from FCC at 05:57 and from Oxnard Fire at 06:03. EMS 2 (Rosa) was the assigned Duty Officer at the time of the notification, but was unable to respond. EMS 1 (Carroll) provided backup and responded to the incident at 06:00:24, arriving on scene at 06:16:40. EMS 2 made notifications to Mike Noone, Region 1 Disaster Medical Health Specialist (RDMHS 1), at 06:17. Additionally, EMS 3 (Hansen) was contacted and requested to respond to the scene with the backup command vehicle after he picked it up from the EMS bunker. EMS 3 was on scene at 07:12. EMS 2 was on scene of the incident at 07:14. EMS 1 entered into Unified Command of the incident, and EMS 2 assumed the role of Patient Tracking Unit Leader once on scene. Other critical roles (Triage Unit Leader, Treatment Unit Leader, Patient Transportation Group Supervisor, Medical Group Supervisor) were also filled early and these roled were maintained throughout the incident, where applicable.

In advance of receiving patients, many hospitals activated their internal Hospital Emergency Operations Centers (HEOC) and operated under the Hospital Incident Command

System (HICS) throughout the MCI operations. The first patients were transported off of the scene in about 45 minutes, with all other patients being transported within 2 hours of the first 9-1-1 call being received. 28 patients were transported from the scene via ground ambulance to local hospitals. 4 patients met Immediate criteria, 12 met delayed, and 12 were categorized as MINOR. 22 victims were assessed on scene and either found to not have any injuries/complaints, or declined further treatment and transport. Of these 22, 3 later walked-in to local emergency rooms for treatment. The patient distribution amongst all local hospitals was as follows:

CMH	9 (1 Walk-In)
LRHMC	6
SJPVH	3
SJRMC	4 (2 Walk-In)
VCMC	9

And of this distribution, patient outcomes were as follows:

23 Discharged

4 Admitted

4 Admitted ICU (VCMC)

- 1 Expired

Reddinet was relied on heavily throughout the incident for incident mangament, hospital communications, and (most importantly) patient tracking purposes. VCMC maintained control of the incident on Reddinet from the time of initial MCI activation until VCEMS took control of the incident between 0830 and 0900. For the first time on an MCI in Ventura County, a formal patient tracking unit was established, and Reddinet was utilized for the purposes of maintaining an accurate patient count and for maintainting patient information and ongoing disposition within the hospital. Furthermore, this patient tracking information was shared with key partner agencies on scene of the incident including Metrolink, California Office of Emergency Services, and the National Transportation Safety Board investigation team.

While opportunities for improvement exist, this incident was a success in terms of medical health management and meeting overall incident objectives. Ventura County EMS

remained on scene until approximately 2000 hours, in unified command with the Oxnard Police and Fire Departments.

Identified Challenges and Opportunities for Improvement

1. Scene layout and time of day created challenges related to early incident size-up and management.
2. Utilization of triage tags for primary START triage creates delays and problems related to patient tracking and retaining cateogry “tabs.”
3. Role identification in the medical and transport groups was challenging as vests were not used by all involved.
4. There was limited utilization of mutual aid resources (ALS and BLS).
5. Delayed and minor treatment tarps were laid out in close proximity to one another, creating crowded conditions and the treatment area.
6. An involuntary breakdown of unified command amongst some of the incident leadership created management challenges for Fire and EMS.
7. The non-injured victims presented logistical and management challenges related to shelter, care and feeding, restrooms, etc.
8. A lack of a formal ambulance staging area resulted in ambulances driving through critical areas of the scene to access patients. Crowding in the informal patient loading area was a secondary result of this absent staging area.
    a. Ground Ambulance Coordinator and Ambulance Staging Area Manager positions were not staffed.
9. Radio communications were challenging for about the first 45 minutes of the incident.
    a. A stand-alone medical tactical channel was not utilized.
10. Confusion exists related the ordering and use of the Disaster Medical Support Units (DMSU).

Best Practices

1. In spite of scene challenges and poor lighting, the first arriving units provided an excellent scene size-up, allowing the incident commander to request additional resources early and establish an adequate organizational structure.
2. START triage was accurate and efficient.

3. Medical Communications Officer position was established early and maintained throughout the incident. Medical communications with VCMC were clear and effective.
4. All patients were transported off the scene within two hours of the first 9-1-1 call.
    a. All patients were transported appropriately, with no subsequent transfers to trauma centers through the trauma system "safety net."
5. All modules of the Reddinet system were utilized at the base hospital level.
    a. 100% accountability in patient tracking utilizing the Reddinet tool.
6. DMSU 157 was utilized for medical equipment on scene of the incident.
7. Clearly defined organizational structure was established early, resulting in key resources being ordered early. Additionally, critical roles related to the triage, treatment and transport of patients were filled quickly.

<u>Training/Operational/Policy Implications</u>

1. New MCI response and management equipment is on order.
    a. Triage ribbons will eliminate the need to utilize triage tags for primary START triage.
    b. Updated and improved tags will allow for more detailed information, better patient tracking, and (most importantly) will allow the patient to be re-triaged two additional times as needed.
    c. Management kits will contain better forms that are easier to utilize on scene.
    d. ID vests for easier role identification.
2. Updated basic and advanced MCI modules to be released with new equipment in Summer of 2015.
    a. Basic MCI for dispatchers in the two fire communications centers will be released in 2015.
3. VCEMSA MCI policy and plan need to be revised / updated to better reflect the roles and responsibilities of the VCEMSA, and better outline certain response thresholds.
4. Policy and guidelines related to the ordering and use of the DMSU are needed at the VCEMSA level.
5. VCEMSA will develop internal guidance related to staff roles and utilization during an incident or event.

Ventura County EMS Plan
2014 QUALITY IMPROVEMENT PROGRAM
ANNUAL UPDATE

August 2015

Steve Carroll, EMS Administrator
Karen Beatty, Specialty Systems Coordinator

QI Program Summary

Ventura County EMSA continues the process of redefining our current QI Plan as described in our last update. While we have made progress, our original timeline was to complete the redesign by July of this year. However, due to staffing challenges and other system priorities, we have modified the project completion timeline to July of 2016. We are still working to ensure that all core measures are patient focused and implementation for improvement will be timely and sustainable.

Changes in the QI program

We have analyzed our 2014 data to identify improvement projects. Through our monthly TAG meetings along with our STEMI, Stroke, Trauma, and Sudden Cardiac Arrest meetings, we continue to monitor our Air-Q study, Stroke Core Measures, Trauma Triage and Destination, and Cardiac Arrest Survival.

We are collecting data from our pre-hospital providers and hospitals in order to follow a patient from the initial 911 call through patient care activities in the hospital. The following are a few of those core measures:

1. Time from 911 ring to brain image interpretation. In 2014 we had a median time of 29 minutes, with a decrease to 25 minutes in Q1 2015. We decreased our time by having medics transport patients directly to the CT scanner, if they meet “stroke” criteria.

2. Percent of patients that met “sepsis” criteria by EMS, and had a hospital discharge diagnosis of Sepsis. We have added a “sepsis alert” field to our e-PCR. In 2014 we were able to collect data from 25% of our hospitals. This has been a challenge to get 100% participation, and we are continuing to work on this in 2015.

In 2014 we worked with one of our primary PSAP’s to bring them up to current standards to improve their response times along with their own internal QI performance. We have seen slight improvement to date and will continue to improve this process.

We are participating in Ventura County's Elderly Fall Prevention program by gathering data on patients that have fallen or have a potential to fall and are *not* transported by EMS to the hospital. We answer a set of questions that are sent to the fall prevention coordinator along with leaving educational material about fall prevention at the home. We meet quarterly to discuss the data and areas of improvement. The Fall Prevention Committee had two community outreach symposiums in 2014 with great response.

Lastly, we saw an increase in our hands-only "Sidewalk CPR" training outreach in 2014 and we noted a slight increase in bystander CPR during cardiac arrests from 39% to 40.5%. We will continue to monitor these figures in the coming year.

Indicators used during the reporting year

We increased our reporting of State Core Measures from 57% compliance in 2013, to 70% compliance in 2014.

Along with the State Core Measures, please see attached for specific Ventura County EMS key indicators. (Attachment A)

Data Collection

We receive our data from receiving hospitals using Outcome Sciences Registry for our Stroke Program, CARES Registry for our Sudden Cardiac Arrest, ImageTrend Trauma Registry for our Trauma data, a secure protected monthly spreadsheet for our STEMI data, and we are currently assessing how to gather Sepsis data from our hospitals. Additionally, we use ImageTrend for our EMS electronic patient care reporting system (e-PCR).

Audit Critical skills

Ventura County EMS requires that all paramedics attend airway refresher training sessions once every six months and one paramedic skills lab annually. Included in these paramedic skills lab are education stations covering certain low frequency, high risk procedures. In addition, various critical procedures are monitored regularly through our ImageTrend ePCR. Skills monitored through this method include advanced airway, transcutaneous pacing, and intraosseous infusion.

Performance Improvement

Ventura County EMS identified issues with emergency transfers from our Primary Stroke Centers (PSC) to a Neuroendovascular Center (NEC) for endovascular intervention. We are currently working on a policy to identify and rapidly transport these patients.

Patient care data was reviewed to evaluate the time interval from the primary PSAP notification to the first chest compression on cardiac arrest patients. We have seen a slight decrease in these times after the new version of ProQA 13 was implemented in late 2014. We will continue to track and monitor this item.

For the Stroke System, we increased our percentage of compliance in Get with the Guidelines (GWTG) STK Core Measures, by implementing a monthly progress report in Q3 of 2014 to all hospitals. This allowed them to analyze their data and increase compliance in a timely manner.

Policies

Some minor changes were made to a few policies to include adding hemostatic gauze to the optional equipment list, all EMT-1's were changed to EMT, and 1000 ml BVM bags were changed to 500 ml for better compliance during cardiac arrest management.

A new policy was developed for the indication and usage of the Air-Q airway. 100% of all Air-Q cases are reviewed for effectiveness and concerns.

2015-2016 Goals

We will be implementing an annual training video and skill demonstration by first responders for the proficiency of Cardiac Arrest Management (CAM)

We are currently looking at core measures for Sepsis in order to improve our survival rate of septic patients and will develop a plan to collect hospital data consistently.

We will be working to update our EMS Agency website and plan to review the use of social media for gathering and disseminating EMS specific information.

We will complete and implement a new policy for the rapid transport of stroke patients to a NEC.

We will continue with our 10 year goal to train all eligible Ventura County residents in hands-only CPR.

We will also be revising our CQI Plan to include developing base hospital core measures for system evaluations.

Respectfully submitted by,

Steve Carroll
EMS Administrator

Karen Beatty, RN
Specialty Systems Coordinator

Attachment A

State and Local Core Measures

State Core Measures			
	2012	2013	2014
TRA 1-Scene Time on Trauma Pts	21:03	17:57	21:46
TRA 2-Direct Transport to Trauma Center	100%	100%	93%
ACS 1-ASA given to cardiac origin CP	N/A	N/A	90%
ACS 2-12L EKG Perfomance Pre-Hospital	N/A	78%	68%
ACS 3-Scene time for Pts with STEMI	23:10	21:18	23:12
ACS 5-Direct transport to Stemi Center	100%	100%	93%
CAR 2-Cardiac Arrest with ROSC	33%	32%	32%
CAR 3-Cardiac Arrest survived ED d/c	24%	29%	24%
CAR 4-Cardiac Arrest survived Hospital d/c	14%	15%	15%
STR 2-Glucose test on suspected Stroke Pts	N/A	N/A	81%
STR 3-Scene time for Stroke Pts	N/A	22:02	20:26
STR 5-Direct Transport to Stroke Center	N/A	98%	99%
New-STR-Identify of suspected Stroke by EMS using Stroke Screening	N/A	N/A	N/A
RES 2-Beta2 agonist for adults	N/A	N/A	40%
PED 1-Pediactric asthma gets bronchodilator	N/A	100%	N/A
PAI 1-Received pain intervention if 7/10 pain	36%	N/A	N/A
SKL 1-Intubation success rate	N/A	67%	76%
SKL 2-End tidal CO2 performed on intubated Pts	N/A	N/A	N/A
RST 1-Response time in emergency zone	N/A	N/A	N/A
RST 2-Response time ine non-emergency zone	N/A	N/A	N/A
RST 3-% of Pts transported to hospital	N/A	N/A	N/A

Definitions Of Stroke Measures		
	Resposible	Due date
1. Total Strokes: Total of Ischemic, hemorhhagic,TIA and "No Stroke" reported through Outcome Science.	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
2. Total Ischemic Stroke: Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Ischemic Stroke".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
3. Total Hemorhhagic Stroke: Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Subarachnoid" or "Intracerebral Hemorrhage Stroke".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
4. Total TIA: Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting" and Final diagnosis related to stroke is Transient Ischemic Attack (<24 hrs.)	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
5. Total "No Strokes": Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting" and Final diagnosis related to stroke is No Stroke related diagnosis	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
6. Total Ischemic (walk-ins): Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Ischemic Stroke" and Patients arrived by "Private transportation/taxi or other from home/scene".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
7. Total Ischemic by (EMS): Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting","Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Ischemic Stroke" and Patients arrived by "EMS from home/scene".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
8. Total Ischemic by (IFT): Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting","Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Ischemic Stroke" and Patients arrived by "IFT."	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
9. Total Hemorrhagic (walk-ins): Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Subarachnoid" or "Intracerebral Hemorrhage Stroke" and arrived by "Private transportation/taxi or other from home/scene".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
10. Total Hemorrhagic by (EMS): Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Subarachnoid" or "Intracerebral Hemorrhage Stroke" and arrived by "EMS from home/scene".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
11. Total Hemorrhagic by (IFT): Number of patients with "Patient location when stroke symptoms discovered" as "Not in a healthcare setting", "Chronic health care facility" or "Outpatient healthcare setting", and "Final clinical diagnosis related to stroke" is "Subarachnoid" or "Intracerebral Hemorrhage Stroke" and	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
12. Total Pts received t-PA: Total patients with "IV t-PA initiated at this hospital"="Yes".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015

Definitions Of Stroke Measures Cont.	Responsible	Due by
13. Total Pts received t-PA (walk-ins): Total patients with "IV t-PA initiated at this hospital ="Yes", that arrived by "private transportation/taxi or other from home/scene".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
14. Total Pts received t-PA (EMS): Total patients with "IV t-PA initiated at this hospital ="Yes", that arrived by "EMS from home/scene".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
15. Median Interval of Arrival at hospital to initiate t-PA: Total of Ischemic patients who received "IV t-PA initiated at this hospital" = "Yes" the median interval between "Arrival Date/Time" and "Date/Time IV t-PA initiated".	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
16. % of Pts who received t-PA in 60 min or less from arrival: Total % of patients with "IV t-PA initiated at this hospital"="Yes" and had a D2N interval of 60 minutes or less.	Karen-Quarter	April 25, July 25, Oct 24, Jan 23-2015
17. % of Identified suspected Stroke patients by EMS personnel in the field, documented use of a validated pre-hospital stroke screen (Los Angeles LAPSS or Cincinnati CPSS)	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
18. Median interval of Arrival of "Stroke Alert" patients at ED to CT Brain interpretation: The median interval of "Arrival Date/Time" of patient to "Brain imaging interpretation".	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
19. % of Dx Strokes dispatched as Strokes: Using the incident PCR number as a common identifying field, what % of patients diagnosed in GWTG as + stroke (Ischemic, TIA, subarachnoid, intracerebral) had dispatch call type as Stroke/CVA?	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
20. % of positive CSS NOT Dx as a Stroke: Using the incident PCR number as a common identifying field, what % of patients who had a documented + CSS did not have a + diagnoses of stroke in GWTG?	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
21. % of DX Strokes not having a CSS documented: Using the incident PCR number as a common identifying field, what % of patients who were documented in GWTG as having a + stroke did not have a + CSS documented in ePCR (blank or CSS negative)?	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
22. Median Interval of Dispatch time and Brain Image Interpretation: Using the incident PCR number as a common identifying field, what is the median interval between "Unit Dispatched Time" and "Brain Imaging Reported" for all patients where the "Stroke Team Activated" field is not blank.	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
23. Total of Ischemic patients who received "IV t-PA initiated at this hospital"= "Yes" the median interval between "Unit Dispatched" Date/Time" and "Date/Time IV t-PA initiated".	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
24. Median time from "patient contact" to "depart scene" for all patients meeting "Stroke Alert" criteria.	Chris-Quarter	April 25, July 25, Oct 24, Jan 23-2015
25. % completed Optional Field #2 (documenting the PCR number)	Karen-Month	April 25, July 25, Oct 24, Jan 23-2015
26. % completed Optional Field #3 (Hospital Code Stroke initiated)	Karen-Month	April 25, July 25, Oct 24, Jan 23-2015

The Joint Commission Core Measures	Responsible	Due by
STROKE		
STK 1-% of Pts who received VTE prophylaxis: Ischemic and hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission.	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 2-% of Pts who were d/c on antithrombotics: Ischemic stroke patients prescribed antithrombotic therapy at hospital discharge	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 3-% of Pts who received antocoagulation: Ischemic stroke patients with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge.	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 4-% of Pts who received thrombolitics: Acute ischemic stroke patients who arrive at this hospital within 2 hours of time last known well and for whom IV t-PA was initiated at this hospital within 3 hours of time last known well.	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 5-% of Pts who received antothrombotics by day 2: Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2.	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 6-% of Pts who were d/c on satins: Ischemic stroke patients with LDL greater than or equal to 100 mg/dL, or LDL not measured, or who were on a lipid-lowering medication prior to hospital arrival are prescribed statin medication at hospital discharge.	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 8-% of Pts who received Stroke education: Ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**
STK 10-% of Pts who were accessed for rehabilitation: Ischemic or hemorrhagic stroke patients who were assessed for rehabilitation services.	**Karen-Quarter**	**April 25, July 25, Oct 24, Jan 23-2015**

Definitions of Stemi Measures	Responsible	Due by
1. Time from arrival by EMS to **SRC** with POS EKG to Time of first reperfusion by balloon/device in Cath Lab (calculated) median time and % completed in 90 min or less	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
2. Time from Pre-hospital POS EKG to time of first reperfusion by balloon/device in Cath Lab (calculated) median time and % completed in 90 minutes or less	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
3. Time of Unit Dispatch (from e-PCR) to first reperfusion by balloon/device in Cath Lab (calculated) median time and % completed in 90 minutes or less	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
4. % of Pre-hospital on scene time to EKG time completed within 10 minutes that were TP.	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
5. % of Pre-hospital POS EKG time to transport time completed within 10 minutes.	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
6. % of pre-hospital True Positive EKG's	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
7. % of pre-hospital True Negative EKG's	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
8. % of pre-hospital False Positive EKG's	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
9. Breakdown of clinic EKG's by True Positive (TP), False Positive (FP), or NO EKG documented	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
10. % of Ambulance arrival time at SRH to time patient was transported from ED in 15 minutes or less and received reperfusion by balloon/device in cath lab	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
11. Time from walk-in arrival at **SRC** with POS EKG to Time of first reperfusion by balloon/device in Cath Lab (calculated) median time and % completed in 90 minutes or less	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
12. % of walk-in **SRC** Pt's who received reperfusion by balloon/device in cath Lab received EKG within 10 minutes of arrival.	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
13. Time from walk-in arrival at **SRH** with POS EKG to Time of first reperfusion by balloon/device in Cath Lab (calculated) median time and % completed in 90 minutes or less	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
14. Time of walk-in arrival at **SRH** with POS EKG to time leaving the SRH ED-median time and % completed within 30 minutes for patients who received reperfusion by balloon/device in cath lab.	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
15. % of walk-in **SRH** Pt's who received reperfusion by balloon/device in cath Lab received EKG within 10 minutes of arrival.	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
16. % of POS EKG time at **SRH** to calling ambulance for transfer to SRC within 10 minutes.	**Karen-Tri**	**May 23, Sept. 26, Jan 23-2015**
17. % of all patients with final diagnosis STEMI that are transported by EMS.	**Karen-Month**	**May 23, Sept. 26, Jan 23-2015**

Definitions of Sudden Cardiac Arrest Data	Responsible	Due By
T-SCA1- % of all patients with cardiac arrest of cardiac etiology and on first EMS evaluation are in VF/VT and are D/C alive with CPC 1 or 2.	Katy-Month	1rst Thursday of every month
T-SCA2- For patients with cardiac arrest of cardiac etiology and on first EMS evaluation are in VF/VT, median time interval between Primary PSAP ring to first defibrillation (Time from ALS/BLS Monitor).	Katy-Month	1rst Thursday of every month
T-SCA3- % of cardiac arrest patients (from CARES) who were eligible for EMD assisted CPR who received CPR prior to EMS arrival (from EMD records) (Eligible= 2nd party caller, no known barrier to CPR).	Katy-Month	1rst Thursday of every month
T-SCA4- Median time interval in seconds between “time of pick-up” and "first compressions started" per FCC EMD report for all contacts who have a first compression time	Karen-FCC month	1rst Thursday of every month

Definitions of TAG Core Measures	Responsible	Due by
STROKE		
T-STK1- Median time interval between "Unit Dispatched" (from e-PCR) and "Brain Imaging Reported" (Outcome Sciences Registry) for all patients where the "Stroke Team Activated" (Code Stroke) field is not blank.	Chris-Month	1rst Thursday of every month
T-STK2- % of patients diagnosed with "Code Stroke" (Outcome Sciences Registry) transported by EMS that were called in as "Stroke Alert." (Image Trend).	Chris-Month	1rst Thursday of every month
SEPSIS		
T-SEP1- % of "Code Sepsis" patients in ED (hospital report) who were recognized by paramedics and called in as "sepsis alert." (Image Trend)	Chris-Karen-ED's Month	1rst Thursday of every month
T-SEP2- Median interval time between "Unit Dispatched" (Image Trend) to "2nd liter of fluid infused" (hospital report)on all ED "Code Sepsis" patients. (hospital report)	Chris-Karen-ED's Month	1rst Thursday of every month
T-SEP3- Sepsis % breakdown by patient arrival (EMS or POV) and survival (discharged alive or died) for all patients with a primary or secondary diagnosis of severe sepsis or septic shock.	Karen-ED'sMonth	1rst Thursday of every month
STEMI		
T-ACS1- Median time interval between "Unit Dispatch (from e-PCR) to first reperfusion by balloon/device in Cath Lab (reported by SRC)	Karen-Month	1rst Thursday of every month
T-ACS2- % of all patients with final diagnosis STEMI that are transported by EMS. (reported by SRC)	Karen-Month	1rst Thursday of every month
T-ACS3-Median time interval minutes from door arrival to balloon for all patients who received PCI (reported by SRC) and destination % breakdown (reported by SRC)	Karen-Month	1rst Thursday of every month
TRAUMA		
T-TRA1- Total # of patients transported by EMS or arrived POV to a non-Trauma center and later transported to a Trauma Center as an Emergent trauma transfer; number that arrived by EMS and Median interval time between FCC call (at non-trauma hospital) to arrival at Trauma Center	Katy-Month	1rst Thursday of every month

Definitions of TAG Core Measures Cont.	Responsible	Due by
SUDDEN CARDIAC ARREST		
T-SCA1- % of all patients with cardiac arrest of cardiac etiology and on first EMS evaluation are in VF/VT and are D/C alive with CPC 1 or 2.	Katy-Month	1rst Thursday of every month
T-SCA2- For patients with cardiac arrest of cardiac etiology and on first EMS evaluation are in VF/VT, median time interval between Primary PSAP ring to first defibrillation (Time from ALS/BLS Monitor).	Katy-Month	1rst Thursday of every month
T-SCA3- % of cardiac arrest patients (from CARES) who were eligible for EMD assisted CPR who received CPR prior to EMS arrival (from EMD records) (Eligible= 2nd party caller, no known barrier to CPR).	Katy-Month	1rst Thursday of every month
T-SCA4- Median time interval in seconds between “time of pick-up” and "first compressions started" per FCC EMD report for all contacts who have a first compression time	Karen-FCC month	1rst Thursday of every month

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Prehospital Emergency Medical Care Quality Improvement Program	Policy Number 120
APPROVED: Administration: Steven L. Carroll, EMT-P	Date: June 1, 2009
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: June 1, 2009
Origination Date: January 1996 Date Revised: December 11, 2008 Date Last Reviewed: December 11, 2008 Review Date: December 31, 2012	Effective Date: June 1, 2009

I. PURPOSE: To define the process to identify areas for improvement in the VC EMS system.

II. AUTHORITY: Reference: H&S Code Section 1798 Medical Control

III. POLICY: The Ventura County EMS Agency shall assess and evaluate all aspects of the EMS System in Ventura County.

IV. Each pre-hospital provider (hospital provider, ambulance provider and first responder agency) will use the Ventura County Continuous Quality Improvement Program (CQI) as a model for their CQI plan with respect to the EMS portion of their activities.

Ventura County Emergency Medical Services Agency

Continuous Quality Improvement Program

Mission Statement

The mission of Ventura County's Emergency Medical Service Agency CQI program is to optimize the health of those requiring emergency medical care in the County of Ventura by promoting timely, highly skilled and effective medical care to those who request our services. We also intend to promote healthy lifestyles, and prevent and control disease, injury and disability though community education programs. Successful performance of this mission demands the development and modeling of strategies that ensure the delivery of cost effective, high quality response and delivery of assessment, treatment and transportation to the residents of, and visitors to, Ventura County who are in need of Emergency Medical Services.

Vision

To foster an ethical[1] work environment, in which all employees see themselves as valued members of a team, working continuously to improve the health of the residents of, and visitors to, Ventura County, who require Emergency Medical Services.

Scope of Services

The Emergency Medical Services Agency provides oversight for all emergency medical care and transportation in the County of Ventura. It assures adherence requirements for personnel education and certification and oversees Advanced Life Support Service providers' compliance with the county contract. Services are provided by a professional and support staff which includes the EMS Medical Director, EMS Administrator, EMS Deputy Administrator, EMS CQI Coordinator, Administrative Assistant, and Student Aide. Programs are coordinated with other providers in the County.

Purpose

The purpose of the EMS Continuous Quality Improvement Program (CQIP) is to improve the quality and effectiveness of emergency medical services through standardization, coordination, and evaluation. The EMS CQI Program coordinates its continuous quality improvement effort with, and reports to, the Ventura County Public Health Department Continuous Quality Improvement Program.

Goals

- ***Coordinate and facilitate implementation*** of a comprehensive, customer-oriented continuous quality improvement program
- ***Maximize utilization*** of both human and material resources within the EMS Program

[1] See Appendix I, *Ventura County Public Health Code of Ethics*

- ***Assure the greatest benefit*** from services rendered for people who live with or are affected by the Emergency Medical Services Agency in Ventura County
- ***Gauge the ongoing effectiveness*** of EMS CQIP efforts resulting in increased services.

VC EMS Agency

The VC EMS Agency operates according to California Health and Safety Code Division 2.5, Section 1798 and 1798.204.

The VC EMS CQI Program operates under the direction of the VC EMS Medical Director and the VC EMS Administrator. The VC EMS CQI Coordinator acts as facilitator to this meeting.

I. Technical Advisory Group (TAG)

A. Structure

The Technical Advisory Group (TAG) will be multidisciplinary and will include, but not be limited to:

- VC EMS Agency Medical Director
- VC EMS Agency Representative
- ALS Service Provider Medical Director
- Receiving Hospital Medical Director
- EMS Educator(s)
- Base Hospital CQI Representative
- ALS CQI Representative
- EMD CQI Representative
- BLS CQI Representative

B. Interactions

The Technical Advisory Group will seek and maintain relationships with all EMS participants including but not limited to:

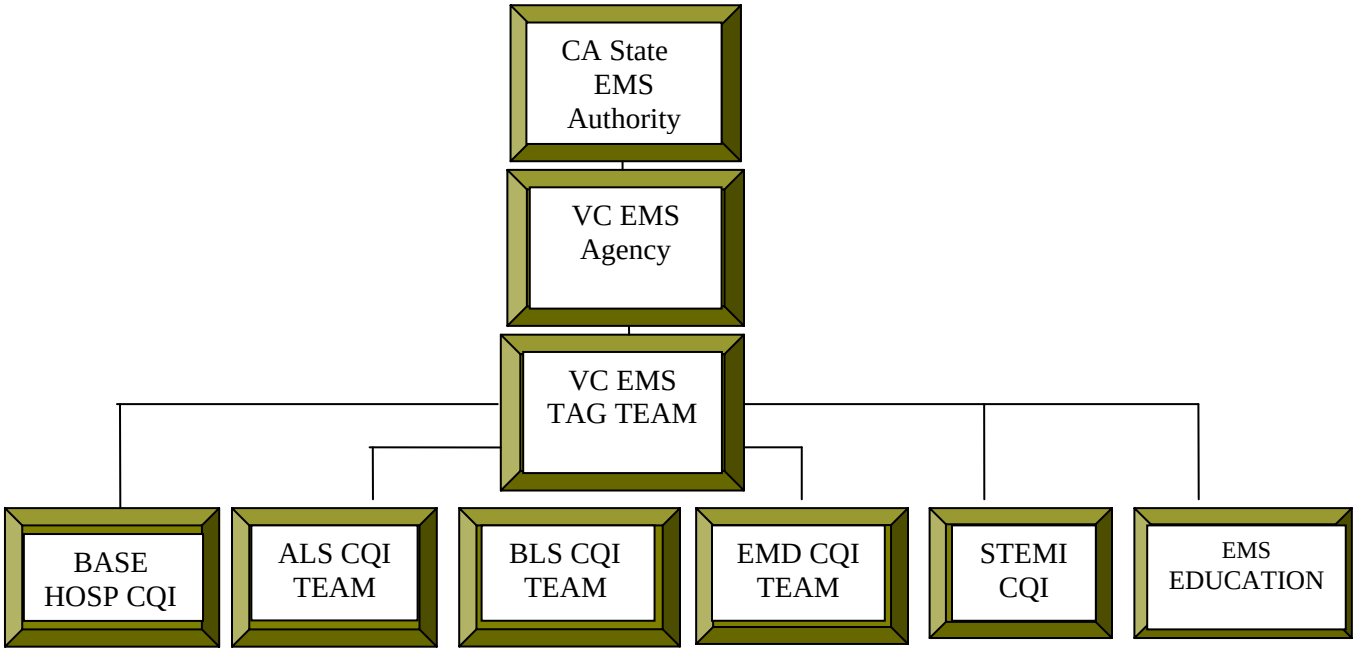
- State EMSA
- Other LEMSAs
- EMS Service Provider(s)
- Local Department of Health
- Specialty Care Center(s)
- Law Enforcement
- PSAP(s)
- EMS Dispatch Center(s)
- Constituent Groups

C. Roles and Responsibilities

The VC EMS TAG should be the central repository of local or regional EMS system information as it relates to EMS CQI Program activities. The team should perform the following functions:

- Cooperate with the EMSA in carrying out the responsibilities of statewide EMS QI Program and participate in the EMSA Technical Advisory Group
- Cooperate with the EMSA in the development, approval, and implementation of state required EMS system indicators
- Cooperate with the EMSA in the development, approval, and implementation of state optional EMS system indicators
- Maintain responsibility for monitoring, collecting data on, reporting on, and evaluating state required and optional EMS System indicators from the EMS providers and hospitals within the jurisdiction of the VC EMS.
- Identify and develop VC EMS specific indicators for system evaluation.
- Maintain responsibility for monitoring, collecting data on, and evaluating locally identified indicators
- Re-evaluate, expand upon, and improve state EMS system indicators and locally developed indicators annually or as needed
- Facilitate meetings and presentations on VC EMS indicators and the development of performance improvement plans for review by designated EMS providers
- Establish a mechanism to incorporate input from EMS provider advisory groups for the development of performance improvement plans
- Assure reasonable availability of EMS QI Program training and in-service education for EMS personnel under the statewide EMS CQI Program
- Prepare plans for improving VC EMS CQI Program

VC EMS Agency
Continuous Quality Improvement
Organizational Chart



II Base Hospital

A. Structure

The Base Hospital EMS QI Program should be a program reviewed by the VC EMSA for compatibility with the VC EMS CQI Program guidelines. The organizational chart should reflect the integration of the VC EMS CQI Program in the organization. There should be:

1. An EMS QI Team under the direction of the Base Hospital medical director. Lead staff should have expertise in management of the base hospital's EMS CQI Program. The following staffing positions are identified (note: organizations with limited resources may combine positions):

   - Base Hospital Medical Director (or designee)
   - EMS CQI Program Coordinator (Prehospital Care Coordinator)

2. An internal EMS QI Program Technical Advisory Group with members, which include but are not limited to:

   - Base Hospital Medical Director

- VC EMS CQI Coordinator
- EMS Service Provider Personnel (Physicians, RNs, Paramedics, EMTs)

B. Interaction

The Base Hospital's CQI Program should involve all EMS system participants including but not limited to the VC EMSA, dispatch agencies, ALS and BLS EMS service providers, receiving hospitals, and specialty care centers

Cooperation and interaction with all EMS system participants should include but not be limited to:

- State EMSA
- VC EMS
- Other Base Hospital(s)
- Receiving Facilities
- Local Department of Health
- Law Enforcement
- PSAP(s)
- Community Group(s)
- Non-EMS Public Representative(s)
- EMS Provider(s)

C. Roles and Responsibilities

The Base Hospital EMS QI Team should be a primary source of EMS activity reporting for statewide and local EMS system indicators. The Base Hospital EMS QI Program will perform the following functions:

- Cooperate with VC EMS in carrying out the responsibilities of the VC EMS CQI Program and participate in the VC MSA Technical Advisory Group
- Cooperate with VC EMS in the implementation of state required EMS system indicators
- Cooperate with VC EMS in the implementation of state optional EMS system indicators
- Cooperate with VC EMS in monitoring, collecting data on, and evaluating state required and optional EMS system indicators
- Cooperate with VC EMS in monitoring, collecting data on, and evaluating local/regional EMS system indicators
- Cooperate with EMSA and VC EMS in the re-evaluation and improvement of state and local EMS system indicators
- Identify and develop base hospital indicators for system evaluation
- Participate in meetings for internal review of base hospital indicators and development of performance improvement plans related to the findings
- Establish a mechanism to incorporate input from VC EMS, service providers, and other hospitals for the development of performance improvement plans
- Assure reasonable availability of EMS CQI Program training and in-service education for base hospital personnel
- Prepare plans for expanding or improving the Base Hospital EMS CQI Program
- Facilitate meetings and presentations of state and local EMS system indicators for peer review to local designated advisory groups and other authorized constituents
- Provide technical assistance to all EMS CQI Programs in the base hospital's jurisdiction
- Participate in annual CQI review conducted by VC EMS

D. Annual Updates

The Base Hospital EMS QI Team will annually publish summary reports of EMS QI Program activity for distribution.

III Emergency Medical Service Provider

A. Structure

The EMS Provider EMS QI Program should be reviewed by VC EMS for compatibility with the VC EMS CQI Program guidelines. The organizational chart should reflect the integration of the EMS CQI Program in the organization. There should be:

1. An EMS QI Team under the direction of the EMS Provider medical director or EMS administrator. Lead staff should have expertise in management of the EMS provider's EMS QI Program. The following staffing positions are identified (organizations with limited resources may combine positions):

   - Provider Medical Director or Designee
   - EMS CQI Program Coordinator

2. An internal EMS CQI Program Technical Advisory Group with members which include but are not limited to:

   - Medical Director or Medical Designee
   - VC EMSA CQI Coordinator
   - EMS QI Program Coordinator
   - Service Personnel (Physicians, RNs, Paramedics, EMTs)
   - Other system participants

B. Interaction:

The EMS Provider's EMS QI Program should involve EMS system participants including but not limited to dispatch agencies, the VC EMSA, EMS personnel training programs, hospitals, specialty care centers, and other EMS service providers. A regional approach, with collaboration between EMS service providers serving neighboring communities, is highly recommended

Cooperation with all EMS participants should include but not limited to:

- State EMSA
- VC EMS
- Other EMS Provider(s)
- Base and Receiving Facilities
- Local Department of Health
- Law Enforcement
- PSAP(s)
- Community Group(s)
- Non-EMS Public representative(s)
- EMS Dispatch Center(s)

C. Roles and Responsibilities

The EMS Provider's EMS CQI Program Technical Advisory Group should be the primary source of EMS QI Program activity reporting for statewide and local EMS System information. The EMS Provider's EMS CQI Program Technical Advisory Group will perform the following functions:

- Cooperate with VC EMS in carrying out the responsibilities of the VC EMS's CQI Program and participate in the VC EMSA Technical Advisory Group
- Cooperate with VC EMS in the implementation of state required EMS system indicators
- Cooperate with VC EMS in the implementation of state optional EMS system indicators
- Cooperate with VC EMSA in monitoring, collecting data on, and evaluating state required and optional EMS system indicators
- Cooperate with VC EMSA in monitoring, collecting data on, and evaluating local/regional EMS system indicators
- Cooperate in the re-evaluation and improvement of state and local EMS system indicators
- Develop, monitor, collect data on, and evaluate indicators specific to the EMS provider
- Conduct meetings for internal review of EMS provider information and development of performance improvement plans related to the findings
- Establish a mechanism to receive input from VC EMS, other service providers and other EMS system participants for the development of performance improvement plans
- Assure reasonable availability of EMS CQI Program training and in-service education for EMS provider personnel
- Prepare plans for expanding or improving the EMS Provider EMS CQI Program
- Participate in meetings and presentations of state EMSA and VC EMS system information for peer review to local designated advisory groups and other authorized constituents
- Participate in annual CQI review conducted by VC EMS
- Develop and conduct a system of Peer Review

D. Annual Updates

The EMS Provider EMS QI Team will annually publish summary reports of EMS QI Program activity for distribution.

IV Emergency Medical Dispatch

A. Structure

The EMD CQI Program should be reviewed by VC EMSA for compatibility with the VC EMS CQI Program guidelines
The organizational chart should reflect the integration of VC EMS CQI Program in the organization. There should be:

1. An EMD CQI Team under the direction of the EMD medical director. Lead staff should have expertise in management of the EMD CQI program. The following staffing positions are identified ()organizations with limited resources may combine positions):

    - Medical Director or Designee
    - VC EMS CQI Coordinator
    - EMD CQI Program Director
    - Other county EMD representatives

B. Interactions

The EMD CQI Program should involve EMS system participants including but not limited to other local dispatch agencies, the VC EMSA, EMS personnel training programs, hospitals, specialty care centers, and other EMS service providers. A regional approach, with collaboration between EMD Program serving neighboring communities, is highly recommended

An internal EMD CQI Program Technical Advisory Group with members which include but are not limited to:

- Medical Director
- Chief/Administrator or designee
- EMD CQI Program Coordinator
- Service Personnel
- Other system participants

C. Roles and Responsibilities

The EMD CQI Program Technical Advisory Group should be the primary source of EMD CQI Program activity reporting for statewide and local EMS System information. The EMD CQI Program Technical Advisory Group will perform the following:

- Cooperate with VC EMS in carrying out the responsibilities of VC EMS's CQI Program and participate in VC EMS Technical Advisory Group
- Cooperate with VC EMS in the implementation of state required EMS system indicators
- Cooperate with VC EMS in the implementation of state optional EMS system indicators
- Cooperate with EMSA and VC EMS in monitoring, collecting data on, and evaluating state required and optional EMS system indicators
- Cooperate with VC EMS in monitoring, collecting data on, and evaluating local/regional EMS system indicators
- Cooperate in the re-evaluation and improvement of state and local EMS system indicators
- Develop, monitor, collect data on, and evaluate indicators specific to the EMD Program
- Conduct meetings for internal review of EMD information and development of performance improvement plans related to the findings
- Establish a mechanism to receive input from VC EMS, other service providers and other EMS system participants for the development of performance improvement plans
- Assure reasonable availability of EMD Program training and in-service education for EMS provider personnel
- Prepare plans for expanding or improving the EMD CQI Program
- Participate in meetings and presentations of state EMSA and VC EMS system information for peer review to local designated advisory groups and other authorized constituents
- Participate in annual CQI review conducted by VC EMS
- Provide monthly CQI reports as determined by VC EMS

D. Annual Updates

The EMD EMS CQI Team will annually publish summary reports of EMS CQI Program activity for distribution

V. Basic Life Support Service Provider

A. Structure

The EMS/BLS Provider CQI Program should be reviewed by VC EMS for compatibility with the VC EMS CQI Program guidelines. The organizational chart should reflect the integration of the EMS CQI Program in the organization. There should be:

1. An EMS/BLS CQI Team under the direction of the BLS Provider medical director or EMS Administrator. Lead staff should have expertise in management of the EMS/BLS provider's CQI Program. The following staffing positions are identified (organizations with limited resources may combine positions):

   - Provider Medical Director or Designee
   - EMS CQI Program Coordinator, or EMS Coordinator

2. An internal EMS/BLS CQI Program Technical Advisory Group with members which include but are not limited to:

   - Medical Director or Medical Designee
   - VC EMSA CQI Coordinator
   - EMS QI Program Coordinator, or EMS Coordinator
   - EMTs
   - Other system participants

B. Interaction:

The EMS/BLS Provider's CQI Program should involve EMS system participants including but not limited to dispatch agencies, the VC EMSA, EMS personnel training programs, hospitals, specialty care centers, and other EMS service providers. A regional approach, with collaboration between EMS service providers serving neighboring communities, is highly recommended

Cooperation with all EMS participants should include but not limited to:

- State EMSA
- VC EMS
- Other EMS/ BLS Provider(s)
- Base and Receiving Facilities
- Local Department of Health
- Law Enforcement
- Community Group(s)
- Non-EMS Public representative(s)
- EMS Dispatch Center(s)

C. Roles and Responsibilities

The EMS/BLS Provider's CQI Program Technical Advisory Group should be the primary source of EMS/BLS CQI Program activity reporting for statewide and local EMS System information. The Provider's CQI Program Technical Advisory Group will perform the following functions:

- Cooperate with VC EMS in carrying out the responsibilities of the VC EMS's CQI Program and participate in the VC EMSA Technical Advisory Group
- Cooperate with VC EMS in the implementation of state required EMS system indicators
- Cooperate with VC EMS in the implementation of state optional EMS system indicators
- Cooperate with VC EMSA in monitoring, collecting data on, and evaluating state required and optional EMS system indicators
- Cooperate with VC EMSA in monitoring, collecting data on, and evaluating local/regional EMS system indicators
- Cooperate in the re-evaluation and improvement of state and local EMS system indicators
- Develop, monitor, collect data on, and evaluate indicators specific to the EMS/BLS provider
- Conduct meetings for internal review of EMS/BLS provider information and development of performance improvement plans related to the findings
- Establish a mechanism to receive input from VC EMS, other service providers and other EMS system participants for the development of performance improvement plans
- Assure reasonable availability of EMS/BLS CQI Program training and in-service education for EMS provider personnel
- Prepare plans for expanding or improving the provider EMS/BLS CQI Program
- Participate in meetings and presentations of state EMSA and VC EMS system information for peer review to local designated advisory groups and other authorized constituents

D. Annual Updates

The EMS/BLS Provider CQI Team will annually publish summary reports of program activity for distribution.

Goals

The following Dimensions of Performance[2] and additional Aspects of Care[3] form the framework upon which the CQIP process is based. They are:

DOING THE RIGHT THING

- The ***Efficacy*** of service in relation to the client's needs.
- The ***Appropriateness*** of a specific service to meet the client's needs.

DOING THE RIGHT THING WELL

- The ***Availability*** of needed service to the client who needs it
- The ***Timeliness*** with which service is provided to the client
- The ***Effectiveness*** with which services are provided
- The ***Continuity*** of the services provided to the client with respect to other services, practitioners, and providers, over time
- The ***Respect and Caring*** with which services are provided

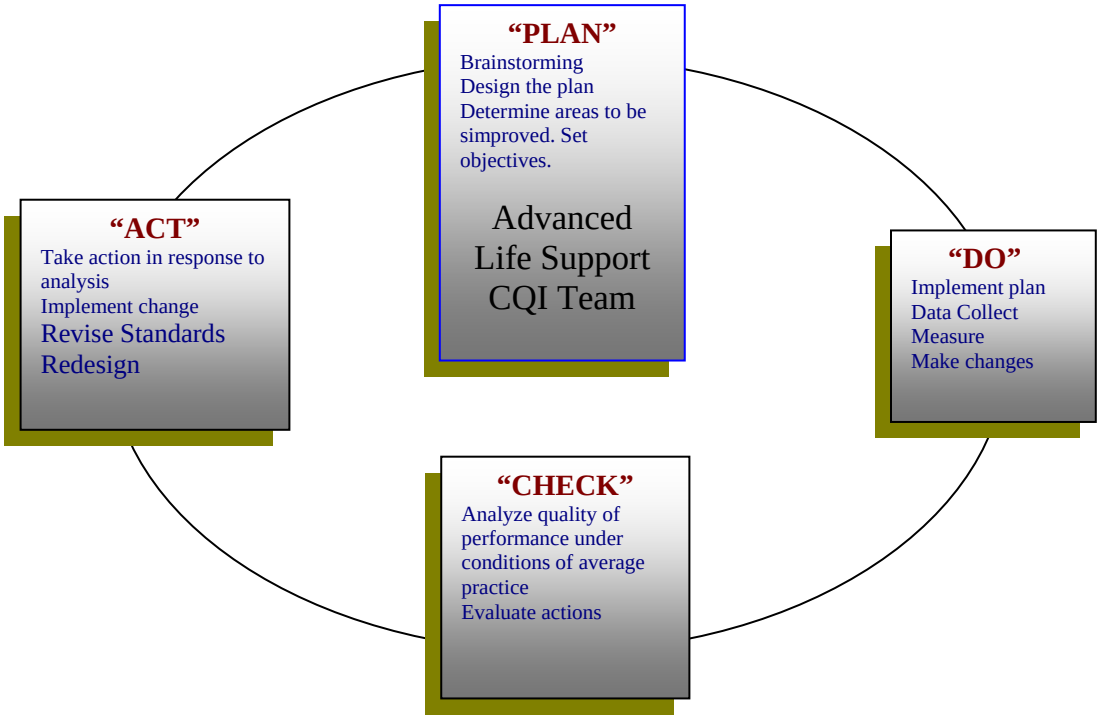
ADDITIONAL ASPECTS OF SERVICE

- Provider Staff Performance
- Support Staff Performance
- Client Record System
- Client Compliance
- Client Satisfaction

[2] Joint Commission On Accreditation of Health Care Organizations
[3] Benson, Dale S., M.S. and Miller, Jane, R.N., *Quality Assessment and Improvement for Primary Care Centers*, Methodist Hospital of Indiana, 1991: Chapter 3, p. 17-24.

CQIP Methodology

We have chosen to use the "PDCA" methodology[4] (Plan, Do, Check, Act). See Appendix VI.



Program-Level Continuous Quality Improvement Implementation Cycle

Plan

Each program will construct (or update) a strategic quality improvement action plan that links to the department's mission, vision, goals, and translates them into the program's specific domains. Programs will develop and implement ways to analyze input from internal and external customers, as well as identify external comparative data sources, and identify and prioritize program assets and needs.

The Nursing Process Model calls for programs to assess diagnosis problems and develop a plan to address them.

Do

Programs select models and methods for measuring objectives. Objectives should be "S-M-A-R-T" (*Specific, Measurable, Achievable, Relevant, Timely). Programs also develop and/or identify internal data sources (formal and/or informal) used in the next phase to establish benchmarks and assess improvement priorities. This includes developing strategies for improvement, identifying sources of relevant information, and identifying external data sources that can provide benchmarks for improvement.

Check

Programs will conduct evaluations to obtain judgments of quality (performance, outcome) about their service delivery or practice. They will also coordinate ongoing data analysis and evaluation and quality improvement efforts with the CQIP Committee. The purpose of this coordination is to improve the overall performance of Public Health.

Information from internal and external sources is collected and used to develop and assess quality improvement priorities. This step also utilizes external data and information sources to compare processes and outcomes with external benchmarks. The American Nurses Association (and other groups) provides general and specific standards for evaluation of processes and outcomes.

Act

Programs will identify next areas of improvement and revise specifications and standards to meet those new needs. They will conduct ongoing internal data analysis and evaluation, and identify areas needing quality improvement efforts. Programs will participate in the consolidation of their individual program CQIP plans to assure coordination and best use of department resources.

Priorities that programs have developed are translated into actual *improvements* and/or innovative actions. These actions then lead to the *redesign* of objectives, which completes the cycle by leading back to the "Plan" phase of designing new procedures.

SECTION I
DATA COLLECTION & REPORTING

Purpose
To improve the EMS system, information must first be collected, reported, and evaluated. The following are guidelines for data collection and reporting of EMS information.

A. Data Collection

Aspects of care which are identified as important should be monitored despite the possible complexity of necessary data or challenges associated with the data collection. All reliable sources of information should be utilized in the evaluation of system performance. EMS organizations should also consider the use of hard copy review, collection check-sheets, customer surveys, direct observation, and skills simulation.

B. Approach to Data System Development

Information systems should be designed to answer EMS system performance questions. It is strongly recommended that EMS organizations establish a practical consensus and clear understanding with all users regarding the purpose for collecting and processing the data. This step is vital to assure validity and reliability.

The following activities are recommended prior to data systems development:

1. Identify the specific mission and purpose of the organization
2. Identify the most important services that support the mission and purpose
3. Identify the resources, activities, and results that comprise the services
4. Identify what information must be reported to others, such as LEMSAs or the state EMSA
5. Identify specific questions (regarding the structures, activities, and outcomes within your organization), which need to be answered in order to better understand the success of the mission and purpose
6. Define how each question will be answered
7. Use the answers as the basis for developing indicators
8. Develop a quality indicator
9. Use the indicators as the basis for identifying what data is needed
10. Develop your technical plan for data collection based upon the elements identified
11. Test the process prior to investing in a data system
12. Recognize that an effective EMS QI Program is dynamic and therefore constantly changing, and incorporate this need for change into your data vendor contract (if applicable) and/or your data management plan

The California State EMS data set (with associated definitions) should be incorporated to allow for statewide data collection. Statewide EMS system indicators provide for comparative analysis between similar EMS providers/LEMSAs as well as statewide system evaluation. Additional data elements and code sets should be collected at a local level to focus on regional issues and concerns. The National EMS Information System (NEMSIS) data set (with associated definitions) may provide consistent data collection with these additional data elements.

Validity and Reliability

Validity - The data have validity if there is sufficient evidence to warrant the collection and use of the information for the purpose of measuring the performance of the EMS system. The information is valid if it is:

- Representative of important aspects of service performance
- Determined to be important for successful service performance
- Predictive of or significantly correlated with important elements of performance

Reliability – The data have reliability if the collection and interpretation methods can be trusted to be consistent and predictable. If the data collection is always performed in the same way, using the same data collection tools and interpreted with the same definitions, the information is likely to be reliable. Standardized definitions or agreement by the users regarding what the data will indicate and how they will be collected is critical to the success of the overall program.

C. Organizational Reporting

Data collection, reporting, and analysis shall occur at each of the four organizational levels. Each level shall submit information to their respective advisory group. Data collection and reporting should be done in the form of summary reports and may be based upon core EMS system indicators as adopted by the State EMSA, LEMSA, hospital, or individual EMS provider. Data collected specific to personnel shall only be exchanged between the personnel and provider levels. EMS information should be consistent in how it is organized, analyzed, presented and evaluated.

See A*ppendix III* for specific diagram showing the flow and exchange of information at all levels.

SECTION II
EVALUATION OF EMS SYSTEM INDICATORS

Organizational Structure
In order to provide a continuous evaluation of EMS services, it is recommended that the organizations establish technical advisory groups at each level (state, local, hospital, and provider). Each technical advisory group should be responsible for decision-making regarding evaluation and improvement and should be composed of stakeholders within the system under evaluation.
Organization of Information
EMS organizations shall develop indicators which address but are not limited to the following (*Appendix E*):
(1) Personnel
(2) Equipment and Supplies
(3) Documentation
(4) Clinical Care and Patient Outcome
(5) Skills Maintenance/Competency
(6) Transportation/Facilities
(7) Public Education and Prevention
(8) Risk Management
The recommended approach to organizing data and other sources of information is through the development and use of standardized indicators.

Indicators Defined
According to the Joint Commission on Accreditation of Healthcare Organizations, an indicator is "a quantitative performance measure…a tool that can be used to monitor performance and direct attention to potential performance issues that may require more intensive review within an organization." In other words, an EMS indicator measures the degree of conformance to a reasonable expectation as defined by the community served. Indicators may be related to structures (people, places, things), processes (activities occurring in a system), and outcomes (the results of the structures and activities within a system). In fact, the three types of indicators (structure, process, and outcome) are all related and dependent upon one another. Hence the following equation:

STRUCTURE + PROCESS = OUTCOME

Changes in structure may affect the process and the outcome. Likewise, changes in the process may affect the structure and outcome. Indicators, in short, are a way to simplify information so that data can be digested more efficiently and in a meaningful way.

Required EMS System Indicators
Statewide EMS system indicators as developed and adopted by the EMSA should be incorporated to allow comparison within the state at all levels. These indicators are developed through a statewide consensus process and supported by the statewide data system.

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Optional EMS System Indicators
Recommended indicators are developed and designed on an as-needed basis and may be used for the long or short term or on an ad hoc basis depending on the goals of the group developing the indicators. While the state may develop some indicators, most development will occur at the local level. All EMS organizations are encouraged to develop their own indicators based upon their specific needs. Ad hoc indicators are not reported outside of the specific user group and level of organization.

Analysis
Prior to presenting or distributing indicators, it is recommended that the results be analyzed to include measurements appropriate for rapid interpretation by evaluators. Measurements may include the following:

- Statistical
  - Measures of Central Tendency
  - Measures of Dispersion
- Process Analysis
  - Trending
  - Causation
  - Benchmarking
  - Best Practices
  - Published References

Presentation
The results and measurements of indicators should be presented to the users of the information in a formal process and on a regularly scheduled basis. Each presentation should include the purpose, objectives, references, benchmarks, measurements, and indicator detail sheet for clarification of data. The indicator information should be displayed to evaluators in a format that is most appropriate for the speed and ease of interpretation. The following are typical ways to display an indicator result:

- Flow Chart
- Fishbone – Cause and Effect Diagram
- Pareto Chart
- Histogram
- Scatter Diagram
- Run Chart
- Control Chart

Examples, definitions, and application of these display methods are illustrated in *Appendix L.*

Decision-Making Process
Each organizational level should have a structured process for making decisions. The following is a general outline of the steps in a structured process for evaluation and decision-making by the Technical Advisory Group:

1. Identify the objectives of evaluation
2. Present indicators and related EMS information
3. Compare performance with goals or benchmarks
4. Discuss performance with peers/colleagues
5. Determine whether improvement or further evaluation is required
6. Establish plan based upon decision
7. Assign responsibility for post-decision action plan

SECTION III
ACTION TO IMPROVE

Approach to Performance Improvement
Once valid information has been presented and reliability evaluated, the decision to take action or to solve a problem requires a structured approach that is adaptable and applied to each situation as it is identified. There are many standardized and well-developed quality/performance improvement programs, which may be used during this phase. In all cases, each EMS QI Program Technical Advisory Group should choose an improvement method that is systematic and based upon evidence. The approach to improvement should also be team oriented and be done in a way that does not overwhelm the process due to size and complexity. Small wins are sometimes the basis for the larger wins. It is recommended that initial improvement projects be simple and based upon a strong consensus within the Technical Advisory Group that improvement will benefit all.

Technical Advisory Group
The EMS QI Program at each organizational level should have an oversight body that is responsible for implementing the quality/performance improvement plan. This group may be the same group that collects data from and evaluates the local system. The group should be responsible for delegating action to smaller groups (e.g., the Quality Task Force) and for monitoring the process as it unfolds within the system.

Quality Task Force
It is recommended that the Technical Advisory Group utilize smaller groups within the organizational level to carryout improvement action plans. Quality Task Forces are smaller sub-groups of the larger quality oversight body. Task forces are established to develop and implement action plans. Each task force has one project and is responsible for reporting all activities to the larger oversight group. Once the project is completed, the task force is disbanded. There may be more than one task force working concurrently, with each task force working on a specific action plan.
Note: Availability of resources can vary greatly between urban and rural agencies. It is understood that one task force may handle multiple projects or the Technical Advisory Group may handle the projects without forming any task forces.

Performance Improvement Plan
While there are many approaches to a Performance Improvement Plan within an organization, it is recommended that each Quality Task Force choose a standardized approach and use the same process each time a project is undertaken. The following are traditional components of a standardized improvement process:

- Establish criteria for measurement and evaluation
- Evaluate information
- Make a decision to take action to improve
- Establish criteria for improvement
- Establish an improvement plan
- Measure the results of the improvement plan
- Standardize or integrate change (plan) into the system
- Establish a plan for monitoring future activities

SECTION IV
TRAINING AND EDUCATION

Introduction
Effectiveness of the EMS QI Program and related training is directly proportional to the energy and resources committed. Administrative oversight should be available and directly involved in the process. When clinical issues are addressed, medical oversight is recommended.

Action to improve process is intertwined with training and education
Once the decision to take action or to solve a problem has occurred, training, and education are critical components that need to be addressed. As a Performance Improvement Plan is developed, the Technical Advisory Group will establish criteria for measurement and evaluation. Based on these criteria, delivery methods and content of training will be developed. This integrated process will avoid any misdirection that may occur when training is isolated from the EMS QI Program. Success of the performance improvement plan is dependent upon changing the behavior and knowledge of the staff who deliver care to patients or services to other participants (e.g., EMSA to LEMSA, LEMSA to EMS provider) in the EMS system. To implement change, you must deliver verifiable, ongoing training that is appropriate to the skill level and service goals of the organization.

Medical direction
To successfully implement a Performance Improvement Plan, the organization's EMS QI Program team shall have input into the content and delivery methods of related training and education. This involvement will provide consistency between the current and subsequent Performance Improvement Plans. The structure of the organization shall place the oversight for directing clinical training and education at the highest level of medical knowledge.

Measure the results of the Performance Improvement Plan
Once the Performance Improvement Plan has been implemented, the measurement of a successful outcome will be dependent upon the validity of the plan and the effectiveness of the training and education. If the outcome is not satisfactory, it is necessary to examine both the content of the Plan and delivery method of related training and education.

Integrate change
Once the Performance Improvement Plan has been successfully implemented, the organization needs to standardize the changes within appropriate policies and procedures. When appropriate, assure that staff have successfully completed the training and educational components of the plan. The final steps in integrating change into the system will be to schedule continuing education at appropriate reoccurring intervals and re-evaluate the original EMS system indicators.

SECTION V
Annual Update Guidelines

The Annual Update is a written account of the progress of an organization's activities as stated in the EMS QI Program. In compiling the Annual Update, refer to the previous year's update and work plan.

Description of agency

The description should include an organizational chart showing how the EMS CQI Program is integrated into the organization.

Statement of EMS CQI Program goals and objectives

Describe processes used in conducting quality improvement activities.
Were goals and objectives met?

List and define indicators utilized during the reporting year

- Define state and local indicators
- Define provider specific indicators
- Define methods to retrieve data from receiving hospitals regarding patient diagnoses and disposition
- Audit critical skills
- Identify issues for further system consideration
- Identify trending issues
- Create improvement action plans (what was done and what needs to be done)
- Describe issues that were resolved
- List opportunities for improvement and plans for next review cycle
- Describe continuing education and skill training provided as a result of Performance Improvement Plans
- Describe any revision of in-house policies
- Report to constituent groups
- Describe next year's work plan based on the results of the reporting year's indicator review

Sample Work Plan Template

Indicators Monitored	Key Findings/Priority Issues Identified	Improvement Action Plan Plans for Further Action	Were Goals Met? Is Follow-Up Needed?

SECTION VI
Confidentiality

The activities of the VC EMS CQI Program are legally protected under the California Health & Safety Code Section 1157. The law protects those who participate in quality of care or utilization review. It provides further that "neither the proceedings nor the records of such reviews shall be subject to discovery, nor shall any person in attendance at such reviews be required to testify as to what transpired thereat."

All copies of minutes, reports, worksheets and other data are stored in a manner ensuring strict confidentiality. A written confidentiality policy detailing procedures for maintenance and release of data and other information governs the release of such information. This policy specifies the use of record number or other identifiers in place of client names, and code numbers in place of provider and staff names. This policy also provides methods for restricting all quality improvement documents solely to authorized individuals. In addition, all data shall be considered protected information under the provisions of the California Evidence Code 1157.

EMS Agency CQI Program Coordinator	EMS Agency CQI Medical Director	EMS Agency CQI Committee Member
Signature:	Signature:	Signature:
Date:	Date:	Date:
		Position:

APPENDIX I

VENTURA COUNTY PUBLIC HEALTH DEPARTMENT CODE OF ETHICS

It is the mission of the Ventura County Public Health Department (VCPH) to optimize the health of the community by promoting healthy lifestyles, and preventing and controlling disease, injury and disability. VCPH will operate according to the following code of ethics to carry out this mission. We will:

- **A**ddress the fundamental causes of disease and requirements for health, aiming to prevent adverse health outcomes and promote positive health outcomes.
- **D**evelop and evaluate policies, programs, and priorities through processes that foster an opportunity for input from community members.
- **A**dvocate and work for the empowerment of disenfranchised community members, making every effort to ensure that the basic resources and conditions necessary for health are accessible to all people in our communities.
- **S**eek the information needed to implement effective policies and programs that protect and promote health.
- **P**rovide communities with the best available information needed for decisions on policies or programs.
- **A**ct in an appropriate and timely manner on available health information within our resources and mandate.
- **I**ncorporate into our programs and policies a variety of approaches that anticipate and respect diverse values, beliefs, and cultures in our communities, and that also respect and protect the rights of individuals.
- **I**mplement programs and policies in a manner that most enhances our physical and social environment.
- **P**rotect the confidentiality of information that can bring harm to an individual or community if made public. Exceptions must be justified on the basis of the high likelihood of significant harm to the individual or others.
- **E**nsure and continually enhance the professional competence of our employees, and of the department as a whole.
- **E**ngage in collaborations and affiliations with our communities and other health and human services entities in ways that build the public's trust, the effectiveness of our employees, and of our department as a whole.

APPENDIX II

VENTURA COUNTY EMS AGENCY
PROGRAM INDICATORS

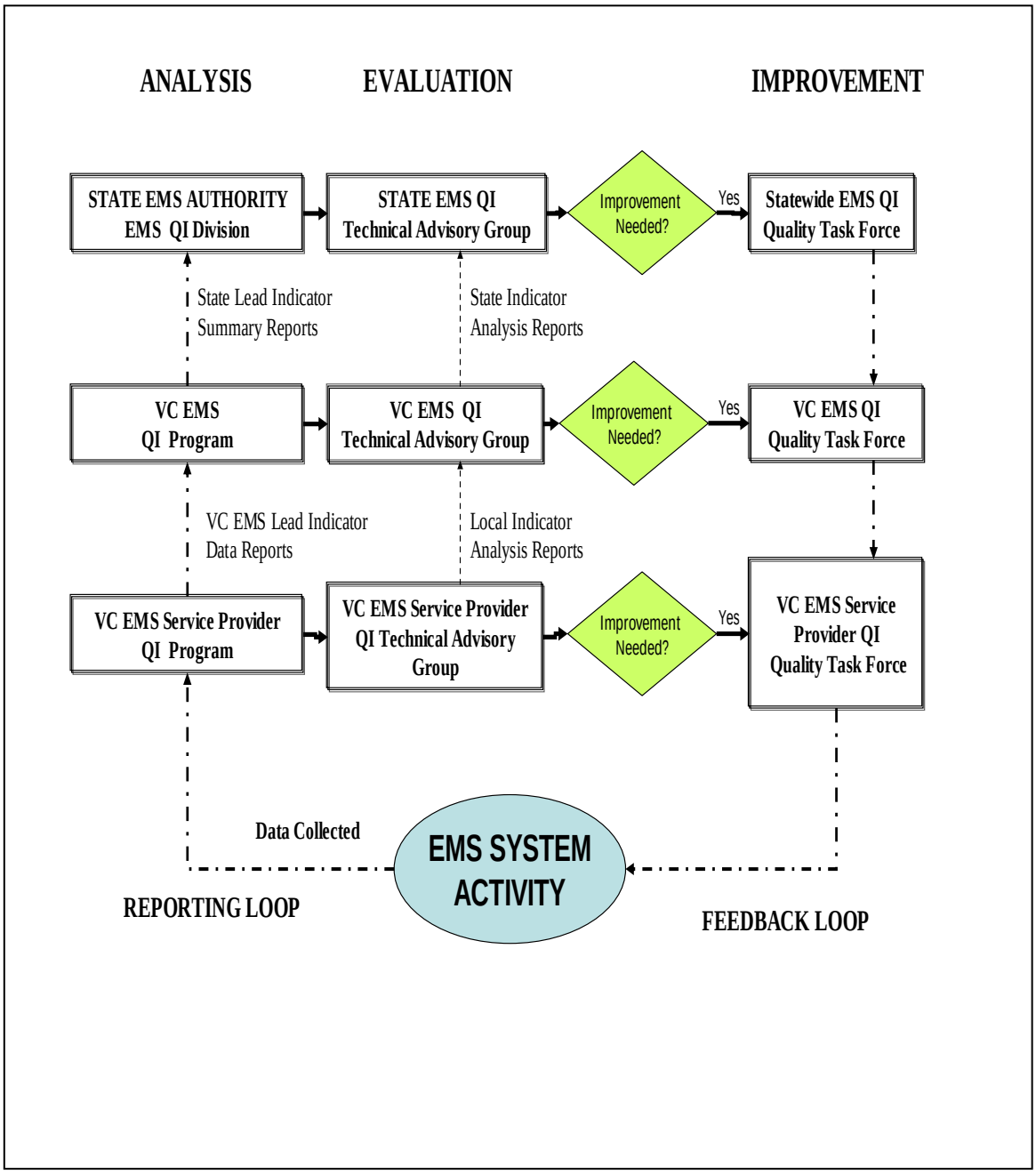
Measure	Definition	Goal
Emergency Medical Dispatch % "Call Entry" correctly followed	Verification of call back #, initial patient conditions to establish Priority Dispatch Determinant	Measured on high risk and random calls 96% C.E. Std, 90% Scoring Std
Emergency Medical Dispatch % correct EMD card selected	Prewritten dispatch card selected based on responses by reporting party	Measured on high risk and random calls 96% C.E. Std, 90% Scoring Std
Emergency Medical Dispatch %Dispatch/Treatment questions asked	Questions asked verbatim related to chief complaint	Measured on high risk and random calls 96% C.E. Std, 90% Scoring Std
Emergency Medical Dispatch %Correct Pre-arrival instructions given	Instructions given correctly to reporting party related to chief complaint	Measured on high risk and random calls 96% C.E. Std, 90% Scoring Std
Emergency Medical Dispatch % Correct final coding	Coding assigned and dispatched correctly	Measured on high risk and random calls 96% C.E. Std, 90% Scoring Std
Advanced Life Support %Rhythm Recognition on 100% patients with AF and SVT	Difference between Rapid Atrial Fibrillation and Supraventricular Tachycardia	Identification of paramedic skill reflective on county education and policy
Advanced Life Support CQI %Correct documentation	Prehospital documentation completed as required on above cases	100% correct documentation using county approved electronic documentation tool
Advanced Life Support CQI % Correctly Intubated Medical Arrests	Number of attempts, Number of successful attempts, reasons for failure. Correct use of policy.	Benchmark not determined Identification of success rate and focus areas for improvement
Advanced Life CQI Team % Correctly Intubated Traumatic Arrests	Number of attempts, Number of successful attempts, reasons for failure. Correct use of policy.	Benchmark not determined Identification of both success rate and focus areas needed for improvement
Advanced Life Support CQI %Correctly Intubated Respiratory Extremis	Number of attempts, Number of successful attempts, reasons for	Benchmark not determined Identification of both success rate and focus

	failure. Correct use of policy.	areas needed for improvement
Advanced Life Support CQI Correct parameters used to determine necessity for intubation on the patient in Respiratory Extremis	Level of Consciousness, Chief Complaint, O2 Saturation, Respiratory Effort, Glascow Coma Scale, Skins will be the evaluation criteria for determining need for intubation on patients presenting with Resp Extremis	Determination of benchmark in progress. Goal is to provide prehospital care providers with parameters to use in determining need for intubation on the patient who is “alive”.
Base Hospital CQI % Medication Errors in prehospital venue	Dose, route, patient, drug, calculation, and policy compliance measured	Measurement of skills performance. Determine focus areas for improvement
Base Hospital CQI % Correctly administered Versed in prehospital venue	Dose, route, patient, drug, calculation, and policy compliance measured	Measurement of skills performance. Determine focus areas for improvement
Advisory Team CQI *Trauma Study* Time Study • On Scene • Dispatch to arrival	Compliance with required time to destination (8minutes) Reasonable amount of time spent on scene	100% compliance with dispatch to arrival time of 8 minutes Individual case evaluation of time on scene
Advisory Team CQI *Trauma Study* % Correct Trauma Assessment	Physical assessment and scene assessment done according to VC EMS policy with correct documentation	Comprehensive and appropriate physical and scene assessment performed
Advisory Team CQI *Trauma Study* % Indicated procedures performed	Correct procedures done in response to physical assessment and history	100% of indicated procedures completed based on physical and scene assessment
Advisory Team CQI *Trauma Study* % Correct medications given	Medications given according to physical assessment and history in accordance to VC EMS policy	Medications given according to policy 100% of the time
Advisory Team CQI *Trauma Study* % Vital signs taken	Objective data obtained on a regular basis, and in response to treatment administered	V/S will be monitored and documented according to pt condition and treatments administered 100% of the time
Unusual Occurrences % annual occurrences by categories, providers	Events outside the norm of acceptable patient care, or outside the normal flow of operations surrounding dispatch, response, rescue and disposition of all ALS and BLS Calls	Events trended to identify focal areas for improvement in delivery of EMS care in the County of Ventura.

Appendix III

Ventura County EMS Agency
Flow of Information and Activity

This diagram illustrates the organizational structure for analysis, evaluation, and improvement and demonstrates the fundamental interconnectedness of these critical components. Comprehensive evaluation lays the foundation upon which improvement shall occur.


ANALYSIS
EVALUATION
IMPROVEMENT
STATE EMS AUTHORITY
EMS QI Division
STATE EMS QI
Technical Advisory Group
Improvement Needed?
Yes
Statewide EMS QI
Quality Task Force
State Lead Indicator
Summary Reports
State Indicator
Analysis Reports
VC EMS
QI Program
VC EMS QI
Technical Advisory Group
Improvement Needed?
Yes
VC EMS QI
Quality Task Force
VC EMS Lead Indicator
Data Reports
Local Indicator
Analysis Reports
VC EMS Service Provider
QI Program
VC EMS Service Provider
QI Technical Advisory
Group
Improvement Needed?
Yes
VC EMS Service
Provider QI
Quality Task Force
Data Collected
EMS SYSTEM
ACTIVITY
REPORTING LOOP
FEEDBACK LOOP