CONTRA COSTA
HEALTH SERVICES

Emergency Medical Services Agency

EMS System Plan Annual Update
2009

August 2010

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SECTION I: SUMMARY OF CHANGES TO EMS PLAN

The following is a summary of significant changes in the Contra Costa EMS Plan since the last reporting period:

(1) A competitive selection process for emergency ambulance service was conducted for ERA IV, comprised of the territory of the San Ramon Valley Fire Protection District, with the result that the San Ramon Valley Fire Protection District was awarded an exclusive contract for the term November 3, 2008 through October 31, 2018.

(2) Contra Costa's STEMI System - added Sutter Delta Medical Center as a designated STEMI receiving center on August 17, 2009, joining the previously designated as STEMI receiving facilities approved in September 2008:

Doctors Medical Center, San Pablo

John Muir Medical Center, Concord Campus

John Muir Medical Center, Walnut Creek Campus

Kaiser Medical Center, Walnut Creek

San Ramon Regional Medical Center

(3) *HeartSafe* Community Program launched in 2009 enhancing public education efforts to reduce mortality and morbidity associated with heart attack and stroke, while promoting appropriate use of 9-1-1, AED and CPR throughout the EMS System.

(4) Updated Trauma System Plan submitted to EMSA June 2009 approved by EMSA on January 20, 2010.

(5) Contra Costa County Medical Reserve Corp (CCCMRC) became official in May 2009, it registered with the US Citizen Corps and now listed on the federal website as an official MRC as well as with Disaster Healthcare Volunteers.

SECTION II: UPDATES OF SPECIFIC INFORMATION

EMSA TABLE 2 - SYSTEM ORGANIZATION AND MANAGEMENT

1. Percentage of population served by each level of care by county:

a. Basic Life Support (BLS)	____ %
b. Limited Advanced Life Support (LALS)	____ %
c. Advanced Life Support (ALS)	100 %

2. Type of agency: b

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. Person responsible for day-to-day EMS Agency activities reports to: b

a. Public Health Officer
b. Health Services Agency Director/Administrator
c. Board of Directors
d. Other:____

4. Indicate the non-required functions that 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	x
Enforcement of local ambulance ordinance	x
Enforcement of ambulance service contracts	x
Operation of ambulance service	n/a
Continuing education	x
Personnel training	x
Operation or oversight of EMS dispatch center	x
Non-medical disaster planning	x
Administration of critical incidents stress debriefing (CISD) team	n/a
Administration of disaster medical assistance team (DMAT)	n/a
Administration of EMS Fund [Senate Bill (SB) 12/612]	x
Other: Tracking and monitoring hospital emergency and critical care capacity	x
Other: Procuring and monitoring emergency ambulance services countywide	x
Other: Implementing EMS program enhancements funded under County Service Area EM-1	x
Other: Planning for/coordinating disaster medical response at local/regional levels	x

5. EMS Agency budget FY 08/09

a. EXPENSES

Salaries and benefits	$ 1,518,144
Contract services	891,556
Operations (e.g. copying, postage, facilities)	1,785,227
Travel	19,000
Fixed assets	-
Indirect expenses (overhead)	-
Ambulance subsidy	-
EMS Fund payments to physicians/hospital	1,605,000
Dispatch center operations (non-staff)	-
Training program operations	-
Other: 1st Responder Enhancements	3,039,000
Other: HazMat	150,000
Other: Contingencies (incl. paramedic engine startup)	
TOTAL EXPENSES	$ 7,931,000

b. SOURCES OF REVENUE FY 08/09

Special project grant(s) [from EMSA]	$ -
Preventive Health and Health Services (PHHS) Block Grant	-
Office of Traffic Safety (OTS)	-
State general fund	142,235
County general fund	-
Other local tax funds (e.g., EMS district)	-
County contracts (e.g., multi-county agencies)	-
Certification fees	10,170
Training program approval fees	-
Training program tuition/Average daily attendance funds (ADA)	-
Job Training Partnership ACT (JTPA) funds/other payments	-
Base hospital application fees	-
Base hospital designation fees	-
Trauma center application fees	-
Trauma center designation fees	75,000
Pediatric facility approval fees	-
Pediatric facility designation fees	-
Other critical care center application fees	-
Other critical care center designation fees	25,000
Ambulance service/vehicle fees	36,030
Contributions	5000
EMS Fund (SB 12/612)	1,893,513
Other grants: Hospital Preparedness Program	339,095
Other: County Service Area EM-1 charges	4,721,821
TOTAL REVENUE	$ 7,220,143
Surplus (deficit)	$901,316

6. Fee structure for 2009

First responder certification	$ 0
EMS dispatcher certification	0
EMT-I certification	30
EMT-I recertification	30
EMT-defibrillation certification	0
EMT-defibrillation recertification	0
EMT-II certification	n/a
EMT-II recertification	n/a
EMT-P accreditation	50
Mobile Intensive Care Nurse/ Authorized Registered Nurse (MICN/ARN) certification	0
MICN/ARN recertification	0
EMT-I training program approval	0
EMT-II training program approval	n/a
EMT-P training program approval	0
MICN/ARN training program approval	0
Base hospital application	0
Base hospital designation	0
Trauma center application	10,000
Trauma center designation	75,000
STEMI center designation	5,000
Pediatric facility approval	n/a
Pediatric facility designation	n/a
Other critical care center application	
Other critical care center designation	
Ambulance service license	n/a
Ambulance vehicle permits	
Non-emergency ambulance (three-year permit)	1,500
Emergency ambulance (three-year permit per ERA)	1,500
Other: Helicopter classification	250
Other: Helicopter authorization (2-year permit)	1,800
Other: CE Provider (authorization and reauthorization)	100
Other: Replacement EMT certification card	10
Other: CCT P Program	n/a
Other: Non-Emergency Paramedic Transfer Program (plus $50/transfer after 1st 50)	3,000

7. The following tables are for the fiscal year 08/09

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (% of salary) [1]	COMMENTS
EMS Admin/Coord/Dir	EMS Director	1	$50.45 (base)	37%	
Asst. Admin/Admin Asst/Admin Mgr	Assistant EMS Director	1	$45.60 (base)	37%	
ALS Coord/Field Coord/Trng Coord	1. 1st Responder Prog/Training Coord	1	$48.91(base)	37%	
Prog Coord/Field Liaison (Non-clinical)	1. Prehosp Care Coord/Personnel/MIS 2. RDMHS (Grant)	1 1	$43.06 (base) $48.91 (base)	37% 37%	
Trauma Coord	Prehospital Care Coordinator/Trauma	1	$43.06 (base)	37%	
Medical Director	EMS Medical Director	1	$80.83 (base)	37%	
Other MD/Med Consult					
Disaster Med Planner	Health Services Disaster Mgr	1	$44.66 (base)	37%	
Dispatch Supervisor					
Medical Planner					
Dispatch Supervisor					
Data Evaluator/Analyst					
QA/QI Coordinator (RN)	Prehospital Care Coordinator/QI	1	$43.06 (base)	37%	
Public Info & Ed Coord					
Exec Secretary					
Other Clerical	1. Clerk - Senior	1	$21.84 (base)	37%	
Data Entry Clerk					
Other: Administrative Assistant	Administrative Services Assistant III	1	$34.66 (base)	37%	

[1] 37% is the standard percentage used to calculate benefits. Actual benefits may be considerably more depending on the position and benefits selected by the employee, etc. The County retirement contribution is not reflected.

EMSA TABLE 3 - PERSONNEL/TRAINING[1]

	EMT-Is	EMT - IIs	EMT- Ps	MICNs	EMS Dispatchers
Total certified/accredited/authorized	1548	-	471	67	NA
Number of newly certified this year	N/A	-	N/A	4	NA
Number of certified this year (2009)	507	-	248	24	NA
Number of certificate reviews resulting in:	1		0	0	NA
a) formal investigations	0		0		
b) probation	1		0		
c) suspensions	0		0		
d) revocations	0		0		
e) denials	0		0		
-	-		-		
g) no action taken	0		0		
h) referred to EMSA	0		0		

1. Number of EMS dispatchers trained to EMSA standards: 52

2. Early defibrillation:

   a) Number of EMT-I (defib) certified 1548
   b) Number of public safety (defib) certified (non-EMTI) 38

3. Do you have a first responder training program? yes _____ no x

[1] As of 12/31/09 number of providers completing certification during 2009

EMSA TABLE 4 - COMMUNICATIONS

1.	Number of primary Public Service Answering Points (PSAP)		10
2.	Number of secondary PSAPs		2
3.	Number of dispatch centers directly dispatching ambulances		3
4.	Number of designated dispatch centers for EMS aircraft		3
5.	Do you have an operational area disaster communication system?	Yes x No	
	a. Radio primary frequency		
	MEDARS (T-Band) 4 channel		
	b. Other methods		
	Alternate telephone system; Local government radio frequencies; ReddiNet microwave communications among hospitals, ambulance dispatch centers and EMS Agency		
	c. Can all medical response units communicate on the same disaster communications system?	Yes x No	
	d. Do you participate in OASIS?	Yes x No	
	e. Do you have a plan to utilize RACES as a back up communication system?	Yes x No	
	1) Within the operational area?	Yes x No	
	2) Between the operational area and region and/or state?	Yes x No	
6.	Who is your primary dispatch agency for day-to-day emergencies?		
	Three designated fire/medical dispatch centers		
7.	Who is your primary dispatch agency for a disaster?		
	Sheriff's Communications		

EMSA TABLE 5 - RESPONSE/TRANSPORTATION

Transporting Agencies

1.	Number of exclusive operating areas			5
2.	Percentage/population covered by Exclusive Operating Areas			100%
3.	Total number responses in 2009			---
	a) Number of emergency responses	(Code 2: expedient, Code 3: lights/siren)		77,872
	b) Number of non-emergency responses	(Code 1: normal)		n/a
4.	Total number of transports in 2008			---
	a) Number or emergency transports	(Code 2: expedient, Code 3: lights/siren)		58,292
	b) Number of non-emergency transports	(Code 1: normal)		n/a

Early Defibrillation Programs

5.	Number of public safety defibrillation programs	11
	a) Automated	11
	b) Manual	0
6.	Number of EMT-Defibrillation programs	3
	a) Automated	3
	b) Manual	0

Air Ambulance Services

7.	Total number or responses	unknown
	a) Number of emergency responses	unknown
	b) Number of non-emergency responses	unknown
8.	Total number of transports in 2009	258
	a) Number of emergency (scene) responses	258
	b) Number of non-emergency responses	unknown

System Standard Response Times (90th Percentile) for 2009

	METRO/URBAN	SUBURBAN/RURAL	WILDERNESS	SYSTEM WIDE
1. BLS and CPR capable first responder	Varies by local jurisdiction	N/A	N/A	Varies by local jurisdiction
2. Early defibrillation capable responder	Varies by local jurisdiction	N/A	N/A	Varies by local jurisdiction
3. Advanced life capable responder	NA	N/A	N/A	N/A
4. EMS transport unit	7.11[1]	N/A	N/A	7.11

EMSA TABLE 6 - FACILITIES/CRITICAL CARE

Trauma care system

Trauma patients for 2009:

1.	Number of patients meeting trauma triage criteria	2,381
2.	Number of major trauma victims transported directly to a trauma center by ambulance	1,155
3.	Number of major trauma patients transferred to a trauma center	121
4.	Number of patients meeting triage criteria who weren't treated at a trauma center [1]	48

Emergency departments

1.	Total number of emergency departments	9
	a) Number of referral emergency services	0
	b) Number of standby emergency services	0
	c) Number of basic emergency services	9
	d) Number of comprehensive emergency services	0

* An additional ED was added in 11/07 making a total of 9 EDs

Receiving Hospitals

1.	Number of receiving hospitals with agreements	9
2.	Number of base hospitals with agreements	1

EMSA TABLE 7 - DISASTER MEDICAL

System Resources

1.	Casualty Collections Points (CCP)	
	a. Where are your CCP's located?	On file at the EMS Agency
	b. How are they staffed?	Situational[2]
	c. Do you have a supply system for supporting them for 72 hours?	Yes x No
2.	CISD	
	Do you have a CISD provider with 24-hour capability?	Yes x No
3.	Medical Response Team (IP=in progress)	
	a. Do you have any team medical response capability?	Yes x No
	b. For each team, are they incorporated into your local response plan?	Yes x No
	c. Are they available for statewide response? [3]	Yes x No
	d. Are they part of a formal out-of state response system?[4]	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?	First Responder

[1] Defined as total undertriages for that year
[2] Determined by incident commander. Medical Reserve Corps available.
[3] If individual wishes to participate
[4] Through Office of Civilian Volunteers

c. Do you have the ability to do decontamination in an emergency room? Yes x No _____

d. Do you have the ability to do decontamination in the field? Yes x No _____

Operations

1. Are you using a standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure? Yes x No _____
2. What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster? 20
3. Have you tested your MCI Plan this year in a:
   a. Real event? (3/08 Senior Facility Fire) Yes x No _____
   b. Exercise? Yes x No _____
4. List all counties with which you have written medical aid agreement. All [1]
5. Do you have formal agreements with hospitals in your operational area to participate in disaster planning and response? Yes x No _____
6. Do you have a formal agreement with community clinics in your operational areas to participate in disaster planning and response? Yes x 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 _____ No x
9. If not, to whom do you report? Contra Costa Health Services
10. If not in the Health Department, do you have a plan to coordinate public health and environmental health issues with the Health Department? Yes n/a No _____

[1] Through California Disaster Mutual Aid Agreement

EMSA TABLE 8 – PROVIDERS

American Medical Response			5151 Port Chicago Hwy, Suite A Concord, CA		Leslie Mueller, General Manger, CCC 925-602-1300 or 888-267-6591		
Written Contract: x Yes ____ No	Service: x Ground ____ Air ____ Water	x Transport x Non-Transport	Air Classification: ____ Auxiliary rescue ____ Air ambulance ____ ALS rescue ____ BLS rescue	If Air: ____ Rotary ____ Fixed Wing	# of personnel providing services: ____ PS ____ PS-Defib ____ BLS 130 EMT-D ____ LALS 173 ALS		
Ownership: ____ Public x Private	Medical Director: x Yes ____ No	If Public: ____ Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State ____ Fire district ____ Federal	System available 24 hours? x Yes ____ No	Number of Ambulances: 64[1]		

San Ramon Valley Fire Protection District			1500 Bollinger Canyon Road San Ramon, CA 94583		Rich Price, Fire Chief 925-838-6603		
Written Contract: x Yes ____ No	Service: x Ground ____ Air ____ Water	x Transport x Non-Transport	Air Classification: ____ Auxiliary rescue ____ Air ambulance ____ ALS rescue ____ BLS rescue	If Air: ____ Rotary ____ Fixed Wing	# of personnel providing services: ____ PS 60 PS-Defib 3 BLS 70 EMT-D ____ LALS 67 ALS		
Ownership: x Public ____ Private	Medical Director: x Yes ____ No	If Public: x Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State x Fire district ____ Federal	System available 24 hours? x Yes ____ No	Number of Ambulances: 8		

[1] Includes 46 ALS units, 14 BLS units and 4 QRVs (Quick Response Vehicles)

EMSA TABLE 8 - Providers (cont.)

Moraga-Orinda Fire Protection District	1280 Moraga Way Moraga, CA 94556	Randy Bradley, Fire Chief / Randy Trumph, EMS Chief 925-258-4599

Written Contract:	Service:		Air Classification:	If Air:	# of personnel providing services:	
x Yes	x Ground	x Transport	___ Auxiliary rescue	___ Rotary	___ PS	
___ No	___ Air	x Non-Transport	___ Air ambulance	___ Fixed Wing	___ PS-Defib	
	___ Water		___ ALS rescue		___ BLS	
			___ BLS rescue		22 EMT-D	
					___ LALS	
					41 ALS	

Ownership:	Medical Director:	If Public:	If Public:		System available 24 hours?	Number of Ambulances:
x Public	x Yes	x Fire	___ City	x Fire district	x Yes	2 (plus 1 cross-staffed and 2 ALS backup)
___ Private	___ No	___ Law	___ County	___ Federal	___ No	
		___ Other	___ State			

Contra Costa County Fire Protection District	2010 Geary Road Pleasant Hill, CA 94523	Daryl Louder, Fire Chief / Keith Cormier, EMS Battalion Chief 925-941-3300

Written Contract:	Service:		Air Classification:	If Air:	# of personnel providing services:	
x Yes	x Ground	___ Transport	___ Auxiliary rescue	___ Rotary	___ PS	
___ No	___ Air	x Non-Transport	___ Air ambulance	___ Fixed Wing	___ PS-Defib	
	___ Water		___ ALS rescue		___ BLS	
			___ BLS rescue		142 EMT-D	
					___ LALS	
					105 ALS	

Ownership:	Medical Director:	If Public:	If Public:		System available 24 hours?	Number of Ambulances:
x Public	x Yes	x Fire	___ City	x Fire district	x Yes	0
___ Private	___ No	___ Law	x County	___ Federal	___ No	
		___ Other	___ State			

EMSA TABLE 8 - Providers (cont.)

Crockett-Carquinez Fire Protection District			746 Loring Avenue Crockett, CA 94525		G. Littleton, Jr., Fire Chief 510-787-2717		
Written Contract: ____ Yes _x_ No	Service: _x_ Ground ____ Air ____ Water	____ Transport _x_ Non-Transport	Air Classification: ____ Auxiliary rescue ____ Air ambulance ____ ALS rescue ____ BLS rescue	If Air: ____ Rotary ____ Fixed Wing	# of personnel providing services: 12 PS 38 PS-Defib ____ BLS 19 EMT-D ____ LALS ____ ALS		
Ownership: _x_ Public ____ Private	Medical Director: _x_ Yes ____ No	If Public: _x_ Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State _x_ Fire district ____ Federal	System available 24 hours? _x_ Yes ____ No		Number of Ambulances: 0	

East Contra Costa Fire Protection District			134 Oak Street Brentwood, CA 94513		Hugh Hendersen, Fire Chief /Jeff Burris, EMS Chief 925-240-2132		
Written Contract: ____ Yes _x_ No	Service: _x_ Ground ____ Air ____ Water	____ Transport _x_ Non-Transport	Air Classification: ____ Auxiliary rescue ____ Air ambulance ____ ALS rescue ____ BLS rescue	If Air: ____ Rotary ____ Fixed Wing	# of personnel providing services: ____ PS ____ PS-Defib 6 BLS 63 EMT-D ____ LALS ____ ALS		
Ownership: _x_ Public ____ Private	Medical Director: _x_ Yes ____ No	If Public: _x_ Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State _x_ Fire district ____ Federal	System available 24 hours? _x_ Yes ____ No		Number of Ambulances: 0	

EMSA TABLE 8 - Providers (cont.)

El Cerrito Fire Department			10900 San Pablo Avenue El Cerrito, CA 94530		Lance Maples, Fire Chief / Dave Gibson, EMS Chief 510-215-4450	
Written Contract: __x__ Yes _____ No	Service: __x__ Ground _____ Air _____ Water	_____ Transport __x__ Non-Transport	Air Classification: _____ Auxiliary rescue _____ Air ambulance _____ ALS rescue _____ BLS rescue	If Air: _____ Rotary _____ Fixed Wing	# of personnel providing services: _____ PS _____ PS-Defib _____ BLS 17 EMT-D _____ LALS 18 ALS	
Ownership: __x__ Public _____ Private	Medical Director: __x__ Yes _____ No	If Public: __x__ Fire _____ Law _____ Other	If Public: __x__ City _____ County _____ State _____ Fire district _____ Federal	System available 24 hours? __x__ Yes _____ No	Number of Ambulances: 0	

Pinole Fire Department			880 Tennent Avenue Pinole, CA 94564		Jim Parrott, Fire Chief 510-724-8970	
Written Contract: __x__ Yes _____ No	Service: __x__ Ground _____ Air _____ Water	_____ Transport __x__ Non-Transport	Air Classification: _____ Auxiliary rescue _____ Air ambulance _____ ALS rescue _____ BLS rescue	If Air: _____ Rotary _____ Fixed Wing	# of personnel providing services: _____ PS _____ PS-Defib _____ BLS 9 EMT-D _____ LALS 7 ALS	
Ownership: __x__ Public _____ Private	Medical Director: __x__ Yes _____ No	If Public: __x__ Fire _____ Law _____ Other	If Public: __x__ City _____ County _____ State _____ Fire district _____ Federal	System available 24 hours? __x__ Yes _____ No	Number of Ambulances: 0	

Richmond Fire Department			440 Civic Center Plaza Richmond, CA 94804		Michael Banks, Fire Chief / Marcus Rayon, Captain EMS 510-307-8031	
Written Contract: _____ Yes __x__ No	Service: __x__ Ground _____ Air _____ Water	_____ Transport __x__ Non-Transport	Air Classification: _____ Auxiliary rescue _____ Air ambulance _____ ALS rescue _____ BLS rescue	If Air: _____ Rotary _____ Fixed Wing	# of personnel providing services: _____ PS _____ PS-Defib _____ BLS 82 EMT-D _____ LALS _____ ALS	
Ownership: __x__ Public _____ Private	Medical Director: __x__ Yes _____ No	If Public: __x__ Fire _____ Law _____ Other	If Public: __x__ City _____ County _____ State _____ Fire district _____ Federal	System available 24 hours? __x__ Yes _____ No	Number of Ambulances: 0	

EMSA TABLE 8 - Providers (cont.)

Rodeo-Hercules Fire Protection District			1680 Refugio Valley Road Hercules, CA 94547		Alan Biagi, Fire Chief 510-799-4561		
Written Contract: x Yes ____ No	Service: x Ground ____ Air ____ Water	____ Transport x Non-Transport	Air Classification: ____ Auxiliary rescue ____ Air ambulance ____ ALS rescue ____ BLS rescue	If Air: ____ Rotary ____ Fixed Wing	# of personnel providing services: ____ PS ____ PS-Defib ____ BLS 20 EMT-D ____ LALS 8 ALS		
Ownership: x Public ____ Private	Medical Director: x Yes ____ No	If Public: x Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State x Fire district ____ Federal	System available 24 hours? x Yes ____ No	Number of Ambulances: 0		

REACH			451 Aviation Blvd. Suite 201 Santa Rosa, CA 95403		Darin Huard, General Manager 707 575-6886		
Written Contract: ____ Yes x No	Service: ____ Ground x Air ____ Water	x Transport ____ Non-Transport	Air Classification: ____ Auxiliary rescue x Air ambulance ____ ALS rescue ____ BLS rescue	If Air: x Rotary ____ Fixed Wing	# of personnel providing services: 6 ____ PS ____ PS-Defib ____ BLS ____ EMT-D ____ LALS 6[1] ALS		
Ownership: ____ Public x Private	Medical Director: x Yes ____ No	If Public: ____ Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State ____ Fire district ____ Federal	System available 24 hours? x Yes ____ No	Number of Ambulances: 2[1]		

[1] An additional 2 helicopters and 6 ALS staff available as needed

EMSA TABLE 8 - Providers (cont.)

CALSTAR			177 John Glenn Dr Concord, CA 94545		Ross Fay, Program Director (925) 798-7670	
Written Contract: ____ Yes _x_ No	Service: ____ Ground _x_ Air ____ Water	_x_ Transport ____ Non-Transport	Air Classification: ____ Auxiliary rescue _x_ Air ambulance ____ ALS rescue ____ BLS rescue	If Air: _x_ Rotary _x_ Fixed Wing	# of personnel providing services: 9	____ PS ____ PS-Defib ____ BLS ____ EMT-D ____ LALS 9 ALS
Ownership: ____ Public _x_ Private	Medical Director: _x_ Yes ____ No	If Public: ____ Fire ____ Law ____ Other	If Public: ____ City ____ County ____ State ____ Fire district ____ Federal	System available 24 hours? _x_ Yes ____ No		Number of Ambulances: 3[1]

[1] Includes 1 helicopter and 2 fixed-wing aircraft with additional assets available as needed

EMSA TABLE 9 – APPROVED TRAINING PROGRAMS

Los Medanos College 2700 East Leland Road Pittsburg, CA 94565		Sam Bradley (925) 439-2181 ext 3352
Student Eligibility: Open to the general public	Cost of Program $ 26.00 per unit Basic: N/A Refresher: N/A	Program Level: EMT Training Number of students completing training per year: Initial training: 240 Refresher: 30 Cont. Education: 0 Expiration Date: 1/31/2011 Number of courses: Initial training: 2 Refresher: 1 Cont. Education: 0

Contra Costa College 2600 Mission Bell Drive San Pablo, CA 94806		Michael J. Frith 510-235-7800 x4229
Student Eligibility: Open to the general public	Cost of Program Basic: $156 Refresher: - $26.00/unit	Program Level: EMT Training Number of students completing training per year: Initial training: 71 Refresher: 25 Cont. Education: 0 Expiration Date: 8/31/11 Number of courses: Initial training: 2 Refresher: 1 Cont. Education: as needed

Mt. Diablo Adult Education 1266 San Carlos Avenue Concord, CA 94518		Barbara Leal 925-685-7340, #2768
Student Eligibility: Open to the general public	Cost of Program Basic: N/A – Refresher: N/A	Program Level: EMT Training Number of students completing training per year: Initial training: 27 Refresher: 0 Cont. Education: 2 Expiration Date: 2/28/2014 Number of courses: Initial training: 2 Refresher: 0 Cont. Education: 1

EMSA TABLE 9 - Approved Training Programs (cont.)

Contra Costa County Fire – EMS Division 2945 Treat Blvd. Concord, CA 94518		Keith Cormier, EMS Battalion Chief 925-941-3300
Student Eligibility: District Personnel Only	Cost of Program No charge to fire district employees In-house training only	Program Level: EMT Training Number of students completing training per year: Initial training: 15 Refresher: 65 Cont. Education: 261 Expiration Date: 8/31/11 Number of courses: Initial training: 2 Refresher: 9 Cont. Education: 4

Richmond Professional Black Firefighters 3510 Cutting Blvd Richmond, CA 94804		Captain Angel Bobo Program Oversight Linsy Mayo, Program Manager 510 307-8031
Student Eligibility: Open to the general public	Cost of Program Basic: none Refresher: none	Program Level: EMT Training Number of students completing training per year: Initial training: 32 Refresher: n/a Cont. Education: n/a Expiration Date: 10/31/2012 Number of courses: Initial training: 2 Refresher: n/a Cont. Education: n/a

John Muir Health, Walnut Creek		Lori Altabet, Base Coordinator 925-947-4438
Student Eligibility: Minimum 2 years ED experience, TNCC, ALS, PALS. In house training only	Cost of Program Initial: No charge In house training only	Program Level: MICN Number of students completing training per year: Initial training: 4 Cont. Education: 55 Expiration Date: per Base Contract Number of courses: Initial training: 1 Refresher: 0 Cont. Education: as needed

EMSA TABLE 10 – FACILITIES

Contra Costa Regional Medical Center		2500 Alhambra Avenue Martinez, CA 94553		Primary Contact: Administration (925) 370-5000	
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service		Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] _____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: _____Yes __x__No

Doctors Medical Center, San Pablo		2000 Vale Road San Pablo, CA 94806		Primary Contact: Administration 510-235-7000	
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service		Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] _____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: __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.
[4] Levels I, II, III and Pediatric.
[5] Contra Costa EMS Stroke System is planned to be launched in January 2012

John Muir Health, Walnut Creek Campus	1601 Ygnacio Valley Road Walnut Creek, CA 94598	Primary Contact: Administration 925-939-3000		
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service	Base Hospital: __x__ Yes _____ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] _____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: __x__ Yes _____ No	If Trauma Center what Level: [4] Level II	Designated STEMI Center: __x__ Yes _____No

Kaiser Medical Center-Antioch	4501 Sandcreek Road Antioch, CA 94531	Primary Contact: Administration 925-813-6500		
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service	Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1]	Designated Stroke Center: [5] ____ Yes __x__No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: _____ Yes __x__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.
[4] Levels I, II, III and Pediatric.
[5] Contra Costa EMS Stroke System is planned to be launched in January 2012

Kaiser Medical Center-Richmond		1330 So. Cutting Blvd. Richmond, CA 94801		Primary Contact: Administration 510-307-1500	
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service		Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] ____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: _____ Yes __x__ No

Kaiser Medical Center-Walnut Creek		1425 South Main Street Walnut Creek, CA 94596		Primary Contact: Administration 925-295-4000	
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service		Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] ____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: __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.
[4] Levels I, II, III and Pediatric.
[5]Contra Costa EMS Stroke System is planned to be launched in January 2012

John Muir Health – Concord Campus	2540 East Street Concord, CA 94524		Primary Contact: Administration 925-682-8200	
Written Contract: __x__ Yes ____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service	Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] ____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: __x__ Yes _____No

San Ramon Regional Medical Center	6001 Norris Canyon Road San Ramon, CA 94583		Primary Contact: Administration 925-275-9200	
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service	Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] ____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: __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.
[4] Levels I, II, III and Pediatric.
[5]Contra Costa EMS Stroke System is planned to be launched in January 2012

Sutter Delta Medical Center		3901 Lone Tree Way Antioch, CA 94509	Primary Contact: Administration 925-779-7200	
Written Contract: __x__ Yes _____ No	___ Referral emergency service ___ Standby emergency service __x__ Basic emergency service ___ Comprehensive emergency service	Base Hospital: _____ Yes __x__ No	Pediatric Critical Care Center: [1] _____ Yes __x__ No	Designated Stroke Center: [5] ____ Yes __x__ No
EDAP: [2] _____ Yes __x__ No	PICU: [3] _____ Yes __x__ No	Burn Center: _____ Yes __x__ No	Trauma Center: _____ Yes __x__ No	If Trauma Center what Level: [4] _____	Designated STEMI Center: __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.
[4] Levels I, II, III and Pediatric.
[5]Contra Costa EMS Stroke System is planned to be launched in January 2012

EMSA TABLE 11 - DISPATCH AGENCIES

Contra Costa Fire Dispatch	2010 Geary Road Pleasant Hill, CA 94523	Chris Suter 925-941-3550

Written Contract: ____ Yes _x_ No	Service: _x_ Ground _x_ Air ____ Water	_x_ Day-to-Day _x_ Disaster	Number of Personnel providing services:	_15_ EMD Trained ____ EMT-D ____ BLS ____ LALS ____ ALS
Ownership: _x_ Public ____ Private	Medical Director: _x_ Yes ____ No	If public: Explain:	_x_ Fire ____ Law ____ Other	____ City ____ County ____ State _x_ Fire District ____ Federal

Richmond Police/Fire Dispatch	401 27th Street Richmond, CA 94804	Byron Baptiste 510-620-6660

Written Contract: ____ Yes _x_ No	Service: _x_ Ground _x_ Air ____ Water	_x_ Day-to-Day ____ Disaster	Number of Personnel providing services:	_27_ EMD Trained ____ EMT-D ____ BLS ____ LALS ____ ALS
Ownership: _x_ Public ____ Private	Medical Director: _x_ Yes ____ No	If public: Explain:	_x_ Fire _x_ Law ____ Other	_x_ City ____ County ____ State ____ Fire District ____ Federal

San Ramon Valley Fire Dispatch	1500 Bollinger Canyon Road San Ramon, CA 94583	Denise Pangelinan 925-838-6600

Written Contract: ____ Yes _x_ No	Service: _x_ Ground _x_ Air ____ Water	_x_ Day-to-Day ____ Disaster	Number of Personnel providing services:	_10_ EMD Trained ____ EMT-D ____ BLS ____ LALS ____ ALS
Ownership: _x_ Public ____ Private	Medical Director: _x_ Yes ____ No	If public: Explain:	_x_ Fire ____ Law ____ Other	____ City ____ County ____ State _x_ Fire District ____ Federal

SECTION III: PROGRESS FROM PREVIOUS YEAR

EMSA TABLE 1: SUMMARY OF SYSTEM STATUS

A. System Organization And Management

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	Short-range Plan	Long-range Plan
Agency Administration					
1.01 LEMSA Structure		x	n/a		
1.02 LEMSA Mission		x	n/a		
1.03 Public Input		x	n/a		
1.04 Medical Director		x	x		
Planning Activities					
1.05 System Plan		x	n/a		
1.06 Annual Plan Update		x	n/a		
1.07 Trauma Planning		x	x		
1.08 ALS Planning		x	n/a		
1.09 Inventory of Resources		x	n/a		
1.10 Special Populations		x	x		
1.11 System Participants		x	x		
Regulatory Activities					
1.12 Review & Monitoring		x	n/a		
1.13 Coordination		x	n/a		
1.14 Policy/Procedures Manual		x	n/a		
1.15 Compliance w/Policies		x	n/a		
System Finances					
1.16 Funding Mechanism		x	n/a		
Medical Direction					
1.17 Medical Direction		x	n/a		
1.18 QA/QI		x	x		
1.19 Policies, Procedures, Protocols		x	x		
1.20 DNR		x	n/a		
1.21 Determination of Death		x	n/a		
1.22 Reporting of Abuse		x	n/a		
1.23 Interfacility Transfer		x	n/a		
Enhanced Level: Advanced Life Support					
1.24 ALS System		x	x		
1.25 On-Line Medical Direction		x	x		
Enhanced Level: Trauma Care System					
1.26 Trauma System Plan		x	n/a		
Enhanced Level: Pediatric Emergency Medical and Critical Care System					
1.27 Pediatric System Plan		x	n/a		
Enhanced Level: Exclusive Operating Areas					
1.28 EOA Plan		x	n/a		

B. Staffing/Training

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	Short-range Plan	Long-range Plan
Local EMS Agency					
2.01 Assessment of Needs		x	n/a		
2.02 Approval of Training		x	n/a		
2.03 Personnel		x	n/a		
Dispatchers					
2.04 Dispatch Training		x	x		
First Responder (non-transporting)					
2.05 First Responder Training		x	x		
2.06 Response		x	n/a		
2.07 Medical Control		x	n/a		
Transporting Personnel					
2.08 EMT-1 Training		x	x		
Hospital					
2.09 CPR Training		x	n/a		
2.10 Advanced Life Support		x	x		
Enhanced Level: Advanced Life Support					
2.11 Accreditation Process		x	n/a		
2.12 Early Defibrillation		x	n/a		
2.13 Base Hospital Personnel		x	n/a		

C. Communications

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	Short-range Plan	Long-range Plan
Communications Equipment					
3.01 Communications Plan		x	x		
3.02 Radios		x	x		
3.03 Interfacility Transfer		x	n/a		
3.04 Dispatch Center		x	n/a		
3.05 Hospitals		x	x		
3.06 MCI/Disasters		x	n/a		
Public Access					
3.07 9-1-1 Planning/Coordination		x	x		
3.08 9-1-1 Public Education		x	n/a		
Resource Management					
3.09 Dispatch Triage		x	x		
3.10 Integrated Dispatch		x	x		

D. Response/Transportation

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	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	n/a		
4.04 Pre-scheduled Responses		x	n/a		
4.05 Response Time Standards		x	x		
4.06 Staffing		x	n/a		
4.07 First Responder Agencies		x	n/a		
4.08 Medical & Rescue Aircraft		x	n/a		
4.09 Air Dispatch Center		x	n/a		
4.10 Aircraft Availability		x	n/a		
4.11 Specialty Vehicles		x	x		
4.12 Disaster Response		x	n/a		
4.13 Intercounty Response		x	x		
4.14 Incident Command System		x	n/a		
4.15 MCI Plans		x	n/a		
Enhanced Level: Advanced Life Support					
4.16 ALS Staffing		x	x		
4.17 ALS Equipment		x	n/a		
Enhanced Level: Ambulance Regulation					
4.18 Compliance		x	n/a		
Enhanced Level: Exclusive Operating Permits					
4.19 Transport Plan		x	n/a		
4.20 "Grand fathering"		x	n/a		
4.21 Compliance		x	n/a		
4.22 Evaluation		x	n/a		

E. Facilities/Critical Care

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

F. Data Collection/System Evaluation

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	Short-range Plan	Long-range Plan
Universal Level					
6.01 QA/QI Program		x	x		
6.02 Prehospital Records		x	n/a		
6.03 Prehospital Care Audits		x	x		
6.04 Medical Dispatch		x	n/a		
6.05 Data Management System		x	x		
6.06 System Design Evaluation		x	n/a		
6.07 Provider Participation		x	n/a		
6.08 Reporting		x	n/a		
Enhanced Level: Advanced Life Support					
6.09 ALS Audit		x	x		
Enhanced Level: Trauma Care System					
6.10 Trauma System Evaluation		x	n/a		
6.11 Trauma Center Data		x	x		

G. Public Information And Education

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	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		

H. Disaster Medical Response

	Doesn't meet standard	Meets minimum standard	Meets guidelines recommended	Short-range Plan	Long-range Plan
Universal Level					
8.01 Disaster Medical Planning		x	n/a		
8.02 Response Plans		x	x		
8.03 HAZMAT Training		x	n/a		
8.04 Incident Command System		x	x		
8.05 Distribution of Casualties		x	x		
8.06 Needs Assessment		x	x		
8.07 Disaster Communication		x	n/a		
8.08 Inventory of Resources		x	x		
8.09 DMAT Teams		x	x		
8.10 Mutual Aid Agreements		x	n/a		
8.11 CCP Designation		x	n/a		
8.12 Establishment of CCPs		x	n/a		
8.13 Disaster Medical Training		x	x		
8.14 Hospital Plans		x	x		
8.15 Inter-hospital Communications		x	x		
8.16 Prehospital Agency Plans		x	n/a		
Enhanced Level: Advanced Life Support					
8.17 ALS Policies		x	n/a		
Enhanced Level: Specialty Care Systems					
8.18 Specialty Center Roles		x	n/a		
8.19 Waiving exclusivity		x	n/a		

COMPLETED ASSESSMENT FORMS

Assessment forms have been updated for all standards to simplify and standardize the annual assessment process.

A. System Organization and Management

Agency Administration

1.01 LEMSA Structure.

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.

CURRENT STATUS: STANDARD MET.

The Contra Costa County Board of Supervisors has designated Contra Costa Health Services as the local EMS Agency. Currently, the EMS Agency has 11 staff positions including an EMS Director, EMS Medical Director, EMS Assistant Director, Health Services Emergency Preparedness Manager, 3 Prehospital Coordinators (Trauma Nurse Coordinator, IS/Data, Quality Improvement), Training Coordinator, Regional Disaster Medical/Health Specialist, and two clerical staff.

1.02 LEMSA Mission.

Each local EMS agency shall plan, implement, and evaluate the EMS system. The agency shall use its quality/evaluation process to identify needed system changes.

CURRENT STATUS: STANDARD MET.

The EMS Agency's stated mission is to plan, implement, and evaluate the EMS System. Local data is used to identify necessary system changes, and/or to evaluate the need/effect of recommended changes.

1.03 Public Input.

Each local EMS agency shall actively seek and shall have a mechanism (including the Emergency Medical Care Committee and other sources) to receive appropriate consumer and health care provider input regarding the development of plans, policies, and procedures, as described throughout this document.

CURRENT STATUS: STANDARD MET.

A system of advisory and other EMS-related committees including the Emergency Medical Care Committee (EMCC), EMS Facilities and Critical Care Committee, Medical Advisory Committee, and Quality Improvement Committee has developed over the years to provide for EMS system-related input and recommendations to the Board of Supervisors, the Health Services Department and/or the EMS Agency.

1.04 Medical Director.

Each local EMS agency shall appoint a medical director who is a licensed physician who has substantial experience in the practice of emergency medicine.

RECOMMENDED GUIDELINES:

Administrative Experience. The local EMS agency medical director should have administrative experience in emergency medical services systems. Advisory Groups. Each local EMS agency medical director should establish clinical specialty advisory groups composed of physicians with appropriate specialties and non-physician providers, including nurses and prehospital providers.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The EMS Agency has a full-time, well-prepared EMS Medical Director who is actively involved in local and statewide EMS-related activities. The EMS Medical Director reports directly to the County Health Officer on medical matters, and to the EMS Director on operational issues. Specialty resources, including advisory groups or specialty medical consultants, are in place or are developed to provide input into specialized system issues.

1.05 System Plan.

Each local EMS agency shall develop an EMS system plan based on community need and utilization of proper resources, and shall submit it to the EMS Authority. The plan shall:

a) Assess how the current system meets guidelines,

b) Identify system needs for patients within each of the clinical target groups, and

c) Provide a methodology and time line for meeting these needs.

CURRENT STATUS: STANDARD MET.

The EMS Plan is the foundation for a process of ongoing planning and implementation for Contra Costa County EMS. Many of the activities directed by this plan focus on target issues and evaluation of the system's performance outcomes.

1.06 Annual Plan Update.

Each local EMS agency shall develop an annual update to its EMS System Plan and shall submit it to the EMS Authority. The update shall identify progress made in plan implementation and changes to planned system design.

CURRENT STATUS: STANDARD MET.

An approved EMS system plan in the required format has been in place since November 1995. Materials have been updated and have been submitted to EMSA as required. 11/07

1.07 Trauma Planning.

The local EMS agency shall plan for trauma care and shall determine optimal system design for trauma care in its jurisdiction.

RECOMMENDED GUIDELINE:

Trauma Center Agreements. The local EMS agency should designate appropriate facilities or execute agreements with trauma facilities in other jurisdictions.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

There is a trauma system and a designated/contract Level II trauma center in Contra Costa County. An updated Trauma System Plan based on the policies and standards established by the initial Contra Costa Trauma System Plan and current trauma regulation was developed and endorsed by the EMCC in 2009, and approved by EMSA effective January 2010. Trauma triage policies have been approved and are periodically reviewed. Integration of all the existing EMS system components into a functional trauma system has been fully completed. Revised 6/10

COORDINATION WITH OTHER EMS AGENCIES:

Contra Costa County works closely with neighboring Alameda County with respect to care provided critical trauma patients. Each county recognizes the other's trauma centers, and local critical pediatric trauma is transported/transferred to Children's Hospital Trauma Center in Oakland. There is also an extensive bi-county (Alameda and Contra Costa County) medical review process of trauma patient care.

1.08 ALS Planning.

Each local EMS agency shall plan for advanced life support services throughout its jurisdiction.

CURRENT STATUS: STANDARD MET.

Advanced life support services are provided countywide. All emergency ambulance services are required to respond with ALS resources to emergency medical requests. As a result of a successful RFP process, the County has entered into a no-subsidy emergency ambulance contract with a private provider, American Medical Response. Subsidy savings are being passed on to fire districts that have elected to provide ALS programs. A comprehensive competitive bid process for emergency ambulance service in ERA IV was held in 2008. San Ramon Valley Fire Protection District's comprehensive proposal was the single bid received.

The EMS Agency has developed and implemented a plan to support fire first response agencies in developing and expanding paramedic first-responder programs throughout the county. This EMS system reconfiguration assures a more rapid paramedic response to emergency medical requests. Four fire districts and two city fire departments, Moraga-Orinda Fire Protection District, San Ramon Valley Fire Protection District, Contra Costa County Fire Protection District, El Cerrito Fire Department, Rodeo-Hercules Fire District, and Pinole Fire Department have established ALS first response units. Innovative rural ALS first response units respond to the identified needs in four rural areas (Byron/Discovery Bay, Oakley, Bethel Island and Crockett).

COORDINATION WITH OTHER EMS AGENCIES:

Paramedic reciprocity agreements are in place with surrounding counties where paramedics may be dispatched across county lines.

1.09 Inventory of Resources.

Each local EMS agency shall develop a detailed inventory of EMS resources (e.g., personnel, vehicles, and facilities) within its area and, at least annually, shall update this inventory.

CURRENT STATUS: STANDARD MET.

Inventories exist for personnel, vehicles (air and ground), facilities, and agencies within the County's jurisdiction.

1.10 Special Populations.

Each local EMS agency shall identify population groups served by the EMS system that require specialized service (e.g., elderly, handicapped, children, non-English speakers).

RECOMMENDED GUIDELINES:

Special Services. Each local EMS agency should develop services, as appropriate, for special population groups requiring specialized EMS services as appropriate (e.g., elderly, handicapped, children, non-English speakers).

CURRENT STATUS: STANDARD MET/RECOMMENDED GUIDELINE BEING ADDRESSED.

Groups served by the EMS system that may require specialized services have been identified. Some targeted specialty population planning has occurred to date particularly in trauma, and in pediatrics. EMS system participates in Contra Costa County Fall Prevention Network and-Child Injury Prevention Network-East Bay. Website and other EMS community resources are available at www.cccems.org in both English and Spanish. EMS Agency partners with Contra Costa Health Services supporting reducing Health Disparities Initiatives. EMS protocols are written to address special needs of special populations including seniors, bariatric, behavioral health, pediatric and non-english speaking populations. Revised 6/10

1.11 System Participants.

Each local EMS agency shall identify the optimal roles and responsibilities of system participants.

RECOMMENDED GUIDELINES:

Formalized EMS System Participation. The local EMS agency should ensure that system participants conform to their assigned EMS system roles and responsibilities, through mechanisms such as written agreements, facility designations, and exclusive operating areas.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

EMS Agency has contracts or letters of understanding with EMS providers that reflect identified roles, responsibilities and performance standards. EMS providers with agreements include emergency ambulance providers, trauma center, medical dispatch centers, fire paramedic first responder agencies, and emergency helicopter providers. The EMS Medical Director may serve as Medical Director of the fire paramedic program, and EMS staff is involved in program implementation and quality improvement activities.

1.12 Review and Monitoring.

Each local EMS agency shall provide for review and monitoring of EMS system operations.

CURRENT STATUS: STANDARD MET.

The Board of Supervisors appoints the local Emergency Medical Care Committee. The EMCC provides advice and recommendations on ambulance services and emergency medical care to County Board of Supervisors, Health Services Department and EMS Agency. EMS system operations are monitored and evaluated using data. Written agreements are in place that identify minimum EMS performance standards for system participants. Contra Costa County EMS system's operational performance is evaluated, documented, and reported on a regular basis.

1.13 Coordination.

Each local EMS agency shall coordinate EMS system operations.

CURRENT STATUS: STANDARD MET.

Substantial coordination exists between the EMS Agency and the system providers. System coordination is provided through the Emergency Medical Care Committee and local and multi-county advisory committees. These committees operate with varying missions and meeting schedules based on needs.

1.14 Policy and Procedures Manual.

Each local EMS agency shall develop a policy and procedures manual that includes all EMS agency policies and procedures. The agency shall ensure that the manual is available to all EMS system providers (including public

safety agencies, transport services, and hospitals) within the system.

CURRENT STATUS: STANDARD MET.

Comprehensive EMS Agency policies/procedures and prehospital care manuals are available to all EMS system providers on the Contra Costa County EMS website or at the EMS Agency Office. Each EMS Policy is reviewed annually - to assure that EMS policies and prehospital care manual are current. Revised 6/10

1.15 Compliance with Policies.

Each local EMS agency shall have a mechanism to review, monitor, and enforce compliance with system policies.

CURRENT STATUS: STANDARD MET.

The EMS Agency has contracts, written agreements or letters of understanding with EMS providers, which include emergency ambulance providers, trauma center, medical dispatch centers, fire paramedic first responder agencies, and emergency helicopter provider agencies. These agreements provide mechanisms to monitor, evaluate and enforce compliance with system policies and regulations with respect to emergency medical services. Revised 03/09

1.16 System Finances: Funding Mechanism.

Each local EMS agency shall have a funding mechanism that is sufficient to ensure its continued operation and shall maximize use of the Emergency Medical Services Fund.

CURRENT STATUS: STANDARD MET.

EMS Agency and support program funding is derived from several sources: the County Service Area EM-1 (Measure H) assessments, grant funds, certification fees, funds derived from Senate Bill 12/612, and other fees from EMS system participants. The existing funding sources are adequate to meet existing needs.

1.17 Medical Direction.

Each local EMS agency shall plan for medical direction within the EMS system. The plan shall identify the optimal number and role of base hospitals and alternative base hospitals and the roles, responsibilities, and relationships of prehospital and hospital providers.

CURRENT STATUS: STANDARD MET.

County has designated one base hospital to provide medical direction to prehospital personnel. Base hospital and base hospital personnel roles and responsibilities are identified in the County's policies, procedures and protocols manual. ALS Providers, as well as fire first responder agencies participating in Fire Paramedic First Responder Programs and/or First Responder Defibrillation Programs are under medical direction of the EMS Medical Director.

1.18 QA/QI.

Each local EMS agency shall establish a quality assurance (Q)/quality improvement (QI) program to ensure adherence to medical direction policies and procedures, including mechanism for compliance review. Provider-based programs approved by the EMS agency and coordinated with other system participants may be included.

RECOMMENDED GUIDELINE:

Provider QA/QI In-house. Prehospital care providers should be encouraged to establish in-house procedures that identify methods of improving the quality of care provided.

CURRENT STATUS: STANDARD MET/RECOMMENDED MET.

A formal system-wide QI plan which integrates/interfaces with prehospital care provider CQI programs is in place. All ALS providers and ALS support providers, have active CQI programs that include data evaluation to the extent possible, case review, and identification of training needs and problem solving. A common data collection set has been established and patient care data from the field is collected electronically, allowing for enhanced CQI processes. An EMS QI committee provides system data review, problem-solving discussion, identification of countywide training needs, and educational case review. A comprehensive, bi-county trauma care review process is also in place. Integration and interface of electronic data to provide expanded capability for EMS system evaluation is in place and being utilized. Revised 6/10

1.19 Policies, Procedures, Protocols.

Each local EMS agency shall develop written policies, procedure, and/or protocols including:

a. *Triage*
b. *Treatment*
c. *Medical dispatch protocols*
d. *Transport*
e. *On-scene treatment times*
f. *Transfer of emergency patients*
g. *Standing orders*
h. *Base hospital contact*
I. *On-scene physicians and other medical personnel*
j. *Local scope of practice for prehospital personnel.*

RECOMMENDED GUIDELINES:

Each local EMS agency should develop (or encourage the development of) pre-arrival/post dispatch instructions.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Detailed policies, procedures and protocol exist for clinical and operational prehospital situations. County transfer guidelines and a procedure for on-scene physicians and other medical personnel are in place. A Countywide system of emergency medical dispatching that includes pre-arrival instructions is fully implemented.

1.20 DNR.

Each local EMS agency shall have a policy regarding "Do Not Resuscitate" (DNR) situations, in accordance with the EMS Authority's DNR guidelines.

CURRENT STATUS: STANDARD MET.

An EMS "Do-Not-Resuscitate" policy, developed in accordance with EMSA's DNR guidelines is in place for prehospital personnel. DNA forms are available in English and Spanish. Integration of the POLST progam into local field policies and procedures was implemented January 1, 2009 as required by law. Training of EMS responders is complete and EMS is working with SNFs to support appropriate use in the community on an ongoing basis. Revised 6/10

1.21 Determination of Death.

Each local EMS agency, in conjunction with the County coroner(s) shall develop a policy regarding determination of death, including deaths at the scene of apparent crimes.

CURRENT STATUS: STANDARD MET.

An EMS policy is in place regarding determination of death.

1.22 Reporting of Abuse.

Each local EMS agency, shall ensure that providers have a mechanism for reporting child abuse, elder abuse, and suspected SIDS deaths.

CURRENT STATUS: STANDARD MET.

An EMS Policy is in place for reporting child and elder abuse, and suspected SIDS deaths and is reviewed and updated annually. EMS participates in Contra Costa County Child Death Review Process. Revised 6/10

1.23 Interfacility Transfer.

The local EMS medical director shall establish policies and protocols for scopes of practice of all prehospital medical personnel during interfacility transfers.

CURRENT STATUS: STANDARD MET.

Policies/procedures are in place identifying scope of practice for prehospital medical personnel during interfacility transfers. A paramedic interfacility transfer program including detailed policies, procedures and QI activities has been developed.

Enhanced Level: Advanced Life Support

1.24 ALS System.

Advanced life support services shall be provided only as an approved part of a local EMS system and all ALS providers shall have written agreements with the local EMS agency.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Written agreements exist between the EMS Agency and all ALS providers, both transport and first response.

1.25 On-line Medical Direction.

Each EMS system shall have on-line medical direction, provided by a base hospital (or alternative base station) physician or authorized registered nurse.

RECOMMENDED GUIDELINE:

Medical Control Plan. An EMS system should develop a medical control plan that determines:

a) Base hospital configuration for the system;

b) Base hospital selection/designation processes that allow eligible facilities to apply;

c) Process for determining when prehospital providers should appoint an in-house medical director.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

One base hospital has been designated by/for the County, providing on-line medical control by physicians or authorized registered nurses. There is a base station application and selection process for designation should more than one hospital be interested in being designated as a base hospital. Prehospital providers that furnish paramedic services are required to have an EMS Medical Director. The EMS Agency Medical Director serves in this capacity for fire agency providers.

Enhanced Level: Trauma Care System

1.26 Trauma System Plan.

The local EMS agency shall develop a trauma care system plan, which determines:

a) The optimal system design for trauma care in the EMS area, and

b) The process for assigning roles to system participants, including a process that allows all eligible facilities to apply.

CURRENT STATUS: STANDARD MET.

A trauma care system plan was developed and successfully implemented in 1985. One trauma center is optimal for the County, and, following a competitive process, John Muir Medical Center was designated as the local level II trauma center. The trauma system plan was updated in 2009, endorsed by the EMCC in March 2009 and approved by EMSA in January 2010. Revised 6/10

Pediatric Emergency Medical and Critical Care System

1.27 Pediatric System Plan.

The local EMS agency shall develop a pediatric emergency medical and critical care system plan that determines:

a) Optimal system design for pediatric emergency medical and critical care in EMS area, and

b) Process for assigning roles to system participants, including a process that allows all eligible facilities to apply.

CURRENT STATUS: STANDARD MET.

A comprehensive pediatric emergency medical and critical care system plan is in place that includes triage protocols, criteria for designation of pediatric facilities, and the drafting and execution of agreements between the EMS Agency and the designated receiving and specialty care facilities. Most seriously injured children are transported or interfacility transferred to Children's Hospital Oakland. Pediatric treatment, and other prehospital procedures for children have been implemented in the County.

NEED(S):

A comprehensive update to the Pediatric System Plan developed in 2000 which was evaluated and updated in December 2008. The EMSC Program Evaluation and Update of these Pediatric System Plans are not required by EMSA. Contra Costa was the first county to submit a Pediatric System Plan in four years per EMSA as of June 3, 2009. Revised 6/10

Exclusive Operating Area

1.28 EOA Plan.

The local EMS agency shall develop, and submit for state approval, a plan based on community needs and utilization of available resources for granting of exclusive operating areas which determines:

a) The optimal system design for ambulance service and advanced life support services in the EMS area, and

b) The process for assigning roles to system participants, including a competitive process for implementation of exclusive operating areas.

CURRENT STATUS: STANDARD MET.

All residents and visitors to Contra Costa County have access to ALS services. The Moraga Fire District is "grandfathered" as an exclusive operating area (EOA) under 1797.201 and 1797.224 of the H&S code. Competitive processes for emergency ambulance services are held at least every ten years in the remaining four EOAs within Contra Costa County.

B. Staffing and Training

Local EMS Agency

2.01 Assessment of Needs.

The local EMS Agency shall routinely assess personnel and training needs.

CURRENT STATUS: STANDARD MET.

The EMS Agency sets standards for training and requires EMS providers to assure that their personnel meet these standards. The local Quality Improvement process is designed to identify areas where training is indicated. EMS routinely assesses training needs when new skills or programs are added to the EMS system. The Fire EMS Training Consortium offers a forum for addressing training needs identified in the EMS system QI process.

2.02 Approval of Training.

The EMS Authority and/or local EMS agencies shall have a mechanism to approve an emergency medical services education programs that require approval (according to regulations) and shall monitor them to ensure that they comply with State regulations.

CURRENT STATUS: STANDARD MET.

Procedures and mechanisms are in place to approve EMS education programs.

2.03 Personnel.

The local EMS Agency shall have mechanisms to accredit, authorize, and certify prehospital medical personnel and conduct certification reviews in accordance with State regulations. This shall include a process for prehospital providers to identify and notify the local EMS Agency of unusual occurrences that could impact EMS personnel certification.

CURRENT STATUS: STANDARD MET.

Procedures, policies and requirements are in place to credential first responder defibrillator personnel, EMT-Is, EMT-Ps, and MICNs. Provisions are included for the Agency to be notified in the event of unusual occurrences that could impact local EMS Agency credentialing. A fingerprint background check process through the California Department of Justice is required of applicants for EMT-I certification.

Dispatchers

2.04 Dispatch Training.

Public safety answering point (PSAP) operators with medical responsibility shall have emergency medical orientation and all medical dispatch personnel (public and private) shall receive emergency medical dispatch training in accordance with the EMS Authority's Emergency Medical Dispatch Guidelines.

RECOMMENDED GUIDELINE:

Training/Certification According to State Standards. Public safety answering point (PSAP) operators with medical dispatch responsibilities and all medical dispatch personnel (both public and private) should be trained and tested in accordance with the EMS Authority's Emergency Medical Dispatch Guidelines.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Dispatch training standard adopted countywide. Dispatch agency personnel are trained and tested in accordance with EMSA Emergency Medical Dispatch Guidelines.

First Responders (non-transporting)

2.05 First Responder Training.

At least one person on each non-transporting EMS first response unit shall have been trained to administer first aid and CPR within the previous three years.

RECOMMENDED GUIDELINE:

Defibrillation. At least one person on each non-transporting EMS first response unit should be currently certified to provide defibrillation and have available equipment commensurate with such scope of practice, when such a program is justified by response times for other ALS providers.

EMT-I. At least one person on each non-transporting EMS first response unit should be currently certified at the EMT-I level and have appropriate training and equipment to administer first aid and CPR.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

A first responder master plan - coordinated by the EMS Agency - includes policies, procedures and treatment guidelines for the county. First response units are staffed with paramedics and/or EMTs with defibrillation training. Defibrillation programs for first responders receive ongoing support. Under American Medical Response's (AMR's) contract with the county additional training resources are made available to fire service employees. Fire services countywide have formed an EMS Training Consortium that includes representatives of each of the fire providers with the support of AMR and the EMS Agency, to coordinate and standardize available and new training to meet certification and county requirements and to enhance patient care provided in both the public and private sectors.

2.06 Response.

Public safety agencies and industrial first aid teams shall be encouraged to respond to medical emergencies and shall be utilized in accordance with local EMS Agency policies.

CURRENT STATUS: STANDARD MET.

All fire services provide first responder services. There are also law enforcement and industrial teams that may respond. A plan for providing increased numbers of fire paramedics on first-response units is underway. Staff is working with Concord Police Department and has developed and implemented a SWAT paramedic program.

2.07 Medical Control.

Non-transporting EMS first responders shall operate under medical direction policies, as specified by the local EMS agency medical director.

CURRENT STATUS: STANDARD MET.

The EMS Agency policies and procedures manual provides medical protocols for EMS first responders. Monitoring and evaluation of first responder efforts have been incorporated within the County system. Processes are in place to allow fire first responders to complete patient care documentation. The EMS Medical Director is the medical oversight for first responder paramedic services.

Transport Personnel

2.08 EMT-I Training.

All emergency medical transport vehicle personnel shall be currently certified at least at the EMT-I level.

RECOMMENDED GUIDELINES:

Defibrillation. If advanced life support personnel are not available, at least one person on each emergency medical transport vehicle should be trained to provide defibrillation.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

All emergency medical transport vehicles are staffed at the EMT-P level. "One and one" staffing (one paramedic and one EMT-I) on ambulances in service areas that are covered by fire first-response paramedics is permitted. All fire

first responder units are staffed and equipped to provide defibrillation, and the majority are staffed with paramedics. Revised 11/07

Hospital

2.09 CPR Training.

All allied health personnel who provide direct emergency patient care shall be trained in CPR.

CURRENT STATUS: STANDARD MET.

All first responders, ambulance personnel and hospital personnel who provide direct emergency patient care are trained in CPR.

2.10 Advanced Life Support.

All emergency department physicians and registered nurses that provide direct emergency patient care shall be trained in advanced life support.

RECOMMENDED GUIDELINE:

Board Certification. All emergency department physicians should be certified by the American Board of Emergency Medicine (ABEM).

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

All emergency department physicians and registered nurses that provide direct emergency patient care are trained in advanced life support. Receiving hospitals require that emergency physician staff be ABEM certified or to have appropriate ALS training as defined by medical staff protocols and ED service requirements. Majority of ED physicians in all facilities meet ABEM standard. Revised 6/10

Advanced Life Support

2.11 Accreditation Process.

The local EMS Agency shall establish a procedure for accreditation of advanced life support personnel, which includes orientation to system policies and procedures, orientation to the roles, and responsibilities of providers within the local EMS system, testing in any optional scope of practice, and enrollment into the local EMS Agency's quality improvement process.

CURRENT STATUS: STANDARD MET.

Procedures are in place for accrediting advanced life support personnel that include orientation to system policies and procedures, orientation to roles and responsibilities of providers within the local EMS system, and testing for optional scopes of practice. Provider CQI programs must interface with the county process.

2.12 Early Defibrillation.

The local EMS Agency shall establish policies for local accreditation of public safety and other basic life support personnel in early defibrillation.

CURRENT STATUS: STANDARD MET.

Policies and procedures for public safety/EMT defibrillation programs are in place.

2.13 Base Hospital Personnel.

All base hospital/alternative base station personnel who provide medical direction to prehospital personnel shall be knowledgeable about local EMS agency policies/procedures and have training in radio communications techniques.

CURRENT STATUS: STANDARD MET.

Base hospital personnel are prepared to provide consultation to prehospital personnel and are familiar with radio communications techniques.

C. Communications

Communications Equipment

3.01 Communications Plan.

The local EMS agency shall plan for EMS communications. The plan shall specify the medical communications capabilities of emergency medical transport vehicles, non-transporting advanced life support responders, and acute care facilities and shall coordinate the use of frequencies with other users.

RECOMMENDED GUIDELINE:

Use of Technology. The local EMS agency's communications plan should consider the availability and use of satellite and cellular telephones.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The EMS communications plan includes common radio frequencies for use by ambulances and hospitals, the use of cell phones by paramedics, fire/ambulance radio communications, and CAD linkages among ambulance and fire-dispatch centers. All acute care hospitals, fire medical dispatch centers, ambulance dispatch center, Sheriff's Communications and EMS Agency have installed ReddiNet communications systems allowing for communications among those agencies.

Interoperable communications within the health care system has been enhanced by adding hospitals and community clinics to the County's new 440 mhz trunked radio system. Revised 03/09

3.02 Radios.

Emergency medical transport vehicles and non-transporting advanced life support responders shall have two-way radio communications equipment which complies with the local EMS communications plan and which provides for dispatch and ambulance-to-hospital communication.

RECOMMENDED GUIDELINE:

Enhanced Radio Capability. Emergency medical transport vehicles should have two-way radio communications equipment that complies with the local EMS communications plan and which provides for vehicle-to-vehicle (including both ambulances and non-transporting first responder units) communications.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Medical transport vehicles are required to have radio capability to communicate with dispatch, with fire agencies, and for ambulance-to-hospital communication.

3.03 Interfacility Transfer.

Emergency medical transport vehicles used for interfacility transfers shall have the ability to access both sending and receiving facilities. This could be accomplished by cellular telephone.

CURRENT STATUS: STANDARD MET.

Permitted ambulances providing emergency interfacility transfer services have communications capability with sending and receiving facilities through the MEDARS system (T-Band) frequencies and/or by cellular telephone.

3.04 Dispatch Center.

All emergency medical transport vehicles where physically possible (based on geography and technology), shall have the capability of communicating with a single dispatch center or disaster communications command post.

CURRENT STATUS: STANDARD MET.

All ambulances are capable of communicating on the MEDARS radio system.

3.05 Hospitals.

All EMS system hospitals shall (where physically possible) be able to communicate with each other by two-way radio.

RECOMMENDED GUIDELINE:

Access to Services. All hospitals should have direct communications access to relevant services in other hospitals within the system (e.g., poison information, pediatric and trauma consultation).

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

All hospitals, Sheriff's Communications, ambulance dispatch agencies and the EMS Agency are part of the ReddiNet computerized communications system. Hospitals use this system on a daily basis to report midnight patient census and to communicate CT and internal disaster status. Although the MEDARS system is designed to permit radio communications between hospitals, ambulances and the County, design requires that hospitals communicate via the County Sheriff's Communications Center. The ReddiNet system has been upgraded and users trained. Interoperable communications within the health care system has been enhanced by adding hospitals and community clinics to the County's new 440 mhz trunked radio system. Radio and ReddiNet training and testing activities are regularly done in coordination with the EMS Agency.

3.06 MCI/Disasters.

The local EMS agency shall review communication linkages among providers (prehospital and hospital) in its jurisdiction for their capability to provide service in the event of multi-casualty incidents and disasters.

CURRENT STATUS: STANDARD MET.

Emergency communications procedures are in place to provide system coordination during a multi-casualty or disaster event. The disaster plan, including the communication component, has been integrated with other agencies within the County. The ReddiNet computer system allows for hospital polling and patient tracking, as well as intra-agency communications. During 2009 three small MCIs were captured in the ReddiNet System. Two were related to major vehicle accidents and one was an unknown HazMat event. The MCIs were limited involving up to eight patients. Revised 6/2010

Public Access

3.07 9-1-1 Planning/Coordination.

The local EMS agency shall participate in on-going planning and coordination of the 9-1-1 telephone service.

RECOMMENDED GUIDELINE:

9-1-1 Promotion. The local EMS agency should promote the development of enhanced 9-1-1- systems.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Enhanced 9-1-1 has been implemented in Contra Costa County, and is functional throughout the County.

3.08 9-1-1 Public Education.

The local EMS agency shall be involved in public education regarding 9-1-1 telephone service, as it impacts system access.

CURRENT STATUS: STANDARD MET.

The EMS Agency, along with the EMCC, developed and distributes a 9-1-1-access brochure to assist with 9-1-1 education.

Resource Management

3.09 Dispatch Triage.

The local EMS agency shall establish guidelines for proper dispatch triage, identifying appropriate medical response.

RECOMMENDED GUIDELINE:

Priority Reference System. The local EMS agency should establish an emergency medical dispatch priority reference system, including systemized caller interrogation, dispatch triage policies, and pre-arrival instructions.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

A comprehensive Emergency Medical Dispatch program has been implemented Countywide, and is evaluated on an ongoing basis.

3.10 Integrated Dispatch.

The local EMS system shall have functionally integrated dispatch with system-wide emergency services coordination, using standardized communications frequencies.

RECOMMENDED GUIDELINE:

System Status Management. The local EMS agency should develop a mechanism to ensure appropriate system-wide ambulance coverage during periods of peak demand.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

County Sheriff acts in a radio communication/resource coordination role for emergency ambulances. Fire, ambulance, Sheriff's Dispatch CAD linkages assure coordinated response enabling Sheriff's Dispatch to maintain ambulance unit status.

D. Response and Transportation

Universal Level

4.01 Service Area Boundaries.

The local EMS agency shall determine the boundaries of emergency medical transportation service areas.

RECOMMENDED GUIDELINES:

Formalized EOA's. The local EMS agency should secure a county ordinance or similar mechanism for establishing emergency medical exclusive operating areas (e.g., ambulance response zones).

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The Board of Supervisors has defined exclusive operating areas for EMS ground ambulance providers. These zones remain intact but have been informally restructured for purposes of data reporting.

COORDINATION WITH OTHER EMS AGENCIES.

No impact on other EMS Agencies.

4.02 Monitoring.

The local EMS agency shall monitor emergency medical transportation services to ensure compliance with appropriate statutes, regulations, policies, and procedures.

RECOMMENDED GUIDELINE:

Licensing Mechanism. The EMS agency should secure a county ordinance or similar mechanism for licensure of emergency medical transport services. These should be intended to promote compliance with overall system management and, wherever possible, replace any other local ambulance regulatory programs within the EMS area.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

A County ambulance ordinance and County contracts with emergency ground ambulance providers provide mechanisms for local EMS Agency to permit and monitor medical transportation services. Contracts with emergency ambulance providers include requirements for rigorous evaluation of services provided.

4.03 Classifying Medical Requests.

The local EMS agency shall determine criteria for classifying medical requests (e.g., emergent, urgent, and non-emergent) and shall determine appropriate level of medical response to each.

CURRENT STATUS: STANDARD MET.

Criteria for determining the appropriate level of emergency medical response have been established. Fire/medical dispatchers are trained as emergency medical dispatchers in the Priority Dispatch system.

4.04 Pre-scheduled Responses.

Service by emergency medical transport vehicles, which can be pre-scheduled without negative medical impact, shall be provided only at levels that permit compliance with EMS agency policy.

CURRENT STATUS: STANDARD MET.

Existing ALS provider system status plans do not allow for use of emergency resources for pre-scheduled non-emergency use. Policies/procedures are in place for interested paramedic providers to establish paramedic interfacility transfer programs. Paramedics staffing these units are required to have additional medical training.

4.05 Response Time Standards.

Each local EMS agency shall develop response time standards for medical responses. These standards shall take into account the total time from receipt of the call at the primary public safety answering point (PSAP) to arrival of the responding unit at the scene, including all dispatch intervals and driving time.

RECOMMENDED GUIDELINE:

Minimum Response Time Standards. Emergency medical service areas designated so that, for 90% of emergent responses, the response time for each of the following does not exceed:

a) BLS/CPR provider	Metro/urban—5 minutes Suburban/rural—15 minutes Wilderness—as quickly as possible
b) First responder defibrillation provider	Metro/urban—5 minutes Suburban/rural—as quickly as possible Wilderness—as quickly as possible
c) ALS provider (not functioning as first responder)	Metro/urban—8 minutes Suburban/rural—20 minutes Wilderness—as quickly as possible
d) BLS/ALS transport (not functioning as first responder)	Metro/urban—8 minutes Suburban/rural—20 minutes Wilderness—as quickly as possible

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET

Emergency ambulance provider contracts and enhanced first responder agreements established by the EMS Agency specify response time standards. Response times are measured from receipt of call at secondary PSAP to arrival on scene. Standards are met for all transport and enhanced first responder providers as locally defined using criteria based on local definitions of service areas with the approval of Board of Supervisors. Revised 6/2010

COORDINATION WITH OTHER EMS AGENCIES.

No impact on other EMS Agencies.

4.06 Staffing.

All emergency medical transport vehicles shall be staffed and equipped according to current State and local EMS Agency regulations.

CURRENT STATUS: STANDARD MET.

Adequate regulations, policies and procedures exist to assure that ambulances are staffed and equipped according to current State and local standards.

4.07 First Responder Agencies.

The local EMS agency shall integrate qualified EMS first responder agencies (including public safety agencies and industrial first aid teams) into the system.

CURRENT STATUS: STANDARD MET.

A first responder master plan is in place that includes standards for enhanced first responder programs. Most fire agencies have elected to provide paramedic first responder services and have entered into written agreements with the EMS Agency. Such agreements include standards for quality improvement processes and data collection. The EMS Agency provides some funding to offset the cost of providing paramedic fire first responder services. Revised 11/07

4.08 Medical & Rescue Aircraft.

The local EMS agency shall have a process for categorizing medical/rescue aircraft and shall develop policies/procedures for:

a) Authorizing aircraft to be utilized in prehospital care.

b) Requesting of EMS aircraft.
c) Dispatching of EMS aircraft.
d) Determining EMS aircraft patient destination.
e) Orientation of pilots/flight crews to local EMS system.
f) Addressing and resolving formal complaints regarding EMS aircraft.

CURRENT STATUS: STANDARD MET.

Helicopter guidelines provide a mechanism for emergency helicopter access. Policies and procedures are in place for helicopter classification, authorization, request for, transport criteria and field operations.

COORDINATION WITH OTHER EMS AGENCIES.

No formal coordination with other local EMS agencies.

4.09 Air Dispatch Center.

The local EMS agency shall designate a dispatch center to coordinate the use of air ambulances or rescue aircraft.

CURRENT STATUS: STANDARD MET.

Air medical and air rescue requests are made by the appropriate fire/medical dispatch agency.

4.10 Aircraft Availability.

The local EMS agency shall identify the availability of medical and rescue aircraft for emergency patient transportation and shall maintain written agreements with aeromedical services operating within the EMS system.

CURRENT STATUS: STANDARD MET.

Two air ambulance helicopter services provide emergency helicopter coverage on a daily rotation. Medical helicopters are requested through fire/medical dispatch centers. Procedures to classify and to authorize air medical programs to respond within the County have been developed and implemented. Written agreements are in draft.

COORDINATION WITH OTHER EMS AGENCIES.

Informal agreements have consistently demonstrated Air providers ability to effectively coordinate with other EMS agencies. Formal agreements will be considered if conditions change. Revised 6/10

4.11 Specialty Vehicles.

Where applicable, the local EMS agency shall identify the availability and staffing of all terrain vehicles, snow mobiles, and water rescue and other transportation vehicles.

RECOMMENDED GUIDELINES:

Planning for Response. EMS agency should plan for response by and use of all terrain vehicles, snowmobiles, and water rescue vehicles in areas where applicable, which considers existing EMS resources, population density, environmental factors, dispatch procedures and catchment area.

CURRENT STATUS: STANDARD MET.

Fire and police agencies within the County have rescue capabilities relevant to local areas utilizing appropriate specialty vehicles e.g. water rescue with supplemental resources available from other agencies (e.g. Coast Guard) upon request. Revised 6/10

COORDINATION WITH OTHER EMS AGENCIES.

Not applicable.

4.12 Disaster Response.

The local EMS agency, in cooperation with the local office of emergency services (OES) shall plan for mobilizing response and transport vehicles for disaster.

CURRENT STATUS: STANDARD MET.

A comprehensive medical disaster plan following SEMS/NIMS is in place for the County.

4.13 Inter-County Response.

The local EMS agency shall develop agreements permitting inter-county response of emergency medical transport vehicles and EMS personnel.

RECOMMENDED GUIDELINE:

Formal Agreements. Mutual aid agreements and automatic aid agreements that identify the optimal configuration and responsibility for EMS responses are encouraged and coordinated by the county.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Mutual aid responsibilities met through the California Master Mutual Aid Agreement.

COORDINATION WITH OTHER EMS AGENCIES.

Coordinated through State and Region II medical disaster plans.

4.14 Incident Command System (ICS).

The local EMS agency shall develop multi-casualty response plans and procedures that include provisions for on-scene medical management, using the Incident Command System.

CURRENT STATUS: STANDARD MET.

A comprehensive multi-casualty response plan is in place for EMS incidents within the County. ICS is utilized for multi-casualty incidents. Hospitals have adopted and trained in the Hospital Emergency Incident Command System. 11/07

MCI Plans.

Multi-casualty response plans and procedures shall utilize State standards and guidelines.

CURRENT STATUS: STANDARD MET.

Existing State and federal guidelines are used as a basis for the County's multi-casualty plans.

Advanced Life Support

4.16 ALS Staffing.

All ALS ambulances shall be staffed with at least one person certified at the advanced life support level and one person staffed at the EMT-I level.

RECOMMENDED GUIDELINES:

Crew Composition. The local EMS agency should determine whether advanced life support units should be staffed with two ALS crewmembers or with one ALS and one BLS crewmembers.

Defibrillation Capability. On any emergency ALS unit that is not staffed with two ALS crewmembers, the second crewmember should be trained to provide defibrillation, using available defibrillators.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Ambulances and first responder units are optimally staffed to provide a minimum of two paramedics on scene to provide care for critically ill and injured patients. First responder units are staffed with a paramedic or at least one crewmember trained and equipped to provide defibrillation.

4.17 ALS Equipment.

All emergency ALS ambulances shall be appropriately equipped for the scope of practice of level of staffing.

CURRENT STATUS: STANDARD MET.

Adequate regulations, policies and procedures exist to assure that ALS ambulances are appropriately equipped for the scope of practice of its level of staffing.

Ambulance Regulation

4.18 Compliance.

The local EMS agency shall have a mechanism (e.g., an ordinance and/or written provider agreements) to ensure that EMS transportation agencies comply with applicable policies and procedures regarding system operations and clinical care.

CURRENT STATUS: STANDARD MET.

The county has an ambulance permit process in place which pertains to ground ambulances. The county has written agreements with EMS ground providers that define and require compliance with EMS policies and procedures. The EMS agency has policies and procedures in place for classification and authorization of EMS Aircraft. Written agreements are in draft.

Exclusive Operating Permits

4.19 Transportation Plan.

Any local EMS agency, which desires to implement exclusive operating areas, pursuant to Section 1797.224, H&SC, shall develop an EMS transportation plan which addresses:

a) Minimum standards for transportation services,
b) Optimal transportation system efficiency and effectiveness, and
c) Use of a competitive process to ensure system optimization.

CURRENT STATUS: STANDARD MET.

Contra Costa County Board of Supervisors has approved an EMS ground transportation plan.

4.20 "Grand fathering."

Any local EMS agency which desires to grant an exclusive operating permit without use of a competitive process shall document in its EMS transportation plan that its existing provider meets all of the requirements for "grand fathering" under Section 1797.224, H&SC.

CURRENT STATUS: STANDARD MET.

Exclusive operating areas that have been granted comply with the H&S Code.

4.21 Compliance.

The local EMS agency shall have a mechanism to ensure that EMS transportation and/or advanced life support agencies to whom exclusive operating permits have been granted, pursuant to Section 1797.224, H&SC, comply with applicable policies and procedures regarding system operations and patient care.

CURRENT STATUS: STANDARD MET.

County ordinance, contracts and EMS Agency policies and procedures require compliance of ambulance providers.

4.22 Evaluation.

The local EMS agency shall periodically evaluate the design of exclusive operating areas.

CURRENT STATUS: STANDARD MET.

Exclusive operating areas are periodically reviewed.

E. Facilities and Critical Care

5.01 Assessment of Capabilities.

Local EMS agency shall assess and periodically reassess EMS-related capabilities of acute care facilities in its service area.

RECOMMENDED GUIDELINE:

Written Agreements. Local EMS agency should have written agreements with acute care facilities in its services area.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Addressed as part of EMS system protocol(s), MCI and disaster plans with appropriate contracts in place. The EMS Agency, in conjunction with the Facilities & Critical Care standing committee, conducts an assessment of receiving hospital capabilities annually.

5.02 Triage & Transfer Protocols.

Local EMS agency shall establish prehospital triage protocols and assist hospitals with establishment of transfer agreements.

CURRENT STATUS: STANDARD MET.

The local EMS Agency has prehospital triage and transfer protocols.

COORDINATION WITH OTHER EMS AGENCIES.

There is coordination with Alameda County on trauma triage.

5.03 Transfer Guidelines.

The local EMS agency, with the participation of acute care hospital administrators, physicians and nurses, shall establish guidelines to identify patients who should be considered for transfer to facilities of right capability and shall work with acute care hospitals to establish transfer agreements with such facilities.

CURRENT STATUS: STANDARD MET.

The EMS Agency has developed criteria to help identify patients who should be considered for transport or transfer to facilities with specialized or limited capabilities and has assisted in developing transfer agreements among these facilities.

COORDINATION WITH OTHER EMS AGENCIES.

There is no formal coordination with other EMS Agencies.

5.04 Specialty Care Facilities.

The local EMS agency shall designate and monitor receiving hospitals and, when appropriate, specialty care facilities for specified groups of emergency patients.

CURRENT STATUS: STANDARD MET.

The EMS Agency designates and monitors ambulance-receiving facilities, including a specialty care facility for trauma patients. Children are transported to receiving hospitals staffed and equipped to care for pediatric patients. The EMS Agency has implemented a program in which patients who have been assessed of having ST-Elevation Myocardial Infarctions (STEMIs) are transported to designated receiving facilities staffed and equipped to provide rapid intervention.

COORDINATION WITH OTHER EMS AGENCIES.

Local trauma system/center evaluation process is performed in conjunction with neighboring Alameda County's process.

5.05 Mass Casualty Management.

The local EMS agency shall encourage hospitals to prepare for mass casualty management.

RECOMMENDED GUIDELINE:

Preparation. The local EMS agency should assist hospitals with preparation for mass casualty management, including procedures for coordination of hospital communication and patient flow.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

A comprehensive plan is in place for managing medical/health emergencies. EMS Agency administers federal/state grants that provide funding specific for hospital and trauma center preparations for caring for large numbers of patients. The EMS Agency facilitates the Hospital Disaster Forum providing an opportunity for hospital and city disaster planners and the EMS Agency to share ideas and information. Individual hospitals have their own disaster and mass-casualty incident plans and have adopted the Hospital Emergency Incident Command System. Hospital surge plan developed and submitted to the State in conjunction with the Hospital Preparedness Program. Working with hospitals on enhanced surge planning is an ongoing project. Revised 6/10

5.06 Hospital Evacuation.

The local EMS agency shall have a plan for hospital evacuation, including its impact on other EMS system providers.

CURRENT STATUS: STANDARD MET.

The Bay Area Medical Mutual Aid (BAMMA) Committee developed hospital evacuation guidelines and each hospital has an evacuation plan as required by law. Additionally, the County Multicasualty Incident Plan can be implemented to handle transport and distribution of patients from a hospital being evacuated.

COORDINATION WITH OTHER EMS AGENCIES.

Evacuation guidelines were developed in coordination with the other Bay Area counties.

5.07 Base Hospital Designation.

The local EMS agency shall, using a process which allows all eligible facilities to apply, designate base hospitals or alternative base stations as it determines necessary to provide medical direction of prehospital personnel.

CURRENT STATUS: STANDARD MET.

One hospital has been designated as a base hospital in Contra Costa County (John Muir Medical Center). John Muir Medical Center has also been designated to receive all of the trauma system base contacts. All hospitals may apply to provide base hospital services.

COORDINATION WITH OTHER EMS AGENCIES.

Not applicable.

Trauma Care System

5.08 Trauma System Design.

Local EMS agencies that develop trauma care systems shall determine the optimal system, including:

a) Number and level of trauma centers,
b) Catchment area design (including areas in other counties, as appropriate), with consideration of workload and patient mix,
c) Identification of patients who should be triaged or transferred to a designated center, including consideration of patients who should be triaged to other critical care centers,
d) Role of non-trauma center hospitals, including those that are outside of the primary triage area of trauma center,
e) Plan for monitoring and evaluation of the system.

CURRENT STATUS: STANDARD MET.

A comprehensive trauma system plan, which addresses the points identified in the standard has been developed and adopted throughout the county. The County has designated one Level II trauma center. The trauma plan update was completed in 2009 and approved by EMSA in January 2010. Revised 6/10

5.09 Public Input.

In planning its trauma care system the local EMS agency shall ensure input from both providers and consumers.

CURRENT STATUS: STANDARD MET.

The local trauma system planning process included broad multidisciplinary input including from consumers through several health services forums for the public and the EMCC. Although the 2009 update of the Trauma System Plan did not involve any substantive changes from earlier planning processes, input was obtained from stakeholders and the Plan was approved by the EMCC. The Plan will be submitted to Contra Costa Board of Supervisors and to EMSA for approval.

Pediatric Emergency and Critical Care Systems

5.10 Pediatric System Design.

Local EMS agencies developing pediatric emergency medical/critical care systems shall determine optimal system, including:

a) Number/role of system participants, particularly ED's,
b) Catchment area design with regard to workload/patient mix,
c) Identification of patients to be primarily triaged or secondarily transferred to designated centers,
d) Role of providers qualified to transport such patients to designated facilities,
e) Identification of tertiary care centers for pediatric critical care and pediatric trauma,
f) Role of non-pediatric, critical care hospitals including those outside the primary triage area,
g) Plan for monitoring and evaluation of the system.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

A comprehensive pediatric system plan that addresses considerations listed in the standard for optimal system design is in place. County EMS leading regional planning efforts in coordination with the EMSC Advisory Committee and Alameda County in an ongoing basis. Revised 6/10

COORDINATION WITH OTHER EMS AGENCIES.

Local hospitals transfer most seriously ill pediatric patients to Children's Hospital, Oakland, in neighboring Alameda County. Children's Hospital has been designated as a Pediatric Critical Care Center.

5.11 Emergency Departments.

Local EMS agencies shall identify minimum standards for pediatric capability of an emergency department, 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, and
f) Data reporting to the local EMS agency.

RECOMMENDED GUIDELINE:

Identification Procedure. A County EMS procedure for identifying emergency departments that meet standards for pediatric care, for pediatric critical care centers and pediatric trauma centers.

CURRENT STATUS: STANDARD MET.

The County's EMS for Children Plan includes standards for hospitals.

5.12 Public Input.

In planning its pediatric emergency medical and critical care system, the local EMS agency shall ensure input from the prehospital, hospital providers and consumers.

CURRENT STATUS: STANDARD MET.

Public input was obtained through the EMCC, Medical Advisory Committee, Facilities and Critical Care Committee, and others, in developing and implementing a countywide EMS for Children program.

Enhanced Level: Other Specialty Care Systems

5.13 Specialty System Design.

Local EMS agencies developing specialty care plans for EMS-targeted clinical conditions shall determine the optimal system, for the specific condition involved including:

a) Number and role of system participants,
b) Design of catchment areas (including inter-county transport), with consideration of workload and patient mix,
c) Identification of patients who should be triaged or transferred to a designated center,
d) The role of non-designated hospitals, including those that are outside of the primary triage area,
e) A plan for monitoring and evaluating the system.

CURRENT STATUS: STANDARD MET.

Local EMS Agency has and will continue to consider the points listed in Standard 5.13 in developing specialty care plans. A plan for identification of certain cardiac conditions (S-T Elevation Myocardial Infarcts or STEMIs) by paramedic personnel using equipment that provides a 12-lead electrocardiogram (ECG) and transportation to designated hospitals staffed and equipped to provide immediate specialty care for these patients (STEMI Centers) was implemented in 2008. STEMI System performance reported at appropriate intervals and exceeds national standards.
Revised 6/2010

5.14 Public Input.

In planning other specialty care systems the local EMS agency shall ensure input from both providers and consumers.

CURRENT STATUS: STANDARD MET.

The EMS Agency has and will ensure input from providers and consumers when planning/ developing specialty care systems. Broad based input was obtained from providers and consumers when planning and developing our STEMI system.

F. Data Collection and System Evaluation

6.01 QI Program.

The local EMS agency shall establish an EMS quality improvement/assurance program to evaluate response to emergency medical incidents and care provided specific patients. Programs shall address the total EMS system, including all prehospital provider agencies, base and receiving hospitals. It shall address compliance with policies, procedures, and protocols and identification of preventable morbidity and mortality and shall utilize State standards/guidelines. Program shall use provider-based QI/QA programs and shall coordinate them with other providers.

RECOMMENDED GUIDELINE:

Resources to Evaluate. Local EMS agency should have resources to evaluate response to/care provided specific patients.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The EMS system has a QI program in place to evaluate response to emergency medical incidents and care provided specific patients. Resources are available for the EMS Agency to evaluate response to and care provided individual patients. The largest local ambulance transport provider has implemented an electronic patient care reporting system, which may be accessed by EMS staff. This upgrade provides a significant enhancement to local QI activities. Fire agencies providing paramedic service have implemented an electronic patient care reporting system. All Provider QI plans are subject to EMS Agency approval. Local core metrics for system performance developed and reviewed quarterly. Active participant at state level sharing data for refinement of CEMSIS Trauma, Medical and EMS for Children performance measures. Revised 6/10

6.02 Prehospital Records.

Prehospital records for all patient responses shall be completed and forwarded to appropriate agencies as defined by the local EMS agency.

CURRENT STATUS: STANDARD MET.

The EMS Agency has established prehospital care report (PCR) data to be collected by all contract emergency ambulance providers and paramedic first responders. A standard PCR for BLS first responder is in place. Copies of completed ambulance PCRs are submitted routinely to receiving hospitals and base hospital. EMS Agency staff has access to the major ambulance provider's ePCR database, and may print individual PCRs or evaluate aggregate data. The EMS Agency has purchased electronic software for fire agencies countywide to use to document patient care data and currently work is being done to customize the data collection software to meet local needs. Implementation occurred in early 2007. Some fire agencies have progressed more quickly than others with respect to full implementation and the ability to access data. The EMS Agency has contracted with an individual to act as project manager to identify problems and barriers at the individual fire agencies and with system coordination so that full implementation may be achieved. At that time data will be available to EMS staff to use in monitoring and quality improvement activities.

6.03 Prehospital Care Audits.

Audits of prehospital care, including both clinical and service delivery aspects, shall be conducted.

RECOMMENDED GUIDELINES:

Linking Mechanism. The local EMS agency should have a mechanism that links prehospital records with dispatch, emergency department, inpatient and discharge records.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINES MET.

Provider agencies, base hospitals and the EMS Agency perform audits of prehospital care. Electronic Prehospital records systems fully implemented. Dispatch data available via First Watch supported with access to wave files for response drill down CQI functions. PCR, emergency department, inpatient, and discharge records are electronically and manually collected for review of critical trauma patients, cardiac arrest situations, and on a case-by-case basis. These processes are supported by a best practice patient/provider safety program (EMS Event Reporting). Linkages with National Registries for Trauma and CARES (Cardiac Arrest Registry to Enhance Survival are in place and being further refined. Revised 6/10

6.04 Medical Dispatch Evaluation.

The local EMS agency shall have a mechanism to review medical dispatching to ensure that the appropriate level of medical response is sent to each emergency and to monitor the appropriateness of pre-arrival/post dispatch directions.

CURRENT STATUS: STANDARD MET.

The dispatch staffs of all three fire/medical dispatch centers in the county have implemented an Emergency Medical Dispatch program. This program provides for pre-arrival instructions, and for ongoing monitoring and evaluation that is performed in conjunction with the EMS Agency.

6.05 Data Management System.

Local EMS agency shall establish based on State standards a data management system that supports system-wide planning and evaluation (including identification of high-risk patient groups) and QA audit of care provided specific patients.

RECOMMENDED GUIDELINES:

Integrated Data Management System. The local EMS agency should establish an integrated data management system that includes system response and clinical (both prehospital and hospital) data. The EMS agency should use patient registries, tracer studies, and other monitoring systems to evaluate patient care at all stages of the system.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Comprehensive data management system. Work continues to implement a seamless data management system. Prehospital first responder and ambulance response and clinical data is available electronically for all responses. Current emphasis is on linking information to various data management platforms and CEMSIS to support data management efficiencies. A data tracking system (First Watch) has been implemented in each of the fire medical dispatch centers. This system is able to integrate response times and key clinical data. Full integration of various electronic patient care data sources throughout the EMS system is planned to link with CEMSIS in 2010. Revised 6/10

6.06 System Design/Operations Evaluation.

The local EMS agency shall establish an evaluation program to evaluate EMS system design and operations. This shall include structure, process, and outcome evaluations, utilizing State standards and guidelines when they exist.

CURRENT STATUS: STANDARD MET.

The EMS Agency has a program to evaluate system components.

6.07 Provider Participation.

The local EMS agency shall have the resources and authority to require provider participation in the system-wide evaluation program.

CURRENT STATUS: STANDARD MET.

Local EMS providers are active participants in EMS system review processes. Such processes include participation on the EMCC, Medical Advisory Committee, QI/Data Committee, Facilities and Critical Care Committee and Hospital Disaster Forum. EMS providers are also active participants on specialized evaluation projects and programs. Contract emergency ambulance providers submit to intense program review. Contracts and written agreements with EMS providers contain provisions that require participation in EMS system evaluation activities.

6.08 Reporting.

The local EMS agency shall periodically report on EMS system operations to the Board(s) of Supervisors, provider agencies, and Emergency Medical Care Committee(s).

CURRENT STATUS: STANDARD MET.

The EMS Agency reports to the Board of Supervisors, the EMCC and its advisory committees on a regular basis.

6.09 ALS Audit.

The process used to audit treatment provided by advanced life support providers shall evaluate both base hospital and prehospital activities.

RECOMMENDED GUIDELINES:

Integrated Data Management System. The local EMS agency's integrated data management system should include prehospital, base hospital, and receiving hospital data.

CURRENT STATUS: STANDARD MET AND RECOMMENDED GUIDELINE MET

An EMS system QI process is used to evaluate care provided by paramedics and by base hospital personnel. The EMS agency's integrated data management system includes dispatch, ambulance, first responder, base hospital and trauma system data (e.g. Trauma, STEMI, Cardiac Arrest and Child Death). Efforts to create seamless linkages of this data are being explored. 6/10

Trauma Care System

6.10 Trauma System Evaluation.

The local EMS agency shall develop a trauma system including:

a) A trauma registry,
b) A mechanism to identify patients whose care fell outside of established criteria, and
c) A process of identifying potential improvements to the system design and operation.

CURRENT STATUS: STANDARD MET.

The trauma system evaluation process includes a comprehensive trauma registry, a mechanism to identify "under triaged" trauma patients, and methods to assure continued optimal operation.

6.11 Trauma Center Data.

The local EMS agency shall ensure that designated trauma centers provide required data to the EMS agency, including patient specific information that is required for quality assurance and system evaluation.

RECOMMENDED GUIDELINE:

Non-Trauma Center Data. The local EMS agency should seek data on trauma patients who are treated at non-trauma center hospitals and shall include this information in its quality assurance/quality improvement and system evaluation program.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The EMS Agency collects required trauma registry and system data from the local designated level II trauma center, and seeks necessary trauma related data from other hospitals that might, on occasion receive critical trauma patients.

G. Public Information and Education

7.01 Public Information Materials.

The local EMS agency shall promote the development and dissemination of materials for the public that addresses:

a) Understanding of EMS system design and operation,
b) Proper access to the system,
c) Self help, e.g., CPR, first aid, etc.
d) Patient and consumer rights as they relate to the EMS system,
e) Health/safety habits as they relate to prevention/reduction of health risks in target areas,
f) Appropriate utilization of Emergency Departments.

RECOMMENDED GUIDELINE:

Local EMS agency should promote targeted community education programs on use of emergency medical services.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The EMS Agency has developed information and materials for dissemination to the public including a 9-1-1 brochure, which is distributed countywide. EMS participants have been involved in prevention programs including violence prevention, child injury prevention, and in Child Death Review. The EMS Agency maintains a "1-800-GIVE CPR" telephone number to promote CPR training. Local businesses and other organizations have developed Public Access Defibrillation (PAD) programs to assure rapid availability of defibrillation. The EMS Agency continues to work with public agencies throughout the county to make available CPR and PAD training, and to distribute -defibrillators to public agencies with PAD programs. A PAD brochure and PAD implementation guide was developed to support these efforts. In 2009 the EMS Agency implemented the AHA "*HeartSafe* Community" Program to integrate and support system-wide community education on the use to emergency medical services. Revised 6/10

7.02 Injury Control.

Local EMS agency, in conjunction with local health education programs, shall work to promote injury control/preventive medicine.

RECOMMENDED GUIDELINE:

Programs for Targeted Groups. The local EMS agency should promote the development of special EMS educational programs for targeted groups at high risk of injury or illness.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The EMS Agency supports/ provides resources to injury control efforts in conjunction with multiple partners within the EMS System (e.g. Trauma Center, Car Safety, Child Injury Prevention Network-Bay Area and *HeartSafe* Community). The local designated trauma center provides a trauma prevention education program directly and financially supports the county's programs to decrease violence and to prevent injury. The local private emergency ambulance provider undertakes an annual community health research project. EMS staff along with other EMS responders participates on the Contra Costa County Coronor's Child Death Review Committee. The EMS Agency provides data on injury frequency and demographics for populations served at intervals to appropriate stakeholder groups. Revised 6/10

7.03 Disaster Preparedness Promotion.

Local EMS agency, in conjunction with local office of emergency services, shall promote citizen disaster preparedness activities.

RECOMMENDED GUIDELINE:

Disaster Preparedness Activities. The local EMS agency, in conjunction with the local office of emergency services (OES), should produce and disseminate information on disaster medical preparedness.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

EMS Agency works with the OES and other local agencies to promote and disseminate information on disaster preparedness.

7.04 First Aid and CPR Training.

The local EMS agency shall promote the availability of first aid and CPR training for the general public.

RECOMMENDED GUIDELINE:

Training Goals: The local EMS agency should adopt a goal for training an appropriate percentage of the general public in first aide and CPR. A higher percentage should be achieved in high-risk groups.

CURRENT STATUS: STANDARD MET.

EMS has taken a lead in promoting CPR training for the public by maintaining a "1-800 GIVE-CPR" number that provides information regarding locations of citizen CPR classes. Multiple local agencies promote and provide CPR training. American Medical Response offers a program to provide CPR training and AED training/distribution. This program is supplemented by the *HeartSafe* Community Program launched by the EMS agency in 2009. Revised 6/10

H. Disaster Medical Response

8.01 Disaster Medical Planning.

In coordination with the local office of emergency services (OES), the local EMS agency shall participate in the development of medical response plans for catastrophic disasters, including those involving toxic substances.

CURRENT STATUS: STANDARD MET.

The EMS Agency is actively involved in medical response planning including bioterrorism response. EMS Agency staff has successfully completed the National Incident Management system (NIMS) Training courses IS-00100, IS-00200, IS-00700.

8.02 Response Plans.

Medical response plans and procedures for catastrophic disasters shall be applicable to incidents caused by a variety of hazards, including toxic substances.

RECOMMENDED GUIDELINES:

Model Plan. The California Office of Emergency Services' multi-hazard functional plan should serve as the model for the development of medical response plans for catastrophic disasters.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

County Health Services has implemented a comprehensive medical/health emergency plan for the county based on SEMS that interfaces with the County Disaster Plan. Medical response plans under SEMS are in place for a variety of potential disastrous or hazardous incidents. A Multicasualty Response (MCI) Plan provides for a multidisciplinary

response to incidents with multiple victims including hazardous materials medical incidents. A revision of the local MCI plan helps to assure the broadest possible scope of response possibilities.

8.03 HAZMAT Training.

All EMS providers shall be properly trained and equipped for response to hazardous materials incidents, as determined by their system role and responsibilities.

CURRENT STATUS: STANDARD MET.

County's fire departments and the County Health Services Hazardous Materials Division have addressed hazardous materials response. All emergency ambulance providers are required to attend eight hours of HAZMAT training.

8.04 Incident Command System.

Medical response plans and procedures for catastrophic disasters shall use the Incident Command System as the basis for field management.

RECOMMENDED GUIDELINES:

ICS Training. The EMS agency should ensure that ICS training is provided for all medical providers.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Medical response plans and procedures for catastrophic events use ICS as the basis for field management and coordination. Training for ICS activities by ambulance personnel is an emergency ambulance contract requirement.

8.05 Distribution of Casualties.

The local EMS agency, using State guidelines when available, shall establish written procedures for distributing disaster casualties to the most appropriate facilities in its service area.

RECOMMENDED GUIDELINES:

Special Facilities and Capabilities. Local EMS agency, using State guidelines and in consultation with Regional Poison Center, should identify hospitals with special facilities and capabilities for receipt and treatment of patient with radiation and chemical contamination and injuries.

CURRENT STATUS: STANDARD MET.

County multicasualty plan identifies patient distribution procedures. Hospital emergency personnel have received specialized HAZMAT training. All basic emergency departments are considered capable of receiving/treating contaminated patients.

8.06 Needs Assessment.

The local EMS agency shall establish written procedures for early assessment of needs and resources and an emergency means for communicating requests to the State and other jurisdictions.

RECOMMENDED GUIDELINE:

Annual Exercises. Local EMS agency's procedures for determining necessary outside assistance in a disaster should be exercised yearly.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Specific county disaster plan components address out-of-county medical mutual aid requests. A comprehensive Regional Disaster Medical Health Coordination (RDMHC) system is in place in Region II with the CCC EMS Agency as lead. Local hospitals, ambulance providers and the EMS Agency drill together during statewide disaster exercises.

8.07 Disaster Communication.

A specific frequency/frequencies shall be identified for interagency communication and coordination during a disaster.

CURRENT STATUS: STANDARD MET.

CALCORD is the County frequency for interagency coordination at the command level. Fire and emergency ambulance units are capable of unit-to-unit communication, and a single frequency has been identified for this purpose. All paramedic ambulances are equipped with cellular telephones. 440 MHz radio base stations and have been installed in all receiving hospital command centers. Portable 440 radios have been issued to the same.

8.08 Inventory of Resources.

The local EMS agency, in cooperation with the local OES, shall develop an inventory of appropriate disaster medical resources to respond to multi-casualty incidents and disasters likely to occur in the service area.

RECOMMENDED GUIDELINES:

Medical Resource Provider Agreements. The local EMS agency should ensure that emergency medical providers and health care facilities have written agreements with anticipated disaster medical resource providers.

CURRENT STATUS: STANDARD MET.

Resource directories have been developed by County OES and by the EMS Agency. A web-based asset-tracking database called "Asset Logistics and Resource Management System" or "ALARMS", was developed and implemented with HRSA funding to inventory and track local hospital and other emergency resources. There are no plans to require emergency medical providers and health care facilities to develop written agreements with anticipated disaster medical resource providers.

The EMS Agency has entered into cooperative agreements with the Health Resources Services Administration (HRSA) to make available funding to hospitals and clinics to achieve preparedness in surge capacity; pharmaceutical caches; personal protection; decontamination; communications/information; and education, preparedness training and terrorism preparedness exercises. The Health Department and EMS Agency worked with fire, law, and OES to implement a Homeland Security grant that provided communications and radiological detection equipment, and person protective equipment.

8.09 DMAT Teams.

Local EMS agency shall establish/maintain relationships with disaster medical assistance teams (DMAT) in its area.

RECOMMENDED GUIDELINE:

Local DMAT Team. The local EMS agency supports the development and maintenance of DMAT teams in its area.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

The county supports the OES Region II DMAT team, CA-6.

8.10 Mutual Aid Agreements.

The local EMS agency shall ensure medical mutual aid agreements with other counties in its OES Region and elsewhere, as needed, to ensure that sufficient emergency medical response and transport vehicles, and other relevant resources will be available during significant medical incidents and during periods of extraordinary system demand.

CURRENT STATUS: STANDARD MET.

Inter-county medical mutual aid planning has been extensive particularly in the EMS Agency's role as the Regional Disaster Medical Health Coordinator (RDMHC). The County is signatory to the California Mutual Aid Agreement.

8.11. CCP Designation.

The local EMS agency, in coordination with local OES and County health officer(s), and using State guidelines when they are available, shall designate casualty collection points (CCPs).

CURRENT STATUS: STANDARD MET.

CCP sites have been designated for all areas of the County.

8.12 Establishment of CCPs.

The local EMS agency shall develop plans for establishing CCPs and a means for communicating with them.

CURRENT STATUS: STANDARD MET.

CCP sites have been designated. There is a plan to dispatch an ambulance to the CCP to communicate with County EOC.

8.13 Disaster Medical Training.

The local EMS agency shall review the disaster medical training of EMS responders in its service area, including the proper management of casualties exposed to and/or contaminated by toxic or radioactive substance.

RECOMMENDED GUIDELINE:

EMS Responders Appropriately Trained. The EMS agency should assure that EMS responders are appropriately trained in disaster response, including the proper management of casualties exposed to or contaminated by toxic or radioactive substances.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Policies, procedures, and treatment guidelines for substance specific hazardous material incidents have been developed. EMS Agency requires eight hours of HAZMAT training for all ambulance personnel. EMS providers participate in training exercises. EMS Agency staff has completes the National Incident Management system (NIMS) Training courses IS-00100, IS-00200, IS-00700. Contra Costa Medical Reserve Corp was officially recognized in May 2009 and trained over 90 individuals in its first operational year. Revised 6/10

8.14 Hospital Plans.

The local EMS agency shall encourage all hospitals to ensure that their plans for internal and external disaster are fully integrated with the County's medical response plan(s).

RECOMMENDED GUIDELINE:

Hospital Disaster Drills. At least one disaster drill per year conducted by each hospital should involve other hospitals, the local EMS agency, and prehospital medical care agencies.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

Hospitals have internal and external disaster plans in place. There is integration with the County's disaster plans. EMS Agency facilitates the Medical/Health Preparedness Forum for hospitals and our preparedness partners to share ideas and assist each other in disaster planning. Local hospitals, ambulance providers and the EMS Agency participate in the annual EMSA statewide hospital/ambulance disaster exercise at a minimum.

NEED:

Assure that hospital fatality management plans are integrated into the County's plan for handling mass fatalities and conduct a tabletop exercise involving hospitals and appropriate local officials.

8.15 Inter-hospital Communications.

The local EMS agency shall ensure that there is an emergency system for inter-hospital communications, including operational procedures.

CURRENT STATUS: STANDARD MET.

ReddiNet, an inter-hospital microwave communications system, links hospitals with each other, the EMS Agency, Sheriff's Communications Center, and all three ambulance dispatch centers. 440 MHz radio base stations and have been installed in all receiving hospital command centers. Portable 440 radios have been issued to the same. Monthly testing is done on the fourth Wednesday of the month. EMS agency staff held ReddiNet polls as routine part of State and Federal HAvBED during H1N1 Pandemic. ReddiNet e-learning and training environment planned to maintain enduser competencies. Revised 6/10

8.16 Prehospital Agency Plans.

The local EMS agency shall ensure that all prehospital medical response agencies and acute care hospitals in its service area, in cooperation with other local disaster medical response agencies, have developed guidelines for the management of significant medical incidents and have trained their staffs in their use.

RECOMMENDED GUIDELINE:

Prehospital Training. The local EMS agency ensures the availability of training in management of significant medical incidents for all prehospital medical response agencies and acute-care hospital staffs in its service area.

CURRENT STATUS: STANDARD AND RECOMMENDED GUIDELINE MET.

All hospitals and medical response agencies have written policies and procedures for the management of significant medical incidents. Disaster managers from all facilities actively participate in a robust schedule of training and planning activities coordinator by EMS Disaster Manager. Generally, all hospitals participate in multi-agency exercises on an annual basis and are compliant with HICS training. Revised 6/10

Enhanced Level: Advanced Life Support

8.17 ALS Policies.

The local EMS agency shall ensure that policies and procedures allow advanced life support personnel and mutual aid responders from other EMS systems to respond and function during significant medical incidents.

CURRENT STATUS: STANDARD MET.

Current policies waive restrictions on responders during disasters. There are reciprocal agreements with surrounding county EMS agencies.

Enhanced Level: Specialty Care System

8.18 Specialty Center Roles.

Local EMS agencies developing trauma or other specialty care systems shall determine the role of identified specialty centers during significant medical incidents and the impact of such incidents on day-to-day triage procedures.

CURRENT STATUS: STANDARD MET.

In multiple patient situations, mechanisms are in place to assure - patients are transported by ground or air to appropriate specialty centers consistent with local MCI plan. Specialty care systems are well developed for Trauma and STEMI at the present time. Access to additional specialty care including neurosurgery, organ transplant, stroke, pediatric and neonatal critical care and burns are accessible with base consultation. In a significant medical incident, specialty center designation may not be taken into consideration in patient triage if specialty resources are overwhelmed. Revised 6/10

Enhanced Level: Exclusive Operating Areas/Ambulance Regulation

8.19 EOA/Disasters.

Local EMS agencies that grant exclusive operating permits shall ensure that a process exists to waive the exclusivity in the event of a significant medical incident.

CURRENT STATUS: STANDARD MET.

Current policies and County contracts with providers allow exclusivity waiver in the event of disaster and mutual aid requests.

MAJOR SYSTEM CHANGES

EMS SYSTEM MANAGEMENT AND ORGANIZATION

EMS Agency staff functions and assignments have been evaluated and consolidated in light of Plan priorities and goals. Additional staff has been recruited to support Agency activities specific to EMS system Quality Improvement activities.

Integration of paramedic first responder and ambulance services continues to be a major priority in implementing a comprehensive plan, approved by the Board of Supervisors in May 2004, for the integration of paramedic first responder and ambulance services in those areas of the county covered by private ambulance services. The standard set for EMS responses within Contra Costa County is a paramedic on scene within 10 minutes, either on the fire first responder unit, a paramedic-staffed "Quick Response Vehicle" (QRV), or the transport ambulance.

- All ambulances crews include at least 1 paramedic.
- The number of fire paramedic first responder units has increased from 38 to 41 of 48 planned fire first responder paramedic units during the past year.
- Four QRVs are located in areas throughout the county to provide or enhance a paramedic response.

STAFFING AND TRAINING

At the request of the EMS chiefs, an EMS Training Consortium that includes representatives from each of the fire first responder agencies, emergency ambulance providers and EMS has been developed and implemented. The goal of the Consortium is to standardize EMS training throughout the county by working together on developing training plans, providing training aids, and encouraging participation by both public and private personnel working together. Fire providers have taken responsibility for further program development, although EMS Agency continues to provide staff support. A number of training modules are being developed and are or will be available to all fire and ambulance agencies. Two human patient simulators, one an adult (MetiMan) and the other, a child, along with related components have been purchased for use on a rotating basis by fire agencies countywide.

COMMUNICATIONS

Initiated construction of interoperable communications within the local health care system by adding hospitals and community clinics to the County's new 440 MHz trunked radio system.

RESPONSE AND TRANSPORTATION

Significant time and effort has been spent reviewing and re-evaluating the model used for response to emergency medical requests. In cooperation with the EMS Agency, local fire first-responder agencies continue to expand first responder advanced life support programs. Changes in ambulance staffing configuration and response time standards have been implemented in areas with fire paramedic first responder services.

Local EMS aircraft policies and procedures for classification, authorization, request for, transport criteria and field operations have been implemented. Two currently classified and accredited air medical providers are based within County.

TRAUMA SYSTEM PLAN

DURING 2009 THE CONTRA COSTA TRAUMA SYSTEM PLAN WAS UPDATED AND SUBMITTED TO EMSA IN 2009. THE TRAUMA SYSTEM PLAN WAS APPROVED BY EMSA IN JANUARY 2010.

FACILITIES AND CRITICAL CARE

Nine acute care hospitals currently provide Basic Emergency Medical Services. The ninth facility, Kaiser Medical Center, Antioch, opened in November 2007.

DATA COLLECTION AND SYSTEM EVALUATION

American Medical Response, the County's largest contract emergency ambulance provider, uses an electronic patient care reporting system that is linked to their dispatch data. The electronic patient care report (ePCR) is printed at the patient's receiving hospital and specified data points are entered into a database. This information is used for a variety of functions including quality improvement activities by designated EMS staff.

Fire agencies providing paramedic ambulance and first responder services have implemented to a similar electronic PCR system (Zoll ePCR) to replace previous electronic and paper systems. This software was purchased by the EMS Agency for all fire agencies, and work was completed to tailor the system to meet local needs. This system was implemented in early 2007 by most agencies. Clinical and system performance metrics are now accessible, however work continues to fully integrate this system to other nonclinical and clinical data platforms used byEMS to evaluate the system as a whole. Contra Costa will be participating in the CEMSIS grant project in 2010. Revised 6/10

PUBLIC INFORMATION AND EDUCATION

EMS System continues its emphasis onresonse to /suddent Cardiac Arrest and Public Access Defibrillation or "PAD" programs. These programs are supported in partnership with the American Heart Association. The number of publically accessible defibrillators has increased throughout the county by an additional 70 AEDs.

The EMS Agency has also implemented a system-wide program called *HeartSafe* Community where all elements of the Chain of Survival are in place. This program partners EMS, the American Heart Association and local communities tro improve cardiovascular health of the citizens of that community and to increase the chances of survival from heart attack, stroke or sudden cardiac arrest. Revised 6/10

DISASTER MEDICAL RESPONSE

Disaster planning continues to be a high local priority. EMS Agency staff members participate on the Health Services Bioterrorism Response Planning Committee that provides education and training on biological threats for emergency responders, clinicians, and the public.

County and other organizations have been involved in the preparation of several grant applications related to bioterrorism and homeland security. Hospitals in the county have received personal protective equipment for decontamination teams through a grant administered by the federal Health Resources and Services Administration (HRSA) through the State EMS Authority and - the California Department of Public Health (CDPH-EPO). A federal Homeland Security grant administered through State OES will continue to provide funding to Contra Costa fire, law enforcement, and health services for equipment purchases, planning, and exercises. EMS staff has successfully completed NIMS courses IS-00100, IS-00200, IS-00700.

In May 2009 the Contra Costa Medical Reserve Corp (MRC) was officially recognized. It was registered with the US Citizen Corp, interviewed and now listed on the federal website as an official MRC, as well as in Disaster Healthcare Volunteers of California. In less than one year the MRC has recruited and trained over 90 individuals. Over 50 MRC volunteers participated in the fall Flu Vaccine Community Clinics. Other collaborations included participating in DMAT, CERT, Urban Shield exercises and Community Health Fairs. Revised 6/10

During the H1N1 Pandemic the EMS agency was actively involved in the risk assessment, action planning and coordination and distribution of information and resources to the community in collaboration with Contra Costa Public Health. Weekly conference calls with stakeholders facilitated the response process for the county. EMS data was utilized to monitor EMS system impacts. Large distributions of N95 and antivirals were supported by EMS in collaboration with local, regional and state partners. Revised 6/10

2009 EMS System Plan

SPECIFIC OBJECTIVES

Progress From Last Reporting Period

	Standard	Meets Standard	Objective	Progress
1.07	Trauma Planning	Yes	Trauma Plan undated and submitted for approval to EMSA..	Objective met. Trauma Plan approved by EMCC on March 2009 and submitted to EMSA for approval.
1.14	Policy and Procedure Manual	Yes	Review and redesign prehospital care protocol format.	Objective met. Prehospital care protocols redesigned into new Field Manual streamlined protocol format
1.15	Compliance With System Policies	Yes	Review and update local ambulance ordinance.	Objective met. Current ambulance ordinance reviewed and meets current needs. Re-evaluate every 2 years and update as needed.
1.18	QA/QI	Yes	Further implement electronic capture of patient care data within all first responder fire agencies.	Objective met. Data Advisory Group of Prehospital stakeholders in place to facilitate and support implementation of electronic patient care record (ePCR) system upgrades and data management.
			Further integrate electronic data to provide expanded capability for EMS system evaluation.	Objective met. Participating in CEMSIS trials of medical, pediatric and trauma indicators.
1.20	DNR	Yes	Implement policies and procedures to support POLST program.	Objective met. POLST policies and procedures created and prehospital providers trained
1.21	Determination of Death	Yes	Review and update policies, resources and training for unexpected deaths in pediatrics and adults.	Objective partially met. Field provider needs and resources partially identified
1.23	Interfacility Transfer	Yes	Review and revision of interfacility transfer processes, policy and training to support rapid transport of critically ill patients to definitive care e.g. STEMI and Trauma.	Objective met. Interfacility Emergency Response using 911 system added to Hospital Guidlelines for Acute Care Interfacility Transfer via Ambulance policy. Implemented on 2/17/2010.
1.27	Pediatric System Plan	Yes	Evaluate current pediatric system plan and make changes if indicated.	Objective met. First Local EMS Agency to submit EMS for Children Program Plan submitted to State EMSA for review.
2.06	Response	Yes	Work with interested fire first responder agencies to increase numbers of paramedics on first-response units. Support and maintain QRV system in appropriate areas.	Objective largely met. The number of fire first responder paramedic units planned is 48 throughout the county. Currently 41 units provide fulltime service.

3.01	Communications Plan	Yes	Continue to build interoperable communications within the health care system by adding hospitals and community clinics to the County's new 440 mhz trunked radio system.	Objective met. Clinics and SNFs added to 440 mhz radio network supported by routine radio drills and ongoing training
3.05	Hospitals	Yes	Develop and implement monthly drill program to assure that emergency department, dispatch and EMS staff are proficient in using the ReddiNet system including the multicasualty and hospital polling processes.	Objective met. Ongoing exercises and drills implemented. Successful implementation of CDPH mandated HaVBED assessments.
4.17	ALS Equipment	Yes	Participate in an assessment study of LUCAS Chest Compression System.	Objectie met. Completed first phase of study and participating in ongoing study opportunities
5.06	Hospital Evacuation Plan	Yes	Review of hospital evacuation plans completed and continued participation in at least one tabletop exercise involving a hospital evacuation.	Objective met.
5.07	Base Hospital	Yes	Review and enter written agreement for base hospital.	Objective met. Written agreement completed running Jan 2009 thru December 2012
5.08	Trauma Planning	Yes	Review Trauma CQI process and redesign to meet current need.	Objective partially met. Participating in trials of CEMSIS trauma indicators. Working with State Helicopter task force to address air transport aspect of trauma care. -
5.10	Pediatric System Design	Yes	Evaluate current pediatric system plan and make changes if indicated based on new state standards when available.	Objective met. Update of pediatric first responder and ambulance equipment lists implemented.
5.13	Specialty System Design	Yes	Full implementation of STEMI system for Contra Costa.	Objective met. STEMI system launched September 2008 with additional STEMI receiving center added in August 2009 . Rigorous system oversight facilitated by system stakeholders and public performance reporting.
			Explore development of stroke system for Contra Costa County.	Objective partially met. Preliminary plan for stroke system implementation developed to launch in January 2012.
5.14	Public Input	Yes	Assure public input on any stroke system design for Contra Costa County.	Objective not met. Stroke System Advisory Group to be identified in 2010.
6.01	QA/QI Program	Yes	Implement Cardiac Arrest Registry for Enhanced Survival (CARES).	Objective met. Successful implementation and first year participation
6.02	Prehospital Records	Yes	Implement and fully integrate an electronic record and data collection system in fire services countywide.	Objective – met. Fire ePCR system implemented with ability to access both Fire first responder and transport data.

			Explore development of data warehouse. Improve integration of current electronic data sources.	Objective partially met. Efforts to evaluate warehouse vs data hub and enhance linkages between data platforms ongoing.
6.03	Prehospital Care Audits	Yes	Develop core EMS performance measures for paramedica programs and implement system of reliable review and process improvement linked to core measure.	Objective met. Routine clinical audits developed on pain, skills, trauma, cardiac arrest and ePCR compliance with process improvement efforts linked to reports.
6.05	Data Management System	Yes	Continue to work on implementation of an integrated data management system.	Objective-substantially met. Prehospital patient care data is – available. First Watch used to link fire dispatch, ambulance dispatch, and PCR records in most areas of the county. Linkage with Richmond–Fire not yet in place.
6.09	ALS Audit	Yes	Continue to work on integrating first responder and receiving hospital data.	Objective- met. Linkages to patient outcome including first responder data available for cardiac arrest, STEMI, Pediatrics and Trauma.
7.01	Public Education	Yes	Enhanced public education through expansion of PAD program, increased web resources for the public on disaster preparedness, pediatric injury prevention and heart attack and stroke. Deployment of Heart Safe Communities programs and initiatives.	Objective met. Website enhancement implemented with strong ongoing public education efforts supporting Heart Safe Communities, PAD, pediatric disaster preparedness and CPR training.
7.03	Disaster Preparedness Promotion	Yes	Identify and disseminate information and resources on pediatric surge and disaster preparedness.	Objective met. Expanded website resources to address all topics. Pediatric Surge Conference participation promoting local efforts and distribution of materials to enhance ED, Prehospital and Inpatient pediatric surge preparedness.
8.14	Public Input	Yes	Assure public input on the STEMI system and pediatric system design.	Objective met. Routine reporting to EMCC and stakeholder for input on STEMI system and EMSC program activities.
8.15	Inter-hospital Communications	Yes	Implementation of local ReddiNet polling and status drill procedure with the hospitals.	Objective met. Polling system developed with successful implementation of Federally mandated HAvBED assessment during H1N1 pandemic of 2009.

TIMELINE/ACTIONS TO BE ADDRESSED

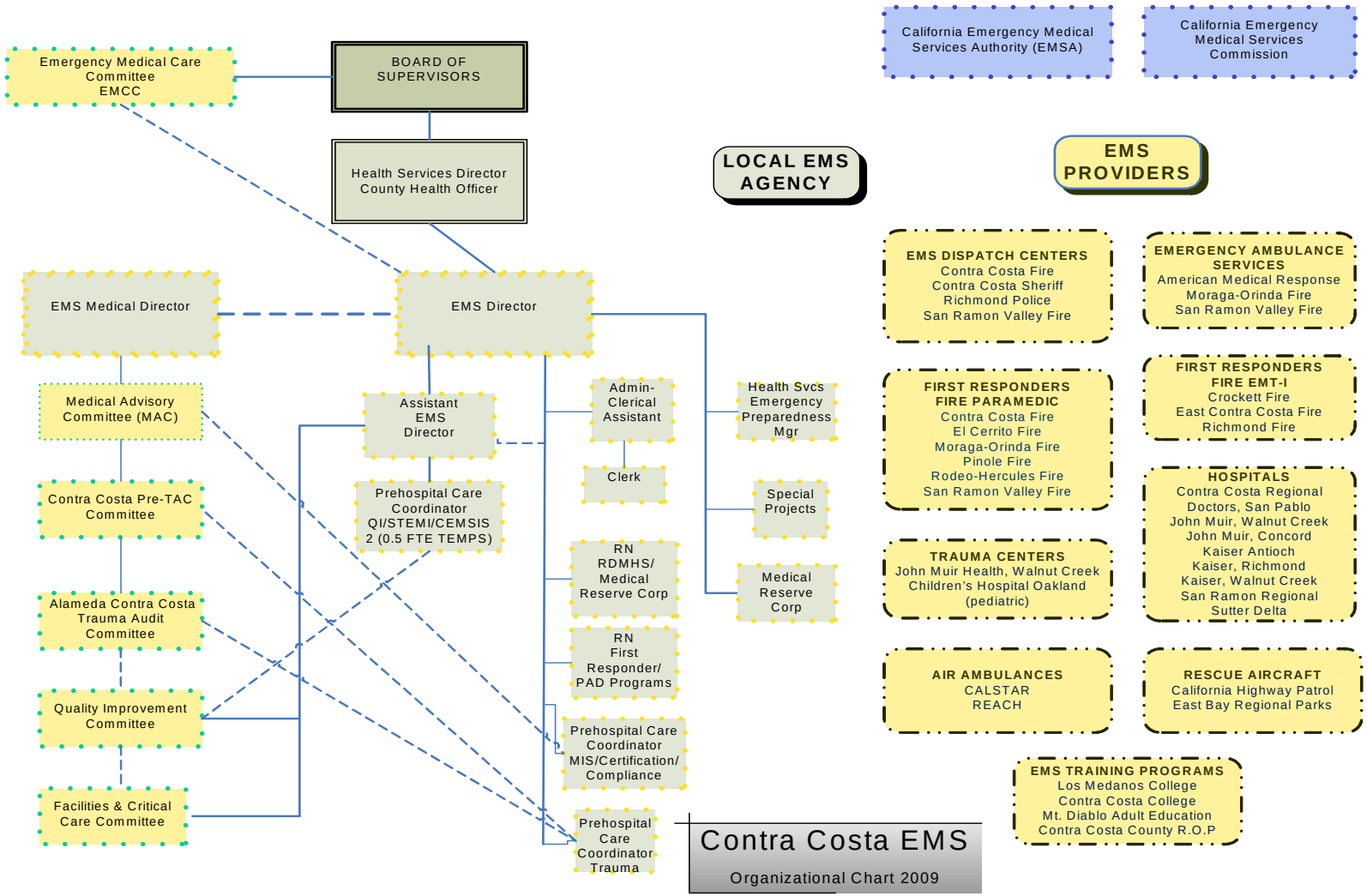
All State standards have been met. We plan to address or reassess the following objectives.

	Standard	Meets State Standard	Objective	Time Frame
1.07	Trauma Planning	Yes	Review and address supplemental issues raised by EMSA review of local trauma plan updated in March 2009 and approved by EMSA in January 2010.	1-2 years
1.14	Policy and Procedure Manual	Yes	Review and further enhancement based on prehospital evidenced based care.	1-2 years
1.20	DNR	Yes	Review policies and procedures to ensure language consistent with statewide POLST implementation including updates in public and prehospital personnel education campaigns.	1-2 years
1.21	Determination of Death	Yes	Complete review and update policies, resources and training for unexpected deaths in pediatrics and adults.	1-2 years
1.23	Interfacilty Transfer	Yes	Evaluate impacts and effectiveness of implementation of "interfacility emergency response" as part of policy revision of hospital guidelines for acute care interfacility transfer via ambulance implemented 2/17/2010.	1-2 years
2.06	Response	Yes	Continue to work with interested fire first responder agencies to increase numbers of paramedics on first-response units.	2-3 years
4.17	ALS Equipment	Yes	Participate in phase two studies for LUCAS Chest Compression System.	1-2 years
			Implement 12 lead transmission pilot using LifeNet Techology System.	1 year
5.06	Hospital Evacuation Plan	Yes	Integration of Hospital specific evacuation plans into EMS system hospital evacuation planning.	1-3 years
5.07	Base Hospital	Yes	Participate in joint Base-EMS study to evaluate base hospital communications and head trauma triage practices.	1-2 years
5.08	Trauma Planning	Yes	Participation in CEMSIS Trauma indicator development with ongoing review of Trauma CQI process.	1-2 years
5.10	Pediatric Emergency and Critical Care System	Yes	Create a network of pediatric emergency care advocates throughout the EMS system supporting pediatric emergency care best practices.	1-2 years
5.13	Specialty System Design	Yes	Establish Stroke System policies, procedures, curriculum, protocols, designation processes, contracts and oversight.	1-2 years
5.14	Public Input	Yes	Establish Stroke System Advisory Group. Continued Coalition building supporting HeartSafe Communities.	1-2 years
6.01	QA/QI Program	Yes	Implement Cardiac Arrest Registry for Enhanced Survival (CARES) web based hospital reporting.	1-2 years

			Implement patient focused evidenced based EMS System.	5 years
6.02	Prehospital Records	Yes	Evaluate data warehouse versus data hub approach as part of improving integration of current electronic medical record platforms.	3-5 years
6.03	Prehospital Care Audits	Yes	Continue enhancement of linkages between prehospital and hospital data platforms to evaluate EMS patient care. Implementation of evidence-based EMS system performance metrics supporting improved patient outcomes e.g. CARES, STEMI, Stroke, Trauma.	2-5 year
7.01	Public Education	Yes	Expansion of Heart Safe Communities to include support for CPR, PAD, Heart Attack, Stroke and Healthy Lifestyle.	2-3 years
7.03	Disaster Preparedness Promotion	Yes	Develop pediatric surge plan while supporting development of regional and state efforts to address pediatric disaster management.	2-3 years
8.13	Disaster Medical Response	Yes	Establish active network of ongoing recruitment and development of Contra Costa Medical Reserve Corp.	1-2 years
8.15	Interhospital Communications	Yes	Identify and address current gaps and opportunities for ReddiNet platform to support reliable use by hospitals.	2-3 years
8.17	Enhanced Level: Advanced Life Support	Yes	Re-evaluation and enhancement of MCI Plan implemented in 2008 to support field and provider effectiveness during significant medical incidents.	2-3 years
8.18	Enhanced Level: Specialty Care Systems	Yes	Establish and support prehospital provider agencies and Stroke center designation candidates in establishing appropriate metrics in preparation for launch of Contra Costa Stroke System in January 2012.	1-2 years

ORGANIZATIONAL CHART

Contra Costa Health Services, Emergency Medical Services



AMBULANCE ZONE SUMMARY FORM - ERA I

Local EMS Agency or County Name: Contra Costa County
Area or sub area (Zone) Name or Title: ERA I
Name of Current Provider(s): American Medical Response
Area or sub area (Zone) Geographic Description: ERA-I includes the cities of El Cerrito, Richmond, Pinole, Hercules, San Pablo, Kensington, Martinez, Pleasant Hill, Lafayette, and Walnut Creek west of Highway 680 and adjacent unincorporated areas excluding that portion of ERA 1 included in the Moraga-Orinda Fire Protection District.
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Exclusive
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Emergency Ambulance, ALS, 9-1-1 responses
Method to achieve Exclusivity, if applicable (HS 1797.224 Competitively-determined. Request for Proposal and review process held at least every 10 years. EMS Authority approved an RFP August 10, 2004. An exclusive 9-1-1 contract with American Medical Response went into affect of July 1, 2005.

AMBULANCE ZONE SUMMARY FORM – ERA II

Local EMS Agency or County Name: Contra Costa County
Area or sub area (Zone) Name or Title: ERA II
Name of Current Provider(s): American Medical Response
Area or sub area (Zone) Geographic Description: ERA-II includes the cities of Clayton, Concord, Walnut Creek east of Highway 680 and adjacent unincorporated areas.
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Exclusive
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Emergency Ambulance, ALS, 9-1-1 responses
Method to achieve Exclusivity, if applicable (HS 1797.224) Competitively-determined. Request for Proposal and review process held at least every 10 years. EMS Authority approved RFP August 10, 2004. An exclusive 9-1-1 contract with American Medical Response went into affect of July 1, 2005.

AMBULANCE ZONE SUMMARY FORM – ERA III

Local EMS Agency or County Name: Contra Costa County
Area or sub area (Zone) Name or Title: ERA III
Name of Current Provider(s): Moraga-Orinda Fire Protection District
Area or sub area (Zone) Geographic Description: ERA-III includes the territory of the Moraga -Orinda Fire Protection District
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Exclusive
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Emergency Ambulance-all calls requiring emergency ambulance response, ALS
Method to achieve Exclusivity, if applicable (HS 1797.224 Grandfathered with exclusivity pursuant to H.S. 1797.224. Moraga Fire Protection District began providing paramedic ambulance service throughout the territory of its jurisdiction in June 1977 and has continued on an uninterrupted basis. In December 1997, the territory of the Moraga Fire Protection District was combined with the territory of the Orinda Fire Protection District and a new Moraga-Orinda Fire Protection District formed and the County exclusive operating area agreement update to reflect the expanded territory. EMSA approved this boundary adjustment on January 30, 2003.

AMBULANCE ZONE SUMMARY FORM – ERA IV

Local EMS Agency or County Name: Contra Costa County
Area or sub area (Zone) Name or Title: ERA IV
Name of Current Provider(s): San Ramon Valley Fire Protection District
Area or sub area (Zone) Geographic Description: ERA IV includes the territory of San Ramon Valley Fire Protection District.
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Exclusive
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Emergency Ambulance-all calls requiring emergency ambulance response, ALS
Method to achieve Exclusivity, if applicable (HS 1797.224
Periodic Request for Proposal process. Request for proposal process held in 2008 resulted in a contract that expires October 21, 2018.

AMBULANCE ZONE SUMMARY FORM – ERA V

Local EMS Agency or County Name: Contra Costa County
Area or sub area (Zone) Name or Title: ERA V
Name of Current Provider(s): American Medical Response West
Area or sub area (Zone) Geographic Description: ERA-V includes all of East County including the cities of Pittsburg, Bay Point, Antioch, Brentwood and unincorporated areas along the 9-1-1 boundary line separating East from Central County.
Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Exclusive
Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): Emergency Ambulance, ALS, 9-1-1 responses
Method to achieve Exclusivity, if applicable (HS 1797.224 Competitively-determined. Request for Proposal and review process held at least every 10 years. EMS Authority approved RFP August 10, 2004. An exclusive 9-1-1 contract with American Medical Response went into affect of July 1, 2005.