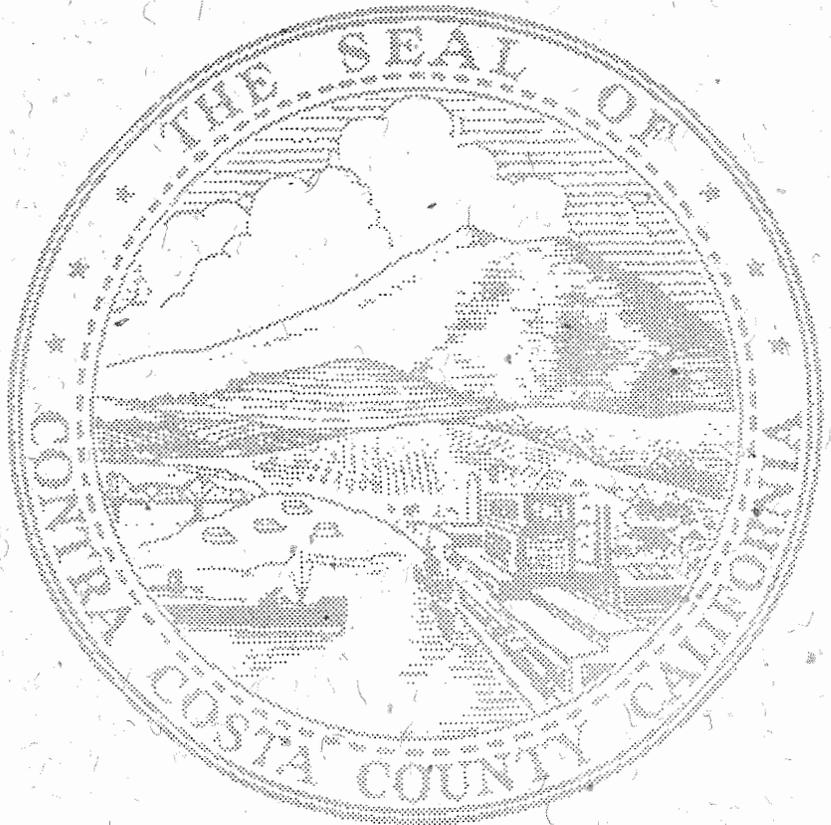


EMSS PLAN

County of Contra Costa Emergency Medical Services

November 1, 1995



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INTRODUCTION

This Contra Costa County Emergency Medical Services (EMS) Plan has been developed through an extensive process with input from a wide variety of EMS system participants. The Contra Costa County Health Services Department engaged the assistance of the EMS consultants, The Abaris Group, to facilitate the process.

The Plan development process included interviewing a multitude of system participants and stakeholders. Representatives from first responder organizations, receiving hospitals, base hospitals, fire departments, ambulance services, physician groups, the EMS Agency, elected officials, and other government staff were interviewed in order to develop appropriate standards, goals, and objectives for this EMS Plan. Eight task forces were formed to develop the conceptual framework for the EMS Plan. Their input was invaluable in establishing a comprehensive plan to meet the diverse needs and challenging environment characteristic of Contra Costa County.

The ultimate goal of the EMS Plan is to define an effective and efficient EMS system which will continue to assure consistent, high-quality emergency medical services to the residents and visitors of Contra Costa County using available resources. Other important considerations include providing a fiscally stable and responsible system, means for community involvement in defining the level of emergency medical services, and development of a system that can withstand future challenges and thrive.



GEOGRAPHIC INFORMATION

A. General Description of the Area

Contra Costa County is located in the Bay Area of California and encompasses an area of 720 square miles. The boundary of the County extends from the San Pablo Bay, Carquinez Strait, and the Sacramento River Delta on the North (Marin, Sonoma and Solano Counties), Alameda County on the South and Southwest, San Joaquin County on the East, and San Francisco Bay on the West. The landscape is characterized by rolling, oak-covered hills and urbanized valleys. Although the County is California's ninth smallest in geographical size, it is the ninth largest in population.

Contra Costa County is commonly divided into three regions which reflect variations in terrain and industry. West County, which includes the cities of El Cerrito, Hercules, Pinole, Richmond, and San Pablo, contains the County's heaviest industry and is the location of major oil and chemical plants. Central County, which includes the cities of Clayton, Concord, Danville, Lafayette, Martinez, Moraga, Orinda, Pleasant Hill, San Ramon and Walnut Creek, has the highest population density and is the County's major employment center. The central portion of the County is sometimes further divided into the Central and San Ramon Valley Regions. East County, which includes the cities of Antioch and Pittsburg, has strong service, retail and manufacturing industries, as well as some agricultural lands in its eastern regions. East County is sometimes further divided into the Antioch-Pittsburg Region and the Far-East Region.

B. Transportation

The automobile is the predominate form of transportation in Contra Costa County. U.S. Interstate 680 bisects the County in a north/south direction and connects Concord to San Jose and Sacramento. U.S. Interstate 80 runs along the western edge of the County and connects Richmond to Sacramento and San Francisco. State Highway 24 runs east-west linking Interstate 680 at the City of Walnut Creek to Interstate 80 at Oakland. State Highway 4 runs east-west, linking Interstate 680 (at the city of Martinez) to Interstate 80 (at Hercules). U.S. Interstate 580 links Richmond to San Rafael. There is a



network of county and city roads which provide access among incorporated cities, agricultural lands and rural communities of the County.

Bay Area Rapid Transit (BART) maintains 34 stations (8 of which are within the County) that provide public transportation to many Bay Area communities between 6:00 A.M. and midnight. BART is the means of transportation to work for 5.5 percent of County residents. The end line stops are located in Daly City, Fremont, Concord, and Richmond. There are current plans to extend service to Pittsburg and Antioch. In addition, most of the cities in Contra Costa County offer public bus services which provide transportation to work for around 1.6 percent of County residents. Amtrak maintains stations in Martinez, Richmond and Antioch. Interstate bus service is available at a station in San Pablo. San Francisco and San Pablo Bays and the Sacramento River Delta offer significant water transportation options to major industry located in the County.

San Francisco and Oakland International Airports are located anywhere from 30 minutes to two hours from locations within Contra Costa County. Both these airports offer daily flights with many major airlines. Oakland Airport has public transportation services linked to BART. Buchanan Field and the new Byron Airport, both metropolitan airports that offer air taxi, charter and training services, are also located within the County.

C. Climate

The Contra Costa County area has a Mediterranean climate with mild winters and warm summers. Precipitation falls almost entirely between November and March and averages about 18.4 inches per year. Concord averages 72°F in July with an average high of 90°F and 46°F in January with an average low of 38°F. Occasional late-night frosts occur during the winter months, but continuous freezing temperatures are not experienced outside of the mountain regions of the area. Short-lived snow at the top of 3,849 ft. of Mt. Diablo is common. Coastal and Valley fog is common in during some seasons, though it often burns off by midday. This fog can become dense at the higher elevations.

Please see Figure 1 for a map of Contra Costa County.



DEMOGRAPHIC INFORMATION

A. Population

According to the 1990 Census, Contra Costa County's population in 1990 was 803,732. Population projections place the County's population at around 891,200 in 1995, 969,700 in 2000, 1,040,400 in 2005 and 1,104,700 in 2010 as shown in Table 1. Using the 1995 projection, the population density for Contra Costa County is around 1,238 persons per square mile, which places the entire County in the urban classification using the United States Census Bureau's definition. Out of the 161 census tracts in the County, 158 are categorized as urban. In 1990, there were only 14,272 County residents living in rural areas. Between the years 1990 and 2010 the population is expected to increase by around 300,000 (37 percent) with much of the growth occurring in East County.

Tables 2 through 4 provides an overview of population, age and other demographic indicators for Contra Costa County. Of significance is the population over 65 years (10.9 percent), which is comparable to California as a whole (10.5 percent), and the population living below the poverty line (7.3 percent) both of which impact emergency medical services.

B. Recreation and Points of Interest

Contra Costa County is an integral part of the greater Bay Area which is famous for numerous and diverse recreational opportunities. Within Contra Costa County alone, there are 16 art galleries, 6 museums, 7 historical sites and 9 regional and state parks. Mt. Diablo (3,849 ft) offers extensive views and with 19,000 acres, the park offers many attractions to its visitors including camping, hiking, rock climbing and horseback riding. The Concord Pavilion, located at the base of Mt. Diablo, is the site of many top performances in the Bay Area including an annual Jazz Festival. San Pablo and Briones Reservoirs provide areas for boating, fishing, hiking and picnicking. The Sacramento Delta, which borders the County to the north, is available for waterskiing, fishing and boating.

Cultural activities are also a common feature offered by Contra Costa County.



The County boasts a total of 12 theater companies, 4 ballet companies, 4 orchestras and 4 opera houses. Nearby Alameda and San Francisco Counties also have much to offer and U.C. Berkeley, which is only 20 minutes away, often presents top artists and performers from around the world. Chinatown, North Beach and Golden Gate Park are popular sites in San Francisco. California's famous Wine Country is 40 minutes away, Monterey Bay and Carmel are 2 hours away, and the Sierra-Nevada Mountain Range is around 3 hours away.

C. Major Industry

Much of the future job growth in Contra Costa County will be in computer related services, especially in Central County where most of the County's office space is located. In West County, biotechnology is a growing occupational field. Chevron Corporation, Bank America Corporation, Pacific Bell and the County of Contra Costa are the largest employers in the County with over 35,000 employees collectively in 1993. Service is the strongest industry in the County in terms of the number of persons employed. Retail trade followed by manufacturing, and finance/insurance/real estate are the next three strongest industries. A fair number of migrant workers enter the East County to work in the agricultural fields. Due to the transient nature of their work, these migrant workers generally have not had adequate access to primary health-care services and may enter the health-care through emergency medical services.

D. Epidemiological Characteristics

Statistics from the California Department of Health Services reveal that the major causes of death in Contra Costa County are heart disease and cancer which is the consistent with the trend throughout California and the United States.

Table 5 presents selected data regarding cause of death in Contra Costa County and in the State as a whole. It is noted that, with the exception of homicides and cancer, Contra Costa County has a lower death rate in the categories reviewed compared to the State as a whole. This may reflect the quality of current emergency medical services.



Injuries and their sources have been a major priority for the public health system and the EMS Agency in Contra Costa County. Voters in Contra Costa County were first in the nation to approve an action plan for violence prevention. Table 6 demonstrates that poisonings is the leading cause for hospitalization in Contra Costa County for intentional injuries. Firearms are the number one cause of death for the same category. Table 7 shows that unintentional deaths accounts for 54.7 percent of the deaths by injury for the County. Table 8 demonstrates the leading causes of injury death for children. The leading cause is motor vehicles at 41.6 percent followed by firearms at 25.7 percent. Table 9 demonstrates that motor vehicles are the leading cause of child hospitalizations in Contra Costa County followed by falls (19.8 percent) and other vehicles (9.9 percent). Table 10 is a breakdown of injury by County area.



Table 1

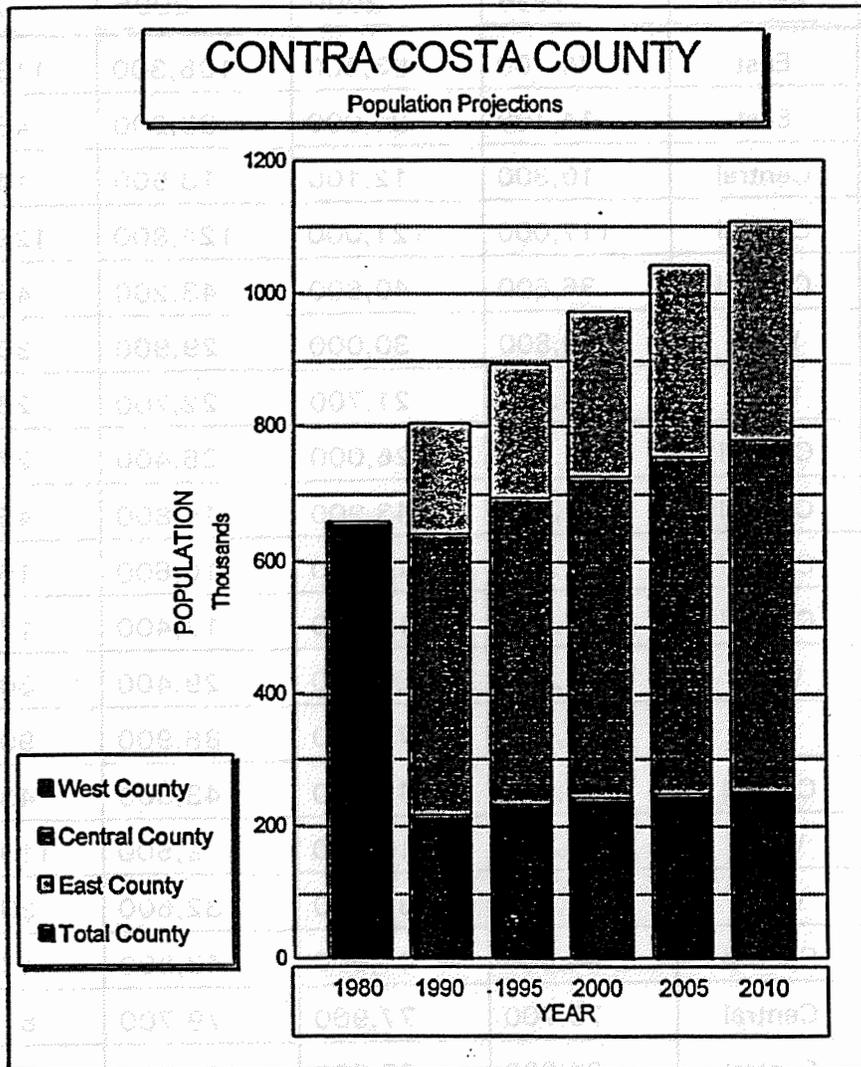


Table 2

Contra Costa County Population Projections By Region					
City	Region	1996	2000	2005	2010
Antioch	East	76,700	93,500	106,300	113,200
Brentwood	East	14,100	24,000	33,200	43,700
Clayton	Central	10,300	12,100	13,500	14,000
Concord	Central	117,000	121,000	124,800	129,100
Danville	Central	36,600	40,600	43,200	46,400
El Cerrito	West	29,800	30,000	29,900	30,100
Hercules	West	19,900	21,700	22,700	23,600
Lafayette	Central	25,900	26,000	26,400	27,200
Martinez	Central	42,300	43,900	44,800	45,500
Moraga	Central	16,100	16,200	16,600	16,600
Orinda	Central	17,100	17,300	17,400	17,900
Pinole	West	28,200	29,000	29,400	30,300
Pittsburg	East	72,500	79,300	86,900	90,900
Pleasant Hill	Central	41,400	42,400	43,000	43,800
Richmond	West	109,500	114,000	118,500	119,200
San Pablo	West	29,700	32,000	32,600	33,400
San Ramon	Central	40,600	41,900	43,800	46,500
Walnut Creek	Central	75,700	77,900	79,700	81,100
Alamo-Blackhawk	Central	24,900	25,800	25,900	26,000
Rodeo-Crockett	West	12,100	12,100	12,100	12,100
Rural East County	East	37,900	48,700	63,000	79,500
Remainder	Central	12,900	19,100	26,800	34,600
TOTAL	ALL	891,200	968,600	1,040,500	1,104,700

Source: 1990 U.S. Census, ABAG Regional Data Center, Contra Costa County.



Table 3

**Age Distributions
Contra Costa County
1990 Census**

<u>Age Group</u>	<u>West County</u>	<u>Central County</u>	<u>East County</u>	<u>Total County</u>
	<u>percent of total population</u>			
0-4	8.0%	5.8%	9.8%	7.2%
05-24	27.0%	25.2%	30.1%	26.7%
24-44	34.3%	35.2%	36.4%	35.2%
45-64	18.8%	22.1%	15.9%	20.0%
> 65	11.9%	11.7%	7.8%	11.0%
Total Population	213,268	425,461	165,003	803,732
Median Age	33.8	36.1	30.3	N.A.

Source: 1990 U.S. Census, ABAG Regional Data Center, Contra Costa County.



Table 4

**Contra Costa County
1990 Census Summary**

Population:	Total	803,732	
	White		69.7%
	Black		9.1%
	Asian/Pac Island		9.2%
	Nat Am/Aelut/Eskimo		9.2%
	Hispanic		11.4%
	Other		0.2%
Population over 65 Years			11.0%
Persons Below Poverty			7.2%
Births		13,589	
Deaths		5,626	
Net Migration		6,850	
Housing Units:	Number	316,170	
	Mean Value	\$254,100	
Number of New Units 1990-1993		19,368	
Persons per Household		2.64	
Mean Monthly Costs:	With Mortgage	\$ 1,395	
	Without Mortgage	\$ 242	
Median Rent		\$ 642	
Vacancy Rate			6.4%
Mean Family Income		\$ 61,988	
Mean Travel Time to Work		29.3 min	

Source: 1990 U.S. Census, ABAG Regional Data Center, Contra Costa County



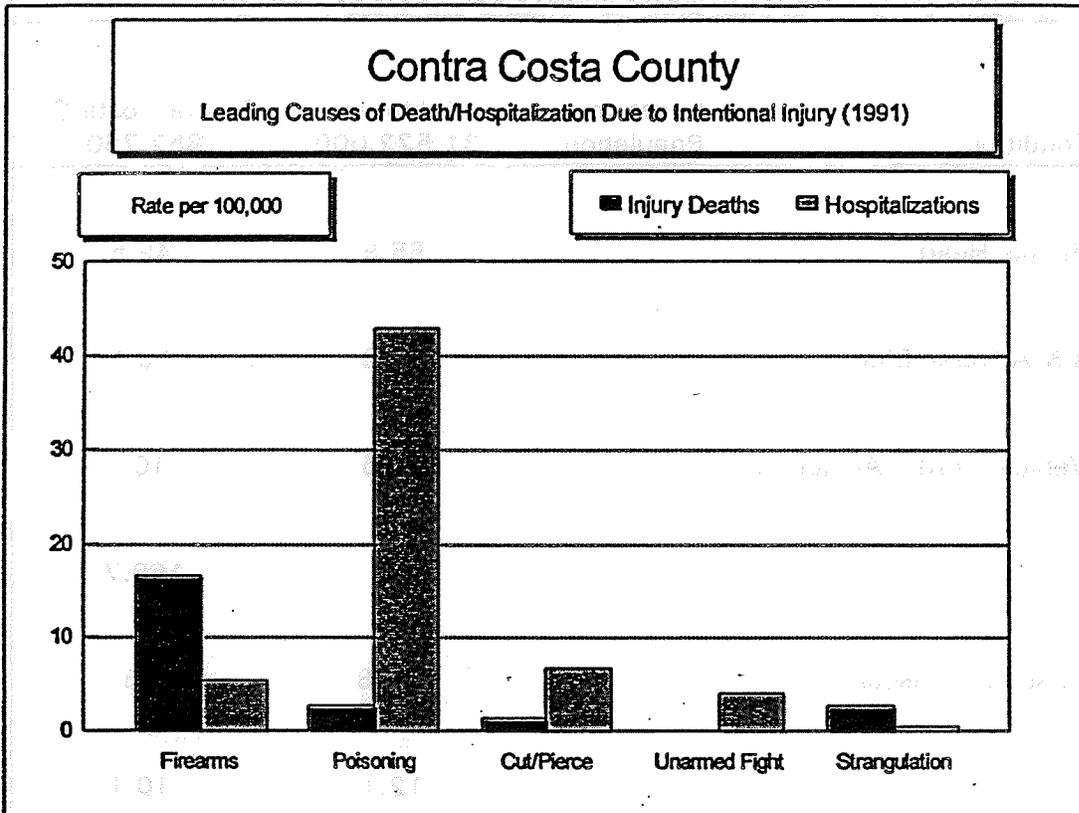
Table 5

Contra Costa County 1993 Death Rates for Selected Causes per 100,000 Residents			
Disease/Condition	Location: Population:	California 31,522,000	Contra Costa Co 852,750
Acute Ischemic Heart		55.9	49.5
Accidnets & Adverse Effects		30.3	28.1
-Motor Vehicle Traffic Accidents		13.6	10
Cancer		161	169.7
Heart Disease (all causes)		220.8	203
Suicide		12.1	10.1
Homicide		13.3	14.8

Source: California Department of Health Services, Health Demographics Section



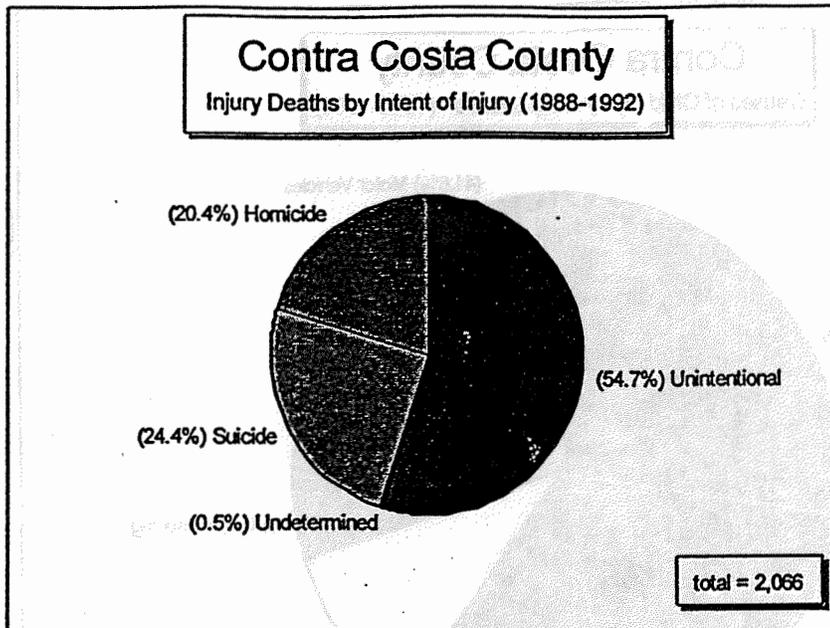
Table 6



Sources: California Department of Health Services
Office of Statewide Health Planning and Development

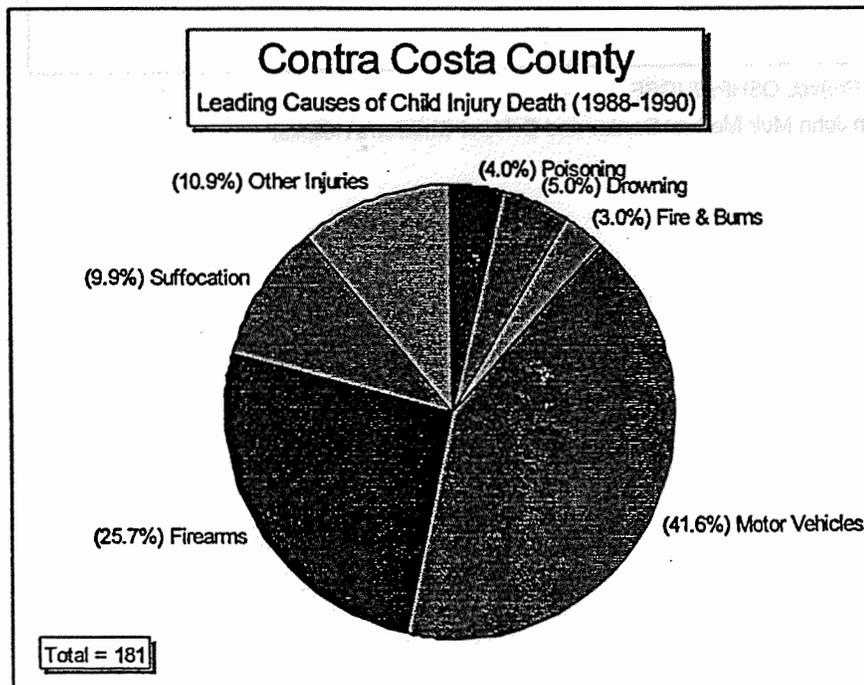


Table 7



Source: California Department of Health Services

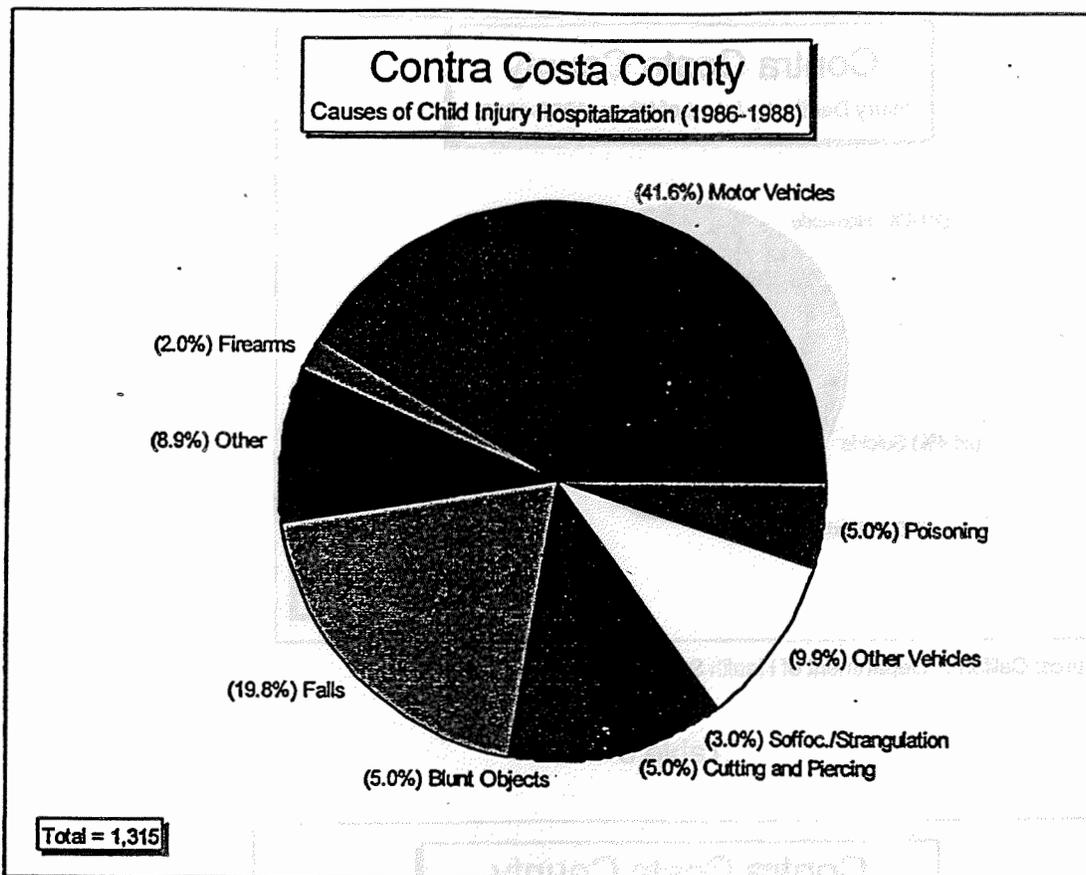
Table 8



Source: California Health Services Department



Table 9



Source : Childhood Injury Project: OSHPD/UCSF
Patient data from John Muir Medical Center and Oakland Children's Hospital.

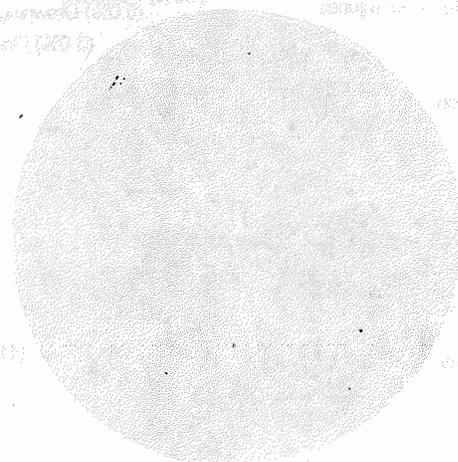
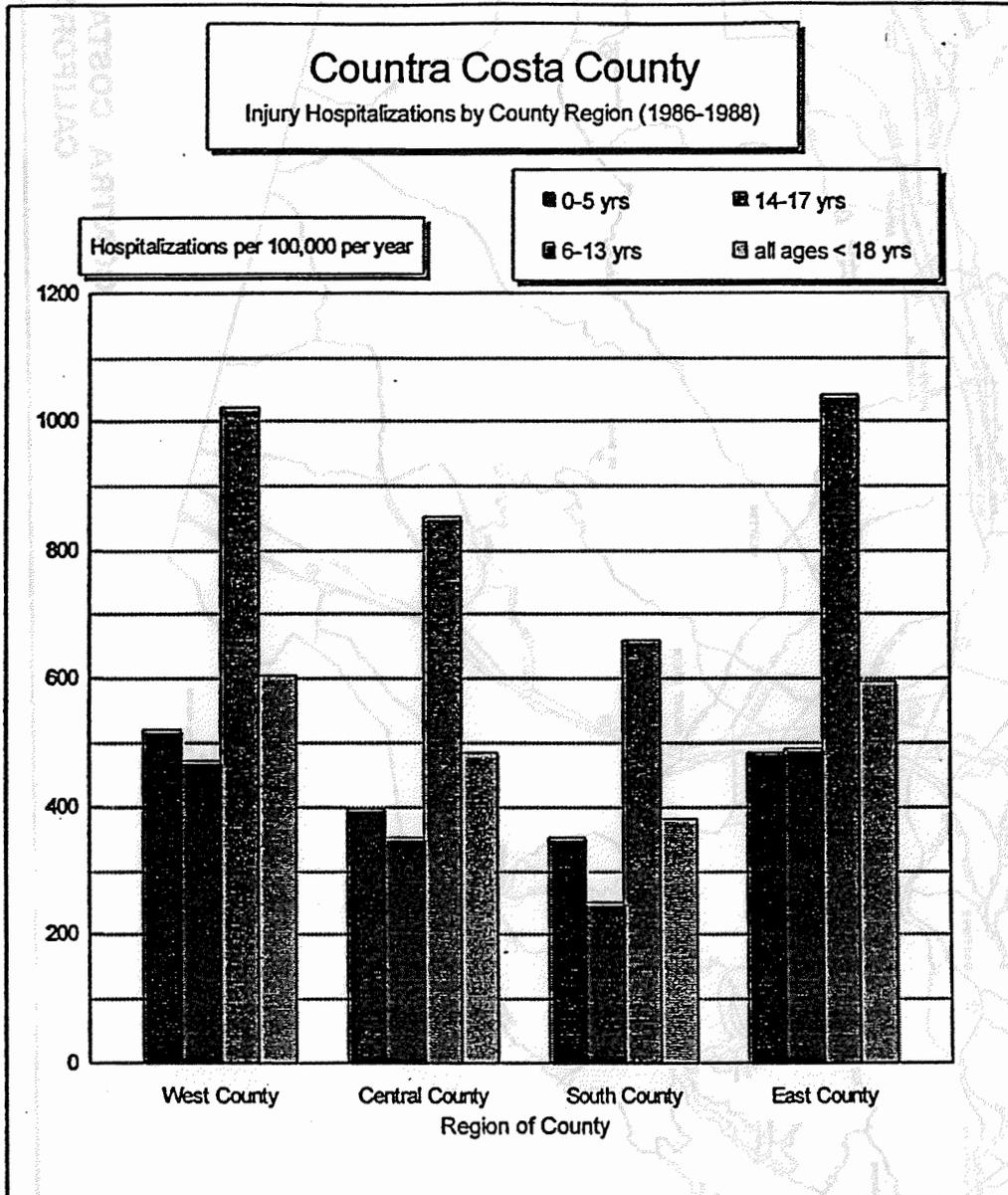
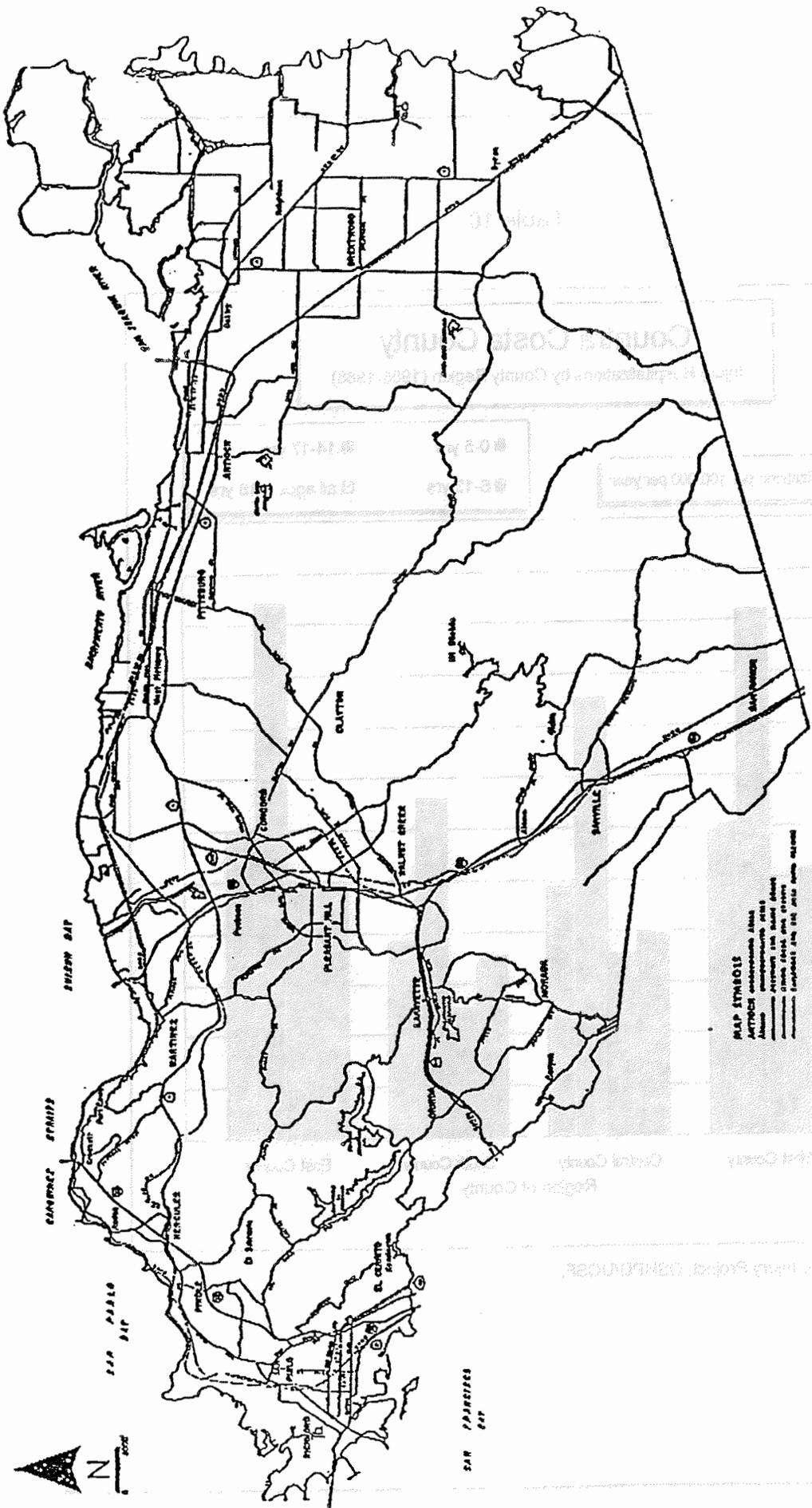


Table 10



Source: Childhood Injury Project, OSHPD/UCSF.





**CONTRA COSTA COUNTY
CALIFORNIA**



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E. EMS System Overview

1. Delivery of EMS Services

EMS services in Contra Costa County are typically provided in response to a medical emergency reported through the 9-1-1 emergency telephone system. A 9-1-1 call placed from a telephone is automatically routed to the appropriate designated Public Safety Answering Point (PSAP). A dispatcher or complaint operator at the PSAP determines the nature of the emergency and, if the PSAP is part of a fire/medical dispatch center, obtains information necessary to dispatch the appropriate response units. If the PSAP is not part of the fire/medical dispatch center, the call is transferred to a "secondary PSAP" where a dispatcher then obtains the necessary information to dispatch fire and medical units.

The initial response to a potential life threatening incident includes both a fire unit and a paramedic-staffed ambulance. The location of fire stations throughout the County enables firefighters to make a rapid initial response to a medical emergency. Firefighters are trained and equipped to provide extrication and rescue, first aid, and cardiac defibrillation techniques.

Emergency ambulance service in most of the County is provided by a private company, American Medical Response West (formerly Regional Ambulance) under contract with the County. In San Ramon Valley and Moraga Fire District areas, emergency ambulance service is provided by the fire service also under contract with the County. Depending upon the nature of the incident, an ambulance may be dispatched Code 3 (red lights and siren) or Code 2 (immediate response, but following normal traffic regulations). Ambulances may be staffed with personnel trained at either the EMT-Paramedic or EMT-I level. Advanced life support (ALS) ambulance units are staffed with two paramedics and are dispatched to potentially life threatening incidents. Paramedics work under direction of base hospital physicians and nurses and are able to administer life saving drugs and perform other invasive life saving procedures. Basic life support (BLS) ambulances are staffed by two



EMT-I's and may be used for non-emergency response or to provide additional support at an emergency incident. In some areas, first responders may respond to medical emergencies in an ambulance vehicle rather than an engine. This provides backup transport capability to the paramedic ambulance in the event there are multiple victims or delays in the paramedic ambulance response.

Patient treatment and transport are carried out under State and local EMS policies and procedures. These policies may include, in the case of paramedics, making contact with a Mobile Intensive Care Nurse (MICN) or a physician at a designated base hospital to obtain direction in management and/or hospital destinations of the patient. Patients are then transported to the appropriate hospitals. Hospital destination determination is based upon County EMS protocols and/or patient preference. Critical patients must be directed to the nearest emergency department or to a trauma center. Non-critical patients may be transported to a hospital of choice within reasonable travel time.

Medical helicopter service is available to transport critical patients when ground ambulance transport time would be excessive. CALSTAR, one of eight medical helicopter services authorized to respond to EMS calls in Contra Costa, maintains a 24-hour helicopter unit staffed by specially trained flight nurses based at Buchanan Field in Concord. Other helicopter services are available to respond from neighboring counties if CALSTAR is unavailable and/or special additional resources are required.

2. County Service Area EM-1 (Measure H) Funding

In 1988, the voters of Contra Costa County passed county-wide Measure H providing for enhancements to the EMS system including increased paramedic ambulance service, additional medical training and equipment for firefighter first responders and an improved EMS communications system. Following a 71.6 percent affirmative vote, the Board of Supervisors, with the support of the 18 city councils, formed County Service Area EM-1 to levy charges on real property as specified



in Measure H. Annual assessments are limited to two single benefit units for a single family residence. Commercial and industrial properties are assessed multiple benefit units depending upon the use code classification of the parcel. For FY 1994-1995, the assessment rate per unit was \$9.22 for all areas of the County except the San Ramon Valley. The rate in San Ramon Valley was \$3.95, the lower rate reflecting that there is no ambulance subsidy in that area. Measure H assessments have been used to add six staffed paramedic ambulance units to respond to 9-1-1 calls; to establish a firefighter first responder defibrillator program; to purchase semiautomatic defibrillators for all fire response units; to purchase medical supply caches for use in multi-casualty and disaster response; to upgrade the Medical Emergency

Disaster Area Response System (MEDARS) radio system used for ambulance-to-hospital communications; and to upgrade the dispatch system and dispatcher preparedness. A summary of emergency ambulance response data is provided in Table 11.

Table 11

Emergency Ambulance Responses

	1991		1992		1993		1994	
All EMS Ambulance Responses	39,496	100.0%	40,780	100.0%	43,774	100.0%	44,473	100.0%
Code 3 (emergency, lights & sirens)	33,110	83.8%	33,997	83.4%	36,484	83.3%	36,172	81.3%
Code 2 (emergency, no lights & siren)	6,386	16.2%	6,783	16.9%	7,290	16.7%	8,301	18.7%
American Medical Response	36,691	92.9%	37,737	92.5%	40,650	92.9%	41,329	92.9%
San Ramon Fire	2,330	5.9%	2,491	6.1%	2,561	5.9%	2,613	5.9%
Moraga Fire	475	1.2%	552	1.4%	563	1.3%	531	1.2%
Transport	29,057	73.6%	29,774	73.0%	30,886	70.6%	31,332	70.5%
No Transport (Dry Run)	10,439	26.4%	11,006	27.0%	12,888	29.4%	13,141	29.5%
Average Code 3 Response Time	6.91 minutes		6.11 minutes		6.85 minutes		6.87 minutes	

*Source: Contra Costa County EMS Agency
Response times are from receipt of call to arrival of ambulance.*



SECTION I - EXECUTIVE SUMMARY AND OVERVIEW

A. Purpose

The Emergency Medical Services (EMS) Plan for Contra Costa County is a description of the current capabilities and future goals of the EMS system in the County. The purpose of this plan is to comply with the California Health and Safety Code and provide direction to the EMS system as defined by the Contra Costa County Board of Supervisors. It is intended to provide an organized and logical guide toward assuring the highest quality of emergency care to all in Contra Costa County. This plan recognizes that a vast partnership of organizations, institutions and individuals form the nucleus of a quality EMS system. It is only through this partnership and adherence to the highest standards of care that the goals of this plan will be achieved.

B. Background

During 1966, the so-called EMS "White Paper" titled "Accidental Death and Disability: The Neglected Disease of Modern Society," identified deficiencies in providing emergency medical care in the country.¹ This paper was the catalyst to spurring federal leadership toward an organized approach to EMS. Through enactment of the 1966 Highway Safety Act, the States' authority to set standards and regulate EMS was further reinforced and encouraged. This Act also provided highway-safety funds to buy equipment and train personnel.

During 1973, the Emergency Medical Services Act (PL-93-154) was enacted to promote development of regional EMS systems. Fifteen program components were recognized as essential elements of an EMS system. During 1981, this program was folded into the Preventive Health and Health Services (PHHS) Block Grant Program. The original "White Paper," the accompanying Highway Safety Act, the Emergency Medical Services Act and subsequent block-grant programs have contributed significantly to the improvement of EMS across the country.

¹National Committee of Trauma and Committee on Shock. "Accidental Death and Disability: The Neglected Disease of Modern Society," Washington D.C., National Academy of Sciences/National Research Council, 1966



Early in California, this improvement took the form of increased standards for vehicle licensing and personnel certification. Emergency Medical Technician (EMT) training was required for ambulance personnel, as were ambulance inspections by the California Highway Patrol. Unbridled growth of ambulance services and the difficulty of monitoring ambulance providers and their personnel led some communities to limit the number of transport ambulance services serving their communities. These communities relied on licensing ambulance services into designated service areas and limited new licensees. For the most part, franchising was limited to monitoring equipment and controlling patient charges and did not begin to address the broad-ranged needs of an EMS system.

Significant State EMS direction and a leadership component for development of EMS systems began occurring in 1981 with the establishment of State law and the California EMS Authority. After considerable debate, the California State Legislature enacted the "Emergency Medical Services System and Prehospital Emergency Medical Care Personnel Act" (Health and Safety Code 1797, et seq.). This law specifically authorized local EMS agencies to *"...plan, implement, and evaluate an emergency medical services system...consisting of an organized pattern of readiness and response services...."* (Health and Safety Code 1797.204). The Act further authorized local EMS agencies to plan, implement and monitor limited advanced life support and advanced life support programs.

During 1985 and pursuant to Section 1797.103 of the California Health and Safety Code, the California EMS Authority promulgated Emergency Medical Services System Standards and Guidelines. These recently revised guidelines describe basic components and general function of an EMS system as follows:

1. Staffing/Training
2. Communication
3. Response/Transportation
4. Facilities/Critical care
5. System organization and management
6. Data collection/System evaluation
7. Public information and education
8. Disaster medical response



During 1990, it was apparent that EMS in California had surpassed these original published standards, and, in the intervening years, new regulations had been adopted (i.e., trauma, EMS dispatching standards, etc.) necessitating updating the document. New standards and guidelines were issued and adopted in 1994.

C. Local EMS Agency Functions

The principal functions of a local EMS Agency are specified in the State Health & Safety Code. These include:

- ▶ Planning, implementing, and evaluating emergency medical services.
- ▶ Monitoring and approving EMT-1, paramedic, and Mobile Intensive Care Nurse (MICN) training programs.
- ▶ Conducting certification/accreditation/authorization and licensing programs for EMT-I's, EMT-P's and MICN's.
- ▶ Authorizing advanced life support (ALS) programs.
- ▶ Establishing policies and procedures for medical control of the EMS system, including dispatch, patient destination, patient care, and quality improvement.
- ▶ Establishing ordinances and/or exclusive operating areas for the regulation of ambulance services.
- ▶ Developing and implementing a trauma system plan.

The Contra Costa County Board of Supervisors has further charged the Health Services Department as local EMS Agency with the following responsibilities:

- ▶ Monitoring interfacility patient transfers.
- ▶ Implementing EMS program enhancements funded under County Service Area EM-1 (Measure H).

Additionally, the EMS Agency is the lead agency responsible for:

- ▶ Planning and coordinating disaster medical response.
- ▶ Administering the County Ambulance Ordinance and monitoring the ambulance contracts.



To accomplish these functions, the EMS Agency employs a full time staff of nine persons, including the EMS Director, Program Coordinator, two Prehospital Care Coordinators, Trauma Coordinator, Training Coordinator, Administrative Aide, and two clerks.

D. Overall Program Priorities/Direction

Overview

The Contra Costa EMS Agency is responsible for planning, administering, monitoring and evaluating the EMS system in Contra Costa County. This plan identifies key expectations, needs, program priorities, objectives and actions for each of the eight EMS system components. This plan also introduces a new document, EMS Master Plan for First Responder Services, which will be developed to assure the logical and orderly development of first responder services in the County.

It is the intent of this plan to provide a clear, and orderly framework for implementing a comprehensive EMS system for Contra Costa County.

New Direction/Philosophy

The overall philosophy in this plan is to pro-actively map a strategy for the EMS system of the future. This will involve challenging the basic assumptions of EMS system delivery, validating appropriate systems, recommending revised approaches when the historical method cannot be documented to be the appropriate method for achieving quality and efficiency.

One significant area to be explored is the existing prehospital delivery model. The health care industry and payers have been stressing the need for more accountability and documentation as to the outcome of current methods for responding to requests for emergency assistance. Fire and private EMS agencies within the County have begun to investigate their future roles in EMS. Other counties in the State are developing models for alternative EMS patient response and treatment approaches that may be more appropriate for their specific needs and keep emergency medical resources available for high-risk patients.



The method to achieve this effort will be through participatory planning with extensive use of advisory committees steered by a revamped and revitalized Emergency Medical Care Committee. All planning and potential alternatives evaluated and implemented will be tied to a comprehensive management information system (MIS) and continuous quality improvement (CQI) process. Collaborative planning with all system participants, including health care providers and payers, will be encouraged. The premise will be quality, efficiency, outcomes and validation based on parameters defined by the advisory groups.

Key ingredients to this effort are outlined below based on the objectives written in this plan.

EMS System Management and Organization

To achieve the goals of this plan and obtain participatory input, it will be necessary to review and revamp the advisory committee structure for the EMS system. This revision should include reconstituting the Emergency Medical Care Committee (EMCC) membership, mission and expectations. The EMCC should continue in its oversight function but expand its charge to include the broad-based planning steps called for in this plan. To accomplish this task, seven advisory committees would be formed as subcommittees of the EMCC with active charges to accomplish the specific goals of this plan. Medical audit committees would be the responsibility of the Assistant Medical Director. The Measure H Oversight Committee should be linked into the EMCC hierarchy. Some of the subcommittees may initially start with a small, working task force to accomplish the early investigation and planning necessary to achieve their specific goal. Existing advisory committees and task forces would fold into these subcommittees. The EMCC and its subcommittees should be advisory to the County Health Services Director through the EMS Agency.

Supportive to this plan is the refocusing of EMS system activities on proactive planning. One key ingredient is the need to review EMS Agency staff functions and assignments. A reassessment of staff service lines with a view towards realignment towards the priorities and goals of this plan is needed. Assignments of existing functions may be consolidated or integrated with new



responsibilities. Existing staff and expertise exist within the EMS Agency to accomplish these roles with the exception of the management information system area. A management information specialist will be needed to provide the expertise and direction to support the information needs of this plan and to assist with supplying the critical foundation of the quality improvement commitment in this plan. Outside expert help may be needed to temporarily support technical planning (e.g., Communication planning, MIS design) or to provide temporary assistance in the planning process (e.g., CQI Plan, Public Information and Education Plan).

Figure 2 provides an organization chart of the proposed EMS system configuration.

EMS Medical Director

Currently, EMS medical direction comes from the County Health Officer with support from a part-time EMS medical director position and the advisory committees. This plan calls for redefining the roles and job description of the EMS medical director for a formal half-time EMS system medical director or assistant medical director. This medical director will be experienced in emergency medicine and emergency medical systems. The assistant medical director will report to the EMS Agency and the Health Officer and provide medical oversight and direction on all medical policies. This position will also be significantly involved in the development of components of the CQI model and assist with the potential future direction of the EMS delivery model. Additional emergency medical support in the form of participation on advisory committees will also be encouraged.

System and Organization Component Priorities	
<ul style="list-style-type: none">• Establish revised EMS Medical Director position• Reorganize/revitalize the EMS advisory committees• Link to CQI program	



Staffing and Training

An expanded role within the EMS Agency is planned for designing and establishing curriculum and continuing education standards. The support in this area will extend to BLS services as well. A county-wide emergency medical dispatch (EMD) program is being implemented. Personnel involved in curriculum design and education activities should be adequately prepared to provide these services.

Staffing and Training Component Priorities
<ul style="list-style-type: none">• Further EMD county wide• Link to the CQI program

Communications

The continued development and fine tuning of EMS communication capabilities is contemplated. Needs will be determined through the ongoing assessment of the communications system.

Communication Component Priorities
<ul style="list-style-type: none">• Assess basic communication system

Response and Transportation

A significant scope of this component is the review and potential conceptual redesign of the current model used for response to emergency requests. An evaluation will be conducted to determine whether or not different models or approaches will be taken on issues of call triage, method and type of response



and alternatives for a patient destination and their potential effect on improving care, quality, outcome and efficiency. Only those programs able to meet the scrutiny of these parameters and others established by the advisory committees will be recommended for implementation. Improved air medical coordination and analysis of appropriate utilization patterns will be conducted.

Response and Transportation Component Priorities
<ul style="list-style-type: none">• Improve coordination and utilization patterns with air medical services• Establish a county-wide call triage, pre-arrival EMD program• Conduct a proactive review of Prehospital systems for the future

Facilities and Critical Care

This area will receive focused attention on receiving center verification, pediatric resource planning and alternatives to poison center requests.

Facilities and Critical Care Component Priorities
<ul style="list-style-type: none">• Inventory and assess receiving centers• Continue study of alternatives to Poison Control Centers

Data Collection and System Evaluation

This is a significant focus of the EMS plan and an important link to potentially directing the future of the EMS system. Excellent data that describes and



tracks system impact, performance, outcome and quality indicators is essential to achieve the goals of the plan. This component defines two important tasks of planning and implementing a comprehensive management information system (MIS) and the preparation and implementation of a Continuous Quality Improvement (CQI) Plan. Existing databases and software linkages with the designated trauma center will also need further refinement.

Data and Evaluation Component Priorities
<ul style="list-style-type: none">• Develop a complete MIS system .• Link all components of EMS system to MIS system.• Develop a CQI plan and integrate into EMS system.• Refine trauma system data system.

Public Information and Education

Informed and educated consumers are also important to this plan's success. However, there is a danger that EMS public education activities will be too global and lack clear outcome expectations. This component specifically speaks to a targeted effort for public information and education, with identified outcome expectations and the utilization and cataloging of existing resources where possible.

Public Information/Education Component Priorities
<ul style="list-style-type: none">• Assess ongoing public information and educations needs.• Target public education efforts.



Disaster Medical Response

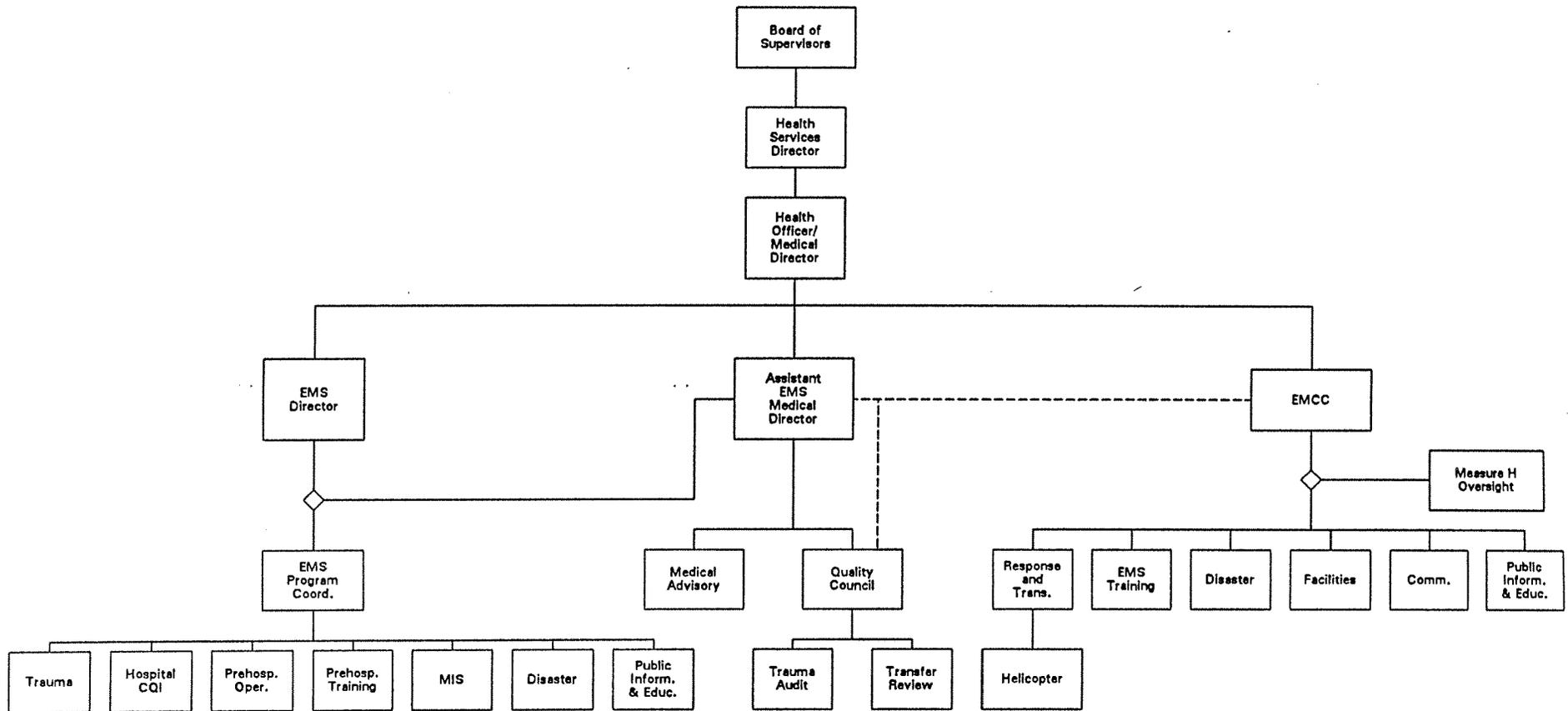
While disaster planning has received a high priority in the County, continued improvements in the level of preparedness are planned. Key priorities are re-evaluating the command structure for consistency with the new State SEMS regulations, establishing a network for hospital communications, adopting the Hospital Emergency Incident Command System (HEICS) in all hospitals, and providing increased training opportunities for EMS personnel at all levels.

Disaster and Mutual Aid Component Priorities
<ul style="list-style-type: none">• Adopt SEMS.• Establish hospital communications network.• Adopt HEICS in all hospitals.• Provide increased training.



Figure 2

Contra Costa County EMS Agency
Proposed Organization



SECTION II

SYSTEM ASSESSMENT

The following charts describe the California EMS Authority standard (listed as "standard") for each of the eight components of the EMS Plan along with a focused local goal established for Contra Costa County (listed as "Goal"). Time frames are listed as Short (one year or less) or Long Range. Priorities are listed as 1 (highest) to 4 (lowest). "Complete" and "partially complete" indicates that the component is in substantial compliance with the State requirements, lacking only locally initiated enhancements.

System Organization and Management

Agency Administration

Standard:

1.01 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.

Goal:

An effective organizational structure which enables the EMS Agency to plan, implement, monitor and evaluate the local EMS system. EMS Agency coordination of the multiple participants of the EMS system. EMS Agency functioning as system advocate to the community and other governmental entities.

Current Status: The Contra Costa County Board of Supervisors designated the Department of Health Services as the local EMS Agency. Currently, the EMS Agency has nine staff positions including: an EMS Director, an EMS Program Coordinator, two Prehospital Coordinators, a Trauma Nurse Coordinator, a Data Management Coordinator, a Training Coordinator, and two clerical staff. The EMS Agency is a part of the Contra Costa County Health Services Department.

Need(s): Identify staffing needs, review and modify job descriptions and employee classifications in keeping with the mission and goals of the EMS Agency and this plan.

Objective: Enhance functional and personnel components of the EMS Agency to address goals.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

Priority

0-6 month Time Requirement



System Organization and Management

Agency Administration

Standard:

1.02 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.

Goal:

A comprehensive system-wide Continuous Quality Improvement (CQI) and evaluation program.

Current Status: Although most EMS system monitoring currently occurs using a quality assurance method, the continuous quality improvement (CQI) approach to monitoring activities is being developed and integrated within a number of programs. The CQI approach is currently used in the trauma and transfer review programs. Individual facilities and providers conduct some CQI components. Some evaluation processes are generally complaint-driven.

Need(s): A comprehensive CQI program plan is needed which encompasses the receiving hospitals, base hospitals, trauma center, first responders, dispatch, training programs, ambulance service providers and other system components. Specific outcomes and quality indicators of the quality improvement process need to be defined. Policies, procedures and regulations need to be developed to require quality improvement activities by the system participants. The EMS Agency should make CQI responsibilities a staffing priority and should use various participant resources, establish participant work groups, and develop comprehensive procedures and standards for system participants.

Objective: Establish a system-wide CQI plan. Implement the plan with the provision of appropriate feedback to individual providers and system participants. Use the information developed in this process to identify and implement needed system changes.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

Priority

1-2 years Time Requirement



System Organization and Management

Agency Administration

Standard:

1.03 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.

Goal:

Broad-based input from EMS system participants and consumers in the ongoing management and evaluation of the EMS system.

Current Status: A system of advisory committees including the Emergency Medical Care Committee (EMCC), has developed over the years to provide EMS system related input and recommendations to the Board of Supervisors, the Health Services Department and the EMS Agency.

Need(s): Review and re-define missions, responsibilities, expectations and membership for EMS committee structure including the EMCC to meet the EMS system objectives defined in this plan. Enhance linkages between the EMCC, the various advisory committees, and the EMS Agency.

Objective: Establish and maintain strong permanent committees for oversight of the operational and administrative functions of the EMS system and for monitoring and defining the clinical care aspects of the system. Develop advisory committees to respond to the ongoing needs of the EMS system. Link the Measure H Oversight Committee to the EMCC. Develop limited term task forces to address specific objectives such as the development of system-wide CQI, preparation of an EMS communication plan and the development of performance standards for various EMS system components.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

6-12 mo. Time Requirement



System Organization and Management

Agency Administration

Standard:

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

Goal:

Local EMS Agency medical leadership with administrative experience in emergency medical services systems. Clinical specialty resources available to provide clinical input as needed through specialty advisory groups composed of physicians with appropriate specialties and non-physician providers (including nurses and prehospital providers), and/or through medical consultants with expertise in trauma care, pediatrics, and other clinical specialties.

Current Status: The County Health Officer currently operates in the role as EMS medical director. A contract has been established for physician medical oversight for the First Responder Defibrillation Program, the Emergency Medical Dispatch Program, and certain aspects of the prehospital care program on a limited basis. Specialty physicians are asked to provide input on specialty programs and policies on an ad hoc basis.

Need(s): Develop additional EMS physician leadership and time commitment to the EMS Agency. Provide the Medical Advisory Committee with an opportunity to provide input on qualifications and responsibilities for an EMS Agency assistant medical director. This individual should report 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, need to be developed formally to provide input into specialized system issues.

Objective: An organization structure which provides strong, specialized EMS system clinical oversight of EMS system activities.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High
 Moderate
 Low Resource Requirement

3
 6
 1 Priority

6 months
 12 months Time Requirement



System Organization and Management

Planning Activities

Standard:

1.05 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.

Goal:

A comprehensive and dynamic EMS plan for the County of Contra Costa to meet existing and future challenges to the EMS system.

Current Status: The previous EMS Plan was approved in 1986. This revised 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 will focus on target issues and evaluation of the system's performance outcomes.

Need(s): Develop ongoing process for monitoring the implementation of plan activities and modifying the plan to meet changing needs. Develop a specific action plan for each system component with a time-frame and accountability for plan implementation. Respond to the complex and changing health care field with defined parameters of accountability, performance and cost efficiency.

Objective: Implement plan activities on a timely basis. Provide mechanisms to modify plans as needed. Evaluate all plan components for response to the health care industry changes through the development of a framework of accountability, performance and cost efficiency.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

1 Priority

Ongoing Time Requirement



System Organization and Management

Planning Activities

Standard:

1.06 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 the planned system design.

Goal:

Regular status reports regarding Contra Costa County EMS to the Board of Supervisors and the California EMS Authority.

Current Status: This plan represents the initial revised plan to meet the new EMS system guidelines. Therefore, there have been no current annual updates.

Need(s): Develop a comprehensive process to solicit input and provide updates and modification to the existing EMS plan. Report EMS system progress to the County Board of Supervisors and submit an updated plan to the State EMS Authority every 12 months after the acceptance of the initial plan.

Objective: Provide annual reports to the County Board of Supervisors and update the EMS plan each year.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

Annual Time Requirement



System Organization and Management

Planning Activities

Standard:

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

Goal:

Local EMS Agency designation and trauma center contract in place. Agreements with trauma facilities in other jurisdictions.

Current Status: There is a trauma system and a designated Level II trauma center in Contra Costa County. All essential components of the approved trauma system plan are in place, including criteria for hospital designation, medical control, and data collection. Trauma triage policies have been approved. Integration of all the existing EMS system components into a functional trauma system has been fully completed. There is also an extensive bi-county (Alameda and Contra Costa County) medical review process of trauma patient care.

Need(s): The trauma system evaluation process, including specialized review and focused audits, should be incorporated into the EMS system CQI process as identified in Standard 1.02.

Objective: To continue a coordinated and comprehensive trauma system plan for Contra Costa County with ongoing program evaluation and linkages to the EMS system Quality Improvement Plan as it is developed.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med Resource Requirement

1 Priority

Ongoing Time Requirement



System Organization and Management

Planning Activities

Standard:

1.08 Each local EMS Agency shall plan for eventual provision of advanced life support services throughout its jurisdiction.

Goal:

Advanced life support response and transportation throughout Contra Costa County for all patients triaged as needing that level of service.

Current Status: Advanced life support services are provided county-wide. All emergency ambulance services routinely respond ALS resources to emergency medical requests. An innovative rural ALS first response unit has been implemented to respond to the identified needs in one rural area (Byron). Two fire districts, Moraga Fire Protection District and San Ramon Valley Fire Protection District, have established ALS first response units.

Need(s): There are no identified needs in this area.

Objective: Ongoing review and monitoring.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

Ongoing Time Requirement



System Organization and Management

Planning Activities

Standard:

1.09 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.

Goal:

Comprehensive awareness of resources used in the provision of emergency medical services and prior identification of resources which may be needed to meet unusual system requirements.

Current Status: Inventories exist for personnel, vehicles (air and ground), facilities, and agencies within the jurisdiction of Contra Costa County.

Need(s): Review and update inventory of EMS resources

Objective: Identify resources which may be needed for emergency medical service response and update the inventory annually.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years Time Requirement



System Organization and Management

Planning Activities

Standard:

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

Goal:

Services developed for special population groups requiring specialized EMS services as appropriate. (e.g., elderly, handicapped, children, non-English speakers).

Current Status: Some targeted specialty population planning has occurred to date particularly in trauma, and in pediatrics.

Need(s): Assess the needs of specific population groups which may require specialized services. Work with other programs which provide specialized services to the public such as the County Injury Prevention Program. Develop plans to enhance service delivery to specialized groups where needed.

Objective: Assure appropriate access to the EMS system by all individuals and groups within the County.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

2-5 years Time Requirement



System Organization and Management

Planning Activities

Standard:

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

Goal:

The local EMS Agency ensures that system participants conform with their assigned EMS system roles and responsibilities, through mechanisms such as written agreements, facility designations, and exclusive operating areas.

Current Status: Procedures, policies and performance standards have been developed for ALS and BLS system personnel. Some activities lack standardization throughout the system.

Need(s): Evaluate and/or develop EMS related roles, responsibilities and performance standards for EMS system providers. Review existing contracts with EMS providers to assure responsibilities and standards developed through this process are addressed. Develop and execute agreements or letters of understanding between the County (through the EMS Agency) and EMS providers including receiving hospitals, medical dispatch centers, first responder agencies, emergency helicopter provider agencies and other system providers to reflect identified roles, responsibilities and performance standards.

Objective: Establish comprehensive roles, responsibilities, and performance standards for the EMS system providers. Develop written agreements which identify these roles, responsibilities and performance standards as well as provide the mechanisms to ensure compliance. Develop mechanisms to link the monitoring efforts of EMS providers to the EMS CQI plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

1 Priority

1-2 years Time Requirement



System Organization and Management

Regulatory Activities

Standard:

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

Goal:

The Emergency Medical Care Committee responsible for EMS system operational oversight. EMS system operations monitored and evaluated through a data collection system. Written agreements in place which identify minimum EMS performance standards with system participants. Contra Costa County EMS system's operational performance is evaluated, documented, and reported on a regular basis.

Current Status: Lack of contemporary data collection and analysis resources, coupled with limited definitions of expectations and quality indicators has restricted the EMS Agency's ability to review and monitor EMS system operations. Ambulance response data is currently collected as the primary measure of compliance.

Need(s): Redefine the EMCC and its advisory committee functions. Develop specific parameters and responsibilities for reviewing and monitoring EMS system performance. Facilitate that review and monitoring through development of a contemporary management information system, written agreements with the various system participants and a CQI plan. Develop EMS Medical Director position and realign EMS Agency staff. Integrate review and monitoring of the various quality improvement and data collection activities.

Objective: A comprehensive, ongoing review and monitoring process used to evaluate EMS system performance. The system review process is to be based on data and to address methods for providing feedback to participants as well as for managing non-compliance.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

1 Priority

1-2 years Time Requirement



System Organization and Management

Regulatory Activities

Standard:

1.13 Each local EMS Agency shall coordinate EMS system operations.

Goal:

System-wide coordination through the efforts of the Emergency Medical Care Committee, sub-committees, limited-term task forces. Information is provided through multiple avenues with system participants.

Current Status: Substantial coordination exists between the EMS Agency and the system providers. System coordination is currently provided through a network of the Emergency Medical Care Committee, nine advisory committees in the County and one multi-county advisory committee. These committees operate with varying missions and meeting schedules based on needs. The EMS Agency publishes a bi-monthly EMS newsletter which provides information about EMS system operations.

Need(s): The EMCC and advisory committee network should be revised. The EMS Agency should emphasize communications with EMS system participants and should respond promptly to all requests for information or assistance.

Objective: The Emergency Medical Care Committee with its revised, system-wide representation, will lead coordination efforts through establishment of permanent and limited-term subcommittees and task forces to address specific issues and components of the EMS system plan. The EMS Agency will also regularly communicate through multiple avenues with system participants.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

6-12 mos. Time Requirement



System Organization and Management

Regulatory Activities

Standard:

1.14 Each local EMS Agency shall develop a policy and procedures manual which 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.

Goal:

A comprehensive policies and procedures manual is maintained for the Contra Costa County EMS system.

Current Status: EMS Agency policies and a prehospital care manual are available to all the EMS system providers within the system. These are reviewed on a regular basis.

Need(s): Additional policies and procedures may need to be developed subsequent to the approval of this EMS plan.

Objective: Maintain comprehensive policy and procedure manuals for EMS system participants. Review and modify as identified by CQI program.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

Ongoing Time Requirement



System Organization and Management

Regulatory Activities

Standard:

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

Goal:

A strong legal foundation which enables the County to comply with State mandates and to ensure the EMS system's functioning.

Current Status: The Contra Costa County has contracts in place and guidelines to monitor and regulate ground ambulance services. The contracts along with EMS policies, procedures and guidelines are used to monitor and enforce compliance with system regulations. There is an ordinance in place which provides limited support to the monitoring and enforcement issues.

Need(s): The current County Ambulance Ordinance has been in place for a number of years and should be amended or replaced with a comprehensive ordinance as system needs change. Compliance monitoring should be integrated into the CQI plan.

Objective: Reaffirm the legal foundation for the organizational structure, authority and scope of activities of the EMS Agency and its relationship with system providers including performance criteria and penalties with the authority to enforce compliance.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

1-2 years Time Requirement



System Organization and Management

System Finances

Standard:

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

Goal:

A strong independent financial basis for the EMS system and system participants.

Current Status: EMS Agency and support program funding is derived from several sources: the County Special Benefit Assessment (Measure H), the County general fund, grant funds, certification fees, funds derived from Senate Bill 612, and other fees from EMS system participants.

Need(s): The existing funding sources appear adequate. Ongoing monitoring is needed.

Objective: Continue ongoing monitoring of EMS funding needs.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

Ongoing Time Requirement



System Organization and Management

Medical Direction

Standard:

1.17 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.

Goal:

All agencies within the EMS system with direct patient care responsibilities have medical directors to oversee the clinical aspects of the Agency's operations. Designated base hospitals have comprehensive EMS related policies and procedures. Base personnel have adequate training and guidance to fulfill their responsibilities.

Current Status: The County has designated two base hospitals (one of the two is also designated as the trauma system base). Roles and responsibilities of the base hospitals and base hospital personnel are identified in the County's policies, procedures and protocols manual, as well as in the base hospital contract. ALS providers as well as first responder agencies participating in the first responder defibrillation program are under the medical control of the County EMS Medical Director.

Need(s): The role and responsibilities of base hospitals are in need of review. The changing requirements of the ALS program and first responder defibrillation programs coupled with the diminishing needs for day to day oversight may necessitate a revision in the mission, scope and configuration of base hospitals.

Objective: Implementation of a plan for medical control for all patient care providers. Evaluation and refinement of current system of providing ALS medical oversight, monitoring and education through base hospitals.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

1-2 years Time Requirement



System Organization and Management

Medical Direction

Standard:

1.18 Each local EMS Agency shall establish a quality assurance (QA)/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.

Goal:

EMS participants in-house procedures identify methods of improving the quality of care provided.

Current Status: There is no formal system-wide QI plan in place. Retrospective QA methods are primarily used to evaluate system components. Many evaluation activities are complaint-driven (except for trauma, transfer and some base hospital and provider functions) and do not reflect comprehensive QA/QI planning. An EMD pilot program with a QI component has been implemented in the San Ramon Fire District.

Need(s): A system-wide QI Plan should be developed with input from EMS providers. A comprehensive QI Plan should include identification of appropriate outcome measures, indicators, identification of a common data set, individual provider agency responsibilities, and feedback mechanisms. Medical policies and procedures for care providers should be established or modified by the EMS Agency based on trends identified by the CQI program. EMS providers should have their own CQI programs which interface with the system plan, including responsibility for agency QI activities. QI activities should be monitored by a quality council, with regular reports to the EMCC and other appropriate advisory committees.

Objective: Establish a system-wide CQI plan which is monitored by a quality council and integrates individual provider QI plans.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

1 Priority

1-3 years Time Requirement



System Organization and Management

Medical Direction

Standard:

- 1.19 Each local EMS Agency shall develop written policies, procedure, and/or protocols including, but not limited to:
- triage,
 - treatment,
 - medical dispatch protocols,
 - transport,
 - on-scene treatment times,
 - transfer of emergency patients,
 - standing orders,
 - base hospital contact,
 - on scene physicians and other medical personnel,
 - local scope of practice for prehospital personnel.

Goal:

Comprehensive set of policies, procedures, and protocols is available for all agencies and individuals functioning within the EMS system. County-wide standard for emergency medical dispatching, with review developed and based on the CQI model.

Current Status: Detailed policies, procedures and protocol exist for most clinical and operational prehospital situations. A County-wide system of emergency medical dispatching is being developed.

Need(s): New policies as well as modifications to original EMS policies and procedures should be based on findings of the EMS CQI program. County-wide policies for EMS dispatching and call-taking should be completed.

Objective: Continue to provide comprehensive guidelines, policies, procedures and protocols for all EMS personnel functioning within the EMS system. Incorporate specific policies and procedures to address commonly occurring circumstances. Develop a county-wide standard and review process for emergency medical dispatching. Conduct all processes using CQI methods. Revise other policies based on system needs identified through implementation of this system plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

1-2 years Time Requirement



System Organization and Management

Medical Direction

Standard:

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

Goal:

Adequate guidelines, policies and procedures to support personnel in the field for determining when it is appropriate not to resuscitate patients.

Current Status: An EMS "Do-Not-Resuscitate" policy is in place.

Need(s): No current needs have been identified.

Objective: Continue to monitor these procedures.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Resource Requirement

Priority

Ongoing Time Requirement



System Organization and Management

Medical Direction

Standard:

1.21 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.

Goal:

Ongoing monitoring of policies.

Current Status: A policy regarding determination of death is in the Agency's policy and procedures manual. Occasional issues surface with law enforcement agencies regarding "pronouncement".

Need(s): Ongoing monitoring and role clarification as appropriate.

Objective: Continue to monitor/revise as needed.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

Ongoing Time Requirement



System Organization and Management

Medical Direction

Standard:

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

Goal:

Updating of policies on an ongoing basis.

Current Status: The mechanism for reporting child and elder abuse has been addressed in the EMS Agency's policies and procedures manual.

Need(s): No identified needs.

Objective: Ongoing review and monitoring.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



System Organization and Management

Medical Direction

Standard:

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

Goal:

Ongoing monitoring and review.

Current Status: Policies and procedures have been developed and are in place for identifying the scope of practice for prehospital medical personnel during interfacility transfers.

Need(s): No identified needs.

Objective: Ongoing monitoring and review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



System Organization and Management

Advanced Life Support

Standard:

1.24 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.

Goal:

Provision of ambulance services based upon exclusive operating areas for ALS providers throughout Contra Costa County.

Current Status: Agreements exist between the ALS providers and the EMS Agency.

Need(s): No identified needs.

Objective: Ongoing monitoring and review.

Time Frame for Objective:

Short-Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



System Organization and Management

Advanced Life Support

Standard:

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

Goal:

An EMS system medical control plan which determines:

- System base hospital configuration;
- Base hospital selection and designation processes which allow all eligible facilities to apply;
- The process for determining when prehospital providers should appoint an in-house medical director; or,
- An appropriate medical control configuration for the future.

Current Status: Two base hospitals have been designated for the County with each providing on-line medical control by physicians or authorized registered nurses. One of the two base hospitals also provides medical control for all trauma cases. There is a base station application and selection process for designation. The County currently provides funding for Base Hospital services.

Need(s): The medical control system as it relates to the EMS delivery model should be validated. An assistant EMS medical director position should be developed and filled.

Objective: Study the base hospital system to validate its mission, scope and configuration as in 1.17.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

2 Priority

1-2 years Time Requirement



System Organization and Management

Trauma Care System

Standard:

- 1.26 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 which allows all eligible facilities to apply.

Goal:

A trauma care system plan within the County in order that all trauma patients receive the most appropriate level of trauma care in a timely manner.

Current Status: The trauma care system plan has been developed and successfully implemented. It was determined that only one trauma center was needed within the County, and John Muir Medical Center has been designated as the local level 2 trauma center.

Need(s): No identified needs.

Objective: Continue the comprehensive trauma system plan for Contra Costa County.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

Ongoing Time Requirement



System Organization and Management

Pediatric Emergency Medical and Critical Care System

Standard:

- 1.27 The local EMS Agency shall develop a pediatric emergency medical and critical care system plan which determines:
- The optimal system design for pediatric emergency medical and critical care in the EMS area, and
 - The process for assigning roles to system participants, including a process which allows all eligible facilities to apply.

Goal:

Children in Contra Costa County have timely access to the most appropriate level of pre-hospital and in-hospital medical care.

Current Status: Currently, most seriously injured children are transported or interfacility transferred to Children's Hospital Oakland. Pediatric treatment, advanced airway and other prehospital procedures for children have been implemented in the County. While the seriously injured child component has been comprehensively addressed, the EMS Agency has begun to evaluate the total pediatric emergency medical and critical care system needs.

Need(s): A comprehensive pediatric emergency medical and critical care system plan needs to be developed. The components of the plan would include the development of 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.

Objective: Implementation of a comprehensive pediatric emergency medical and critical care system plan for Contra Costa County.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years Time Requirement



System Organization and Management

Exclusive Operating Area

Standard:

- 1.28 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:
- The optimal system design for ambulance service and advanced life support services in the EMS area, and
 - The process for assigning roles to system participants, including a competitive process for implementation of exclusive operating areas.

Goal:

Residents and visitors to Contra Costa County to have access to timely advanced life support ambulance transportation service.

Current Status: All residents and visitors of Contra Costa County have access to ALS services. The Moraga Fire District is "grandfathered" as an exclusive operating area (EOA) under 1797.201 of the H&S code. The other EOA's have not been reviewed in several years and their configuration may no longer be appropriate.

Need(s): A review of the EOA configuration and definitions needs to be conducted.

Objective: Conduct a review and redesign the EOA system, if necessary.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Staffing/Training

Local EMS Agency

Standard:

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

Goal:

Adequate numbers of well-trained personnel for the Contra Costa County EMS system.

Current Status: The EMS Agency has taken a leadership role in the development of a fire service EMT program. However, the EMS Agency has no formal program to routinely assess personnel and training needs. Multiple training programs are available throughout the County.

Need(s): A formal process to receive input from the various EMS providers with regard to personnel shortages and training needs for prehospital (ground and air) and hospital participants should be developed. (Creative methods to assist and support various system participants in providing local training programs and continuing education should be used.) The development of standards for curriculum, competencies and continuing education programs at all EMS provider levels should occur.

Objective: To have adequate training and continuing education opportunities throughout the County to assure orientation to the critical pathways defined in the CQI plan. Develop a standardized curriculum, competency list and continuing education program format for all EMS provider levels to assist the providers and meet the intent of the new State defined roles.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

2-5 years Time Requirement



Staffing/Training

Local EMS Agency

Standard:

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

Goal:

High quality Contra Costa County training programs support personnel involved in the Contra Costa County EMS system.

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

Need(s): Activities devoted to approval and monitoring of training programs should be implemented. Periodic on-site monitoring of teaching activities and training program outcomes should take place.

Objective: Assure the training programs approved by the County comply with regulations and that the outcome of the programs results in appropriately trained personnel.

Time Frame for Objective:

Short Term Implementation Long Range Plan Complete/Partially

Low Resource Requirement 3 Priority 1-2 years Time Requirement



Staffing/Training

Local EMS Agency

Standard:

2.03 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 which could impact EMS personnel certification.

Goal:

Prehospital medical personnel are appropriately qualified to function within the EMS system.

Current Status: State licensing and local accreditation is required for EMT-P's; County certification for first responder defibrillators and EMT-I's; and authorization for MICN's. Procedures, policies and requirements are in place to credential first responder defibrillator personnel, EMT-I's, EMT-P's, and MICN's. Provisions are included for the Agency to be notified in the event of unusual occurrences which could impact EMS certification.

Need(s): Current credentialing procedures should be reviewed with the aim of simplifying and expediting the process.

Objective: Continue to develop policies and procedures which assure that qualified personnel are operating within the system, and link credentialing procedures to the CQI plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

Ongoing Time Requirement



Staffing/Training

Dispatchers

Standard:

2.04 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.

Goal:

Public safety answering point (PSAP) operators with medical dispatch responsibilities and all medical dispatch personnel (both public and private) are trained and certified in accordance with the EMS Authority's Emergency Medical Dispatch Guidelines.

Current Status: First responders are dispatched by designated medical dispatch agencies located in fire or police dispatch centers. EMS dispatchers also notify private ambulance services when their resources are needed. Contra Costa County Fire District dispatchers have been using a County-approved emergency medical dispatch program including pre-arrival instructions since 1988. The EMS Agency has established a pilot computerized emergency medical dispatch program with the San Ramon Valley Fire Protection District on EMD.

Need(s): A long-term process needs to be undertaken to evaluate the current public safety answering point and dispatch system for Contra Costa County emergency medical services. County-wide policies, procedures and an evaluation process for emergency medical dispatch needs to be developed. Incorporation of EMD county-wide should continue to be promoted. An EMS system orientation program for call takers and dispatchers within the County should be developed.

Objective: Continue the plan for county-wide EMD based on approved policies and procedures and evaluation processes. Facilitate the implementation of the EMD concept to answering and dispatch system for all emergency medical services providers.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

2 Priority

6-12 mos. Time Requirement



Staffing/Training

First Responders (non-transporting)

Standard:

2.05 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.

Goal:

A first responder master plan is in place for the county. First response units are staffed with EMT-I and defibrillation trained personnel. Defibrillation programs for first responders receive continued support.

Current Status: Emergency medical first responder services are generally provided by various fire services within the County and all fire first responders are trained to the first responder level. All fire first responders were accredited to defibrillate by March, 1992 and EMT-I trained personnel are prevalent. There have been discussions within some fire services regarding the provision of ALS first response services. Although there is no current plan for implementation of a county-wide ALS first response system, standards for an ALS first responder program are currently being developed.

Need(s): A master plan for first responder services including policies, procedures and treatment guidelines needs to be initiated and coordinated by the EMS Agency. Enhancement of first responder resources in those areas not served by EMT-I trained first responders should be promoted. A subcommittee of the Emergency Medical Care Committee should begin the development of a first responder needs' assessment (basic and advanced life support) and a master plan to address first responder needs and planning issues, make recommendations and promote a County-wide first response system. Allowances for various first responder levels (first responder through ALS) should be accommodated within the EMS system structure.

Objective: Promotion of a coordinated and planned expansion of first response capability based on identified needs.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

1 Priority

6-12 mos. Time Requirement



Staffing/Training

First Responders (non-transporting)

Standard:

2.06 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.

Goal:

All patients who may benefit from first response receive those resources.

Current Status: There are a number of organizations providing medical first response within the County. All fire services provide first responder services. There are also law enforcement and industrial teams.

Need(s): On-going liaison between EMS Agency and transport as well as non-transport first responder agencies including law enforcement should be maintained.

Objective: Continue to inventory and coordinate with county-wide first responder programs.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Staffing/Training

First Responders (non-transporting)

Standard:

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

Goal:

A county-wide first response capability with appropriate clinical levels and monitoring mechanisms.

Current Status: The County EMS Agency policies and procedures manual provide medical protocols for EMS first responders. Limited monitoring and evaluation of first responder efforts have been incorporated within the County system.

Need(s): Include first responders in the proposed CQI plan. Develop a standard data set and form for first responder use in order to collect needed information. Develop policies and procedures and/or regulations requiring all first responder programs to have physician input.

Objective: Development of a coordinated first responder program within the County with appropriate medical oversight.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

2 Priority

1-2 years Time Requirement



Staffing/Training

Transport Personnel

Standard:

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

Goal:

All patients requiring emergency medical transportation are transported by vehicles staffed to the advanced life support (paramedic) level.

Current Status: All emergency medical transport vehicles are required to be staffed at the EMT-P level.

Need(s): Current considerations for first responder ALS services may permit consideration of an EMT-I/EMT-P configuration for ambulances served by ALS first responders.

Objective: Consider the optimal staffing levels for EMS transport services once the first responder master plan is put into place.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

6-12 mo Time Requirement



Staffing/Training

Hospital

Standard:

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

Goal:

Personnel responsible for direct emergency patient care provide CPR to patients who need it.

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

Need(s): No identified needs.

Objective: Continue to encourage all allied health personnel who provide direct emergency patient care to be trained in CPR.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

Ongoing Time Requirement



Staffing/Training

Hospital

Standard:

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

Goal:

Hospitals providing medical control or receiving patients provide ACLS-trained personnel for direct emergency patient care at all times. All emergency department physicians are certified by the American Board of Emergency Medicine (ABEM).

Current Status: All base hospital emergency physicians and MICN's are required to maintain current ACLS certification. Some receiving hospitals do require that all licensed critical care nursing staff possess current ACLS certification. All base hospital physicians are required to be Board eligible or Board certified with the American Board of Emergency Medicine.

Need(s): Conduct a survey to determine ACLS requirements for licensed emergency department staff. Revise receiving hospital criteria to encourage ACLS certified personnel to be available at all times (for non-ABEM staff). Encourage ABEM for all emergency physicians.

Objective: Ensure that adequate numbers of emergency department physicians and registered nurses who provide direct emergency patient care will be trained in advanced cardiac life support (if not ABEM) and encourage emergency physicians to be ABEM.

Time Frame for Objective:

Short Term Implementation Long Range Plan Complete/Partially
 Low Resource Requirement 4 Priority 2-5 years Time Requirement



Staffing/Training

Advanced Life Support

Standard:

2.11 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.

Goal:

Qualified and well prepared advanced life support personnel for the Contra Costa County EMS system. ALS personnel/providers are integrated into the County CQI processes.

Current Status: Procedures have been implemented for accrediting advanced life support personnel which 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.

Need(s): A mechanism to link advanced life support activities to the county-wide quality improvement process. Revision of current orientation process.

Objective: Link advanced life support providers and their personnel to the proposed CQI program.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

2 Priority

6-12 mo Time Requirement



Staffing/Training

Advanced Life Support

Standard:

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

Goal:

Incorporation of early defibrillation into the County's EMS and first responder system.

Current Status: Certification policies and procedures for the development of first responder defibrillation programs are in place within the EMS guidelines. All the fire first responder agencies have adopted early defibrillation programs.

Need(s): No identified needs.

Objective: Ongoing monitoring and review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

Ongoing Time Requirement



Staffing/Training

Advanced Life Support

Standard:

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

Goal:

Base hospital personnel who are well prepared to provide on-line medical control for field personnel.

Current Status: Base hospital physicians receive an EMS system orientation from the Base Station Liaison Physician and Base Hospital Coordinator. MICN's are required to have completed an approved MICN training program, receive an EMS system orientation as part of an EMS Agency program, and a base hospital orientation from the Base Hospital Coordinator.

Need(s): There are no specific training needs for base hospital personnel.

Objective: Ongoing monitoring.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

Ongoing Time Requirement

Communications

Communications Equipment

Standard:

3.01 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.

Goal:

On-going evaluation of the overall EMS communication needs of the County. A county-wide communication network for EMS which takes into consideration the availability of new technologies, e.g., satellite and cellular technology.

Current Status: The EMS Agency has implemented a communications system for emergency medical services. Certain communication capabilities are in need of refinement (particularly the fire and ambulance linkages) or updating to meet the continuing needs of the EMS system.

Need(s): Refine the current county-wide EMS communications system with improved coverage for ambulance services and updated voice and digital capability for dispatchers.

Objective: Develop a plan to enhance EMS communications and identify funding sources to begin implementation of necessary improvements.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years Time Requirement



Communications

Communications Equipment

Standard:

3.02 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.

Goal:

Emergency medical transport vehicles have two-way radio communications equipment which 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: Medical transport vehicles are required to have radio capability to communicate with dispatch, with fire agencies, and for ambulance to hospital communication. There are some limited needs to improve EMS communications in the County.

Need(s): Develop enhanced EMS communications capability based on needs.

Objective: Identify needs and develop enhanced EMS communications capability based on needs.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

2 Priority

2-5 years Time Requirement



Communications

Communications Equipment

Standard:

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

Goal:

Effective communication capability among ambulances and all hospitals.

Current Status: All permitted ambulances providing emergency interfacility transfer services have communications capability with sending and receiving facilities through the MEDARS system (T-Band) frequencies. All ALS vehicles have cellular phone capability.

Need(s): Identify areas in the County where radio communication is ineffective and incorporate remedies into an EMS communication plan of action.

Objective: Identify areas in the County where radio communication is ineffective and incorporate remedies into an EMS communication plan of action.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

3 Priority

1-2 years Time Requirement



Communications

Communications Equipment

Standard:

3.04 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.

Goal:

County-wide EMS radio communications capability.

Current Status: Multiple communication avenues are available to ambulance services throughout most of the County but in some areas, radio communication capability is erratic due to large distances or geographical barriers such as mountain ranges. Communication capability with out-of-county providers or for Contra Costa County providers responding into other counties does not exist.

Need(s): Assess communication needs of EMS provider services for "dead spots" in the County and establish possible linkages with out-of-county providers.

Objective: Ongoing assessment of EMS communication needs.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

1-2 years Time Requirement



Communications

Communications Equipment

Standard:

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

Goal:

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

Current 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 Communications Center.

Need(s): Assess the communications needs of hospitals in the EMS system and include in the County EMS Communication Plan.

Objective: On-going assessment and support of EMS communications needs.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Communications

Communication Equipment

Standard:

3.06 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.

Goal:

Effective disaster communications capability is available county-wide.

Current Status: An emergency communications area has been created 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.

Need(s): Evaluate hospital communications needs in a disaster situation. Disaster needs should be considered in communications planning.

Objective: Include disaster needs in communications planning. Enhance EMS disaster communication capability especially with hospitals.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Communications

Public Access

Standard:

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

Goal:

Effective call answering, accurate transfer of dispatch information, and prompt dispatch of first responders and ambulances.

Current Status: Enhanced 9-1-1 has been implemented in Contra Costa County. It is functional throughout the County. The EMS Agency has little involvement in coordination and on-going participation with the 9-1-1 telephone service system.

Need(s): Develop activities directed towards being an active participant in the monitoring and performance of the 9-1-1 telephone system calls related to EMS. Continue to develop computer linkages between 9-1-1 dispatch and response entities actually responsible for dispatching first responders and ambulances.

Objective: Direct linkage of 9-1-1 to first responder and ambulance dispatch centers should be encouraged in the EMS communication's plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

1-2 years Time Requirement



Communications

Public Access

Standard:

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

Goal:

Public awareness and familiarity with appropriate 9-1-1 use.

Current Status: The EMS Agency, along with the EMCC has developed a 9-1-1 access brochure to assist with the educational process.

Need(s): 9-1-1 educational information should continue to be included in public relations services and updated literature for the public. 9-1-1 cellular protocol development statewide or regionally should be encouraged. Identification and promotion of appropriate policies of prehospital emergency care access should be undertaken with managed care organizations.

Objective: Continue to assist with the provision of public information regarding appropriate use of 9-1-1. Link with statewide and/or regional 9-1-1 cellular access planning.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

4 Priority

Ongoing Time Requirement



Communications

Resource Management

Standard:

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

Goal:

An emergency medical dispatch priority reference system, including systemized caller interrogation, dispatch triage policies, and pre-arrival instructions is in place.

Current Status: The County has actively participated with the establishment of guidelines for proper dispatch triage and identification of appropriate medical response.

Need(s): Dispatch triage as well as appropriate medical response policies and procedures should be included in the communication plan, as well as in efforts to coordinate and standardize EMS call answering and dispatch procedures.

Objective: Medically oriented call-answering, prioritization of calls, and dispatch policies, procedures and evaluation mechanisms which are linked EMD objectives identified in this plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

Ongoing Time Requirement



Communications

Resource Management

Standard:

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

Goal:

Communication mechanisms to ensure appropriate system-wide ambulance coverage during periods of peak demand are in place.

Current Status: Currently the County Sheriff operates in a radio communication and resource coordination role for emergency ambulances. This function is largely being replaced through direct computer links between the 9-1-1/PSAP's and the provider agencies. Ambulance providers do not necessarily respond the closest unit irrespective of the jurisdiction of the responding ambulance agency.

Need(s): The ongoing needs for radio and resource coordination should be evaluated in EMS communication planning. The routine use of the Sheriff Department may need to be refocused for major incidents and/or disaster roles. Closest unit ambulance dispatch procedures should be established.

Objective: Evaluate and continue to integrate dispatch and emergency response through the development and implementation of EMS communication planning and appropriate procedures.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Response and Transportation

Standard:

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

Goal:

A county ordinance or similar mechanism for establishing emergency medical exclusive operating areas.

Current Status: Boundaries for EMS transport agencies have been defined by the Board of Supervisors as emergency response areas for ground ambulances. The purpose of the ERA's is to aid in the dispatch of the appropriate ambulance service to the scene of an incident. These zones remain intact but have been informally restructured for purposes of data reporting.

Need(s): A review of exclusive operating area (EOA) boundaries needs to be conducted for both air and ground. Agreements are needed with air transport agencies.

Objective: Re-evaluate current configuration of exclusive operating areas and adjust if indicated.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

2 Priority

1-2 years Time Requirement



Response and Transportation

Standard:

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

Goal:

A county ordinance or similar mechanism for licensure of emergency medical transport services. This ordinance promotes compliance with overall system management and, wherever possible, replaces any other local ambulance regulatory programs within the EMS area.

Current Status: A County ambulance ordinance and County contracts with emergency ground ambulance providers provide a mechanism for the local EMS Agency to permit and monitor medical transportation services.

Need(s): Ambulance ordinance revision which complies with this plan should be developed.

Objective: Revise ambulance ordinance as necessary to comply with this plan.

Time Frame for Objective:

<input type="checkbox"/> Short Term Implementation	<input checked="" type="checkbox"/> Long Range Plan	<input type="checkbox"/> Complete/Partially
<input type="checkbox"/> Med. Resource Requirement	<input type="checkbox"/> 3 Priority	<input type="checkbox"/> 1-2 years Time Requirement



Response and Transportation

Standard:

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

Goal:

Patients in Contra Costa County receive appropriate response resources (e.g., first responder, ALS ambulance, helicopter, etc.) specific to their needs and are transported as necessary to destinations appropriate for their medical conditions.

Current Status: The urgency of current medical requests is largely dependent upon the means of access to the system. In general, 9-1-1 calls are treated as emergency events. The EMD program is well on the way to being implemented county-wide. However, the current EMS system, particularly the prehospital system, has not been studied for the needs and direction for the future.

Need(s): The prehospital care system should be studied to assess the current and future needs of the EMS system patient and link these needs with appropriate resources allocation and utilization. The need to link with EMS system providers, managed care organization, consumers and policy makers is paramount in the planning of this issue. New models for delivery may be the outcome of this objective. Validation of existing approaches may also be considered. This study should also include a review of contemporary planning efforts in similar counties.

Objective: A comprehensive study of the prehospital care system and its positioning for the health care delivery system of the future should be conducted.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

2 Priority

Ongoing Time Requirement



Response and Transportation

Standard:

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

Goal:

A totally integrated medical transportation system which maximizes performance and resource efficiency, while holding down cost.

Current Status: Existing ALS provider system status plans do not allow for utilization of emergency resources for non-emergency use. Emergency ambulance vehicles in the County are staffed and equipped to the paramedic (ALS) level.

Need(s): Evaluate and adopt procedures that allow the efficient and effective use of all ambulance resources to achieve a contemporary medical transportation system for the County consistent with the other objectives of this plan and the future needs of the County.

Objective: Evaluate the overall medical transportation needs of the County and incorporate these needs and other objectives in this plan into the ambulance contracting process.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

2 Priority

6-12 mos. Time Requirement



Response and Transportation

Standard:

4.05 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.

Goal:

Defined response time standards throughout County EMS system in the following areas:

- a) BLS/CPR provider
- b) First responder defibrillation
- c) BLS/ALS first response
- d) BLS/ALS transport

Current Status: The provider contracts required by the EMS Agency specify response time standards.

Need(s): Existing response time standards should be reviewed by EMCC and appropriate response time standards set for each of the categories specified in the goal. Response time standards should consider constraints of geography and resource availability.

Objective: Establish performance standards for prehospital EMS operating zones with the definition of sub-zones for response time standards through input from County and local community representatives.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

12 months Time Requirement



Response and Transportation

Standard:

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

Goal:

All emergency medical transport vehicles providing ALS service are staffed and equipped with at least one EMT-P per unit.

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

Need(s): Adequate policies and monitoring mechanisms are in place to assure that this level is met and maintained.

Objective: Ongoing review and analysis.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Response and Transportation

Standard:

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

Goal:

A county-wide first responder system for emergency medical incidents.

Current Status: The EMS Agency has been integrally involved with first responder agencies in both first responder coordination, EMT training and elevation of programs to the first responder defibrillation level of care. New interest in ALS first response services has been raised by some fire agencies.

Need(s): A first responder master plan which would:

- Develop standards for first responder agency participation in the EMS system.
- Establish a process to be used for patient care documentation on a county-wide basis by first responders.
- Develop first responder performance standards with contract terms.
- Develop processes by which first responders participate in the EMS Agency CQI program, including the establishment of outcome expectations and measurement tools.
- Evaluate first responder ALS needs.
- Plan for overall first responder future needs.

Assure that first responder involvement in the EMS system is facilitated through agreements or letters of understanding between the County and first responder services.

Objective: Integrate first responder agencies and functions into the framework of the County EMS system through agreements and letters of understanding.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

1-2 years Time Requirement



Response and Transportation

Standard:

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

- a) authorization of aircraft to be utilized in prehospital care.
- b) requesting of EMS aircraft.
- c) dispatching of EMS aircraft.
- d) determination of EMS aircraft patient destination.
- e) orientation of pilots/flight crews to local EMS system.
- f) addressing and resolving formal complaints regarding EMS aircraft.

Goal:

Using State standards, when they exist, the local EMS Agency should plan for medical and rescue aircraft response to and transport of emergency patients within its service area. This plan should consider existing EMS resources, population density, environmental factors, dispatch procedures and catchment area. EMS aircraft providers participate in QI process.

Current Status: Helicopter guidelines provide a mechanism for emergency helicopter access. The EMS Agency has a procedure to authorize air medical programs to respond within the County. Eleven air medical providers are on a call list for the County. Helicopters are requested through fire/medical dispatch centers.

Need(s): An evaluation of current emergency helicopter services should be undertaken to determine effective utilization and quality of care provided. Agreements with air ambulance providers should be developed which include staffing, equipment, and response standards, as well as monitoring and QI mechanisms. Consideration of air-medical services as first response when the patient's location is likely to involve an extended response, where ground transport may exacerbate injuries and when the patient's condition is likely to be life threatening. The air medical response program should be linked to the County EMS CQI program.

Objective: Coordinated air medical response to emergency events in which time is essential. Include case review and evaluation of outcome expectations for air medical response in the EMS CQI plan.

Time Frame for Objective:

<input type="checkbox"/> Short Term Implementation	<input type="checkbox"/> Long Range Plan	<input type="checkbox"/> Complete/Partially
<input type="checkbox"/> Low Resource Requirement	<input type="checkbox"/> 2 Priority	<input type="checkbox"/> 1-2 years Time Requirement



Response and Transportation

Standard:

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

Goal:

Prompt and efficient air medical response to designated emergencies.

Current Status: Air medical and air rescue requests are conducted by the appropriate fire/medical dispatch agency.

Need(s): No Current needs.

Objective: Ongoing review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

Priority

Ongoing Time Requirement



Response and Transportation

Standard:

4.10 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.

Goal:

Prompt and efficient air response to designated medical emergencies.

Current Status: The EMS Agency has designated various agencies that provide medical and rescue aircraft.

Need(s): On-going communication and coordination, as well as written agreements with agencies providing air medical services are needed.

Objective: Assure ongoing adequate resources for air medical responses for EMS in Contra Costa County.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years

Time Requirement



Response and Transportation

Standard:

4.11 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.

Goal:

A plan for response by and use of all terrain vehicles, snowmobiles, and water rescue vehicles, which considers existing EMS resources, population density, environmental factors, dispatch procedures and catchment area.

Current Status: The issue has not been addressed by the local EMS Agency. Individual agencies within the County have various rescue capabilities.

Need(s): The EMS Agency needs to conduct an inventory of special rescue resources within the County and provide a mechanism for activation of special rescue resources when needed.

Objective: Establish specialized medical rescue program.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

2-5 years Time Requirement



Response and Transportation

Standard:

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

Goal:

A plan for mobilizing adequate response and transport vehicles in the event of a disaster.

Current Status: There is an existing comprehensive medical disaster plan for the County that is currently being updated to meet new EMS guidelines.

Need(s): County medical disaster plan should be updated to meet new EMS guidelines.

Objective: Complete revision of County medical disaster plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

2-3 years Time Requirement



Response and Transportation

Standard:

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

Goal:

Mutual aid agreements and automatic aid agreements which identify the optimal configuration and responsibility for EMS responses are encouraged and coordinated.

Current Status: County fire departments have mutual aid in place. Medical mutual aid and automatic aid are not fully developed although there exist many formal and informal agreements.

Need(s): As a part of the ambulance ordinance and agreements between EMS providers and the County, there should be a clear definition of mutual and automatic aid response requirements.

Objective: Assurance that patients receive the most prompt response possible.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

6-12 mos. Time Requirement



Response and Transportation

Standard:

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

Goal:

Effective comprehensive multi-casualty response for EMS incidents within the County.

Current Status: The incident command system is utilized for multi-casualty incidents. Hospitals have not universally adopted an incident command system (e.g. Hospital Emergency Incident Command System).

Need(s): The multi-casualty response plan, adopted by the EMS Agency and all prehospital EMS providers, needs to be better communicated to hospital personnel and other providers within the County. All EMS providers should be encouraged to adopt an incident command system.

Objective: Encourage continued adoption of the ICS system by all EMS providers including the HEICS system for hospitals. Facilitate better communication of the plan with medical community.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

12 months Time Requirement



Response and Transportation

Standard:

4.15 Multi-casualty response plans and procedures shall utilize State standards and guidelines when they exist.

Goal:

Continued monitoring and updating of MCI plans as necessary.

Current Status: Existing State guidelines are utilized as a basis for the County's multi-casualty plans.

Need(s): There are no identified needs.

Objective: Ongoing review and analysis.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Response and Transportation

Advanced Life Support

Standard:

4.16 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.

Goal:

Ambulance staffing at the ALS level to assure safe, high quality advanced life support services.

Current Status: Currently all ALS ambulances are staffed with two paramedics.

Need(s): An evaluation of this standard is needed in light of the evaluation of ALS first response programs.

Objective: Continue to study and update this staffing policy where appropriate.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Response and Transportation

Advanced Life Support

Standard:

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

Goal:

All ambulances fully equipped for paramedic ALS level of care.

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

Need(s): There are no identified needs.

Objective: Ongoing review and monitoring.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Response and Transportation

Ambulance Regulation

Standard:

4.18 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.

Goal:

EMS transportation agencies comply with EMS policies and procedures.

Current Status: Most EMS providers have contracts which define and require compliance with EMS policies and procedures. The exception is air medical services.

Need(s): Revision of the current ordinance to comply with this plan may be needed. Establish agreements where needed.

Objective: Revision of the ambulance ordinance and establishment of agreements to comply with this plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Response and Transportation

Exclusive Operating Permits

Standard:

- 4.19 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:
- Minimum standards for transportation services,
 - Optimal transportation system efficiency and effectiveness, and
 - Use of a competitive process to ensure system optimization.

Goal:

Selected ambulance services are assigned responsibility for medical transportation within exclusive operating areas. A legal framework which defines and requires compliance with performance standards is in place.

Current Status: The Contra Costa County Board of Supervisors has approved an EMS ground transportation plan.

Need(s): Revision of the transportation plan to comply with this plan may be needed.

Objective: Assure the transportation plan complies with this plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Response and Transportation

Exclusive Operating Permits

Standard:

4.20 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.

Goal:

Medical transportation entities designated for exclusive operating areas are appropriately selected and awarded specified areas.

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

Need(s): Ongoing review and an update of the EOA configuration may be needed.

Objective: Review and update the EOA configuration.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

1-2 years Time Requirement



Response and Transportation

Exclusive Operating Permits

Standard:

4.21 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.

Goal:

Selected ambulance services are assigned responsibility for medical transportation within exclusive operating areas. A legal framework to define and require compliance with performance standards is in place.

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

Need(s): No identified needs.

Objective: Ongoing review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Response and Transportation

Exclusive Operating Permits

Standard:

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

Goal:

The EMS system is able to respond to changes by implementing an ongoing program for monitoring and modifying activities to meet the needs of the County residents and enhance system effectiveness.

Current Status: Exclusive operating areas are in place.

Need(s): EOA's should be periodically evaluated.

Objective: Review and update exclusive operating area configuration as needed. Continue to monitor the performance of the EMS system and exclusive operating areas.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Facilities and Critical Care

Standard:

5.01 The local EMS Agency shall assess and periodically reassess the EMS-related capabilities of acute care facilities in its service area.

Goal:

The local EMS Agency, using State standards (when they exist) should assess, periodically reassess, and disseminate to EMS providers, information about the EMS-related capabilities of acute care facilities in its service area.

Current Status: Criteria has been developed by the EMS Agency for some specialty receiving hospitals but not for general emergency receiving center capability. An assessment of receiving hospital capabilities has not been conducted by the County.

Need(s): Develop criteria for emergency receiving hospitals with input from hospitals and prehospital providers. Prepare a self-assessment tool to assure capability of receiving hospitals. Develop letters of understanding between the EMS Agency and receiving hospitals. Include the receiving hospitals in the EMS Agency's quality improvement program and data collection activities.

Objective: Work with receiving hospitals to assure the capability exists to provide the optimal and appropriate care to patients transported to those facilities through a self assessment and monitoring system.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Resource Requirement

Priority

Time Requirement



Facilities and Critical Care

Standard:

5.02 The local EMS Agency shall establish prehospital triage protocols and shall assist hospitals with the establishment of transfer protocols and agreements.

Goal:

EMS patients are delivered to the most appropriate facility to treat their needs.

Current Status: The local EMS Agency has developed comprehensive prehospital triage and transfer protocols.

Need(s): Review prehospital and hospital triage and transfer protocols and, if necessary, revise to be consistent with this plan.

Objective: Policies and procedures which assist field and base hospital personnel in determining the most appropriate disposition of patients. Work with hospitals to develop any transfer policies, protocols and agreements revised in response to this plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

1-2 years Time Requirement



Facilities and Critical Care

Standard:

5.03 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.

Goal:

EMS patients are delivered to the most appropriate facility to treat their needs.

Current Status: 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. The EMS Agency has assisted in development of transfer agreements between these facilities.

Need(s): Continue to monitor and refine criteria to identify patients who should be considered for transfer to facilities of higher capability and provide consultation to hospitals developing new transfer agreements. Follow up data is needed from destination hospitals to evaluate EMS system effectiveness.

Objective: Continue to monitor and refine criteria to identify patients who should be considered for transfer to facilities of higher capability and develop guidelines and work with facilities to develop any new transfer agreements. Develop a mechanism to obtain patient disposition data from receiving hospitals.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Facilities and Critical Care

Standard:

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

Goal:

The local EMS Agency, using State standards (when they exist), should designate and monitor receiving and, when appropriate, specialty care facilities for specified groups of emergency and definitive care patients.

Current Status: Criteria have been developed for specialty receiving hospitals but have not been formally developed for general receiving centers. There has been work on pediatrics in the area of prehospital treatment guidelines and direct transport of some seriously injured children to Children's Hospital Oakland.

Need(s): Review criteria for receiving hospital designation and conduct needs' analysis on pediatric specialty designation requirements. Incorporate all related activities into the County EMS CQI program.

Objective: Establish a system in which a patient with an identified or unique need can be transported directly to the specific facility medically appropriate to provide treatment.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

1-2 years Time Requirement



Facilities and Critical Care

Standard:

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

Goal:

The local EMS Agency provides consultation to hospitals on preparation for mass casualty management when requested, including procedures for the coordination of hospital communication and patient flow. The incident command system for hospitals (HEICS) has been adopted by hospitals.

Current Status: There is a comprehensive plan for mass-casualty incidents. Individual hospitals have their own disaster and mass-casualty incident plans. Most have not adopted a compatible incident command system.

Need(s): Hospitals should continue to receive EMS system support in preparing for mass casualty management including the development of procedures for coordination of hospital communications and patient transportation. Hospital adoption of the HEICS system of emergency management should be encouraged. Individual facility plans should be reviewed to assure that they are coordinated and integrate with the County disaster plan and with each other.

Objective: Hospitals which are prepared in mass casualty management and are well integrated into the County disaster plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years Time Requirement



Facilities and Critical Care

Standard:

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

Goal:

A plan in place in the event that a hospital must be evacuated.

Current Status: Hospital evacuation guidelines have been developed by the Bay Area Medical Mutual Aid (BAMMA) Committee 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.

Need(s): EMS Agency should continue to work with hospitals to assure coordination between hospital disaster and County EMS planning for hospital evacuation.

Objective: Coordination of hospital disaster and County EMS planning for hospital evacuation.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years Time Requirement



Facilities and Critical Care

Standard:

5.07 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.

Goal:

A system to provide medical direction for prehospital providers.

Current Status: Two hospitals have been designated as base hospitals in Contra Costa County (Mt. Diablo and John Muir Medical Centers). One, John Muir Medical Center, has also been designated to receive all of the trauma system base contacts. The hospitals were selected by application and hospital agreements define base hospital standards. Base hospitals have signed agreements with the County to provide base hospital services.

Need(s): There is a need to review the overall requirements, expectations and configuration of base hospitals and base hospital standards, as well as the designation process. Based on this review and potential configuration changes, updated agreements with base hospital(s) and the County will be necessary.

Objective: Review the overall requirements, expectations and configuration of base hospitals, related standards and designation process. Update agreements between the base hospital(s) and the County, as necessary.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

12-24 mos Time Requirement



Facilities and Critical Care

Trauma Care System

Standard:

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

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

Goal:

A plan and procedures which ensure that trauma patients are delivered promptly to trauma centers.

Current Status: Criteria for trauma care facilities have been developed by the County EMS Agency. The County has one designated Level II trauma center.

Need(s): There are no specific needs for the trauma system.

Objective: Ongoing monitoring and review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

Ongoing Time Requirement



Facilities and Critical Care

Trauma Care System

Standard:

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

Goal:

A plan and procedures which ensure that trauma patients are delivered promptly to trauma centers.

Current Status: This standard has been met.

Need(s): There are no needs in this area.

Objective: Ongoing monitoring and review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Facilities and Critical Care

Pediatric Emergency and Critical Care Systems

Standard:

- 5.10 Local EMS agencies that develop pediatric emergency medical and critical care systems shall determine the optimal system, including:
- Number/role of system participants, particularly ED's,
 - Catchment area design with regard to workload/patient mix,
 - Identification of patients to be primarily triaged or secondarily transferred to designated centers;
 - Role of providers qualified to transport such patients to designated facilities,
 - Identification of tertiary care centers for pediatric critical care and pediatric trauma,
 - Role of non-pediatric critical care hospitals including those outside the primary triage area,
 - Plan for monitoring and evaluation of the system.

Goal:

A plan and procedures to ensure that pediatric patients receive the most appropriate prehospital and in-hospital specialty medical care.

Current Status: Prehospital treatment guidelines have been implemented for seriously ill/injured pediatric patients. Trauma system policies direct triage/transfer of seriously injured children to a pediatric trauma center. There is not a comprehensive plan addressing triage/transfer of other than seriously injured pediatric patients.

Need(s): An Emergency Medical Services for Children Plan should be developed.

Objective: Establish a pediatric emergency medical and critical care system plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

2-5 years Time Requirement



Facilities and Critical Care

Pediatric Emergency and Critical Care Systems

Standard:

5.11 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.

Goal:

A procedure for identifying emergency departments which meet standards for pediatric care, for pediatric critical care centers and pediatric trauma centers.

Current Status: The EMS Agency has not developed criteria and standards for pediatric capability in emergency departments beyond high-acuity pediatric trauma care.

Need(s): In conjunction with the development of the pediatric emergency medical and critical care systems plan, it will be necessary to identify the capability of existing emergency departments.

Objective: Establish a coordinated response to pediatric emergency medical and critical care patients in conjunction with Objective 5.10.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

2-5 years Time Requirement



Facilities and Critical Care

Other Critical Care Systems

Standard:

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

Goal:

Plans for appropriate prehospital response, treatment and transport of pediatric patients are developed with input from the clinical specialists.

Current Status: EMS Agency efforts towards EMS for children have been mainly directed toward trauma and prehospital treatment of seriously ill children.

Need(s): In conjunction with a recommendation on pediatric emergency planning, ensure input from all specified groups.

Objective: Identify and provide coordinated input from related groups on pediatric emergency planning.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

2-5 years Time Requirement



Facilities and Critical Care

Other Critical Care Systems

Standard:

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

- a) The number and role of system participants,
- b) The design of catchment areas (including inter-county transport, as appropriate), 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 which are outside of the primary triage area,
- e) A plan for monitoring and evaluation of the system.

Goal:

Patients with specific clinical conditions are provide for appropriate response and treatment.

Current Status: The major clinical condition targeted by the EMS Agency for the development of a systematic plan has been trauma.

Need(s): In conjunction with the recommendation to focus on the specialty care area of pediatrics, other targeted patient groups may be identified which should be specifically addressed through protocols and procedures to provide a coordinated response, delivery or transfer by secondary means to the most appropriate facilities.

Objective: Identify and provide coordinated EMS response to targeted patient groups.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

2-5 years Time Requirement



Facilities and Critical Care

Standard:

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

Goal:

Plans and procedures for the delivery of patients to specialty centers receive input from both providers and consumers.

Current Status: Comprehensive specialty patient planning thus far has been targeted towards trauma care.

Need(s): The development of all system-wide specialty planning system will require input from receiving hospitals, specialty hospitals, the EMS Agency, and various EMS providers.

Objective: Obtain wide input into development of all specialty patient plans, as identified in standard 5.13.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

4 Priority

2-5 years Time Requirement



Data Collection and System Evaluation

Standard:

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

Goal:

Resources are available to evaluate patient response and the care provided specific patients.

Current Status: The EMS system has some components of a comprehensive quality improvement program in place.

Need(s): Philosophy and commitment to the total quality continuum concept should be developed by all EMS system participants. A comprehensive system-wide CQI (Continuous Quality Improvement) Program which involves all system providers should be developed and implemented. For the County CQI Plan to be successful, various system participants will need to provide in-house QI activities. An extensive management information system should be developed to support the County CQI program.

Objective: A comprehensive Continuous Quality Improvement Plan for Contra Costa County EMS activities county-wide.

Time Frame for Objective:

<input checked="" type="checkbox"/> Short Term Implementation	<input type="checkbox"/> Long Range Plan	<input type="checkbox"/> Complete/Partially
<input type="checkbox"/> High Resource Requirement	<input type="checkbox"/> 1 Priority	<input type="checkbox"/> 1-2 years Time Requirement



Data Collection and System Evaluation

Standard:

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

Goal:

Comprehensive documentation of patient contacts and interventions by all EMS providers.

Current Status: The EMS Agency has established a prehospital care report (PCR) form which is completed by all contract emergency ambulance providers. Copies of these forms are submitted to the EMS Agency upon request. There is no standard first responder intervention form.

Need(s): A standardized first responder patient intervention form needs to be developed and implemented among the first responder agencies. A MIS system needs to be established to support the information and evaluation needs of the EMS system. Contemporary data collection (e.g., "paperless" data entry) and evaluation systems need to be investigated and where appropriate integrated into the EMS evaluation system. The patient PCR system needs to be integrated into a comprehensive quality improvement program. A standard reporting format should be in place with regular dissemination of information to EMS providers.

Objective: An EMS MIS plan needs to be developed and integrated into the CQI program. The State Data Set, along with other data necessary to evaluate the system, are to be collected and used in the CQI program.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

1 Priority

1-2 years Time Requirement



Data Collection and System Evaluation

Standard:

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

Goal:

A mechanism is in place to link prehospital records with dispatch, emergency department, inpatient and discharge records.

Current Status: Current audits of prehospital care are done largely at the base hospital and the provider levels. EMS Agency audits are often precipitated by complaints. Currently the only time prehospital records are linked with dispatch and emergency department inpatient and discharge records, is on a case-by-case request for information. The exception is the special review that the First Responder Defibrillation program receives which covers from field care through hospital discharge.

Need(s): Establish a comprehensive audit/review program for all aspects of the EMS system as part of the MIS and CQI plans. As a part of the CQI program, clinical indicators and outcome measurements should be identified and studied.

Objective: Establish an effectively linked MIS and CQI program in conjunction with objective 6.02.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

1 Priority

1-2 years Time Requirement



Data Collection and System Evaluation

Standard:

6.04 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.

Goal:

Appropriate monitoring of medical dispatch process.

Current Status: Currently there is a pilot computerized emergency medical dispatch (EMD) program being conducted with San Ramon Valley Fire Protection District which has had extensive EMS Agency oversight. There is no county-wide system for the EMS Agency to review medical dispatching.

Need(s): EMD programs county-wide need to be involved in an overall evaluation plan, tied to the CQI effort to enhance medical dispatch within the County.

Objective: Medical dispatch monitoring is included in the EMS CQI program.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

3 Priority

1-3 years Time Requirement



Data Collection and System Evaluation

Standard:

6.05 The local EMS Agency shall establish a data management system which supports its system-wide planning and evaluation (including identification of high risk patient groups) and the QA audit of the care provided to specific patients. It shall be based on State standards (when they are available).

Goal:

An integrated data management system which includes system response and clinical (both prehospital and hospital) data. Patient registries, tracer studies, and other monitoring systems are used to evaluate patient care at all stages of response.

Current Status: Contra Costa County EMS Agency has established limited-use computer programs for prehospital report information. This information is currently being entered and the program is consistent with a limited data management system. A county-wide prehospital data set is in draft form.

Need(s): A comprehensive MIS which supports the EMS Agency CQI efforts. The system should be compatible with the EMS providers so that information can be electronically transferred to the system. A common patient identifier and data set for transportation providers, receiving hospitals, base hospitals, dispatch centers and trauma centers will need to be developed.

Objective: Establish a comprehensive MIS which can integrate data from the various EMS system participants. Monitor EMS system performance using MIS data.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

1 Priority

1-2 years Time Requirement



Data Collection and System Evaluation

Standard:

6.06 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.

Goal:

A data based evaluation process for Contra Costa County EMS performance which focuses on identified desired outcomes.

Current Status: The EMS Agency consistently evaluates its Program components but there is not a regular comprehensive system review based on outcome. Manual collection of information is often required. Achievement of comprehensive system analysis would be time and resource consuming using the present methods of evaluation.

Need(s): Development and implementation of this EMS System Plan, establishment of comprehensive MIS and CQI programs, needed input by EMS providers and creation of various policies and procedures should allow for overall EMS system program evaluation. A review of other program models should be conducted including the potential for a co-review program with neighboring counties.

Objective: The EMS Agency will regularly evaluate and report on the status of EMS system operations through the tools of the MIS system and CQI program.

Time Frame for Objective:

<input type="checkbox"/> Short Term Implementation	<input checked="" type="checkbox"/> Long Range Plan	<input type="checkbox"/> Complete/Partially
<input type="checkbox"/> Med. Resource Requirement	<input type="checkbox"/> 2 Priority	<input type="checkbox"/> 2-3 years Time Requirement



Data Collection and System Evaluation

Standard:

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

Goal:

All providers in the EMS system participate in the system-wide evaluation process.

Current Status: Evaluation processes for some EMS system components include providers, but there is not a mechanism for a system-wide review process. Resources are not available to fully implement comprehensive system-wide evaluation activities.

Need(s): Additional resources, including personnel, would need to be dedicated to system evaluation activities in order to accomplish system-wide evaluation. A more comprehensive county ordinance and provider agreements should include opportunities for provider participation and support in the evaluation program. Specific funding sources should be identified and tapped to support evaluation processes. Expertise within the EMS Agency should be developed for the MIS plan.

Objective: A system-wide EMS evaluation program which includes participation by all EMS providers.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

2 Priority

2-3 years Time Requirement



Data Collection and System Evaluation

Standard:

6.08 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).

Goal:

Increased awareness of the EMS system's accomplishments and activities.

Current Status: The EMS Agency reports to the Board of Supervisors, the EMCC and the advisory committees on a regular basis. These reports define milestones and measurable EMS Agency and provider performance.

Need(s): Provide on-going information regarding performance of the Contra Costa County EMS system's performance coordinated with the proposed CQI plan.

Objective: Provide regular reports on the performance and accomplishments of the Contra Costa County EMS system.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Data Collection and System Evaluation

Standard:

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

Goal:

The local EMS Agency's integrated data management system includes prehospital, base hospital, and receiving hospital data.

Current Status: Most of the treatment evaluation for providers is done by base hospitals. There is little global or system evaluation of cases. Base hospitals perform an annual self-assessment of base hospital standards. Evaluation of base hospital clinical performance occurs on an isolated basis and is not linked to a CQI plan.

Need(s): The integrated MIS plan should include prehospital, base hospital, and receiving hospital data. An on-going process for evaluation of clinical performance of base station hospitals and prehospital activities is a key function of the quality improvement program proposed previously.

Objective: Institution of a comprehensive MIS and CQI program.

Time Frame for Objective:

<input checked="" type="checkbox"/> Short Term Implementation	<input type="checkbox"/> Long Range Plan	<input type="checkbox"/> Complete/Partially
<input checked="" type="checkbox"/> High Resource Requirement	<input type="checkbox"/> 1 Priority	<input checked="" type="checkbox"/> 1-2 years Time Requirement



Data Collection and System Evaluation

Trauma Care System

Standard:

6.10 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.

Goal:

Trauma system activities are integrated into the EMS system's quality improvement/assurance program.

Current Status: The trauma registry has been successfully implemented and in use for the trauma system for the past nine years, however recent difference between the hardware and software of the trauma center and the EMS Agency has created data compatibility problems.

Need(s): Attention needs to be given to the software and data reporting compatibility problems. There is also a need to plan and rectify difficulties in getting patient information from non-trauma centers and to address confidentiality protection strategies.

Objective: As part of the MIS plan, meet with trauma center and non-trauma center providers and rectify data needs and procedures.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

1-2 years Time Requirement



Data Collection and System Evaluation

Trauma Care System

Standard:

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

Goal:

A functioning and comprehensive quality improvement/assurance program which includes collection of essential trauma care information.

Current Status: The EMS Agency is not able to collect all pertinent trauma system information from the designated trauma center and other hospitals which may be receiving trauma patients due to incompatibilities in software and policies.

Need(s): Work with providers to rectify the problem areas.

Objective: Work with providers to rectify the problem areas

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

1 Priority

1-2 years Time Requirement



Public Information and Education

Standard:

7.01 The local EMS Agency shall promote the development and dissemination of materials for the public which 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 ED's.

Goal:

Community education programs on the use of emergency medical services in its service area are targeted.

Current Status: The EMS Agency has developed information and materials for dissemination to the public including a 9-1-1 brochure. EMS participants have been involved in the Health Services Division Child Injury Prevention Coalition. The EMS Agency has acquired a "1-800-GIVE CPR" telephone number. The EMS PIE Committee has also worked with the County fire agencies to assist in the provision of EMS related information. Staffing limitations and other program priorities have restricted efforts in this area.

Need(s): Develop target needs, public information materials, and coordinate/assist the various provider groups in developing information for the public regarding EMS activities. This program should be specifically tied to the CQI plan, with clear and measurable outcomes.

Objective: Complete a revised public information and education plan to accomplish the goal of this plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

4 Priority

2-5 years Time Requirement



Public Information and Education

Standard:

7.02 The local EMS Agency, in conjunction with other local health education programs, shall work to promote injury control and preventive medicine.

Goal:

The local EMS Agency promotes the development of special EMS educational programs for targeted groups at high risk of injury or illness.

Current Status: The EMS Agency supports and provides resources to injury control efforts including the Child Injury Prevention Coalition of the Health Services Department.

Need(s): To support programs developed by other facilities and agencies within the County to promote preventive medicine and to continue injury control efforts.

Objective: Advocate and support existing programs within the County. Develop programs devoted to injury control and preventive, medicine as identified in the public information and education plan.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

2-5 years Time Requirement



Public Information and Education

Standard:

7.03 The local EMS Agency, in conjunction with the local office of emergency services, shall promote citizen disaster preparedness activities.

Goal:

The local EMS Agency, in conjunction with the local office of emergency services (OES), produces and disseminates information on disaster medical preparedness.

Current Status: The local EMS Agency is involved with the County's emergency services division in promoting citizen disaster preparedness activities.

Need(s): On-going participation in promoting citizen awareness of emergency preparedness activities.

Objective: Continue to provide citizen awareness programs on emergency preparedness as needed.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Public Information and Education

Standard:

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

Goal:

The local EMS Agency has adopted a goal for training an appropriate percentage of the general public in first aid and CPR. A higher percentage is achieved in high risk groups.

Current Status: The EMS Agency has taken a lead in promoting CPR training for the general public largely through acquisition of an "800" phone which when called provides information regarding locations of citizen CPR classes. Multiple providers within the County have provided CPR training and are actively promoting such programs.

Need(s): The EMS Agency should continue to pursue supporting first aid and CPR program information availability in the EMS public education plan.

Objective: Increase access to first aid and CPR training programs through advocacy and resource identification.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years Time Requirement



Disaster Medical Response

Standard:

8.01 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.

Goal:

Prompt and adequate medical response in the event of catastrophic disasters.

Current Status: A county-wide disaster response plan is in place which includes two health related indexes (medical and public health). The Health Services Department has organized an Emergency Response Team which meets regularly to develop specific plans for disaster medical response. The EMS Agency is the lead agency for the Health Service Department on major emergency medical responses.

Need(s): Revise medical disaster plan to comply with new SEMS requirements. All response agencies need to be trained in the new plan.

Objective: Revise medical disaster plan and provide training to participants.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

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

Goal:

The California Office of Emergency Services emergency plan, prepared under Standardized Emergency Management System (SEMS), serves as the model for the development of medical response plans for catastrophic disasters.

Current Status: Medical response plans are in place for a variety of potential disastrous or hazardous incidents.

Need(s): The Hospital Emergency Incident Command System (HEICS) and SEMS programs should be incorporated into current planning and procedure development of hospitals. Increased involvement of system participants in medical response planning.

Objective: Continue to develop and update medical response plans to meet the variety of potential hazards which exist in County and to conform to State requirements

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

2-5 years Time Requirement



Disaster Medical Response

Standard:

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

Goal:

Trained and informed personnel respond to and manage medical incidents involving hazardous materials.

Current Status: The County's fire departments and the County Health Services Department's Environmental Health Division have addressed hazardous materials response. All emergency ambulance providers are required to attend eight hours of HAZMAT training.

Need(s): Continuation of exiting liaison among EMS, prehospital and hospital industry agencies.

Objective: The EMS Agency should continue to ensure availability of hazardous materials incident training for EMS system participants.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

3 Priority

2-5 years Time Requirement



Disaster Medical Response

Standard:

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

Goal:

ICS training is provided for all medical providers.

Current Status: Medical response plans and procedures for catastrophic disasters are utilized in the incident command system (ICS) as the basis for field management and coordination. Training for incident command system activities is required in the emergency ambulance contracts.

Need(s): On-going evaluation and enhancement of catastrophic disaster plans. The requirements of designation, permitting, or agreements with the various EMS providers, including SEMS coordination and training exercises, should include mechanisms to further incident command system training.

Objective: Expanded ICS and SEMS training exercises for medical providers.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

2-5 years

Time Requirement



Disaster Medical Response

Standard:

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

Goal:

The local EMS Agency, using State guidelines when they are available, and in consultation with the 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: Patient distribution procedures are provided for by the County disaster plan. Specialized HAZMAT training has been provided to hospital emergency personnel. All basic emergency departments are considered capable of receiving and treating patients with hazardous materials contamination.

Need(s): Review and revise procedures if needed. Identify specialized receiving facilities for specific hazardous materials incidents.

Objective: Continue to provide on-going review, and revise procedures as needed. Establish options for the distribution of casualties and identify appropriate facilities based on unique incident factors as needed.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.06 The local EMS Agency, using State guidelines when they are available, shall establish written procedures for early assessment of needs and resources and an emergency means for communicating requests to the State and other jurisdictions.

Goal:

The local EMS Agency's procedures for determining necessary outside assistance in a disaster are exercised yearly.

Current Status: Specific components of the disaster plan address out-of-county medical mutual aid requests. A comprehensive Regional Disaster Health and Medical Coordination (RDHMC) system has been established in Region II with the CCC EMS Agency as the lead.

Need(s): On-going review and revision of disaster management policies, procedures, and plans. Regular testing of components.

Objective: Ability to determine early in a disaster situation that outside assistance is needed with defined procedures to acquire help.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.07 A specific frequency (e.g., CALCORD) or frequencies shall be identified for interagency communication and coordination during a disaster.

Goal:

Capability to communicate with and coordinate activities of participants in a disaster situation.

Current Status: CALCORD is the frequency in the County for interagency coordination at the command level. Additionally, all fire and emergency ambulance units are capable of unit to unit communication. All paramedic ambulances are equipped with cellular telephones.

Need(s): To have communications capability with out-of-county ambulances responding on mutual aid requests.

Objective: To establish communications capabilities for out-of-county ambulances responding to a mutual aid request.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Med. Resource Requirement

4 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.08 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.

Goal:

The local EMS Agency, using State guidelines when they are available, should ensure that emergency medical providers and health care facilities have written agreements with disaster medical resource providers for the provision of appropriate resources to respond to multi-casualty incidents and disasters likely to occur in its service area.

Current Status: Resource directories have been developed by County OES and by the Bay Area Medical Mutual Aid Committee (BAMMA).

Need(s): Periodic review and updating of resource directories.

Objective: Maintain existing directories.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.09 The local EMS Agency shall establish and maintain relationships with disaster medical assistance teams (DMAT) teams in its area.

Goal:

Ongoing review and analysis.

Current Status: No DMAT teams have been established in the Contra Costa Area.

Need(s): None.

Objective: None.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

4 Priority

Time Requirement



Disaster Medical Response

Standard:

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

Goal:

Provide adequate response resources to significant medical incidents and during periods of extraordinary demand.

Current Status: Inter-county medical mutual aid planning has been extensive particularly in the EMS Agency's role with the Bay Area Medical Mutual Aid (BAMMA) Committee and as the Regional Disaster Medical Health Coordinator (RDMHC).

Need(s): Master Medical Mutual Aid Plan within the Region or the State.

Objective: Continue to engage in medical mutual aid planning with other counties in the Region as well as the State.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

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

Goal:

County-wide designation of casualty collection points for use in disasters.

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

Need(s): Continue to evaluate and designate sites as needed, review site selection, equipment, staffing needs and mechanisms for supply acquisition.

Objective: Review of existing sites and the designation of additional CCP sites throughout the County, as necessary.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.12 The local EMS Agency shall develop plans for establishing CCP's and a means for communicating with them.

Goal:

Establishment of CCP's with communication capabilities during disasters.

Current Status: CCP's have been designated and communication requirements are available through the County EOC.

Need(s): On-going review and revision of CCP designation and operational procedures, as needed.

Objective: Define plans for establishing communication with CCP's, as needed.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.13 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.

Goal:

EMS responders are appropriately trained in disaster response, including the proper management of casualties exposed to and/or contaminated by toxic or radioactive substances.

Current Status: 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. SEMS training is planned.

Need(s): Continue to develop policies, procedures, and treatment guidelines for substance specific hazardous material incidents. Develop curriculum and coordinate training programs regarding medical disasters as needed. Coordinate prehospital exercises with hospital responses. Continue to review the disaster medical training of first responders.

Objective: Continue to establish plans, policies, and procedures for disaster response. Conduct a continued review of management of toxic or radioactive substances.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

8.14 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).

Goal:

Coordinated response and management of disaster situations.

Current Status: Hospitals have internal and external disaster plans in place. There is integration with the County's disaster plans. EMS Agency facilitates the Hospital Disaster Forum for hospitals to share ideas and assist each other in disaster planning.

Need(s): Continue to encourage and require receiving hospitals to participate with the EMS Agency in disaster planning integration of the hospital and system plans. Encourage the implementation of the HEICS program in hospitals. Continue involving hospitals in exercises. Continue facilitating participation in the Hospital Disaster Forum.

Objective: Integrated disaster plans for hospitals, providers, and EMS system.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Standard:

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

Goal:

Hospitals within County linked through radio communication capability.

Current 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 Communications Center.

Need(s): A digital network is needed to link the hospitals, county communications and EMS, with the capacity to display hospital status and to transmit emergency information.

Objective: Establish a digital hospital network.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

High Resource Requirement

4 Priority

1-2 years Time Requirement



Disaster Medical Response

Standard:

8.16 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.

Goal:

Medical response agencies and acute care hospitals have written policies and procedures for the management of specific medical incidents and participate in at least one disaster exercise per year.

Current Status: All hospitals and medical response agencies have written policies and procedures for the management of significant medical incidents. Not all hospitals participate in multi-agency exercises on an annual basis.

Need(s): Multi-agency disaster exercises.

Objective: All agencies and hospitals to participate in multi-agency annual exercises.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Advanced Life Support

Standard:
8.17 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.

Goal:
Ability to acquire ALS resources from outside of County during significant medical incidents.

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

Need(s): None.

Objective: None.

Time frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

2 Priority

Ongoing Time Requirement



Disaster Medical Response

Critical Care System

Standard:

8.18 Local EMS agencies developing trauma or other critical 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.

Goal:

Identification of most appropriate patient destinations during significant medical incidents, including specialty systems when appropriate.
Maintenance of normal EMS operations during significant medical incidents.

Current Status: Capabilities during major incidents and MCI's are addressed in their respective plans.

Need(s): None.

Objective: Ongoing review.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



Disaster Medical Response

Exclusive Operating Areas/Ambulance Regulation

Standard:

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

Goal:

Access to external ambulance services during significant medical incidents or periods of extraordinary demand.

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

Need(s): There are no current needs.

Objective: Ongoing review and analysis.

Time Frame for Objective:

Short Term Implementation

Long Range Plan

Complete/Partially

Low Resource Requirement

3 Priority

Ongoing Time Requirement



SECTION III

SYSTEM RESOURCES AND OPERATIONS

The following tables are provided in the format required by the California EMS Authority and are labeled EMSA Table 1-8 respectively.

EMSA TABLE 1: Summary of System Status

A. SYSTEM ORGANIZATION AND MANAGEMENT

Agency Administration	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
1.01 LEMSA Structure		X	X	X	
1.02 LEMSA Mission		X	X		X
1.03 Public Input		X	X	X	
1.04 Medical Director		X		X	

Planning Activities

1.05 System Plan		X	X		X
1.06 Annual Plan Update		X	X	X	
1.07 Trauma Planning*		X	X	X	
1.08 ALS Planning*		X	X		X
1.09 Inventory of Resources		X	X		X
1.10 Special Populations		X	X		X
1.11 System Participants		X	X		X



Regulatory Activities	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
1.12 Review & Monitoring		X	X		X
1.13 Coordination		X	X	X	
1.14 Policy & Procedures Manual		X	X		X
1.15 Compliance w/Policies		X	X		X

System Finances

1.16 Funding Mechanism		X	X		X
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Medical Direction

1.17 Medical Direction*		X	X		X
1.18 QA/QI		X	X		X
1.19 Policies, Procedures, Protocols		X			X
1.20 DNR		X	X		X
1.21 Determination of Death		X	X		X
1.22 Reporting of Abuse		X	X		X
1.23 Interfacility Transfer		X	X		X

Enhanced Level: Advanced Life Support

1.24 ALS System		X	X		X
1.25 On-Line Medical Direction		X	X		X



Enhanced Level: Trauma Care System	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
1.26 Trauma System Plan		X	X		X

Enhanced Level: Pediatric Emergency Medical and Critical Care System

1.27 Pediatric System Plan	X				X
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**Enhanced Level:
Exclusive Operating Areas**

1.28 EOA Plan		X	X		X
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	X		X		
		X	X		
	X		X		
		X	X		
	X		X		
		X	X		
	X		X		
		X	X		
	X		X		
		X	X		
	X		X		



B. STAFFING/TRAINING

Local EMS Agency	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
2.01 Assessment of Needs		X	X		X
2.02 Approval of Training		X	X		X
2.03 Personnel		X	X		X

Dispatchers

2.04 Dispatch Training		X		X	
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First Responder (non-transporting)

2.05 First Responder Training		X	X	X	
2.06 Response		X	X		X
2.07 Medical Control		X	X		X

Transporting Personnel

2.08 EMT-1 Training		X	X	X	
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Hospital

2.09 CPR Training		X	X		X
2.10 Advanced Life Support		X			X

Enhanced Level: Advanced Life Support

2.11 Accreditation Process		X	X	X	
2.12 Early Defibrillation		X	X		X
2.13 Base Hospital Personnel		X	X		X



C. COMMUNICATIONS

Communications Equipment	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
3.01 Communications Plan*		X	X		X
3.02 Radios		X	X		X
3.03 Interfacility Transfer*		X	X		X
3.04 Dispatch Center		X	X		X
3.05 Hospitals		X	X		X
3.06 MCI/Disasters		X			X

Public Access

3.07 9-1-1 Planning/Coordination		X	X		X
3.08 9-1-1 Public Education		X	X		X

Resource Management

3.09 Dispatch Triage		X			X
3.10 Integrated Dispatch		X	X		X



D. RESPONSE/TRANSPORTATION

Universal Level	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
4.01 Service Area Boundaries*		X	X		X
4.02 Monitoring		X	X		X
4.03 Classifying Medical Requests		X	X		X
4.04 Pre-scheduled Responses		X		X	
4.05 Response Time Standards*		X		X	
4.06 Staffing		X	X		X
4.07 First Responder Agencies		X	X		X
4.08 Medical & Rescue Aircraft*		X	X		X
4.09 Air Dispatch Center		X			X
4.10 Aircraft Availability*		X	X		X
4.11 Specialty Vehicles*		X	X		X
4.12 Disaster Response		X	X		X
4.13 Intercounty Response*		X		X	
4.14 Incident Command System		X	X	X	
4.15 MCI Plans		X	X		X



Enhanced Level: Advanced Life Support	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
4.16 ALS Staffing		X	X		X
4.17 ALS Equipment		X	X		X

Enhanced Level: Ambulance Regulation

4.18 Compliance		X	X		X
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Enhanced Level:
Exclusive Operating Permits

4.19 Transportation Plan		X	X		X
4.20 "Grand fathering"		X	X		X
4.21 Compliance		X	X		X
4.22 Evaluation		X	X		X

	X		X		
	X		X		

	X		X		
	X		X		
	X		X		

	X		X		
	X		X		



E. FACILITIES/CRITICAL CARE

Universal Level	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
5.01 Assessment of Capabilities		X	X		X
5.02 Triage & Transfer Protocols*		X	X		X
5.03 Transfer Guidelines*		X	X		X
5.04 Specialty Care Facilities*		X			X
5.05 Mass Casualty Management		X	X		X
5.06 Hospital Evacuation*		X	X		X

Enhanced Level: Advanced Life Support

5.07 Base Hospital Designation*		X	X		X
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Enhanced Level: Trauma Care System

5.08 Trauma System Design		X	X		X
5.09 Public Input		X	X		X

Enhanced Level: Pediatric Emergency Medical and Critical Care System

5.10 Pediatric System Design		X			X
5.11 Emergency Departments		X			X
5.12 Public Inputs		X			X

Enhanced Level: Other Specialty Care Systems

5.13 Specialty System Design		X	X		X
5.14 Public Input		X	X		X



F. DATA COLLECTION/SYSTEM EVALUATION

Universal Level	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
6.01 QA/QI Program		X	X		X
6.02 Prehospital Records		X	X		X
6.03 Prehospital Care Audits		X			X
6.04 Medical Dispatch		X			X
6.05 Data Management System*		X	X		X
6.06 System Design Evaluation		X			X
6.07 Provider Participation		X	X		X
6.08 Reporting		X	X		X

Enhanced Level: Advanced Life Support

6.09 ALS Audit		X			X
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Enhanced Level: Trauma Care System

6.10 Trauma System Evaluation		X	X		X
6.11 Trauma Center Data		X	X		X



G. PUBLIC INFORMATION AND EDUCATION

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



H. DISASTER MEDICAL RESPONSE

Universal Level	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
8.01 Disaster Medical Planning*		X	X		X
8.02 Response Plans		X	X		X
8.03 HAZMAT Training		X	X		X
8.04 Incident Command System		X	X		X
8.05 Distribution of Casualties*		X	X		X
8.06 Needs Assessment		X	X		X
8.07 Disaster Communication*		X	X		X
8.08 Inventory of Resources		X	X		X
8.09 DMAT Teams		X	X		
8.10 Mutual Aid Agreements*		X	X		X
8.11 CCP Designation*		X	X		X
8.12 Establishment of CCP's		X	X		X
8.13 Disaster Medical Training		X	X		X
8.14 Hospital Plans		X	X		X
8.15 Inter-hospital Communications		X		X	
8.16 Prehospital Agency Plans		X	X		X



SYSTEM RESOURCES AND OPERATION

EMSA TABLE 2: System Organization and Management

EMS System: Contra Costa County Reporting Year 1994

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

County: Contra Costa 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 _____ d

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

4. Indicate the non-required functions which are performed by the Agency
- Implementation of exclusive operating areas (ambulance franchising) _____ X
 - Designation of trauma centers/trauma care system planning _____ X
 - Designation/approval of pediatric facilities _____
 - Designation of other critical care centers _____
 - Development of transfer agreements _____ X
 - Enforcement of local ambulance ordinance _____ X
 - Enforcement of ambulance service contracts _____ X
 - Operation of ambulance service _____
 - Continuing education _____



EMSA TABLE 2 - System Organization & Management (cont.)

B. SOURCES OF REVENUE

Special project grant(s) [from EMSA]

Preventive Health and Health Services (PHHS) Block Grant \$ 160,000

Office of Traffic Safety (OTS) NA

State general fund NA

County general fund 242,000

Other local tax funds (e.g., EMS district) 3,706,000

County contracts (e.g. multi-county agencies) NA

Certification fees 10,000

Training program approval fees NA

Training program tuition/Average daily attendance funds (ADA)

Job Training Partnership ACT (JTPA) funds/other payments NA

Base hospital application fees NA

Base hospital designation fees NA

Trauma center application fees 0

Trauma center designation fees 75,000

Pediatric facility approval fees NA

Pediatric facility designation fees NA

Other critical care center application fees NA

Type: _____

Other critical care center designation fees NA

Type: _____

Ambulance service/vehicle fees NA

Contributions NA

EMS Fund (SB 12/612) 850,000

Other grants: _____ NA

Other fees: _____ NA

Other (specify): Carry over 427,000

TOTAL REVENUE \$ 5,470,000

TOTAL REVENUE SHOULD EQUAL TOTAL EXPENSES.

IF THEY DON'T, PLEASE EXPLAIN BELOW.



EMSA TABLE 2 - System Organization & Management (cont.)

EMS System: Contra Costa County

Reporting Year: 1994

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (% of salary)	COMMENTS
EMS Admin./ Coord./Dir.	EMS Director	1	\$32.08	30%	
Asst. Admin./ Admin. Asst./ Admin. Mgr.	EMS Program Coord.	1	\$28.94	30%	
ALS Coord./ Field Coord./ Trng Coord.	1. First Responder Prog./Training Coord.	1	\$28.06	30%	
	2. Prehospital Care Coord. QI/Hospitals	1	\$27.93	30%	
	3. Prehospital Care Coord. Field	1	\$27.93	30%	
Program Coord./ Field Liaison (Non-clinical)					
Trauma Coord.	EMS Trauma Coord.	1	\$28.06	30%	
Med. Director					



EMSA TABLE 2 - System Organization & Management (cont.)

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (% of salary)	COMMENTS
Other MD/ Med. Consult./ Trng. Med. Dir.	1. EMS Medical Consultant	0.4	\$60.00	0	Contract
	2. EMS Medical Consultant	0.5			Unfilled
Disaster Med. Planner	Disaster Planning Project Consultant	0.5	\$31.35	0	Contract
Dispatch Super.					
Medical Planner					
Dispatch Super.					
Data Evaluator/Analyst	Data Management Specialist	1	\$16.74	30%	
QA/QI Coordinator					
Public Info. & Ed. Coord.					
Ex. Secretary					
Other Clerical	1. Clerk - Experienced	1	\$12.97	30%	
	2. Clerk - Senior	1	\$15.05	30%	
Data Entry Clerk					



EMSA TABLE 3 - Personnel/Training

EMS System: Contra Costa County Reporting Year: 1994

	EMT-I's	EMT - II's	EMT- P's	MICN's	EMS Dispatchers
Total certified				70	
Number of newly certified this year	NA			NA	
Number of certified this year	436			46	
Number of certificate reviews resulting in:					
a) formal investigations					
b) probation					
c) suspensions					
d) revocations					
e) denials					
f) denials					
g) no action taken					

1. Number of EMS dispatchers trained to EMSA standards:

2. Early defibrillation:

 a) Number of EMT-I (defib) certified 0

 b) Number of public safety (defib) certified (non-EMTI)

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



SYSTEM RESOURCES AND OPERATIONS

EMSA TABLE 4 - Communications

EMS System: Contra Costa County
County: Contra Costa County
Reporting Year: 1994

1. Number of primary Public Service Answering Points (PSAP) 10
2. Number of secondary PSAP's 2
3. Number of dispatch centers directly dispatching ambulances 3
4. Number of designated dispatch centers for EMS aircraft 5
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
Alternative telephone system; local government radio frequencies
 - 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?
Four designated fire/medical dispatch centers.
7. Who is your primary dispatch agency for a disaster?
Sheriff's Dispatch



EMSA TABLE 5 - Response/TransportationEMS System: Contra Costa CountyReporting Year: 1994**Note:** Table 5 is to be reported by Agency.**TRANSPORTING AGENCIES**

1.	Number of exclusive operating areas	<u>5</u>
2.	Percentage or population covered by Exclusive Operating Areas (EOA)	<u>100%</u>
3.	Total number responses	<u>44,473</u>
	a) Number of emergency responses (Code 2: expedient, Code 3: lights and siren)	<u>44,473</u>
	b) Number non-emergency responses (Code 1: normal)	<u>unknown</u>
4.	Total number of transports	<u>31,332</u>
	a) Number or emergency transports (Code 2: expedient, Code 3: lights and siren)	<u>31,332</u>
	b) Number of non-emergency transports (Code 1: normal)	<u>unknown</u>

Early Defibrillation Programs

5.	Number of public safety defibrillation programs	<u>15</u>
	a) Automated	<u>15</u>
	b) Manual	<u>NA</u>
6.	Number of EMT-Defibrillation programs	<u>0</u>
	a) Automated	<u>0</u>
	b) Manual	<u>0</u>

Air Ambulance Services

7.	Total number or responses	<u>unknown</u>
	a) Number of emergency responses	<u>unknown</u>
	b) Number of non-emergency responses	<u>unknown</u>
8.	Total number of transports	<u>408</u>
	a) Number of emergency (scene) responses	<u>408*</u>
	b) Number of non-emergency responses	<u>unknown</u>

* Includes interfacility transfers.



EMSA TABLE 5 - Response/Transportation (cont.)

SYSTEM STANDARD RESPONSE TIMES (90TH PERCENTILE)

Enter the response times in the appropriate boxes.

	METRO/URBAN	SUBURBAN/RURAL	WILDERNESS	SYSTEM WIDE
1. BLS and CPR capable first responder.	none	N/A	N/A	N/A
2. Early defibrillation capable responder.	none	N/A	N/A	N/A
3. Advanced life capable responder.	8.5 minutes*	N/A	N/A	N/A
4. EMS transport unit.	8.5 minutes*	N/A	N/A	N/A

* Official response performance standard equals 10 minutes 95% of the time. Providers average the above performance.



EMSA TABLE 6 - Facilities/Critical Care

EMS System: Contra Costa County

Reporting Year: 1994

Trauma care system - based on admittance data

1. Trauma patients:

- a) Number of patients meeting trauma triage criteria 1,152
- b) Number of major trauma victims transported directly to a trauma center by ambulance 967
- c) Number of major trauma patients transferred to a trauma center 96
- d) Number of patients meetings triage criteria who weren't treated at a trauma center 89

Emergency departments:

- 2. Total number of emergency departments 10
 - a) Number of referral emergency services 0
 - b) Number of standby emergency services 1
 - c) Number of basic emergency services 9
 - d) Number of comprehensive emergency services 0
- 3. Number of receiving hospitals with agreements 0



EMSA TABLE 7 - Disaster Medical

EMS System: Contra Costa County
County: Contra Costa County
Reporting Year: 1994

SYSTEM RESOURCES

1. Casualty Collections Points (CCP)

- a. Where are your CCP's located? see attached
- b. How are they staffed? no staffing plan
- 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

- a. Do you have any team medical response capability? yes no X
- b. For each team, are they incorporated into your local response plan? yes no
- c. Are they available for statewide response? yes no
- d. Are they part of a formal out-of state response system? yes 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
- 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 EOC's you will need to interact with in a disaster? 20
- 3. Have you tested your MCI Plan this year in a:
 - a. real event? yes X no
 - b. exercise? yes X no



RESOURCES DIRECTORY TABLES

EMSA TABLE 8 - Providers

EMS System: Contra Costa County

County: Contra Costa County

Reporting Year: 1994

Name, address & telephone:		American Medical Response West 2490A Arnold Industrial Parkway Concord, CA 94520 510-827-2970		Primary Contact:		Bob Weber Director of Operations, CCC	
Written Contract: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: PS <u>0</u> PS-Defib. BLS <u>56</u> EMT-D LALS <u>0</u> ALS <u>103</u>		
Ownership: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	Medical Director: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Public: <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>47</u>		

Name, address & telephone:		San Ramon Valley Fire Protection District 1500 Bollinger Canyon Road San Ramon, CA 510-838-6691		Primary Contact:		Assistant Chief Rick Probert	
Written Contract: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Transport <input type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: PS <u>1</u> PS-Defib. BLS <u>123</u> EMT-D LALS <u>0</u> ALS <u>23</u>		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>7*</u> * Staffed and unstaffed.		



EMSA TABLE 8 - Providers (cont.)

Name, address & telephone:		Moraga Fire Protection District 1280 Moraga Way Moraga, CA 94556 510-376-5454		Primary Contact:		Chief Allen Little	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Transport <input type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>0</u> PS <u>27</u> PS-Defib. <u>15</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>12</u> ALS		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>1</u>		

Name, address & telephone:		Contra Costa County Fire Protection District 2010 Geary Road Pleasant Hill, CA 94523 510-939-3400		Primary Contact:		Chief Allen Little	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>361</u> PS <u>377</u> PS-Defib. <u>16</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>		



EMSA TABLE 8 - Providers (cont.)

Name, address & telephone:		Bethel Island Fire Protection District P.O. Box 623 Bethel Island, CA 94511 510-684-2211		Primary Contact:		Chief Dave Wahl	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>11</u> PS <u>17</u> PS-Defib. <u>6</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>		

Name, address & telephone:		Crockett-Carquinez Fire Protection District 746 Loring Avenue Crockett, CA 94525 510-787-2717		Primary Contact:		Chief Littleton, Jr.	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>11</u> PS <u>17</u> PS-Defib. <u>6</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>		



EMSA TABLE 8 - Providers (cont.)

Name, address & telephone: Dougherty Regional Fire Authority 9399 Firecrest Lane San Ramon, CA 94583 510-803-8650		Primary Contact: Chief Karl Diekman			
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>0</u> PS <u>45</u> PS-Defib. <u>45</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>

Name, address & telephone: East Diablo Fire Protection District 134 Oak Street Brentwood, CA 94513 510-634-3400		Primary Contact: Chief Paul Hein			
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>49</u> PS <u>45</u> PS-Defib. <u>30</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>



EMSA TABLE 8 - Providers (cont.)

Name, address & telephone:		El Cerrito Fire Department 10900 San Pablo Avenue El Cerrito, CA 94530 510-215-4450		Primary Contact:		Chief Stephen Cutright	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>0</u> PS <u>33</u> PS-Defib. <u>33</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>		

Name, address & telephone:		Pinole Fire Department 880 Tennent Avenue Pinole, CA 94564 510-724-8970		Primary Contact:		Chief William Mike Radcliffe	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>6</u> PS <u>30</u> PS-Defib. <u>24</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>		



EMSA TABLE 8 - Providers (cont.)

Name, address & telephone:		Richmond Fire Department 330 25th Street Richmond, CA 94804 510-307-8031		Primary Contact:	Chief Floyd Cormier
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>0</u> PS <u>92</u> PS-Defib. <u>92</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>

Name, address & telephone:		Rodeo-Hercules Fire Protection District 1680 Refugio Valley Road Hercules, CA 94547 510-799-4561		Primary Contact:	Chief Pedro Jiminez
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	Number of personnel providing services: <u>13</u> PS <u>34</u> PS-Defib. <u>21</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Ambulances: <u>0</u>



EMSA TABLE 8 - Providers (cont.)

Name, address & telephone: Orinda Fire Protection District 33 Orinda Way Orinda, CA 94563 510-939-3400		Primary Contact: Chief Allen Little	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water	<input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	Air Classification: <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Air: <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing
			Number of personnel providing services: <u>0</u> PS <u>35</u> PS-Defib. <u>35</u> BLS <u>0</u> EMT-D <u>0</u> LALS <u>0</u> ALS
		If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	System available 24 hours? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			Number of Ambulances: <u>1</u>



EMSA TABLE 9 - Approved Training Programs

EMS System: Contra Costa County

County: Contra Costa County

Reporting Year: 1994

Training Institution Name / Address

Contact Person telephone no.

Los Medanos College 2700 East Leland Road Pittsburg, CA 94565		William Crouch 510-798-3500 x347
Student Eligibility: * Open to the general public.	Cost of Program Basic: \$416.00 + expenses Refresher: NA	**Program Level: <u>Paramedic Training</u> Number of students completing training per year: Initial training: 24 Refresher: NA Cont. Education: NA Expiration Date: Number of courses: Initial training: 1 Refresher: NA Cont. Education: NA

* Open to general public or restricted to certain personnel only.

** Indicate whether EMT-I, EMT-II, EMT-P, or MICN; if there is a training program that offers more than one level complete all information for each level.



EMSA TABLE 9 - Approved Training Programs (cont.)

Training Institution Name / Address		Contact Person telephone no.
Los Medanos College 2700 East Leland Road Pittsburg, CA 94565		William Crouch 510-798-3500 x347
Student Eligibility: * Open to the general public.	Cost of Program Basic: \$52.00 Refresher: \$26.00	**Program Level: EMT Training Number of students completing training per year: Initial training: 100 Refresher: 50 Cont. Education: NA Expiration Date: Number of courses: Initial training: 4 Refresher: 2 Cont. Education: NA

Training Institution Name / Address		Contact Person telephone no.
Contra Costa College 2600 Mission Bell Drive San Pablo, CA 94806		Michael Frith 510-235-7800 x.229
Student Eligibility: * Open to the general public.	Cost of Program Basic: \$78.00 Refresher: \$30.50	**Program Level: EMT Training Number of students completing training per year: Initial training: 35-40 Refresher: 35-40 Cont. Education: 0 Expiration Date: Not available Number of courses: Initial training: 1 Refresher: 1 Cont. Education: 0



EMSA TABLE 9 - Approved Training Programs (cont.)

Training Institution Name / Address		Contact Person telephone no.
Mt. Diablo Adult Education 1266 San Carlos Avenue Concord, CA 94518		Holly Bennet 510-685-7340
Student Eligibility: *	Cost of Program	**Program Level: <u>EMT Training</u>
Open to the general public.	Basic: \$125.00 - 1st responder \$555.00 - EMT Refresher: \$ 84.00	Number of students completing training per year: Initial training: 45 Refresher: 0 Cont. Education: 10 Expiration Date: 8/30/95 Number of courses: Initial training: 2 Refresher: 0 Cont. Education: Unavailable



EMSA TABLE 10 - Facilities

EMS System: Contra Costa County

County: Contra Costa County

Reporting Year: 1994

Name, address & telephone: Brookside Hospital 2000 Vale Road San Pablo, CA 94806 510-235-7000		Primary Contact: Administration		
Written Contract: ___ yes <u>x</u> no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <u>x</u> Comprehensive emergency service ___	Base Hospital: ___ yes <u>x</u> no	Pediatric Critical Care Center:* ___ yes <u>x</u> no	
EDAP:** ___ yes <u>x</u> no	PICU:*** ___ yes <u>x</u> no	Burn Center: <u>x</u> yes ___ no	Trauma Center: ___ yes <u>x</u> no	If Trauma Center what Level:**** ___

Name, address & telephone: Delta Memorial Hospital 3901 Lone Tree Way Antioch, CA 94509 510-779-7200		Primary Contact: Administration		
Written Contract ___ yes <u>x</u> no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <u>x</u> Comprehensive emergency service ___	Base Hospital: ___ yes <u>x</u> no	Pediatric Critical Care Center:* ___ yes <u>x</u> no	
EDAP:** ___ yes <u>x</u> no	PICU:*** ___ yes <u>x</u> no	Burn Center: ___ yes <u>x</u> no	Trauma Center: ___ yes <u>x</u> no	If Trauma Center what Level:**** ___

- * Meets EMSA *Pediatric Critical Care Center (PCCC)* Standards.
- ** Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.
- *** Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
- **** Levels I, II, III and Pediatric.



EMSA TABLE 10 - Facilities (cont.)

Name, address & telephone: Doctor's Hospital of Pinole 2151 Appian Way Pinole, CA 94564 510-724-5000		Primary Contact: Administration		
Written Contract ___ yes <u>x</u> no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <u>x</u> Comprehensive emergency service ___	Base Hospital: ___ yes <u>x</u> no	Pediatric Critical Care Center:* ___ yes <u>x</u> no	
EDAP:** ___ yes <u>x</u> no	PICU:*** ___ yes <u>x</u> no	Burn Center: ___ yes <u>x</u> no	Trauma Center: ___ yes <u>x</u> no	If Trauma Center what Level:**** _____

Name, address & telephone: John Muir Medical Center 1601 Ygnacio Valley Road Walnut Creek, CA 94598 510-939-3000		Primary Contact: Administration		
Written Contract: <u>x</u> yes ___ no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <u>x</u> Comprehensive emergency service ___	Base Hospital: <u>x</u> yes ___ no	Pediatric Critical Care Center:* ___ yes <u>x</u> no	
EDAP:** ___ yes <u>x</u> no	PICU:*** ___ yes <u>x</u> no	Burn Center: ___ yes <u>x</u> no	Trauma Center: <u>x</u> yes ___ no	If Trauma Center what Level:**** II

* Meets EMSA Pediatric Critical Care Center (PCCC) Standards.
 ** Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.
 *** Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
 **** Levels I, II, III and Pediatric.



EMSA TABLE 10 - Facilities (cont.)

Name, address & telephone: Kaiser Medical Center 200 Muir Road Martinez, CA 94553 510-372-1000		Primary Contact: Administration		
Written Contract: ___ yes <input checked="" type="checkbox"/> no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service ___	Base Hospital: ___ yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* ___ yes <input checked="" type="checkbox"/> no	
EDAP:** ___ yes <input checked="" type="checkbox"/> no	PICU:*** ___ yes <input checked="" type="checkbox"/> no	Burn Center: ___ yes <input checked="" type="checkbox"/> no	Trauma Center: ___ yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:**** ___

Name, address & telephone: Kaiser Medical Center-Richmond 1330 Cutting Blvd. Richmond, CA 94801 510-307-1500		Primary Contact: Administration		
Written Contract: ___ yes <input checked="" type="checkbox"/> no	Referral emergency service ___ Standby emergency service <input checked="" type="checkbox"/> Basic emergency service ___ Comprehensive emergency service ___	Base Hospital: ___ yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* ___ yes <input checked="" type="checkbox"/> no	
EDAP:** ___ yes <input checked="" type="checkbox"/> no	PICU:*** ___ yes <input checked="" type="checkbox"/> no	Burn Center: ___ yes <input checked="" type="checkbox"/> no	Trauma Center: ___ yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:**** ___

- * Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*
- ** Meets EMSA *Emergency Departments Approved for Pediatrics (EDAP) Standards.*
- *** Meets California Children Services (CCS) *Pediatric Intensive Care Unit (PICU) Standards.*
- **** Levels I, II, III and Pediatric.



EMSA TABLE 10 - Facilities (cont.)

Name, address & telephone: Kaiser Medical Center-Walnut Creek 1425 South Main Street Walnut Creek, CA 94596 510-295-4000		Primary Contact: Administration		
Written Contract: ___ yes <u>x</u> no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <u>x</u> Comprehensive emergency service ___	Base Hospital: ___ yes <u>x</u> no	Pediatric Critical Care Center:* ___ yes <u>x</u> no	
EDAP:** ___ yes <u>x</u> no	PICU:*** ___ yes <u>x</u> no	Burn Center: ___ yes <u>x</u> no	Trauma Center: ___ yes <u>x</u> no	If Trauma Center what Level:**** ___

Name, address & telephone: CCC Merrithew Memorial Hospital 2500 Alhambra Avenue Martinez, CA 94553 510-370-5000		Primary Contact: Administration		
Written Contract: ___ yes <u>x</u> no	Referral emergency service ___ Standby emergency service ___ Basic emergency service <u>x</u> Comprehensive emergency service ___	Base Hospital: ___ yes <u>x</u> no	Pediatric Critical Care Center:* ___ yes <u>x</u> no	
EDAP:** ___ yes <u>x</u> no	PICU:*** ___ yes <u>x</u> no	Burn Center: ___ yes <u>x</u> no	Trauma Center: ___ yes <u>x</u> no	If Trauma Center what Level:**** ___

- * Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*
- ** Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.
- *** Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
- **** Levels I, II, III and Pediatric.



EMSA TABLE 10 - Facilities (cont.)

Name, address & telephone: Mt. Diablo Medical Center P.O. Box 4110 2540 East Street Concord, CA 94524 510-682-8200		Primary Contact: Administration		
Written Contract: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:**** _____

Name, address & telephone: San Ramon Regional Health Center 6001 Norris Canyon Road San Ramon, CA 94583 510-275-9200		Primary Contact: Administration		
Written Contract: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:**** _____

- * Meets EMSA Pediatric Critical Care Center (PCCC) Standards.
- ** Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.
- *** Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
- **** Levels I, II, III and Pediatric.



EMSA TABLE 11 - Dispatch Agency

EMS System: Contra Costa County

County: Contra Costa County

Reporting Year: 1994

Name, address & telephone: Sheriff's Communications 40 Glacier Drive Martinez, CA 94553 510-646-2441		Primary Contact: Commander Kathryn Holmes 510-646-2447	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Air <input checked="" type="checkbox"/> Water	<input checked="" type="checkbox"/> Day-to-Day <input checked="" type="checkbox"/> Disaster	Number of Personnel providing services: _____ EMD Training _____ BLS
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If public: <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal
		Number of Ambulances: _____	

Name, address & telephone: Contra Costa Fire 2010 Geary Road Pleasant Hill, CA 94523 510-930-3400		Primary Contact: Chief Allen Little 510-939-5550	
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Day-to-Day <input checked="" type="checkbox"/> Disaster	Number of Personnel providing services: 12 _____ EMD Training _____ BLS
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal
		Number of Ambulances: _____	



EMSA TABLE 11 - Dispatch Agency (cont.)

Name, address & telephone: West Bay Police/Fire 880 Tennent Avenue Pinole, CA 94564		Primary Contact: Chief Ted Barnes 510-724-8950		
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Day-to-Day <input type="checkbox"/> Disaster	Number of Personnel providing services: _____ EMD Training _____ BLS _____ EMT-D _____ LALS _____ ALS _____ Other	
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Fire district <input type="checkbox"/> State <input type="checkbox"/> Federal	Number of Ambulances: _____



EMSA TABLE 11 - Dispatch Agency (cont.)

Name, address & telephone: Richmond Police/Fire 401 27th Street Richmond, CA 94804			Primary Contact: Lt. Lori Ritter 510-620-6901		
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Day-to-Day <input type="checkbox"/> Disaster	Number of Personnel providing services: _____ EMD Training _____ EMT-D _____ ALS _____ BLS _____ LALS _____ Other		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If public: <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire district <input type="checkbox"/> Federal	Number of Ambulances: _____	

Name, address & telephone: San Ramon Valley Fire 1500 Bollinger Canyon Road San Ramon, CA 94583			Primary Contact: Chief Mel Deardorff 510-837-4212		
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Service: <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Air <input type="checkbox"/> Water	<input checked="" type="checkbox"/> Day-to-Day <input type="checkbox"/> Disaster	Number of Personnel providing services: <u>9</u> EMD Training _____ EMT-D _____ ALS _____ BLS _____ LALS _____ Other		
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Medical Director: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	If Public: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input checked="" type="checkbox"/> Fire district <input type="checkbox"/> Federal	Number of Ambulances: _____	



**SECTION VI
APPENDICES**

APPENDIX I
Definitions and Abbreviations

The following terms and abbreviations are utilized throughout this plan. The definitions are provided for clarification and enhanced understanding of the ambulance systems mentioned herein.

Advanced Life Support - ALS - Special services designed to provide definitive prehospital emergency medical care as defined in Health and Safety Code Section 1797.52, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the supervision of a base hospital.

Ambulance Service - A qualified provider of medical transportation for patients requiring treatment and/or monitoring due to illness or injury.

Ambulance Service Area (zone) - A designated geographic area contiguous to other such areas and delineated by the local EMS agency for the purpose of ensuring availability of emergency medical transport services at all times by one or more specified providers.

Ambulance Unit - An ambulance staffed with qualified personnel and equipped with appropriate medical equipment and supplies.

Base Hospital - One of a limited number of hospitals which, upon designation and upon the completion of a written contractual agreement with the local EMS agency, is responsible for directing the advanced life support (ALS) system and prehospital care system assigned to it by the local EMS agency.

Basic Life Support (BLS) - Emergency first aid and cardiopulmonary resuscitation procedures which, as a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation (CPR) to maintain life without invasive techniques until the victim by be transported or until advanced life support is available.

Casualty Collection Point (CCP) - A site for the congregation, triage (sorting), preliminary treatment, and evacuation of casualties following a disaster.

Code Three - Ambulance response with red lights and sirens to an emergency incident. When responding Code 3, the emergency unit may proceed through red lights and may exceed the posted speed limit within certain restraints, although the driver is responsible for assuring safety for his/her unit and other drivers while doing so.

Code Two - Used by EMS systems to refer to an immediate ambulance response to a potentially urgent but non-life threatening incident without the use of red lights and sirens and adhering to all requirements of the vehicle code (speed limits and rights-of-ways).



Communications System - Resources and arrangements for notifying the EMS system of an emergency, for mobilizing and dispatching resources, for exchanging information, for remote monitoring of vital indicators and for the radio transmission of treatment procedures and directions.

Computer-Aided Dispatch or CAD - Computer-Aided Dispatch system consisting of associated hardware and software to facilitate call taking, system status management, unit selection, ambulance coordination resource dispatch and deployment, event time stamping, creation and real time maintenance of incident database, and providing management information.

Dispatch Center - A coordinating center for the efficient management of all participating emergency resources within a designated area of responsibility. The center dispatches rescue personnel and equipment and coordinates these various resources to ensure maximum effectiveness.

Definitive Care - A level of therapeutic intervention capable of providing comprehensive health care services for a specific condition.

Emergency (medical) - a situation in which there is a real or perceived need for immediate action, attention or decision making to prevent mortality or to reduce serious morbidity.

Emergency Medical Dispatch (EMD) - Personnel trained to State and national standards on emergency medical dispatch techniques including call screening, resource priority and pre-arrival instruction.

Emergency Medical Services Authority (EMSA) - The State EMS organization which develops standards for local EMS systems and provides coordination and leadership.

Emergency Medical Services Medical Director - Every local EMS agency shall have a licensed physician as medical director designated by the county to provide medical control and assure medical accountability through planning, implementation and evaluation of the EMS system.

Emergency Medical Services System - A specially organized arrangement which provides for the personnel, facilities, and equipment for the effective and coordinated delivery of medical care services under emergency conditions.

Emergency Medical Technician-I (EMT-I) - Individuals trained in basic life support according to standards prescribed by the California Code of Regulations and certified by a local EMS agency.

Emergency Medical Technician - Defibrillator (EMT-D) - Individuals trained to initiate automatic or semiautomatic defibrillator procedures.

Emergency Medical Technician - Paramedic (EMT-P) - Individuals trained in basic and advanced life support according to the California Code of Regulations and who have been licensed by the State.



First Responder - The first person (unit) dispatched to the scene of a medical emergency to provide patient care.

Health Services Department - A department of county government responsible for health related issues. The Contra Costa County Health Services Department, which includes the Emergency Medical Services Agency, has been designated by the local Board of Supervisors as the "Local EMS Agency", and the County Health Officer as the "EMS Medical Director".

Local EMS Agency - The local agency, usually a county health department, or office having primary responsibility for administration of emergency medical services in a county or multi-county area.

Medical Control - Physician responsibility for the development, implementation, and evaluation of the clinical aspects of an EMS system.

Medical Disaster - A natural or human-caused event which overwhelms the medical resources within a system. It is characterized by a wide geographic scope and by damage to medical facilities and the transportation system. Because of its wide scope, it must be managed by a centralized, off-scene command system.

Mobile Intensive Care Nurse (MICN or Authorized Registered Nurse ARN) - A Registered Nurse who is authorized to give medical direction to advanced life support personnel from a base hospital under direction of a base hospital physician.

Metro - All census places with a population density of greater than 500 persons per square mile; or census tracts and enumeration districts without census tracts which have a population density of greater than 500 persons per square mile.

Multi-Casualty Incident A natural or human-caused event which may overwhelm the medical resources within a system. It is characterized by a limited geographic scope and can be managed by an on-scene command system.

Mutual Aid - The furnishing of resources by one agency to another agency.

Quality Improvement/Quality Assurance - A method of evaluation of services provided, which includes defined standards, evaluation methodology, and utilization of evaluation results for continued system improvement.

Receiving Facility - A general acute care facility which has been assigned a role in the EMS system by the local EMS agency.

Response Time - The total interval from receipt of a request for medical assistance to the primary public safety answering point (PSAP) to arrival of the responding unit at the scene. This includes all dispatch intervals and driving time.

Rural Area - All census places with a population density of 7 to 50 persons per square mile; or census tracts or enumeration districts without census tracts which have a population density of 7 to 50 persons per square mile.



Suburban Area - All census places with a population density of 51 to 100 persons per square mile; or census tracts or enumeration districts without census tracts which have a population density of 51 to 100 persons per square mile.

System Status Management or Systems Status Plan (SSP) - A management tool to define the "unit hours" of production time, their positioning and allocation, by hour and day of week to best meet demand patterns.

Transfer Agreement - A written agreement between health facilities providing reasonable assurance that transfer of patients will be effected between health facilities whenever such transfer is medically appropriate, as determined by the attending physician.

Trauma Care System - A subsystem within the EMS system designed to manage the triage, transportation and treatment of the trauma patient.

Urban Area - All census places with a population density of 101 to 500 persons per square mile; or census tracts and enumeration districts without census tracts which have a population density of 101 to 500 persons or more per square mile.

Wilderness - Census tracts or enumeration districts without census tracts which have a population of less than seven persons per square mile.



ANNEX I

AB 3153 Compliance (Section 1797.224 H&SC)

CONTRA COSTA County

EXCLUSIVE OPERATING AREAS FACT SHEET

1. **Area or subarea (zone) name or title:** ERA 1
2. **Name(s) of current provider(s):** American Medical Response West
3. **Area or subarea (zone) geographical description:** Emergency response area one includes the unincorporated areas of West County. The cities of El Cerrito, Richmond, Pinole, Hercules, San Pablo, Kensington, Martinez, Pleasant Hill, Lafayette, Orinda and Walnut Creek west of Highway 680 and adjacent unincorporated areas.
4. **Statement of exclusivity:** Exclusive
5. **Method to achieve exclusivity:** Request for Proposal
6. **Type of exclusivity:** Emergency Ambulance.
7. **Addendum:** None



CONTRA COSTA County

EXCLUSIVE OPERATING AREAS FACT SHEET

1. **Area or subarea (zone) name or title:** ERA 2
2. **Name(s) of current provider(s):** American Medical Response West
3. **Area or subarea (zone) geographical description:** Emergency response area two includes Clayton, Concord, Walnut Creek east of Highway 680 and adjacent unincorporated areas.
4. **Statement of exclusivity:** Exclusive
5. **Method to achieve exclusivity:** Request for Proposal
6. **Type of exclusivity:** Emergency Ambulance.
7. **Addendum:** None



CONTRA COSTA County

EXCLUSIVE OPERATING AREAS FACT SHEET

1. **Area or subarea (zone) name or title:** ERA 3
2. **Name(s) of current provider(s):** Moraga Fire Protection District
3. **Area or subarea (zone) geographical description:** Emergency response area three includes Moraga and adjacent unincorporated areas along Moraga Fire Protection District boundaries.
4. **Statement of exclusivity:** Exclusive
5. **Method to achieve exclusivity:** Grandfathered pursuant to H.S. 1797.201
6. **Type of exclusivity:** Emergency Ambulance.
7. **Addendum:** None

Providing service prior June 1977.

*phone conversation
per Art Stettin
4/2/02*

in same exact manner



EXCLUSIVE OPERATING AREAS FACT SHEET

1. **Area or subarea (zone) name or title:** ERA 4
2. **Name(s) of current provider(s):** San Ramon Valley Fire Protection District
3. **Area or subarea (zone) geographical description:** Emergency Response area four includes the entire San Ramon Valley (Alamo, Danville, San Ramon and Tassajara).
4. **Statement of exclusivity:** Exclusive
5. **Method to achieve exclusivity:** Request for Proposal
6. **Type of exclusivity:** Emergency Ambulance.
7. **Addendum:** None



CONTRA COSTA County

EXCLUSIVE OPERATING AREAS FACT SHEET

1. **Area or subarea (zone) name or title:** ERA 5
2. **Name(s) of current provider(s):** American Medical Response West
3. **Area or subarea (zone) geographical description:** Emergency response area five includes all of East County (Pittsburg, Bay Point, Antioch, Brentwood and unincorporated areas) along the 9-1-1 boundary line separating East from Central County.
4. **Statement of exclusivity:** Exclusive
5. **Method to achieve exclusivity:** Request for Proposal
6. **Type of exclusivity:** Emergency Ambulance.
7. **Addendum:** None



ANNEX II
Trauma Care System Plan

CONTRA COSTA County

Trauma Care System Plan

The Trauma Care System Plan for Contra Costa County was adopted by the Board of Supervisors on November 19, 1985. This plan was approved by the State Emergency Medical Services Authority on December 20, 1985, as meeting proposed State Trauma Regulations, and was re-approved on November 28, 1988, as meeting the new State Trauma Regulations.

The Trauma Care System Plan is available from the EMS Agency upon request.



EMERGENCY MEDICAL SERVICES AUTHORITY

1930 9TH STREET, SUITE 100
SACRAMENTO, CA 95814-7043
(916) 322-4336
FAX (916) 324-2875



August 9, 1996

Art Lathrop
EMS Director
Contra Costa County EMS
50 Glacier Drive
Martinez, CA 94553-4822

Dear Mr. Lathrop:

We have completed our review of *Contra Costa County's Emergency Medical Services Plan: 1994-95*, and have found it to be in compliance with the *EMS System Standards and Guidelines and the EMS System Planning Guidelines*.

As you indicated, you will be developing a comprehensive plan for a pediatric emergency medical and critical care system in the future. The Authority is offering technical assistance to develop an EMSC system to local EMS agencies. We would be happy to arrange a consultation visit to assist you.

If you have any questions regarding the plan review, please call Michele Rains at (916) 322-4336, extension 315.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph E. Morales".

Joseph E. Morales, M.D., MPA
Director