STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY PETE WILSON, *Governor*

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

July 29, 1998

Bonny Martignoni, EMS Administrator
1500 Third Street, Suite B
Napa, CA 94559

Dear Ms. Martignoni:

We have completed our review of *Napa County EMS Agency's Emergency Medical Services Plan*, and have found it to be in compliance with the *EMS System Standards and Guidelines and the EMS System Planning Guidelines.*

Our reviewers raised some concerns regarding certain sections of the plan. I have listed those sections along with the specific comment below.

SECTION		COMMENT
1.23	Interfacility Transfer	Policies and procedures are mentioned, but not referenced. We recommend revising this section to include reference to specific policies.
1.26	Trauma System Plan	Acronyms need to be defined. Need to identify what trauma centers and where linkage will be established. Need more detail on EDAT process. Trauma Plan needs to be submitted.
4.06	Staffing	Need to relate more closely to plan to review county ambulance ordinances and EOAs referenced in Sections 1.23 and 4.01.
4.13	Intercounty Response	Recommend revision of this part. Narrative focuses on coordination of responses inside of the county. This section is for coordination between counties.

4.18	Compliance	This should tie in with EOA sections. In Current Status it states that "there is no ambulance ordinance. In Needs it states "revision of the current ordinance to comply with this plan may be needed. Which is correct?
4.20	Grandfathering	Doesn't address planning for any grandfathering. It states "no comprehensive ambulance network exists." This is somewhat contradictory with reference in 4.19 to a "coordinated EMS transportation plan."

These comments are only for your information and may be addressed in your regional plan. If you have any questions regarding the plan review, please call Michele Rains at (916) 322-4336.

Sincerely,

Daniel R. Smiley for

Richard E. Watson
Interim Director

RW:MR:mr

NAPA COUNTY

HEALTH AND HUMAN SERVICES AGENCY
EMERGENCY MEDICAL SERVICES AGENCY
1500 Third Street, Suite B
Napa, California 94559
(707) 253-4345 •FAX (707) 259-8112

Ms. Terry Longoria, Director
Robert S. Hill, M.D. , Medical Director

September 29, 1997

Michelle Rains
State of California
Emergency Medical Services Authority
1930 9th Street, Suite 100
Sacramento, CA 95814-7043

Dear Michelle,

Enclosed is the Napa County EMS/Trauma Plan which was developed under a Special Project grant 1995-96 Contract #EMS-4055. The EMS/Trauma Plan was presented at the Napa County Board of Supervisors meeting on September 23, 1997.

Sincerely,

Bonny Martignoni

Bonny Martignoni
EMS Coordinator

cc: Robert S. Hill, M.D.
Medical Director

Jim Featherstone, Deputy Director
Health and Human Services Agency

Enclosure

County of Napa

Emergency Medical Services

EMS Plan

September 1997

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SECTION TABLE OF CONTENTS PAGE

INTRODUCTION

INTRODUCTION

This Emergency Medical Services (EMS) plan has been developed for Napa County following an analysis of the EMS delivery system. The analysis followed a process which elicited input from multiple participants in the EMS system. The Napa County Health and Human Services Agency engaged the assistance of the EMS consultant group, The Abaris Group, to facilitate the process.

The analysis and ultimate plan development 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, and other government staff were interviewed in order to develop appropriate goals and objectives for the EMS plan. Their input was invaluable towards establishing a comprehensive plan which would meet the diverse needs and challenging environment encompassed by Napa County.

The Plan approval process stipulates a period for review and comment to the draft plan prior to its presentation to the Napa County Board of Supervisors. The ultimate goal of the EMS Plan is to define an effective and efficient EMS system which can assure consistent, high-quality emergency medical services to the residents and visitors of Napa County within available resources. Other considerations are also important. These include the establishment of a fiscally stable and responsible system, provision for community involvement in defining the level of emergency medical services, and development of a system which can withstand challenges and thrive in the future.

Section I

Executive Summary/Overview

SECTION I - EXECUTIVE SUMMARY AND OVERVIEW

A. Purpose

The Emergency Medical Services (EMS) Plan for Napa 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 Napa 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 Napa 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 the 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 the development of regional EMS systems. Fifteen program components were recognized as essential elements of an EMS system. During

[1] National 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

1981, this program ended and 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.

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 transporting ambulance services serving their communities. These communities relied on licensing ambulance services into designated service areas and limited new licensees. For the most part, this 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 the 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 the document Emergency Medical Services System Standards and Guidelines. These recently revised guidelines describe the basic components and general function of an EMS system. The following component titles are provided with the new guideline titles in a parenthesis.

1. Manpower/training (Staffing/Training)

2. Communication

3. Transportation (Response/Transportation)

4. Assessment of hospitals and specialty care centers (Facilities/Critical care)

5. System organization and management

6. Data collection and evaluation (Data collection/System evaluation)

7. Public information and education

8. Disaster medical preparedness (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, early defib, and Mobile Intensive Care Nurse (MICN) training programs.
- Conducting certification/accreditation/authorization and licensing programs for EMT-Is, EMT-Ps, MICNs, EMT-Ds, and EMDs.
- 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 and ALS designation.
- Establishing ordinances and/or exclusive operating areas for the regulation of ambulance services.
- Developing and implementing a trauma system plan.

To accomplish these functions, the EMS Agency only employs one full time staff member and an extra help secretary. Additional staffing and outside resources will be necessary to accomplish the goals of this plan.

D. Overall Program Priorities/Direction

Overview

The Napa EMS Agency is responsible for planning, administering, monitoring and evaluating the EMS system in Napa 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 Napa County.

New Direction/Philosophy

The overall philosophy in this plan is to proactively 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. Significant effort has been put into the prehospital care system to date, a recent analysis of the prehospital care system, focusing on first response and ambulance service has outlined significant work for this area. The health care industry and payers have also 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 providers within the county have begun to investigate their future roles in EMS. Other counties in the

state are developing models for alternative response and treatment approaches to EMS patients that may be more appropriate for their specific needs. Such models would thereby keep emergency medical resources available for the high-risk patients.

The method to achieve this effort will be through participatory planning with extensive use of advisory committees steered by a consolidated 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 the participatory input it will be necessary to reinforce the advisory committee structure for the EMS system. This effort should include the Emergency Medical Care Committee (EMCC) membership as the pivotal group for steering the plan. The EMCC should begin its oversight function and expand its charge to include broad-based planning steps that are called for in this plan. To accomplish this task, 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 continue to be the responsibility of the EMS Medical Director. Some subcommittees may initially start with a small working task force to accomplish

the early investigation and planning called for in 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 Board of Supervisors and through the EMS Agency.

Supportive to this plan is the refocus 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 priorities of the large responsibility of an EMS Agency is needed.

A review of staffing levels should also be undertaken. Outside expert help may be needed to temporarily support technical planning areas (e.g., Ambulance EOAs, Trauma Planning, etc.) or to provide temporary assistance in the planning process (e.g., CQI Plan, Public Information and Education Plan).

System and Organization Component Priorities
• Assess EMS Agency staffing • Reinforce the EMS advisory committees • Linkage to CQI program

Staffing and Training

A proactive role within the EMS Agency in planning and establishing continuing education standards is planned. The support in this area will extend to BLS

services as well. There is also a need for additional personnel and/or training in curriculum design in other educational services areas.

Staffing and Training Component Priorities
• Planning for CE standards • Curriculum design • Linkage to the CQI program

Communications

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

Communication Component Priorities
• Ongoing communication assessment

Response and Transportation

A significant scope of this component is the review and potential conceptual redesign of the current prehospital system. An evaluation should be conducted on areas of need including: (1) uniform, performance-based county-wide coverage, (2) consolidation into one or two EOAs, (3) coordinated county-wide

ALS services, and (4) assuring oversite and stability. Improved air medical coordination and an analysis of appropriate utilization patterns should be conducted.

Response and Transportation Component Priorities
• Consider a county-wide, coordinated ALS ambulance system • Improve coordination and utilization patterns with air medical services • Conduct a proactive review of prehospital systems for the future

Facilities and Critical Care

This area will focus on stabilizing the trauma care center and referral service.

Facilities and Critical Care Component Priorities
• Conduct assessment to stabilize trauma program • Conduct EDAT and pediatric services review

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, describing system impact, performance, outcome and the tracking of 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
• Develop a complete MIS system . • Link all components of the EMS system to the MIS system. • Develop a CQI plan and integrate into the EMS system. • Refine trauma system data system.

Public Information and Education

An informed and educated consumer is 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 cataloguing of existing resources where possible.

Public Information/Education Component Priorities
• Ongoing PI& E assessment. • Targeted public education efforts.

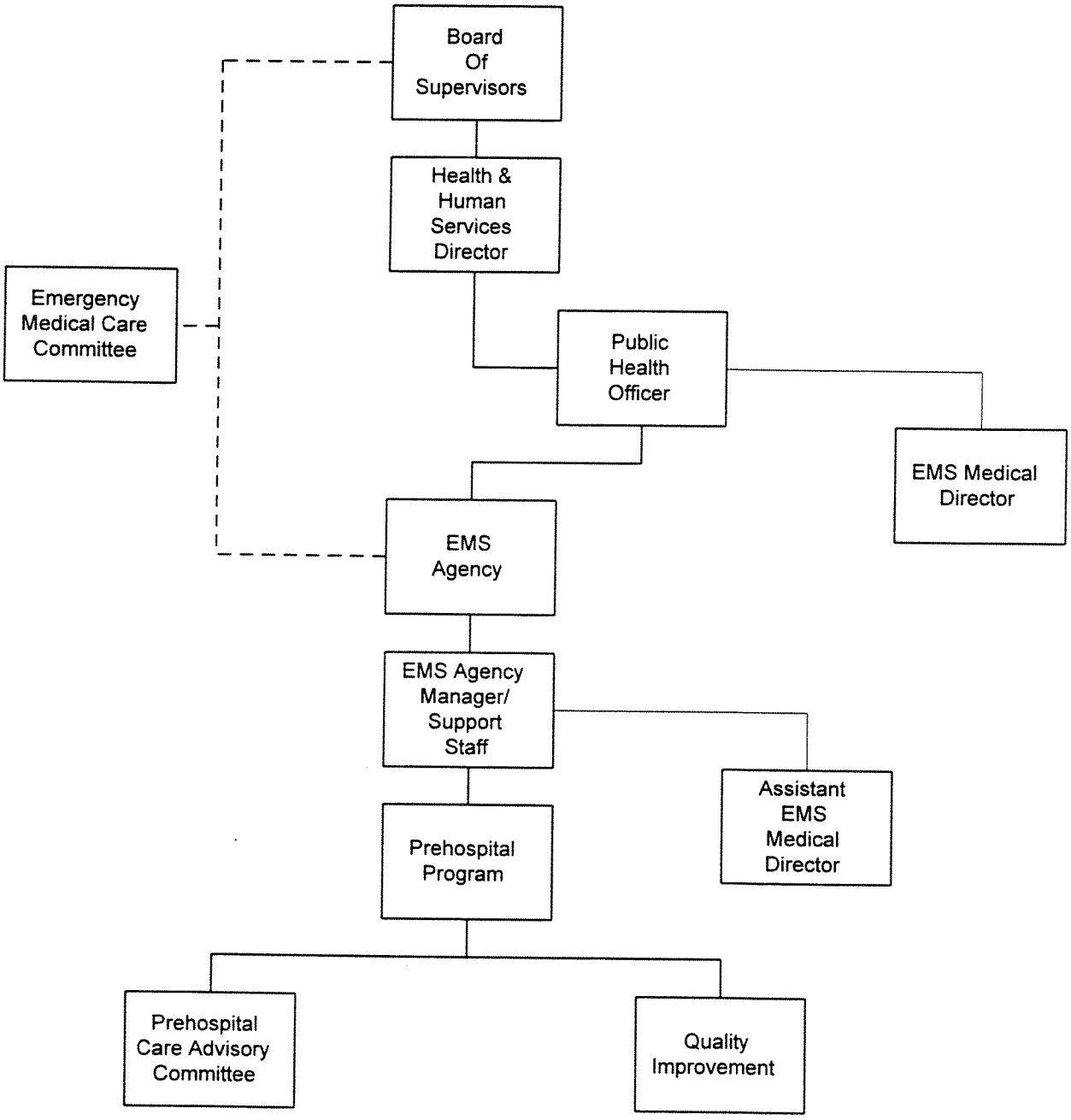
Disaster Medical Response

Emergency preparedness as it relates to the EMS system will need continuous support. Key priorities are: updating the health annex and operation plan for EMS disaster response, establishing a command structure system (e.g., Incident Command System, Hospital Emergency Incident Command System) as the standard for EMS Agency, continued integration into the county-wide plan and the further development of a disaster communication network to support the hospital and EMS Agency responses to major emergencies.

Disaster and Mutual Aid Component Priorities

• Prepare an EMS disaster plan
• Develop communication systems for disasters:
  • Prehospital
  • Hospital.
• Encourage the adoption of the ICS and HEICS system for the EMS Agency and hospitals.

Figure 1
County of Napa
Proposed EMS Agency Program
Organization Chart



Section II
Geography and Physical Characteristics

SECTION II - Geography and Physical Characteristics

A. Overview

Napa County encompasses a total of 794 square miles. It is located approximately fifty-two miles northeast of San Francisco and forty-seven miles north of Oakland. Napa County consists of seven different regions including Airport Industrial, American Canyon, Angwin, Calistoga, Napa, St. Helena, and Yountville. Calistoga is nestled in between Lake, Sonoma, Solano, and Yolo Counties in California.

Napa County is characterized by plush greenery, wooded hillsides, and rolling hills and valleys. The Napa Valley is drained by the Napa River which runs up and down the east side. There are ridges to the west and the east which ascend into hilly terrain. The ridges continue up to Lake Berryessa, near the eastern border. Napa County attracts visitors year-round to its numerous wineries, health resorts, fine restaurants, and seasonal festivals. Other attractions include the Petrified Forest and the famous regularly erupting, hot-water geyser, Old Faithful which are both located in Calistoga. Much of the county's land area supports the 24,000 vineyards that Napa boasts. Elevation in the county ranges from 100 feet to about 4500 feet.

B. Transportation

Most areas of Napa County have reasonable access to Highway 29 which bisects the county and connects Vallejo to the cities of Napa, St. Helena, and Calistoga. Highway 80 is connected to Highway 12 and Highway 37 and provides access to Sacramento and beyond. Highway 128 connects the eastern and western borders of the upper region in Napa County. The rail system, which was established in the late 1800's is still in use today as a popular tourist

attraction. In addition to being served by Greyhound and a charter company, local bus service is provided in Napa. Napa County Airport serves the entire Napa region.

C. Climate

During most of the year, the entire Napa region is fairly mild. Napa averages around 60°F in the month of February and a low of 39°F. In July, Napa averages 83°F with a low of 53°F. The average rainfall in Napa is about 24.0 inches according to the National Weather Service. Hilly regions of Napa County, such as Calistoga and St. Helena, tend to receive 60% more rain than the valleys. During an extremely rainy season, the Napa river has been known to flood around some of the low-lying areas. Overnight frosts can occur occasionally during the winter months. Fog is common in the Napa Valley during many months, though it often burns off by midday.

Section III - Demographic Information

Section III - Demographic Information

A. Population

The 1995 estimated population of Napa County is 121,150. It is expected to grow 26 percent in the next 20 years with 132,700 residents in the year 2000, 138,800 residents in 2005, 144,700 residents in 2010 and 152,500 residents in 2015.

Tables 1 through 4 provide an overview of population, age and other demographic indicators for Napa County. There are many factors which would impact emergency medical services including age-factors, poverty, and occupation. According to the 1990 Census report, 16.51 percent of Napa County's population is sixty-five years of age or older which is higher than California as a whole (10.5 percent). The tourist industry in Napa County significantly increases the resident population which also creates an impact on the EMS system. The vacation atmosphere and wineries in the county could induce a significant number of alcohol-related injuries. There is also an agricultural migrant population that is considered to be high risk. According to the 1990 census, 7,229 people (6.9 percent of the county) lived below the poverty line.

B. Lifestyle

Napa County offers its residents quality schools, parks, low crime rates and regional festivals. In 1990, the county contained 44,199 housing units. The median value of owner occupied units county wide was $183,600. The median gross rent within the county was $632. The median family income was $42,789 which is comparable to California as a whole ($40,559).

C. Recreation and Points of Interest

Scenic countryside, mineral springs of Calistoga, plush green landscapes and seemingly endless rows of grapevines are main attractions in Napa County. The county is home to California's most famous wineries and orchards. Calistoga is known for its health spa resorts with natural hot-water geysers, mineral springs, and mineralized mud baths. There is also an extinct volcano to the north which lures many visitors.

There are a full range of recreational activities in Napa County: hot-air ballooning, camping, golf, bicycling, hiking, backpacking, horseback riding, fishing, river rafting, and swimming. Additionally, Napa County's rich historical heritage is well preserved in museums, sites and industries. Festivals are common year-round.

D. Major Industry

Napa County has historically relied on services, agriculture, mining, and tourism as an economic base. These industries have continued to stay strong despite an overall change towards technology. Retail and wholesale trade employs an estimated 19.6% of the workers in the county. Government employs only around 4.2% while the weight of employment is carried in agriculture, manufacturing, services and tourism. Together, those industries make up 67.1% of the work force for Napa County. Tourism and agriculture are important in major portions of the county.

E. Epidemiological Characteristics

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

Table 5 illustrates selected data regarding Napa County's causes of deaths compared to the state. With the exception of the accidental injury, motor vehicle traffic collisions and homicide categories, Napa County has a higher death rate in the categories reviewed than for the state as a whole.

Table 1

ESTIMATED POPULATION FOR COMMUNITIES OF Napa County					
Regional	1990	2000	2005	2010	2015
American Canyon	7,779	10,800	12,900	14,900	16,600
Calistoga	4,468	5,100	5,600	6,000	6,900
Napa	67,561	79,500	82,600	85,400	88,700
St. Helena	4,990	6,100	6,300	6,500	6,800
Yountville	3,259	4,000	4,000	4,100	4,400
Airport Industrial	0	0	0	0	0
Remainder	22,708	27,200	27,400	27,800	29,100
TOTAL	110,765	132,700	138,800	144,700	152,500

Source: 1990 U.S. Census and Association of Bay Area Governments

Furnished by Napa County Conservation-Development and Planning Dept, State Census Data Center and input from study participant

* Projections may not reflect current experience due to local growth limitations and the recent effect of the economy.

Table 2

Age Distributions
Napa County
1990 Census

	Year		
Age Group	1980	1990	1995
0-17	24,183	25,850	25,646
18-24	11,901	9,710	8,028
25-34	15,583	17,148	15,173
35-44	11,661	17,631	21,846
45-64	20,843	22,135	24,936
>65	15,028	18,291	20,010

Source: 1990 U.S. Census and Association of Bay Area Governments.

Furnished by Napa Chamber of Commerce

Table 3

NAPA COUNTY
(American Canyon,Calistoga,Napa,St. Helena, Yountville)
1990 Population by Race

White	65,212	79.91%
Black	754	0.92%
Native American, Eskimo, Aleut	494	0.61%
Asian/ Pacific Islander	2,485	3.05%
Hispanic	12,664	15.52%
Total Population	81,609	100.00%

Source: 1990 Census and Association of Bay Area Governments.

Table 4

Napa County
1990 Census Summary

Population: Total	110,765
Population over 65 Years	16.51%
Persons Below Poverty	6.9%
Births (1994)	1373
Deaths (1994)	1252
Housing Units: Number	44,199
Median Value	$183,600
Persons per Household	2.54
Median Rent	$632
Median Family Income	$42,789
Mean Travel Time to Work	21.4 minutes
Average Rainfall	24.0 inches
Average Summer Temp	83 deg F
Average Winter Temp	60 deg F

Source: 1990 U.S. Census and Association of Bay Area Governements

Furnished by Napa County Chamber of Commerce

Table 5

Napa County
1994 Death Rates Per Capita for Selected Causes

Disease/ Condition	California	Napa County
Population:	31,522,000	114,800
Total	0.71%	1.10%
Accidents & Adverse Effects	0.03%	0.03%
Motor Vehicle Traffic Collisions	0.01%	0.01%
Cancer	0.16%	0.27%
Heart Diease (all causes)	0.22%	0.31%
Suicide	0.01%	0.02%
Homicide	0.01%	0.003%

Source: California Department of Health Services, Death Records

Section IV - EMS System Overview

Section IV - EMS System Overview

A. Delivery of EMS Services

EMS services in Napa 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 one of three appropriate designated Public Safety Answering Points (PSAP). A dispatcher 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.

The initial response to a potential life threatening incident generally varies by area of the county as follows:

- North County: there are either fire first responders or ALS or a BLS ambulance units with ALS unit backup.
- East County (Angwin): BLS with ALS intercept as needed.
- Napa: fire ALS first responders and BLS ambulances.
- South County: fire first responders and ALS ambulances.

The location of fire stations throughout the county enables firefighters to make an initial response to a medical emergency. Firefighters are trained and equipped to provide extrication and rescue, and first aid. Firefighters have EMT-D, but not all volunteer stations do. The use of cardiac defibrillation techniques for first responders is a goal of this plan.

B. EMS System

Ambulance delivery systems are but one component of an EMS system. This system, when fully implemented, is designed to assure high-quality emergency care to all residents of Napa County. The basic components of an EMS system and their goals are as follows.

1. System Organization and Management

Overall Goal:

The EMS system will be structured so as to assure an organizational model to identify needs and goals, assure a successful implementation and monitoring of a comprehensive EMS system.

2. Staffing and Training

Overall Objective:

The EMS system will include adequately trained hospital and prehospital health professionals to provide emergency medical services on a 24-hour basis. Provisions will be made for the initial and ongoing training of EMS personnel utilizing curricula consistent with state and national standards.

3. Communications

Overall Goal:

The EMS system will make provisions for the two-way communications between personnel and facilities within coordinated communication systems. The system will assure public access to the EMS system, resource management, and medical direction on both the basic life support and advanced life support levels.

4. **Response and Transportation**

Overall Goal:

The EMS system will include adequate ground vehicles and aircraft meeting appropriate standards regarding location, design, performance, equipment, personnel and safety.

5. **Facilities and Critical Care**

Overall Goal:

Provide for an appropriate number and level of health facilities and their capabilities to receive and treat emergency patients. The system will have the capability of identifying, under medical direction, the most appropriate facility to manage a patient's clinical problem and arranging for triage and/or transfer of the patient to this facility.

6. **Data Collection and System Evaluation**

Overall Goal:

To provide mechanisms to collect data regarding operational and clinical aspects to the system, covering all stages of the system including day-to-day quality assurance/improvement activities and overall evaluation of system operations.

7. **Public Information and Education**

Overall Goal:

Provide programs to establish the awareness of the EMS system, how to access and use the system.

8. **Disaster Medical Response**

Overall Goal:

The EMS system should proactively plan and where necessary revise emergency management plans so that the EMS system is capable of expanding its standard operations to meet the needs created by multi-casualty incidents and medical disasters, including integration of in-area and out-of-area resources.

The current status of these components in Napa County are listed in the table below:

EMS Systems Component	NAPA COUNTY STATUS OF IMPLEMENTATION		
	NONE	PARTIAL	COMPLETE
1. System organization and management		√	
2. Staffing/training			√
3. Communication		√	
4. Response and transportation		√	
5. Facilities and critical care		√	
6. Data collection and system evaluation		√	
7. Public information and education		√	
8. Disaster medical preparedness			√

Section V - 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 Napa County (listed as "Goal"). The charts also list the resource requirements and the relative importance of each task. 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:

Establish an effective organizational structure to enable the agency to plan, implement, monitor and evaluate the local EMS system. In addition, the agency will coordinate the multiple participants of the system and function as a system advocate to the community and governmental entities.

Current Status:

The Napa County Board of Supervisors designated the Public Health Department as the local EMS agency. Currently, the EMS Agency has only one professional position. The EMS Agency is a part of the Napa County Health and Human Services Agency.

Need(s):

Due to staffing limitations, the EMS Agency has not been able to maintain all of the minimum State-required efforts of a Local EMS Agency (LEMSA). There is a need to identify staffing, review and modify job descriptions and employee classifications to keep 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:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [0-6 months]

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 assurance/quality improvement and evaluation processes to identify needed system changes.

Goal:

Implement a comprehensive system-wide continuous quality improvement (CQI) and evaluation program.

Current Status:

Minimal EMS system monitoring occurs. There is an interest in establishing continuous quality improvement (CQI) approach to activities on a system-wide base. The initial CQI efforts have occurred as a result of programs at the base hospitals. Many evaluation processes are 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. A written plan is needed with specific outcomes and quality indicators of the quality improvement process defined. The plan should also list the "quality circle" participants and their roles. Policies, procedures and regulations need to be developed to require quality improvement activities by the system participants. The EMS Agency should utilize various participant resources, establish working groups, and develop comprehensive procedures and policies for the 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:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [6-12 mo]

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:

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

Current Status:

The EMS Agency utilizes the Emergency Medical Care Committee (EMCC) and multiple advisory committees to garner input and provide advice for the EMS system. Committee memberships and charters need to be revisited. Linkage between the EMCC and the various advisory committees is presently in place. However, there has been limited definition of the specific roles and responsibilities of each of the committees and inadequate specification of authority and responsibilities.

Need(s):

Evaluate the current committee structure and roles for the EMS Agency. Develop specific linkages between the EMCC and the various advisory committees to meet the needs of this plan as appropriate.

Objective:

Establish and maintain strong permanent committees for oversight of the operational and administrative functions of the EMS system and for monitoring and directing the clinical care aspects of the system. Develop advisory committees to respond to the ongoing needs of the EMS system. 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:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [6-12 mo]

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:

The local EMS agency medical director should have administrative experience in emergency medical services systems. The EMS agency medical director should create clinical specialty advisory groups composed of physicians with appropriate specialities and non-physician providers (including nurses and prehospital providers), and/or should appoint medical consultants with expertise in trauma care, pediatrics, and other areas, as needed.

Current Status:

The County Health Officer is the EMS medical director.

Need(s):

Develop additional EMS physician leadership and time commitment to the EMS Agency. Continue speciality resources including advisory groups or speciality medical consultants to provide input into system issues regarding specialized areas of medicine.

Objective:

Develop an organization structure to provide strong, specialized EMS system clinical oversight of EMS system activities. Acquire input from the general EMS physician community particularly in regard to specific medical specialty areas.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [12 months]

System Organization and Management

Planning Activities

Standard:

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

a) assess how the current system meets these 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:

Establish a comprehensive and dynamic EMS plan for the County of Napa to meet existing and future challenges to the EMS system.

Current Status:

There is no current EMS Plan for the county. This EMS Plan is the foundation for a process of ongoing planning and implementation for Napa County EMS. Many of the activities directed by this plan will focus on target issues and evaluation of the system's performance outcomes. Accountability for the EMS Plan should rest with the County.

Need(s):

Develop an 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 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. Performance should be measured through management reports and annual reports.

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:

[x] Short Term Implementation Plan [ ] Long Range Plan [ ] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Med] Time Requirement [Ongoing]

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:

Provide regular status reports regarding Napa County EMS to the Board of Supervisors and the California EMS Authority.

Current Status:

This plan represents the initial attempt 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 through the EMCC. Report EMS system progress to the County Board of Supervisors and submit an updated plan to the State EMS Authority every 12 months from 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:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [Annual]

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:

The local EMS agency and appropriate advisory committees should designate and contract with appropriate facilities and execute agreements with trauma facilities in other jurisdictions.

Current Status:

There is one Level III trauma center in Napa County (Queen of the Valley Hospital), but it operates without benefit of an organized trauma system. Limited linkages and coordination exists between the trauma center and the county providers.

Need(s):

The EMS System CQI process will need to be incorporated in the trauma system-wide procedures as identified in Standard 1.02 including specialized reviews and focused audits.

Objective:

To develop a coordinated and comprehensive trauma system plan for the County of Napa with ongoing program evaluation and linkages to the EMS system quality improvement plan as it is developed.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Med.] Time Requirement [Ongoing]

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 for all ambulance patients throughout the jurisdiction of Napa County

Current Status:

Napa County routinely provides BLS and some EMT-D first responder services. Not all emergency ambulance services that routinely respond to 9-1-1 calls provide ALS services.

Need(s):

Needs of the prehospital care system should be identified in a special analysis prepared for the Board of Supervisors.

Objective:

Conduct a special analysis and begin implementing short and long-term recommendations within 12 months.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [2-3 yrs.]

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:

Maintain comprehensive awareness of resources used in the provision of emergency medical services and identify 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 Napa County.

Need(s):

No needs identified.

Objective:

None identified.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

Each local EMS agency should develop services, as appropriate, for special population groups served by the EMS system which require specialized service (e.g., elderly, handicapped, children, non-English speakers).

Current Status:

The fire department and ambulance services have completed targeted speciality population planning, but need to coordinate at a broader level and on a county-wide basis to assure compliance.

Need(s):

Identify specific population groups requiring specialized services. Work with other programs with specialized data. Develop plans to enhance service delivery to the groups.

Objective:

Assure appropriate access to the EMS system by all individuals and groups.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

System Organization and Management

Planning Activities

Standard:

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

Goal:

Each local EMS agency should ensure 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 the ALS system participants. There is no coordinating first responder oversight. Many activities by the participants lack standardization.

Need(s):

Review, update responsibilities, EMS system linkages and performance standards for all system participants. Develop and execute agreements or letters of understanding between the County (through the EMS Agency) and receiving hospitals, dispatch centers, first responders, helicopters and other system participants to reflect the revised policies, linkages and performance standards. First responder monitoring should be established.

Objective:

Establish comprehensive roles and responsibilities and performance standards for the EMS system participants and create written agreements which identify these roles and responsibilities and performance as well as providing the mechanism to ensure compliance and assist in enforcement of policies and procedures. The agreements should also encompass mechanisms to link the monitoring effort to the CQI plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [1- 2 yrs]

System Organization and Management

Regulatory Activities

Standard:

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

Goal:

Assign the responsibility for EMS system operational oversight to the Emergency Medical Care Committee. Monitor and evaluate EMS system operations through the development of a data collection system and the establishment of written agreements between the system participants. Measure, document, and report Napa County EMS system's operational performance on a regular basis.

Current Status:

Lack of contemporary data collection and analysis resources, coupled with limited definitions of expectations and quality indicators, has limited the EMS Agency's ability to address all issues needed for reviewing and monitoring EMS system operations. BLS is not tracked and there is no response time requirement for it. Response data is not currently collected. No county-wide data is available for ambulance transport only.

Need(s):

Redefine the EMCC and its advisory committee roles and functions. Develop specific parameters and responsibilities for reviewing and monitoring EMS system performance (ALS and BLS). 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 Assistant Medical Director position and realign EMS Agency staff with the needs and goals of this plan. Integrate, review, and monitor the various quality improvement and data collection activities.

Objective:

Provide ongoing and direct review and monitoring of the EMS system's operational components. Provide a mechanism to document compliance with system protocols and procedures. Develop enforceable penalties for noncompliance.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [1-2 yrs.]

System Organization and Management

Regulatory Activities

Standard:

1.13 Each local EMS agency shall coordinate EMS system operations.

Goal:

Establish system-wide coordination through the efforts of the Emergency Medical Care Committee, sub-committees, limited-term task forces, and through direct communication and contract by the EMS agency staff.

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, five advisory committees in the county and one multi-county advisory committee. These committees operate with varying missions and meeting schedules based on needs.

Need(s):

The Emergency Medical Care Committee with its revised, system-wide representation, shall 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. This shall include periodic site visits, telephone communications, and written communications via letters and facsimile transmissions.

Objective:

Revise the EMCC and advisory committee network. Provide regular contact with all EMS system participants and promptly respond to all requests for information or assistance.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [6 - 12 mos.]

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:

Maintain a comprehensive policies and procedures manual for the Napa 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):

No needs identified.

Objective:

None identified.

Time Frame for Objective:

[x] Short Term Implementation Plan [ ] Long Range Plan [ ] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Low] Time Requirement [Ongoing]

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:

Create a strong legal foundation to enable the County to comply with state mandates and to ensure the EMS system's functioning.

Current Status:

Not all providers in the County of Napa have contracts in place and voluntary guidelines to monitor and regulate ground ambulance services. There is no ordinance in place which provides support to the monitoring and enforcement issue. The recent EMS report called for the contracts, ordinance and policies to be revised.

Need(s):

A County Ambulance Ordinance and the contracts will need to be developed or replaced with a more 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:

[x] Short Term Implementation Plan [ ] Long Range Plan [x] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [6 - 12 mos.]

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:

Establish a strong independent financial basis for the EMS system and system participants.

Current Status:

EMS Agency and support program funding is only derived from a single source: the County General Fund. Current funding for EMS tourist areas (e.g., Lake Berryessa) is adequate.

Need(s):

The existing funding sources are fragile at best. Ongoing monitoring and financial accountability needs should be established with a formal plan and oversight by the Board of Supervisors.

Objective:

Develop a comprehensive EMS system financial plan and continue ongoing monitoring development of EMS funding needs.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [x] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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 will be overseen by the EMS Agency Medical Director. He or she will oversee the clinical aspects of the agency's operations. Designated base hospitals will have comprehensive policies and procedures and base station personnel will have adequate training and guidance to fulfill their responsibilities.

Current Status:

The County has designated two base hospitals. Some of the roles and responsibilities of the base hospitals and the Mobile Intensive Care Nurses (MICNs) are identified in the County's policies, procedures and protocols manual. ALS providers and first responder agencies participating in the first responder defibrillation program are required to report on medical issues to 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 allow for a revision in the mission, scope and configuration of base hospitals. Coordination on time frames is needed to reflect the multiple issues being addressed concurrent.

Objective:

Conduct an evaluation on the base hospital missions, scope and configuration.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs.]

Medical Direction

Standard:

1.18 Each local EMS agency shall establish a quality assurance/quality improvement program to ensure adherence to medical direction policies and procedures, including a mechanism to review compliance with system policies. This may include use of provider-based programs which are approved by the local EMS agency and which are coordinated with other system participants.

Goal:

Prehospital care providers should be encouraged to establish in-house procedures which identify methods of improving the quality of care provided.

Current Status:

As indicated under Standard 1.02, there are limited quality improvement activities currently functioning within the system. Most of the activities are complaint-driven (with the exception of the trauma, transfer and some base hospital functions) and do not reflect a comprehensive quality improvement/assurance program. Individual base hospitals and ambulance providers have encompassed quality improvement programs but they are not coordinated or conducted on a system-wide basis. There is no system wide CQI plan although individual program activities exist with the trauma and transfer programs.

Need(s):

The EMS Agency, the base hospitals, and prehospital EMS providers need to collectively develop a county-wide, comprehensive continuous quality improvement (CQI) plan. The County should take the lead in system design, establishment and training. Initial development should include the identification of appropriate outcome measures, indicators, a common data set of information to be collected, individual Agency responsibilities, and the appropriate mechanism for feedback to EMS system participants. After the development of this basic quality improvement/assurance plan, the EMS Agency needs to establish related policies and procedures for all system participants. The requirements for system participants would include the designation of the individuals responsible for quality improvement activities at base station hospitals, specialty centers and ambulance service providers. Each provider should have its own

internal CQI program which interfaces with the system CQI plan. Results of the quality improvement components should be communicated to the EMCC and its appropriate advisory committees. A linkage should be required with all first responder defibrillator, ALS and ambulance providers.

Objective:
Establishment of a provider-based improvement program which interfaces with the system-wide CQI plan and defines specific clinical indicators and outcome measures to monitor the performance of the EMS system.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Med.] Time Requirement [1-2 yrs.]

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:
- a) triage,
- b) treatment,
- c) medical dispatch protocols,
- d) transport,
- e) on-scene treatment times,
- f) transfer of emergency patients,
- g) standing orders,
- h) base hospital contact,
- I) on scene physicians and other medical personnel,
- j) local scope of practice for prehospital personnel.

Goal:

Comprehensive set of policies, procedures, and protocols for all agencies and individuals functioning within the EMS system, pre-arrival /post dispatch instructions, should be developed and should be based on the CQI model.

Current Status:

Policies on pre-arrival and post dispatch need to be prepared for county-wide use. EMD programs are in place, but need establishment of an automated CQI link..

Need(s):

County-wide policies should be developed for the various public safety answering points and communication centers which are directly responsible for call-taking and dispatch of EMS resources. Development of new and modifications to original EMS policies should be based on findings of the CQI program. Monitoring should occur at the EMSA level.

Objective:

Continue to provide comprehensive guidelines, policies, procedures and protocols for all individuals and agencies functioning within the EMS system. Incorporate specific policies and procedures to address commonly occurring circumstances. Develop a county-wide standard and review process for pre-arrival and post-dispatch instructions. Conduct all processes including changes consistent with the CQI plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [ ] Long Range Plan [x] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs]

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 when determining when it is appropriate not to resuscitate patients.

Current Status:

A "do-not resuscitate" policy exists within the EMS system.

Need(s):

No current needs have been identified.

Objective:

Continue to monitor these procedures.

Time Frame for Objective:

[ ] Short Term Implementation Plan [ ] Long Range Plan [x] Complete/Partially Complete

Priority [ ] Importance [ ] Resource Requirement [ ] Time Requirement [Ongoing]

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:

Develop a policy for the determination of death.

Current Status:

A policy regarding determination of death exists. Occasional issues surface with law enforcement agencies regarding "pronouncement."

Need(s):

A policy regarding determination of death needs to be developed that includes SIDS.

Objective:

Develop a policy regarding determination of death that includes SIDS.

Time Frame for Objective:

[x] Short Term Implementation Plan [ ] Long Range Plan [x] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [low] Time Requirement [6-12 mos.]

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:

Develop a mechanism for reporting child abuse, elder abuse and suspected SIDS deaths.

Current Status:

A mechanism for reporting child and elder abuse does not exist.

Need(s):

A mechanism for reporting child and elder abuse and suspected SIDS deaths needs to be developed.

Objective:

Develop a mechanism for reporting child and elder abuse and suspected SIDS deaths.

Time Frame for Objective:

[x] Short Term Implementation Plan [ ] Long Range Plan [x] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [6-12 mos.]

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 Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [Ongoing]

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 area(s) throughout Napa County.

Current Status:

Only one (1) agreement exists between one ALS provider and the EMS Agency. There is no comprehensive EOA plan for the county.

Need(s):

These agreements need to be developed and updated. A county-wide ambulance analysis is needed.

Objective:

Complete and update agreements and conduct ambulance analysis.

Time frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [ ] Resource Requirement [Low] Time Requirement [1 - 2 yrs.]

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) a physician or authorized registered nurse.

Goal:

Each EMS system should develop a medical control plan which determines:

a) The base hospital configuration for the system;
b) The process for selecting base hospitals, including a process for designation which allows all eligible facilities to apply;
c) The process for determining when prehospital providers should appoint an in-house medical director; or,
d) An appropriate medical control configuration for the future.

Current Status:

Two base hospitals have been designated in the County with each providing on-line medical control by physicians or certified mobile intensive care nurses. There is a base station selection and application process for designation within the County.

Need(s):

There is a need to validate the medical control system as it relates to the EMS delivery model, and the establishment of an assistant EMS medical director position.

Objective:

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

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Med] Time Requirement [1-2 yrs]

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:

Develop 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:

No written trauma plan is in place in the county. The county is served by one Level III trauma center. No formal linkages exist with out-of-county trauma centers. There are no EDATs approved in the county.

Need(s):

Establish linkages with designated trauma center systems. Identify and designate two EDATs.

Objective:

Implement a comprehensive trauma system plan for Napa County that includes prehospital provider PALS and PHTLS.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Med] Time Requirement [Ongoing]

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:

a) The optimal system design for pediatric emergency medical and critical 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:

Assure that all children in Napa County have timely access to the most appropriate level of prehospital and in-hospital medical care.

Current Status:

Currently, most seriously injured children are interfacility transferred to a designated trauma center. Pediatric treatment, advanced airway and other prehospital procedures for children have been implemented in the county. While the seriously injured child component has been partially addressed, the EMS Agency has begun but not fully addressed 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 definition of triage protocols, criteria for designation of pediatric receiving facilities, and the drafting and execution of agreements between the EMS Agency and the designated facilities.

Objective:

Implementation of a comprehensive pediatric emergency medical and critical care system plan for Napa County.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

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

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

Goal:

Assure that all residents and visitors to Napa County have access to timely advanced life support ambulance transportation service.

Current Status:

All residents of Napa County have access to ALS services, except residents of the Angwin area. However, in the Angwin area, the ALS service is only available through rendezvous with an out-of-area ALS unit.

Need(s):

An ongoing review of the ambulance and 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [1-2 yrs.]

Staffing/Training

Local EMS Agency
Standard:

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

Goal:
Assure adequate personnel for the Napa County EMS system.

Current Status:
The EMS Agency has no formal program to routinely assess personnel and training needs. Multiple training programs are available to the County.

Need(s):
The Agency should develop a written process to receive input from the various providers with regard to personnel shortages and training needs including prehospital (ground and air) and hospital participants should they occur. The Agency should be creative in assisting and supporting various system participants in providing local training programs and continuing education. The development of standards for curriculum, competencies and continuing education programs at all EMS provider levels should occur. Liaison with law enforcement agencies is needed regarding mutual aid and ongoing policy clarification.

Objective:
To monitor training and continuing education opportunities throughout the County that will, in turn, 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 new State defined roles.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

Staffing/Training

Local EMS Agency

Standard:

2.02 The EMS Authority and/or local EMS agencies shall have a mechanism to approve an 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 Napa County training programs to support personnel involved in the Napa 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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:

Only qualified prehospital medical personnel will function within Napa County EMS system.

Current Status:

State licensing is required for EMT-Ps and County authorization for first responder defibrillation, certification for EMT-I, authorization for MICNs and accreditation for EMT-Ps. Procedures, policies and requirements are in place to authorize first responder defibrillation, EMT-I, EMT-P personnel, and MICNs. Provisions are included for the Agency to be notified in the event of unusual occurrences which could impact EMS certification.

Need(s):

No definable needs other than ongoing monitoring are necessary.

Objective:

Continue to develop policies and procedures which assure that qualified personnel are operating within the system and link needs to the outcomes identified in the CQI plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Med] Time Requirement [Ongoing]

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 (both 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 that ultimately are responsible for medical dispatch should be trained and certified in accordance with the EMS Authority's Emergency Medical Dispatch Guidelines.

Current Status:

First responders are dispatched by designated dispatch agencies, located in three public safety dispatch centers, however all EMS calls are transferred to Napa Central Dispatch. These dispatchers also notify ambulance services when their resources are needed. Napa Central Dispatch has been using County-approved pre-arrival instructions.

Need(s):

No needs have been identified.

Objective:

There are no needs other than ongoing monitoring.

Time frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Med] Time Requirement [Ongoing]

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:

County-wide first responder system with, at a minimum, first responder and first responder defibrillation trained personnel. Support and expand defibrillation programs for first responders. Development of a first responder master plan.

Current Status:

The majority of first responders are with various fire services within the county and are trained to the first responder level. Not all first responders are EMT-D nor are they all EMT-I trained personnel. Significant discussion of ALS and first response services have occurred but there is no plan.

Need(s):

Policies, procedures, treatment guidelines and a CQI plan link need to be developed and implemented in conjunction with the first responder service providers. An inventory of first responder services and their service areas needs to be undertaken so that areas without or with limited first responder services can be identified. The EMS Agency should promote the development of first responder resources in those areas not served by EMT-I trained first responders. 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, planning issues, make recommendations and to promote county-wide first response system. Allowances for various first responder levels (first responder through ALS) should be accommodated within the EMS system structure. However funded separately from ambulance contract(s).

Objective:

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

Time frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [6-12 mos.]

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 which may benefit from first response will receive those resources.

Current Status:

There are a number of organizations providing medical first response within the County. Most first responder organizations are located in the fire services but there are also a number of law enforcement and park ranger staff responses.

Need(s):

Ongoing liaison between the first responder organizations and better linkage with the EMS planning of the county is needed. A formal set of policies that provide for a coordinated first responder response standard is also needed.

Objective:

Prepare and approve such policies. Continue to inventory and coordinate with county-wide first responder programs.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [Ongoing]

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:

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

Current Status:

The County EMS Agency does not have a policies and procedures manual which provides some 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. Insure that they have been trained to administer first aid and CPR within the previous three years as dictated in sections 2.05 and 2.09. Develop a standard data set and form for first responder use to collect needed information. Develop policies and procedures or regulations requiring that all first responder programs 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Med] Time Requirement [1-2 yrs.]

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 ALS medical transportation will be transported by vehicles staffed to the advanced life support (paramedic) level.

Current Status:

County-wide ALS transport is not available.

Need(s):

Current considerations for first responder ALS services may permit consideration of an alternative configuration and/or performance standards for ambulances served by ALS first responder.

Objective:

Consider the optimal staffing levels for EMS transport services once the ambulance analysis and first responder master plan is put into place.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [6-12 mos.]

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 will be able to 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Low] Time Requirement [Ongoing]

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 shall be able to provide ACLS-trained personnel for direct emergency patient care at all times. All emergency department physicians should be encouraged to be American Board of Emergency Medicine (ABEM) certified.

Current Status:

At this time, all base hospital emergency physicians and MICNs are required to maintain current ACLS certification. Some hospitals do require that all licensed critical care nursing staff possess current ACLS certification. It is unknown if hospitals require the emergency department physicians to maintain current ACLS certification or to be Board certified by ABEM. All base hospital physicians are required to be Board eligible or Board certified with the American Board of Emergency Medicine (non ABEM).

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. Encourage cross familiarization of jobs (i.e., ride-a-longs, clinical experience).

Time frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [B] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 competent advanced life support personnel for the Napa County EMS System. Integration of personnel into the CQI processes.

Current Status:

Procedures have been implemented for the credentialling and licensing 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, and evaluation of optional scopes of practice.

Need(s):

The inclusion of policies and procedures to link advanced life support personnel in the quality improvement process. Revise and update current orientation process.

Objective:

Link advanced life support personnel and their providers to the proposed CQI program and the goal of 1.02.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Med.] Time Requirement [6-12 mos]

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 and expansion of early defibrillation into Napa 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 first responder agencies have not adopted an early defibrillation program.

Need(s):

Continued implementation of the EMT-D program. Specific policies, procedures and program implementation need to be developed for remote area facilities.

Objective:

Ongoing implementation of the EMT-D program monitoring and review.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med] Time Requirement [Ongoing]

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:

Notification and education about local EMS policies and procedures shall take place among all base hospital/alternative base station personnel who medically direct prehospital personnel. These base hospital/base station personnel should also be trained in radio communications techniques.

Current Status:

All base hospital and alternative base station personnel who provide medical direction to prehospital personnel are informed of local EMS agency policies and procedures and trained in radio communications techniques.

Need(s):

No needs have been identified.

Objective:

There are no needs other than ongoing monitoring.

Time frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Med] Time Requirement [Ongoing]

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:

Continue to evaluate the overall EMS communication needs of the county. Establish a county-wide communication network for EMS and consider the availability of satellite and cellular technology.

Current Status:

The EMS Agency has an implemented 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. Mountaintop repeaters may need to be reviewed for upgrading. No coordinated car phone plan exists. Specific disaster capabilities, especially redundant capabilities, do not exist with health care providers.

Need(s):

Study and refine the current county-wide EMS communications system with improved coverage for ambulance services, updated voice and digital capability for dispatchers.

Objective:

Asses and develop a plan to enhance EMS communications and identify funding sources to begin implementation of necessary improvements, including cellular phones.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 should 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, hospitals and with fire agencies. There are some limited needs to improve EMS communications in the county.

Need(s):

Develop enhanced EMS communications capability based on needs.

Objective:

Develop enhanced EMS communications capability based on needs.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [High] Time Requirement [2-5 yrs.]

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 licensed ambulances providing emergency interfacility transfer services have communications capability with sending and receiving facilities through the VHF radio frequencies. Cellular phone use is encouraged.

Need(s):

Identify areas in the County where radio communication is ineffective and incorporate remedies into an EMS communication plan of action, including cellular phones.

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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [High] Time Requirement [1-2 yrs.]

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 some areas are without radio communication capability. There are significant "dead" zones in the county and some repeater sites are not always reliable. Communication capability with out-of-county providers or for Napa County providers responding into other counties does not exist.

Need(s):

Assess communication needs of EMS provider services for "dead spots" and equipment reliability in the county and establish possible linkages with outside county providers.

Objective:

Ongoing assessment of EMS communication needs.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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

Current Status:

Both hospitals have communication capability via the HEAR system but do not have direct access to other hospitals without assistance from the County. The absence of individual hospital tone access, large distances and some geographic barriers, including mountain ranges, preclude all hospitals being able to communicate with each other, individually. Communication does not exist between these two general acute care hospitals and the two other health care institutions (i.e., Napa State Hospital and The Veteran's Home).

Need(s):

Continue the needs' assessment of current communication capability for the EMS system and where needed develop an EMS communication plan of action.

Objective:

Continue to assess and address EMS communications needs.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Low] Time Requirement [Ongoing]

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:

Establish effective disaster communications capability county-wide.

Current Status:

An emergency operating center has been created for communication during a multi-casualty or disaster event. The Amateur Radio Association provides assistance to the center. The disaster plan, including the communication component, has been integrated with other agencies within the County. Existing hospital to hospital communication capability is limited.

Need(s):

Assure inclusion of the disaster communications component in communication planning.

Objective:

Develop EMS disaster communication capability especially with hospitals.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs.]

Communications

Public Access

Standard:

3.07 The local EMS agency shall participate in ongoing 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 (E9-1-1) has been implemented in Napa County. It is functional throughout the County. The EMS Agency has little involvement in coordination and ongoing participation with the E9-1-1 telephone service system.

Need(s):

The EMS Agency should develop activities that promote their active participation in the monitoring and performance of the E9-1-1 telephone system calls related to EMS. Continue to develop computer linkages between E9-1-1 dispatch and response entities actually responsible for dispatching field responders.

Objective:

Direct linkage of E9-1-1 to first responders should be encouraged in the EMS communication's plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Med] Time Requirement [1-2 yrs.]

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 has developed a 9-1-1 access brochure to assist with the educational process.

Need(s):

The EMS Agency should include 9-1-1 educational information in developing its public relations services and update literature where needed. A linkage to 9-1-1 cellular protocol development statewide or regionally shall be encouraged. Work with managed care organizations should take place to identify and promote appropriate policies on emergency contact with the subscribers of the plans.

Objective:

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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [D] Resource Requirement [Med.] Time Requirement [Ongoing]

Communications

Resource Management

Standard:

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

Goal:

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

Current Status:

The County has established guidelines for proper dispatch triage and identification of appropriate medical response.

Need(s):

As referred in previous standards, the EMS Agency should continue to include dispatch triage and appropriate medical response policies and procedures in the communication plan, as well as in its efforts to coordinate and standardize EMS call answering and dispatch procedures.

Objective:

Continue to develop medically oriented call-answering, prioritization of calls, and dispatch policies, procedures and evaluation mechanisms and link this effort to previously identified EMD objectives in this plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med] Time Requirement [Ongoing]

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:

The local EMS agency should develop communication mechanisms to ensure appropriate system-wide ambulance coverage during periods of peak demand.

Current Status:

Backup and mutual aid coverage is limited due to the fact that the county only has three (3) providers from within the county. Radio communications for disasters is provided via RACES and the State's OASIS systems.

Need(s):

The ongoing needs for radio and resource coordination should be evaluated in EMS communication planning.

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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Response and Transportation

Standard:

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

Goal:

The local EMS agency should secure a county ordinance or similar mechanism for establishing emergency medical exclusive operating areas.

Current Status:

Boundaries for EMS transport agencies have been defined. Only one contract and exclusive operating area for ground ambulances exists. No county-wide plan is in effect.

Need(s):

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

Objective:

Evaluate and/or designate exclusive operating ambulance areas for the entire County.

Time frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Med] Time Requirement [0-6 mos.]

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:

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

Current Status:

The County contracts with one provider and allows the local EMS Agency to permit and monitor medical transportation services. There is no county ambulance ordinance.

Need(s):

Establish contracts with all three ambulance providers. Revise contract and replace ordinances as necessary to comply with this plan. ALS first responders (e.g., Napa City Fire) should also have written contracts.

Objective:

Establish contracts with all three ambulance providers and all ALS first responders. Revise contract and develop contracts and/or replace ordinances as necessary to comply with this plan.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Med.] Time Requirement [0-6 mos.]

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 Napa County shall receive appropriate response resources (e.g., first responder, ALS ambulance, helicopter, etc.) specific to their needs and be transported as necessary to destinations appropriate for their condition.

Current Status:

The urgency of current medical requests is largely dependent upon the means of access to the system. In general, E9-1-1 calls are treated as emergency events. The EMD program through Napa Central Dispatch is presently 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):

A county-wide, integrated ambulance system, with consistent ALS response is needed. The need to link with EMS system providers, managed care organizations, 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:

Consider a county-wide, integrated ALS ambulance system. Over the long term, conduct a comprehensive study of the prehospital care system and its positioning for the health care delivery system of the future.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [ ] Resource Requirement [High] Time Requirement [12 mos.]

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 total integrated medical transportation system should be allowed which maximizes performance, cost and resource efficiency.

Current Status:

There are no formal guidelines or policies which establish alternatives for prehospital triage, transport or destination. Existing ALS provider operations are fragmented due to multiple providers and the lack of consistent coverage. Coverage in North and South County is in need of review.

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 into a coordinated county-wide ALS ambulance network.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [High] Time Requirement [6-12 mos.]

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/ALS first response
b) BLS/ALS ground transport
c) EMS aircraft

Current Status:

The one provider contract required by the EMS Agency specifies that response times comply with all Napa County EMS Agency policies, protocols, and procedures.

Need(s):

All three provider contracts should specify ambulance response times and other performance standards. As part of the CQI, establish committee representatives to evaluate response time standards and propose effective performance standards that are reasonable for the county. Response zones (e.g., urban, suburban, and rural) should be established with regard to the constraints of geography and resource availability. Performance standards may be set for Code 1, 2, and 3 calls at the urban, suburban, rural and wilderness levels. Maximum performance and response times should also be considered.

Objective:

Establishment of 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 should be developed.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Low] Time Requirement [12 mos.]

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 provided by ALS shall be staffed and equipped with at least one EMT-P on each unit or through an ALS intercept program in rural areas.

Current Status:

Adequate regulations, policies and procedures exist to assure that ambulances are staffed and equipped according to current state and local standards, but ALS services are not available consistently county-wide.

Need(s):

Adequate policies and monitoring mechanisms are in place to assure that this level is met and maintained. A goal of county-wide ALS ambulance service should be considered.

Objective:

Ongoing review and analysis. Consider county-wide ALS service.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [12 mos.]

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. Interest in ALS first response services has been raised by some fire agencies throughout the State.

Need(s):

Formally plan and integrate fire first responders fully into the EMS plan by developing a first-responder master plan. This plan would:

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

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

Objective:

Integrate first responder agencies and functions within the framework of the county EMS system through agreements and letters of understanding.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med.] Time Requirement [1-2 yrs.]

Response and Transportation

Standard:

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

a) authorization of aircraft to be utilized in prehospital patient care.
b) requesting of EMS aircraft.
c) dispatching of EMS aircraft,
d) utilization
e) determination of EMS aircraft patient destination.
f) orientation of pilots and medical flight crews to the local EMS system, and
g) addressing and resolving formal complaints regarding EMS aircraft.
h) CQI compliance

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.

Current Status:

The EMS Agency is currently establishing policies and procedures for designating and authorizing helicopter air medical programs to respond within Napa County through a special task force. There are five air medical programs serving the county. Key policies are already in place. The helicopters are requested through the Napa Central Dispatch center.

Need(s):

Additional work needs to be done in defining the local needs, activation process and requirements (equipment, staffing and training) for air medical helicopter services in Napa County. Specific policies and procedures need to be defined to determine patient destination based upon patient needs and location and their compliance. Agreements and monitoring mechanisms need to be in place to include program compliance and inspection and monitoring that appropriate equipment and staffing levels are maintained by the air medical providers. In the establishment of the exclusive operating zones and the response time goals, certain areas should be designated for air medical first

response when the criticality of the call is presumed to be high and extended response times are expected. The air medical program should be linked to the CQI program.

Objective:

Coordinated air medical response to specific emergency events in which time is essential. Integration of air-medical services into first response within the County when the patient's location is likely to require an extended response time, where ground transport may exacerbate the injury and when the patient's condition is likely to be life threatening. Link the providers to review and evaluate outcome expectations of the CQI plan.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Low] Time Requirement [12 mos.]

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):

More comprehensive criteria for air medical resource utilization are needed. Current policies are not always followed and monitoring and follow up mechanisms have not been fully established. Issues of over utilization need to be addressed. More education on the CQI process and outcome orientation of the services for providers is needed.

Objective:

Develop comprehensive policies and procedures, written agreements and a monitoring process for medical control over air medical and rescue aircraft.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Med] Time Requirement [6-12 mo]

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):

Ongoing communication and coordination and written agreements with agencies providing air medical services are needed. The EMS Aircraft committee meets monthly. EMS staff needs to be increased to better serve committee needs.

Objective:

Assure ongoing adequate resources for air medical responses for EMS in Napa County.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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:

The local EMS agency should plan for response by and use of all terrain vehicles, snowmobiles, and water rescue vehicles. This plan should consider 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 rescue program inventory for Napa County EMS.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

The Office of Emergency Services has a county plan. However, it needs to be coordinated with local medical disaster plan development.

Need(s):

An updated EMS disaster plan needs to be developed.

Objective:

Prepare a medical disaster response plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med] Time Requirement [2-3 yrs]

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:

The local EMS agency should encourage and coordinate development of mutual aid agreements and automatic aid agreements which identify the optimal configuration and responsibility for EMS responses.

Current Status:

Many of the fire departments have mutual aid in place. Medical aid, mutual aid and automatic aid is not fully functional between the ambulance providers level although there exists many formal and informal agreements.

Need(s):

As a part of the EMS ordinance and agreements between EMS providers and the EMS Agency, there should be a clear definition of mutual and automatic aid response requirements.

Objective:

Assurance that patients receive the most prompt response possible particularly in times of peak demand.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [6-12 mos.]

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 currently 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 the physicians and other providers within the County. All EMS providers should be encouraged to adopt an incident command system.

Objective:

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

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [12 mos.]

Response and Transportation

Standard:

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

Goal:

Continue monitoring and updating 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [Ongoing]

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:

Continue to monitor and update ambulance staffing levels as necessary.

Current Status:

Currently all ALS ambulances are staffed with at least one paramedic but county-wide, ALS is not available.

Need(s):

No formal needs are identified.

Objective:

Continue to study and update this staffing policy where appropriate. Look to maximize ALS coverage county-wide.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [Ongoing]

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:

ALS ambulances are 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):

No new needs have been identified.

Objective:

Ongoing review and monitoring.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [Ongoing]

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:

All EMS transportation agencies shall comply with EMS policies and procedures.

Current Status:

The St. Helena Ambulance Service has a contract with Napa County which defines and requires compliance with the EMS policies and procedures. There is no ambulance ordinance.

Need(s):

Revision of the current ordinance to comply with this plan may be needed. Establish agreements for all providers where needed.

Objective:

Development of an ambulance ordinance and establishment of agreements to comply with this plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs]

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

Goal:

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

Current Status:

A coordinated EMS transportation plan is available for the prehospital care system.

Need(s):

Review and revise the prehospital care system to comply with recommendations.

Objective:

Implementation of the recommendations after Board approval.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs]

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 shall be appropriately selected or awarded the privilege of serving the specified area.

Current Status:

No comprehensive ambulance network exists.

Need(s):

Develop a comprehensive ambulance network.

Objective:

Implement a comprehensive ambulance network.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med] Time Requirement [1-2 yrs.]

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 shall be assigned responsibility for medical transportation within exclusive operating areas. A legal framework to define and require compliance with performance standards shall be in place.

Current Status:

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

Need(s):

Prepare such documents.

Objective:

Performance-based agreements with providers and exclusive operating zones should be updated as needed.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs]

Response and Transportation

Exclusive Operating Permits

Standard:

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

Goal:

The system shall be 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:

Previously recommended.

Need(s):

No new needs other than identified in this plan.

Objective:

No new needs other than identified in this plan.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [A] Resource Requirement [Low] Time Requirement [Ongoing]

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 not been developed by the EMS Agency regarding specialty receiving hospitals, except for the trauma center. An assessment between the County and receiving hospitals has also not been conducted.

Need(s):

Prepare and review criteria for each emergency receiving hospital with the participation of the hospital and prehospital providers. Develop a self-assessment tool to assure capability of receiving hospitals. Draft a letter of understanding to be utilized between the EMS Agency and the 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 their facility through a self assessment and monitoring system.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [ ] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs]

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 will be delivered to the most appropriate facility to treat their needs.

Current Status:

The local EMS Agency has not developed comprehensive prehospital triage and transfer protocols beyond the general trauma protocols.

Need(s):

Prepare and implement comprehensive prehospital and hospital triage and transfer protocols to be consistent with this plan (e.g., neurosurgical, pediatrics, burns, spinal cord injuries).

Objective:

Prepare and implement policies and procedures to assist field and base hospital personnel in determining the most appropriate disposition of patients. Assist hospitals in developing revised transfer policies, protocols and agreements in compliance with the work of this plan.

Time frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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:

Trauma patients will be delivered to the most appropriate facility to treat their needs.

Current Status:

The EMS Agency has developed some guidelines establishing criteria to identify patients who should be considered for transport or transfer to facilities. No transfer agreements have been established for trauma care.

Need(s):

Continue to develop, monitor and refine criteria to identify patients who should be considered for transfer to facilities of higher capability and develop guidelines and assist the facilities in developing transfer agreements. Follow up data is needed from destination hospitals including policies to facilitate the access to such data.

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 assist the facilities in developing transfer agreements. Work with hospitals to access patient destination data. Develop hospital transfer agreements.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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 has not been developed for specialty receiving hospitals.

Need(s):

Develop and review criteria for receiving hospital designation and conduct needs' analysis on pediatric specialty designation needs. In developing the criteria, procedures and policies, incorporate activities into the quality improvement program for Napa County EMS.

Objective:

Establish a system where a patient's particular or unique needs can be identified and that patient would then be able to be transported directly, assuming medical stability, to the specific center best able to provide treatment.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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 should assist hospitals with preparation for mass casualty management, including procedures for coordinating hospital communications and patient flow and the adoption of the incident command system for hospitals (HEICS).

Current Status:

Individual hospitals have their own disaster and mass-casualty incident plans. Additionally, hospitals have a plan that is incident command system compatible.

Need(s):

The EMS Agency should assist hospitals with the preparation for mass casualty management including developing procedures for coordinating hospital communication and patient transportation. The adoption of the HEICS systems should be encouraged by the EMS Agency. Individual facility and County plans need to be reviewed to assure that they are coordinated and integrate with each other.

Objective:

Provide ongoing policies, procedures, and guidelines to ensure that hospitals are prepared for mass-casualty management.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

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

Current Status:

Policies for hospitals as they relate to emergency preparedness have been prepared by the individual hospitals. A comprehensive plan for hospital evacuation has been developed.

Need(s):

Develop a comprehensive plan for hospital evacuation and communicate and share the plan with the EMS system providers.

Objective:

Develop hospital evacuation plans in conjunction with each hospital in the county.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

Provide communication with and medical direction for prehospital providers.

Current Status:

Both hospitals in Napa County have been designated as base hospitals. The hospitals were selected by application of the hospitals and their agreement to meet certain criteria. Base hospitals do not have signed agreements with the County to provide base hospital services. Base hospitals do have signed agreements with the provider to provide base hospital services.

Need(s):

There is an overall need to review the, configuration, expectations and configuration of base hospitals and their criteria and the supporting 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 needs, configuration, expectations and configuration of base hospitals and their criteria and designation process and link to the activity of objective 1.17. Develop agreements between the base hospital(s) and the County, as necessary.

Time Frames for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [A] Resource Requirement [Low] Time Requirement [12-24 mo.]

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:

Implement a plan and procedures to ensure that trauma patients will be delivered promptly to capable trauma centers.

Current Status:

The county is served by one trauma center in Napa County and several nearby counties. Triage standards have been adopted using the Revised Trauma Score (RTS).

Need(s):

There is a need to define total trauma needs and to link with existing trauma centers systems. There is also a need to develop coverages with adjacent counties training programs.

Objective:

Implement a trauma system strategic link with existing trauma systems and to develop an EDAT system.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Med] Time Requirement [Ongoing]

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:

Implement a plan and procedures to ensure that trauma patients will be delivered promptly to capable trauma centers.

Current Status:

Trauma criteria has been developed, but adherence is not being monitored.

Need(s):

There is a need to implement a system to monitor adherence to trauma criteria.

Objective:

Implementation of a system to monitor adherence to trauma criteria.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [Ongoing]

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:

a) The number and role of system participants, particularly of emergency departments.

b) the design of catchment areas (including areas in other counties, as appropriate), with consideration of workload and patient mix,

c) Identification of patients who should be primarily triaged or secondarily transferred to a designated center, including consideration of patients who should be triaged to other critical care centers,

d) the role of providers that are qualified to transport such patients to a designated facility,

e) Identification of tertiary care centers for pediatric critical care and pediatric trauma,

f) The role of non-pediatric critical care hospitals including those which are outside of the primary triage area,

g) A plan for monitoring and evaluation of the system.

Goal:

Provide a plan and procedures to ensure that pediatric patients will receive the most appropriate prehospital and in-hospital medical care.

Current Status:

Prehospital treatment guidelines have been implemented specifically to the treatment of seriously ill or injured pediatric patients. Currently there is no specific pediatric

emergency medical system plan to deal with conditions that are less serious than the critically ill or injured child.

Need(s):
Consideration should be given for a specific EMS-C (Emergency Medical Services for Children) plan for Napa County EMS.

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

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med.] Time Requirement [2-5 yrs.]

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:

Local EMS agencies should develop methods of identifying emergency departments which meet standards for pediatric care and for pediatric critical care centers and pediatric trauma centers.

Current Status:

The EMS Agency has not developed criteria and standards for pediatric capability in emergency departments.

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 Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Med.] Time Requirement [2-5 yrs.]

Other Critical Care Systems

Standard:

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

Goal:

Provide for appropriate response and treatment of pediatric patients with input from the specified groups.

Current Status:

The EMS Agency has not directly examined pediatric issues in terms of a systematic plan.

Need(s):

In conjunction with the recommendation on pediatric emergency planning, ensure input from the specified groups.

Objective:

Identify and provide coordinated input from specified groups on pediatric emergency planning.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Med.] Time Requirement [2-5 yrs.]

Other Critical Care Systems

Standard:

5.13 Local EMS agencies developing speciality 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:

Provide for appropriate response and treatment of patients with specific clinical conditions.

Current Status:

The EMS Agency has not directly examined targeted clinical conditions for the development of a systematic plan.

Need(s):

In conjunction with the recommendation to focus on the speciality 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 Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Med.] Time Requirement [2-5 yrs.]

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:

Implement a plan and procedures to ensure that specialty patients will be delivered promptly to capable centers with input from specified groups.

Current Status:

Comprehensive specialty patient planning has not occurred.

Need(s):

The development of the system-wide specialty plan system will require input from all receiving hospitals, specialty hospitals, the EMS Agency, and various EMS providers.

Objective:

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

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Med] Time Requirement [2-5 yrs.]

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 the care provided to specific patients. The 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 when they exist. The program shall use provider-based QI/QA programs and shall coordinate them with other providers

Goal:

The local EMS agency should have the resources to evaluate the response to, and the care provided to, specific patients.

Current Status:

The EMS Agency has only minimal components of a comprehensive quality improvement in place.

Need(s):

EMS Agency and provider philosophy and commitment to the total quality continuum concept will need to be developed. Based on this philosophical endorsement, the development and establishment of a comprehensive system-wide and provider-wide continuous quality improvement program (CQI) for Napa County EMS should occur. Providing needed resources to the CQI plan will require various system participants to accomplish in-house quality improvement activities. An extensive management information system will need to be developed to support the CQI program.

Objective:
Develop and establish a comprehensive continuous quality improvement plan for Napa County EMS activities.

Time frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [1-2 yrs.]

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 all patient contacts and interventions.

Current Status:

The EMS Agency has established a prehospital care report (PCR form to be completed by all ambulance providers.) Copies of these forms are submitted to the EMS Agency. No standard first responder intervention form has been established.

Need(s):

A standardized first responder patient intervention form needs to be integrated into the ALS paperwork and disseminated 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., "paper less" data entry) and evaluation systems need to be investigated and where appropriate integrated into the EMS evaluation system. Analysis and integration into a comprehensive quality improvement program of the patient PCR system should be accomplished. Development of 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, linked to the state data set, to accomplish the tasks listed in the needs' statement.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [B] Resource Requirement [High] Time Requirement [1-2 yrs.]

Data Collection and System Evaluation

Standard:

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

Goal:

The local EMS agency should have a mechanism 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 mechanism to link prehospital records with dispatch and emergency department inpatient and discharge records is by a case-by-case request for information. The exception is the special review that EMT-D programs receive which are from the field to hospital discharge.

Need(s):

Establish a comprehensive audit/review program for all aspects of 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. Patient confidentiality and disclosure issues should be protected.

Objective:

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

Time frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [B] Resource Requirement [High] Time Requirement [1-2 yrs.]

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:

Monitoring of medical dispatch process.

Current Status:

There is no county-wide system for the EMS Agency to review medical dispatching.

Need(s):

An overall evaluation plan, tied to the CQI effort, needs to be included with EMD programs county-wide to enhance medical dispatch within the County.

Objective:

Include medical dispatch monitoring in the CQI program.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [High] Time Requirement [1-2 yrs.]

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:

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

Current Status:

Napa County EMS Agency has not established computer programs for prehospital report information. Presently no information currently being entered into program is consistent with a limited data management system. A county-wide prehospital data set is not collected or reviewed.

Need(s):

Develop a comprehensive MIS which supports the EMS Agency CQI program. The system should be compatible with the larger EMS providers so that information can be electronically transferred to the system. It will be necessary to establish a common patient identifier and data set for the transportation providers, receiving hospitals, base hospitals, dispatch centers and trauma centers. This common data set will then be able to be utilized for tracer studies, outcome studies and to monitor the system's performance.

Objective:

Establish a comprehensive MIS which can integrate data from the various EMS system participants.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [B] Resource Requirement [High] Time Requirement [1-2 yrs.]

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:

Establish an outcome-driven evaluation process for Napa County EMS performance.

Current Status:

The EMS Agency consistently evaluates its program components but lacks a regular comprehensive review. Manual collection of information is required. Achievement of comprehensive system analysis would be time and resource consuming.

Need(s):

Development and implementation of the EMS plan, the establishment of comprehensive MIS and CQI programs, and creation of various policies and procedures will allow overall EMS system program evaluation. A review of other program models should be conducted including the potential of a co-reviewer program with neighboring counties.

Objective:

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

Time frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Med.] Time Requirement [2-3 yrs.]

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 participating in the system-wide evaluation programs.

Current Status:

The available resources and expertise of the EMS Agency are inadequate to fully implement system-wide evaluation activities.

Need(s):

Additional resources need to be provided to Napa County EMS in order to accomplish system-wide evaluation. A more comprehensive county ordinance and the proposed multiple provider agreements should require provider participation and support of the evaluation program. Specific funding sources will be identified and tapped to support evaluation processes. Expertise within the EMS Agency should be developed for the MIS plan.

Objective:

Provide adequate resources to enable system-wide EMS program evaluation.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [High] Time Requirement [2-3 yrs.]

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:

Increase awareness of Napa County 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 ongoing information regarding performance of the Napa County EMS system's performance with coordination to the proposed CQI plan.

Objective:

Provide regular reports on the performance and accomplishments of the Napa County EMS System.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [Ongoing]

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 should include 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 or outlier review of non Base Hospital cases. Evaluation of the base hospitals themselves has occurred on an isolated basis and is not linked to needs or a CQI plan.

Need(s):

As addressed in previous standards, the integrated MIS plan should include prehospital, base hospital, and receiving hospital data. An ongoing process for evaluation of performance of base station hospitals and prehospital activities is a key function of the quality improvement program proposed previously. These standards should be developed locally based on experience in other counties.

Objective:

Institution of a comprehensive MIS and CQI program.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [X] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [High] Time Requirement [1-2 yrs.]

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:

Integration of the trauma system activities into the system's quality improvement/assurance program.

Current Status:

There is no integration of trauma registry data into the EMS system. Some data is being received but data from both hospitals is not complete.

Need(s):

Attention needs to be given to the data reporting requirements of the trauma and EMS program. Presently, the EMS system relies upon an older Bay Area trauma registry. The county needs to switch to a more contemporary and useful trauma registry. The county EMS agency receives data from the Queen of the Valley Hospital, but not St. Helena Hospital.

Objective:

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

Time frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs]

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 policies and lack of software and hardware.

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 Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [1] Importance [A] Resource Requirement [Low] Time Requirement [1-2 yrs.]

Public Information and Education

Standard:

7.01 The local EMS agency shall promote the development and dissemination of informational 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 and safety habits as they relate to the prevention and reduction of health risks in target areas.

f) appropriate utilization of emergency departments

Goal:

The local EMS agency should promote targeted community education programs on the use of emergency medical services in its service area.

Current Status:

The EMS Agency is involved with the development of information and materials for dissemination to the public through its Public Information and Education Committee. Staffing limitations and program priorities have limited the efforts in this area.

Need(s):

Develop target needs, public information materials, and coordinate and 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 and linked to the health care delivery analysis defined in this plan.

Objective:

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

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [4] Importance [D] Resource Requirement [Med.] Time Requirement [2-5 yrs.]

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 should promote the development of special EMS educational programs for targeted groups at high risk of injury or illness.

Current Status:

The EMS Agency agrees to support and provide resources to the injury control efforts prevention program to the extent that resources are available.

Need(s):

The EMS Agency needs to work with the local resources and supply support resources in order to support programs developed by other facilities and agencies within the County to promote preventive medicine and to continue the injury control efforts.

Objective:

Advocate and support existing programs in 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 Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [4] Importance [D] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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), should produce and disseminate information on disaster medical preparedness.

Current Status:

The local EMS Agency is not involved with the county's emergency services division in promoting citizen disaster preparedness activities.

Need(s):

Ongoing participation in promoting citizen awareness of emergency preparedness activities.

Objective:

Provide citizen awareness programs on emergency preparedness as needed.

Time Frame for Objective:

☐ Short Term Implementation Plan ☐ Long Range Plan ☐ Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [Ongoing]

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 should adopt a goal for training of an appropriate percentage of the general public in first aide and CPR. A higher percentage should be achieved in high risk groups.

Current Status:

The EMS Agency has not taken a lead in promoting CPR training for the general public. Multiple providers within the county have provided CPR training and are actively promoting such programs.

Need(s):

The EMS Agency should 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 Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

Regular planning meetings occur and specific plans have been developed for multiple disaster possibilities.

Need(s):

Ongoing review for the comprehensive approach to disaster planning is needed. An increase in communication and training of the plan's components with participant groups is needed.

Objective:

Prepare and implement planned emergency medical response to catastrophic disasters.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [Ongoing]

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), should serve 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. There is a need to better incorporate an EMS Agency ICS, HEICS and SEMS programs into current planning and procedure development.

Need(s):

The communication of information and training about the plans needs to occur with all providers or potential providers within the system. Additional work needs to occur to develop medical response plans with increased involvement of system participants and linkages to an EMS Agency ICS, HEICS and SEMS.

Objective:

Continued development and updating of a flexible and pertinent medical response plan suitable for a variety of potential hazards are needed and linked to HEICS and SEMS.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 to respond to and handle incidents involving hazardous materials.

Current Status:

The county's multiple fire departments (Napa County Fire/CDF/American Canyon Fire District and Cities of Calistoga, St. Helena and Napa Fire) have addressed hazardous materials response.

Need(s):

Continuation of exiting liaison with EMS, prehospital and hospital industry agencies. Continuation of participation in the Hospital Disaster Forum. All emergency ambulance providers also need to be encouraged to attend HAZMAT training.

Objective:

The EMS Agency should continue to ensure availability of hazardous materials incident training for EMS system participants and training in SEMS.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

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:

The local EMS agency should ensure that 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 as the basis for field management. Limited training for incident command system activities is available and is required for all prehospital care providers.

Need(s):

Ongoing evaluation and enhancement of catastrophic disaster plans. Requirements as part 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 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:

Disaster patient distribution procedures have not been tested county wide. These procedures need to be part of the medical annex of the county disaster plan.

Need(s):

Review and revise procedures. Develop plans to include resources outside of County and expand procedures for distribution of disaster patients. Evaluate and designate special receiving facilities for specific hazardous materials incidents.

Objective:

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 Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [B] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 should be exercised yearly.

Current Status:

The specific components of the disaster plan address requesting additional assistance from agencies outside the County. These resources have been identified by the OES plan.

Need(s):

Ongoing 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 follow to acquire help.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Low] Time Requirement [Ongoing]

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:

A field and agency coordination frequency does exist. However, there are occasions where the coordination of frequencies has been identified as a problem for intercounty disaster and mutual-aid needs. Designated frequencies have been identified to affect radio communications with various agencies within the county.

Need(s):

Identification of a common communication frequency and procedures is needed for out-of-county disaster response and mutual aid coordination. Regular testing of the system is needed in conjunction with disaster drills. Communication policies, and procedures for agencies within the County should be identified in EMS communication planning efforts and distributed to all appropriate county agencies.

Objective:

Identify and stipulate frequencies to be used by agencies in disaster situations. Continue implementation of the voice and data and appropriate hospital disaster communication network.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [4] Importance [C] Resource Requirement [Med.] Time Requirement [Ongoing]

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:

A resource directory has been developed.

Need(s):

Update resource directories. Provide copies of directories to hospitals, ambulance provider agencies, first responder agencies and disaster preparedness committees.

Objective:

A comprehensive inventory of medical resources to be used in disaster situations and a plan to keep it updated.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [4] Importance [D] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

Informal relationships have not been established with DMAT sponsoring agencies.

Need(s):

The EMS Agency should establish a more formal linkage with DMAT teams as needed and support their activities.

Objective:

Establish EMS Agency involvement with and support of DMAT teams in the region as needed. Identify ongoing needs and rationale for an in-county team, if necessary.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [4] Importance [D] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 periods of extraordinary demand.

Current Status:

Inter-county medical mutual aid planning have been developed.

Need(s):

Continue to develop and negotiate mutual aid contracts with surrounding counties. Develop policies and procedures to address provider mutual aid response from outside the County. Continue to monitor and develop, if necessary, standardized procedures to be followed during a multi-casualty incident which require more resources than are immediately available locally.

Objective:

Establish plans and procedures to acquire adequate response resources in the event of significant medical incidents and extraordinary system demand.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [ ] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [Ongoing]

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 Field Treatment Sites (FTS).

Goal:

County-wide designation of FTSs for use in disasters.

Current Status:

Field Treatment Sites have not been designated by EMS Agency, but is currently being evaluated.

Need(s):

Evaluate and designate sites as needed, review equipment, staffing needs and mechanism for acquisition.

Objective:

Review of existing sites and the designation of additional Field Treatment Sites throughout the county, as necessary.

Time Frame for Objective:

☐ Short Term Implementation Plan ☐ Long Range Plan ☐ Complete/Partially Complete

Disaster Medical Response

Standard:
8.12 The local EMS agency shall develop plans for establishing FTSs and a means for communicating with them.

Goal:
Establishment of FTSs with communication capabilities during disasters.

Current Status:
FTSs have not been designated by EMS Agency.

Need(s):
Review and revision of FTS designation and operational procedures, as needed.

Objective:
Defined plans for establishing communication with FTSs, as needed.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [Ongoing]

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:

The local EMS agency should ensure that 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:

This component has been adequately addressed and is limited to a brief review, but not a formal program, during initial training. Ambulance providers have HAZMAT training. Participation in exercises and 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.

Objective:

Continue to establish plans, policies, and procedures for disaster response and management of toxic or radioactive substances.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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 no integration with the county's disaster plans. Queen of the Valley Hospital has adopted the HEICS program.

Need(s):

Continue to encourage and require receiving hospitals to participate with the EMS Agency in disaster planning integration of the hospitals and system's plans. Encourage the implementation of the HEICS program. Continue with exercise participation. Continue participation in the Hospital Disaster Forum.

Objective:

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

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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:

County hospitals linked through radio communication capability.

Current Status:

Direct inter-hospital communication is not possible among many of the hospitals. Geography and distance also precludes total inter-hospital communication capability. However, the Amateur Radio Groups are currently working to address this deficiency.

Need(s):

The current inter-hospital and EMS system disaster communication system has limitations and does not meet all of the resource identification and coordination roles needed. There is also a need to include in EMS communication planning components to address communication among and between the county's hospitals. Implement procedures to accomplish inter-hospital communication.

Objective:

Contemporary and redundant capability and procedures for hospitals to communicate with each other and to allow resource identification and coordination should be built into the EMS communication planning.

Time Frame for Objective:

[X] Short Term Implementation Plan [ ] Long Range Plan [ ] Complete/Partially Complete

Priority [4] Importance [D] Resource Requirement [High] Time Requirement [6-12 mos]

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:

At least one disaster drill or functional emergency event per year conducted by each hospital should involve other hospitals, the local EMS agency, and prehospital medical care agencies.

Current Status:

Hospitals conduct annual disaster drills with limited participation of other agencies at some facilities. HEICS training has not been offered, however one hospital has adopted HEICS.

Need(s):

The EMS Agency should actively support and encourage multi-agency disaster drills. HEICS should be identified and endorsed as the standard for hospitals disaster plans in the county.

Objective:

Periodic multi-agency disaster drills. The Hospital Emergency Incident Command System (HEICS) should be actively pursued as the hospital EMS command structure in the county.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [2-5 yrs.]

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):

Review current policies and revise to ensure access to outside ALS resources in the event of significant medical incidents. Include waiver of restrictions in mutual aid agreements.

Objective:

Continue to eliminate policies and procedures which restrict access to outside ALS resources in the event of a significant medical incident. Continue education efforts.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [2] Importance [B] Resource Requirement [Low] Time Requirement [1-2 yrs]

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. Plan to maintain operation of normal EMS activities during these situations.

Current Status:

Capabilities during major incidents and MCIs are addressed in their respective plans, however, further refinement is needed.

Need(s):

Develop guidelines for distributing patients of significant medical incidents in conjunction with disaster patient distribution plans (Standard 8.05). Establish policies and procedures for maintaining ongoing EMS patient distribution during significant medical incidents, as appropriate.

Objective:

Written plans for determining where patients of significant medical incidents should be delivered.

Time Frame for Objective:

[ ] Short Term Implementation Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [C] Resource Requirement [Low] Time Requirement [1-2 yrs.]

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 the County's contract with St. Helena Ambulance Service 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 Plan [X] Long Range Plan [X] Complete/Partially Complete

Priority [3] Importance [ ] Resource Requirement [Low] Time Requirement [Ongoing]

Section VI - 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	
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
1.06 Annual Plan Update	X			X	
1.07 Trauma Planning*	X			X	
1.08 ALS Planning*	X				X
1.09 Inventory of Resources	X				X
1.10 Special Populations	X				X
1.11 System Participants	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
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
Medical Direction					
1.17 Medical Direction*		X	X		X
1.18 QA/QI	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
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

Enhanced Level: Pediatric Emergency Medical and Critical Care System

1.27 Pediatric System Plan	X				X

Enhanced Level: Exclusive Operating Areas

1.28 EOA Plan	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
2.02 Approval of Training		X	X		X
2.03 Personnel		X	X		X
Dispatchers					
2.04 Dispatch Training		X	X		X
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	
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

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	
4.03 Classifying Medical Requests	X	X		X	
4.04 Pre-scheduled Responses	X	X		X	
4.05 Response Time Standards*	X			X	
4.06 Staffing		X		X	
4.07 First Responder Agencies		X	X		X
4.08 Medical & Rescue Aircraft*	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	
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	
4.17 ALS Equipment	X			X	

Enhanced Level: Ambulance Regulation

4.18 Compliance		X		X	

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

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
5.02 Triage & Transfer Protocols*	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
Enhanced Level: Trauma Care System					
5.08 Trauma System Design	X			X	
5.09 Public Input	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
5.14 Public Input	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	
6.02 Prehospital Records		X			X
6.03 Prehospital Care Audits	X			X	
6.04 Medical Dispatch		X			X
6.05 Data Management System*	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
Enhanced Level: Trauma Care System					
6.10 Trauma System Evaluation	X			X	
6.11 Trauma Center Data	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
7.02	Injury Control	X		X		X
7.03	Disaster Preparedness		X			X
7.04	First Aid & CPR Training		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 Communications *		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 FTS Designation*	X			X	
8.12 Establishment of FTSs	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

Enhanced Level: Advanced Life Support	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range Plan	Long-range Plan
8.17 ALS Policies		X	X		X

Enhanced Level: Specialty Care Systems

8.18 Specialty Center Roles		X	X		X
8.19 EOA/Disasters		X	X		X

EMSA TABLE 2: SYSTEM RESOURCES AND OPERATION

System Organization and Management

EMS System: Napa County Reporting Year 1996

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: Napa

a. Basic Life Support (BLS)	10 %
b. Limited Advanced Life Support (LALS)	%
c. Advanced Life Support (ALS)	90 %

2. Type of agency 100 %
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: Health and Human Services Agency

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

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	

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

Enforcement of local ambulance ordinance	
Enforcement of ambulance service contracts	X
Operation of ambulance service	
Continuing education	X
Personnel training	
Operation of oversight of EMS dispatch center	
Non-medical disaster planning	
Administration of critical incidents stress debriefing (CISD) team	
Administration of disaster medical assistance team (DMAT)	
Administration of EMS Fund [Senate Bill (SB) 12/612]	$ 5,125
Other:	
Other:	
Other:	

5. EMS agency budget for FY 1995/1996

A. EXPENSES

Salaries and benefits (all but contract personnel)	$ 59,731
Contract Services (e.g., extra-help person)	$ 8,550
Operations (e.g. copying, postage, facilities, Abaris Group, PCC)	$ 74,771
Travel	$ 1,000
Fixed assets	
Indirect expenses (overhead)	$ 5,125
Ambulance subsidy	
EMS Fund payments to physicians/hospital	$ 406,476
Dispatch center operations (non-staff)	

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

Training program operations	_____
Other:_____	
Other:_____	
Other:_____	

TOTAL EXPENSES

B. SOURCES OF REVENUE

Special project grant(s) [from EMSA]	
Preventive Health and Health Services (PHHS) Block Grant	$ 35,500
Office of Traffic Safety (OTS)	_____
State general fund _____	
County general fund	$ 94,760
Other local tax funds (e.g., EMS district)	_____
County contracts (e.g. multi-county agencies) _____	
Certification fees	$ 2,950
Training program approval fees	_____
Training program tuition/Average daily attendance funds (ADA) Job Training Partnership ACT (JTPA) funds/other payments	_____
Base hospital application fees	_____
Base hospital designation fees	_____
Trauma center application fees	_____
Trauma center designation fees	_____
Pediatric facility approval fees	_____
Pediatric facility designation fees	_____
Other critical care center application fees	_____
Type:_____	
Other critical care center designation fees	_____

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

Type:_____

Ambulance service/vehicle fees	_____
Contributions	_____
EMS Fund (SB 12/612)	$ 15,967
Other grants:_____	_____
Other fees:_____	_____
Other (specify):_____	_____
TOTAL REVENUE	$ 149,177

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

6. Fee structure for FY 1995/1996

_____ We do not charge any fees

__X__ Our fee structure is:

First responder certification	$ N/A
EMS dispatcher certification	$ 7 / $9 recent
EMT-I certification	$ 11
EMT-I recertification	$ 11/ $16 by CE
EMT-defibrillation certification	$ N/A
EMT-defibrillation recertification	$ N/A
EMT-II certification	$ N/A
EMT-II recertification	$ N/A
EMT-P accreditation	$ 164
EMT-P continuing accreditation	$ 27
Mobile Intensive Care Nurse/ Authorized Registered Nurse (MICN/ARN) certification	$ 150
MICN/ARN recertification	$ 30

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

EMT-I training program approval	$ 0
EMT-II training program approval	$ N/A
EMT-P training program approval	$ N/A
MICN/ARN training program approval	$ 0
Base hospital application	$ 0
Base hospital designation	$ 0
Trauma center application	$ 0
Trauma center designation	$ 0
Pediatric facility approval	$ N/A
Pediatric facility designation	$ N/A
Other critical care center application	
Type: _____	
Other critical care center designation	
Type:_____	
Ambulance service license	$ 0
Ambulance vehicle permits	$ 0
Other: -0- _____	_____
Other: -0- _____	_____
Other: -0- _____	_____

7. Complete the table on the following two pages for the EMS agency staff for the fiscal year of 1995/1996.

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

EMS System: Napa County **Reporting Year:** 1995/1996

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (% of salary)	COMMENTS
EMS Admin./ Coord./Dir.	EMS Coordinator	1.0	$23.14	24.08%	
Asst. Admin./ Admin. Asst./ Admin. Mgr.	N/A				
ALS Coord./ Field Coord./ Trng Coord.	N/A				
Program Coord./Field Liaison (Non-clinical)	N/A				
Trauma Coord.	N/A				
Med. Director	Director of Health Services	0.15	$56.10	14.30%	
Other MD/ Med. Consult./ Trng. Med. Dir.	N/A				
Disaster Med. Planner	N/A				

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

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (% of salary)	COMMENTS
Dispatch Supervisor	N/A				
Medical Planner	N/A				
Dispatch Supervisor	N/A				
Data Evaluator/Analyst	N/A				
QA/QI Coordinator	N/A				
Public Info. & Ed. Coord.	N/A				
Ex. Secretary	N/A				
Other Clerical	N/A				
Data Entry Clerk	N/A				
Other (Extra Hire Clerical)	N/A	Temporary (10 hours/week)	$10.02	N/A	

EMSA TABLE 3: SYSTEM RESOURCES AND OPERATIONS -- Personnel/Training

EMS System: Napa County

Reporting Year: 1995/1996

	EMT-Is	EMT - IIIs	EMT- Ps	MICN	EMS Dispatchers
Total certified	465	- -		40	26
Number of newly certified this year	74	- -		4	6
Number of certified this year	391	- -		28	20
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: 26
2. Early defibrillation:
   a) Number of EMT-I (defib) certified: 137
   b) Number of public safety (defib) certified (non-EMT I): 17
3. Do you have a first responder training program?
   ☒ yes ☐ no at Napa Valley College

EMSA TABLE 4: SYSTEM RESOURCES AND OPERATIONS -- Communications

EMS System: Napa County

County: Napa County

Reporting Year: 1995/1996

1. Number of primary Public Service Answering Points (PSAP) 3
2. Number of secondary PSAPs 1
3. Number of dispatch centers directly dispatching ambulances 1
4. Number of designated dispatch centers for EMS aircraft 1
5. Do you have an operational area disaster communication system? yes X no___
   a. Radio primary frequency_____
   b. Other methods_____
   c. Can all medical response units communicate on the same disaster communications system?
      yes__ 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 the region and/or state?
         yes X no___
6. Who is your primary dispatch agency for day-to-day emergencies? Napa Central Dispatch
7. Who is your primary dispatch agency for a disaster? Napa Central Dispatch

EMSA TABLE 5: SYSTEM RESOURCES AND OPERATIONS
Response/Transportation

EMS System: Napa County

Reporting Year: 1995

Note: Table 5 is to be reported by agency.

TRANSPORTING AGENCIES

1. Number of exclusive operating areas — 1 (under contract)
2. Percentage or population covered by Exclusive Operating Areas (EOA) — 10,100
3. Total number responses 12,430 (this includes 3,654 Napa Fire Dept. responses with Piners as a transporting agency)
   a) Number of emergency responses (Code 2: expedient, Code 3: lights and siren) — 11,601
   b) Number non-emergency responses (Code 1: normal) — 829
4. Total number of transports
   a) Number or emergency transports (Code 2: expedient, Code 3: lights and siren) — 6,094
   b) Number of non-emergency transports (Code 1: normal) — 825

Early Defibrillation Programs

5. Number of public safety defibrillation programs — 1 (county-wide program)
   a) Automated (Semi-automatic) —
   b) Manual —
6. Number of EMT-Defibrillation programs — 1 (county-wide program)
   a) Automated (Semi-automatic) — 10 stations
   b) Manual —

Air Ambulance Services

7. Total number or responses — 51
   a) Number of emergency responses — 51

	b) Number of non-emergency responses	0
8.	Total number of transports	37
	a) Number of emergency (scene) responses	51
	b) Number of non-emergency responses	0

EMSA TABLE 5: SYSTEM RESOURCES AND OPERATIONS -- 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.		4 - 6 minutes		
2. Early defibrillation capable responder.				
3. Advanced life capable responder.		4 - 6 minutes		
4. EMS transport unit.	< 10 minutes	< 30 minutes	< 60 minutes	< 20 minutes

EMSA TABLE 6: SYSTEM RESOURCES AND OPERATION
Facilities/Critical Care

EMS System: Napa County

Reporting Year: 1995/1996

Trauma care system

1. Trauma patients:

a) Number of patients meeting trauma triage criteria	unknown
b) Number of major trauma victims transported directly to a trauma center by ambulance	209
c) Number o major trauma patients transferred to a trauma center	209
d) Number of patients meetings triage criteria who weren't treated at a trauma center	unknown

Emergency departments:

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

EMSA TABLE 7: SYSTEM RESOURCES AND OPERATIONS - Disaster Medical

EMS System: Napa County

County: Napa County

Reporting Year: 1995/1996

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

SYSTEM RESOURCES

1. Field Treatment Site (FTS) In process of determining locations of Field Treatment Sites.
   b. How are they staffed? _____
   c. Do you have a supply system for supporting them for 72 hours? yes___ no_X_
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_X_
   c. Are they available for statewide response? yes___ no_X_
   d. Are they part of a formal out-of state response system? yes___ no_X_
4. Hazardous materials
   a. Do you have any HAZMAT trained medical response teams? yes_X_ no___
   b. At what HAZMAT level are they trained? _____
   c. Do you have the ability to do decontamination in an emergency room? yes___ no_X_
   d. Do you have the ability to do decontamination in the field? yes_X_ no___

OPERATIONS

1. Are you using a standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure? yes_X_ no___
2. What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster? _____
3. Have you tested your MCI Plan this year in a:
   a. real event? yes___ no_X_
   b. exercise? yes_X_ no___

4. List all counties with which you have written medical aid agreement.

   _____

5. Do you have formal agreements with hospitals in your operational area to participate in disaster planning and response? yes___ no_X_

6. Do you have a formal agreement with community clinics in your operational areas to participate in disaster planning and response? yes___ no_X_

7. Are you part of a multi-county EMS system for disaster response? yes___ no_X_

8. Are you a separate department or agency? yes_X_ no____

9. If not, to whom do you report?_____

10. If not in the Health Department, do you have a plan to coordinate public health and environmental health issues with the Health Department? yes____ no____

Annex I
Trauma Care System Plan

Plan Summary

Overview

It has been demonstrated in EMS systems throughout the nation that an organized, systematic approach to trauma care results in a reduction in preventable death and morbidity. The total death rate per capita in Napa County is equal to that of the state. As there is no contemporary trauma registry within the Napa County EMS system, there is no ability to identify the rate of preventable death. However, the literature has clearly demonstrated that in systems without an organized approach to trauma care, the preventable death rate for seriously injured patients may approximate 30 percent (this rate is higher in rural areas) and that this preventable death rate drops significantly following the implementation of organized trauma care (as in the Orange County experience).

In recognition of this local public health issue, the California State Emergency Medical Services Authority has authorized the development of this trauma plan as a logical first step toward the eventual implementation of an organized injury management strategy.

This plan will be based on the inclusive model, encouraging all hospitals to participate at some level, dependent upon their resources, commitment to quality care and ability to care for specific levels of injury. Factors to be considered include: the limited surgical services available and that there is only one hospital with a Level III trauma center.

Prehospital triage criteria have historically been developed for the metropolitan/urban setting and it must be remembered that triage to a level II trauma center from this system will incorporate a helicopter transport out of county at substantial additional expense, not simply a ground transfer of a few additional miles. Eventual triage criteria must balance both patient care [as paramount] while remaining sensitive to the costs involved in unnecessary over triage.

Trauma System Criteria

The facility standards proposed for this document will be the State of California's standards and are based exactly on the trauma regulations of the California Code of Regulations (for level III trauma centers), as well as the standards established for Emergency Departments Approved for Trauma (EDATs) through the NOR-CAL EMS Agency.

The service are for this plan will be the County of Napa. While the county's current population is under the 350,000 population guideline, an exemption was granted to the agency during 1984 on this standard. Napa County also intends to sign written agreements with neighboring counties for continuity of service and integration of adjoining trauma

planning areas.

Organizational Structure

The management and administration of this plan will be the responsibility of the EMS Agency, County of Napa.

Trauma System Design and Policy Development

Trauma system design and policy development will be developed as described in this trauma plan and the accompany objectives that are listed in the EMS plan under Facilities. Specialized policies, required have been prepared and are available under separate cover.

Trauma center standards will be the State adopted standards for a level III and EDAT standards in use by Nor-Cal EMS, Inc.

Objectives

The objectives for this trauma plan are as listed under System Goals and Objectives beginning on page A9.

Fiscal Impact

Napa County has had an operational trauma system for approximately ten years. No new fiscal impact is anticipated as a result of formalizing the trauma system in this plan. Additional study is anticipated.

Local Approval

The trauma plan will be incorporated into the EMS Plan with input by providers and other interested parties solicited throughout its development. The Board of Supervisors will be asked to adopt the trauma plan with the EMS Plan.

Data Collection

The trauma data management system has been planned and is defined in separate documents. In general, the designated trauma center will collect trauma data through a trauma registry. The State's trauma data set, as defined in Appendix B of the Trauma Plan Development Guidelines will be used as the framework for data elements collected. The EMS Agency will receive this data and conduct its own analysis. Audits and quality improvement reviews are anticipated. An update trauma registry software and hardware system has been researched and a decision is expected shortly.

Trauma System Evaluation

The effectiveness of this plan will be measured through the incorporation of a trauma registry at each participating facility. A Continuous Quality Improvement model will be instituted for system review and a comprehensive management information system will be implemented to ensure the seamless integration of dispatch, prehospital, hospital and registry information. Quality in this trauma system will be defined through complete, accurate data analysis and will be outcome based.

A. PURPOSE

The trauma plan for Napa County is, first and foremost, a patient advocacy document. Its purpose is to provide a framework for the establishment of a comprehensive injury management strategy for Napa County that addresses the needs of the injured. To that end, it acknowledges the inherent challenges of the limited resources within the health care environment and provides an organized and logical process for achieving the desired goal of quality trauma services while remaining sensitive to the intrinsic resource and financial constraints of the system participants. This plan recognizes that a partnership of organizations, institutions and individuals form the nucleus of a quality trauma system. It is only through this partnership and adherence to quality trauma care standards that the goals of this plan will be achieved.

This trauma plan will design a county-wide trauma system in order to:

1. Identify the causes of injury.
2. Pursue injury prevention activities to decrease the incidence of trauma.
3. Identify and address preventable death and disability from trauma.
4. Assure timely, optimal trauma services in a cost-efficient manner through close coordination of prehospital, hospital and post-acute care services.
5. Manage costs of trauma system implementation.

B. TRAUMA PLAN PHILOSOPHY

The goal for Napa County's Trauma Plan is to assure high quality trauma care to all residents and visitors of the County. To assure this capability, a network of trauma capable emergency departments and designated trauma centers (Level III) will be developed. Priority consideration in this plan's development will be given to a system design and resource allocation which is in the best interest of the injured patient. The emergency departments, EDATs and the Level III[1] trauma centers will

[1] In the event that a local level III is not achievable, the plan will accommodate this and address patient distribution issues.

be integrated into a total system of care that includes prevention programs, prehospital coordination through rehabilitation and follow-up. Air medical transport procedures will also be re-evaluated as part of the trauma plan implementation process. The trauma system of care will be carefully implemented and monitored by the Napa County EMS Agency and a Trauma Advisory Committee.

This philosophy for the Napa County Trauma Plan calls for the following elements:

Inclusivity: Participation of hospitals will be encouraged county-wide.

Continuous Quality Improvement/Outcome: Orientation towards a continuous quality improvement process and an emphasis on patient outcomes will be the primary focus of program evaluation.

Prevention: An emphasis on injury control as a priority at all levels of trauma care will be established.

Continuum of Services: The trauma-care program will be developed as a system with all components integrated, including prehospital, hospital and rehabilitative care.

County Planning/Monitoring: County Health and Human Services and EMS needs and planning goals will be essential inputs to the trauma system plan.

Financial Impact: Efforts will be made to evaluate system data and participant observations to assist with evaluating the financial impact of the trauma system and to allow integration of the trauma system with the emerging health-care system.

C. PLAN APPROACH/EMPHASIS

The designated Level III trauma center is at Queen of the Valley Hospital. This hospital is going through a reassessment of their trauma program which is expected to take 6-12 months. The other local emergency department (St. Helena Hospital) will be encouraged to participate at the EDAT level of trauma service. There are no hospitals in Napa County that have the resources to establish a Level II trauma center or for significant pediatric trauma at present. These services will be sought outside of Napa County (e.g., Contra Costa, Alameda).

Recognition of EDs will be conducted through letters of interest and solicitation of proposals. Designation of Level III trauma facilities in Napa County will be based on a periodic RFP process to be conducted by the county every 5 - 8 years as necessary. Triage and transfer criteria will be developed based on the ultimate

system configuration with the patient's needs kept as paramount. Pediatric trauma center capability will be identified through transfer agreements. Designation would be limited to hospitals that have made a commitment to quality trauma care. Napa County's designated trauma center (Level III) and EDATs will be required to enter into written transfer agreements as a requirement of the process.

D. TRAUMA FINANCIAL PLAN

The Napa County Trauma Plan specifically acknowledges the need to monitor the financial impact of the trauma system. Financial elements in the plan designed to encourage financial stability include:

(a) Assist participant hospitals in identifying and maximizing current reimbursement sources.

(b) Establishing an objective for the NCEMSA to conduct a system-wide study of trauma center cost and reimbursement.

(c) Establishing objectives to advocate for further increased reimbursement through county, state and national legislative efforts.

(d) Integrating the trauma system with future changes to the health-care delivery system.

(e) Committing to and supporting an ongoing program of injury prevention.

Section II Problem Statement

A. OVERVIEW

Given the nature of the county, with its long stretches of remote highways and roads, weather conditions (e.g., potential flooding), and high speeds, there are numerous motor vehicle collisions within the County. Specifically, motor vehicle collisions and unintentional injuries are the major causes of deaths and injuries in the county, although the rates are comparable to those of the state.

B. KEY PROBLEMS

Organization is a major problem in Napa County. The following key problem areas are noted in Napa County:

(1) Napa County has not developed a trauma system based on an organized plan.

The mortality rate in Napa County from motor vehicle collisions and unintentional injuries, while similar to the state's and the lack of an organized trauma system indicates a need for a comprehensive trauma plan in order to mitigate this public health problem. It is anticipated that a trauma system will substantially contribute to a decrease in preventable deaths in the county through injury prevention activities and the coordinated delivery of timely and quality trauma care. According to the biannual publication of the American College of Surgeons, *Optimal Care for the Injured Patient*, areas without a trauma system can expect preventable death rates as high as 30 percent.

(2) Napa County's trauma center has not clarified their situation or commitment.

Napa County has one Level III trauma center at Queen of the Valley Hospital. This trauma center has been plagued with financial problems. Queen of the Valley Hospital needs to evaluate their situation and determine their level of commitment with a clear definition of their intentions and goals. They must decide whether or not to remain a Level III trauma center. If not, then they must coordinate to become part of a network of EDATs. This will help

Napa County to better understand the strengths and weaknesses of their EMS system and determine their guidelines.

(3) Napa County lacks a strong system of coordination with surrounding county trauma programs.

Napa County does not have any Level II trauma centers. These services need to be established in surrounding counties such as Alameda, Contra Costa, Sonoma, or Solano. Napa County lacks a well coordinated trauma triage protocol to provide for consistency in prehospital trauma care and destination decisions for patients who will go to out-of-county trauma hospitals. A system of coordination needs to be set up with these surrounding trauma programs to ensure the efficient transfer of critical care patients.

(4) Napa County has not solidified ground and air transport issues.

Although Napa County does have both ground and air (helicopter) transport transport services, a stronger coordination system needs to be employed.

C. SUMMARY

Napa County is presently developing a trauma system to serve its residents and visitors. This effort recognizes that:

- Trauma is a significant health care problem in Napa County, particularly trauma due to motor vehicle collisions and other accidents.
- The primary victims of motor vehicle collisions are young adults (especially those between 20 - 29 years of age).
- It is in the best interest of the residents and visitors to Napa County to establish an efficient and coordinated trauma system.
- Such a system should assure the delivery of high-quality care, make the delivery of such care cost effective, prevent human suffering and reduce the human and societal burden resulting from injury.

Section II Goals and Objectives

A. OVERVIEW

The following trauma system components are identified for the Napa County trauma system:

(1) Identification/Access;

(2) Triage;

(3) Prehospital Care/Transportation;

(4) Hospital Care;

- Definitive Care;
- Special Care;
- Interfacility;

(5) Evaluation;

(6) Administration;

(7) Finance.

B. SYSTEM GOALS AND OBJECTIVES

The goals and objectives for the Napa County trauma system are as follows:

1. Identification and Access:

Goal: To improve injury identification and access to the EMS system.

Objectives:

(1) The NCEMSA shall complete a study of trauma identification needs.

(2) The NCEMSA shall continue to study the epidemiology of trauma to

identify access problems.

2. Triage:

Goal: Develop, implement and monitor a trauma-patient identification and flow process design to assure the appropriate destination of injured patients.

Objectives:

(1) The NCEMSA will complete the trauma triage criteria for out of County transport.

(2) The NCEMSA will coordinate the development of trauma transfer criteria in conjunction with adjacent counties.

3. Prehospital Care/Transportation:

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

Objectives:

(1) The NCEMSA will complete an assessment of the trauma education needs of prehospital care providers.

(2) The NCEMSA will complete a resource inventory and needs analysis of prehospital care providers to include:

(a) accessibility for trauma patients;

(b) solidifying ground and air transports; and,

(c) communication needs.

4. Hospital Care:

Goal: Development of a network of acute care treatment and rehabilitation facilities meeting nationally recognized trauma system standards.

Objectives:

(1) The NCEMSA will finalize trauma criteria defining hospital standards, and the Level III trauma center, EDAT(s), and participating ED selection process.

(2) The NCEMSA will complete the RFP application process of the Level III trauma center, EDAT(s), and participating EDs.

(3) The NCEMSA will conduct the RFP and application process of the Level III trauma center, EDAT(s), and participating EDs.

(4) The NCEMSA will designate appropriate Level III trauma center, EDAT(s), and contract with participating EDs.

(5) The NCEMSA will monitor designated Level III trauma center and EDAT(s).

5. Evaluation:

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

Objectives:

(1) The NCEMSA will finalize and fully implement a county-wide trauma registry and integrated management information system.

(2) The NCEMSA will seek participation of non-designated hospitals and specialty centers.

(3) The NCEMSA/trauma providers will conduct county-wide monitoring.

6. Administration:

Goal: Establish a program of leadership and monitoring to facilitate the implementation of the trauma plan.

Objectives:

(1) The NCEMSA will finalize the trauma system plan.

(2) There will be a biannual review of the trauma system plan's components, criteria and system configuration.

(3) The Trauma Advisory Committee will provide ongoing system input and direction.

7. Finance:

Goal: Monitor, evaluate and modify trauma system components as appropriate, based on the financial assessment of the trauma system.

Objectives:

(1) The NCEMSA will contract for a trauma system financial review to study:

(a) system costs;

(b) provider costs;

(c) system funding alternatives; and,

(d) Assisting with provider funding alternatives when feasible.

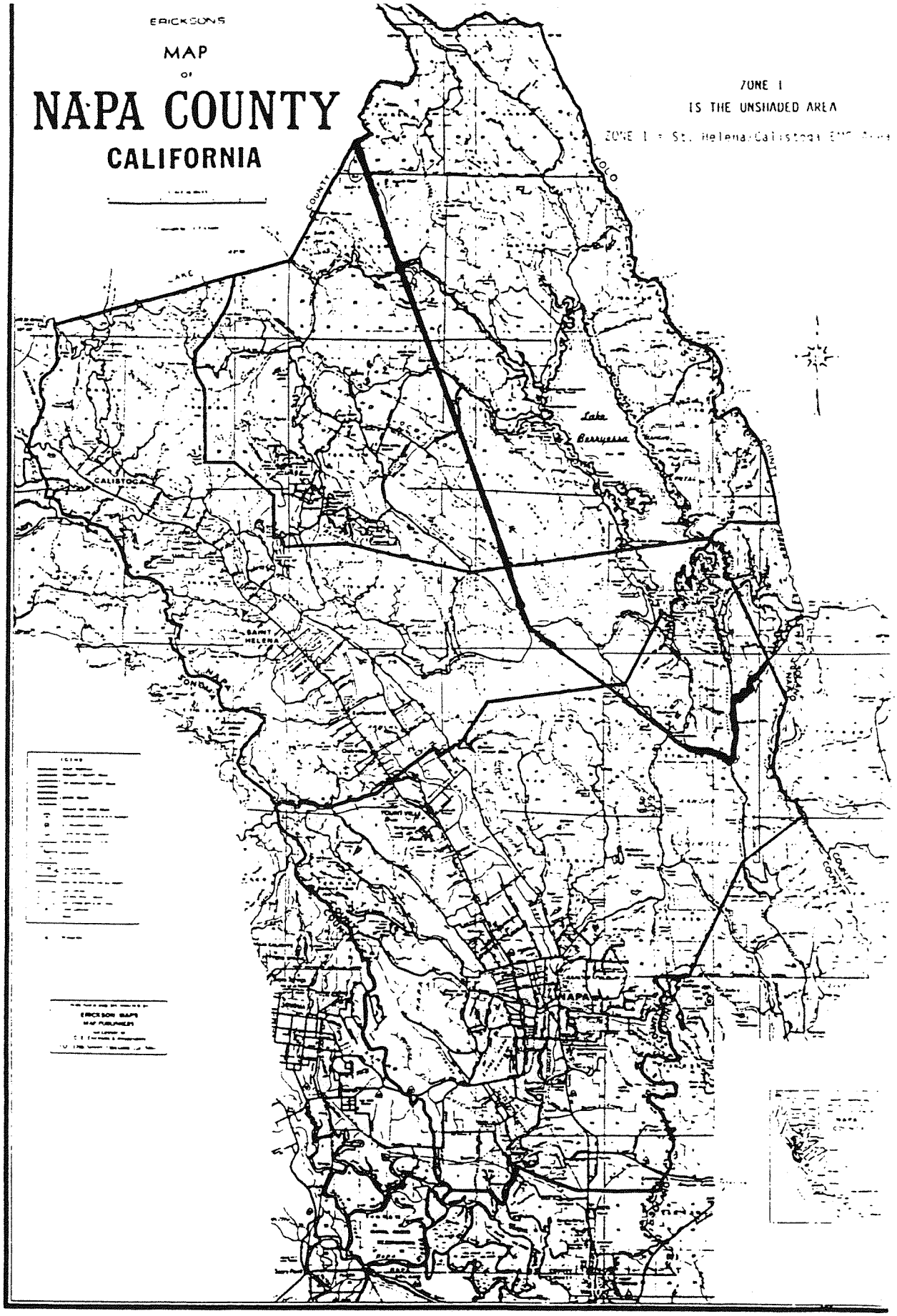
(2) The Consultant will prepare a financial plan for the trauma system.

(3) The NCEMSA/providers will implement the plan to include:

(a) Seeking/implementing system funding alternatives;

(b) Seeking/implementing provider funding alternatives.

Annex II
AB 3153 Compliance (Section 1797.224 H&SC)


ERICKSON'S
MAP
OF
NAPA COUNTY
CALIFORNIA
ZONE 1
IS THE UNSHADED AREA
Lake
Berryessa
CALISTOGA
SAINT
HELENA
NAPA

Annex II - AB 3153 Compliance (Section 1797.224 H&SC)
(To be completed for each exclusive operating area)

NAPA COUNTY

EXCLUSIVE OPERATING AREAS FACT SHEET

1. **Area or subarea (zone) name or title**:

   St. Helena/Calistoga EMS Area

2. **Name(s) of current provider(s)**:

   Mercy-St. Helena Ambulance Service

3. **Area or subarea (zone) geographical description**:

   See Attachment Exhibit A

4. **Statement of exclusivity** (exclusive or non-exclusive):

   Exclusive. Competitive bid with contract expiring in 1996. Napa County is still determining plans for the future.

5. **Method to achieve exclusivity**:

   Competitive bid with contract.

6. **Type of exclusivity**:

   Emergency Ambulance

7. **Addendum**: Attachment Exhibit A

Section VII - 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 direct supervision of a base hospital.

Ambulance - Any vehicle specially constructed, modified or equipped and used for transporting sick, injured, infirmed or otherwise incapacitated person and capable of supporting BLS or a higher level of care.

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

Basic Life Support (BLS) - As defined in Health and Safety Code Section 1797.60.

Basic Life Support Unit (BLS Unit) - As defined in Health and Safety Code Section 1797.60. 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 to maintain life without invasive techniques until the patient may be transported or until advanced life support is available.

Code-One Call - Any non Code-3 or Code-2 request for service which are scheduled or unscheduled where a physician has determined a need for an ambulance because of a potential for an emergency.

Code-Three Call - Any request for service perceived or actual life threatening, as determined by dispatch

personnel, in accordance with County policy, requiring immediate dispatch with the use of lights and sirens.

Code-Two Call - Any request for service designated as non-life threatening by dispatch personnel in accordance with County policy, requiring the immediate dispatch of an ambulance without the use of lights and sirens.

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.

EDAT: An emergency department approved for trauma, which is a Basic emergency department per State law that has made additional commitments for the care of the trauma patient.

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 Technician - I - or EMT - I - An individual trained in all facets of basic life support according to standards prescribed by the California Code of Regulations and who has a valid certificate issued pursuant to this part. This definition shall include, but not be limited to, EMT-I (FS) and EMT-I.

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

Emergency Medical Technician - Paramedic - or EMT-P - Individual whose scope of practice to provide advanced life support is according to the California Code of Regulations and who has a valid certificate/license issued pursuant to this division.

EMS Agency - Napa County Emergency Medical Services Agency, established by the County of Napa, which monitors the medical control and standards of the county EMS system.

EOA - Exclusive operating area as provided for by 1997 of the Health and Safety Code.

DMAT - Disaster medical assistance teams as defined by the Federal Emergency Management Association.

First Responder - An agency with equipment and staff (e.g. fire department, police or non-transporting ambulance unit) with personnel capable of providing appropriate first responder prehospital care.

First Responder - Defibrillator - Personnel trained to initiate automatic or semiautomatic defibrillator procedures.

FTS - Field Treatment Site as defined by the California EMS Authority.

Limited Advanced Life Support - Special services designed to provide prehospital emergency medical care limited to techniques and procedures that exceed basic life support but are less than advanced life support.

Mobile Intensive Care Nurse or M.I.C.N. - 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.

Paramedic Unit - An ambulance or first-responder unit staffed and equipped to provide advanced life support at the scene of a medical emergency and during transport in an ambulance of a patient(s) and designated as a paramedic unit by the Medical Director.

RDMHC - Regional Disaster Medical Health Coordination as defined by the California EMS Authority.

Remote Area - Census tracts or enumeration districts without census tracts which have a population density of 5 to 9 persons per square mile.

Rural Area - designation is appropriate for areas which are not urban, not suburban, and which are either an incorporated city of less than 2,000 or within a 30-mile radius of such a city's center.

SEMS - Standardized Emergency Management System as required by California State Statute.

Suburban Area - designation is appropriate for areas which are non-urban but are contiguous to urban areas, and is either within a ten-mile radius of an urban community center or consist of a census tract

having a population density between 1,000 and 2,000 persons per square mile, or are traffic corridors in which a 12-minute response-time standard can be extended without unduly adding to system costs.

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.

Urban Area - Designation is appropriate for areas which are in an incorporated city with a population greater than 9,000 persons or which consist of a census tract having a population density greater than 2,000 persons per square mile.