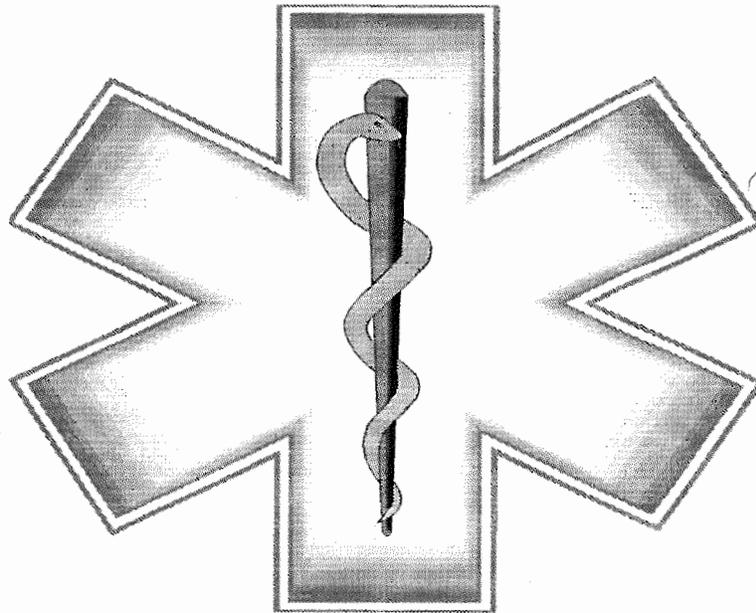


**Emergency Medical Services System  
Five Year Plan  
June, 1999**



**North Coast Emergency Medical Services Region  
Del Norte, Humboldt and Lake Counties**

Submitted By:

North Coast Emergency Medical Services

~~86 E Street~~ 3340 Glenwood Street

Eureka, California 95501

June 25, 1999

# North Coast EMS System Plan

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## Executive Summary

### **Regional Characteristics:**

The North Coast Emergency Medical Services (North Coast EMS) region is comprised of Del Norte, Humboldt, and Lake Counties and the southern portion of Trinity County. The area encompasses almost 6,000 square miles and is populated by approximately 210,000 people, with most inhabitants living in any of the 10 incorporated small towns around Humboldt Bay, along the perimeter of Clear Lake and along the northernmost coastal stretch of the region. The remainder of the population is widely dispersed throughout literally hundreds of unincorporated areas, from small villages of a few hundred residents to individual homesteads spread ever more remotely into the wilderness.

The North Coast EMS region begins approximately 100 miles north of San Francisco and extends north to the Oregon border. The region's topography consists of inland valleys, rugged coastal and inland mountains, and bay and sea coast areas. Distances between towns, villages, and other unincorporated and wilderness areas can be far, and many parts of the region are not proximal to major highways. Two major highways in the region are Route 101 north to south along the coast and Route 299 east to west between Arcata and Redding. Routes 20, 29, 36 and 199 are secondary two-lane roads. Other roads, some unpaved, traverse the rugged mountains from the coast to the interior throughout much of the region.

The region is pounded by severe rainstorms each winter, and is prone to flooding and mudslides, effectively closing roads and highways and cutting off areas of the region for uncertain periods of time. Also, it is a little-known fact that this area of California is one of the state's most seismically active. Just off the coast along Humboldt and Del Norte Counties lies the Southern Cascadian Subduction Zone, a major thrust fault zone at risk for a major earthquake of magnitude 8.4, sea floor deformation and a seismic sea wave (tsunami).

The scattered, isolated population, rugged terrain, weather patterns and earthquake potential that characterize the region can pose a challenge to the timely provision of emergency medical services. In addition, the beauty of the area regularly attracts seasonal tourists, and a great increase in the need for emergency ambulance response can place additional pressures on the emergency medical services (EMS) system. Finally, income data for the region reflect the area's economically depressed state. EMS providers serve a population that is disproportionately uninsured and low income, with limited ability to pay for emergency transport services.

### **Agency Organizational Structure:**

North Coast EMS has coordinated the emergency medical services system on California's north coast since 1975. The agency is governed by a Joint Powers Agency Governing Board, which consists of one Board of Supervisors member and one alternate from each of the three member counties. With adoption of the Emergency Medical Services Act in 1982, several local EMS agency responsibilities were delegated to North Coast EMS, including: training program

approval, personnel certification, base hospital and provider designation, quality improvement, system coordination and evaluation, and other services. The agency currently provides/facilitates or has in the past also provided/facilitated: first responder and early defibrillation training, call box installation, paramedic upgrade training and scope of practice expansion, computerized data collection and analysis, critical incident stress management (CISM) program coordination, Emergency Medical Dispatch (EMD) training, the EMS for Children Program, Emergency Department Approved for Pediatrics (EDAP) designation, and other system enhancements. North Coast EMS serves as the lead agency in coordinating all system participants in its jurisdiction, and in planning, implementing, monitoring and evaluating the overall system. The agency budget for fiscal year 1998-99 was \$375,489.

### **EMS System Service Delivery:**

At this time, 663 EMT-Is, 11 EMT-IIs, 84 paramedics, and 105 Mobile Intensive Care Nurses are certified and accredited by North Coast EMS. Field delivery of emergency medical services is provided by 6 privately owned ambulance companies and 12 public ambulance services. Of the public safety agencies, 45 fire districts and 14 law enforcement agencies provide first responder services. Six base hospitals and one alternate base hospital provide medical control services for advanced life support (ALS) personnel, and a single facility serves as a receiving hospital.

### **Overview of EMS System Needs:**

This EMS System Plan articulates needs for each of the topical areas addressed in the “System Assessment.” The majority (81%) of the minimum standards are fully met and an additional 7% are partially met with outstanding needs noted, for a total of 88% of the minimum standards. Also, 87% of the recommended guidelines have been met or are partially met. (See Table 1, pages 8-14, for a summary). It should be noted that because the agency mission statement commits North Coast EMS to Continuous Quality Improvement principles and to the ongoing enhancement of the EMS system, this EMS System Plan has frequently documented needs related to some of the standards and guidelines even when those minimum standards have been met.

The EMSA standards and guidelines addressed in the Plan pose some difficulty in reconciling the difference between current, ongoing contractual obligations and outstanding needs as identified in the Plan. For example, many standards speak to an *outcome* as to what should be in place, without enabling the agency to include in the document all of the daily operations that make that particular outcome or standard met. (Or, if they were, it would be a particularly unwieldy document). Ongoing agency functions are not “needs” per se, as needs are defined in the Plan, and so frequently do not appear. The following is a summary of the major identified needs, which are further elaborated throughout “*Section 2 – System Assessment:*”

## • System Organization and Management

The most pressing need, one that will determine whether all other EMS functions are possible, is for stable federal, state and local funding so that agency mandates can be carried out and desirable system improvement activities accomplished. An immediate need is for ongoing stable funding for the Regional Medical Director and maintenance of the required local match.

A second major area of need for the EMS system is in the area of evaluation. Quality Assurance (QA)/Continuous Quality Improvement (CQI) principles and data analysis should be routinely applied to the evaluation and planning process. Regional system participants also need to actively participate in system evaluation by using the tools developed and outlined in the North Coast EMS QA/CQI policies. Statewide EMS system evaluation criteria are also needed.

North Coast EMS advocates for the highest level of care possible, and feels it is highly desirable to have all transporting providers in the region commit to full time provision of advanced life support (ALS) services. Currently, there are a few exceptions. The minimum expanded level of care provided throughout the region by Emergency Medical Technician (EMT)-Is should be early defibrillation and Esophageal Tracheal Airway Device (ETAD) (i.e. Combitube) capable whenever limited advanced life support(LALS)/ALS is not promptly available. It is also highly desirable to have all first responders be early defibrillation capable whenever LALS/ALS is not promptly available.

*Proposed Solutions:* North Coast EMS will continue to advocate for stable funding, and to pursue special project funding for ongoing system enhancement. North Coast EMS will encourage both the State EMS Authority and providers throughout the region to use CQI principles and data analysis to plan and evaluate the system. Agency staff will also continue to work closely with prehospital providers to promote increased levels of care.

## • Staffing/Training

Overall needs in this section generally reflect some gaps and inconsistencies in the training and certification requirements for various providers, as governed by Title 22. A major need is to make EMT-II laws consistent with other levels of care, and to add Mobile Intensive Care Nurse and first responder laws to Title 22 regulations to promote statewide consistency. A second major need is for standards which address rural dispatch training needs, including methods for funding the training and certification of Emergency Medical Dispatch (EMD). A third major need is for first responders and EMT-Is to become trained and accredited in Automated External Defibrillation (AED), and to have funding available to purchase defibrillators. Access to AED could also be increased through the implementation of a physician-prescribed AED Program to train family members of high risk patients in AED. Parallel with needs stated elsewhere (in the standards for facilities and disaster medical planning), base hospital personnel need more training and experience using the interfacility

Med-Net. Finally, the region should consider increased implementation of standing orders for paramedics in the future.

*Proposed Solutions:* North Coast EMS will work with the state to encourage streamlining of training and certification requirements. Locally, North Coast EMS will strive to increase the consistency and level of dispatch services provided by continuing to co-sponsor EMD classes and by implementing EMD programs as funding allows. Agency staff will also work toward increasing the availability of first responder, EMT-I and family member AED training, and will write policy requiring defibrillation on every emergency medical transport unit without EMT-II or Paramedic personnel. North Coast EMS will work with hospital personnel to train on Med-Net communications protocols, and with the EMS community as a whole to explore increased implementation of standing orders for paramedics.

#### • **Communications**

The major communications need for rural areas such as the North Coast EMS region is for reliable and affordable communications technology. The current system is in existence far past its projected life expectancy, with no major repair or replacement plan in place. Current technology available in the region does not perform nearly as well as modern equipment, and does not offer a path to upgrade to possible changes in FCC requirements. The second major area of need for this section is for protocols requiring routine use of interfacility Med-Net by hospitals. Finally, in Humboldt County there is a need for one tactical command frequency to be designated for medical response.

*Proposed Solution:* The agency will work with counties in the region to coordinate a comprehensive assessment and plan to replace mountain-top repeaters. The agency has established a trust fund and has recently been funded to assist with the replacement of the repeaters, although comprehensive replacement will require additional funds. Protocols will be implemented to increase hospital testing of Med-Net, in preparation for a disaster situation. North Coast EMS will support the efforts of California Department of Forestry and Fire Protection, fire chiefs, first responders and others to implement one tactical command frequency for medical response.

#### • **Response/Transportation**

One of the major response/transport needs which has emerged in the region in the recent past has been the need to have the transport system in Lake County become more formalized with respect to public transport agencies (i.e. Fire Districts). This would help ensure predictable staffing patterns, response times, etc. At the same time, there is a need to modify the Lake County Ambulance Ordinance to apply to Fire Districts and a need to increase monitoring of ordinance compliance.

Special rural standards are critically needed in upcoming MediCare reform, so that funding of emergency transport services in rural areas can be stabilized. Another major need is for minimum certification standards to be adopted for all public safety and first responder

personnel. Finally, the region needs to explore strengthening regionally coordinated multi-casualty response plans and procedures.

*Proposed Solutions:* Fire Districts in Lake County are exploring the creation of a joint powers arrangement which will establish transport standards for public ambulance services. As this entity develops, North Coast EMS will work to support Lake County efforts to modify the ambulance ordinance. Staff will also develop improved ways to track ordinance compliance using the Prehospital Care Report Data System. North Coast EMS will also continue to advocate for special rural standards in the MediCare system, so that providers may remain financially solvent. The agency will work with public safety and first responder agencies to ensure minimum certification standards are met, and that ideal standards are sought.

- **Facilities/Critical Care**

This section of the Plan documents the need for strengthened facility plans for mass-casualty management, including coordination of hospital communications and patient transportation. Some hospitals in the region should explore reinstatement of regular communications checks and generally assure that disaster plans are well-coordinated with county health departments. North Coast EMS also needs to explore, in conjunction with hospitals and the medical community, possible implementation of new state trauma regulations, when they are available.

*Proposed Solutions:* Although most of the hospital planning functions are retained by hospitals themselves, in conjunction with county health officers, North Coast EMS will support strengthened disaster collaboration throughout the region, including communications protocols and routine Med-Net checks. The agency has already applied for special project funding to help improve disaster planning in the region, and will continue to participate on committees and work with health departments and local providers to promote preparedness.

- **Data Collection/System Evaluation**

North Coast EMS has a very strong Continuous Quality Improvement program, with numerous policies and procedures in place, as well as the Prehospital Care Report Data System (PCR-DS). The major data/evaluation needs are to improve the timeliness of reporting, create data links throughout the EMS system, evaluate disaster drills to determine training needs and implement further permanent monitoring mechanisms using the data system.

A secondary need is in the area of dispatch, which currently is not well-integrated into the EMS system. There is a need for state standards for Emergency Medical Dispatch (EMD), and a general need to increase the number of EMD programs in place in the region.

*Proposed Solutions:* North Coast EMS will continue to improve the CQI Program by implementing new and creative monitoring mechanisms as needed and by working with providers to assure 100% PCR submission in a timely manner. North Coast EMS will increase involvement in evaluation of prehospital personnel participation in disaster drills. Finally North Coast EMS will also encourage the state to develop emergency medical dispatch standards.

#### • **Public Information and Education**

The major need identified in this section is increased funding and staff time devoted to public education on injury prevention, use of the emergency medical system, and other related issues. A second need is to examine cardiac deaths in the region and undertake appropriate public education efforts (and policy and protocol changes, as needed).

*Proposed Solutions:* North Coast EMS will continue to coordinate with local agencies involved in injury prevention, and will work with county health departments to seek Block Grant or state funding opportunities for public education as they are appropriate. The agency will also consider obtaining funding to develop a cardiac improvement program.

#### • **Disaster Medical Response**

Much of the disaster medical planning, including writing the Disaster Medical Annex, is led by counties in the region, and the operations function is performed solely by counties. The role of North Coast EMS at this time involves: facilitating the training of prehospital personnel in disaster response, assisting with coordination of disaster communications, and assisting counties with obtaining funding to enhance disaster medical planning. A major need is for continued clarification of disaster medical roles of both counties and North Coast EMS. This would be greatly aided by the development of clearer standards by the state relative to health departments versus EMS agencies, and planning versus operations. Increased funding from the state would also benefit disaster medical planning.

Substantial work has been completed in planning and preparing for disasters, but improvement is always desirable in this important area. Highlights of other needs stated in this section of the Plan include obtaining increased multi-agency involvement in planning and exercises, delineating multi-agency responsibilities and updating specific resource lists or disaster planning documents. Once again, hand-in-hand with the need to improve disaster planning is the need for funding of staff time, either county or regional, to be devoted to this issue.

A specific major need is for improved coordination of inter-hospital disaster communications. A second is the maintenance and expansion of contracts with anticipated medical providers. Another is (re)designation of Casualty Collection Points/Field Treatment Sites throughout the region. Some specific needs are tangible, such as Lake County's need

for additional radios. Increased participation (and standardized evaluation) of prehospital personnel in disaster exercises is also desirable.

*Proposed Solutions:* Counties are continuously working to update and improve disaster planning, and will continue to do so, as needed. This could include updating resource lists, carrying out drills and exercises, revising areas of disaster plans, etc. Specific objectives in this section of the EMS Plan directly address the specific needs which are stated above.

Counties and North Coast EMS will continue to seek additional funding for disaster planning. North Coast EMS will continue to participate in planning meetings and will assist counties with special projects (as is feasible) such as the *Cascadia Region Disaster Medical/Health Preparedness Proposal*, which was recently awarded to North Coast EMS in conjunction with Humboldt and Del Norte Counties, and is to begin after July 1, 1999. Agencies will work together to examine needs as they develop, such as the possible need for bioterrorism training or the need to explore increased training of new personnel.

## SUMMARY TABLE 1: SYSTEM ASSESSMENT

xp = partially met

## A. SYSTEM ORGANIZATION AND MANAGEMENT

	Does not currently meet standard	Meets minimum standard	Meets recommended standard	Short-range Plan	Long-range Plan
<b>Agency Administration</b>					
1.01 LEMSA Structure		x			x
1.02 LEMSA Mission		x		x	x
1.03 Public Input		x			
1.04 Medical Director		x	x		x
<b>Planning Activities</b>					
1.05 System Plan		x		x	
1.06 Annual Plan Update		x		x	
1.07 Trauma Planning*		x	xp	x	
1.08 ALS Planning*		x		x	x
1.09 Inventory of Resources		x		x	
1.10 Special Populations		x	x		x
1.11 System Participants		x	x	x	
<b>Regulatory Activities</b>					
1.12 Review and Monitoring		x			x
1.13 Coordination		x			
1.14 Policy & Procedures Manual		x			
1.15 Compliance w/ Policies		x		x	
<b>System Financing</b>					
1.16 Funding Mechanism		x			x
<b>Medical Direction</b>					
1.17 Medical Direction*		x		x	
1.18 QA/QI		x	x	x	x
1.19 Policies, Procedures, Protocols		x	x		
1.20 DNR Policy		x			
1.21 Determination of Death		x		x	x
1.22 Reporting of Abuse		x		x	
1.23 Interfacility Transfer		x			
<b>Enhanced Level: Advanced Life Support</b>					
1.24 ALS Systems		x	n/a		
1.25 On-Line Medical Direction		x	x	x	

<b>Enhanced Level: Trauma Care System</b>					
1.26	Trauma System Plan		n/a		x
<b>Enhanced Level: Pediatric Emergency Medical and Critical Care System</b>					
1.27	Pediatric System Plan		x		
<b>Enhanced Level: Trauma Care System</b>					
1.28	EOA Plan		n/a		

**B. STAFFING/TRAINING**

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

**C. COMMUNICATIONS**

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

**D. RESPONSE/TRANSPORTATION**

	Does not currently meet standard	Meets minimum standard	Meets recommended standard	Short-range Plan	Long-range Plan
<b>Universal Level</b>					
4.01 Service Area Boundaries*		x	xp	x	x
4.02 Monitoring		x	xp	x	x
4.03 Classifying Medical Requests		x		x	
4.04 Prescheduled Responses		x		x	x
4.05 Response Time Standards*	x			x	x
4.06 Staffing		x		x	x
4.07 First Responder Agencies		x			x
4.08 Medical & Rescue Aircraft*		x			x
4.09 Air Dispatch Center		x			
4.10 Aircraft Availability*		x			x

<b>4.11</b> Specialty Vehicles*		n/a	n/a		
<b>4.12</b> Disaster Response		x			x
<b>4.13</b> Intercounty Response		x			x
<b>4.14</b> Incident Command System		x		x	
<b>4.15</b> MCI Plans		x		x	x
<b>Enhanced Level: Advanced Life Support</b>					
<b>4.16</b> ALS Staffing		x	xp	x	x
<b>4.17</b> ALS Equipment		x			
<b>Enhanced Level: Ambulance Regulation</b>					
<b>4.18</b> Compliance		x			
<b>Enhanced Level: Exclusive Operating Permits</b>					
<b>4.19</b> Transportation Plan		n/a			
<b>4.20</b> "Grandfathering"		n/a			
<b>4.21</b> Compliance		n/a			
<b>4.22</b> Evaluation		n/a			

**E. FACILITIES/CRITICAL CARE**

	Does not currently meet standard	Meets minimum standard	Meets recommended standard	Short-range Plan	Long-range Plan
<b>Universal Level</b>					
<b>5.01</b> Assessment of Capabilities		x	x		
<b>5.02</b> Triage & Transfer Protocols*		x			
<b>5.03</b> Transfer Guidelines*		x			
<b>5.04</b> Specialty Care Facilities*		x			
<b>5.05</b> Mass Casualty Management		x	x		x
<b>5.06</b> Hospital Evacuation*		x			x
<b>Enhanced Level: Advanced Life Support</b>					
<b>5.07</b> Base Hospital Designation		x		x	
<b>Enhanced Level: Trauma Care System</b>					
<b>5.08</b> Trauma System Design		n/a			
<b>5.09</b> Public Input		n/a			

<b>Enhanced Level: Pediatric Emergency Medical and Critical Care System</b>					
5.10	Pediatric System Design		xp		
5.11	Emergency Departments		x	x	
5.12	Public Input		xp		
<b>Enhanced Level: Other Specialty Care Systems</b>					
5.13	Specialty System Design		n/a		
5.14	Public Input		n/a		

**F. DATA COLLECTION/SYSTEM EVALUATION**

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

**G. PUBLIC INFORMATION AND EDUCATION**

	Does not currently meet standard	Meets minimum standard	Meets recommended standard	Short-range Plan	Long-range Plan
<b>Universal Level</b>					
7.01 Public Information Materials		xp	x		
7.02 Injury Control		x	x		
7.03 Disaster Preparedness		x	x		x
7.04 First Aid & CPR Training		x			x

**H. DISASTER MEDICAL RESPONSE**

	Does not currently meet standard	Meets minimum standard	Meets recommended standard	Short-range Plan	Long-range Plan
<b>Universal Level</b>					
8.01 Disaster Medical Planning		x		x	x
8.02 Response Plans		x	xp	x	x
8.03 HazMat Training		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*		xp			x
8.08 Inventory of Resources		x	xp	x	x
8.09 DMAT Teams		x	x		x
8.10 Mutual Aid Agreements*		x		x	x
8.11 CCP Designation*		xp		x	x
8.12 Establishment of CCPs		x			x
8.13 Disaster Medical Training		x	x		x
8.14 Hospital Plans		xp	xp	x	x
8.15 Interhospital Communications	x				x

<b>8.16</b> Prehospital Agency Plans		x	x		x
<b>Enhanced Level: Advanced Life Support</b>					
<b>8.17</b> ALS Policies		x			
<b>Enhanced Level: Specialty Care Systems</b>					
<b>8.18</b> Specialty Center Roles		x			
<b>Enhanced Level: Exclusive Operating Areas/Ambulance Regulations</b>					
<b>8.19</b> Waiving Exclusivity		n/a			

## Agency Administration

### MINIMUM STANDARD:

#### 1.01 - Local EMS Agency Structure

“Each local EMS agency shall have a formal organizational structure which includes both agency staff and non-agency resources and which includes appropriate technical and clinical expertise.”

### CURRENT STATUS:

North Coast Emergency Medical Services (EMS) currently meets this standard and has a formal organizational structure which includes a Joint Powers Agency (JPA), agency staff, contractors and non-agency EMS system participants. Technical and clinical expertise are provided by these personnel, as well as through the agency’s coordination with numerous other EMS agencies such as the State EMS Authority (SEMSA), EMS Administrators Association of California (EMSAAC), Emergency Medical Directors Association of California (EMDAC), County Health Officers and Administrators, Emergency Medical Care Committees (EMCCs), Fire Chiefs Associations, Medical Advisory Committees (MACs), Prehospital Medical Directors and Nurse Coordinators Committees, the continuous quality improvement committee, and numerous other individuals, organizations and collaborative groups.

The agency is overseen by the JPA Governing Board, which currently consists of one elected county supervisor member and one alternate from each member county, including: Del Norte County - David Finigan, Vice-Chairperson and Chuck Blackburn, Alternate; Humboldt County - John Woolley, Chairperson and Paul Kirk, Alternate; Lake County - Bill Merriman, Member and, Ed Robey, Alternate. As of February, 1999, a change has been proposed that the JPA Governing Board be comprised of one voting member from each of the Boards of Supervisors in the region and an alternate member, who may be either a representative from each county’s Board of Supervisors or a senior level appointed official from that county.

Employees functioning under the general fund/local budget total 5.8 Full Time Equivalents. Current employees include: Larry Karsteadt, M.A., Executive Director; Judy Haines, Training Coordinator/Fiscal Manager; Louis Bruhnke, Paramedic (EMT-P), EMS Coordinator; Julie Caldwell, M.A., Program Assistant (80%); Heather Gramp, M.P.H., Special Project Coordinator; and Wendy Chapman, Secretary.

Contractors include: Ken Stiver, M.D., Regional Medical Director; Virginia Plambeck, EMT-P, Critical Incident Stress Debriefing and Early Defibrillation; Karen Sheeks, R.N., Mobile Intensive Care Nurse (MICN) and base hospital site visits; Roger Hawkins, Auditor; Virgil “Butch” Wolfe, EMT-P, Med-Net Replacement Coordinator; Jim Perry, EMT-P, Policy, Protocol and Training Material Development; Amanda James, R.N., Paramedic Expanded Scope of Practice Examination Revision; Connie Wolfe, R.N., EMT-I Skills Test Revision; Kathy Major,

EMS for Children Public Service Announcement and Newspaper Article Development; Jim Hubbard, Computer PCR Programming and Technical Assistance; Buddy Wallat, EMT-P, PCR Technical Assistance for Lake County; Page Weavers, Web Site Development and Maintenance; and others as needed.

In 1975, the JPA was executed by the Counties of Del Norte, Humboldt, Lake and Mendocino to coordinate and develop a multi-county Emergency Medical Services System. Federal funds were utilized for the first six years as part of the National EMS Act, and in 1981, federal funding shifted to state general fund support for eligible rural multi-county agencies with high tourist impact. That same year, California adopted the State EMS Act, which created the State EMS Authority and Local EMS Agency. North Coast EMS was delegated specific Local EMS Agency contractual responsibilities at that time by each member county. Mendocino County exercised its option to withdraw from the JPA around 1985, losing eligibility for state general funds. Trinity County contracted with North Coast EMS around 1989 to provide the same Local EMS Agency functions for the southern portion of the County because patients are generally transported from that area to Humboldt County.

Specific Local EMS Agency functions delegated to North Coast EMS under the General Fund/Local budget are as follows:

- planning, implementation and evaluation of the EMS system;
- policy development, protocols and procedures for establishing and supervising the medical direction of Limited Advanced Life Support (LALS) and Advanced Life Support (ALS);
- annual EMS Plan preparation;
- medical audit of field care and continuing education programs;
- interfacility transfer guideline development;
- base hospital designation;
- authorization of ALS and LALS providers;
- monitoring and approval of first responder, EMT-I, Early Defibrillation, Emergency Medical Dispatcher, EMT-II, EMT-Paramedic, Mobile Intensive Care Nurse (MICN) training programs;
- certification and certificate review of personnel;
- coordination and facilitation of EMS system development and review of EMS grants;
- review/investigation of violations of transfer guidelines, protocols or agreements;
- fee establishment, training program probation, suspension or revocation, and oversight of certification examinations;
- regional trauma plan.

Local EMS Agency functions *not* specifically delegated to North Coast EMS in contract are retained by JPA member counties and Trinity County; these include but are not limited to:

- ambulance ordinance and ambulance permit responsibilities;
- disaster medical services operations and most planning functions (e.g. writing the Disaster Medical Annex; see 8.01, 8.02);

- ambulance franchise Exclusive Operating Area (EOA) responsibility (no member counties currently utilize EOAs).

North Coast EMS provides several other EMS system-related services:

- continuing education provider approval;
- continuous quality improvement program development; and
- Critical Incident Stress Management (CISM) program coordination.

North Coast EMS has initiated the following special projects with State EMS Authority or Office of Traffic Safety assistance:

- call box program initiation;
- Emergency Medical Dispatch (EMD) program development;
- first responder training and equipment;
- early defibrillation program;
- EMS for Children;
- Rural Trauma Program and Rural/Urban Trauma Study;
- Statewide Data Conference; and
- EMT-II to Paramedic Upgrade training.

All programs and projects were planned, coordinated and implemented with the cooperation of numerous individuals and organizations.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Federal, state and local funding needs to be stabilized to enable LEMSA mandated and desirable activities to be accomplished.

**OBJECTIVE(S):**

- North Coast EMS will encourage stabilization of federal, state, and local funds to enable LEMSA mandates and desirable activities to be accomplished;
- North Coast EMS will consider assuming responsibility for permitting and transport, exclusive operating areas, and other EMS system functions if Counties wish to formally delegate and fund these functions.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**Reference:**

HSC Division 2.5, Chapter 4: Local Administration.

**MINIMUM STANDARD:**

## 1.02 - Local EMS Agency Mission

“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.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard. The mission of the North Coast EMS Agency is to “enhance the EMS system consistent with California state laws and continuous quality improvement principles, through the pursuit of personal excellence, effective leadership and positive working relationships.” North Coast EMS has been delegated authority to plan, implement, and evaluate the EMS system on behalf of the JPA member counties, and uses its quality assurance/quality improvement and evaluation process to identify potential problems and needed system changes. Based upon SEMSA’s continuous quality improvement guidelines, North Coast EMS has created an extensive system to establish medical standards, approve training programs, and improve patient care through prospective, concurrent and retrospective evaluation of prehospital patient care by medical professionals.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Quality assurance/quality improvement principles and data analysis need to be applied to the EMS system planning and evaluation process;
- Locally, the agency would like to see increased utilization of the Prehospital Care Report program at all levels of the EMS community in order to identify potential problems, trends and patient care needs;
- Improved linkage is needed between all policies associated with the data system, disclosure protection, the CQI Committee, discovery of potential problems, remediation, and disciplinary action; and
- The current CQI program needs to be adopted by remaining ALS provider services and base hospitals.

**OBJECTIVES:**

North Coast EMS will:

- encourage quality assurance/quality improvement principles and data analysis be applied to the EMS system planning and evaluation process;
- work towards assuring increased utilization of the Prehospital Care Report program at all levels of the EMS community;

- work to improve linkages around the use of the PCR data system; and
- work on development and expansion of the CQI system.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: All (except below)

Long range: Increase utilization of the PCR-DS.

References:

North Coast EMS Quality Assurance Policies # 2100 – # 2110.

HSC Division 2.5, Chapter 4: Local Administration, §1797.204 -- Responsibility to plan, implement and evaluate the EMS system.

**MINIMUM STANDARD:**

1.03 - Public Input

“Each local EMS agency shall have a mechanism (including the emergency medical care committee(s) and other sources) to seek and obtain appropriate consumer and health care provider input regarding the development of plans, policies, and procedures, as described throughout this document.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and seeks to obtain appropriate consumer and health care provider input regarding the development of plans, policies and procedures. Existing policies require a forty-five day comment period prior to the adoption of all medical and system related policies, protocols and procedures. Agency staff routinely attend MACs, EMCCs and other committee meetings to identify regional needs and to obtain appropriate consumer and health care provider input.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

Reference:

North Coast EMS Policy # 2006: Public Comment Solicitation.

**MINIMUM STANDARD:**

## 1.04 - Medical Director

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

**RECOMMENDED GUIDELINES:**

## 1.04 - Medical Director

“The local EMS agency medical director should have administrative experience in emergency medical services systems.”

“Each local EMS agency medical director should establish clinical specialty advisory groups composed of physicians with appropriate specialties and non-physician providers (including nurses and prehospital providers), and/or should appoint medical consultants with expertise in trauma care, pediatrics, and other areas as needed.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and the recommended guidelines. The agency has appointed Ken Stiver, M.D. as the Regional Medical Director. Dr. Stiver has substantial experience in both the practice of emergency medicine and the administration of the North Coast EMS System. Dr. Stiver is Board Certified in Emergency Medicine, has practiced medicine for over 20 years, and has served as North Coast EMS Medical Director since 1982. He is also a member of the Emergency Medical Directors’ Association of California and has substantial administrative experience in emergency medicine and EMS systems.

North Coast EMS and Dr. Stiver have been instrumental in forming the EMCCs and MACs in each member county. The membership of the EMCCs includes physicians, registered nurses, prehospital care providers, law enforcement personnel, hospital representatives, offices of emergency services staff, public health officers and a general member from the community. Dr. Stiver routinely utilizes MACs, composed of health officers, physicians, nurses and prehospital providers, and consults with physician specialists in trauma care, pediatrics, and other specialties, as needed.

The MACs and EMCCs are advisory groups for North Coast EMS, with the EMCCs also advising the County Boards of Supervisors. Several other committees and task forces have been or are currently utilized by the Medical Director and agency staff to ensure direct consultation with physician specialists, including: surgeons, pediatricians, neurosurgeons, orthopedic surgeons, and others. These committees have included the Trauma Advisory Committee, the EMS for Children Committee and various task forces, and the Base Hospital Medical Directors.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- North Coast EMS needs to maintain adequate funding for the Regional Medical Director. In 1995, the allocation received from the Bertha Russ Lytel Foundation was decreased from \$15,000 to \$10,000, and since 1997 has further decreased to \$7,500, with written notification from the Foundation that they will eventually discontinue funding Dr. Stiver. It is essential that the JPA member counties fulfill their obligation to meet the required match if the Bertha Russ Lytel fund continues to decrease in the future as expected; and
- Del Norte County personnel should initiate EMCC meetings or participate in some other multi-disciplinary group setting in which prehospital care issues would be discussed. The Prehospital Care Nurse Coordinator of Sutter-Coast Community Hospital in Crescent City regularly attends the Humboldt County MAC meetings at this time.

**OBJECTIVES:**

- North Coast EMS will obtain the required state general fund match from JPA member counties and will secure sufficient local funding to continue Regional Medical Director services; and
- North Coast EMS recommends that Del Norte County personnel explore the possibility of starting a committee comprised of physicians, registered nurses, prehospital care providers, law enforcement, hospital representatives, office of emergency services, public health officers, and interested others to discuss local prehospital care and related issues.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

Reference:

HSC Division 2.5, Chapter 4: Local Administration, §1797.202 -- Medical director requirement.

## Planning Activities

### MINIMUM STANDARD:

#### 1.05 - System Plan

“Each local EMS agency shall develop an EMS System Plan, based on community need and utilization of appropriate 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 targeted clinical categories (as identified in Section II), and
- c) provide a methodology and timeline for meeting these needs.”

### CURRENT STATUS:

North Coast EMS currently meets this standard. The last North Coast EMS Five-Year Plan was completed and approved in 1988 and was revised annually thereafter as part of the State General Fund Contract. The annual North Coast EMS Agency Focus is based on state and county contracts, community need and utilization of appropriate resources. The new North Coast EMS System Plan (this document) assesses how the entire EMS System meets the June, 1993 “EMS Systems Standards and Guidelines” (SEMSA #101), identifies system needs for patients, and provides a methodology and timeline for meeting these needs.

### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

### NEED(S):

No needs at this time.

### OBJECTIVE(S):

Pending the approval of the 1999 EMS System Plan, the agency will use the document to plan to meet system needs, and thereafter will annually update the EMS System Plan as designated by the General Fund contract with SEMSA.

### TIME FRAME FOR MEETING OBJECTIVE(S):

Short range.

### Reference:

HSC Division 2.4, Chapter 4: Agency Administration, §1797.250 – Development and submission of EMS System Plan.

**MINIMUM STANDARD:**

## 1.06 - Annual Plan Update

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard. The 1988 North Coast EMS Five-Year Plan was updated annually as part of the State General Fund Contract. The new North Coast EMS System Plan (this document) assesses how the entire EMS System meets the June, 1993 “EMS Systems Standards and Guidelines” (SEMSA #101), identifies system needs for patients, and provides a methodology and timeline for meeting these needs. The annual “North Coast EMS Agency Focus” document is based on state and county contracts, community need and utilization of appropriate resources. The State General Fund Final Report is presented annually to the State EMS Authority and the JPA Governing Board to report progress, identify problems and make recommendations for the future.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

Pending the approval of the 1999 North Coast EMS System Plan, the agency will use the document to meet system needs, and thereafter will annually update the EMS System Plan as part of the General Fund contract with SEMSA.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**Reference:**

HSC Division 2.4, Chapter 4: Agency Administration, §1797.254 – Annual submission of the EMS System Plan.

**MINIMUM STANDARD:**

## 1.07 - Trauma Planning\*

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

**RECOMMENDED GUIDELINE:**

## 1.07 - Trauma Planning\*

“The local EMS agency should designate appropriate facilities or execute agreements with trauma facilities in other jurisdictions.”

**CURRENT STATUS:**

North Coast EMS meets this standard, and the recommended guideline is largely inapplicable to the region. Reciprocity agreements have been executed with surrounding LEMSAs which allow utilization of their designated trauma system. With SEMSA special project support, North Coast EMS and the EMS community previously designed and implemented a Rural Trauma Program to develop a rural alternative to a “trauma center” based system. Utilizing a prehospital pre-warning system, emergency department trauma teams at five of eight regional hospitals, and a quality improvement effort, North Coast EMS demonstrated higher than expected major trauma patient survival outcomes relative to norms expected from the Major Trauma Outcome Study (MTOS). An article was published in the *Journal of Trauma* in March, 1994.

In 1995, a subsequent Rural/Urban Trauma Study was funded by SEMSA to compare survival outcome in two trauma centers in southern California relative to all eight hospitals in the North Coast EMS region. Survival outcome data were uniformly collected by trained personnel for all major trauma patients arriving at hospitals included in the study between September 1, 1995 and September 31, 1996. Preliminary results indicate that despite significantly different population characteristics, survival outcome is statistically equivalent, which indicates that for our rural, low volume, predominantly blunt injury population, we do as well as can be expected relative to MTOS norms.

North Coast EMS meets or exceeds the national standard for outcome survival of major trauma patients. Specifically, trauma centers have not been designated and a formal Trauma System Plan has not been adopted or approved by the State EMS Authority for this region.

**COORDINATION WITH OTHER EMS AGENCIES:**

The Rural Trauma Program was conducted with input from: general and orthopedic surgeons, neurosurgical physicians, the Trauma Task Force, EMCCs and MACs, participating hospital and provider representatives, and interested others. The Rural/Urban Trauma Study included these participants and representatives from Harbor-UCLA Medical Center, Harbor-UCLA Research and Education Institute, UCLA Medical Center, California EMS Authority, Los Angeles County EMS, local trauma contractors, and others.

**NEED(S):**

- North Coast EMS needs to complete and publish results of the Rural/Urban Trauma Study; and

- North Coast EMS needs to evaluate the applicability of the new state trauma regulations to the region and promote adoption as needed.

**OBJECTIVE(S):**

- North Coast EMS will complete and publish results of the Rural/Urban Trauma Study; and
- North Coast EMS will evaluate the applicability of the new state trauma regulations to the region and promote adoption as needed.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short-range.

Reference:

HSC Division 2.4, Chapter 4: Agency Administration, §1797.257 – Submission of trauma care system plan, and §1797.258 – Annual trauma care system plan update.

**MINIMUM STANDARD:**

## 1.08 - ALS Planning\*

“Each local EMS agency shall plan for eventual provision of advanced life support services throughout its jurisdiction.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies, procedures, and participation agreements with all Limited Advanced Life Support (LALS) and Advanced Life Support (ALS) service providers, consistent with California state laws and guidelines. These policies, procedures, and participation agreements contain the provisions and guidelines for LALS and ALS service providers located in the North Coast EMS region.

All transporting providers ensure full-time LALS or ALS coverage, with a few exceptions in Lake County (i.e., Middletown, Lakeshore, and Clearlake Oaks Fire Districts are part-time only). Several non-transporting fire or volunteer services are part-time LALS or ALS providers (i.e. Upper Lake, Loleta, Shelter Cove and Orleans Fire Departments, and Southern Trinity Area Rescue).

**COORDINATION WITH OTHER EMS AGENCIES:**

Participation agreements are executed with all part-time or full-time LALS and ALS service providers.

**NEED(S):**

All transporting provider services which do not currently provide full-time LALS or ALS should determine whether or not a full-time commitment is possible. If not, at minimum, early defibrillation and use of the Combitube should be available full-time by EMT-Is who transport when LALS and ALS is not available. Ultimately, all first responder services throughout the region should be early defibrillation wherever and whenever LALS or ALS staff are not immediately available.

**OBJECTIVE(S):**

North Coast EMS will continue development and/or revision of the LALS and ALS policies, procedures and the LALS and ALS service provider participation agreements, as needed. The agency will also work to promote a full-time LALS and ALS commitment for all transporting providers within the region (or at minimum, early defibrillation and use of the Combitube), and early defibrillation for all first responder services where and when this level of response is not currently available.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Assess potential for transporting provider full-time LALS/ALS or defibrillation/Combitube and first responder defibrillation/airway commitment.

Long range: Promote implementation of these lifesaving procedures throughout the region.

Reference:

HSC Division 2.5, Chapter 4: Agency Administration, §1797.206 -- Implementation of ALS and LALS systems.

**MINIMUM STANDARD:**

1.09 - Inventory of Resources

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

**CURRENT STATUS:**

North Coast EMS meets this standard. The last comprehensive resource directory developed by this agency, which included a detailed inventory, was 1990. Currently, North Coast EMS has completed the numerous tables covering EMS resources and operations as part of this EMS System Plan. This document provides detailed information regarding personnel, vehicles and facilities within the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Resource and operations inventories need to be completed annually.

**OBJECTIVE(S):**

North Coast EMS will update resource and operations inventories annually.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**MINIMUM STANDARD:**

## 1.10 - Special Populations

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

**RECOMMENDED GUIDELINE:**

## 1.10 - Special Populations

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

**CURRENT STATUS:**

North Coast EMS currently meets the standard and recommended guideline and has identified and served population groups served by the EMS system which require specialized services. These include children, handicapped, elderly populations. The EMS for Children special project has addressed pediatric patient care needs. The Early Defibrillation program (and ALS cardiac scope of practice) and a thrombotic pre-warning program have been developed primarily for the elderly. Management of other specialized groups (e.g., handicapped) is taught in approved training or continuing education courses for prehospital personnel, or as part of the orientation program conducted by ambulance services for new employees.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED:**

Standardized instructional guidelines for pediatric, geriatric, and handicapped patients are desirable. Methods are needed to facilitate communication for first responder and transport services routinely responding to non-English speaking communities (e.g., H'mong and Spanish-speaking).

**OBJECTIVE(S):**

North Coast EMS will encourage SEMSA to assess the need for standardization of instruction, develop guidelines if needed, and promote communications with non-English speaking patients.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 1.11 - System Participants

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

**RECOMMENDED GUIDELINE:**

## 1.11 - System Participants

“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:**

North Coast EMS currently meets the standard and recommended guideline and has developed policies, procedures, contracts, and other documents outlining the roles and responsibilities of system participants consistent with California state laws and guidelines. Participation agreements are in place with first responder and early defibrillation service providers, LALS and ALS service providers, and base, alternative base and receiving hospitals. The agency has an extensive training and continuing education program approval process, has standardized protocols for all certification levels, and a comprehensive Continuous Quality Improvement (CQI) program. In addition, North Coast EMS has designated the following: Emergency Medical Dispatch (EMD) providers, AED providers, LALS and ALS providers, base hospitals, alternative base hospitals, and Emergency Departments Approved for Pediatrics (EDAPs). Site visit evaluations are conducted periodically of all designated ALS providers, base hospitals, EDAPs, and approved training programs: EMT-I, EMT-II, paramedic, MICN, and Continuing Education (CE) Programs. Exclusive operating areas, however, are not designated in our region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

The base hospital site visit survey tools need to be updated to reflect new standards and system changes.

**OBJECTIVE(S):**

North Coast EMS will update the base hospital site visit survey tools.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

## Regulatory Activities

### MINIMUM STANDARD:

#### 1.12 - Review and Monitoring

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

### CURRENT STATUS:

North Coast EMS currently meets this standard and provides several methods for review and monitoring of EMS system operations. The Prehospital Care Report Data System (PCR-DS) program is one tool for monitoring EMS system operations. The agency, base hospitals and providers utilize the PCR-DS to generate audit screens and other reports designed to help identify system trends and patient care problems.

All complaints or problems identified regarding patient care, training, or system operations are investigated through a formal disclosure protected system involving due process, confidentiality and patient protection. Remediation and/or disciplinary action can follow. Annual reports are generated and submitted to the State EMS Authority specific to the Early Defibrillation program and ALS operations. North Coast EMS also conducts periodic site visit evaluations of LALS and ALS service providers, base and alternative base hospitals, Emergency Departments Approved for Pediatrics, and approved training and CE programs.

On the state level, North Coast EMS is participating in the Mt. Valley “EMS System Evaluation” special project to develop clinical indicators and utilize the Rapid Cycle Improvement Program.

### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

### NEED(S):

- Special studies need to be designed to routinely measure compliance with expected system standards and survival outcome;
- Statewide EMS system evaluation criteria need to be developed. This should include development of improved data systems which link prehospital and hospital outcome data; and
- EMS evaluation of drills by pre-hospital personnel.

### OBJECTIVES:

- North Coast EMS will continue to work with the state (SEMSA, EMSAAC, EMDAC and Commission) to design and participate in special studies to routinely measure compliance with expected system standards and survival outcome, including cardiac arrest, major trauma, pediatric, geriatric and medical patients;
- North Coast EMS will continue to encourage and participate in the development of statewide EMS system evaluation criteria, and will encourage the effective application of data and research to the EMS decision-making process; and

- North Coast EMS will participate as evaluators in drills by prehospital personnel.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**References:**

North Coast EMS Policies # 2402 - # 2404: Prehospital Care Records, and Policies # 2100 - # 2110: Quality Assurance.

**MINIMUM STANDARD:**

1.13 - Coordination

“Each local EMS agency shall coordinate EMS system operations.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies and procedures to coordinate EMS system operations. North Coast EMS staff participate at county EMCC, MAC, fire chiefs’ and hospital council meetings to assist with coordination of the EMS system.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEEDS:**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

Reference:

HSC 2.5, Chapter 4: Local Administration, §1797.252 – Coordination of EMS system.

**MINIMUM STANDARD:**

## 1.14 - Policy and Procedures Manual

“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, ambulance services, and hospitals) within the system.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed a North Coast EMS Policies and Procedures Manual which is available to all EMS system providers. The contents of the manual are continuously being reviewed and revised to enhance the regional EMS system, consistent with California state laws and regulations. Also, those policies and procedures relevant to BLS personnel are distributed to local first responder agencies.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 1.15 - Compliance With Policies

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and regularly reviews and monitors the functions within the region to ensure compliance with the system policies. Furthermore, North Coast EMS QA/CQI policies have been developed to provide a mechanism for incident reporting, problem identification, and system monitoring. If North Coast EMS sees or is informed that a problem exists, the agency notifies involved parties and acts to resolve issues. After review, notification, and necessary remediation, North Coast EMS notifies SEMSA, as necessary.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

All system participants should be encouraged to use the mechanism established in the QA/CQI policies for system improvement.

**OBJECTIVE(S):**

North Coast EMS will continue reviewing, monitoring and assuring compliance with regional policies to improve services and enhance the CQI system, and will encourage system participants to use the mechanism established in the QA/CQI policies for system improvement.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

## Reference:

North Coast EMS Policies # 2100 -- # 2110: Quality Assurance Policies.

## System Finances

### MINIMUM STANDARD:

#### 1.16 - Funding Mechanism

“Each local EMS agency shall have a funding mechanism which is sufficient to ensure its continued operation and shall maximize use of its Emergency Medical Services fund.”

### CURRENT STATUS:

North Coast EMS currently meets this standard. The agency’s State General Fund allocation and local matching dollars cover the agency’s core functions as delegated by JPA member counties and State EMS contractual requirements. Local funds are comprised of County fiscal contributions, County SB612 funds, a Bertha Russ Lytel Foundation grant and various fees.

### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

### NEED(S):

As stated under standard 1.04, North Coast EMS needs to maintain adequate funding for the Regional Medical Director. It is essential that the JPA member counties fulfill their obligation to meet the required match if the Bertha Russ Lytel Foundation fund continues to decrease in the future as expected.

### OBJECTIVE(S):

North Coast EMS will obtain the required state general fund match from JPA member counties and will secure sufficient local funding to continue Regional Medical Director services.

### TIME FRAME FOR MEETING OBJECTIVE(S):

Long range.

## Medical Direction

### MINIMUM STANDARD:

#### 1.17 - Medical Direction\*

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

### CURRENT STATUS:

North Coast EMS currently meets this standard and has planned for medical direction within the EMS system. The agency has identified (and participation agreements define) the optimal number and role of base and alternative base hospitals and the roles, responsibilities, and relationships of prehospital and hospital providers. There is one designated base hospital in Del Norte County, there are three in Humboldt County (plus one alternative base and one receiving hospital) and two in Lake County.

### COORDINATION WITH OTHER EMS AGENCIES:

In 1988, the JPA Governing Board held public meetings attended by hospital representatives regarding the optimal number and designation of base and alternative base hospitals.

### NEED(S):

North Coast EMS agency staff needs to evaluate and recommend to the JPA Governing Board (and the JPA Governing Board needs to determine) whether General Hospital, which is currently interested in becoming a base hospital, should do so. If General Hospital does become a second base hospital in Eureka, policies and protocols regarding base hospital communications will need to be developed.

### OBJECTIVE(S):

North Coast EMS will carry out the decision of the JPA Governing Board regarding General Hospital as instructed.

### TIME FRAME FOR MEETING OBJECTIVE(S):

Short range.

### References:

HSC Division 2.4, Chapter 4: Local Administration, §1797.220 – Establishment of medical control policies and procedures by local EMS agency.

North Coast EMS Policy # 2102: Medical Control Policy.

**MINIMUM STANDARD:**

1.18 - QA/QI

“Each local EMS agency shall establish a quality assurance/quality improvement program. This may include use of provider base programs which are approved by the local EMS agency and which are coordinated with other system participants.”

**RECOMMENDED GUIDELINE:**

1.18 - QA/QI

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

**CURRENT STATUS:**

North Coast EMS currently meets the minimum standard and recommended guideline. The agency has developed QA/CQI policies and standards, which include use of provider base programs approved by North Coast EMS and which are coordinated with other system participants. All ALS providers are required to have an approved CQI Program. CQI programs are evaluated and approved by North Coast EMS through provider site visits.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEEDS:**

- Standardized QA/CQI program requirements for all levels are needed statewide; and
- All regional system participants should be encouraged to use the tools developed and outlined in the North Coast EMS QA/CQI policies.

**OBJECTIVE(S):**

- North Coast EMS will encourage SEMSA to standardize CQI program requirements; and
- North Coast EMS will encourage all system participants to use the tools developed and outlined in the North Coast EMS QA/CQI policies.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Encourage all system participants to use the tools developed and outlined in the North Coast EMS QA/CQI policies.

Long range: Encourage SEMSA to standardize QA/CQI program requirements.

**Reference:**

North Coast EMS Policies # 2100 -- # 2110: Quality Assurance Policies.

**MINIMUM STANDARD:**

1.19 - Policies, Procedures, Protocols

“Each local EMS agency shall develop written policies, procedures, 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, and
- j) local scope of practice for prehospital personnel.”

**RECOMMENDED GUIDELINE:**

1.19 - Policies, Procedures, Protocols

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and the recommended guideline. The agency has developed numerous written policies, procedures and protocols regarding triage, treatment, medical dispatch, transport, on-scene treatment priority times, transfer of emergency patients, standing orders, base hospital contact, on-scene physicians and other medical personnel, and local scope of practice for prehospital personnel (items a-j). The agency uses the PCR program to flag extended on-scene treatment times.

North Coast EMS has recognized the Advanced Medical Priority Dispatch System from Medical Priority Consultants, Inc., as the Emergency Medical Dispatch (EMD) system for use in our region. The system includes an EMD program and instruction, as well as continuing education and continuous quality improvement components.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard/guideline.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

1.20 - DNR Policy

“Each local EMS agency shall have policy regarding “Do Not Resuscitate (DNR)” situations in the prehospital setting, in accordance with the EMS Authority’s DNR guidelines.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed a written DNR policy in accordance with SEMSA DNR guidelines. The SEMSA DNR guidelines are distributed to all North Coast EMS-approved prehospital care training programs to incorporate into their curriculum.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

Reference:

North Coast EMS Policy # 2307: Do Not Resuscitate.

**MINIMUM STANDARD:**

1.21 - Determination of Death

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed written Determination of Death policies.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Current coroners in each county in the region need to review the agency’s Determination of Death policies; and
- Statewide standards are needed to promote standardized determination of death by prehospital personnel.

**OBJECTIVE(S):**

- North Coast EMS will send the agency’s Determination of Death policies to coroners in each county in the region for review; and
- North Coast EMS will encourage SEMSA to develop a statewide guideline for determination of death.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Send the Determination of Death policies to each coroner for review.

Long range: Encourage the SEMSA to develop a statewide guideline.

**References:**

North Coast EMS Policy # 2304: BLS Personnel – Determination of Death.

North Coast EMS Policy # 2305: LALS/ALS Personnel – Determination of Death.

**MINIMUM STANDARD:**

1.22 - Reporting of Abuse

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

**CURRENT STATUS:**

North Coast EMS meets this standard. It is required by law that providers have a mechanism for reporting child abuse, elder abuse, and suspected SIDS deaths. All providers have Department of Justice forms for reporting abuse and all training programs include the SEMSA mandatory SIDS curriculum and instruction on child and elder abuse.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

There may be a need for written policies and procedures for mandated reporting by prehospital providers in the North Coast EMS region.

**OBJECTIVE(S):**

North Coast EMS will evaluate policies and procedures for mandated reporting and determine the need to write policies for prehospital providers in the region.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**MINIMUM STANDARD:**

1.23 - Interfacility Transfer

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies regarding the scope of practice, procedures, responsibilities and standards for BLS and ALS prehospital personnel during interfacility transfers.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**References:**

- North Coast EMS Policy # 2208: Interfacility Transfer Procedure
- North Coast EMS Policy # 5102: EMT-I Scope of Practice
- North Coast EMS Policy # 5303: EMT-II Scope of Practice
- North Coast EMS Policy # 5402: Paramedic Scope of Practice

**Enhanced Level: Advanced Life Support**

**MINIMUM STANDARD:**

1.24 - ALS Systems

“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.”

**RECOMMENDED GUIDELINE:**

1.24 - ALS Systems

“Each local EMS agency, based on state approval, should, when appropriate, develop exclusive operating areas for ALS providers.”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and has developed policies, procedures and participation agreements with all LALS and ALS service providers consistent with California state laws and guidelines. These policies, procedures and participation agreements contain the provisions and guidelines for LALS and ALS services throughout the North Coast EMS region.

The recommended guideline is not applicable to the region at this time. Exclusive operating areas for ALS providers are neither developed nor in use in the North Coast EMS region at this time. For Del Norte and Humboldt Counties there are zones specified in the ambulance ordinances, and each zone has one provider.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 1.25 - On-Line Medical Direction

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

**RECOMMENDED GUIDELINE:**

## 1.25 - On-Line Medical Direction

“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, and
- c) the process for determining the need for in-house medical direction for provider agencies.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and recommended guideline. The agency has developed policies and procedures regarding on-line medical direction provided by a base or alternative base hospital physician or mobile intensive care nurse. In 1988 the JPA Governing Board identified the optimal base hospital configuration and a process for selecting base hospitals (applied in Eureka). Agency protocols identify a process to determine the need for in-house medical direction for provider agencies.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

As stated in standard 1.17, EMS needs to evaluate and recommend to the JPA Governing Board (and the Board needs to determine) whether General Hospital, which is currently interested in becoming a base hospital, should do so. If General Hospital does become a second base hospital in Eureka, policies and protocols regarding base hospital communications will need to be developed.

**OBJECTIVE(S):**

North Coast EMS will carry out the decision of the JPA Governing Board regarding General Hospital as instructed.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

## Enhanced Level: Trauma Care System

### MINIMUM STANDARD:

#### 1.26 - Trauma System Plan

“The local EMS agency shall develop a trauma care system plan, based on community needs and utilization of appropriate resources, 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.”

### CURRENT STATUS:

This standard is not applicable, since there is no trauma care system in the North Coast EMS region. With SEMSA special project support, North Coast EMS and the EMS community previously designed and implemented a Rural Trauma Program to develop a rural alternative to a “trauma center” based system. Utilizing a pre-hospital pre-warning system, emergency department trauma teams at five of eight regional hospitals, and a quality improvement effort, North Coast EMS demonstrated higher than expected major trauma patient survival outcomes relative to norms expected from the Major Trauma Outcome Study (MTOS). An article was published in the *Journal of Trauma* in March, 1994.

In 1995, a subsequent Rural/Urban Trauma Study was funded by State EMS Authority to compare survival outcome in two trauma centers in southern California relative to all eight hospitals in the North Coast EMS region. Survival outcome data were uniformly collected by trained personnel for all major trauma patients arriving at hospitals included in the study between September 1, 1995 and September 31, 1996. Preliminary results indicate that despite significantly different population characteristics, survival outcome is statistically equivalent, which indicates that for our rural, low volume, predominantly blunt injury population, we do as well as can be expected relative to MTOS norms.

North Coast EMS meets or exceeds the national standard for outcome survival of major trauma patients. Specifically, trauma centers have not been designated and a formal Trauma System Plan has not been adopted or approved by the State EMS Authority for the region.

### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

**NEED(S):**

- North Coast EMS needs to complete and publish results of the Rural/Urban Trauma Study; and
- North Coast EMS needs to evaluate the applicability of the new state trauma regulations to the region and promote adoption as needed.

**OBJECTIVE(S):**

- North Coast EMS will complete and publish results of the Rural/Urban Trauma Study; and
- North Coast EMS will evaluate the applicability of the new state trauma regulations to the region and promote adoption as needed.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**References:**

HSC Division 2.4, Chapter 4: Agency Administration, §1797.257 – Submission of trauma care system plan, and §1797.258 – Annual trauma care system plan update.

**Enhanced Level: Pediatric Emergency Medical and Critical Care System****MINIMUM STANDARD:**

## 1.27 - Pediatric System Plan

“The local EMS agency shall develop a pediatric emergency medical and critical care system plan, based on community needs and utilization of appropriate resources, 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.”

**CURRENT STATUS:**

North Coast EMS partially meets this standard. Pediatric emergency medical and critical care has been addressed through the SEMSA EMSC special project, which included three components: prehospital, in-hospital, and injury prevention. The in-hospital portion of the project addressed issues such as Emergency Department Approved for Pediatrics (EDAP), interfacility transfers, and staff education. EDAP was established in the North Coast EMS region in 1989, with the goal of improving pediatric care by requiring minimum education standards for physicians and ED staff, minimum safe staffing levels, minimum equipment availability, and a pediatric CQI program. These minimum standards were agreed to by participating hospitals and are monitored by periodic site visit evaluations. All hospitals in the region are formally designated as EDAPs.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

### Enhanced Level: Exclusive Operating Areas

#### MINIMUM STANDARD:

##### 1.28 - EOA Plan

“The local EMS agency shall develop, and submit for state approval, a plan based on community needs and utilization of appropriate 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 of assigning roles to system participants, including a competitive process for implementation of exclusive operating areas.”

#### CURRENT STATUS:

There are no exclusive operating areas in use in the North Coast EMS region.

#### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

#### NEED(S):

No needs at this time.

#### OBJECTIVE(S):

None.

#### TIME FRAME FOR MEETING OBJECTIVE(S):

Not applicable.

### Local EMS Agency

**MINIMUM STANDARD:**

2.01 - Assessment of Needs

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has completed several surveys throughout the region to assess the needs regarding personnel and training. Furthermore, students are required to complete surveys evaluating the instruction received in the training program. Results of regional surveys are used to guide policy and procedural changes to improve operations and the EMS system. The results of the training program surveys are compiled and forwarded to the training institutions to improve regional training and to identify training and CE needs and other EMS system needs.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

North Coast EMS needs to continue to use surveys to acquire feedback regarding regional training needs.

**OBJECTIVE(S):**

North Coast EMS will continue to solicit public input from regional participants through assessment surveys and, depending on results of future assessment surveys, make needed changes in policies and procedures relative to training to improve the EMS system.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 2.02 - Approval of Training

“The EMS Authority and/or local EMS agencies shall have a mechanism to approve EMS education programs which require approval (according to regulations) and shall monitor them to ensure that they comply with state regulations.”

**CURRENT STATUS:**

North Coast EMS meets this standard, and has developed policies regarding required training program approval of first responder, EMT-I, early defibrillation, EMT-II, EMT-P and MICN training programs, consistent with state laws and regulations. Agency staff meet with each of the approved training program staff to discuss California state laws and regulations, North Coast EMS policies and procedures, and expectations for training. At a minimum, North Coast EMS staff monitor each training program once during the program approval period, followed by written evaluation results. North Coast EMS also approves CE providers following the SEMSA CE Guidelines.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 2.03 - Personnel

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

**CURRENT STATUS:**

North Coast EMS meets this standard and has developed policies which govern accreditation, authorization, and certification of prehospital medical personnel. The agency conducts certification reviews in accordance with California state regulations. The North Coast EMS Incident Reporting and CQI policies include a process for prehospital providers to identify and notify the local EMS agency of unusual occurrences which could impact EMS personnel certification.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Chapter 3 of Title 22 of the California Code of Regulations needs to be revised to make EMT-II laws consistent with laws for other levels of care;
- MICN and first responder laws should be added to Title 22 to promote consistency throughout California.

**OBJECTIVE(S):**

- North Coast EMS will continue to encourage revision of Chapter 3 of Title 22 to make EMT-II laws more consistent with laws for other levels of care; and
- Will encourage the addition of laws governing MICN and first responder levels of care.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

## Dispatchers

### MINIMUM STANDARD:

#### 2.04 - Dispatch Training

“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.”

### RECOMMENDED GUIDELINE:

#### 2.04 - Dispatcher Training

“Public safety answering point (PSAP) operators with medical dispatch responsibilities and all medical dispatch personnel (both public and private) should be trained and tested in accordance with the EMS Authority’s Emergency Medical Dispatch Guidelines.”

### CURRENT STATUS:

Dispatch agencies in the region meet this standard and partially meet the recommended guideline. North Coast EMS currently relies on local dispatch agencies to provide emergency medical dispatch training. With SEMSA special project assistance, North Coast EMS has sponsored several local Medical Priority, Inc. EMD training classes. Four of the seven primary PSAPs in the region, one secondary PSAP, and at least two ambulance dispatch centers use the Medical Priority, Inc. EMD Program.

### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

### NEED(S):

- State EMS regulations are needed regarding implementation of dispatch agency EMD programs;
- North Coast EMS needs a method of funding for ongoing EMD training and recertification.

### OBJECTIVE(S):

- North Coast EMS encourages the SEMSA to develop regulations tailored to the dispatch needs in rural areas;
- North Coast EMS will conduct future EMD classes as funding allows, or will help coordinate future classes.

### TIME FRAME FOR MEETING OBJECTIVE(S):

Long range.

### First Responders (non-transporting)

#### MINIMUM STANDARD:

##### 2.05 - First Responder Training

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

#### RECOMMENDED GUIDELINE:

##### 2.05 - First Responder Training

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

“At least one person on each non-transporting EMS first response unit should be currently certified at the EMT-I level and have available equipment commensurate with such scope of practice.”

#### CURRENT STATUS:

Each of the private ambulance providers and Fire Districts in the region meet this minimum standard, per Title 22. The only non-transporting EMS first response units that North Coast EMS designates are those that staff AED personnel, EMT-IIs, or paramedics. When Title 22 was revised to include the requirement that at least one person on each non-transporting EMS first response unit shall have been trained to administer first aid and CPR, North Coast EMS distributed this information to the appropriate agencies.

Ambulance providers in the North Coast EMS region partially meet the recommended guidelines. Although North Coast EMS encourages the use of early defibrillation, not all non-transporting EMS first response units in our region own defibrillators at this time. In past years, North Coast EMS obtained local grant funds to assist some local fire departments to purchase defibrillators and more recently supported local fire departments in obtaining grant funds to purchase defibrillators. North Coast EMS has developed policies governing training and accreditation of EMT-Is and first responders in the use of early defibrillation. Currently, there are 100 EMT-I and 27 public safety personnel certified to provide defibrillation in this region.

While most regional first responder agencies have at least one EMT-I who works or volunteers, quite a few agencies are strictly volunteer and do not require EMT-I certification. It would be difficult under these circumstances to require at least one person on each non-transporting EMS first response unit be currently certified at the EMT-I level and have available equipment commensurate with such scope of practice.

#### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

**NEED(S):**

- Additional first responder agencies need to secure funding to obtain defibrillators, and there is a need to expand the availability of first responder and EMT AED training; and
- First aid, first responder and EMT-I trained individuals with AED accreditation should not be required to do more to maintain their accreditation than the layperson performing defibrillation.

**OBJECTIVE(S):**

- North Coast EMS will continue supporting first responder agencies in securing funding to obtain defibrillators and in expanding the availability of AED training and accreditation of EMT-Is and first responders; and
- North Coast EMS encourages SEMSA to revise Title 22, Chapters 1.5 and 2 regarding AED accreditation so first aid, first responder and EMT-I trained individuals are not required to do more to maintain accreditation than the layperson performing defibrillation.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Support first responder agencies in securing funding to obtain defibrillators and encourage training and accreditation of EMT-Is and first responders in the use of early defibrillation.

Long range: Encourage SEMSA to revise Title 22, Chapters 1.5 and 2 regarding accreditation maintenance.

**MINIMUM STANDARD:**

2.06 - Response

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

**CURRENT STATUS:**

North Coast EMS meets this standard and encourages all public safety agencies who respond to medical emergencies provide Department of Transportation first responder or EMT-I level of care. Additionally, North Coast EMS has developed and executed written participation agreements with participating first responder agencies outlining minimum care and equipment requirements. Currently, 39 first responder agencies in the region participate in the program. Two industrial first aid teams have written participation agreements with North Coast EMS for initial response.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

North Coast EMS needs to encourage additional public safety agencies and identified industrial first aid teams to participate in the system by signing agreements for first responder level of care, at minimum.

**OBJECTIVE(S):**

North Coast EMS will encourage all public safety agencies providing response to medical emergencies to sign North Coast EMS written participation agreements and provide first responder level care, at a minimum.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

2.07 - Medical Control

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

**CURRENT STATUS:**

North Coast EMS meets this standard and has developed written BLS treatment protocols signed by the Regional Medical Director. All North Coast EMS first responder and EMT-I level policies are distributed to EMCCs, MACs, base and alternative base hospitals, providers, health officers, JPA members, and first responder agencies for review and comment. Non-transporting LALS/ALS personnel are designated by this agency and are under specific medical control per state laws and regulations.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Transporting Personnel****MINIMUM STANDARD:**

2.08 - EMT-I Training

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

**RECOMMENDED GUIDELINE:**

2.08 - EMT-I Training

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

**CURRENT STATUS:**

North Coast EMS meets this minimum standard except in the cases that are exclusions by law (i.e. Vehicle Code allows a driver to obtain EMT-I certification within one year of employment and AB2635 which allows rural, volunteer ambulances to run without EMT-I personnel under certain conditions). It should be noted that counties may also have their own restrictions stated in ambulance ordinances; for example, Humboldt County does not allow for the one year grace period for drivers to obtain EMT-I certification. All personnel must be EMT-Is at the time of hire.

North Coast EMS partially meets the recommended guideline. If ALS personnel are not available, North Coast EMS does not require, but rather encourages, at least one person on each emergency medical transport vehicle be trained to provide defibrillation.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

At least one person on each non-ALS emergency medical transport vehicle should be trained to provide defibrillation.

**OBJECTIVE(S):**

North Coast EMS will develop policy requiring that at least one person on each non-ALS emergency medical transport unit should be trained and certified to provide defibrillation.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

## Hospital

### MINIMUM STANDARD:

#### 2.09 - CPR Training

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

### CURRENT STATUS:

North Coast EMS currently meets this standard. “CPR for the Health Care Professional” is a required part of training for all first responder and EMT-I programs. CPR training is a prerequisite for entry into EMT-II and Paramedic training programs. Additionally, MICNs are required to be trained in Advanced Cardiac Life Support (ACLS), which includes CPR. North Coast EMS does not have jurisdiction over other non-prehospital health personnel providing direct emergency care, but encourages current CPR certification whenever possible.

### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

### NEED(S):

None at this time.

### OBJECTIVE(S):

None.

### TIME FRAME FOR MEETING OBJECTIVE(S):

Not applicable.

**MINIMUM STANDARD:**

## 2.10 - Advanced Life Support

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

**RECOMMENDED GUIDELINE:**

## 2.10 - Advanced Life Support

“All emergency department physicians should be certified by the American Board of Emergency Medicine.”

**CURRENT STATUS:**

North Coast EMS encourages and assumes that all emergency department (ED) physicians and registered nurses (RNs) licensed in the state of California who provide direct emergency patient care are trained in ALS. Many of the ED physicians in the region are certified by the American Board of Emergency Medicine and most ED RNs are ACLS certified. However, regional hospitals are in charge of staffing and therefore determine whether they desire board certification.

All hospitals in the region are EDAP. Standards for level I EDAP for non-metropolitan areas require at least 50% of ED physician coverage to be qualified specialists in Emergency Medicine, Pediatrics, or Family Medicine, and it is strongly recommended that all ED physicians complete and maintain ACLS, PALS/APLS and ATLS. At least one RN per shift to have completed 8 hours CE in pediatric emergency or critical care within the past two years, and at least one RN in-house, on-duty should complete PALS/APLS, or other equivalent pediatric emergency training.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

All ED physicians should be certified by the American Board of Emergency Medicine. Of all Emergency Department staff, at least the prehospital care Medical Director should be certified.

**OBJECTIVE(S):**

North Coast EMS will continue to recommend that all ED physicians be certified by the American Board of Emergency Medicine.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**Enhanced Level: Advanced Life Support**

**MINIMUM STANDARD:**

2.11 - Accreditation Process

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies regarding the paramedic accreditation process, which includes a defined orientation to the system, training and testing on the North coast EMS-approved expanded scope of practice, and a minimum of five patient contacts evaluated by a North Coast EMS-approved Field Training Officer (FTO).

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

None at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

2.12 - Early Defibrillation

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies governing local accreditation of public safety and other basic life support personnel in the use of early defibrillation.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- At least one person on each non-ALS emergency medical transport vehicle should be trained to provide defibrillation; and
- North Coast EMS needs to consider implementation of a physician-prescribed AED Program to train more family-members of high risk patients in AED.

**OBJECTIVE(S):**

- North Coast EMS will develop policy requiring that at least one person on each non-ALS emergency medical transport unit should be trained and certified to provide defibrillation; and
- North Coast EMS will consider implementation of a physician-prescribed AED Program to train more family members of high risk patients in AED.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

2.13 - Base Hospital Personnel

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed hospital participation agreements, policies and procedures requiring that all base and alternative base hospital personnel who provide medical direction to prehospital personnel are knowledgeable about local EMS agency policies and procedures and radio communication techniques.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Hospitals need to adopt an interfacility Med-Net communication protocol and exercise the system on a routine basis.

**OBJECTIVE(S):**

North Coast EMS and Humboldt County Public Health will work with hospitals to establish a protocol requiring routine use of Med-Net radios for interfacility communications to assure preparedness during a communication system outage.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

## Communications Equipment

**MINIMUM STANDARD:****3.01 - Communication Plan\***

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

**RECOMMENDED GUIDELINE:****3.01 - Communication Plan\***

“The local EMS agency’s communications plan should consider the availability and use of satellites and cellular telephones.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies and procedures regarding communications. All agency participation agreements with hospitals and ambulance providers specify communications requirements, including equipment requirements for LALS/ALS service providers. The regional hospitals are required to maintain their own Emergency Department Med-Net radios; prehospital providers maintain their own mobile and portable Med-Net radios; and each county provides maintenance for the Med-Net repeaters located within the county. Hospitals do not have protocols for inter-facility communication via Med-Net and do not exercise the capability to conduct interfacility communications regularly.

North Coast EMS does not require, but rather encourages, the use of cellular telephones as a back-up to the Med-Net because there are many parts of the region that do not have reliable cellular coverage. Satellite communication is not financially feasible at this time.

**COORDINATION WITH OTHER EMS AGENCIES:**

All North Coast EMS Policies and Procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies.

**NEED(S):**

- The North Coast EMS region needs reliable and affordable communications technology. The current UHF Med-Net system was installed in 1978 with a projected life expectancy of 11 years; the system is now approaching 21 years of use with no major repair or replacement plan. The current system does not offer the technical performance of modern radio equipment, and does not offer a path for upgrading that may meet upcoming FCC requirements.
- Hospitals need to adopt an interfacility Med-Net communication protocol and exercise the system on a routine basis.

**OBJECTIVES:**

- North Coast EMS will work with each county in the region to coordinate a program to assess, plan and replace repeaters. The agency has established a trust fund and has submitted funding proposals to the OSHPD Rural Health Development Grants Program for \$50,000 and to the Office of Traffic Safety for \$66,000 to assist with the replacement program.
- North Coast EMS and Humboldt County Public Health will work with hospitals to establish a protocol requiring routine use of Med-Net radios for interfacility communications to assure preparedness during a communication system outage.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

References:

North Coast EMS Policy # 2204:	LALS Supply and Equipment List
North Coast EMS Policy # 2205:	Paramedic Standard and Equipment Supply List
North Coast EMS Policy # 2508:	Med-Net Communications Guidelines

**MINIMUM STANDARD:**

## 3.02 - Radios

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

**RECOMMENDED GUIDELINE:**

## 3.02 - Radios

“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) communication.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and the recommended guideline, and has developed policies and procedures regarding communications. All emergency medical transport vehicles and non-transporting advanced life support responders have two-way radio communications equipment which complies with those policies, including providing for dispatch and ambulance-to-hospital communication. The required equipment is inspected through periodic provider and base hospital site visits performed by North Coast EMS staff. In addition, all emergency medical transport vehicles have two-way radio communications equipment which complies with the local EMS communications policies and which provides for vehicle-to-vehicle (including both ambulances and non-transporting first responder units) communication. Hospitals do not have protocols for inter-facility communication via Med-Net and do not exercise the capability to conduct interfacility communications regularly.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- The North Coast EMS region needs reliable and affordable communications technology. The current UHF Med-Net system was installed in 1978 with a projected life expectancy of 11 years; the system is now approaching 21 years of use with no major repair or replacement plan. The current system does not offer the technical performance of modern radio equipment, and does not offer a path for upgrading that may meet upcoming FCC requirements.
- The California Department of Forestry and Fire Protection (CDF) has stated that the use of telephone digital pagers for ambulance dispatch is problematic and should be replaced with voice paging to prevent possible delays at commercial paging companies and the risk that unavailable phone lines will disrupt paging capabilities.
- Hospitals need to adopt an interfacility Med-Net communication protocol and exercise the system on a routine basis.
- For daily operations, there should be a designated command frequency (e.g. Calcord) programmed into all ambulances for incident tactical use between ambulances and all first responders.

**OBJECTIVE(S):**

- North Coast EMS will work with each county on the region to coordinate a program to assess, plan and replace repeaters. The agency has established a trust fund and has submitted funding proposals to the OSHPD Rural Health Development Grants Program for \$50,000 and to the Office of Traffic Safety for \$66,000 to assist with the replacement program.
- CDF has stated that all ambulances should be dispatched by voice paging on a frequency directly transmitted by their dispatch center, and that all ambulance services should explore this.
- North Coast EMS and Humboldt County Public Health will work with hospitals to establish a protocol requiring routine use of Med-Net radios for interfacility communications to assure preparedness during a communication system outage.
- North Coast EMS will encourage Fire Chiefs, first responders and other emergency personnel to work together to designate one tactical command frequency.

**TIME FRAME FOR MEETING OBJECTIVES:**

Long range.

References:

North Coast EMS Policy # 2508: Med-Net Communications Guidelines

**MINIMUM STANDARD:**

**3.03 - Interfacility Transfer\***

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies requiring that all LALS and ALS transport vehicles have the ability to communicate with both the sending and receiving facilities. There are no emergency medical transport vehicles that are utilized solely for interfacility transfers in the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

All North Coast EMS Policies and Procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

Reference:

North Coast EMS Policy # 2508: Med-Net Communications Guidelines

**MINIMUM STANDARD:**

3.04 - Dispatch Center

“All emergency medical transport vehicles where physically possible (based on geography and technology), shall have the ability to communicate with a single dispatch center or disaster communications command post.”

**CURRENT STATUS:**

North Coast EMS currently relies on local agencies to meet their own communication needs, and emergency transport providers in the region meet this standard. Each provider communicates with a single dispatch center.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

3.05 - Hospitals

“All hospitals within the local EMS system shall (where physically possible) have the ability to communicate with each other by two-way radio.”

**RECOMMENDED GUIDELINE:**

3.05 - Hospitals

“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:**

The North Coast EMS region currently partially meets this minimum standard and meets the recommended guideline. All hospitals within the region have direct communication access (via ham radios or Med-Net) with all other hospital Emergency Departments; however the system is not exercised on a routine basis.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Emergency Department hospital staff should be instructed to use the Med-Net to communicate with other hospitals in case of disasters.
- Hospitals need to adopt an interfacility Med-Net communication protocol and exercise the system on a routine basis.

**OBJECTIVE(S):**

- North Coast EMS will encourage Emergency Department hospital staff to use Med-Net to communicate with other hospitals during disasters and other special events.
- North Coast EMS and Humboldt County Public Health will work with hospitals to establish a protocol requiring routine use of Med-Net radios for interfacility communications to assure preparedness during a communication system outage.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 3.06 - MCI/Disasters

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

**CURRENT STATUS:**

North Coast EMS and the member counties meet this minimum standard by having policies for MCI and disaster communications linkages in place. However, hospitals do not have protocols for inter-facility communication via Med-Net and do not exercise the capability to conduct interfacility communications regularly.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Hospitals need to adopt an interfacility Med-Net communication protocol and exercise the system on a routine basis.

**OBJECTIVE(S):**

North Coast EMS and Humboldt County Public Health will work with hospitals to establish a protocol requiring routine use of Med-Net radios for interfacility communications to assure preparedness during a communication system outage.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**Reference:**

North Coast EMS Policy # 2506: MCI Communication Plan

**Public Access****MINIMUM STANDARD:**

3.07 - 9-1-1 Planning/Coordination

“The local EMS agency shall participate in ongoing planning and coordination of the 9-1-1 telephone service.”

**RECOMMENDED GUIDELINE:**

3.07 - 9-1-1 Planning/Coordination

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

**CURRENT STATUS:**

The minimum standard and recommended guideline have been met. North Coast EMS staff attended initial meetings when 9-1-1 services were proposed for the region, but are not involved in the planning and coordination of the service at this time. The 9-1-1 planning and coordination activities are overseen in Lake County by the 9-1-1 committee and in Del Norte and Humboldt Counties by individual PSAPs. North Coast EMS supports and promotes enhanced 9-1-1 systems, which are currently in place throughout the region in all areas where this is feasible.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

More funds and staff are needed to allow for public information and education regarding the enhanced 9-1-1 telephone services.

**OBJECTIVE(S):**

North Coast EMS will provide public information and education regarding the enhanced 9-1-1 telephone services as funding allows.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range

**MINIMUM STANDARD:**

3.08 - 9-1-1 Public Education

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

**CURRENT STATUS:**

North Coast EMS meets this standard. The agency supports, encourages and provides public education, where appropriate, regarding the 9-1-1 system in the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

## Resource Management

**MINIMUM STANDARD:**

3.09 - Dispatch Triage

“The local EMS agency shall establish guidelines for proper dispatch triage which identifies appropriate medical response.”

**RECOMMENDED GUIDELINES:**

3.09 - Dispatch Triage

“The local EMS agency should establish a emergency medical dispatch priority reference system, including systematized caller interrogation, dispatch triage policies, and pre-arrival instructions.”

**CURRENT STATUS:**

The North Coast EMS region meets the standard and partially meets the recommended guideline. Traditionally, each dispatch center and response agency has developed their own dispatch triage systems regarding first responders. Within the region, every 9-1-1 medical aid call gets an ambulance. North Coast EMS, with State EMS Authority assistance, previously implemented the Medical Priority, Inc. EMD Program, which exceeds the recommended guideline. Of the nine PSAPs in the region, four primary and one secondary PSAP utilize this program.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

State EMD regulations are needed which are tailored to be feasible for rural communities and which encourage and support expansion and continuation of EMD programs.

**OBJECTIVE(S):**

North Coast EMS will encourage the adoption of standardized triage and state EMD regulations for rural communities.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 3.10 - Integrated Dispatch

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

**RECOMMENDED GUIDELINE:**

## 3.10 - Integrated Dispatch

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

**CURRENT STATUS:**

The North Coast EMS region meets this standard. Del Norte and Lake County both utilize central dispatch out of the Sheriff's Department. Humboldt County has six primary and one secondary PSAPs.

The recommended guideline is met. System-wide ambulance coverage is a county-retained function addressed in local ambulance ordinances. North Coast EMS currently relies on local ambulance agencies to maintain staffing levels with feedback from local first responders, base and alternative base hospital personnel, and by public comment. Some providers have built-in back-up coverage plans and will also use mutual aid when necessary to ensure coverage.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Humboldt County PSAPs may need to reconsider consolidation of PSAPs; and
- State EMSA needs to help fund the acquisition of fully integrated dispatch systems statewide.

**OBJECTIVE(S):**

- Humboldt County PSAPs should reconsider consolidation of PSAPs; and
- State EMSA should help fund the acquisition of fully integrated dispatch systems statewide.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 4.01 - Service Area Boundaries\*

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

**RECOMMENDED GUIDELINE:**

## 4.01 - Service Area Boundaries\*

“The local EMS agency should secure a county ordinance or similar mechanism for establishing emergency medical transport service areas (e.g., ambulance response zones).”

**CURRENT STATUS:**

This minimum standard is met, and is retained by the Counties of Del Norte, Humboldt, and Lake. Boundaries of emergency medical transportation service areas are defined in respective county ordinances.

The recommended guideline is partially met. With the exception of Lake County, traditional service boundaries were incorporated into county ambulance ordinances. In Lake County, boundaries for private providers are determined by the ambulance ordinance; public transport agency (Fire Districts) boundaries are determined by their Fire District boundaries. With no ambulance ordinance in place, service boundaries in southern Trinity County are determined by traditional service areas.

**COORDINATION WITH OTHER EMS AGENCIES:**

Since counties determine service boundaries, the greatest amount of coordination occurs directly between counties and ambulance service providers. The EMCC advises the Boards of Supervisors in each county within our region (except in Del Norte County, where the EMCC is inactive) on ambulance ordinances, and review operations of ambulance companies. North Coast EMS advises counties regarding ambulance ordinances and transport issues.

**NEED(S):**

- Lake County Fire Districts state that they need to create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport;
- Upon formation of the Fire District Joint Powers Entity, Lake County will need to amend the ambulance ordinance to apply to public agencies and will need to modify current permit requirements such as ambulance availability;
- Throughout the region, ambulance response zones need to be such that prompt and continuous coverage is ensured.

**OBJECTIVES:**

- Lake County Fire Districts will create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport;

- Lake County will amend its ambulance ordinance to apply to public agencies, and will modify permit requirements with respect to ambulance availability throughout the county; and
- North Coast EMS will consider assuming responsibility for approval and monitoring of emergency transport providers if counties wish to formally delegate and fund these functions.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Lake County.

Long range: North Coast EMS.

**References:**

Health and Safety Code §1797.274 – Duties of the EMCC

Health and Safety Code §1797.222 – Adoption of County Ordinances for Transport of Patients

**MINIMUM STANDARD:**

## 4.02 - Monitoring

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

**RECOMMENDED GUIDELINE:**

## 4.02 - Monitoring

“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:**

This minimum standard is met and the recommended guideline is partially met. Each of the counties in the North Coast EMS region has an ordinance in effect that provides a mechanism to permit and monitor emergency medical transportation services. Each of these ordinances supercedes any other local regulatory programs in existence in the county. Counties retain these permitting and monitoring functions through Health Departments and Health Officers in Humboldt and Lake Counties, and by the Board of Supervisors in Del Norte County .

In Lake County, public ambulances (Fire Districts) are not covered under the county ambulance ordinance, although Fire Districts are in compliance with LALS/ALS requirements.

North Coast EMS designates all LALS/ALS service providers, conducts site visits, approves provider quality improvement programs, and performs many other monitoring functions to ensure compliance with appropriate statutes, regulations, policies, and procedures. North Coast EMS does not monitor ordinance compliance.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Lake County Fire Districts state that they need to create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport;
- Upon formation of the Fire District Joint Powers Entity, Lake County will need to amend the ambulance ordinance to apply to public agencies, and will need to modify current permit requirements such as ambulance availability; and
- In Lake County, there is a need for additional monitoring, reporting and enforcement regarding ordinance compliance by permittee(s).

**OBJECTIVES**

- Lake County will create a joint powers entity which will act as a collective body to develop and enforce ambulance ordinance. and hence establish and ensure coverage, staffing patterns, response zones and times, and
- Lake County will amend its ambulance ordinance to apply to public agencies, and will modify its permit process to affect ambulance availability throughout the county;
- For Lake County, North Coast EMS will monitor ordinance compliance by permittee(s) to the extent feasible, using PCR and other data available to North Coast EMS, and alert designated County staff of the need for investigation or enforcement. If and when the fire services JPA is established and permitted by the County, it will be included in this monitoring and reporting; and
- North Coast EMS will consider assuming additional responsibility for approval and monitoring of emergency transport providers if Counties wish to formally delegate and fund these functions.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Lake County.

Long range: North Coast EMS.

**References:**

Del Norte County Ordinance, Chapter 5.12, Ambulance Services, 1997.

Humboldt County Ordinance #1755, Emergency Medical Services System, Chapter 1 – Establishment of Emergency Medical Services System and Regulation of Ambulance Services, adopted 10/7/86, revised 2/15/91.

Lake County Ambulance Ordinance, October, 1997

**MINIMUM STANDARD:****4.03 - Classifying Medical Requests**

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

**CURRENT STATUS:**

This minimum standard is met. All public safety, fire district, and volunteer personnel traditionally provide first response, activated through the 911 response system. Generally, each fire district provider has its own criteria for classifying medical requests. The Medical Priority Inc. “determinants section” has been approved by the North Coast EMS Medical Director for first response activation and is being used by the Eureka Fire Department.

For transport, many North Coast EMS protocols define appropriate levels of medical response. California Highway Patrol, Health and Safety Codes, and county ordinances are also used as guidelines. Every 911 medical aid call gets an ambulance in this region via ambulance dispatch policies; on occasion, determination of the medical request classification is made in consultation with a paramedic. Four PSAPs in the region have EMD capabilities.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Special rural standards for emergency transport services are needed in upcoming MediCare reform if funding for rural areas is to be stabilized; and
- Universal standards are needed for classification of medical requests.

**OBJECTIVE(S):**

North Coast EMS will adopt a policy that classifies medical requests.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**MINIMUM STANDARD:**

## 4.04 - Prescheduled Responses

“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 local EMS agency policy.”

**CURRENT STATUS:**

North Coast EMS and the member counties currently meet the minimum standard with regard to the interfacility transfer of patients, both BLS and ALS. North Coast EMS interfacility transfer policy covers scope of practice, medical control, and prehospital medical personnel. Prescheduled transportation has little or no effect on system operation. Responsibility to minimize or eliminate the impact of prescheduled transport on the emergency system is the responsibility of provider agencies.

Each member county has developed an ambulance ordinance. In Del Norte and Humboldt Counties, the ordinances do not specifically address interfacility transfers, but these are carried out by permitted providers. Also in Humboldt County, Arcata, Eureka, and Fortuna have city ambulance permitting ordinances that restrict interfacility transfers out of those areas. In Lake County, the ambulance ordinance covers non-emergency physician-ordered transfers for the private permitted provider only. The Lake County ordinance does not apply to public agency transport providers.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- The State EMS Authority needs to develop definitions and standards for critical care transport;
- Lake County Fire Districts state that they need to create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport; and
- Upon formation of the Fire District Joint Powers Entity, Lake County will need to amend the ambulance ordinance to apply to public agencies, and will need to modify current permit requirements such as ambulance availability.

**OBJECTIVES:**

- North Coast EMS will encourage the State EMS Authority to develop definitions and standards for critical care transport;
- Lake County Fire Districts will create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure

compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport:

- Lake County will amend its ambulance ordinance to apply to public agencies, and will modify permit requirements with respect to ambulance availability throughout the county; and
- North Coast EMS will consider assuming responsibility for approval and monitoring of emergency transport providers if counties wish to formally delegate and fund these functions.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Lake County.

Long range: State EMSA and North Coast EMS.

Reference:

North Coast EMS Policy #2208: Interfacility Transfer Procedure.

**MINIMUM STANDARD:**

## 4.05 - Response Time Standards\*

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

**RECOMMENDED GUIDELINE:**

## 4.05 - Response Time Standards\*

“Emergency medical service areas (response zones) shall be designated so that, for ninety percent of emergent responses.:

a) the response time for a basic life support and CPR capable first responder does not exceed:

Metro/urban - 5 minutes

Suburban/rural - 15 minutes

Wilderness - as quickly as possible

b) the response time for an early defibrillation-capable responder does not exceed:

Metro/urban - 5 minutes

Suburban/rural - as quickly as possible

Wilderness - as quickly as possible

c) the response time for an advanced life support capable responder (not functioning as the first responder) does not exceed:

Metro/urban - 8 minutes

Suburban/rural - 20 minutes

Wilderness - as quickly as possible

d) the response time for an EMS transportation unit (not functioning as the first responder) does not exceed:

Metro/urban - 8 minutes

Suburban/rural - 20 minutes

Wilderness - as quickly as possible

**CURRENT STATUS:**

This minimum standard and the recommended guideline are not met. North Coast EMS has no policy regarding response time standards because this has been traditionally addressed in county ambulance ordinances. North Coast EMS has a formal Quality Improvement Program which reviews prehospital patient care (and includes transport delays, if appropriate) (see also Section F: Data Collection/System Evaluation); however, North Coast EMS does not specifically monitor response time standards in county ordinances.

The Del Norte County ambulance ordinance does not specify response time standards, but the contract with the private provider states that response time shall be reasonable. The Humboldt County ordinance specifies response in terms of the time of the call to the time of unit response; the ordinance does not specify response time as to vehicle arrival on-scene. The Lake County ordinance provides for three response time levels, with the levels' areas determined by the Health Department after consultation with the EMCC. However, this ordinance covers only private providers.

#### **COORDINATION WITH OTHER EMS AGENCIES:**

Where counties have an ordinance, they coordinate transport and coverage issues with providers.

#### **NEED(S):**

- As part of our Quality Improvement Program, North Coast EMS needs to establish response time guidelines for the region for all levels (i.e. early defibrillation-capable responder, ALS-capable responder, and EMS transportation units), and to link these with county ordinance response time standards whenever possible, as well as implement procedures to monitor response time guidelines through the Prehospital Care Report;
- Del Norte County needs to consider adopting response time standards in the county ordinance and/or in contracts with providers; and
- Lake County Fire Districts state that they need to create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport; and
- Upon formation of the Fire District Joint Powers Entity, Lake County will need to amend the ambulance ordinance to apply to public agencies, and will need to modify current permit requirements such as ambulance availability.

#### **OBJECTIVES:**

- North Coast EMS will establish response time guidelines for the region for all levels (early defibrillation-capable responder, ALS-capable responder, and EMS transportation units), as well as implement procedures to monitor response time guidelines through the Prehospital Care Report;
- North Coast EMS will consider assuming responsibility for approval and monitoring of emergency transport providers if Counties wish to formally delegate and fund these functions;
- Del Norte County will consider amending the ambulance ordinance and/or contracts with providers to include response time standards; and
- Lake County Fire Districts will create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport; and
- Lake County will amend its ambulance ordinance to apply to public agencies, and will modify permit requirements with respect to ambulance availability throughout the county.

**TIME FRAME FOR MEETING OBJECTIVES:**

Long range: North Coast EMS and Del Norte County.

Short range: Lake County.

**MINIMUM STANDARD:**

## 4.06 - Staffing

“All emergency medical transport vehicles shall be staffed and equipped according to current state and local EMS agency regulations and appropriately equipped for the level of service provided.”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard. State law requires all emergency transport vehicles to be staffed at minimum with certified EMT-Is. North Coast EMS always meets and generally exceeds this standard. All emergency transport vehicles in the region are, with few exceptions, staffed by EMT-II or EMT-P personnel. North Coast EMS has LALS/ALS service provider agreements with all transporting providers in the region and has also developed policies regarding the minimum equipment requirements for BLS, LALS and ALS service providers.

Staffing of transport vehicles falls under the jurisdiction of county ambulance ordinances and is monitored by Health Departments and Health Officers in Humboldt and Lake Counties, and by the Board of Supervisors in Del Norte. The ordinances (or, in Del Norte County, the contract with the provider) require the following minimum staffing:

Del Norte County:	at least one EMT-II
Humboldt County:	at least one EMT-II
Lake County:	at least one EMT-II

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Lake County needs clear minimum staffing requirements for public transport providers. This could be accomplished by Fire Districts creating a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport;
- Upon formation of the Fire District Joint Powers Entity, Lake County will need to amend the ambulance ordinance to apply to public agencies, and will need to modify current permit requirements such as ambulance availability.

**OBJECTIVES:**

- Lake County Fire Districts will create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure

compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport:

- Lake County will amend its ambulance ordinance to apply to public agencies, and will modify permit requirements with respect to ambulance availability throughout the county; and
- North Coast EMS will consider assuming responsibility for approval and monitoring of emergency transport providers if Counties wish to formally delegate and fund these functions.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Lake County.

Long range: North Coast EMS.

**References:**

North Coast EMS Policy # 2202: First Responder/BLS Supply and Equipment Standard

North Coast EMS Policy # 2204: LALS Supply and Equipment List

North Coast EMS Policy # 2205: Paramedic Standard Equipment and Supply List

**MINIMUM STANDARD:**

## 4.07 - First Responder Agencies

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

**CURRENT STATUS:**

North Coast EMS meets this minimum standard and has developed policies that integrate qualified EMS first responder agencies (including public safety agencies and industrial first aid teams) into the system.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- All public safety and first responder personnel with a duty to respond to 911 medical calls need to have, at minimum, CPR and first aid certification, and ideally, should have first responder or EMT-I certification;
- All first responder personnel in the region should, ideally, be trained in automated external defibrillation) AED and to utilize the Combitube and to pre-package patients for prompt transport.

**OBJECTIVES:**

Fire Services and Public Safety Agencies will ensure that all:

- Public safety and first responder personnel will be, at a minimum, certified in CPR and first aid and ideally will receive first responder or EMT-I certification;
- First responders, if not already EMT-Is or EMT-Ps, will be trained in AED and to utilize the Combitube and to pre-package patients for prompt transport.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**References:**

Title 22, Chapter 1.5: First Aid Standards for Public Safety Personnel

North Coast EMS Policies:

- # 3102: First Responder Training Structure and Instructor Qualifications.
- # 3104: First Responder Training Program – Course Content.
- # 5002: First Responder Scope of Practice
- # 3304: Early Defibrillation Training Structure and Instructor Qualifications
- # 3306: Automated Defibrillation Training Programs – Course Content
- # 3307: Early Defibrillation Skills Proficiency Demonstration – Evaluator Training Program
- # 4202: First Responder Certification, Recertification and Challenge Certification
- # 4405: Early Defibrillation Certification and # 4406: Early Defibrillation Skill Proficiency Demonstration

**MINIMUM STANDARD:**

## 4.08 - Medical &amp; Rescue Aircraft\*

“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) determination of EMS aircraft patient destination,
- e) orientation of pilots and medical flight crews to the local EMS system; and,
- f) addressing and resolving formal complaints regarding EMS aircraft.”

**CURRENT STATUS:**

North Coast EMS meets this minimum standard. North Coast EMS does not have any air ambulance helicopters based in the region. There are, however, rescue aircraft based in the region through the Coast Guard and the California Department of Forestry and Fire Protection (CDF).

North Coast EMS does have policies and guidelines which specifically address authorization, requesting and dispatching aircraft, patient destination, and complaint resolution (items a, b, c, d, and f). Orientation and training are provided to hospital ground crew by the air providers. Formal complaints fall within the standard North Coast EMS Continuous Quality Improvement loop and written helicopter agreements, which are in place between North Coast EMS and all air resources providing local scene patient assistance within the region.

Dispatch for air ambulances in Humboldt County is through Central Dispatch at CDF, and destination decisions involve the base or alternative base hospital. Del Norte and Lake Counties use the Sheriffs’ Offices for Dispatch. The Humboldt and Lake County ambulance ordinances also cover air ambulance permitting.

**COORDINATION WITH OTHER EMS AGENCIES:**

All North Coast EMS Policies and Procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies. North Coast EMS also maintains contracts with the medical rescue aircraft providers in the region.

**NEED(S):**

Statewide standards for air service providers.

**OBJECTIVE(S):**

North Coast EMS will encourage the SEMSA to develop statewide air service provider standards.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**References:**

North Coast EMS Policy 2206: EMS Helicopter Services  
Lake County Ambulance Ordinance – October, 1997.

**MINIMUM STANDARD:**

4.09 - Air Dispatch Center

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

**CURRENT STATUS:**

The aircraft dispatch centers in the North Coast EMS region are:

Del Norte:	Del Norte County Sheriff's Office
Humboldt:	California Department of Forestry and Fire Protection (CDF), Fortuna
Lake:	Lake County Sheriff's Office

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

**4.10 - Aircraft Availability\***

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

**CURRENT STATUS:**

North Coast EMS meets this standard and has written agreements with all air resources which service our region. North Coast EMS periodically updates a medical aircraft directory, and provides this guide to dispatch centers.

**COORDINATION WITH OTHER EMS AGENCIES:**

All North Coast EMS Policies and Procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies. North Coast EMS also maintains contracts with medical rescue aircraft providers in the region.

**NEED(S):**

Statewide standards for air service providers.

**OBJECTIVE(S):**

North Coast EMS will encourage the SEMSA to develop statewide air service provider standards.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

**4.11 - Specialty Vehicles\***

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

**RECOMMENDED GUIDELINE:**

**4.11 - Specialty Vehicles**

“The local EMS agency should plan for response by and use of all-terrain vehicles, snow mobiles, and water rescue vehicles in areas where applicable. This plan should consider existing EMS resources, population density, environmental factors, dispatch procedures and catchment area.”

**CURRENT STATUS:**

Public safety agencies and dispatch centers maintain staff and equipment lists. Sheriff’s Departments are responsible for coordinating search and rescue operations, including the coordination of all vehicles. The U.S. Coast Guard has investigation powers in all inland navigable waters. Sheriff’s Departments in each county use a wide variety of vehicles, horses, dogs, ATVs, water rescue and other transportation vehicles. North Coast EMS is not involved in coordinating these search and rescue operations.

**COORDINATION WITH OTHER EMS AGENCIES:**

Sheriff’s Departments are responsible for coordinating search and rescue operations with dispatch centers, law enforcement agencies, fire protection agencies, and other search and rescue personnel.

*Not part of 9-1-1*

operations with personnel,

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

North Coast EMS recommends that this standard be dropped, since it does not apply to any functions retained by local EMS agencies.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 4.12 - Disaster Response

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

**CURRENT STATUS:**

Each county in the North Coast EMS region meets this minimum standard by having a system in place for mobilizing response and transport vehicles during a disaster. Fire and ambulance mutual aid arrangements are in place for the entire region.

Del Norte County has a disaster plan with mobilization channels for local ambulances, alternative transport vehicles, mutual aid with providers in Humboldt County, and Region II OES aid. Humboldt County has a comprehensive medical disaster plan. Lake County has a Health and Human Services section under Operations in their Disaster Organizational Chart, with mobilization of vehicles implied as a Health Department function. The Health Officer and Director of Health Services serve as the Operational Area Disaster Medical and Health Coordinator and alternate, respectively. Lake County also has formal mutual aid agreements between Fire Districts and the private ambulance provider.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Humboldt County has stated that they need to update their Medical Disaster Plan to meet new guidelines and regulations, and to secure funding to get adequate disaster planning staff time.

**OBJECTIVE(S):**

Humboldt County will review and revise the Medical Disaster Plan, as needed.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long Range.

**MINIMUM STANDARD:**

## 4.13 - Intercounty Response\*

“The local EMS agency shall develop agreements permitting intercounty response of emergency medical transport vehicles and EMS personnel.”

**RECOMMENDED GUIDELINE:**

## 4.13 - Intercounty Response\*

“The local EMS agency should encourage and coordinate development of mutual aid agreements which identify financial responsibility for mutual aid responses.”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and partially meets the recommended guideline. Reciprocity agreements for LALS/ALS are in place with all neighboring jurisdictions. Intercounty and intracounty fire mutual aid and ambulance mutual aid arrangements are in place throughout the region, except in Lake County, where there is fire, but not medical, mutual aid with Mendocino County.

Del Norte County mutual aid agreements are not formalized written agreements identifying financial responsibility. The Humboldt County ambulance ordinance establishes procedures for ambulance mutual aid in each operating zone. The ordinance requires mutual aid agreements among all service area providers; these agreements identify financial responsibility. In Lake County, all fire services and the private ambulance company have an executed written mutual aid agreement. If medical resources of any one county are exceeded during a major event, each county OADMHC utilizes the EMS Region II RDMHC in Contra Costa County for assistance.

**COORDINATION WITH OTHER EMS AGENCIES:**

For disaster response planning in the region, the Humboldt-Del Norte Medical Society and the Lake County EMCC Disaster Subcommittee each meet periodically. Intracounty and intercounty mutual aid arrangements are coordinated directly by all fire and ambulance services.

**NEED(S):**

- Humboldt County needs to maintain and/or review all mutual aid agreements among service providers; and
- Lake County has stated that it needs to establish medical mutual aid with all surrounding counties. Currently there is not medical mutual aid with Mendocino County, although there is fire mutual aid in place.

**OBJECTIVES:**

- Humboldt County will review all mutual aid agreements among service providers in coordination with North Coast EMS; and
- Lake County will establish medical mutual aid with all surrounding counties, including Mendocino County.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 4.14 - Incident Command System

“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.”

**CURRENT STATUS:**

The North Coast EMS region meets this minimum standard and has developed policies regarding multi-casualty response. All training programs (i.e. First Responder, EMT-I, EMT-P, and MICN) approved by North Coast EMS contain instruction on Incident Command System and START triage. ICS and SEMS are accepted minimum standards throughout the region.

Del Norte, Humboldt, and Lake Counties have written MCI Plans in place which use existing state guidelines.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Lake County states that it needs to review the MCI Plan and update it if needed; and
- North Coast EMS needs to consider the need for developing a regional MCI Plan, similar to the Mountain Valley Plan.

**OBJECTIVE(S):**

- Lake County will review the MCI Plan and update if needed; and
- North Coast EMS will consider, with county input, the need for a standardized regional MCI Plan, and seek funding as necessary.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**References:**

North Coast EMS Policy # 2506: MCI Communication plan

North Coast EMS Policy # 6020: BLS Treatment Guidelines; MCI Operational Guidelines

North Coast EMS Policy # 6542: ALS Treatment Guidelines; MCI Triage Criteria -- Operational Guidelines.

**MINIMUM STANDARD:**

## 4.15 - MCI Plans

“Multi-casualty response plans and procedures shall utilize state standards and guidelines.”

**CURRENT STATUS:**

Each county in the North Coast EMS region meets this minimum standard. Del Norte, Humboldt, and Lake Counties have MCI Plans which utilize existing state guidelines. North Coast EMS also meets this minimum standard and has developed policies regarding multi-casualty response.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Del Norte County personnel state that differing levels of multi- or mass-casualty incidents may need to be specified in response plans;
- Humboldt County states that they need funding to get adequate MCI/Disaster Planning staff time;
- Lake County states that staff needs to review the MCI Plan and update it if needed; and
- North Coast EMS needs to consider the need for developing a regional MCI Plan, similar to the Mountain Valley Plan.

**OBJECTIVES:**

- Del Norte County personnel will explore the need to differentiate response to differing levels of multi- or mass-casualty incidents in response plans;
- Humboldt County will do ongoing review, analysis, and drills. North Coast EMS staff will participate in disaster drill evaluation of prehospital personnel;
- Lake County states that staff will review the MCI Plan and update it if needed; and
- North Coast EMS will consider, with county input, the need for a standardized regional MCI Plan, and seek funding as necessary.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Lake County and North Coast EMS.

Long range: Del Norte and Humboldt Counties.

### **Enhanced Level: Advanced Life Support**

**MINIMUM STANDARD:**

4.16 - ALS Staffing

“All ALS ambulances shall be staffed with at least one person certified at the advanced life support level and one person staffed at the EMT-1 level.”

**RECOMMENDED GUIDELINES:**

4.16 – ALS Staffing

“The local EMS agency should determine whether advanced life support units should be staffed with two ALS crew members or with one ALS and one BLS crew members.”

“On any emergency ALS unit which is not staffed with two ALS crew members, the second crew member should be trained to provide defibrillation, using available defibrillators.”

**CURRENT STATUS:**

This minimum standard is almost completely met. In the North Coast EMS region, all transport vehicles, with very few exceptions, are staffed by an EMT-I and an EMT-II or EMT-P at all times. The exceptions are Clearlake Oaks, Upper Lake, and Lakeshore Fire.

Jurisdiction for this staffing requirement lies with the member county health departments through ambulance ordinances. It has been determined that it is not operationally necessary or cost effective to staff LALS/ALS units with two ALS practitioners in our predominantly rural region.

With regard to the recommended guideline that the second crew member should be trained to provide defibrillation, North Coast EMS encourages the use of early defibrillation and has developed policies and procedures allowing first responders and EMT-Is to utilize the defibrillator (170 are currently accredited to do so in the region).

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard/guidelines.

**NEED(S):**

- All first-out transport units in the region need to have full-time availability of at least one EMT-II or one EMT-P; and
- Lake County Fire Districts need to create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport; and
- Upon formation of the Fire District Joint Powers Entity, Lake County will need to amend the ambulance ordinance to apply to public agencies, and will need to modify current permit requirements such as ambulance availability.

**OBJECTIVES:**

- Del Norte and Lake County ordinances (and/or contracts) will require LALS/ALS on all first-out transport units in the region, with full-time availability of at least one EMT-II or one EMT-P;
- Lake County Fire Districts will create a joint powers entity which will act as a collective provider and be covered under the ambulance ordinance, and hence establish and ensure compliance with standards for coverage, staffing patterns, response zones and times, and interfacility transport;
- Lake County will amend its ambulance ordinance to apply to public agencies, and will modify permit requirements with respect to ambulance availability throughout the county; and
- North Coast EMS will consider assuming responsibility for approval and monitoring of emergency transport providers if Counties wish to formally delegate and fund these functions.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: Lake County Fire Districts.

Long range: Del Norte and Lake County ordinances.  
North Coast EMS.

**MINIMUM STANDARD:**

4.17 - ALS Equipment

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

**CURRENT STATUS:**

North Coast currently meets this minimum standard. All LALS/ALS ambulances are required to maintain supplies and equipment for the scope of practice of its level of staffing, as specified by both agency policy and provider agreements. Compliance with these minimum equipment policies is monitored during periodic provider site-visit evaluations.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

References:

North Coast EMS Policy #2202:	First Responder/BLS Supply and Equipment Standard
North Coast EMS Policy #2204:	LALS Supply and Equipment List
North Coast EMS Policy #2205:	EMT-P Standard Drug/Intravenous Solution List

**Enhanced Level: Ambulance Regulation**

**MINIMUM STANDARD:**

4.18 - Compliance

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

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and has developed LALS/ALS provider agreements and numerous policies and procedures regarding system operations and clinical care. North Coast EMS uses the Prehospital Care Report Data System, Continuous Quality Improvement policies, and periodic site-visit evaluations as mechanisms for reviewing compliance with these policies.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

### Enhanced Level: Exclusive Operating Permits

#### MINIMUM STANDARD:

##### 4.19 - Transportation Plan

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

- a) minimum standards for transportation services,
- b) optimal transportation system efficiency and effectiveness, and
- c) use of a competitive process to ensure system optimization.”

#### CURRENT STATUS:

This standard is not applicable, since there are no exclusive operating areas in the North Coast EMS region.

#### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

#### NEED(S):

No needs at this time.

#### OBJECTIVE(S):

None.

#### TIME FRAME FOR MEETING OBJECTIVE(S):

Not applicable.

**MINIMUM STANDARD:**

4.20 - “Grandfathering”

“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 non-competitive selection (“grandfathering”) under Section 1797.224, H&SC.”

**CURRENT STATUS:**

This standard is not applicable, since there are no exclusive operating areas in the North Coast EMS region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

4.21 - Compliance

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

**CURRENT STATUS:**

This standard is not applicable, since there are no exclusive operating areas in the North Coast EMS region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

4.22 - Evaluation

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

**CURRENT STATUS:**

This standard is not applicable, since there are no exclusive operating areas in the North Coast EMS region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

5.01 - Assessment of Capabilities

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

**RECOMMENDED GUIDELINE:**

5.01 - Assessment of Capabilities

“The local EMS agency should have written agreements with acute care facilities in its services area.”

**CURRENT STATUS:**

North Coast EMS meets this standard and the recommended guideline. The agency assesses and reassesses the EMS-related capabilities of acute care facilities in the region during periodic base hospital site visits and evaluations of EDAPs. North Coast EMS has signed written participation agreements with all base hospitals, alternative base hospitals and receiving hospitals.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 5.02 - Triage &amp; Transfer Protocols\*

“The local EMS agency shall establish prehospital triage protocols and shall assist hospitals with the establishment of transfer protocols and agreements.”

**CURRENT STATUS:**

North Coast EMS meets this standard and has developed BLS and LALS/ALS treatment guidelines and policies and procedures requiring START triage and Incident Command System to be taught in all prehospital care classes. North Coast EMS also has a Patient Destination Policy (#2309) in place for routine use by all prehospital personnel and base hospitals. All hospitals have developed transfer protocols and agreements. North Coast EMS helped streamline transfer agreements through the EMSC special project grant.

**COORDINATION WITH OTHER EMS AGENCIES:**

All North Coast EMS Policies and Procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies. Additionally, BLS policies are distributed to first responder agencies for review and comment.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**References:**

North Coast EMS Policy # 2309: Patient Destination Policy  
North Coast EMS Policy # 3104: First Responder Training Program – Course Content.  
North Coast EMS Policy # 5102: EMT-I Scope of Practice  
North Coast EMS Policy # 5303: EMT-II Scope of Practice  
North Coast EMS Policy # 5402: Paramedic Scope of Practice

**MINIMUM STANDARD:**

5.03 - Transfer Guidelines\*

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

**CURRENT STATUS:**

North Coast EMS meets this standard. Agency staff have worked with hospital staff to develop transfer agreements and have helped streamline transfer agreements through the EMSC special project grant. North Coast EMS has a written “Interfacility Transfer Procedure” policy.

**COORDINATION WITH OTHER EMS AGENCIES:**

All North Coast EMS Policies and Procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Reference:**

North Coast EMS Policy # 2208: Interfacility Transfer Procedure.

**MINIMUM STANDARD:**

5.04 - Specialty Care Facilities\*

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

**CURRENT STATUS:**

North Coast EMS meets this standard. The agency has designated six base, one alternative base, and one receiving hospital, and has designated eight EDAPs. The agency has signed participation agreements with each facility. North Coast EMS does not designate and monitor specialty care facilities at this time.

**COORDINATION WITH OTHER EMS AGENCIES:**

Participation agreements are negotiated with base, alternative base, and receiving hospital participants.

**NEEDS:**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 5.05 - Mass Casualty Management

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

**RECOMMENDED GUIDELINE:**

## 5.05 - Mass Casualty Management

"The local EMS agency should assist hospitals with preparation for mass casualty management, including procedures for coordinating hospital communications and patient flow."

**CURRENT STATUS:**

North Coast EMS meets this standard by supporting and encouraging efforts of hospitals and counties to prepare for mass casualty management. All hospitals in the region have their own mass casualty disaster and mass casualty incident plans which coordinate hospital communications and patient flow. North Coast EMS does not specifically assist hospitals in their mass casualty preparations, as this has not been specifically delegated to the agency by Counties, nor funded. The agency does participate in disaster planning efforts. Historically, agency staff have attended the Humboldt-Del Norte Medical Society Disaster Preparedness Committee and the Lake County EMCC Disaster Subcommittee meetings, reviewed plans, and evaluated drills, although staff reductions have precluded some of these activities in recent years. Throughout the region, North Coast EMS does have ongoing contact with OES personnel, hospitals and County Health Departments, and the Lake County EMCC Disaster Subcommittee.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Humboldt County states that hospitals should continue to receive EMS system support in preparing for Mass Casualty Management. Plans also need to be reviewed in terms of how they coordinate and integrate with each other and the Humboldt County Disaster Medical Plan.

**OBJECTIVE(S):**

- Both Humboldt and Lake Counties state that their objective is for hospitals to be prepared for mass casualty management and to be well-integrated into county disaster medical plans.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 5.06 - Hospital Evacuation\*

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

**CURRENT STATUS:**

North Coast EMS meets this standard by supporting and encouraging efforts of hospitals and counties to prepare for mass casualty management, including evacuation. All hospitals in the region have their own mass casualty disaster and mass casualty incident plans which coordinate hospital communications and patient flow. North Coast EMS does not specifically assist hospitals in their mass casualty preparations as this has not been specifically delegated to the agency by Counties, nor funded. The agency participates in disaster planning efforts. Historically, agency staff have attended the Humboldt-Del Norte Medical Society Disaster Preparedness Committee and the Lake County EMCC Disaster Subcommittee meetings, reviewed plans, and evaluated drills, although staff reductions have precluded some of these activities in recent years. Throughout the region, North Coast EMS has ongoing contact with OES personnel, hospitals and county health departments, and the Lake County EMCC Disaster Subcommittee.

**COORDINATION WITH OTHER EMS AGENCIES:**

County Health Officers, OES Coordinators, hospitals, and others coordinate on various aspects of disaster planning, including hospital evacuation. North Coast EMS coordinates with these personnel, and attends the Lake County EMCC Disaster Subcommittee and the Humboldt-Del Norte Medical Society Disaster Preparedness Committee meetings.

**NEED(S):**

- Humboldt County states that increased SEMSA funding should go to the County Public Health Department for disaster planning and operations; and
- Lake County states that the disaster response plan needs to be evaluated, and that staff need to work with individual hospitals to assure that plans exist.

**OBJECTIVE(S):**

- North Coast EMS will continue to work with Counties to secure block grant funds and/or increased state funding for disaster planning and operations; and
- Lake County states they will coordinate hospital disaster and county disaster planning for hospital evacuation.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long Range.

**Enhanced Level: Advanced Life Support****MINIMUM STANDARD:****5.07 - Base Hospital Designation\***

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has identified the optimal number and role of base and alternative base hospitals and the roles, responsibilities, and relationships of prehospital and hospital providers. There is one designated base hospital in Del Norte County, there are three in Humboldt County (plus one designated alternative base and one designated receiving hospital), and two in Lake County. Participation agreements defining the roles and responsibilities of prehospital and hospital providers have been developed by North Coast EMS and are utilized by each base and alternative base hospital and prehospital care service providers.

**COORDINATION WITH OTHER EMS AGENCIES:**

In 1988, the JPA Governing Board held public meetings attended by hospital representatives regarding the optimal number and designation of base and alternative base hospitals.

**NEED(S):**

The JPA Governing Board needs to determine if General Hospital, which is currently interested in becoming a base hospital, should do so. If General Hospital does become a second base hospital in Eureka, policies and protocols regarding base hospital communications will need to be developed.

**OBJECTIVE(S):**

North Coast EMS will carry out the decision of the JPA Governing Board regarding General Hospital as instructed.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**Enhanced Level: Trauma Care System**

**MINIMUM STANDARD:**

**5.08 - Trauma System Design**

“Local EMS agencies that develop trauma care systems shall determine the optimal system (based on community need and available resources) including, but not limited to:

- a) the number and level of trauma centers (including the use of trauma centers in other counties)
- 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 specialty care centers,
- d) the role of non-trauma center hospitals, including those that are outside of the primary triage area of the trauma center, and
- e) a plan for monitoring and evaluation of the system.”

**CURRENT STATUS:**

This standard is not applicable, since North Coast EMS does not currently utilize trauma care centers.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

5.09 - Public Input

“In planning its trauma care system, the local EMS agency shall ensure input from both prehospital and hospital providers and consumers.”

**CURRENT STATUS:**

This standard is not applicable, since North Coast EMS does not currently utilize trauma care centers.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

### Enhanced Level: Pediatric Emergency Medical and Critical Care System

#### MINIMUM STANDARD:

##### 5.10 - Pediatric System Design

Local EMS agencies that develop pediatric emergency medical and critical care systems shall determine the optimal system, including:

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>a) the number and role of system participants, particularly of emergency departments,</li> <li>b) the design of catchment areas (including areas in other counties, as appropriate), with consideration of workload and patient mix,</li> <li>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 specialty care centers,</li> </ul> | <ul style="list-style-type: none"> <li>f) identification of providers who are qualified to transport such patients to a designated facility,</li> <li>e) identification of tertiary care centers for pediatric critical care and pediatric trauma,</li> <li>f) the role of non-pediatric specialty care hospitals including those which are outside of the primary triage area, and</li> <li>g) a plan for monitoring and evaluation of the system.</li> </ul> |
|---|--|

#### CURRENT STATUS:

This standard is not fully applicable to North Coast EMS, as there is no Pediatric CCU or PICU in the region. However, pediatric emergency medical and critical care has been addressed through the EMSC project, which included three components: prehospital, in-hospital, and injury prevention. The in-hospital portion of the project addressed issues such as EDAP, interfacility transfers, and staff education. EDAP was established in the North Coast EMS region in 1989, with the goal of improving pediatric care by requiring minimum education standards for physicians and ED staff, minimum safe staffing levels, minimum equipment availability, and a pediatric CQI program. These minimum standards were agreed to by participating hospitals and are monitored by annual site visit evaluations. All hospitals in the region are EDAP.

#### COORDINATION WITH OTHER EMS AGENCIES:

Not applicable for this standard.

#### NEED(S):

No needs at this time.

#### OBJECTIVE(S):

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):** Not applicable.

**MINIMUM STANDARD:**

## 5.11 - Emergency Departments

“Local EMS agencies shall identify minimum standards for pediatric capability of emergency departments including:

- a) staffing,
- b) training,
- c) equipment,
- d) identification of patients for whom consultation with a pediatric critical care center is appropriate,
- e) quality assurance/quality improvement, and
- f) data reporting to the local EMS agency.”

**RECOMMENDED GUIDELINE:**

## 5.11 - Emergency Departments

“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:**

North Coast EMS meets both the standard and the recommended guideline. EDAP was established in the North Coast EMS region in 1989, with the goal of improving pediatric care by requiring minimum education standards for physicians and ED staff, minimum safe staffing levels, minimum equipment availability, and a pediatric CQI program. These minimum standards were agreed to by participating hospitals and are monitored by annual site visit evaluations. All hospitals in the region are EDAP.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

5.12 - Public Input

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

**CURRENT STATUS:**

This standard is not fully applicable to North Coast EMS, as the agency has not developed a formal pediatric emergency medical and critical care system. However, in the region six hospitals in 1989 and two hospitals in 1998 were designated as EDAP, and most recently the EMSC Project addressed several aspects of pediatric emergency medical and critical care. The EMSC Project had the participation and input of numerous individuals on the MACs and EMCCs, and others in the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Enhanced Level: Other Specialty Care Systems****MINIMUM STANDARD:**

## 5.13 - Specialty System Design

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

- a) the number and role of system participants,
- b) the design and catchment areas (including intercounty 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, and
- e) a plan for monitoring and evaluation of the system.”

**CURRENT STATUS:**

This standard is not applicable to North Coast EMS, since there are no specialty care plans for EMS-targeted clinical conditions in the region at this time. However, as described in previous sections of this EMS System Plan, the agency has participated in several specialized trial studies which examined specific clinical conditions, and will continue to do so in order to optimize the level of care provided in the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

5.14 - Public Input

“In planning other specialty care systems, the local EMS agency shall ensure input from both prehospital and hospital providers and consumers.”

**CURRENT STATUS:**

This standard is not applicable to North Coast EMS, since there are no specialty care plans for EMS-targeted clinical conditions in the region at this time. However, as described in previous sections of this EMS System Plan, the agency has participated in several specialized trial studies which examined specific clinical conditions, and will continue to do so in order to optimize the level of care provided in the region. Approval for these studies is made by the JPA Governing Board, and input is received from the MACs and EMCCs in the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 6.01 - QA/QI Program

“The local EMS agency shall establish an EMS quality assurance/quality improvement (QA/QI) 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 and procedures, and protocols and identification of preventable morbidity and mortality and shall utilize state standards and guidelines. The program shall use provider based QA/QI programs and shall coordinate them with other providers.”

**RECOMMENDED GUIDELINE:**

## 6.01 - QA/QI Program

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

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and the recommended guideline. The agency has a comprehensive Continuous Quality Improvement Program involving all prehospital providers and base and receiving hospitals. The CQI Program uses state standards in developing protocols. The agency has developed the PCR-DS program to evaluate the response and care provided to specific patients. However, base hospitals mostly perform these specific evaluations.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

6.02 - Prehospital Records

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

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and has developed policies and procedures which require prehospital care records for all emergency patient responses be completed and forwarded to appropriate agencies. The PCR-DS program is in place to produce those reports. The region has recently attained a very near 100% compliance with PCR-DS reporting, and will continue to monitor compliance.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Emergency Departments are not always able to receive the PCR as quickly as their staff would like. This is due to the region’s rural setting, in which ambulance providers often need to transport patients out of their coverage area, and thus need to leave the ED fairly quickly to resume coverage, often before the PCR has been completed.

**OBJECTIVE(S):**

North Coast EMS will encourage ambulance providers to provide PCRs as quickly as possible, and will explore how to set up the PCR program so that they may transmit the data more easily and quickly to Emergency Departments.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**MINIMUM STANDARD:**

## 6.03 - Prehospital Care Audits

“Audits of prehospital care, including both system response and clinical aspects, shall be conducted.”

**RECOMMENDED GUIDELINE:**

## 6.03 - Prehospital Care Audits

“The local EMS agency should have a mechanism to link prehospital records with dispatch, emergency department, in-patient and discharge records.”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and has developed policies and procedures requiring audits of prehospital care, including both system response and clinical aspects. North Coast EMS partially meets the recommended guideline in that the mechanism which links prehospital records with other systems, where it does exist, is not a formalized link such as an integrated management information system. The base and alternative base hospital staff file a copy of the prehospital care report in the patient’s hospital record and prehospital records can be linked by emergency department run numbers. There is no computerized link available with dispatch records at this time.

As part of two special projects funded by SEMSA, the Rural Trauma Program and the Rural/Urban Trauma Study (previously described in this document; see standard 1.07), emergency department inpatient, discharge and transfer records were linked with prehospital records for major trauma patients.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard/guideline.

**NEEDS:**

A mechanism is needed to link prehospital records with dispatch, emergency department, in-patient and discharge records.

**OBJECTIVE(S):**

North Coast EMS will explore through OSHPD ways to develop a mechanism to link prehospital records with emergency department, inpatient and discharge records. OSHPD would have to find ways to protect patient confidentiality, such as by masking data seen by this agency’s staff.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 6.04 - Medical Dispatch

“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 prearrival/post dispatch directions.”

**CURRENT STATUS:**

North Coast EMS partially meets this minimum standard. The agency has established a procedure for dispatch agencies to apply for accreditation as a Level II EMD provider. Accreditation entails, in part, using certified personnel and implementing and maintaining a CQI Program. North Coast EMS relies on local dispatching and emergency transport agencies to designate and provide appropriate levels of medical response to emergencies. North Coast EMS receives and reviews feedback on medical dispatching from the public, first responders, ambulance and dispatch personnel. With past grant funding, Emergency Medical Dispatch providers in the region monitored the appropriateness of pre-arrival and post-dispatch directions. Providers also continue to make reports to North Coast EMS as part of the provider accreditation.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- North Coast EMS needs a permanent mechanism to monitor for “over-triage” or excessive response; and
- State standards are needed for Emergency Medical Dispatch (EMD), and increased numbers of EMD Programs need to be implemented.

**OBJECTIVE(S):**

- North Coast EMS will explore what type of permanent mechanism may be implemented to monitor “over-triage” or excessive response; and
- North Coast EMS will encourage the development of both state standards for EMD as well as more EMD Programs in the region.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 6.05 - Data Management System\*

“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/QI audit of the care provided to specific patients. It shall be based on state standards.”

**RECOMMENDED GUIDELINES:**

## 6.05 - Data Management System\*

“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:**

North Coast EMS meets this minimum standard and has established the PCR-DS program as the mechanism to monitor the system region-wide and to audit the care of patients based on state standards. The PCS-DS system does not integrate both prehospital and hospital data, but Prehospital Care Nurse Coordinators (PCNCs) perform monthly field care audits (FCAs). Through FCAs and chart review, the PCNCs use case studies to evaluate the entire treatment received by a patient, both prehospital and hospital. This LEMSA does not use patient registries, tracer studies or other monitoring systems to further monitor patient care, except where special studies, such as the trauma study, are being performed. The North Coast EMS Executive Director is involved with several statewide efforts to improve the value of data, quality improvement and research efforts in California.

**COORDINATION WITH OTHER EMS AGENCIES:**

Auditing procedures are discussed with hospital and emergency medical transportation service representatives, as well as County Health Officers and the JPA members, as needed. The North Coast EMS data system is shared with the NorCal, Sonoma and Mendocino EMS agencies. Additionally, a special project grant was received in conjunction with Harbor UCLA and a study was completed regarding trauma patients.

**NEED(S):**

- North Coast EMS needs continued support of ongoing programming and repairs to the PCR-DS system, and will need funds to eventually replace this system;

**OBJECTIVE(S):**

- North Coast EMS will seek continued support of ongoing programming and repairs to the PCR-DS system, and will explore sources of funds to eventually replace this system;

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 6.06 - System Design Evaluation

“The local EMS agency shall establish an evaluation program to evaluate EMS system design and operations, including system effectiveness at meeting community needs, appropriateness of guidelines and standards, prevention strategies that are tailored to community needs, and assessment of resources needed to adequately support the system. This shall include structure, process, and outcome evaluations, utilizing state standards and guidelines.”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and has several EMS system evaluation programs and tools in use:

- The Medical Priority, Inc. EMD Program, which meets national standards for dispatch, was implemented by North Coast EMS with SEMSA funding;
- The AED Program, which the agency reports on annually to SEMSA;
- The PCR-DS Program, which is a tool for monitoring EMS system operations and is used to generate data audit screens to identify system trends and patient care problems. The PCR-DS also assists with research, is part of the CQI Program and requires reporting to the state;
- Training and CE programs are evaluated based on state standards, agency policies and procedures, site visits and written reports;
- LALS/ALS providers are evaluated based on state standards, site visits and written reports, and have approved CQI Programs in place. The agency also conducts certification and accreditation reviews of personnel;
- Base hospitals are evaluated based on state standards, site visits and written reports, and all facilities have written participation agreements with North Coast EMS;
- The EDAP Program evaluates pediatric capabilities of EDs based on local standards and state guidelines, site visits and reports. All EDAPs have written participation agreements with North Coast EMS;
- The CQI Program is in place to provide a mechanism for review of prehospital care, incident reporting, problem identification, and system monitoring;
- North Coast EMS has completed several surveys throughout the region to assess the needs regarding personnel, training, system design and operations. The results of the regional surveys are used to guide policy and procedural changes to improve operations and the EMS system;
- North Coast EMS currently participates in the Mt. Valley “EMS System Evaluation” special project, which is utilizing the “Rapid Cycle Improvement Program” for special short term studies (e.g. chest pain).

- The Rural Trauma Program and the Rural/Urban Trauma Study evaluated trauma patient outcomes in this region;
- North Coast EMS's Executive Director, Medical Director, and EMS Clinical Coordinator participate on various committees at the State level to improve EMS system evaluation mechanisms statewide.
- This EMS System Plan will serve as the current EMS System evaluation document.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- North Coast EMS evaluation of drills by prehospital personnel;
- North Coast EMS needs to explore how the PCR-DS system can facilitate EMS system evaluation; and
- Statewide standards for EMS system evaluation are needed.

**OBJECTIVE(S):**

- North Coast EMS will evaluate drills by prehospital personnel with respect to training needs;
- North Coast EMS will explore how the PCR-DS system can facilitate EMS system evaluation; and
- North Coast EMS encourages SEMSA to adopt statewide standards for EMS system evaluation.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range.

**MINIMUM STANDARD:**

6.07 - Provider Participation

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

**CURRENT STATUS:**

North Coast EMS meets this minimum standard. Each approved LALS/ALS provider currently has an approved CQI Program in place, as required by North Coast EMS policy. Implicit in written agreements is the expectation of active participation in system-wide evaluation through the PCR-DS and through site visits. Providers’ CQI Programs involve the use of the PCR-DS to generate data regarding system trends and patient care, audits, peer review, and case investigation as needed. AED providers are required to provide tapes to North Coast EMS for review and audit. Furthermore, as stated in standard 6.06, base hospitals, EDAPs, and training providers also participate in system evaluation with North Coast EMS through written agreements, site visits, and written reports. North Coast EMS also solicits response from system participants on other various regional assessments, but their response is not required.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

North Coast EMS needs to explore ways to expand and improve, at the state level, standards and authority for provider participation in statewide evaluation.

**OBJECTIVE(S):**

North Coast EMS will work with SEMSA to expand and improve, at the state level, standards and authority for provider participation in statewide evaluation.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

6.08 - Reporting

“The local EMS agency shall, at least annually, report on the results of its evaluation of EMS system design and operations to the Board(s) of Supervisors, provider agencies, and Emergency Medical Care Committee(s).”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and sends the results of all AED and PCR-DS required reports to all system participants, including Boards of Supervisors (via the JPA Governing Board), provider agencies and Emergency Medical Care Committees. All research studies, policies and procedures, quarterly and final reports, and the 1999 North Coast EMS System Plan are also widely distributed.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Enhanced Level: Advanced Life Support**

**MINIMUM STANDARD:**

6.09 - ALS Audit

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

**RECOMMENDED GUIDELINE:**

6.09 - ALS Audit

“The local EMS agency’s integrated data management system should include prehospital, base hospital, and receiving hospital data.”

**CURRENT STATUS:**

North Coast EMS currently meets this minimum standard and has developed the PCR-DS program as well as other mechanisms to audit treatment provided by LALS/ALS providers, base and alternative base hospitals, and prehospital activities. It should be noted that North Coast EMS has no authority to specifically audit treatment in the Emergency Department, as suggested in the standard, but rather can audit the activities of the Mobile Intensive Care Nurse.

As stated in 6.05, the PCR-DS system does not specifically integrate both prehospital and hospital data and thus does not fully meet the recommended guideline. However, Prehospital Care Nurse Coordinators (PCNC) perform monthly field audits. Through chart review, the PCNCs use case studies to evaluate the entire treatment received by a patient, both prehospital and hospital. Special studies, such as the trauma studies, have included analyses of prehospital, base, receiving and transfer hospital survival outcomes relative to the national MTOS outcome norms.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Enhanced Level: Trauma Care System****MINIMUM STANDARD:**

## 6.10 - Trauma System Evaluation

“The local EMS agency, with participation of acute care providers, shall develop a trauma system evaluation and data collection program, including:

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

**CURRENT STATUS:**

This minimum standard is not applicable, since there is no trauma system in the North Coast EMS region. As stated in 1.07, with State EMS Authority special project support, North Coast EMS and the EMS community previously designed and implemented a Rural Trauma Program to develop a rural alternative to a “trauma center” based system. Utilizing a pre-hospital pre-warning system, emergency department trauma teams at five of eight regional hospitals, and a quality improvement effort, North Coast EMS demonstrated higher than expected major trauma patient survival outcomes relative to Major Trauma Outcome Study (MTOS) expected norms. An article was published in the *Journal of Trauma* in March, 1994.

In 1995, a subsequent Rural/Urban Trauma Study was funded by State EMS Authority to compare survival outcome in two trauma centers in southern California relative to all eight hospitals in the North Coast EMS region. Survival outcome data were uniformly collected by trained personnel for all major trauma patients arriving at hospitals included in the study between September 1, 1995 and September 31, 1996. Results indicate that despite significantly different populations, survival outcome is statistically equivalent, which indicates that for our rural, low volume, predominantly blunt injury population, we do as well as can be expected relative to MTOS norms.

North Coast EMS meets or exceeds the national standard for outcome survival of major trauma patients. Specifically, trauma centers have not been designated and a formal Trauma System Plan has not been adopted or approved by the State EMS Authority. Neither of these options, which are the only alternatives provided in existing State Trauma Regulations, are feasible for the North Coast EMS region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

6.11 - Trauma Center Data

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

**RECOMMENDED GUIDELINE:**

6.11 - Trauma System Evaluation

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

**CURRENT STATUS:**

This minimum standard is not applicable to North Coast EMS, since trauma care centers are not designated in the North Coast EMS region.

North Coast EMS currently meets this recommended guideline and has developed the PCR-DS program as the mechanism to evaluate the response and care provided to specific patients, including trauma patients. However, minimal evaluation is completed by North Coast EMS; base hospitals mostly perform these specific evaluations. Relative to the two major trauma patient outcome studies previously described, hospital, emergency department, inpatient and final outcome data were collected at all hospitals in the North Coast EMS region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

## 7.01 - Public Information Materials

“The local EMS agency shall promote the development and dissemination of information materials for the public which address:

- 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 the target areas, and
- f) appropriate utilization of emergency departments.”

**RECOMMENDED GUIDELINE:**

## 7.01 - Public Information Materials

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

**CURRENT STATUS:**

North Coast EMS has partially met this minimum standard and meets the recommended guideline. With Federal Block Grant funds in 1996/97 and 1997/98 (extended through November, 1998), the agency implemented an EMS for Children (EMSC) project which included an injury prevention component. The project included a training program to increase parental understanding of child developmental stages, since lack of this knowledge has been identified to be a key contributing factor in many cases of pediatric death. An educational course focused on child development was also developed for presentation in the workplace or to other interested groups. Public service announcements focusing on the three most common causes of childhood death were developed. Referral directories listing services for children were distributed to the public, and resource directories listing children’s services were provided to EMS providers. Copies of the Safety Awareness for EMS (SAFE) Program were distributed to interested EMS providers. Materials were also provided to existing injury prevention programs. North Coast EMS promotes development and dissemination of informational materials whenever possible.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEEDS:**

No needs at this time.

**OBJECTIVES:**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):** Not applicable.

**MINIMUM STANDARD:**

7.02 - Injury Control

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

**RECOMMENDED GUIDELINE:**

7.02 - Injury Control

“The local EMS agency should promote the development of special EMS education programs for targeted groups at high risk of injury or illness.”

**CURRENT STATUS:**

North Coast EMS meets this minimum standard and the recommended guideline. The agency participates in the Child Death Review Committee, which is staffed by County Public Health Officials and attended by numerous staff from agencies concerned about or working toward injury prevention goals. At the CDR meetings, North Coast EMS gives input as to implications for public education around injury prevention and preventive medicine, based on the cases reviewed.

In addition, through November, 1998 the agency implemented an EMS for Children (EMSC) project which included an injury prevention component. The project included a training program utilizing materials to increase parental understanding of child developmental stages, since lack of this knowledge has been identified to be a key contributing factor in many cases of pediatric death. An educational course focused on child development was also developed for presentation in the workplace or to other interested groups. Public service announcements focusing on the three most common causes of childhood death were developed. Referral directories for services for children were distributed to the public, and resource directories listing children’s services were provided to EMS providers. Copies of the Safety Awareness for EMS (SAFE) Program were distributed to interested EMS providers. Materials were also provided to existing injury prevention programs. North Coast EMS promotes development and dissemination of informational materials whenever possible.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**MINIMUM STANDARD:**

7.03 - Disaster Preparedness

“The local EMS agency, in conjunction with the local office of emergency services, shall promote citizen disaster preparedness activities.”

**RECOMMENDED GUIDELINE:**

7.03 - Disaster Preparedness

“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:**

All member county OES Offices in the region meet both the minimum standard and recommended guideline. OES Offices promote citizen disaster preparedness and disseminate available information to the public.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard/guideline.

**NEED(S):**

Humboldt County states that they need funding for adequate disaster planning staff time, and on-going participation in promoting awareness and preparedness throughout the county, including efforts to produce/disseminate information materials to the public.

**OBJECTIVE(S):**

- Humboldt County will take part in coordinated efforts between private and public sectors to develop, provide, and promote informational materials.
- North Coast EMS will work with Counties to obtain block grant funding and/or increased state funds for disaster preparedness

**TIME FRAME FOR MEETING OBJECTIVE(S)**

Long range.

**MINIMUM STANDARD:**

7.04 - First Aid and CPR Training

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

**RECOMMENDED GUIDELINE:**

7.04 - First Aid and CPR Training

“The local EMS agency should adopt a goal of training of an appropriate percentage of the general public in first aid and CPR. A higher percentage should be achieved in high risk groups.”

**CURRENT STATUS:**

North Coast EMS meets this minimum standard. In the region, the American Heart Association, Red Cross, local Fire Departments, hospitals, and others routinely promote and provide first aid and CPR training. North Coast EMS encourages this effort and requires CPR certification for all levels of prehospital care training (first responder, EMT-I, EMT-II and paramedic). North Coast EMS has not met the recommended guideline.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEEDS:**

North Coast EMS needs to assess, with special project assistance, the causative factors in cardiac death arrests in the region, and determine how automated external defibrillation, focussed CPR training of high risk patients’ family members, and/or general public education may reduce mortality.

**OBJECTIVE(S):**

North Coast EMS will consider obtaining funding and implementation of a cardiac improvement program in the region.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 8.01 - Disaster Medical Planning

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

**CURRENT STATUS:**

North Coast EMS meets this standard by participating in disaster planning efforts. Del Norte, Humboldt, and Lake Counties each have a disaster medical response plan in place. Each of these plans addresses the need to respond to catastrophic disasters, including those involving toxic substances. Historically, North Coast EMS staff have attended the Humboldt-Del Norte Medical Society Disaster Preparedness Committee and the Lake County EMCC Disaster Subcommittee meetings, reviewed plans, and evaluated drills, although staff reductions have precluded some of these activities in recent years. Throughout the region, North Coast EMS has ongoing contact with OES personnel, hospitals, county health departments, and the committees mentioned.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Del Norte County may need to update their “Emergency Plan” from 1976;
- Humboldt County states that they need to revise all response plans to comply with new SEMS requirements, and train all response agencies on revised plans. Humboldt County further states that it needs funding for adequate disaster planning staff time from the disaster component of SEMSA federal block grant funding; and
- Lake County may need to formalize some agreements in their medical response plan.

**OBJECTIVES:**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2,000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will facilitate the increased organization of local, county and regional resources in preparation for a major event along the Southern Cascadia Subduction Zone;
- Del Norte County will assess the need to update their “Emergency Plan” from 1976;
- Humboldt County will revise response plans and provide training;
- Lake County may need to formalize some agreements in their medical response plan; and
- North Coast EMS recommends that SEMSA clarify disaster planning responsibilities and provide funding accordingly.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: North Coast EMS.

Long range: County objectives.

SEMSA to clarify disaster planning.

**MINIMUM STANDARD:**

## 8.02 - Response Plans

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

**RECOMMENDED GUIDELINE:**

## 8.02 - Response Plans

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

**CURRENT STATUS:**

Del Norte, Humboldt, and Lake Counties meet this standard and possibly meet the recommended guideline (since Del Norte County’s Plan is from 1976, it is not known whether it is based on the current standards). Each county has a disaster medical response plan in place which applies to a variety of hazards, including hazardous materials or toxic substances.

Del Norte County’s Emergency Plan calls for 12 drills per year, and that these drills will simulate a variety of disasters. The 1999 Mass Casualty Plan by Del Norte Ambulance, Inc. states that the plan it is to be utilized in the event of disasters involving a variety of emergency situations, including hazardous materials. The Humboldt/Del Norte Hazardous Materials Response Team covers Del Norte County for toxic substances, and works with the Del Norte County Environmental Health Department, which assists with materials identification.

In Humboldt County, medical response plans are in place for a variety of potentially disastrous or hazardous incidents, and all plans use the CA Office of Emergency Services (OES) multi-hazard planning model. The Humboldt/Del Norte Hazardous Materials Response Team covers Humboldt County for any toxic substances incidents, and they work with the Public Health Department to identify the material.

The Lake County Operations Plan addresses a variety of hazards, including toxic substances, and uses the CA OES model. Lake County has a local HazMat unit which is a formal team.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Del Norte County may need to update their “Emergency Plan” from 1976;
- Humboldt County states that Hospital Emergency ICS (HEICS) and the Standardized Emergency Management System (SEMS) programs need to be incorporated into current planning and procedure development of hospitals, and that ongoing involvement by all participants in medical response planning is also needed; and
- Lake County states that they need more exercises and assurance that all personnel know what resources are available and how to access them. Overlapping mutual aid is needed as is coordination between the RIMS (Resource Information Management System) coastal region and mutual aid regions.

**OBJECTIVES:**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2,000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will facilitate the increased organization of local, county and regional resources in preparation for a major event along the Southern Cascadia Subduction Zone;
- Del Norte County will assess the need to update their “Emergency Plan” from 1976;
- Humboldt County will continue to develop and update medical response plans to meet the variety of potential hazards existing in our county and to conform to state requirements; and
- Lake County will develop standardized operational procedures for accessing resources for medical emergencies, including RIMS for a single point of ordering.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: North Coast EMS.

Long range: County objectives.

**MINIMUM STANDARD:**

8.03 - HazMat Training

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed policies and procedures outlining hazardous materials (HazMat) training requirements for first responders. Title 22 outlines the HazMat training requirements for EMT-Is, EMT-IIIs, and EMT-PIs.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEEDS:**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**References:**

North Coast EMS Policy # 3104: First Responder Training Program – Course Content  
Title 22, Chapter 2, §100075; Chapter 3, §100120; and Chapter 4, §100159.

**MINIMUM STANDARD:**

## 8.04 - Incident Command System

“Medical response plans and procedures for catastrophic disasters shall use the Incident Command System (ICS) as the basis for field management.”

**RECOMMENDED GUIDELINE:**

## 8.04 - Incident Command System

“The local EMS agency should ensure that ICS training is provided for all medical providers.”

**CURRENT STATUS:**

North Coast EMS and the member counties meet the minimum standard. Del Norte, Humboldt, and Lake Counties each have a disaster medical response plan in place which use the Incident Command System. In January, 1999, Del Norte County provided a four-day ICS training of multiple personnel, including practice drills. All Lake County staff are trained in ICS.

North Coast EMS also meets the recommended guideline and has developed policies requiring ICS field management be included in all training programs for first responders. This training also includes response to hazardous materials incidents. Title 22 outlines HazMat training requirements for EMT-Is, EMT-IIIs, and EMT-PSs. North Coast EMS does not have jurisdiction over other medical providers, such as doctors, who are not prehospital providers.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Lake County states that they need greater Hospital Emergency ICS (HEICS) involvement, including training within the facility as well as training in field operations. A HEICS class may be needed for each hospital, including new and refresher courses and ongoing training for all new personnel.

**OBJECTIVE(S):**

The Lake County OES Coordinator will explore with hospitals the possibility of increased HEICS training of hospital personnel.

**TIME LINE:**

Long range.

**References:**

North Coast EMS Policy # 3104: First Responder Training Program – Course Content  
Title 22, Chapter 2, §100075; Chapter 3, §100120; Chapter 4, §100159.

**MINIMUM STANDARD:**

## 8.05 - Distribution of Casualties\*

“The local EMS agency, using state guidelines, shall establish written procedures for distributing disaster casualties to the medically most appropriate facilities in its service area.”

**RECOMMENDED GUIDELINE:**

## 8.05 - Distribution of Casualties\*

“The local EMS agency, using state guidelines, and in consultation with Regional Poison Centers, should identify hospitals with special facilities and capabilities for receipt and treatment of patients with radiation and chemical contamination of injuries.”

**CURRENT STATUS:**

North Coast EMS, hospitals and member counties meet this standard and the recommended guideline. All of the county disaster medical plans in the region provide procedures for distribution of disaster casualties to the most appropriate facilities. North Coast EMS has also developed policies for prehospital personnel which outline procedures for distributing disaster casualties to the most appropriate medical facilities in the service area.

Specialized HazMat training has been provided to hospital emergency personnel in Humboldt County. Per Office of State Health Planning and Development (OSHPD) regulations, all emergency departments in the North Coast EMS region are capable of (and have policies/procedures regarding) receiving and treating (or transferring) patients with hazardous materials contamination. All emergency departments consult with existing poison control centers as needed.

**COORDINATION WITH OTHER EMS AGENCIES:**

North Coast EMS, county disaster staff and medical personnel in their respective counties coordinate with the Humboldt-Del Norte Medical Society’s Medical Disaster Subcommittee and the Lake County EMCC Disaster Subcommittee. All North Coast EMS policies and procedures are distributed for comment to MACs, EMCCs, base and alternative base hospitals, providers, health officers, JPA members and interested others prior to finalization, as are revisions to those policies. Additionally, first responder and EMT-I level policies are distributed to first responder agencies for review and comment.

**NEED(S):**

- Humboldt County states that they need adequate disaster planning staff time to continuously update disaster response plans; and
- Lake County states that personnel need ongoing training and disaster drills, a list of possible sites of contamination, and radiation capability. Lake County may need to identify more places to place people in a disaster situation and develop a facilities list, especially facilities not normally used for patients.

**OBJECTIVE(S):**

- Humboldt County will seek adequate funding for ongoing disaster planning; and
- Lake County will explore provision of ongoing training and disaster drills, a list of possible sites of contamination, and radiation capability. Lake County will assess the need to identify more sites to place people in a disaster situation, and as needed, will develop a facilities list, especially facilities not normally used for patients.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 8.06 - Needs Assessment

“The local EMS agency, using state guidelines, shall establish written procedures for early assessment of needs and shall establish a means for communicating emergency requests to the state and other jurisdictions.”

**RECOMMENDED GUIDELINE:**

## 8.06 - Needs Assessment

“The local EMS agency’s procedures for determining necessary outside assistance should be exercised yearly.”

**CURRENT STATUS:**

The standard and recommended guideline are met. All of the county disaster medical plans in the region address needs assessments and communication protocols within the county. Region II has the Regional Disaster Medical Health Coordinator (RDMHC) system established for outside mutual aid requests for each county located within the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Lake County states that it needs training in the use of RIMS for medical personnel and hospitals.

Humboldt County states that it needs:

- to continuously review/revise disaster management policies, procedures and plans;
- regular testing or drills of each component;
- to revise/review areas in which drills show problems; and
- special project funds for a resource availability and assessment system.

**OBJECTIVE(S):**

- Lake County will explore the possibility of increased training in the use of RIMS for medical personnel and hospitals.

Humboldt County will:

- develop the ability to determine early in a disaster that outside resources are needed with defined procedures to acquire help and communicate needs;
- review/revise disaster management policies, procedures and plans;
- do regular testing or drills of each component;
- revise/review areas in which drills show problems; and
- seek special project funds for a resource availability and assessment system.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:****8.07 - Disaster Communications\***

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

**CURRENT STATUS:**

This standard is partially met in the North Coast EMS region. All ambulances in Del Norte County are capable of talking to every other emergency unit in Del Norte, and all ambulances in the region using Med-Net. All ambulances can communicate with hospitals in Humboldt/Del Norte if needed, and can contact the state OES for a radio cache.

In Humboldt County, CALCORD, local government channels, and OES White are available for interagency coordination, and hospitals, ambulance providers and the Health Department can use Med-Net and cellular phones. The hospitals and Health Department have developed a backup communications system utilizing amateur radio operators and equipment. A specific operating frequency has not been designated.

In Lake County, there is a plan to install other frequencies, and frequencies which do not require repeaters (e.g. Green-Net) have been identified. Hospitals access the Red-Net with fire approval.

**COORDINATION WITH OTHER EMS AGENCIES:**

The County Health Departments and OES Offices coordinate with RDHMC, SEMSA, and mutual aid agencies as needed for disaster planning and operations.

**NEED(S):**

- There is a need to designate one tactical command frequency in each county in the region, in the entire region, or for the state as a whole;
- There is a need to develop and coordinate inter-hospital disaster communications using prehospital Med-Net in Humboldt County; and
- Lake County states that they need additional radios and frequencies, and to ensure that hospitals and field responders have a common frequency besides Red Net.

**OBJECTIVES:**

- SEMSA should assist in developing and funding a statewide communication system;
- North Coast EMS and Humboldt County Health Department personnel will work with hospitals in Humboldt County to facilitate inter-hospital disaster communications
- North Coast EMS will provide a communications check as part of hospital site visits; and
- Lake County will acquire additional radios, especially to distribute to field responders.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 8.08 - Inventory of Resources

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

**RECOMMENDED GUIDELINE:**

## 8.08 - Inventory of Resources

“The local EMS agency should ensure that emergency medical providers and health care facilities have written agreements with anticipated providers of disaster medical resources.”

**CURRENT STATUS:**

North Coast EMS and member counties meet this standard and partially meet the recommended guideline. All of the county disaster medical plans in the region have established disaster resource lists, including medical personnel, supplies, facilities, etc. North Coast EMS, with the assistance of counties, has completed and updated the disaster medical responders resource lists (Tables 11a and b), and will continue to do so annually.

Del Norte Ambulance maintains a mobile MCI unit capable of treating up to 100 people. In Humboldt County, the Health Department is solidifying contracts with medical providers throughout the county and OES has agreements for resource acquisitions. Lake County has an emergency resource directory with a medical section that needs further development, including a description for how to access both material and human resources within the county at any time. Lake County does not have written agreements with anticipated providers of disaster medical resources.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard/guideline.

**NEED(S):**

- Disaster medical resource directories should be periodically reviewed and updated by each county;
- Humboldt County states that it needs to maintain and expand contracts with anticipated providers, and receive funding for adequate disaster planning staff time; and
- Lake County states that the emergency resource directory needs the medical portion further developed and needs a description for how to access those resources, both materials and people, within the county, 24 hours a day. Lake County also needs to formalize written contracts with anticipated providers of disaster medical resources.

**OBJECTIVES:**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2,000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will facilitate the increased organization of local, county and regional resources in preparation for a major event along the Southern Cascadia Subduction Zone, including the development of supply lists, contracts with providers, and casualty collections points (CCPs) or field treatment sites (FTSs);

- North Coast EMS will annually update resource directories associated with the EMS Plan and provide information to counties;
- Humboldt County will maintain and expand contracts with anticipated providers, and pursue funding for adequate disaster planning staff time; and
- Lake County will explore the need to further develop the emergency resource directory medical portion and a description for how to access those resources, both materials and people, within the county, 24 hours a day.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: North Coast EMS.

Long range: County objectives.

**MINIMUM STANDARD:**

8.09 - DMAT Teams

“The local EMS agency shall establish and maintain relationships with DMAT teams in its area.”

**RECOMMENDED GUIDELINE:**

8.09 - DMAT Teams

“The local EMS agency should support the development and maintenance of DMAT teams in its area.”

**CURRENT STATUS:**

North Coast EMS and member counties meet the standard and the recommended guideline. Each county in the North Coast EMS region has the capability, through the County Health Officer, to activate a DMAT team through the Region II RDMHC. North Coast EMS previously sent a letter of intent and grant proposal for a local RDMAT (rural DMAT team), which was not funded.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Lake County states that they need to explore whether it is feasible to establish a DMAT team locally.

**OBJECTIVE(S):**

Lake County will explore whether it is feasible to establish a DMAT Team locally.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:****8.10 - Mutual Aid Agreements\***

“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.”

**CURRENT STATUS:**

Counties in the North Coast EMS region meet this minimum standard. Each county within the region has a system in place for mobilizing response and transport vehicles and other relevant resources during a disaster. Fire and ambulance mutual aid agreements are in place for the entire region. All of the county OADMHC contacts for medical mutual aid outside each county within the region go through Region II RDMHC.

**COORDINATION WITH OTHER EMS AGENCIES:**

Counties coordinate with SEMSA, RDHMC, and Contra Costa EMS.

**NEED(S):**

Humboldt County states that they need to review and update resource lists and procedures from RDMHC to allow prompt response to mutual aid requests.

**OBJECTIVE(S):**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2,000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will facilitate the increased organization of local, county and regional resources in preparation for a major event along the Southern Cascadia Subduction Zone; and
- Humboldt County will participate in ongoing medical mutual aid planning with other counties in the region, as well as the state.

**TIME FRAME FOR MEETING OBJECTIVES:**

Short range: North Coast EMS.

Long range: Humboldt County.

**MINIMUM STANDARD:****8.11 - CCP Designation\***

“The local EMS agency, in coordination with the local OES and county health officer(s), and using state guidelines, shall designate casualty collection points (CCPs).”

**CURRENT STATUS:**

Member counties in the region partially meet this minimum standard. Designation of CCPs (now called field treatment sites or FTSS) is part of each county’s Disaster Medical Plan, although Del Norte County has an outdated (1976) Plan which, in terms of facilities, is largely concerned with designating fallout shelters. In Del Norte County, CCPs/FTSS will be designated at the time of the disaster. Humboldt County has designated CCPs/FTSS. In Lake County, CCPs/FTSS have not been formally designated, but they are informally established and known to personnel.

**COORDINATION WITH OTHER EMS AGENCIES:**

EMS providers, Red Cross, county health officers and OES personnel.

**NEED(S):**

- Del Norte County may need to assess the need to formally designate CCPs/FTSS and/or update their disaster medical plan;
- Humboldt County states that it needs to continue to evaluate and designate sites as needed, review site selection, equipment, staffing needs and mechanisms for supply acquisition, as well as secure funding for adequate disaster planning staff time; and
- Lake County needs to formally designate CCPs/FTSS as part of the medical annex of the Emergency Operations Plan.

**OBJECTIVE(S):**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2,000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will facilitate development of supply lists, contracts with providers, and CCPs/FTSS;
- Del Norte County will assess the need to formally designate CCPs/FTSS and/or update their disaster medical plan;
- Humboldt County will review existing sites and designate additional CCP/FTA sites throughout the county, as necessary, will review site selection, equipment, staffing needs and mechanisms for supply acquisition, and will secure funding for adequate disaster planning staff time; and
- Lake County will formally designate CCPs/FTSS as part of the medical annex of the Emergency Operations Plan.

**TIME FRAME FOR MEETING OBJECTIVES:**

Long range.

**MINIMUM STANDARD:**

## 8.12 - Establishment of CCPs

“The local EMS agency, in coordination with the local OES, shall develop plans for establishing CCPs and a means for communicating with them.”

**CURRENT STATUS:**

Counties in the region meet this standard. All counties have operational area disaster communication systems, use Med-Net, OASIS and cellular phones, and have the capability to have medical response units all communicate on the same system. In addition, Del Norte County states that it uses RACES as a backup. Humboldt County states that it also uses RACES as a backup, short wave radio, and CALCORD. Lake County also uses Red-Net and RACES.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Del Norte County may need to assess the need to formally designate CCPs/FTSs and a means for communicating with them;
- Humboldt County states that it needs to perform ongoing review and revision of CCP/FTA designation and operational procedures, as needed; and
- Lake County needs to formally designate CCPs/FTSs before an official means of communicating with them can be set, although the capability is currently available and known to personnel.

**OBJECTIVE(S):**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2,000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will facilitate the increased organization of local, county and regional resources in preparation for a major event along the Southern Cascadia Subduction Zone, including the development of supply lists, contracts with providers, and CCPs/FTSs;
- Del Norte County will assess the need to formally designate CCPs/FTSs;
- Humboldt County will define plans for establishing communication with CCPs/FTSs; and
- Lake County will formally designate CCPs/FTSs, and the means for communicating with them.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 8.13 - Disaster Medical Training

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

**RECOMMENDED GUIDELINE:**

## 8.13 - Disaster Medical Training

“The local EMS agency should ensure that EMS responders are appropriately trained in disaster response, including the proper management of casualties exposed to or contaminated by toxic or radioactive substances.”

**CURRENT STATUS:**

North Coast EMS currently meets this standard and recommended guideline and has developed policies addressing disaster medical training of first responders, including the proper management of casualties exposed to and/or contaminated by toxic or radioactive substances. Policies are also in place which require ICS field management be included in all training programs for first responders. This training includes response to hazardous materials incidents. Title 22 outlines the proper training in ICS and HazMat response for EMT-Is, EMT-IIs, and EMT-Ps. In January, 1999, Del Norte County provided a four-day ICS training of multiple personnel, including practice drills involving toxic substances.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

North Coast EMS and regional member counties need to explore the need for bioterrorism training for EMS responders.

**OBJECTIVE(S):**

Training of EMS responders will expand to include specific bioterrorism training with the assistance of state DHS and SEMSA, as needed.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 8.14 - Hospital Plans

“The local EMS agency shall encourage all hospitals to ensure that their plans for internal and external disasters are fully integrated with the county’s medical response plan(s).”

**RECOMMENDED GUIDELINE:**

## 8.14 - Hospital Plans

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

**CURRENT STATUS:**

Hospitals in the region, county OES offices and North Coast EMS partially meet this standard and recommended guideline. All hospitals in the region have their own mass casualty disaster and mass casualty incident plans which coordinate hospital communications and patient flow. North Coast EMS does not specifically assist hospitals in their mass casualty preparations, as this has not been specifically delegated to the agency by Counties, nor funded. In Del Norte County, the hospital plan is not on file nor integrated with the Health Department’s, but hospital and Health Department personnel have recently begun meeting to work toward that goal. Humboldt County hospitals have internal and external disaster plans in place and on file at the Health Department. In Lake County, hospital plans are not on file nor integrated with the Health Department’s disaster plan, although the County has performed disaster drills with hospitals yearly.

North Coast EMS staff attend the Humboldt-Del Norte Medical Society Disaster Subcommittee and the Lake County EMCC Disaster Subcommittee to participate in disaster planning. All hospitals in the region are required by OSHPD to hold annual drills, which always have interagency participation. Guidelines from the Joint Commission for the Accreditation of Health Organizations also require hospitals to develop response plans which are consistent with their jurisdictions’ overall medical response plans.

North Coast EMS is responsible for training of prehospital personnel regarding their function in disaster situations. Participation in disaster drills is useful for evolution of the educational needs of prehospital personnel.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Lake County states that hospital plans need to be acquired by County OES, reviewed, and better coordinated with the County Emergency Operations Plan.

Humboldt County states that it needs:

- to continue to encourage and require hospitals to participate with the Humboldt County Health Department in disaster planning integration of hospital and disaster plans;
- to encourage implementation of HEICS in hospitals and to continue involving hospitals in exercises and planning forum;

- to perform multi-agency disaster exercises; and
- to receive funding for adequate Disaster Planning staff time.

**OBJECTIVES:**

- North Coast EMS, on behalf of Del Norte and Humboldt Counties, received Prevention 2.000 Federal Block Grant funding for the “Cascadia Region Disaster Medical/Health Preparedness Proposal” from the State EMS Authority. This project will enable North Coast EMS to assist counties with disaster drills and other disaster medical planning needs, as staffing allows;
- North Coast EMS will participate in disaster exercises to evaluate training needs and field functioning of prehospital personnel, as staffing allows;
- Humboldt County will achieve integrated disaster plans for hospitals, providers and county response system. All agencies and hospitals will participate in multi-agency annual drills; and
- Lake County OES will acquire and review hospital plans, and see that there is better coordination between hospitals and the County Emergency Operations Plan.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Short range: North Coast EMS.

Long range: County objectives.

**Reference:**

Emergency Medical Services Authority Disaster Medical Response Plan (EMSA # 201), page 10. July 1992

**MINIMUM STANDARD:**

## 8.15 - Interhospital Communications

“The local EMS agency shall ensure that there is an emergency system for interhospital communications, including operational procedures.”

**CURRENT STATUS:**

This standard is not met by all hospitals in the region. Using Med-Net, all hospitals have direct communication capability with ambulances, but lack the coordination necessary for inter-hospital communication. In Del Norte County, the hospital has not only Med-Net, but access also to the ambulance company frequency. The hospital can talk directly with the Sheriff’s Office and Del Norte Ambulance. Lake County is currently acquiring an emergency generator to supplement its communication ability.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- There is a need to develop and coordinate inter-hospital disaster communications using prehospital Med-Net in Humboldt County; and
- Lake County states that it needs to refine, check, and train on procedures.

**OBJECTIVE(S):**

- North Coast EMS and Humboldt County Health Department personnel will work with hospitals in Humboldt County to facilitate inter-hospital disaster communications;
- North Coast EMS will provide a communications check as part of hospital site visits; and
- Lake County will refine, check and train on procedures.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**MINIMUM STANDARD:**

## 8.16 - Prehospital Agency Plans

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

**RECOMMENDED GUIDELINE:**

## 8.16 - Prehospital Agency Plans

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

**CURRENT STATUS:**

All prehospital providers and acute care hospitals in the North Coast EMS region meet this standard and recommended guideline. North Coast EMS has developed policies and procedures for training in and management of significant medical incidents by prehospital medical agencies. Per hospital accreditation requirements, all hospitals have written policies and procedures for management of significant medical incidents. North Coast EMS, in cooperation with county and regional medical personnel, promotes SEMS and HEICS programs in the region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

- Humboldt County states that multi-agency disaster exercises are needed; and
- Lake County states that it needs to develop a training schedule for SEMS and ICS training for hospital and ambulance providers, and integrate with other agencies' first responders through exercises. The programs in place are not specified to hospitals, and need to be.

**OBJECTIVE(S):**

- Humboldt County and North Coast EMS will facilitate multi-agency disaster exercises in which all agencies and hospitals participate;
- Lake County will specify training programs to be integrated with hospitals.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Long range.

**Enhanced Level: Advanced Life Support**

**MINIMUM STANDARD:**

**8.17 - ALS Policies**

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

**CURRENT STATUS:**

North Coast EMS currently meets this standard and has developed reciprocity agreements with all contiguous county EMS agencies, permitting intercounty response of LALS/ALS personnel in cases where mutual aid is needed. Fire and ambulance mutual aid arrangements are in place for the entire region. Counties in the North Coast EMS region each call on Region II RDMHC for assistance.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Enhanced Level: Specialty Care Systems****MINIMUM STANDARD:****8.18 - Specialty Center Roles**

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

**CURRENT STATUS:**

North Coast EMS meets this standard. North Coast EMS has formally designated all Emergency Departments in the region to be Emergency Department Approved for Pediatrics (EDAPs). As discussed in standard 1.07 and elsewhere, the agency has not formally designated trauma centers; however, the Rural Trauma Program previously funded by SEMSA evaluated patient outcomes and concluded that trauma patient care in the region is equal to or greater than that expected based on the MTOS expected norms.

As discussed in standard 5.13, there are no specialty care plans for EMS-targeted clinical conditions in the region at this time. However, as described in previous sections of this EMS System Plan, the agency has participated in several specialized trial studies which examined specific clinical conditions, and will continue to do so in order to optimize the level of care provided in the region.

All hospitals in the region have their own mass casualty disaster and mass casualty incident plans which coordinate hospital communications and patient flow. North Coast EMS does not specifically assist hospitals in their mass casualty preparations.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

Not applicable.

**OBJECTIVE(S):**

Not applicable.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**Enhanced Level: Exclusive Operating Areas/Ambulance Regulations**

**MINIMUM STANDARD:**

8.19 - Waiving Exclusivity

“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.”

**CURRENT STATUS:**

This standard is not applicable, since there are no exclusive operating areas in the North Coast EMS region.

**COORDINATION WITH OTHER EMS AGENCIES:**

Not applicable for this standard.

**NEED(S):**

No needs at this time.

**OBJECTIVE(S):**

None.

**TIME FRAME FOR MEETING OBJECTIVE(S):**

Not applicable.

**TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT**

EMS System: North Coast EMS Reporting Year: 1999

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

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

County: Del Norte

- a. Basic Life Support (BLS) Always available, but never solely BLS
- b. Limited Advanced Life Support (LALS) 75%
- c. Advanced Life Support 25%

2. Type of Agency d

- a. Public Health Department
- b. County Health Services Agency
- c. Other (non-health) County Department
- d. Joint Powers Agency
- e. Private Non-Profit Entity
- f. Other : \_\_\_\_\_

3. The person responsible for day-to-day activities of EMS agency reports to: c

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

EMS System: North Coast EMS Reporting Year: 1999

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

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

County: Humboldt

- |   |   |
|---|---|
| a. Basic Life Support (BLS)             | <u>Always available, but never solely BLS</u> |
| b. Limited Advanced Life Support (LALS) | <u>5%</u>                                     |
| c. Advanced Life Support                | <u>95%</u>                                    |

2. Type of Agency d

- a. Public Health Department
- b. County Health Services Agency
- c. Other (non-health) County Department
- d. Joint Powers Agency
- e. Private Non-Profit Entity
- f. Other : \_\_\_\_\_

3. The person responsible for day-to-day activities of EMS agency reports to: c

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

EMS System: North Coast EMS Reporting Year: 1999

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

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

County: Lake

- a. Basic Life Support (BLS) Always available, but never solely BLS
- b. Limited Advanced Life Support (LALS) 8%
- c. Advanced Life Support 92%

2. Type of Agency d

- a. Public Health Department
- b. County Health Services Agency
- c. Other (non-health) County Department
- d. Joint Powers Agency
- e. Private Non-Profit Entity
- f. Other : \_\_\_\_\_

3. The person responsible for day-to-day activities of EMS agency reports to: c

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

EMS System: North Coast EMS Reporting Year: 1999

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

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

County: Southern Trinity Area Rescue

- a. Basic Life Support (BLS) 39%
- b. Limited Advanced Life Support (LALS) 56%
- c. Advanced Life Support 0%
- (d. Not applicable – other non-medical calls) 5%

- 2. Type of Agency \_\_\_\_\_

- a. Public Health Department
- b. County Health Services Agency
- c. Other (non-health) County Department
- d. Joint Powers Agency
- e. Private Non-Profit Entity
- f. Other : contract with North Coast EMS

- 3. The person responsible for day-to-day activities of EMS agency reports to: c

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

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

Implementation of exclusive operating areas (ambulance franchising) \_\_\_\_\_

Designation of trauma center/trauma care system planning \_\_\_\_\_

Designation/approval of pediatric facilities \_\_\_\_\_

Designation of other critical care centers \_\_\_\_\_

Development of transfer agreements \_\_\_\_\_

Enforcement of local ambulance ordinance \_\_\_\_\_

Enforcement of ambulance service contracts \_\_\_\_\_

Operation of ambulance service \_\_\_\_\_

Continuing Education \_\_\_\_\_ X

Personnel Training \_\_\_\_\_

Operation of oversight of EMS dispatch center \_\_\_\_\_

Non-Medical Disaster Planning \_\_\_\_\_

Administration of critical incident stress debriefing (CISD) team \_\_\_\_\_ X

Administration of disaster medical assistance team (DMAT) \_\_\_\_\_

Administration of EMS Fund (Senate Bill [SB] 12/612) \_\_\_\_\_

Other: \_\_\_\_\_

Other: \_\_\_\_\_

Other: \_\_\_\_\_

## 5. EMS agency budget for FY 1998-1999

## A. EXPENSES

Salaries and benefits (all but contract personnel)	\$ 218,048
Contract Services (e.g. medical director)	59,080
Operations (e.g. copying, postage, rent)	48,860
Travel	16,500
Mt. Valley grant	4,596
Obligated reserve	28,405
<b>TOTAL EXPENSES</b>	<b>\$ 375,489</b>

## B. SOURCES OF REVENUE

General Fund	\$ 240,919
County Contracts	37,303
SB 612 Funds	37,000
Certification Fees	7,000
Interest	600
Misc. (Test Fees, Misc.)	800
Contributions	7,500
Mt. Valley EMS	4,596
Reserve	39,771
<b>TOTAL EXPENSES</b>	<b>\$ 375,489</b>

## 6. Fee structure for FY 1998-1999

We do not charge any fees

Our fee structure is: (EMT-I and Early Defibrillation Certification fees are waived for local firefighters.)

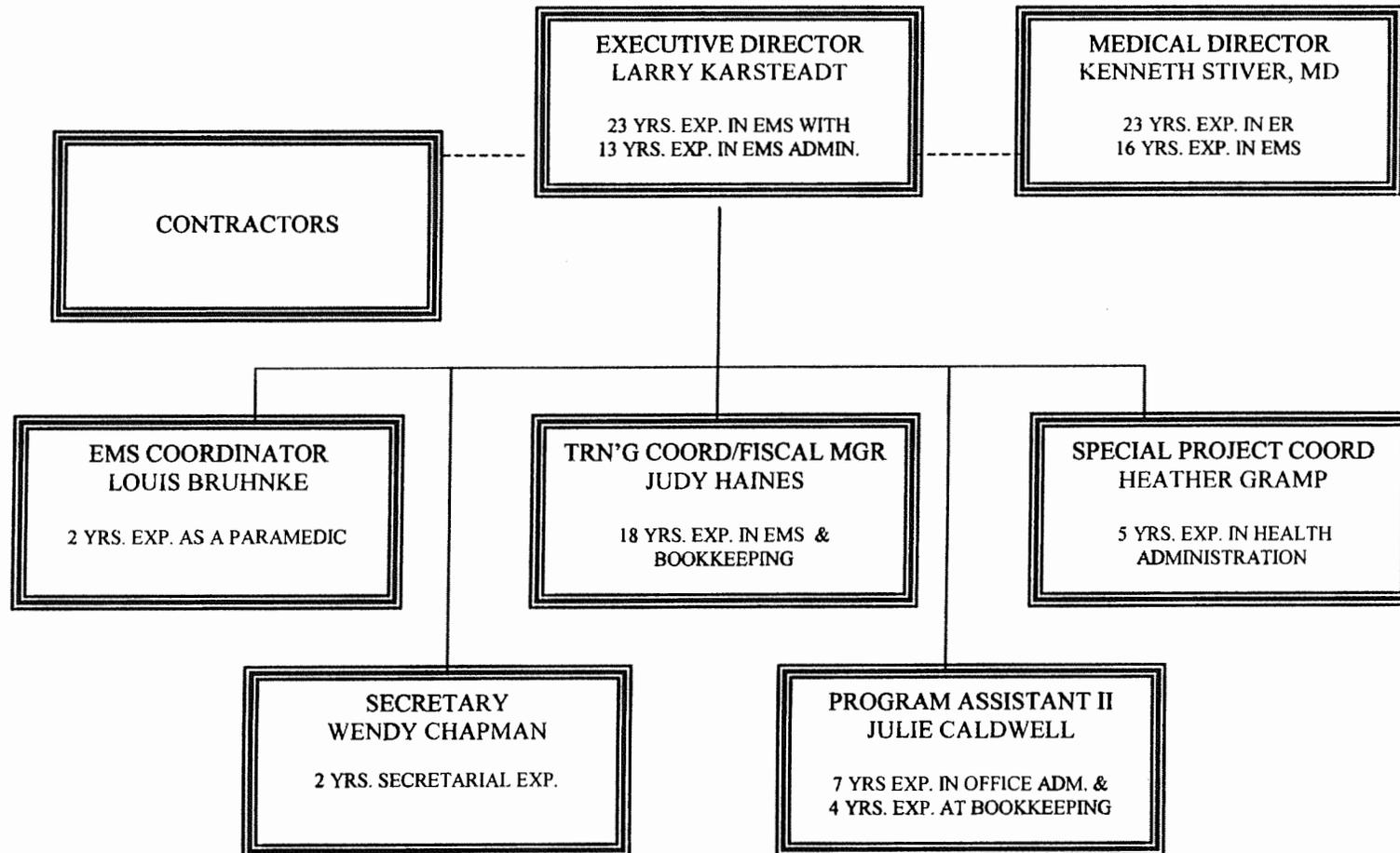
EMT-I Certification/Recertification	20.00
EMT-I Skills Test	100.00
Early Defibrillation Accreditation/Reaccreditation	20.00
Early Defibrillation Skills Test	50.00
EMT-II Certification/Reaccreditation	50.00
EMT-II Skills Test	100.00
Initial EMT-P Accreditation	50.00
MICN Authorization/Reauthorization	50.00
MICN Skills Test	35.00
Card Replacement	10.00
Reactivation from LOA	15.00
Reactivation from Suspension	25.00
Re-test Fee	20.00
Returned Check Fee	10.00

EMS System: North Coast EMSReporting Year: FY 1998-1999

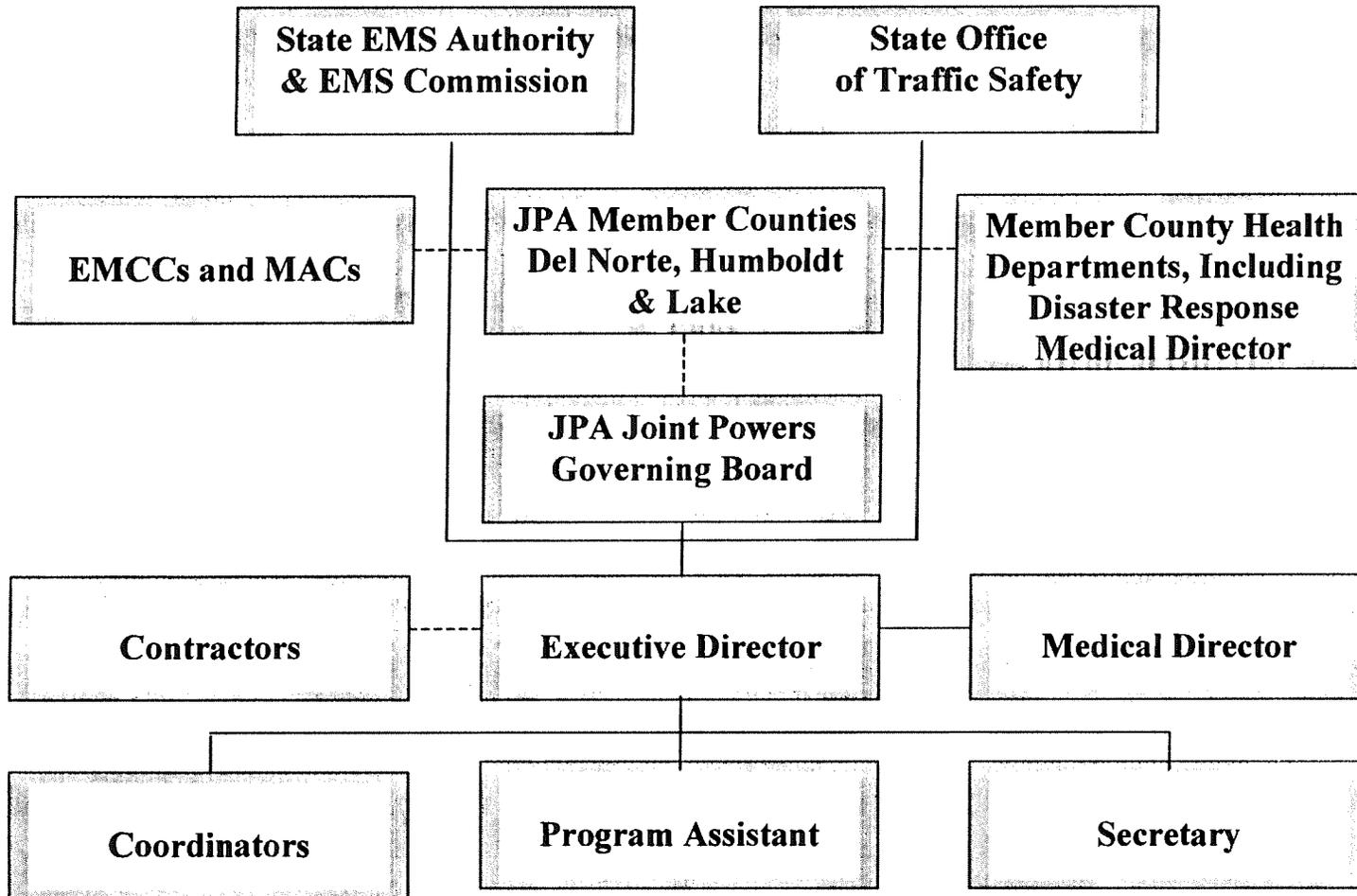
CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (% of Salary)	COMMENTS
EMS Administrator/Coord./Dir.	Executive Director	1.0 FTE	\$27.68	24%	
ALS Coord./Field Coord./Trng Coord.	EMS Coordinator	1.0 FTE	\$21.16	24%	
Program Coord./Field Liaison (Non-clinical)	Training Coordinator/ Fiscal Manager	1.0 FTE	\$21.16	24%	
Program Coord./Field Liaison (Non-clinical)	Special Project Coordinator (Added 1/5/99)	1.0 FTE	\$21.16	24%	
Med. Director	Medical Director		\$1,125/month	-0-	Contractual
Ex. Secretary	Secretary	1.0 FTE	\$12.26	24%	
Other Clerical	Program Assistant	0.80 FTE	\$19.50	24%	

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

### FY 1998-99 NORTH COAST EMS PERSONNEL ORGANIZATIONAL CHART



### NORTH COAST EMS ORGANIZATIONAL CHART June, 1999



**TABLE 3: PERSONNEL/TRAINING**

EMS System: North Coast EMS Reporting Year: FY 1998-1999

NOTE: Table 3 is to be reported by agency.

	EMT-Is	EMT-IIIs	EMT-PS	MICN	EMS Dispatchers
Total certified	605	12		103	**
Number newly certified this year	145	0		5	**
Number recertified this year	124	1		29	**
Total number of accredited personnel on July 1 of the reporting year			93		
Number of certification reviews resulting in					
a) formal investigations	-0-	-0-	-0-	-0-	-0-
b) probation	3	-0-	-0-	-0-	-0-
c) suspensions	-0-	-0-	-0-	-0-	-0-
d) revocations	-0-	-0-	-0-	-0-	-0-
e) denials	-0-	-0-	-0-	-0-	-0-
f) denials of renewal	-0-	-0-	-0-	-0-	-0-
g) no action taken	-0-	-0-	-0-	-0-	-0-

1. Number of EMS dispatchers trained to EMSA standards: \*\* 92  
 \*\* Medical Priority sets the standards, trains and certifies dispatchers. As of June, 1998, approximately 92 dispatchers had been certified in the region by Medical Priority, Inc. Data since that time are unavailable.
  
2. Early defibrillation:
  - a) Number of EMT-I (defib) certified 123
  - b) Number of public safety (defib) certified (non-EMT-I) 38
  
3. Do you have a first responder training program? X yes        no





EMS System: North Coast Emergency Medical Services

County: Lake

Reporting Year: 1999

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

1. Number of primary Public Service Answering Points (PSAP) 1
2. Number of secondary PSAPs 0
3. Number of dispatch centers directly dispatching ambulances 1
4. Number of designated dispatch centers for EMS Aircraft 0
5. Do you have an operational area disaster communication system?    yes X no     
  - a. Radio primary frequency            MedNet
  - b. Other methods                        RedNet Phone
  - c. Can all medical response units communicate on the same disaster communications system?  
yes X    no
  - d. Do you participate in OASIS?    yes X    no
  - e. Do you have a plan to utilize RACES as a back-up communication system?  
yes         no X    RACES does not exist in county, but plan to use ARES.
    - 1) Within the operational area?            yes X no
    - 2) Between the operational are and the regions and/or state?    yes      no X
5. Who is your primary dispatch agency for day-to-day emergencies?  
Central Dispatch - Sheriff's Office
7. Who is your primary dispatch agency for a disaster? Sheriff's Office + OES

**TABLE 5: RESPONSE/TRANSPORTATION**EMS System: North Coast EMSReporting Year: 1998**NOTE:** Table 5 is to be reported by agency.

1. Number of exclusive operating areas	<u>N/A</u>
2. Percentage of population covered by Exclusive Operating Areas (EOA)	<u>N/A</u>
3. Total number responses	<u>13,529</u>
a) Number of emergency responses (code 2: expedient, Code 3: lights and siren)	<u>13,442</u>
b) Number of non-emergency responses (code 1: normal)	<u>87</u>
4. Total number of transports	<u>13,017</u>
a) Number of emergency responses (code 2: expedient, Code 3: lights and siren)	<u>12,691</u>
b) Number of non-emergency transports (code 1: normal)	<u>326</u>

**Early Defibrillation Programs**

5. Number of public safety defibrillation programs.	<u>12</u>
a) Automated	<u>12</u>
b) Manual	<u>0</u>
6. Number of EMT-defibrillation programs	<u>7</u>
a) Automated	<u>7</u>
b) Manual	<u>0</u>

**Air Ambulance Services (1996 data)**

7. Total number of responses.	<u>573</u>
a) Number of emergency responses	<u>49</u>
b) Number of non-emergency responses	<u>524</u>
8. Total number of transports	<u>563</u>
a) Number of emergency (scene) responses	<u>40</u>
b) Number of non-emergency responses	<u>523</u>

**TABLE 6: FACILITIES/CRITICAL CARE**EMS System: North Coast EMSReporting Year: FY 1998-1999**NOTE:** Table 6 is to be reported by agency.**Trauma**

## 1. Trauma Patients:

- |  |            |
|--|------------|
| a) Number of patients meeting trauma triage criteria                                   | <u>N/A</u> |
| b) Number of major trauma victims transported directly to a trauma center by ambulance | <u>N/A</u> |
| c) Number of major trauma patients transferred to a trauma center                      | <u>N/A</u> |
| d) Number of patients meeting triage criteria who weren't treated at a trauma center.  | <u>N/A</u> |

**Emergency Departments:**

- |   |                   |
|---|-------------------|
| 2. Total number of emergency departments      | <u>8</u>          |
| a) Number of referral emergency services      | <u>          </u> |
| b) Number of standby emergency services       | <u>1</u>          |
| c) Number of basic emergency services         | <u>7</u>          |
| d) Number of comprehensive emergency services | <u>          </u> |

**Receiving Hospitals**

- |  |          |
|--|----------|
| 3. Number of receiving hospitals with written agreements | <u>1</u> |
| 4. Number of base hospitals with written agreements      | <u>7</u> |

**TABLE 7: DISASTER MEDICAL**

EMS System:	<u>North Coast Emergency Medical Services</u>	<b>NOTE:</b> Disaster Medical Operations are handled by Public Health Dept., not North Coast EMS.
County:	<u>Del Norte</u>	
Reporting Year:	<u>1999</u>	

**SYSTEM RESOURCES**

1. Casualty Collections Points (CCP)
  - a. Where are your CCPs located? Depends on needed areas
  - b. How are they staffed? Depends on staff and needs
  - 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 team?      yes \_\_\_      no X
  - 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 \_\_\_      no X

**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 jurisdictions EOCs you will need to interact with in a disaster?      2
3. Have you tested your MCI Plan this year in a:
  - a. real event?      yes \_\_\_      no X
  - b. exercise?      yes X      no \_\_\_



EMS System: North Coast Emergency Medical Services  
 County: Humboldt  
 Reporting Year: 1999

**NOTE:** Disaster Medical Operations are handled by Public Health Dept., not North Coast EMS.  
 Contacts:  
 Dr. Ann Lindsay  
 (707) 268-2181 or  
 Clarke Guzzi  
 (707) 268-2187

**SYSTEM RESOURCES**

1. Casualty Collections Points (CCP)
  - a. Where are your CCPs located? Public Schools
  - b. How are they staffed? Red Cross and Department of Social Services Staff
  - 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 team?      yes \_\_\_      no X
  - b. At what HazMat level are they trained? Decontamination
  - c. Do you have the ability to do decontamination in an emergency room?      yes X      no \_\_\_
  - d. Do you have the ability to do decontamination in the field?      yes X      no \_\_\_

**OPERATIONS**

1. Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure?      yes X      no \_\_\_
2. What is the maximum number of local jurisdictions EOCs you will need to interact with in a disaster?      7
3. Have you tested your MCI Plan this year in a:
  - a. real event?      yes X      no \_\_\_
  - b. exercise?      yes X      no \_\_\_

EMS System: North Coast Emergency Medical Services

County: Humboldt

Reporting Year: 1999

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

None with independent counties except through State Mutual Aid Agreement.

5. Do you have formal agreements with hospitals in your operational areas to participate in disaster planning and response?      yes \_\_\_      no X

Good informal relationships

6. Do you have a formal agreement with community clinics in your operational areas to participate in disaster planning and response?      yes \_\_\_      no X

Good informal relationships

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 \_\_\_      no X

9. If not, to whom do you report?      Disasters: Dr. Ann Lindsay, Humboldt County Health Officer

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 X      no \_\_\_



EMS System: North Coast Emergency Medical Services

County: Lake

Reporting Year: 1999

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

\_\_\_\_\_

5. Do you have formal agreements with hospitals in your operational areas to participate in disaster planning and response?      yes\_\_\_      no X

Good informal relationships

6. Do you have a formal agreement with community clinics in your operational areas to participate in disaster planning and response?      yes\_\_\_      no X

Good informal relationships

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\_\_\_

If not, to whom do you report? Not a separate EMS dept., but separate we are from the regional disaster response agency.

10. If not in the health department, do you have a plan to coordinate public health and environmental health issues with the Health Department      N/A yes\_\_\_      no\_\_\_

**TABLE 9: APPROVED TRAINING PROGRAMS**

EMS System: North Coast EMS County: Del Norte Reporting Year: 1999

NOTE: Table 9 is to be completed by county. Make copies to add pages as needed.

Training Institution Name/Address

Crescent City Fire Department 520 I Street Crescent City, CA 95531		Cindy Henderson (707) 487-1116
Student Eligibility:*  Open to general public	Cost of Program  Basic <u>\$ 150</u>  Refresher <u>\$ 40</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>30</u> Refresher: <u>15</u> Cont. Education: _____ Expiration Date: <u>3/31/99</u>  Number of courses: <u>2</u> Initial training: <u>1</u> Refresher: <u>1</u> Cont. Education: _____

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

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

EMS System: North Coast EMS

County: Humboldt

Reporting Year: 1999

Training Institution Name/Address

Arcata Fire Protection District 631 Ninth Street Arcata, CA 95521		David White (707) 825-2000
Student Eligibility: *  Restricted to Arcata Fire Personnel	Cost of Program  Basic <u>N/A</u>  Refresher <u>N/A</u>	**Program Level: <u>EMT-I Refresher Only</u> Number of students completing training per year: Initial training: <u>N/A</u> Refresher: <u>20 every other year</u> Cont. Education: _____ Expiration Date: <u>11/28/99</u>  Number of courses: <u>1 every 2 years</u> Initial training: <u>N/A</u> Refresher: <u>1 every 2 years</u> Cont. Education: _____

Training Institution Name/Address

College of the Redwoods 7351 Tompkins Hill Road Eureka, CA 95501-9300		Sandra Siddall (707) 476-4216
Student Eligibility: *  Open to those enrolled through CR	Cost of Program  Basic <u>\$12 per unit</u>  Refresher <u>\$95</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>approx. 215/year</u> Refresher: <u>3</u> Cont. Education: _____ Expiration Date: <u>10/31/99</u>  Number of courses: <u>8</u> Initial training: <u>5</u> Refresher: <u>2</u> Cont. Education: <u>0</u>

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

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

EMS System: North Coast EMS

County: Humboldt

Reporting Year: 1998

Training Institution Name/Address

Ferndale Volunteer Fire Department Post Office Box 523 Ferndale, CA 95536		Tom Ford, EMT-I Program Director (707) 786-4298
Student Eligibility:* Ferndale VFD and other local departments as available.	Cost of Program  Basic _____  Refresher <u>\$50</u>	**Program Level: <u>EMT-I refresher</u> Number of students completing training per year: Initial training: _____ Refresher: <u>12</u> Cont. Education: <u>6</u> Expiration Date: <u>3/31/02</u>  Number of courses: <u>1</u> Initial training: _____ Refresher: _____ Cont. Education: _____

Training Institution Name/Address

Humboldt Regional Occupational Program 901 Myrtle Avenue Eureka, CA 95501		Douglas Boileau, MBA, EMT-P (707) 445-7122 (707) 822-3353
Student Eligibility:*  Certified EMT-Is who pass entrance exams	Cost of Program  Basic <u>\$1,500</u>  Refresher <u>0</u>	**Program Level: <u>Paramedic</u> Number of students completing training per year: (every other year) Initial training: <u>25</u> Refresher: _____ Cont. Education: _____ Expiration Date: <u>5/31/02</u>  Number of courses: <u>1</u> Initial training: <u>1</u> Refresher: _____ Cont. Education: _____

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

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

EMS System: North Coast EMS

County: Humboldt

Reporting Year: 1999

Training Institution Name/Address

Humboldt State University Arcata, CA 95521		Tricia Gill (707) 826-3357
Student Eligibility:*  18+ years of age Open to the general public	Cost of Program  Basic <u>\$155</u>  Refresher <u>\$77</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>84</u> Refresher: <u>43</u> Cont. Education: <u>56</u> Expiration Date: <u>2/28/03</u>  Number of courses: <u>2</u> Initial training: <u>2</u> Refresher: <u>2</u> Cont. Education: <u>2</u>

Training Institution Name/Address

Shelter Cove Fire Department 9126 Shelter Cove Road Whitethorn, CA 95589		Sal Gurreri, EMT-P (707) 986-7560
Student Eligibility:*  Open to general public	Cost of Program  Basic <u>\$100</u>  Refresher <u>00</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>10</u> Refresher: <u>10</u> Cont. Education: _____ Expiration Date: <u>8/31/02</u>  Number of courses: <u>2</u> Initial training: <u>1</u> Refresher: <u>1</u> Cont. Education: <u>various</u>

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

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

EMS System: North Coast EMS County: Humboldt Reporting Year: 1999

Training Institution Name/Address

St. Joseph Hospital/STAR Post Office Box 4 Mad River, CA 95552		Jim Tinkelenberg, EMT-II, EMS Coordinator (707) 574-6616 tink@saber.net
Student Eligibility:*  Open to general public	Cost of Program  Basic <u>\$50</u>  Refresher <u>varies</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>12-20</u> Refresher: <u>6-10</u> Cont. Education: <u>80-100</u> Expiration Date: <u>1/31/00</u>  Number of courses: <u>2</u> Initial training: <u>1</u> Refresher: <u>1</u> Cont. Education: _____

Training Institution Name/Address

St. Joseph Hospital 2700 Dolbeer Street Eureka, CA 95501		Vicki Gibney, RN, MICN, CEN 269-4250 (work) 442-2559 (home)
Student Eligibility:*  Must be an RN. Must have at least 500 hours of emergency nursing. Must be recommended by Emergency Dept. Director. Must pass MICN pre-test by 80%	Cost of Program  Basic <u>\$250</u> per student  Refresher <u>\$50</u> per student	**Program Level: <u>MICN</u> Number of students completing training per year: Initial training: <u>- approx. 15 per year</u> Refresher: _____ Cont. Education: _____ Expiration Date: <u>2/28/03</u>  Number of courses: <u>varies - only on as-needed basis</u> Initial training: _____ Refresher: <u>varies – only on an as-needed basis</u> Cont. Education: _____

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

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

EMS System: North Coast EMS

County: Lake

Reporting Year: 1999

Training Institution Name/Address

Kelseyville Fire Department Post Office Box 306 Kelseyville, CA 95451		Sam Hukkanen (707) 279-4269
Student Eligibility:*  Open to general public	Cost of Program  Basic <u>\$100</u>  Refresher <u>\$ 25</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>30</u> Refresher: <u>20</u> Cont. Education: <u>10</u> Expiration Date: <u>12/31/99</u>  Number of courses: <u>14</u> Initial training: <u>1</u> Refresher: <u>1</u> Cont. Education: <u>12</u>

Training Institution Name/Address

Kelseyville High School Post Office Box 308/5480 Main St. Kelseyville, CA 95451		Herb Colt (707) 279-4923
Student Eligibility:*  Open to K.H.S. juniors and seniors and the general public.	Cost of Program  Basic <u>00</u>  Refresher <u>00</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>30</u> Refresher: _____ Cont. Education: _____ Expiration Date: <u>8/31/99</u>  Number of courses: <u>2 per year</u> Initial training: <u>2 per year</u> Refresher: _____ Cont. Education: _____

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

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

EMS System: North Coast EMS

County: Lake

Reporting Year: 1999

Training Institution Name/Address

Lakeshore Fire Protection District Post Office Box 506 Clearlake, CA 95422		Willie Sapeta (707) 994-2170 ext 37
Student Eligibility:*  Open to general public	Cost of Program  Basic <u>\$140</u>  Refresher <u>\$0</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>25</u> Refresher: <u>20</u> Cont. Education: _____ Expiration Date: <u>8/31/00</u>  Number of courses: <u>2</u> Initial training: <u>1</u> Refresher: <u>1</u> Cont. Education: <u>monthly</u>

Training Institution Name/Address

Lucerne Fire Department Post Office Box 647 Lucerne, CA 95458		Buddy Wallat (707) 274-3100 fax: (707) 274-3102
Student Eligibility:*  Restricted to Fire Service Personnel	Cost of Program  Basic <u>\$100</u>  Refresher <u>\$25</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>10</u> Refresher: <u>12</u> Cont. Education: <u>12-15</u> Expiration Date: <u>11/20/00</u>  Number of courses: <u>3</u> Initial training: <u>2</u> Refresher: <u>1</u> Cont. Education: <u>ongoing on a monthly basis</u>

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

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

EMS System: North Coast EMS

County: Lake

Reporting Year: 1999

Training Institution Name/Address

Nice Fire Department Post Office Box 4000 Nice, CA 95464		Jill Saylor (707) 274-8834
Student Eligibility:  Restricted to Fire Service Personnel	Cost of Program  Basic <u>\$115</u>  Refresher <u>\$24</u>	**Program Level: <u>EMT-I</u> Number of students completing training per year: Initial training: <u>18</u> Refresher: <u>10</u> Cont. Education: _____ Expiration Date: <u>8/31/00</u>  Number of courses: <u>1 every 1 or 2 years</u> Initial training: _____ Refresher: <u>1 every 1 or 2 years</u> Cont. Education: _____

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

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

TABLE 10: FACILITIES

EMS System: North Coast EMS County: Del Norte Reporting Year: 1999

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

Name, address & telephone	Sutter Coast Hospital 800 E. Washington Crescent City, CA 95531 (707) 464-8888		Primary Contact:	Chantal Giebert, RN		
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Pediatric Critical Care Center:*	
EDAP:**	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

\* Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*

\*\* Meets EMSA *Emergency Departments Approved for Pediatrics (EDAP) Standards.*

EMS System: North Coast EMS County: Humboldt Reporting Year: 1999

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

Name, address & telephone:		General Hospital ER 2200 Harrison Street Eureka, CA 95501 (707) 445-5111, fax: 441-4433		Primary Contact:		Victor Wallenkampf, M.D. 445-5111, ext. 1196	
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:*	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		Standby emergency service	<input type="checkbox"/>				
		Basic emergency service	<input checked="" type="checkbox"/>				
		Comprehensive emergency service	<input type="checkbox"/>				
EDAP:**	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PICU:***	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
							If Trauma Center what Level:****

Name, address & telephone		Mad River Community Hospital P.O. Box 1115 Arcata, CA 95518 (707) 822-3621		Primary Contact:		Laurie Ehret, RN	
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Pediatric Critical Care Center:*	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		Standby emergency service	<input type="checkbox"/>				
		Basic emergency service	<input checked="" type="checkbox"/>				
		Comprehensive emergency service	<input type="checkbox"/>				
EDAP:**	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PICU:***	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
							If Trauma Center what Level:****

\*Meets EMSA Pediatric Critical Care Center (PCCC) Standards.

\*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.

Name, address & telephone		Redwood Memorial Hospital 3300 Renner Drive Fortuna, CA 95540 (707) 725-7382		Primary Contact: Elizabeth Gehrke, RN	
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service Standby emergency service Basic emergency service Comprehensive emergency service	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Base Hospital:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
EDAP:**	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
				Trauma Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
					If Trauma Center what Level:****

Name, address & telephone		Jerold Phelps Community Hospital 733 Cedar Street Garberville, CA 95542 (707) 923-3921		Primary Contact: Juliet Hegdal, R.N.	
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service Standby emergency service Basic emergency service Comprehensive emergency service	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Base Hospital:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
EDAP:**	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
				Trauma Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
					If Trauma Center what Level:****

\* Meets EMSA Pediatric Critical Care Center (PCCC) Standards.

\*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.

Name, address & telephone		St. Joseph Hospital 2700 Dolbeer Street Eureka, CA 95501 (707) 445-8121 (switchboard)		Primary Contact: Vicki Gibney, RN or Roxanne Spencer, R.N.	
Written Contract:	<input checked="" type="checkbox"/> yes	Referral emergency service	<input type="checkbox"/>	Base Hospital:	<input checked="" type="checkbox"/> yes
	<input type="checkbox"/> no	Standby emergency service	<input type="checkbox"/>		<input type="checkbox"/> no
		Basic emergency service	<input checked="" type="checkbox"/>		
		Comprehensive emergency service	<input type="checkbox"/>		
EDAP:**	<input checked="" type="checkbox"/> yes	PICU:***	<input type="checkbox"/> yes	Burn Center:	<input type="checkbox"/> yes
	<input type="checkbox"/> no		<input checked="" type="checkbox"/> no		<input checked="" type="checkbox"/> no
				Trauma Center:	<input type="checkbox"/> yes
					<input checked="" type="checkbox"/> no
					If Trauma Center what Level:****

\* Meets EMSA Pediatric Critical Care Center (PCCC) Standards.

\*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.

EMS System: North Coast EMS County: Lake Reporting Year: 1999

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

Name, address & telephone		Adventist Health/Redbud Community Hospital Post Office Box 6710 Clearlake, CA 95422 (707) 994-6486		Primary Contact: Maureen Sharit, RN, PCNC Jill Pemental, RN, Emer. Dept. Mgr.	
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Standby emergency service	<input type="checkbox"/>		
		Basic emergency service	<input checked="" type="checkbox"/>		
		Comprehensive emergency service	<input type="checkbox"/>		
EDAP:**	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:***	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
				Trauma Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
					Pediatric Critical Care Center:*
					<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
					If Trauma Center what Level:****

Name, address & telephone		Sutter-Lakeside Hospital 5176 Hill Road East Lakeport, CA 95451 (707) 262-5008 fax: 262-5053		Primary Contact: John Gorbenko, RN	
Written Contract:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Standby emergency service	<input type="checkbox"/>		
		Basic emergency service	<input checked="" type="checkbox"/>		
		Comprehensive emergency service	<input type="checkbox"/>		
EDAP:**	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PICU:***	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
				Trauma Center:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
					Pediatric Critical Care Center:*
					<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
					If Trauma Center what Level:****

\* Meets EMSA Pediatric Critical Care Center (PCCC) Standards.

\*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.

TABLE 11A: DISASTER MEDICAL RESPONDERS

EMS System: North Coast EMS County: Del Norte Date: 1999

**County Office of Emergency Services  
Coordinator:**

Ron Sandler

Work Telephone No.: (707) 487-1116

Home Telephone No.: (707) 464-5591

Office Pager No.: (707) 951-6904

FAX No.: (707) 487-3116 or 465-5742

24-HR. No.: (707) 464-4191

**Alternate's Name:**

Jim Maready

Work Telephone No.: (707) 464-4191

Home Telephone No.: (707) 464-3468

Office Pager No.: N/A

FAX No.: (707) 465-5742

24-HR. No.: (707) 464-4191

**County EMS Disaster Medical Services  
Coordinator:**

Dr. Richard Mize

Work Telephone No.: (707) 465-6925  
or (707) 464-3191

Home Telephone No.: (707) 464-8338

Office Pager No.: N/A

FAX No.: (707) 464-4571 or (707) 465-1783

24-HR. No.: (707) 464-3191

**Alternate's Name:**

Linda Shutz, PHN

Work Telephone No.: (707) 464-3191

Home Telephone No.: (707) 464-1494

Office Pager No.: N/A

FAX No.: (707) 465-1783

24-HR. No.: (707) 464-3191

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Del Norte Date: 1999

**County Health Officer's Name:**

Dr. Richard Mize

Work Telephone No.: (707) 465-6925  
or 464-3191

Home Telephone No.: (707) 464-8338

Office Pager No.: N/A

FAX No.: (707) 464-4571 or 465-1783

24-HR. No.: (707) 464-3191

**Alternate's Name:**

Linda Shutz, PHN

Work Telephone No.: (707) 464-7227

Home Telephone No.: (707) 464-1494

Office Pager No.: N/A

FAX No.: (707) 465-1783

24-HR. No.: (707) 464-3191

Medical/Health EOC Telephone No.:

established at time of incident

Amateur Radio contact name:

request from logistics

Who is the RDMHC for your region?

Dr. William Walker

Medical/Health EOC FAX No.

established at time of incident

Medical/Health radio frequency used:

Med-Net Tx 468.100; Med-Net Rx 463.100; open  
PL

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Humboldt Date: 1999

**County Office of Emergency Services  
Coordinator:**

**Alternate's Name:**

Lt. Steve Cobine

Dan Larkin

Work Telephone No.: (707) 268-2500/01

Work Telephone No.: (707) 268-2500/02

Home Telephone No.: (707) 443-2052

Home Telephone No.: (707) 443-4223

Office Pager No.: (707) 444-7189

Office Pager No.: (707) 441-6219

FAX No.: (707) 445-7764

FAX No.: (707) 445-7764

24-HR. No.: (707) 445-7251 (S.O. Emerg)

24-HR. No.: (707) 445-7251 (S.O. Emerg)

**County EMS Disaster Medical Services  
Coordinator:**

**Alternate's Name:**

Ann Lindsay, M.D.

Jeff Arnold, Public Health Director

Work Telephone No.: (707) 268-2181

Work Telephone No.: (707) 445-7437

Home Telephone No.: (707) 839-1712

Home Telephone No.: (707) 839-1935

Office Pager No.: (707) 822-7041

Office Pager No.: (707) 444-7447

FAX No.: (707) 445-6097

FAX No.: (707) 445-6097

24-HR. No.: (707) 445-7251

24-HR. No.: (707) 445-7251

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Humboldt Date: 1999

**County Health Officer's Name:**

Ann Lindsay, M.D.

**Alternate's Name:**

Rebecca Stauffer, M.D.

Work Telephone No.: (707) 268-2181

Work Telephone No.: (707) 445-6210

Home Telephone No.: (707) 839-1712

Home Telephone No.: (707) 822-9271

Office Pager No.: (707) 822-7041

Office Pager No.: N/A

FAX No.: (707) 445-6097

FAX No.: (707) 445-5686

24-HR. No.: (707) 445-7251 (S.O. Emer.)

24-HR. No.: (707) 445-7251 (S.O. Emer.)

**Medical/Health EOC Telephone No.:**

(707) 268-2513

**Medical/Health EOC FAX No.**

(707) 445-7764

**Amateur Radio contact name:**

Clem Cantu

**Medical/Health radio frequency used:**

Med Net Tx 468.000 and RX 463.000 Pierce Mt. Repeater or 2 m-) Tx 146.910 Rx 146.310

**Who is the RDMHC for your region?**

Dr. William Walker

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Lake Date: 1999

**County Office of Emergency Services  
Coordinator:**

Caroline Constable

Work Telephone No.: (707) 262-0862

Home Telephone No.: (707) 994-3828

Office Pager No.: (707) 264-7828

FAX No.: (707) 262-0973

24-HR. No.: (707) 263-2331

**Alternate's Name:**

Kim Clymire

Work Telephone No.: (707) 262-1618

Home Telephone No.: (707) 994-5012

Office Pager No.: (707) 264-7828

FAX No.: (707) 262-0973

24-HR. No.: (707) 263-2331

**County EMS Disaster Medical Services  
Coordinator:**

Robert Erickson

Work Telephone No.: (707) 263-8929

Home Telephone No.: (707) 279-2609

Office Pager No.: (707) 264-3926

FAX No.: (707) 263-1662

24-HR. No.: (707) 263-2331

**Alternate's Name:**

Richard B. Arnold, M.D.

Work Telephone No.: (707) 263-2241

Home Telephone No.: (707) 279-2836

Office Pager No.: (707) 264-3811

FAX No.: (707) 263-1662

24-HR. No.: (707) 263-2331

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Lake Date: 1999

**County Health Officer's Name:**

Dr. Richard Arnold

**Alternate's Name:**

Sandra Boorn

Work Telephone No.: (707) 263-2241

Work Telephone No.: (707) 263-2241

Home Telephone No.: (707) 279-2838

Home Telephone No.: (707) 994-1746

Office Pager No.: (707) 264-3811

Office Pager No.: N/A

FAX No.: (707) 262-4280

FAX No.: (707) 263-1662

24-HR. No.: (707) 263-2331

24-HR. No.: (707) 263-2331

Medical/Health EOC Telephone No.:

(707) 263-8929

Medical/Health EOC FAX No.

(707) 263-1662

Amateur Radio contact name:

Alan Vanderwarker

Medical/Health radio frequency used:

MedNet 463.000

Who is the RDMHC for your region?

Dr. William Walker

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

**TABLE 11B: DISASTER MEDICAL RESPONDERS**EMS System: North Coast EMS County: Del Norte Date: 1999**Regional Disaster Medical Health Coordinator:**Dr. William WalkerWork Telephone No.: (925) 646-4690Home Telephone No.: (510) 370-5010

Office Pager No.: \_\_\_\_\_

FAX No.: (925) 646-437924-HR. No.: (510) 646-2441**Alternate's Name:**Art LathropWork Telephone No.: (510) 646-4690Home Telephone No.: (510) 339-8296Office Pager No.: (925) 940-1114FAX No.: (925) 646-437924-HR. No.: (510) 646-2441**Regional Ambulance Transportation Coordinator:**Ron SandlerWork Telephone No.: (707) 437-1116Home Telephone No.: (707) 464-5591Office Pager No.: (707) 951-6904FAX No.: (707) 487-311624-HR. No.: (707) 464-4191**Alternate's Name:**none

Work Telephone No.: \_\_\_\_\_

Home Telephone No.: \_\_\_\_\_

Office Pager No.: \_\_\_\_\_

FAX No.: \_\_\_\_\_

24-HR. No.: \_\_\_\_\_

Medical/Health EOC Telephone No.:

established at the time of incident

Amateur Radio contact name:

request from logistics

Medical/Health EOC FAX No.

established at the time of incident

Medical/Health radio frequency used:

Med-Net Tx 468.100; Med-Net Rx 463.100; open PL

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Humboldt Date: 1999

NOTE: Information on Table 11b is to be completed by counties with RDMHC projects.

<b>Regional Disaster Medical Health Coordinator:</b>	<b>Alternate's Name:</b>
<u>Dr. William Walker</u>	<u>Art Lathrop</u>
Work Telephone No.: <u>(925) 646-4690</u>	Work Telephone No.: <u>(925) 646-4690</u>
Home Telephone No.: <u>(510) 370-5010</u>	Home Telephone No.: <u>(510) 339-8296</u>
Office Pager No.: _____	Office Pager No.: <u>(925) 940-1114</u>
FAX No.: <u>(925) 646-4379</u>	FAX No.: <u>(925) 646-4379</u>
24-HR. No.: <u>(510) 646-2441</u>	24-HR. No.: <u>(510) 646-2441</u>

<b>Regional Ambulance Transportation Coordinator:</b>	<b>Alternate's Name:</b>
<u>Dr. William Walker</u>	<u>none</u>
Work Telephone No.: <u>(925) 646-4690</u>	Work Telephone No.: _____
Home Telephone No.: <u>(510) 370-5010</u>	Home Telephone No.: _____
Office Pager No.: _____	Office Pager No.: _____
FAX No.: <u>(925) 646-4379</u>	FAX No.: _____
24-HR. No.: <u>(510) 646-2441</u>	24-HR. No.: _____

Medical/Health EOC Telephone No.:	Medical/Health EOC FAX No.
<u>RDMHC (510) 803-7800</u>	<u>RDMHC (510) 803-7878</u>
Amateur Radio contact name:	Medical/Health radio frequency used:
<u>Clem Cantu</u>	<u>MedNet Horse Mt. Repeater: Tx 468.025</u>
	<u>Rx 463.025 &amp; PLL code 103.5</u>
	<u>2 meter: Tx 146.410 &amp; Rx 146.310</u>

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

EMS System: North Coast EMS County: Lake Date: 1999

NOTE: Information on Table 11b is to be completed by counties with RDMHC projects.

**Regional Disaster Medical Health Coordinator:**

**Alternate's Name:**

Dr. William Walker

Art Lathrop

Work Telephone No.: (925) 646-4690

Work Telephone No.: (925) 646-4690

Home Telephone No.: (510) 370-5010

Home Telephone No.: (510) 339-8296

Office Pager No.: \_\_\_\_\_

Office Pager No.: (925) 940-1114

FAX No.: (925) 646-4379

FAX No.: (925) 646-4379

24-HR. No.: (510) 646-2441

24-HR. No.: (510) 646-2441

**Regional Ambulance Transportation Coordinator:**

**Alternate's Name:**

Dr. William Walker

none

Work Telephone No.: (925) 646-4690

Work Telephone No.: \_\_\_\_\_

Home Telephone No.: (510) 370-5010

Home Telephone No.: \_\_\_\_\_

Office Pager No.: \_\_\_\_\_

Office Pager No.: \_\_\_\_\_

FAX No.: (925) 646-4379

FAX No.: \_\_\_\_\_

24-HR. No.: (510) 646-2441

24-HR. No.: \_\_\_\_\_

Medical/Health EOC Telephone No.:

Medical/Health EOC FAX No.

(707) 263-8929

(707) 263-1662

Amateur Radio contact name:

Medical/Health radio frequency used:

Alan Vanderwarker

MedNet 463.000

**NOTE:** In the event of an emergency it is critical for the EMSA to have current information on whom to contact. Therefore, please submit name and telephone number changes to Table 11 as they occur.

### **1999 Emergency Medical Services System Plan Development Process**

This 1999 EMS System Plan was completed by North Coast EMS on behalf of the region with the contribution of numerous individuals and agencies. Agency staff began writing the EMS Plan in 1997. Approximately one third of the document was drafted at that time, but staff changes and the need to focus on other priorities delayed completion of the document.

With State General Fund special project augmentation funds, the agency was able to return to full staffing level in January, 1999 for the first time since the early 1990s. With the addition of the Special Project Coordinator, Heather Gramp, work on the 1999 EMS System Plan resumed in January, 1999.

Sections of the EMS Plan were drafted using the expertise of appropriate personnel as warranted by the particular content of each section. Most of the tables illustrating non-agency resources, operations, and personnel (Tables 8 and 9, for example) were completed directly by the relevant prehospital providers or other agencies. Individuals who were consulted regarding the EMS Plan sections include North Coast EMS agency staff, emergency transport providers, County Health Department and OES personnel, Fire Chiefs, MACs, EMCCs, emergency department personnel, the Humboldt/Del-Norte Medical Society Disaster Subcommittee and others. County staff in Del Norte, Humboldt, and Lake Counties contributed greatly to the Response/Transportation and Disaster Medical Response sections by providing information for many of the standards which were directly applicable to county functions.

The EMS System Plan Review Committee was reactivated in February, 1999. Thereafter, as draft sections were completed they were distributed to committee members for review and comment during two specified comment periods. Members of this committee included: JPA Governing Board members, County Health Officers, County Health Department Directors, EMCC Chairpersons, Office of Emergency Services Coordinators, Fire Chiefs and Fire Chief Associations representatives, Prehospital Care Medical Directors, Prehospital Care Nurse Coordinators, Pediatric Liaison Nurses, and LALS/ALS Service Providers.

North Coast EMS staff evaluated and took action on the comments which were returned following the comment periods; most comments were incorporated into the EMS Plan. The document entitled "Summary of Comments Received" and the revised draft of the 1999 EMS System Plan were discussed by the JPA Governing Board during their April 29, 1999 meeting. North Coast EMS staff were directed to identify mutually agreeable changes to wording (primarily in the Response/Transport and Disaster Medical Response sections) in cooperation with Humboldt County Health Department, Lake County Health Department and JPA Board member Bill Merriman from Lake County.

A final draft of the 1999 EMS System Plan and the document "Summary of Comments Received" were distributed to the EMS Plan Review Committee for final approval. Staff completed the final integration and formatting of the EMS Plan for presentation to the JPA Governing Board at their June 24, 1999 meeting. At that time, a resolution in support of the 1999 EMS System Plan was adopted and the EMS Plan was forwarded to the State EMS Authority on June 25, 1999.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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



May 11, 2000

Larry Karsteadt  
EMS Administrator  
North Coast EMS Agency  
86 E Street  
Eureka, CA 95501

Dear Mr. Karsteadt:

We have completed our review of *North Coast EMS Agency's Emergency Medical Services Plan: 1999*, and have found it to be in compliance with the *EMS System Standards and Guidelines and the EMS System Planning Guidelines*.

Several of our reviewers commented that your plan was very thorough and well put together and that you should be commended for your efforts.

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

Sincerely,

A handwritten signature in cursive script that reads "Daniel R. Smiley for".

Richard E. Watson  
Interim Director

RW:MH:mh