

**County of Marin**

**EMS Plan Update  
2007**



Marin County Emergency Medical Services Agency  
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**MARIN COUNTY  
EMERGENCY MEDICAL SERVICES AGENCY  
PROGRAM SUMMARY  
2004 - 2007**

In gratitude, the Emergency Medical Services (EMS) Agency acknowledges the substantial contributions from all Marin County EMS System providers and administrators who work hard to bring their expertise, knowledge and caring to improve emergency medical services for residents and visitors of Marin County. In particular, our gratitude extends to providers in prehospital EMS provider agencies, emergency departments and specialty care centers who attend to the needs of emergency patients, and to the members of the EMS Forum, Field Advisory, Medical Directors, CQI, TAC, Executive and Policy & Procedure Committees for their many hours of attention to detail in quality improvement and policy development for the EMS System.

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## MARIN COUNTY EMS AGENCY PROGRAM SUMMARY

2004 - 2007

This *Program Summary* provides a review of Emergency Medical Services (EMS) Agency activities for 2004 – 2007, and concludes with priorities for 2008. With the statistical reports that follow in the *Program Summary Supplement*, it is an update to the EMS Forum, the Marin County Board of Supervisors and the California State EMS (Emergency Medical Services) Authority. Previous annual reports are on the EMS Agency website for review at <http://www.co.marin.ca.us/ems>. In 2007 the EMS Agency re-stated its mission and goals, through a series of strategic planning sessions with EMS Agency staff and EMS System stakeholders. The mission and goals are provided here, followed by a summary of related activities.

### **EMS Agency Mission**

The EMS Agency is vested with authority from the California Code of Regulations (Health and Safety Code Title 22) to plan, implement, monitor and regulate the EMS System in Marin County. This mission involves the care of people who request and/or need emergency medical treatment. There are 4 primary goals directed by this mission:

- 1) Plan and regulate the EMS System
- 2) Sustain and evolve the EMS System Continuous Quality Improvement (CQI) process
- 3) Prepare the EMS System to respond to disaster
- 4) Effectively administer the EMS Agency

### ***Plan and regulate the EMS System***

General EMS System activities include maintaining ambulance Certificates of Operation and inspections, prehospital provider certifications and accreditations, ensuring county-wide compliance with state mandates, and developing and maintaining contractual agreements with providers. During 2004 - 2007, the Agency sustained this core regulatory mission, and incorporated a new policy for use of background checks on all EMT applications. This improves oversight of personnel qualifications prior to issuing a certificate to work as an EMT. Randy Saxe, interim EMS Program Manager, and Lynn Baker, EMS Program Office Manager, head up these core regulatory EMS Agency functions. Lynn is a 35-year Marin County employee, and though she officially retired early in 2008, she continues part-time in the office on a temporary basis. We offer Lynn our congratulations, and sincere thanks for her substantial service to Marin County.

During 2007, the former “Emergency Medical Care Committee” was restructured as the “EMS Forum”. This is a group of EMS System stakeholders that meets quarterly to confer with Department of Health and Human Services (HHS) executives on policy matters relating to the EMS System. The former “Prehospital Medical Care Committee” was restructured in 2007 as the “Field Advisory Committee”, to provide oversight and input to

the EMS Agency on operationally-based EMS System issues. See organizational chart on page 9.

### ***Sustain and evolve the Continuous Quality Improvement process***

The Continuous Quality Improvement (CQI) Committee maintains core EMS System clinical quality oversight functions, by providing a forum for EMS System stakeholder input on system data analysis, policy development and prehospital provider training.

The CQI Committee was reorganized through 2004 and early 2005, under the leadership of Alanna Brogan, RN, Kaiser Hospital Trauma Program Manager, with EMS Medical Director Bill Teufel, MD and Karrie Groves, RN. The structure and membership was reconfigured to provide systemwide stakeholder representation with a systematic data review process. The CQI Plan was developed and implemented in April 2005, in accordance with State EMS Authority guidelines. Subcommittees include Executive, Trauma Advisory Committee, Policy and Procedures. The committee chose system indicators using State EMS Authority guidelines. Analysis has been conducted on Pain Management and Advanced Airway Management; 2008 goals include review of Pediatric Seizures and Witnessed VF/VT.

### **EPCIS**

Central to the analysis of EMS System performance is the data derived from the *Electronic Prehospital Care Information System*, or EPCIS. This system was developed in the late 1980's by Jay Myhre, who

continues as a contractor for the EMS Agency. Troy Peterson and Darrin Allen work with Jay and EMS System providers to continuously upgrade EPCIS software and hardware, to improve ease of use for paramedics and CQI coordinators who input and analyze the information. The bulk of information in this Program Summary derives from EPCIS. EPCIS is undergoing an extensive review with EMS System providers and Marin County HHS Information Technology chief, Del Medina, to strategically plan for its evolution over the course of the next 3 years.

### **Ambulance Diversion**

A fundamental change in hospital diversion policy was implemented in 2005 when the Emergency Department Saturation policy was developed. Continued interest in trauma center diversions prompted a revision of the diversion policy in its entirety over the following year. In late 2007, a STEMI Receiving Center Cath Lab diversion category was added.

### **STEMI Receiving Centers**

Initial work on a STEMI Receiving Centers system began in 2006 to ensure integration of the prehospital system with hospital cardiac care programs that rapidly diagnose and treat heart attack patients. This activity is reflected in the increase in the use of 12-lead EKGs seen in EPCIS statistics beginning in 2006.

### **EMS System Notifications**

The Risk Management Subcommittee began a revision of the System Notification Policy in 2006 to improve the

data management process related to unusual occurrences and sentinel events. This new policy implementation date is May 1, 2008.

### **Trauma Advisory Committee**

The Trauma Advisory Committee (TAC) was reactivated in 2006 and continues to provide a forum for principal trauma system stakeholders to evaluate trauma system indicators such as over and undertriage, EMS helicopter use, and mortality. In March 2008 the first meeting of the Trauma Medical Audit subcommittee of TAC met in closed session confidential review of in-hospital trauma cases to address interfacility transfer issues. The Marin General Hospital Level III Trauma Center was reviewed for compliance with Marin County and American College of Surgeons (ACS) standards in 2007, by consultants who recommended the hospital could successfully vie for continued (ACS) verification as a Level III center.

### **Trauma Triage Tool**

The Trauma Triage Tool was addressed during 2005 toward revision and final implementation on January 1, 2006. The revision followed an extensive Trauma System evaluation process conducted between 2002 and 2004, using the American College of Surgeons Trauma System Consultation program, an economic evaluation by Bishop & Assoc., and stakeholder input. The revised Triage Tool directs all in-County ground transports to a single trauma receiving facility (Level III with 24/7 neurosurgery). This represents a significant change in the original trauma system design, which required paramedics to distinguish between two proximally located trauma receiving facilities

(Level III & EDAT [Emergency Dept. Approved for Trauma]), using prehospital field triage criteria that resulted in high overtriage rates. Paramedic judgment was added to the triage tool, allowing for field personnel to decide to activate the trauma system based solely on clinical assessment, even if patients do not meet other triage criteria. Overtriage rates (ISS<9/total trauma activations) measured from 2001-2005 had been in the range of 80%. Since trauma triage tool revision the rates have dropped to a 55% range and continue in a downward trend. See graph on page 17.

With the revision of the triage tool, the prehospital data system (EPCIS) was reprogrammed in October 2006 to more accurately identify prehospital use of the trauma triage tool. The Trauma System CQI process closely monitors the use of the newly-implemented tool. An EPCIS subcommittee, led by Troy Peterson, is steering a project to facilitate a more accurate use of the triage tool in the trauma system.

### **Elderly Falls**

During the triage tool revision process, an "Elderly Fall Victims" study was conducted to provide a focused analysis of cases in which elderly using anticoagulant medication suffer falls. These patients tend to look fairly well immediately after a minor fall, but their condition is often seen to rapidly deteriorate about six hours after the injury, and because of the anticoagulant medication, internal bleeding is difficult to control. A 2001 - 2004 review of "ground level" falls treated in all Marin hospitals revealed that annually, over 100 patients who use

anticoagulants, aged 65 or more, are treated for injuries after minor falls. This represents roughly 25% of all falls treated in Marin's trauma facilities annually. The results corroborated the anecdotal awareness in Marin County that this is a frequent occurrence, and that this population is at risk of poor outcomes if their injuries are not treated promptly in a trauma center. These results were incorporated into paramedic training programs and the trauma triage tool, so that prehospital personnel would have a higher index of suspicion in these cases, and use careful assessment in their decision about whether or not to triage to the trauma center.

### **EMS Helicopters**

The triage tool revision also included a change in the frequent helicopter use pattern in the east-central Marin area prior to 2006. A CQI audit had revealed significant overtriage of trauma patients to EMS helicopters from incidents less than 30 minutes by ground from the scene to the trauma center. Delays in transport time intervals occur in these incidents when helicopters are used instead of ground ambulances. Patients experience costly, unnecessary and lengthier transport to out-of-county trauma centers when helicopters are used in this central Marin area, instead of ground ambulances that would transport to the nearby Marin trauma center. Subsequent audits show a drop in the use of EMS helicopters in Marin County by 15%—down from 26% in 2001 to 11% in 2007—with a concentration of decreased activity in the area within 30 minutes ground travel time to the trauma center. Also significant is the increase in the average injury severity score on trauma patients

transported by aircraft (from an average ISS=12 in 2004 to average ISS=17 in 2007). This is another indicator of the desired decrease in overtriage of air transports. Statistics and graphs on pages 21-25.

### **Policy and Procedure Manual**

Over 100 EMS policies and procedures in the EMS Agency Policy & Procedure manual were reviewed, reformatted, revised and updated during 2007 with extensive stakeholder input and substantial contributions from EMS Agency staff and CQI Committee members. This revision represents a significant milestone in the maturation of the CQI process for the EMS System. The newly revised policies are aligned with policies in neighboring regions, and compliant with current national standards. Final implementation date for the revised policy manual is May 1, 2008.

### **Emergency Medical Dispatch Protocols**

The Marin County Communications Center, under direction of the Sheriff's Office, dispatches EMS resources for all County providers except San Rafael Fire Department. The EMS Agency has oversight responsibility for the EMS protocols dispatchers use to manage medical-related 911 calls, and dispatch emergency response crews. An EMS System priority to upgrade the dispatch protocols was achieved in April 2008, through collaborations with the Dispatch Center and the EMS Agency. The continuous quality improvement process to address these upgrades is in development, and is a priority for 2008.

### ***Prepare EMS System to respond to a disaster***

The EMS Agency collaborates with EMS System stakeholders to plan, implement policy for, and train and exercise responses to, large-scale emergencies and disasters.

### **MERA Radio System**

During 2004, the Marin County-wide MERA radio system was implemented. EMS System issues were addressed under the direction of Randy Saxe. Equipment has been placed, and personnel have been trained to use this system. Prehospital providers use the system regularly to communicate with hospital emergency departments when transporting emergency patients. EMS Agency staff regularly monitors radio traffic, and responds to equipment troubleshooting and improvement requests from EMS System providers.

### **ReddiNet Web-based Communications**

Web-based communications software for emergency medical systems was implemented in 2005 under Randy Saxe's direction. The system – "ReddiNet" – is used in EMS Systems throughout California. It provides data linkage with dispatch centers, EMS Agency, prehospital providers and hospitals that allows all password-permitted users to input critical status information and have it available for viewing by their counterparts in the emergency/disaster response system. It is used to communicate information about EMS System resources in "real-time" for emergency and disaster response operations. ReddiNet software upgrade is currently being

implemented to improve ease of use and expand regional communications capabilities.

### **Marin Medical Reserve Corps**

Under the direction of Brian Waterbury, the Marin Medical Reserve Corps (MMRC) volunteer program has developed since 2005. This program trains and deploys volunteer medical professionals to respond to Marin County emergency/disaster needs. There are over 400 registered members, 250 of whom actively participate in community service and training, and who make substantial contributions to Marin County's emergency preparedness. The financial impact analysis by the Marin County Civic Center Volunteers reports the 2,653 hours of MMRC volunteer effort in 2007 provided an estimated \$110,237 of services.

In 2007 Dr. Bill Teufel agreed to assume the role of MMRC Medical Director, with the goal to integrate the MMRC with EMS System disaster response operations.

### **Multiple Patient Management Plan**

The plan to manage a large surge in volume of emergency patients was revised in draft form in 2007, under Randy Saxe's direction, drafted and coordinated by Crystal Wright. The draft will be revised based on input from exercises planned for 2008.

### **Disaster Response Exercises**

In 2003 the EMS Agency, with Troy Peterson and Randy Saxe, began a regular disaster exercise program. These exercises are crucial to a continuity of operations in

large-scale emergencies/disasters. They facilitate communications with multiple public and private provider agencies, including the Department of Health & Human Services (HHS). The exercise activity ranges from tabletop discussions to full-scale emergency response operations. These exercises include MAD (Mutual Aid) drills, State EMSA exercises, ad hoc exercises and EOC (Emergency Operations Center) / DOC (Department Operations Center) activations.

### **AED Programs**

In 2004, the EMS Agency, in collaboration with the Marin County Fire Dept., implemented a public access program at the Civic Center campus. In addition to administering this program, the EMS Agency maintains the HHS clinical site AED programs. These programs provide immediate access to life-saving automatic external defibrillators (AEDs) for people who suffer sudden cardiac arrest.

### **EMS/Public Health Preparedness Grants**

The EMS Agency supports the Public Health Division of HHS with grant projects funded by State and Federal agencies. These activities include training, equipment purchases, outfitting and maintaining supply trailers for multiple casualty incidents, and consulting on EMS System-related grant projects.

### ***Effectively administer the EMS Agency***

This function involves oversight and direction of the EMS Agency, including budget, contracts, personnel management, office management and strategic planning. The Agency has experienced a series of staffing changes, including the vacancy of the key role of the EMS Administrator. Staffing adjustments were made to accommodate this, including the appointment of Randy Saxe as interim Program Manager, and appointment of Troy Peterson as EMS Specialist in the Agency. These changes also led to a strategic planning process with staff and external stakeholders during 2007. After an analysis of the EMS Administrator role, with input from all stakeholders, recruitment is underway for qualified candidates. The position is expected to be filled by June, 2008. The Agency will relocate in June 2008 to a new office that will be shared with HHS Public Health Preparedness programs. See organizational chart on page 8.

## **Summary of 2008 EMS Agency Priorities**

### ***CQI Program Priorities***

- Review prehospital "Pediatric Seizures" protocol compliance – Fall 2008
- Review prehospital "Witnessed VT/VF" protocol compliance – Fall 2008
- Continue trauma system indicators analysis
- Continue TAC medical reviews
- Collaborate with County Communications Center to expand the dispatch CQI process to accommodate upgrades in the emergency medical dispatch protocols – Fall, 2008
- Review the EPCIS prehospital records data system for upgrades vs. new product purchase – survey EMS System users – Fall, 2008

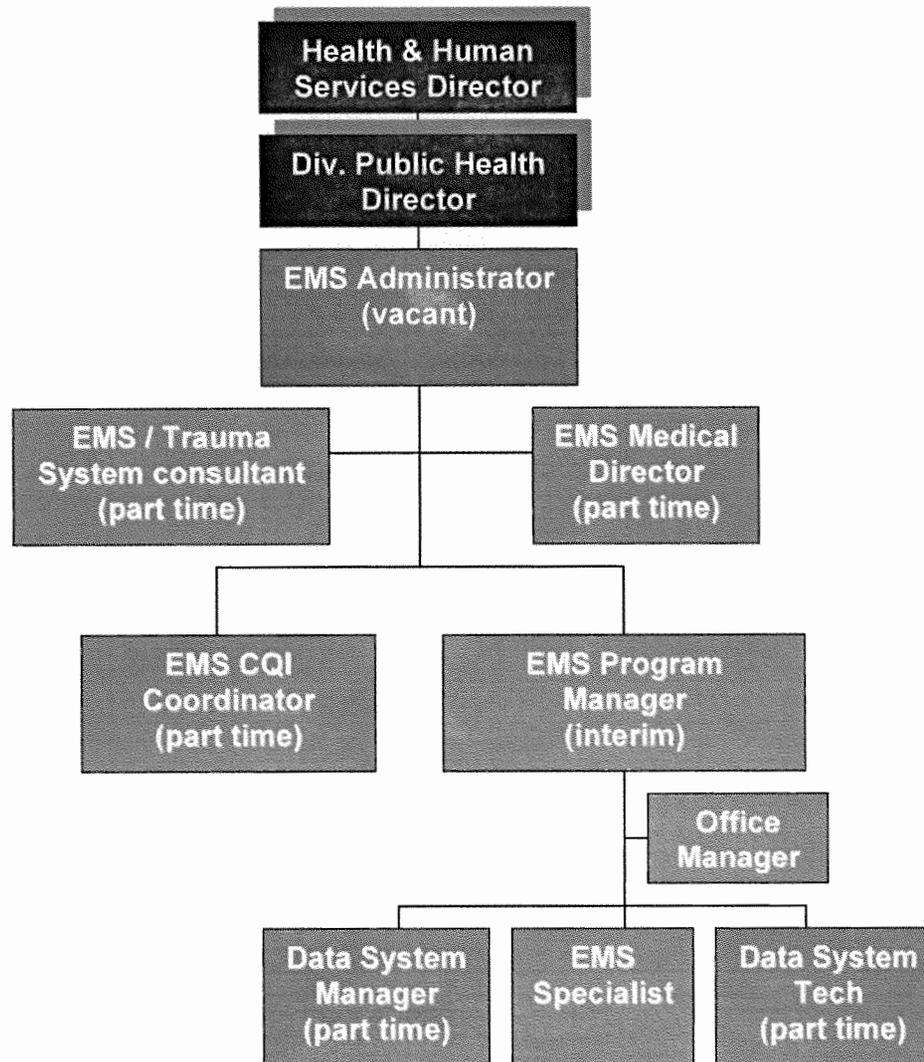
### ***Disaster Response Priorities***

- Multiple Patient Management exercise, revise and approve plan – Dec, 2008
- Implement ReddiNet upgrade – June, 2008

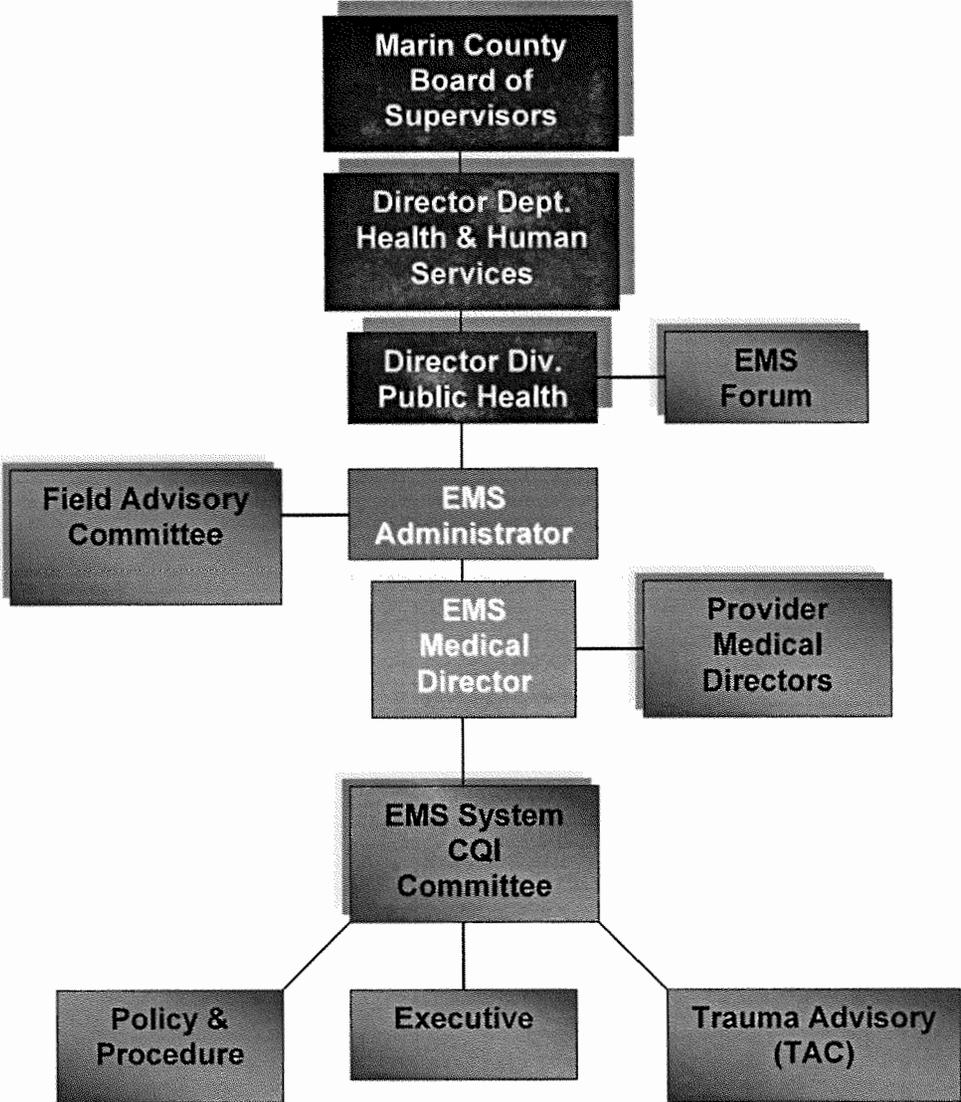
### ***Agency Administration Priorities***

- EMS Administrator recruitment and hire – June, 2008
- EMS Agency office relocation – June, 2008

## EMS AGENCY ORGANIZATIONAL CHART



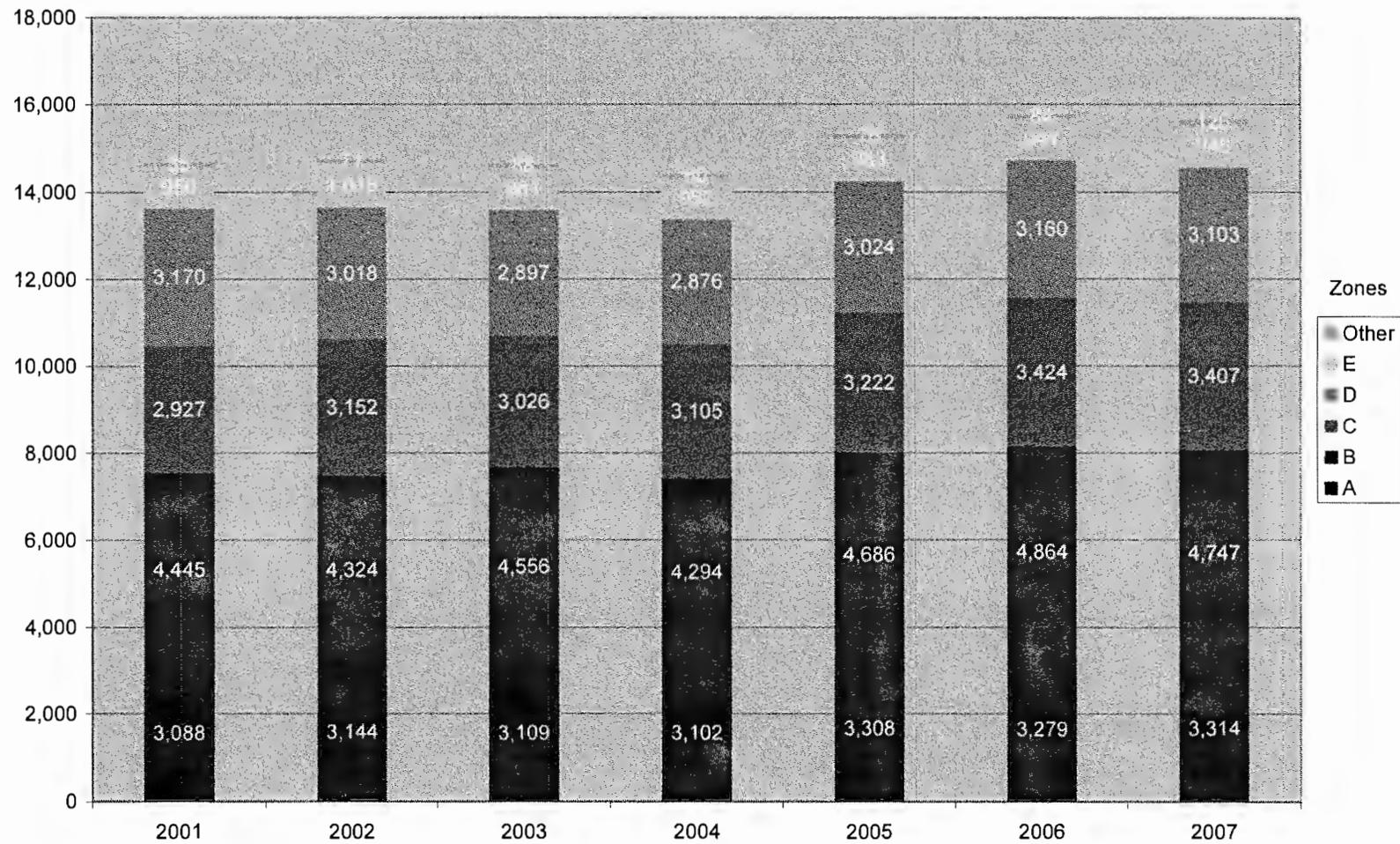
**EMS SYSTEM ADVISORY COMMITTEES ORGANIZATIONAL CHART**



## **EMS and TRAUMA SYSTEM TRENDS**

The following charts represent a sample of statistics derived from dispatch center, prehospital and hospital databases. The supplemental report that accompanies this program summary contains detailed statistics from CAD and EPCIS.

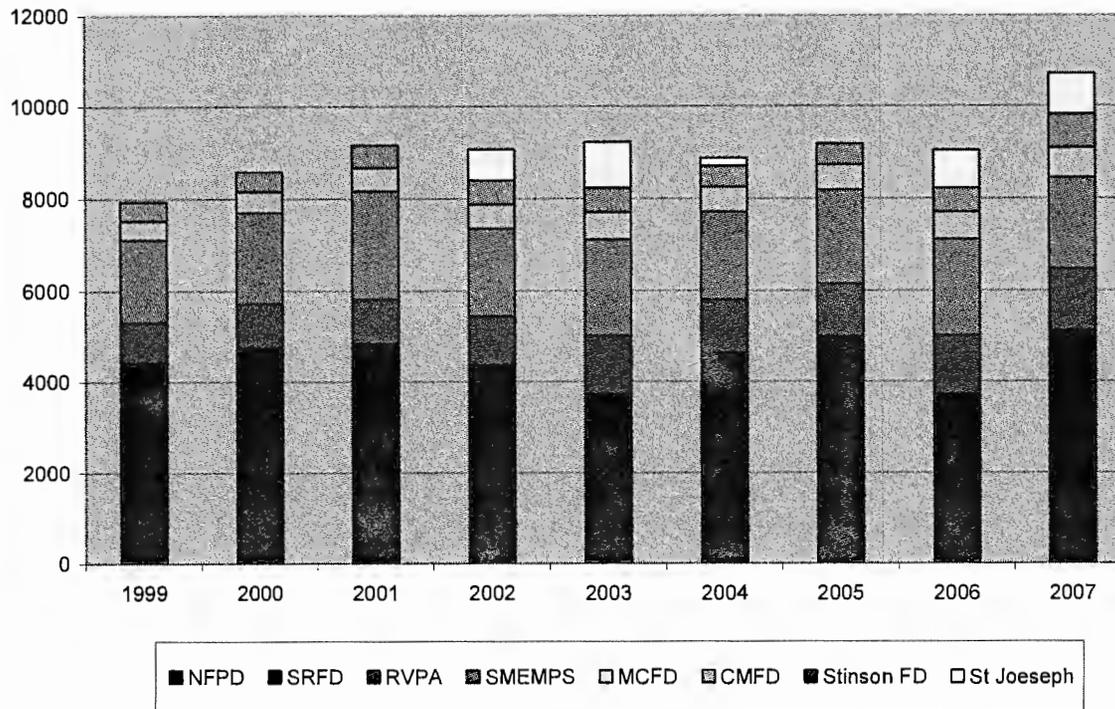
### Marin County EMS Call Volume By Paramedic Zone Providers 2001- 2007



Source: Marin County Communications Center Computer Aided Dispatch data

Although the call volume (based on calls to 911 resulting in a dispatch of a vehicle) remains relatively stable, the number of transports in 2007 has risen 14% over the average number of transports. The ratio of ALS to BLS transports continues to remain steady (75% - 25%)

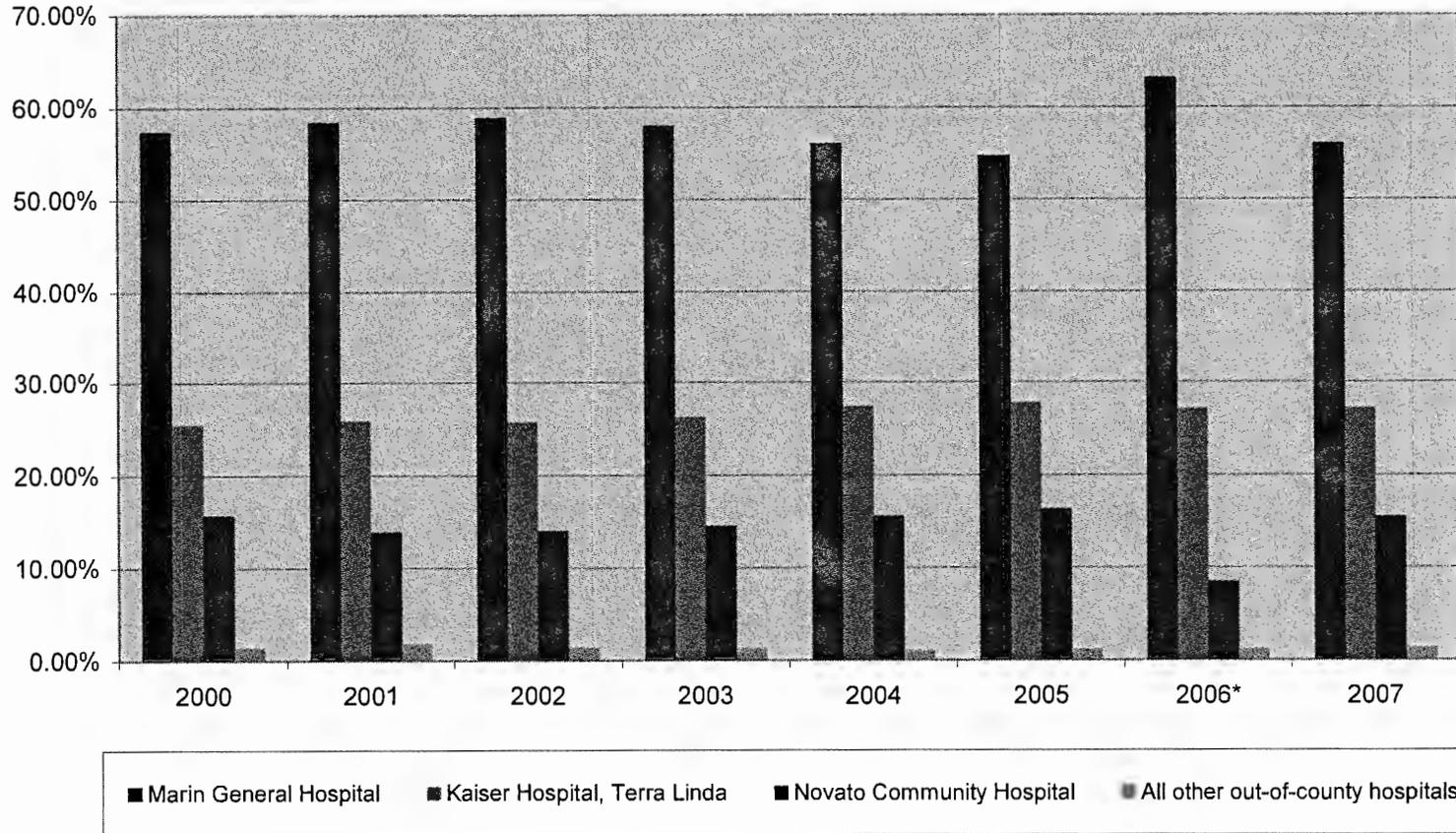
Marin County EMS, Transports By Provider, 2000 - 2007



Data for Novato Fire Protection District not included for the period 05/12/2006 thru 08/30/2006  
 Source: Marin County EMS Agency EPCIS data system

The vast majority of EMS patients continue to be transported to Marin county emergency departments.

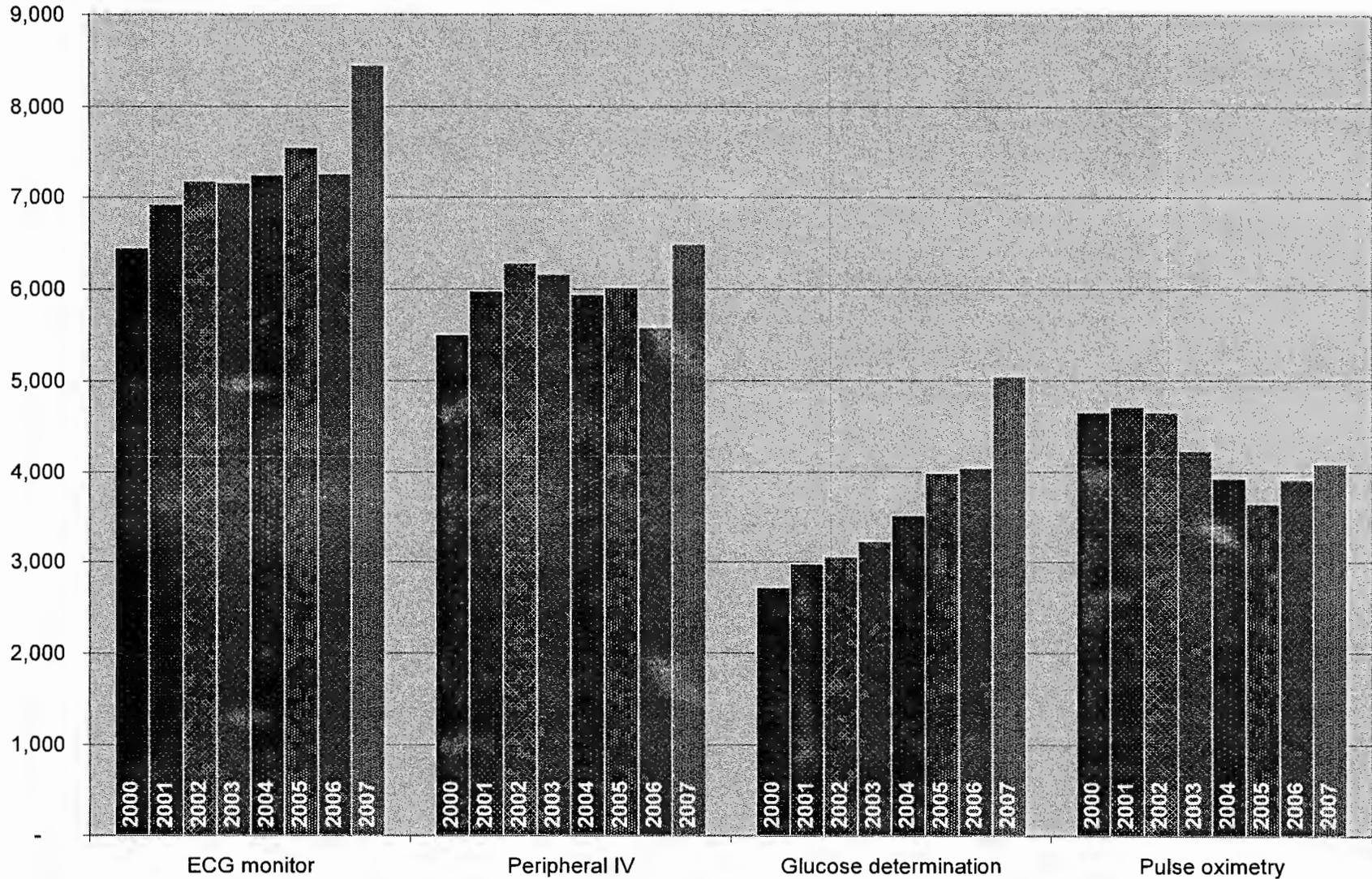
**Marin County EMS, Patient Destinations, 2000 - 2007**



\* Data for Novato Fire Protection District not included for the period 05/12/2006 thru 08/30/2006

Source: Marin County EMS Agency EPCIS data system

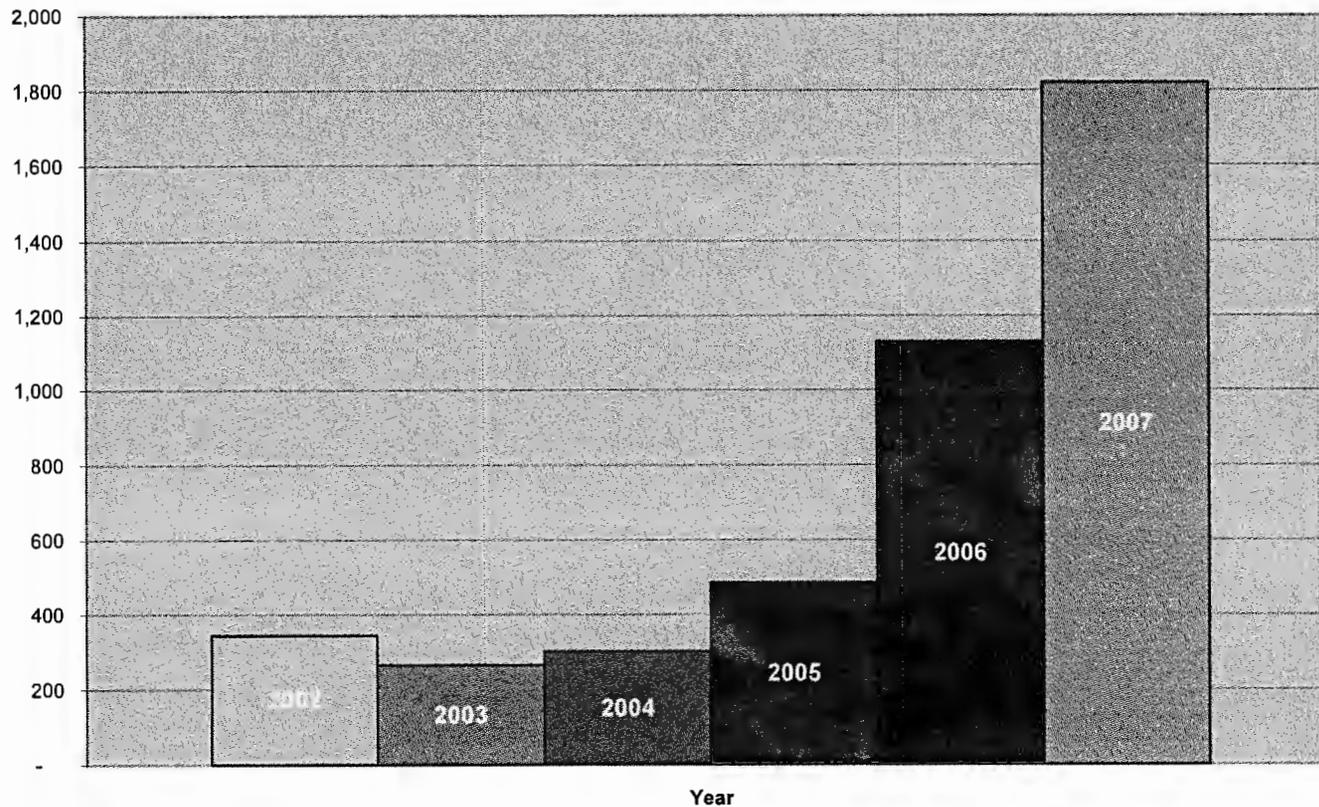
### Marin County EMS, ALS Procedures, 2000-2007



Data for Novato Fire Protection District not included for the period 05/12/2006 thru 08/30/2006  
 Source: Marin County EMS Agency EPCIS data system

The increase in the use of 12-lead EKGs by paramedics in the field is consistent with the continued integration of the prehospital system with hospital cardiac care programs (STEMI Receiving Centers) that rapidly diagnose and treat heart attack patients.

**Marin County EMS, Use of 12 Lead EKGs, 2002 - 2007**



## **TRAUMA SYSTEM TRENDS**

### **What is the total patient volume and severity of injury in Marin's Trauma Receiving Hospitals?**

The total volume of trauma patients cared for in Marin County's trauma receiving hospitals is depicted in the following chart. These are patients that meet prehospital trauma triage criteria. The average annual volume over the past five years is 1058, with a downward trend to 900. Also depicted in the chart is the overtriage rate: the percentage of all patients who have injuries that are relatively less severe (ISS <9). The term "ISS" refers to "Injury Severity Score". The trauma receiving hospitals include the Level III Trauma Center (Marin General Hospital) and the Emergency Dept. Approved for Trauma (EDAT: Kaiser Hospital).

Total trauma centers volume is on a downward trend, and the overtriage rate is on a steeper decline. This downward trend likely reflects the maturation of the trauma system since its inception in 2001, and the triage tool revision in 2006. The current Marin County trauma triage tool was revised after extensive evaluation and stakeholder input, using American College of Surgeons (ACS) guidelines, expert consultation from visiting ACS reviewers and an economic trauma system consultant, using benchmarks from other regional, state and national areas. In 2007 the Trauma Advisory Committee, (TAC) agreed to benchmark the overtriage rate to a range between 50% and 70% (using the ISS<9/total volume measure), and closely monitor this system

indicator. Keeping the overtriage rate in this range addresses concerns for fair financing of the trauma system by triaging patients with less-severe injuries away from trauma specialty care if they do not require these resource-intensive services.

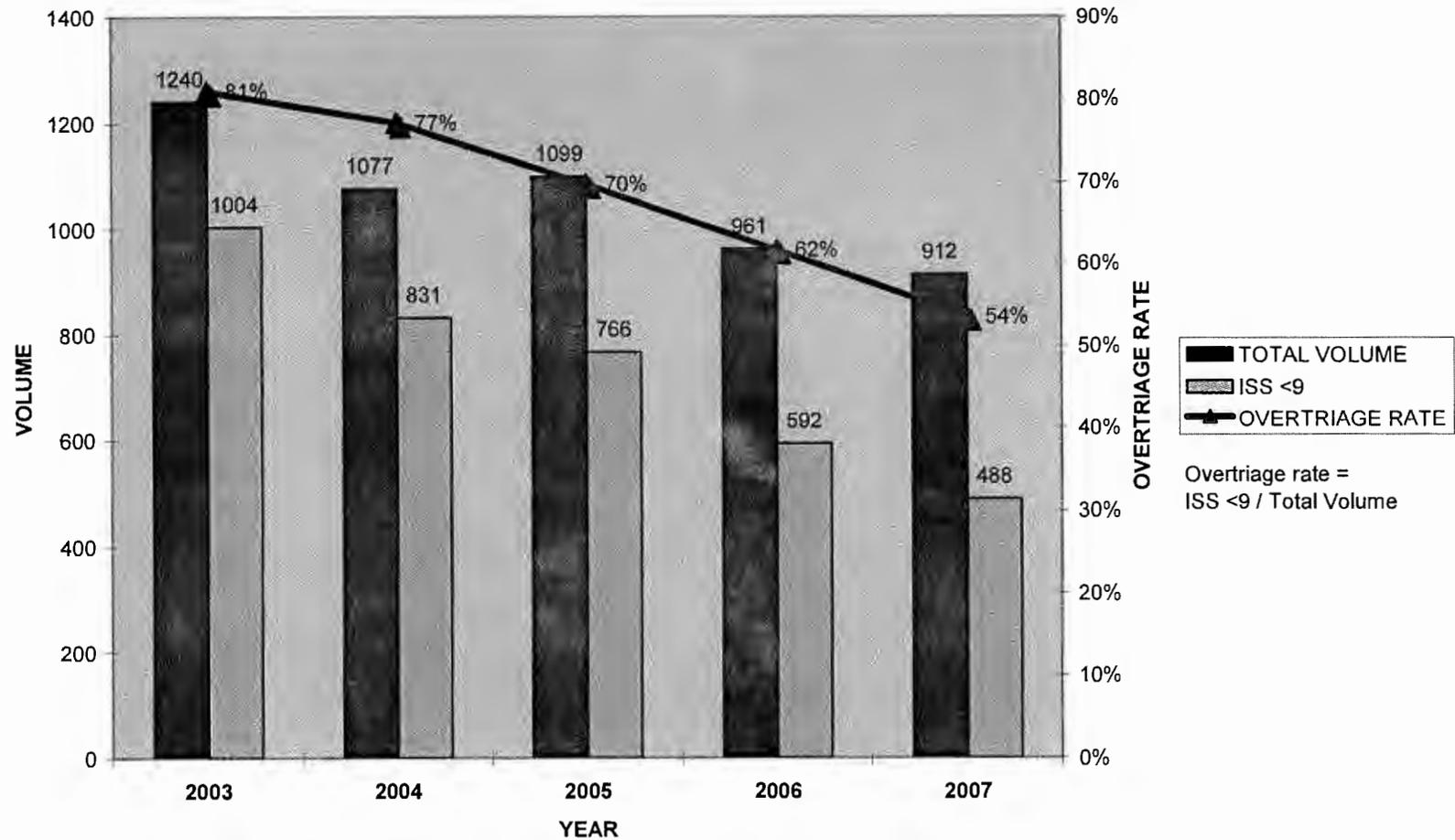
### **Undertriage Rate**

This trauma system indicator tracks the rate at which patients who need specialty trauma services do not receive initial care at a trauma center. The undertriage rate in Marin County consistently is very low – less than 3% of the total trauma system volume. It is tracked regularly by the Trauma Advisory Committee (TAC) on a case by case basis and followed for root cause analysis and system improvements.

### **How does the volume of trauma patients break out by age Marin County?**

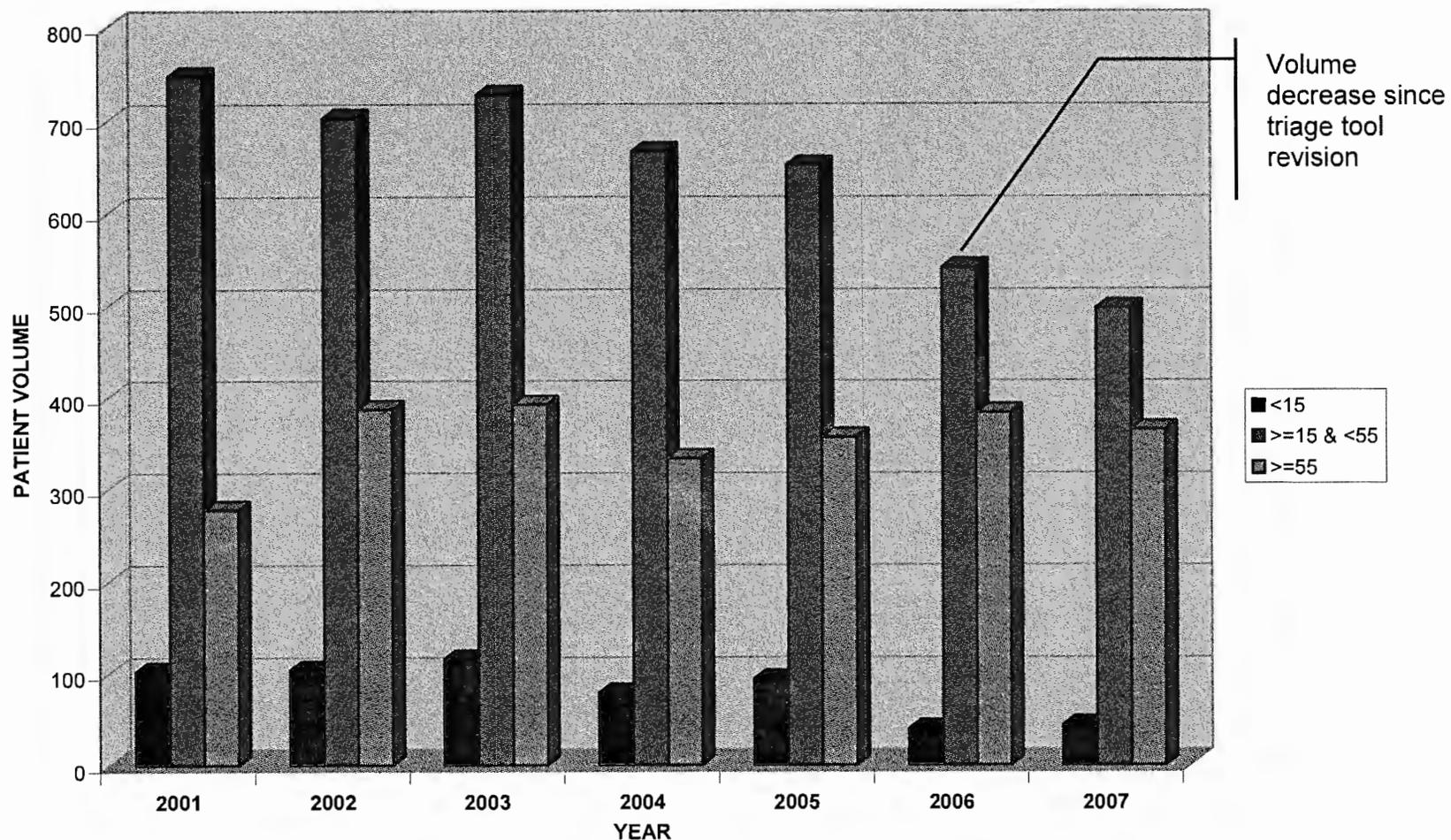
The chart on page 18 shows the trend in trauma system volume by age groups. The volume of young adults and children treated in Marin's trauma facilities has decreased since the triage tool revision, while elderly patient volume has remained stable.

**TRAUMA SYSTEM VOLUME & ISS <9  
2003 - 2007**



Source: EMS Agency Trauma System Registry: includes Trauma Registry statistics from Marin General Hospital and Kaiser Hospital, San Rafael, 2003-2007.

### TRAUMA SYSTEM VOLUME BY AGE



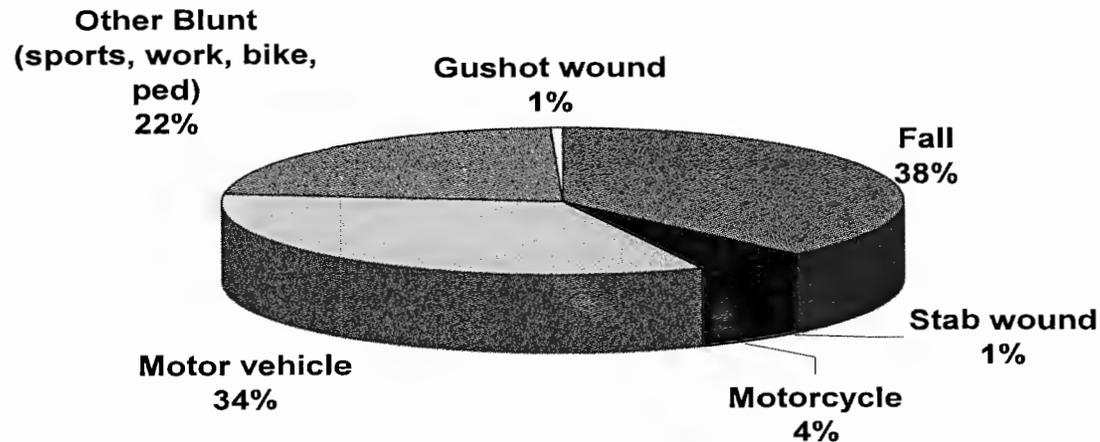
Source: EMS Agency Trauma System Registry; includes Trauma Registry statistics from Marin General Hospital and Kaiser Hospital, San Rafael, 2001-2007

## ***Mechanism of Injury***

### **What are the common mechanisms of injury in Marin County?**

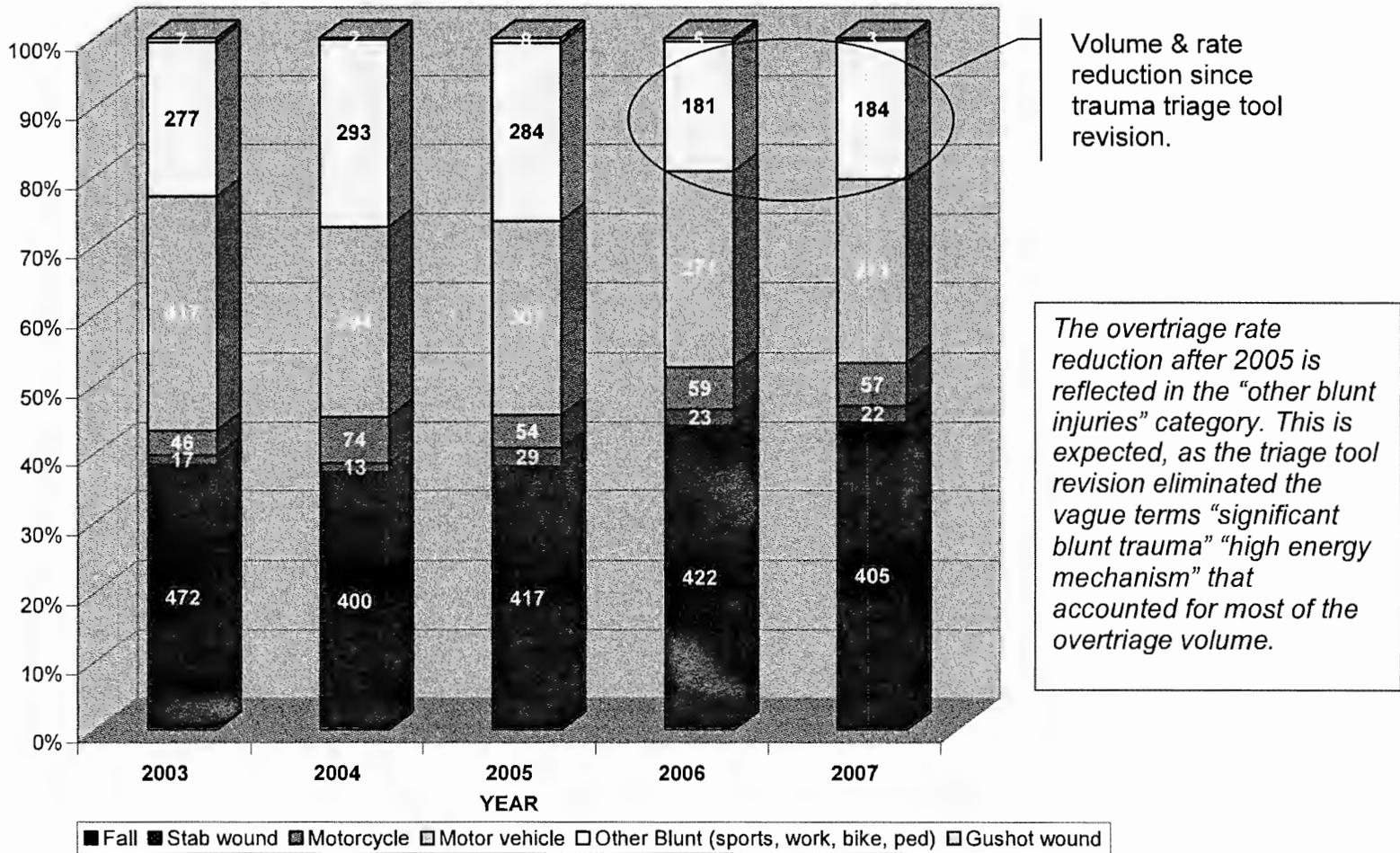
The following charts depict the volume and rate of injury categories treated in Marin's trauma facilities. These are patients who meet prehospital trauma triage criteria. Falls are the leading mechanism of injury, followed by motor vehicle crashes and other blunt force injuries such as bicycle accidents. Injury Prevention programs target the elderly population with fall prevention education, as nearly half of the falls occur in people over the age of 65.

**MECHANISM OF INJURY  
SUMMARY  
2003 - 2007**



Source: Marin County EMS Agency Trauma Registry

### MECHANISM OF INJURY 2003-2007



Source: EMS Agency Trauma System Registry: includes Trauma Registry statistics from Marin General Hospital and Kaiser Hospital, San Rafael, 2003-2007.

## ANNUAL HELICOPTER REPORT For the Years 2004-2007

Helicopter dispatches and transports have continued to steadily decrease over the years in Marin County. The rate of utilization of dispatched helicopters declined from 20% in 2004 to 11% 2007. For comparison purposes, data from previous years has been included.

**Mission Statement:** *“To optimize the quality of patient care of persons who need or may need EMS helicopter transport.”*

**Objectives:**

1. Oversee the continuous quality improvement process through review of transports and/or dispatches as indicated;
2. Provide direction and leadership in the development and monitoring of policy that affects operational issues;
3. Identify and evaluate outcome measures which specifically validate CQI effectiveness.

YEAR	DISPATCHES	TRANSPORTS	% AIR TRANSPORTS
2007	270	31	11%
2006	359	50	14%
2005	431	86	20%
2004	532	108	20%

YEAR	DISPATCHES	TRANSPORTS	% AIR TRANSPORTS
2003	581	120	21%
2002	464	143	31%
2001	314	82	26%
2000	204	65	32%
1999	158	68	43%
1998	132	47	36%
1997	115	43	36%
1996	114	48	42%
1995	77	34	44%
1994	66	31	47%

**HELICOPTER DISPATCH AND TRANSPORT  
REVIEW: 2004 - 2007**

**MARIN COUNTY EMS PROGRAM, April 2008**

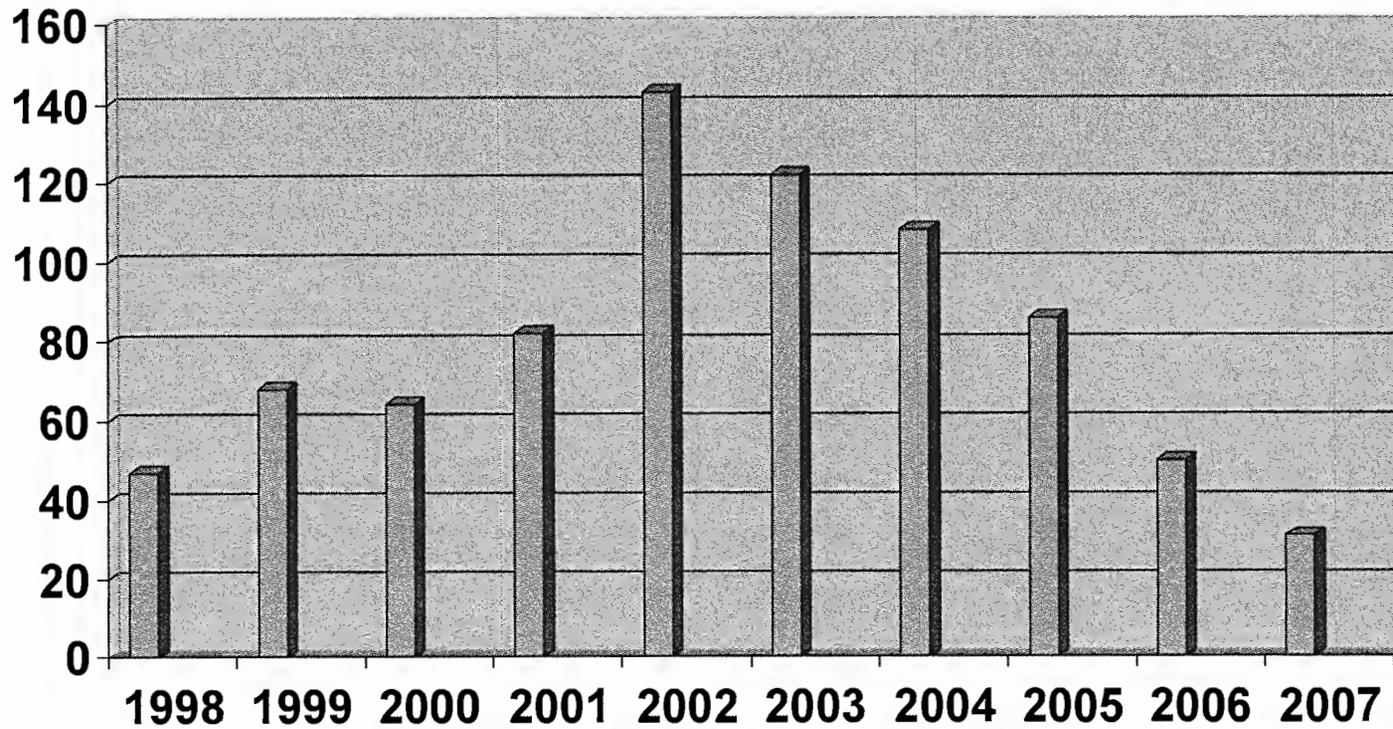
Annual reports prior to 2004 separated out information on helicopter dispatches and transportations from West Marin apart from other areas of Marin County. West Marin locations include Bolinas, Dillon Beach, Dogtown, Inverness, Marshall, Muir Beach, Nicasio, Olema, Point Reyes, Point Reyes Seashore, Stinson Beach, Tomales, and Lagunitas.

Due to 100% review of all helicopter cases and with decreasing numbers in both dispatch and transportation, the EMS Agency has chosen to not separate this information out for this report.

DATA ELEMENT	2007	2006	2005	2004
<i>Helicopter Dispatches</i>	270	359	431	532
<i>Helicopter Transports</i>	31	50	86	108
<i>Percent (%) of dispatches resulting in air transports</i>	11%	14%	20%	20%
<b>MEDICAL VERSUS TRAUMA</b>				
<i>Medical Patients: Transported</i>	10	16	24	28
<i>Trauma Patients: Transported</i>	21	34	62	80
<b>RECEIVING HOSPITALS</b>				
<i>John Muir Medical Center</i>	11	19	27	35
<i>Santa Rosa Memorial Hospital</i>	12	22	31	43
<i>Doctor's Hospital San Pablo</i>	3	6	10	10
<i>Children's Hospital Oakland</i>	2	0	10	12
<i>Other (Petaluma Valley Hospital, Santa Clara Medical Center, Queen of the Valley, Stanford)</i>	3	3	8	8

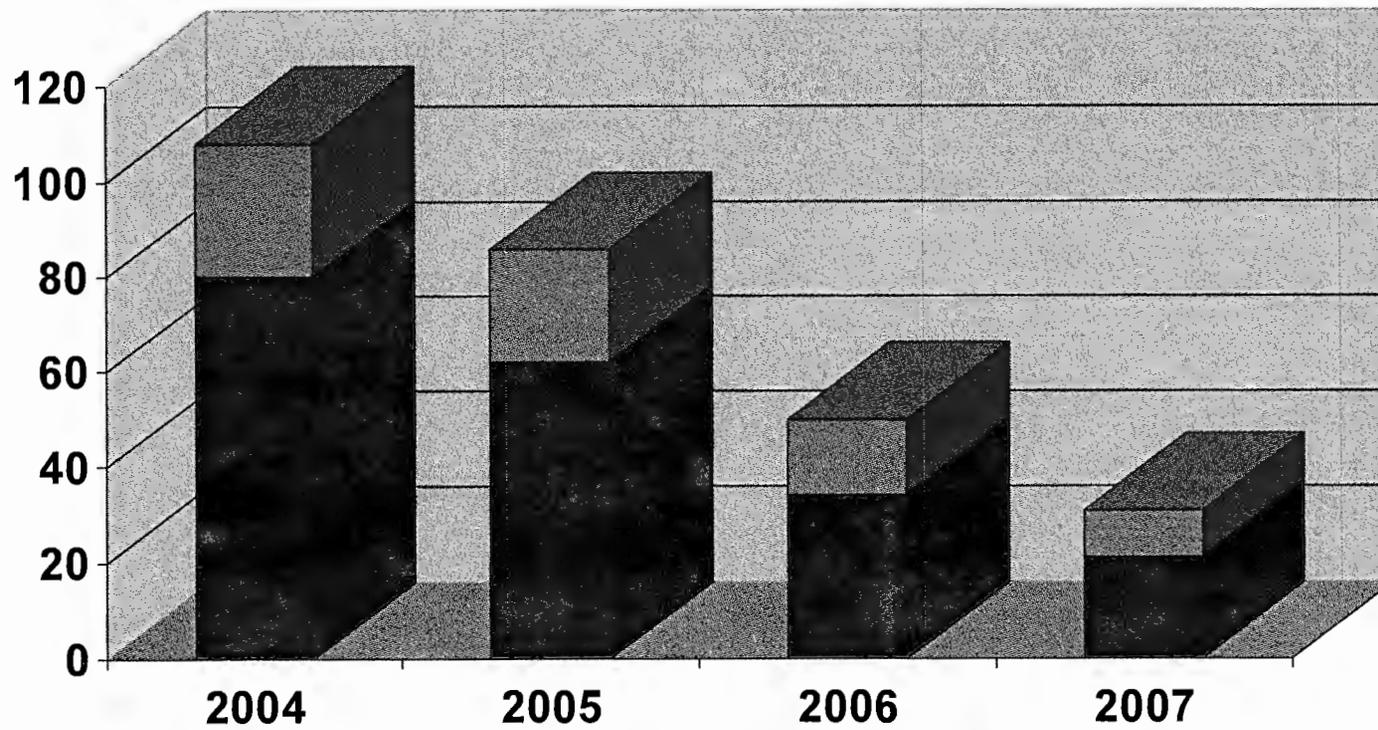
### Air Transports by Year

1998 - 2007



### Number of Patients Transported by Air

#### Trauma vs. Medical: 2004 - 2007



## Injury Severity Scores

*Injury Severity Scores were obtained from the receiving trauma centers (Santa Rosa Medical Center, John Muir Medical Center, Children's Hospital Oakland, Santa Clara Medical Center, and Eden Medical Center).*

Year	Trauma Patients Transported	Injury Severity Scores (ISS) Obtained (%)	Median ISS	Average ISS
2004	80	58 (73%)	6	12
2005	62	53 (85%)	9	13
2006	34	30 (88%)	10	16
2007	21	21 (100%)	12	17



**TABLE 2: SYSTEM RESOURCES AND OPERATIONS**

**System Organization and Management**

EMS System: Marin

Reporting Year: 2007

**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: Marin

- |   |             |
|---|-------------|
| A. Basic Life Support (BLS)             | _____ %     |
| B. Limited Advanced Life Support (LALS) | _____ %     |
| C. Advanced Life Support (ALS)          | <u>100%</u> |

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

3. The person responsible for day-to-day activities of the EMS agency reports to b
- a - Public Health Officer
  - b - Health Services Agency Director/Administrator XX
  - 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 centers/trauma care system planning	<u>X</u>
Designation/approval of pediatric facilities	_____
Designation of other critical care centers	<u>X</u>
Development of transfer agreements	<u>X</u>
Enforcement of local ambulance ordinance	<u>X</u>
Enforcement of ambulance service contracts	_____
Operation of ambulance service	_____

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

Continuing education	_____
Personnel training	_____
Operation of oversight of EMS dispatch center	_____
Non-medical disaster planning	<u>  X  </u>
Administration of critical incident stress debriefing team (CISD)	_____
Administration of disaster medical assistance team (DMAT)	_____
Administration of EMS Fund [Senate Bill (SB) 12/612]	_____
Other: <u>  STEMI Center  </u>	
Other: _____	
Other: _____	

5. EMS agency budget for FY   07-08    
**EXPENSES**

Salaries and benefits (All but contract personnel)	\$ <u> 137,732 </u>
Contract Services (e.g. medical director)	<u> 182,000 </u>
Operations (e.g. copying, postage, facilities)	<u> 223,923 </u>
Travel	_____
Fixed assets	_____
Indirect expenses (overhead)	_____
Ambulance subsidy	_____
EMS Fund payments to physicians/hospital	_____
Dispatch center operations (non-staff)	_____
Training program operations	_____
Other: <u> Inter-department charge </u>	<u> 62,330 </u>
Other: _____	_____
Other: _____	_____
<b>TOTAL EXPENSES</b>	<b>\$ <u> 605,985 </u></b>

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

SOURCES OF REVENUE

Special project grant(s) [from EMSA]	
Preventive Health and Health Services (PHHS) Block Grant	\$ _____
Office of Traffic Safety (OTS)	_____
State general fund	_____
County general fund	<u>413,610</u>
Other local tax funds (e.g., EMS district)	_____
County contracts (e.g. multi-county agencies)	_____
Certification fees	<u>5,000</u>
Training program approval fees	_____
Training program tuition/Average daily attendance funds (ADA)	_____
Job Training Partnership ACT (JTPA) funds/other payments	_____
Base hospital application fees	_____
Trauma center application fees	_____
Trauma center designation fees	<u>15,000</u>
Pediatric facility approval fees	_____
Pediatric facility designation fees	_____
Other critical care center application fees	_____
Type: _____	
Other critical care center designation fees	_____
Type: _____	
Ambulance service/vehicle fees	<u>6,250</u>
Contributions	_____
EMS Fund (SB 12/612)	<u>166,125</u>
Other grants: _____	_____
Other fees: _____	_____
Other (specify): _____	_____
<b>TOTAL REVENUE</b>	<b>\$ <u>605,985</u></b>

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

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

Fee structure for FY 07,08

We do not charge any fees

Our fee structure is:

First responder certification	\$ _____
EMS dispatcher certification	_____
EMT-I certification	<u>15</u>
EMT-I recertification	<u>15</u>
<b>EMT-defibrillation certification</b>	_____
EMT-defibrillation recertification	_____
EMT-II certification	_____
EMT-II recertification	_____
EMT-P accreditation	<u>75</u>
Mobile Intensive Care Nurse/ Authorized Registered Nurse (MICN/ARN) certification	_____
MICN/ARN recertification	_____
EMT-I training program approval	_____
EMT-II training program approval	_____
EMT-P training program approval	_____
MICN/ARN training program approval	_____
Base hospital application	_____
Base hospital designation	_____
Trauma center application	_____
Trauma center designation	<u>\$10,000/5,000</u>
Pediatric facility approval	_____
Pediatric facility designation	_____
Other critical care center application	
Type: _____	
Other critical care center designation	
Type: _____	
Ambulance service license	<u>\$650.00</u>
Ambulance vehicle permits	<u>\$275.00</u>
Other: _____	_____
Other: _____	_____
Other: _____	_____

7. Complete the table on the following two pages for the EMS agency staff for the fiscal year of 2007.

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

EMS System: Marin

Reporting year 2007

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (%of Salary)	COMMENTS
EMS Admin./Coord./Director	Interim Program Manager	1.0	\$ 42.32	40%	
Asst. Admin./Admin. Asst./Admin. Mgr.					
ALS Coord./Field Coord./ Training Coordinator	EMS Specialist	.75	\$36.51	40%	
Program Coordinator/ Field Liaison (Non-clinical)					
Trauma Coordinator	Trauma Coord.				Contract PRN
Medical Director	EMS Medical Director	.33	\$125.00		
Other MD/Medical Consult/ Training Medical Director					
Disaster Medical Planner					

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

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

<b>CATEGORY</b>	<b>ACTUAL TITLE</b>	<b>FTE POSITIONS (EMS ONLY)</b>	<b>TOP SALARY BY HOURLY EQUIVALENT</b>	<b>BENEFITS (%of Salary)</b>	<b>COMMENTS</b>
Dispatch Supervisor					
Medical Planner					
Data Evaluator/Analyst	Technical Support Contractor				Contract \$22,000 per year
QA/QI Coordinator	EMS Specialist	0.4			Contract
Public Info. & Education Coordinator					
Executive Secretary	Office Manager	1.0	\$23.00	40%	
Other Clerical					
Data Entry Clerk					
Other					

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

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

Revision #4 (4/20/07)

EMS System: Marin

Reporting Year: 2007

**NOTE:** Table 3 is to be reported by agency.

	EMT - Is	EMT - IIs	EMT - Ps	MICN
Total Certified	179			
Number newly certified this year	79			
Number recertified this year	100			
Total number of accredited personnel on July 1 of the reporting year	109			
Number of certification reviews resulting in:				
a) formal investigations	7			
b) probation	6			
c) suspensions				
d) revocations				
e) denials				
f) denials of renewal	1			
g) no action taken				

1. Number of EMS dispatch agencies utilizing EMD Guidelines: 2
2. Early defibrillation:
  - a) Number of EMT=I (defib) certified \_\_\_\_\_
  - b) Number of public safety (defib) certified (non-EMT-I) \_\_\_\_\_
3. Do you have a first responder training program       yes    no

**TABLE 4: SYSTEM RESOURCES AND OPERATIONS - Communications**

EMS System: \_\_\_\_\_

County: Marin

Reporting Year: 2007

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

1. Number of primary Public Service Answering Points (PSAP) 6
2. Number of secondary PSAPs 3
3. Number of dispatch centers directly dispatching ambulances 2
4. Number of designated dispatch centers for EMS Aircraft 1
5. Do you have an operational area disaster communication system? Yes X No \_\_\_\_\_
  - a. Radio primary frequency: MERA 460 Digital Trunk System 165 talk groups
  - b. Other methods: VHF Hi, RACES, Cell
  - c. Can all medical response units communicate on the same disaster communications system?  
Yes X No \_\_\_\_\_
  - d. Do you participate in OASIS? Yes X No \_\_\_\_\_
  - e. Do you have a plan to utilize RACES as a back-up communication system?  
Yes X No \_\_\_\_\_
  - 1) Within the operational area? Yes X No \_\_\_\_\_
  - 2) Between the operational area and the region and/or state? Yes X No \_\_\_\_\_
6. Who is your primary dispatch agency for day-to-day emergencies?  
Marin County Communications Center
7. Who is your primary dispatch agency for a disaster? Same

**TABLE 5: SYSTEM RESOURCES AND OPERATIONS**  
**Response/Transportation**

EMS System: Marin

Reporting Year: 2007

**Note:** Table 5 is to be reported by agency.

**Early Defibrillation Providers**

1. Number of EMT-Defibrillation providers 18

**SYSTEM STANDARD RESPONSE TIMES (90<sup>TH</sup> PERCENTILE)**

Enter the response times in the appropriate boxes

	<b>METRO/URBAN</b>	<b>SUBURBAN/RURAL</b>	<b>WILDERNESS</b>	<b>SYSTEMWIDE</b>
BLS and CPR capable first responder				
Early defibrillation responder				
Advanced life support responder	10"	30"	30"+	10/30"
Transport Ambulance	10"	30"	30"+	10/30"

**TABLE 6: SYSTEM RESOURCES AND OPERATIONS**  
**Facilities/Critical Care**

EMS System: Marin

Reporting Year: 2007

**NOTE:** Table 6 is to be reported by agency.

**Trauma**

Trauma patients:

a) Number of patients meeting trauma triage criteria	<u>784</u>
b) Number of major trauma victims transported directly to a trauma center by ambulance	<u>131</u>
c) Number of major trauma patients transferred to a trauma center	<u>26</u>
d) Number of patients meeting triage criteria who weren't treated at a trauma center	<u>20</u>

**Emergency Departments**

Total number of emergency departments	<u>3</u>
a) Number of referral emergency services	<u>          </u>
b) Number of standby emergency services	<u>          </u>
c) Number of basic emergency services	<u>3</u>
d) Number of comprehensive emergency services	<u>          </u>

**Receiving Hospitals**

1. Number of receiving hospitals with written agreements	<u>3</u>
2. Number of base hospitals with written agreements	<u>          </u>

**TABLE 7: SYSTEM RESOURCES AND OPERATIONS -- Disaster Medical**

EMS System: \_\_\_\_\_

County: Marin

Reporting Year: 2007

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

**SYSTEM RESOURCES**

1. Casualty Collections Points (CCP)

a. Where are your CCPs located? Field treatment sites are located adjacent to hospitals

b. How are they staffed? Marin Medical Reserve Corps and hospital staff

c. Do you have a supply system for supporting them for 72 hours?      yes \_\_\_\_\_ no X  
We do have limited supply caches available but may not last 72 hrs., depending on the type of incident.

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 X no \_\_\_\_\_

b. For each team, are they incorporated into your local response plan?      yes X no \_\_\_\_\_

c. Are they available for statewide response?      yes \_\_\_\_\_ no X

d. Are they part of a formal out-of-state response system?      yes \_\_\_\_\_ no X

4. Hazardous Materials

a. Do you have any HazMat trained medical response teams?      yes X no \_\_\_\_\_

b. At what HazMat level are they trained? Level A

c. Do you have the ability to do decontamination in an emergency room?      yes X no \_\_\_\_\_

d. Do you have the ability to do decontamination in the field?      yes X no \_\_\_\_\_

**OPERATIONS**

1. Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure?      yes X no \_\_\_\_\_

2. What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster?      26



**TABLE 8: RESOURCES DIRECTORY -- Approved Training Programs**

EMS System: Marin County

County: Marin

Reporting Year: 2007

**NOTE:** Table 8 is to be completed by county. Make copies to add pages as needed.

**Training Institution Name** College of Marin  
**Address** 835 College Ave.,  
 Kentfield, CA 94904

**Contact Person telephone no.** Rosalind Hartman  
415-485-9326

<b>Student Eligibility: *</b> Open to Public	<b>Cost of Program</b>	<b>**Program Level:</b> ____ Number of students completing training per year: Initial training: 30-40 per semester Refresher: 10-20 per semester Cont. Education _____ Expiration Date: <u>1-31-11</u> Number of courses: _____ Initial training: <u>2</u> Refresher: <u>2</u> Cont. Education: _____
	Basic <u>Unk</u> Refresher <u>Unk</u>	

**Training Institution Name** Marin County Fire Department  
**Address** P.O. Box 518  
 Woodacre, CA 94973

**Contact Person telephone no.** Mike Giannini  
415-499-2975

<b>Student Eligibility: *</b> Restricted to Fire Personnel	<b>Cost of Program</b>	<b>**Program Level:</b> ____ Number of students completing training per year: Initial training: <u>0</u> Refresher: <u>25</u> Cont. Education <u>Unk</u> Expiration Date: <u>12-31-08</u> Number of courses: ____ Initial training: ____ Refresher: ____ Cont. Education: <u>On-going</u>
	Basic <u>N/A</u> Refresher <u>Unk</u>	

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



**Training Institution Name** SMEMPS  
**Address** 1679 Tiburon Blvd., Tiburon, CA 94920

**Contact Person telephone no.** Chief Richard Pearce  
415-435-7200

**Student Eligibility: \***

**Cost of Program**

Basic NA

Refresher Unk

**\*\*Program Level:** \_\_\_\_  
Number of students completing training per year:  
Initial training: None  
Refresher: Unk  
Cont. Education Unk  
Expiration Date: 05-30-08  
Number of courses: \_\_\_\_  
Initial training: \_\_\_\_  
Refresher: \_\_\_\_  
Cont. Education: On-going

**Training Institution Name** Marin County Sheriff's Search and Rescue  
**Address** 3501 Civic Center Dr.  
San Rafael, CA 94903

**Contact Person telephone no.** Mike St. John  
415-838-3168

**Student Eligibility: \***

**Cost of Program**

Basic NA

Refresher Unk

**\*\*Program Level:** \_\_\_\_  
Number of students completing training per year:  
Initial training: None  
Refresher: Unk  
Cont. Education Unk  
Expiration Date: 8-31-2010  
Number of courses: \_\_\_\_  
Initial training: \_\_\_\_  
Refresher: \_\_\_\_  
Cont. Education: On-going

**TABLE 9: RESOURCES DIRECTORY -- Dispatch Agency**

EMS System: Marin County

County: Marin

Reporting Year: 2007

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

<b>Name, address &amp; telephone:</b>		<b>Primary Contact: Ward Hayter</b>	
Marin County Communications Center Marin County Sheriff's Dept. Civic Center San Rafael, CA 94903 415-507-4123			
Written Contract: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Medical Director: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input checked="" type="checkbox"/> Day-to-day <input checked="" type="checkbox"/> Disaster	Number of Personnel providing services: ___34___ EMD Training      ___ EMT-D      ___ ALS ___ BLS      ___ LALS      ___ Other
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	If public: <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other explain: _____	If public: <input type="checkbox"/> city; <input checked="" type="checkbox"/> county; <input type="checkbox"/> state; <input type="checkbox"/> fire district; <input type="checkbox"/> Federal	

**Name, address & telephone:****Primary Contact: Chief Christopher Gray**

San Rafael Fire Department  
 1039 C Street  
 San Rafael, CA 94901 415-485-3300

Written Contract: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Medical Director: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input checked="" type="checkbox"/> Day-to-day <input type="checkbox"/> Disaster	Number of Personnel providing services: <u>  2  </u> EMD Training <u>      </u> EMT-D <u>      </u> ALS <u>      </u> BLS <u>      </u> LALS <u>      </u> Other
Combined Provider Contract		If public: <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain: _____	If public: <input checked="" type="checkbox"/> city; <input type="checkbox"/> county; <input type="checkbox"/> state; <input type="checkbox"/> fire district; <input type="checkbox"/> Federal
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private			

**Name, address & telephone:****Primary Contact:**

Written Contract: <input type="checkbox"/> yes <input type="checkbox"/> no	Medical Director: <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> Day-to-day <input type="checkbox"/> Disaster	Number of Personnel providing services: <u>      </u> EMD Training <u>      </u> EMT-D <u>      </u> ALS <u>      </u> BLS <u>      </u> LALS <u>      </u> Other
Ownership: <input type="checkbox"/> Public <input type="checkbox"/> Private		If public: <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain: _____	If public: <input type="checkbox"/> city; <input type="checkbox"/> county; <input type="checkbox"/> state; <input type="checkbox"/> fire district; <input type="checkbox"/> Federal

**EMS PLAN  
AMBULANCE ZONE SUMMARY FORM**

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

**Local EMS Agency or County Name:**

**Marin County**

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

**Paramedic Response/Zone Area A**

**Name of Current Provider(s):**

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

**Novato Fire Protection District, 1978+**

**Area or subarea (Zone) Geographic Description:**

**Unchanged from previously submitted description, zone map included**

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

Include intent of local EMS agency and Board action.

**Grandfathered with no change in scope and manner of service; unchanged from previous submission. There has been no formal Board action.**

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

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

**Emergency Ambulance ALS, (911/all) BLS, subcontracts with private ambulance company for the provision of backup BLS ambulance service. Does not include non-emergency inter facility transfers unless contract vendor not available; or patient condition changes to upgrade to ALS 911 service.**

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

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

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

**As noted above, grandfathered and unchanged from previous plan update submission.**

**EMS PLAN  
AMBULANCE ZONE SUMMARY FORM**

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

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

**Area or subarea (Zone) Name or Title:**  
**Paramedic Response/Zone Area B**

**Name of Current Provider(s):**  
Include company name(s) and length of operation (uninterrupted) in specified area or subarea.  
**San Rafael Fire Department, 1980+**

**Area or subarea (Zone) Geographic Description:**  
Unchanged from previous submission, zone map included

**Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):**  
Include intent of local EMS agency and Board action.  
Grandfathered with no change in scope and manner of service; unchanged from previous submission. There has been no formal Board Action.

**Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):**  
Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).  
Emergency Ambulance ALS, (911/all); BLS subcontracts with private ambulance company for the provision of backup BLS ambulance service. Does not include non-emergency inter facility transfers unless contract vendor not available or patient condition changes to upgrade to ALS 911 service.

**Method to achieve Exclusivity, if applicable (HS 1797.224):**  
If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.  
  
If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

As noted above, grandfathered and unchanged from previous plan update submission.

**EMS PLAN  
AMBULANCE ZONE SUMMARY FORM**

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

**Local EMS Agency or County Name:**

**Marin County**

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

**Paramedic Response/Zone Area C**

**Name of Current Provider(s):**

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

**Ross Valley Paramedic Authority, 1984+ ( not exclusive per last plan submission)**

**Area or subarea (Zone) Geographic Description:**

Unchanged from previous submission, zone map included

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

Include intent of local EMS agency and Board action.

Non-exclusive operating area as described in 2001 correspondence between Marin EMS and California EMSA. History unchanged, no Board action taken.

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

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

The RVPA provides Emergency Ambulance ALS, (911/all); BLS; subcontracts with private ambulance company for the provision of backup BLS ambulance service. Does not include non-emergency inter facility transfers unless contract vendor not available; or patient condition changes to upgrade to ALS 911 service.

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

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

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

**EMS PLAN  
AMBULANCE ZONE SUMMARY FORM**

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

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

**Area or subarea (Zone) Name or Title:**  
**Paramedic Response/Zone Area D**

**Name of Current Provider(s):**  
Include company name(s) and length of operation (uninterrupted) in specified area or subarea.  
**Southern Marin Emergency Medical Paramedic System, 1980+**

**Area or subarea (Zone) Geographic Description:**  
Zone map included

**Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):**  
Include intent of local EMS agency and Board action.  
Grandfathered with no change in scope and manner of service; unchanged from previous submission. There has been no formal Board action. (The 2004 report contained a typo regarding the City of Sausalito which entered the JPA in 1979 not 1999, this is verified by the signed original 1979 S MEMPS JPA agreement)

**Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):**  
Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).  
Emergency Ambulance ALS, (911/all); BLS subcontracts with private ambulance company for the provision of backup BLS ambulance service. Does not include non-emergency inter facility transfers unless contract vendor not available or patient condition changes to upgrade to ALS 911 service.

**Method to achieve Exclusivity, if applicable (HS 1797.224):**  
If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.  
  
If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

Grandfathered in 1980 with no change in previous plan submission.

**EMS PLAN  
AMBULANCE ZONE SUMMARY FORM**

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

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

**Area or subarea (Zone) Name or Title:**  
**Paramedic Response/Zone Area E**

**Name of Current Provider(s):**  
Include company name(s) and length of operation (uninterrupted) in specified area or subarea.  
**Marin County fire Department, 1979+**

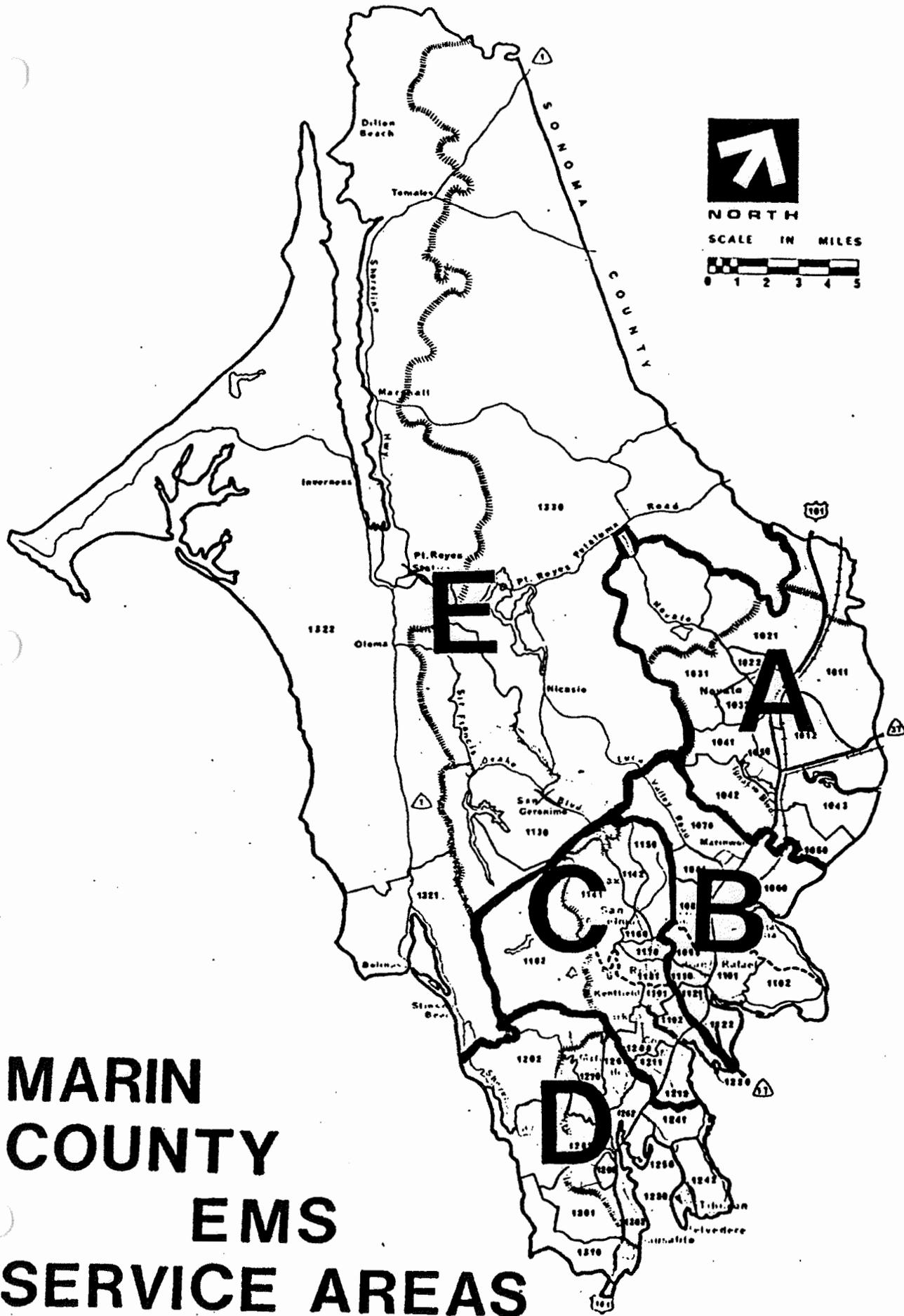
**Area or subarea (Zone) Geographic Description:**  
Unchanged from previous submission, map included.

**Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):**  
Include intent of local EMS agency and Board action.  
Grandfathered with no change in scope and manner of service; unchanged from previous submission. There has been no formal Board action.

**Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85):**  
Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).  
Emergency Ambulance ALS, (911/all); BLS; subcontracts with private ambulance company for the provision of backup BLS ambulance service. Does not include non-emergency inter facility transfers unless contract vendor not available; or patient condition changes to upgrade to ALS 911 service

**Method to achieve Exclusivity, if applicable (HS 1797.224):**  
If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.  
  
If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

Grandfathered in 1979 with no change in previous plan submission.



# MARIN COUNTY EMS SERVICE AREAS

**EMERGENCY MEDICAL SERVICES AUTHORITY**1930 9<sup>th</sup> STREET

SACRAMENTO, CA 95811-7043

(916) 322-4336 FAX (916) 324-2875



June 18, 2009

Miles Julihn, EMS Administrator  
Marin County EMS Agency  
899 Northgate Dr., Suite 104  
San Rafael, CA 94903

Dear Mr. Julihn:

We have completed our review of *Marin County's 2007 Emergency Medical Services Plan Update*, and have found it to be in compliance with the *EMS System Standards and Guidelines* and the *EMS System Planning Guidelines*, except for Paramedic Response Area E ambulance zone. Following are comments on the EMS plan update:

**Standard 1.27 & 5.10 - Pediatric Emergency Medical and Critical Care System -**

In your 2004 EMS Plan update your objective was to develop an emergency medical plan for children. While this is an enhanced level standard, I recommend you review the "*Development and Implementation of EMSC, a Step by Step Approach*", found on our web site at <http://www.emsa.ca.gov/systems/files/EMS-C.pdf>. This document provides information to Local EMS Agencies interested in developing an EMS for Children program.

**Paramedic Response Area E**

As previously stated in our July 18, 2001 letter, this zone does not appear to meet the criteria for exclusivity without a competitive process. In order to qualify for exclusivity without a competitive process an entity must have provided service in the area in the same scope and manner since January 1, 1981. As described in the Ambulance Zone Summary Form dated June 2000, it appears that there were multiple providers in the area until 1994 which would be a change in scope and manner and prohibited without a competitive process. It is recommended that the ambulance zone form be modified to show the area as nonexclusive. For Paramedic Response Area E to be an exclusive zone and maintain protection under state action immunity, a competitive process would be required.

Your next annual update is due on June 18, 2010. If you have any questions regarding the plan review, please call Sandy Salaber at (916) 322-4336, extension 423.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Steven Tharratt".

R. Steven Tharratt, MD, MPVM  
Director