

*Mountain-Valley Emergency Medical Services Agency*



***Annual  
Emergency Medical Services  
System Report***

**2003**

*For the Counties of:*

***Alpine  
Amador  
Calaveras  
Mariposa  
Stanislaus***

***(Updated) September, 2005***

# **ANNUAL EMS SYSTEM REPORT – 2003**

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## **ANNUAL EMS SYSTEM REPORT – 2003**

### **INTRODUCTION**

The Mountain-Valley Emergency Medical Services (EMS) Agency serves as the local EMS agency for the counties of Alpine, Amador, Calaveras, Mariposa, and Stanislaus. The EMS system in these counties has been developed through a partnership between the EMS Agency, 911 emergency access points, EMS dispatch centers, fire department first response agencies, basic life support (BLS) and advanced life support (ALS) ambulance services, local base/receiving hospitals, and the many dedicated EMS dispatchers, first responders, emergency medical technicians (EMTs), paramedics, nurses and physicians who provide the care to the sick and injured within our system.

As part of the Mountain-Valley EMS Agency's commitment to keep EMS participants and the public informed of EMS activities in this region, this *Annual Emergency Medical Services System Report* has been developed. The reader will notice the format of the report has changed considerably from past reports. It is much shorter and more concise. Many of the individual reports seen in earlier reports have been integrated into single page, matrix summaries. Some of the reports that have produced the least amount of interest, have been removed. It is our hope that the information provided will be of use, and interest to the reader.

The reader will find this document to be divided into three main sections: 1) *Structural/Demographic Reports*, 2) *Process Reports*, and 3) *Outcome Reports*. The *Structural/Demographic Reports* provide an overview of the number, or **quantity**, of EMS service providers and the specific events that occurred in the EMS system during the year. The *Process Reports* look at the **quantity** and **quality** of the procedures provided and services rendered by EMS system providers. Finally, the *Outcome Reports* attempt to measure the overall **effectiveness** of the EMS system on the long-term care of the patients served by the system.

### **REPORT CATEGORIES**

#### **Structural /Demographic Reports**

Structural indicators provide an overall description of the system in terms of the numbers of resources and the numbers of events that occur within the system during the reporting period. In this EMS system report, the *Structural /Demographic* indicators include the number of:

- EMS Service Providers
- EMS Responses
- Patient Contacts by EMS Personnel
- Specific Call Types (Medical / Trauma)
- Patient Transports

## **Process Reports**

The second section focuses on the quantity and quality of services and treatment processes provided within the system. The services and processes focused upon for any given year are pre-identified by the EMS Agency and the Quality Liaison Committee prior to the beginning of the year. While some benchmarks of quality are monitored on an ongoing basis, others are monitored periodically to ensure acceptable compliance levels are maintained.

## **Outcome Reports**

Outcome Reports indicate how successfully the system structure, and processes combine to meet the desired system effect, which is to decrease mortality and morbidity of patients treated within the EMS system.

The formula, “*Structure + Process = Outcome*” demonstrates the relationship between the three indicators. It also shows how any change made in either the *Structure* or *Processes* of a system, can directly affect the *Outcome*. For example, an ambulance provider who does nothing to change the system *Structure*, but increases the standard of training for his/her personnel to improve adherence to protocols and execution of skills, thereby improving *Process*, should see a correlating improvement in patient *Outcome*. Conversely, if an ambulance service provider significantly reduces the number of ambulances on the street (minimizing the *Structure*), it should be expected that the *Outcome* would be negatively affected.

## **INTEGRITY OF THE DATA**

The Mountain-Valley EMS Agency receives its data from three separate sources: 1) ***Base Hospital Data*** received from the hospitals, 2) ***Patient Care Record (PCR)*** data submitted by the ambulance providers, and 3) ***Computer Aided Dispatch (CAD)*** data from EMS dispatch centers with CAD capabilities.

In 2003, approximately 80% of the data is received by the EMS Agency in electronic format. The remaining data are taken from hard copy logs and PCRs and are entered by Agency staff. Once records from the three separate sources are entered, records from the three sources are combined. While there are several automated and manual processes used to ensure all records are combined properly, errors or omissions in the original documents result in some records not combining. Records unable to be combined may cause some duplication of data.

While great care is taken to ensure duplicate records are not counted twice, a small percentage are not picked up through the screening processes resulting in a margin of error that varies depending upon the specific report. While these duplicates may show up as minor inconsistencies when comparing totals from various tables, they should not be significant in assessing overall system performance.

Also, there may be periods of time when a particular provider experienced a loss of data that cannot be retrieved, therefore, the EMS Agency is unable to collect complete data from all sources, one-hundred percent of the time. In these instances, the EMS Agency will make every attempt to footnote any reports that are affected by the missing data.

### **UTILIZING THIS REPORT**

It is the goal of Mountain-Valley EMS Agency to ensure that all providers of services within the EMS system, begin to utilize these reports as a measurement of the success of their internal Quality Improvement efforts. From year to year, providers should be able to see how improvements made within their organizations, are reflected in the system as a whole.

Any questions regarding the data or requests for additional information may be directed to the EMS Agency at (209) 529-5085.

*Mountain-Valley Emergency Medical Services Agency*



***EMS System***  
***Structural Reports***  
**2003**

NOTE: Not all of the reports in this section are completed either because the data was not available, or the EMS Agency did not have a mechanism in place to collect the data at the time the report was published. Those “incomplete” reports are still included in this document to serve as a placeholder for future years when that data is available and reportable.

*Mountain-Valley Emergency Medical Services Agency*



***EMS System***  
***Process Reports***  
**2003**

NOTE: Not all of the reports in this section are completed either because the data was not available, or the EMS Agency did not have a mechanism in place to collect the data at the time the report was published. Those “incomplete” reports are still included in this document to serve as a placeholder for future years when that data is available and reportable.



***EMS System***

***Outcome Reports***

**2003**

NOTE: Not all of the reports in this section are completed either because the data was not available, or the EMS Agency did not have a mechanism in place to collect the data at the time the report was published. Those “incomplete” reports are still included in this document to serve as a placeholder for future years when that data is available and reportable.

NOTE: The following *Outcome Reports* contain some *Structural* and /or *Process* indicators that are relevant to the specific report. These indicators are included because they are essential in understanding the outcome, and including them within the report saves the reader from having to reference multiple reports at the same time.

## Number of EMS Service Providers by County 2003

(Population)	Alpine 1,210	Amador 36,500	Calaveras 42,450	Mariposa 17,450	Stanislaus 481,600	TOTAL 579,210
<b>DISPATCH</b>						
EMS Dispatch Centers (PSAP)*	1	1	1	1	4	8
EMS Dispatch Centers (2 PSAP)	0	1	0	1	1	3
<b>FIRST RESPONSE</b>						
First Response Agencies	3	6	9	2	17	37
- Number of AED Providers	3	6	9	2	17	37
<b>AMBULANCE</b>						
Ground Amb. Service Providers**	2	1	5	1	5	14
Avg. No. of 24 hr Amb. In Serv.	2	5	6	2	12	27
Air Amb. Service Providers	0	0	0	0	2	2
Avg. No. of 24 hr Ships in Serv.	0	0	0	0	3	3
<b>FACILITIES</b>						
Hospitals	0	1	1	1	4	7
Trauma Centers (Level II, III, or IV)	0	0	0	0	2	2
<b>TRAINING PROGRAMS</b>						
EMD Dispatcher	0	0	0	0	0	0
First Responder	1	0	2	1	6	10
EMT-I	1	0	1	2	4	8
Paramedic	0	0	0	0	1	1
MICN	0	0	0	0	1	1
<b>PERSONNEL</b>						
EMD Dispatchers						6
First Responders						296
EMT-Is						1451
Paramedics						272
MICNs						175

\* Alpine County EMS is dispatched by Alpine Co. Sheriff's Office on weekdays, and by Douglas Co., Nevada SO on nights and weekends

\*\* Alpine County ground ambulances are BLS

## Number of EMS Training Programs by County 2003

	Alpine			Amador			Calaveras			Mariposa			Stanislaus			TOTAL		
<b>TRAINING PROGRAM</b>	P	C	S	P	C	S	P	C	S	P	C	S	P	C	S	P	C	S
Programs / Classes / Students																		
<b>EMD DISPATCHER</b>																		
<b>FIRST RESPONDER</b>																		
Turlock Rural Fire													1	1	13	1	1	13
Modesto Junior College													1	2	29	1	2	29
Mariposa										1	5	77				1	5	77
Denair Fire													1	1	14	1	1	14
San Andreas							1	2	28							1	2	28
West Point													1	1	13	1	1	13
Bear Valley	1	1	13													1	1	13
Burbank - Paradise Fire													1	1	16	1	1	16
Crowslanding													1	1	6	1	1	6
Woodland Fire													1	1	15	1	1	15
<b>Total</b>		1	13					2	28		5	77		8	106		16	224
<b>EMT-I</b>																		
Abrams College													1	7	134	1	7	134
Modesto Junior College													1	3	102	1	3	102
Crowslanding													1	1	16	1	1	16
Yosemite National Park										1	1	11				1	1	11
Kirkwood	1	1	18													1	1	18
San Andreas							1	1	36							1	1	36
Ceres Adult School													1	1	39	1	1	39
Mariposa										1	1	21				1	1	21
<b>Total</b>		1	18					1	36		2	32		12	291		16	377
<b>EMT-P</b>																		
MVEMSA/Columbia College													1	1	19	1	1	19
<b>Total</b>														1	19		1	19



	Alpine			Amador			Calaveras			Mariposa			Stanislaus			TOTAL		
<b>TRAINING PROGRAM</b>	P	C	S	P	C	S	P	C	S	P	C	S	P	C	S	P	C	S
Programs / Classes / Students																		
<b>EMS C.E.</b>																		
Patterson Ambulance																		
American Medical Response																		
Mercy Ambulance																		
Westside Ambulance																		
American Legion Ambulance																		
Air Med																		
Medi-Flight																		
Oak Valley Dist. Hospital																		
Emanuel Medical Center																		
Memorial Medical Center																		
Doctors Medical Center																		
Mark Twain St Joseph Hosp.																		
John C. Fremont Hospital																		
Sutter Amador Hospital																		
Alpine County Health Dept.																		
Yosemite Medical Clinic																		
Ceres Adult School																		
Ceres Public Safety																		
Medic Alert																		
Abrams College																		
Stroup & Associates																		
Mariposa Health Dept.																		
Cal. County OES																		
EMS Taught & Tested																		
Andrew Murphy																		
Peggy O'Rear																		
Kain Packwood																		
Arlene Whitaker																		
<b>Totals</b>				2	72		3	93		2	51		10	505		17	796	



**NUMBER OF CALLS DISPATCHED BY COUNTY  
2003**

(Population)	Alpine S.O *	Amador S.O	Calaveras S.O	Mariposa CDF	Stanislaus AMR	TOTAL
	1,210	36,500	42,450	17,450	481,600	<b>579,210</b>
<b>TOTAL CALLS PROCESSED</b>						
Law						<b>0</b>
Fire						<b>0</b>
EMS						<b>0</b>
Other						
TOTAL						<b>0</b>
<b>EMS CALL ORIGIN</b>						
Received via 911						<b>0</b>
Received via Pvt Line						<b>0</b>
Received Via Radio						<b>0</b>
TOTAL						<b>0</b>
<b>EMD/PREARRIVAL INSTRUC</b>						
EMS Calls w EMD Only						<b>0</b>
EMS Calls w EMD & PAI						<b>0</b>
						<b>0</b>
<b>PERSONNEL</b>						
Number of Dispatchers						<b>0</b>
Number of Call-Takers, <b>or</b>						<b>0</b>
Number of Disp /Call Takers						<b>0</b>
<b>WORKLOAD</b>						
Total Calls per Dispatcher/CT						<b>0</b>
EMS Calls per Dispatcher/CT						<b>0</b>
EMS: % of Total Calls						<b>%</b>
						<b>0</b>
						<b>0</b>

\* Alpine County EMS is dispatched by Alpine Co. Sheriff's Office on weekdays, and by Douglas Co., Nevada SO on nights and weekends

## NUMBER OF AMBULANCE RESPONSES BY COUNTY 2003

	SCENE RESPONSES			HOSPITAL RESPONSES						TOTAL Calls
	Code 3	Code 2	Code 1	INTERFACILITY TRANSFERS			TO HOSP. ED	TO HOSP. NON-ED	TO OTHER	
				Code 3	Code 2	Code 1				
<b>ALPINE</b>										
Alpine EMS	128									128
American Legion	20	20								40
<b>AMADOR</b>										
American Legion	2160	607	2	22	859	3	77	626	181	3653
<b>CALAVERAS</b>										
American Legion	334	97		2	133		3	74	58	566
AMR	474	97	13		1	1	1		1	586
Ebbetts Pass	251	54								305
San Andreas	611	106	2	1	63	6	9	33	28	789
Valley Springs	566	118		4	80	81	5	101	59	849
<b>MARIPOSA</b>										
Mercy	633	150	44	4	244	29	174	89	14	1104
<b>STANISLAUS</b>										
AMR	24805	6625	7053	162	418	1324	1064	282	558	40387
Hughson	1021	1686	568	5	1525	839	8	96	2265	5644
Oak Valley	2110	445	53	22	250	297	85	311	173	3177
Patterson	1063	194	1	2					2	1260
West Side	994	208	2	1	37	10	6	7	35	1252
<b>Helicopters</b>										
Air Med	1053			340			281	7	52	1393
Medi Flight	570			162			130		32	732
<b>TOTAL</b>	<b>36793</b>	<b>10407</b>	<b>7738</b>	<b>727</b>	<b>3610</b>	<b>2590</b>	<b>1843</b>	<b>1626</b>	<b>3458</b>	<b>61865</b>

Scene calls with unknow ambulance or Code of response = 1270

Transfer call with unknown code of response or call dispostion

**CALL TYPES**  
**PRIMARY DIAGNOSIS: MEDICAL**  
**2003**

	Cardiac Arrest	Cardiac Chest Pain	Respiratory	Neuro	Medical	Poisonings	Environment/ Insect	Psych	OB	Other	TOTAL
<b>ALPINE</b>											
Alpine EMS	2		5	13	3		1	1		13	<b>38</b>
American Legion				6	2					4	<b>12</b>
<b>AMADOR</b>											
American Legion	45	292	242	451	196	51	18	45	5	501	<b>1846</b>
<b>CALAVERAS</b>											
American Legion	11	35	47	65	44	11	3	3	2	66	<b>287</b>
AMR	13	65	40	70	7	7	3	6	1	138	<b>350</b>
Ebbetts Pass	4	19	17	35	15	8	1	4		23	<b>126</b>
San Andreas	8	61	67	100	43	15	1	14	3	150	<b>462</b>
Valley Springs	11	80	75	86	57	14	3	21	1	120	<b>468</b>
<b>MARIPOSA</b>											
Mercy	23	74	75	136	68	20	7	18	3	113	<b>537</b>
<b>STANISLAUS</b>											
AMR	436	2062	3046	4213	268	781	20	974	205	16197	<b>28202</b>
Hughson	18	142	123	125	110	32	4	558	9	1582	<b>2703</b>
Oak Valley	70	199	316	414	198	78	14	42	14	598	<b>1943</b>
Patterson	19	73	101	136	81	29	9	28	8	242	<b>726</b>
West Side	24	91	137	112	122	12	12	19	14	276	<b>819</b>
<b>Helicopters</b>											
Air Med	8	8	4	170		3			3	2	<b>198</b>
Medi Flight	3		1	4					1	4	<b>13</b>
<b>TOTAL</b>	<b>695</b>	<b>3201</b>	<b>4296</b>	<b>6136</b>	<b>1214</b>	<b>1061</b>	<b>96</b>	<b>1733</b>	<b>269</b>	<b>20029</b>	<b>38730</b>

Primary Diagnosis Medical calls with unknown provider or primary illness = 10

**CALL TYPES (CONTINUED)**  
**PRIMARY DIAGNOSIS: ALL INJURIES & TRAUMA**  
**2003**

	MOTOR VEHICLE	ASSAULT	NEAR DROWNING	PEDESTRIAN / BICYCLE	SPORTS/ RECREATION	ANIMAL INJURIES	FALL	Other	TOTAL
<b>ALPINE</b>									
Alpine EMS	40			1	1	3	12	48	<b>105</b>
American Legion	1				33		1		<b>35</b>
<b>AMADOR</b>									<b>0</b>
American Legion	315	36	1	17	66	15	357	103	<b>910</b>
<b>CALAVERAS</b>									<b>0</b>
American Legion	62	7		1	5	1	48	10	<b>134</b>
AMR	115	18		5		3	80	36	<b>257</b>
Ebbetts Pass	51	1		2	35	6	38	17	<b>150</b>
San Andreas	103	20	1	5	15	5	79	16	<b>244</b>
Valley Springs	95	9		6	1	7	51	24	<b>193</b>
<b>MARIPOSA</b>									
Mercy	115	13	1	1	8	5	75	61	<b>279</b>
<b>STANISLAUS</b>									
AMR	3075	922	19	326	2	58	2038	729	<b>7169</b>
Hughson	112	32	4	4	7	7	134	88	<b>388</b>
Oak Valley	217	53	2	23	19	17	272	87	<b>690</b>
Patterson	272	40	2	9	4	12	96	76	<b>511</b>
West Side	200	25		10	2	1	86	47	<b>371</b>
<b>Helicopters</b>									<b>0</b>
Air Med	192	12	2	12	27	11	48	23	<b>327</b>
Medi Flight	113	6		5	8	2	10	9	<b>153</b>
<b>TOTAL</b>	<b>5078</b>	<b>1194</b>	<b>32</b>	<b>427</b>	<b>233</b>	<b>153</b>	<b>3425</b>	<b>1374</b>	<b>11916</b>

**CALL TYPES (Continued)**  
**PRIMARY DIAGNOSIS: TRAUMA (MAJOR)**  
**BEGIN 2/2/04**

	ADULT					PEDIATRICS					TOTAL
	BLUNT		PENETRATING		BURNS	BLUNT		PENETRATING		BURNS	
	TIER I	TIER II	TIER I	TIER II		TIER I	TIER II	TIER I	TIER II		
<b>ALPINE</b>											
Alpine EMS											
<b>AMADOR</b>											
American Legion											
<b>CALAVERAS</b>											
American Legion											
AMR											
Ebbetts Pass											
San Andreas											
Valley Springs											
<b>MARIPOSA</b>											
Mercy											
<b>STANISLAUS</b>											
AMR											
Hughson											
Oak Valley											
Patterson											
West Side											
<b>Helicopters</b>											
Air Med											
Medi Flight											
<b>TOTAL</b>											

Structural Reports  
**SCENE CALL DISPOSITION**  
 (Code 2 and 3 Transport)  
 2003

	Hosp Trans Code 2	Hosp Trans Code 3	Trans Other Prov.	AMA/ PT Release	Dead on Scene	Cancel Enroute	Other	Unk.	Rendez- vous	TOTAL	ALS	BLS	Unk. Call Level	TOTAL
<b>ALPINE</b>														
Alpine EMS		1	59	46	4	1	2	3	10	126		4	123	127
American Legion	40									40	31	9		40
<b>AMADOR</b>														
American Legion	2229	137		11			25		68	2470	2188	280	2	2470
<b>CALAVERAS</b>														
AMR	8	1	5	2						16	384	66		450
American Legion	350	24					2		15	391	339	53		392
Ebbetts	205	13	1	1					17	237	200	37		237
San Andreas	570	41		2			1		27	641	552	88	2	642
Valley Springs	572	43	1	1			4		23	644	566	77	1	644
<b>MARIPOSA</b>														
Mercy	461	22		9			3		42	537	461	91		552
<b>STANISLAUS</b>														
AMR	23628	1020	20	134	4		126			24932	17684	7082	1021	25787
Hughson	2031	53	2	4	2		532		5	2629	858	1742	39	2639
Oak Valley	2336	108	2				6		11	2463	1685	746	32	2463
Patterson	802	41	2	12					9	866	714	137	15	866
West Side	765	31		8	2		2		3	811	1	1	809	811
<b>Helicopters</b>														
Air Med		410	1		1	615	24	2		1053	365	5	683	1053
Medi Flight		139	3	2	5	342		75		566	140	2	428	570
<b>TOTAL</b>	<b>33997</b>	<b>2084</b>	<b>96</b>	<b>232</b>	<b>18</b>	<b>958</b>	<b>727</b>	<b>80</b>	<b>230</b>	<b>38422</b>	<b>26168</b>	<b>10420</b>	<b>3155</b>	<b>39743</b>

Code 2 and 3 response calls with unknown call disposition or code of response = 1320

Call with unknown call level or unknown providers = 4

## SCENE CALL DESTINATION 2003

	Sutter Amador	Mark Twain	John C. Fremont	EMC	DMC	MMC	Oak Valley	Barton	Sutter Roseville	Washoe Reno	Children Oakland	SJGH	Children C Cal	UC Davis	OTHER	UN-KNOWN	TOTAL
<b>ALPINE</b>																	
Alpine EMS																128	128
ALA	6							34									40
<b>AMADOR</b>																	
ALA	2279	6						39	1					5	1		2331
<b>CALAVERAS</b>																	
AMR		306			16	5									216		543
ALA	114	256						2						2			374
Ebbetts Pass		154													1		155
San Andreas	11	508	1		2	1											523
Valley Springs	6	557	1		1	1	1					4		2			573
<b>MARIPOSA</b>																	
Mercy			315	1	15	4	4						2				341
<b>STANISLAUS</b>																	
AMR				5774	10825	10756	523								2		27880
Hughson				355	907	740	119								2		2123
Oak Valley				60	234	600	1627					2					2523
Patterson				256	354	230	2					1					843
West Side				266	200	109									1		576
<b>Helicopters</b>																	0
Air Med			1		253	15						29	2	24			324
Medi Flight					13	120						3	1	1			138
<b>TOTAL</b>	2416	1787	318	6712	12820	12581	2276	75	1	0	0	39	5	34	223	128	39415



Process Reports  
**Training Programs**  
 2003

PR-01

<b>TRAINING PROGRAM</b>	<b>Number of Classes</b>	<b># of Students Starting</b>	<b># of Students Completing</b>	<b># Took Cert / Lic Exam</b>	<b># Passed 1st Attempt</b>	<b># Passed 2nd Attempt</b>	<b># Did Not Pass</b>	<b>Completion Score *</b>	<b>Cum Eval. Score **</b>
<b>EMD DISPATCHER</b>									
<b>Total</b>									
<b>FIRST RESPONDER</b>									
Turlock Rural Fire	1		13	13	13	0	0	100%	N/A
Modesto Junior College	2		29	23	17	0	6	74%	N/A
Mariposa	5		77	77	76	0	1	99%	N/A
Denair Fire	1		14	14	14	0	0	100%	N/A
MVEMSA - San Andreas	2		23	22	20	0	3	91%	N/A
West Point	1		13	13	11	0	2	85%	N/A
Bear Valley	1		13	13	13	0	0	100%	N/A
Burbank - Paradise Fire	1		16	16	13	2	1	94%	N/A
Crowslanding	1		6	6	6	0	0	100%	N/A
Woodland Fire	1		15	15	15	0	0	100%	N/A
<b>Total</b>	<b>16</b>		<b>219</b>	<b>212</b>	<b>198</b>	<b>2</b>	<b>13</b>	<b>94%</b>	
<b>EMT-I</b>									
Abrams College	7	139	135	134	99	13	27	84%	N/A
Modesto Junior College	3		103	98	82	10	6	94%	N/A
Crowslanding	1		16	15	12	2	2	93%	N/A
MVEMSA - Yosemite	1		11	11	11	0	0	100%	N/A
MVEMSA - Kirkwood	1		17	17	15	1	1	94%	N/A
MVEMSA - San Andreas	1	43	36	36	21	5	10	72%	N/A
Ceres Adult School	1		39	37	32	4	1	97%	N/A
MVEMSA - Mariposa	1	37	21	21	21	0	0	100%	N/A
<b>Total</b>	<b>16</b>	<b>219</b>	<b>378</b>	<b>369</b>	<b>293</b>	<b>35</b>	<b>47</b>	<b>89%</b>	
<b>EMT-P</b>									
MVEMSA/Columbia College	1	20	19	19	18	1	0	100%	N/A
<b>Total</b>	<b>1</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>18</b>	<b>1</b>	<b>0</b>	<b>100%</b>	

<b>TRAINING PROGRAM</b>	<b>Number of Classes</b>	<b># of Students Starting</b>	<b># of Students Completing</b>	<b># Took Cert / Lic Exam</b>	<b># Passed 1st Attempt</b>	<b># Passed 2nd Attempt</b>	<b># Did Not Pass</b>	<b>Completion Score *</b>	<b>Cum Eval. Score **</b>
<b>MICN</b>									
MVEMSA/MMC	2	14	12	12	12	0	0	100%	N/A
<b>Total</b>	<b>2</b>								
<b>EMS C.E.</b>									
EMT Re-Certification Class	3		35						N/A
ALS Training	6	358	358						N/A
MCI	5	101	101						N/A
Terrorism Conference	1	21	21						N/A
CDROM - #1		75	75						N/A
CDROM - MCF		123	123						N/A
Prehospital Symposium	1	65	65						N/A
ICS - 200	1	18	18						N/A
<b>Total</b>	<b>17</b>	<b>761</b>	<b>796</b>						

\* Completion Score = Number of students successfully passing exam (1st or 2nd attempt) / Number of students that took the exam.

\*\* Cumulative Evaluation Score = Mean Score (1-5 with 5 being highest) from student course evaluation surveys.

**EMS Dispatch Centers  
2003**

911 EMS CALLS	Alpine S.O		Amador S.O		Calaveras S.O		Mariposa CDF		Stanislaus AMR		EMS REGION	
	MEAN	90%	MEAN	90%	MEAN	90%	MEAN	90%	MEAN	90%	MEAN	90%
<b>LAPSE TIME</b>												
1st Ring to Pick-up												
Pick-up to 1st Resp.Dispatch												
Pick-up to Amb. Dispatch												
1st Ring to Amb. Dispatch												
<b>EMD COMPLIANCE *</b>												
Case Entry (%)												
Key Questions												
PAI Compliance												
PDI Compliance												
Chief Complaint												
Final Coding												
<b>COMPLIANCE SCORE</b>												
<b>CUSTOMER SERVICE</b>												

\* Based upon an audit of 3%, or 100% (whichever number is greater) of EMS calls received.







## Field Assessment vs E.D. Diagnosis 2003

													%	
<b>ALPINE</b>														
Alpine EMS														
<b>AMADOR</b>														
American Legion														
<b>CALAVERAS</b>														
American Legion														
AMR														
Ebbetts Pass														
San Andreas														
Valley Springs														
<b>MARIPOSA</b>														
Mercy														
<b>STANISLAUS</b>														
AMR														
Hughson														
Oak Valley														
Patterson														
West Side														
<b>Helicopters</b>														
Air Med														
Medi Flight														
<b>TOTAL</b>														

## Advanced ALS Skills Success Rate 2003

	ADULT								PEDIATRICS						Needle Cricothyro		Needle Thoracos	
	ET (Oral)		ET (Nasal)		Combitube		IV		ET		IV		IO		#	%	#	%
	#	%	#	%	#	%	#	%	#	%	#	%	#	%				
<b>ALPINE</b>																		
Alpine EMS	No Data Available																	
<b>AMADOR</b>																		
American Legion	42	64%	11	27%	4	25%	1687	88%	1	100%	25	64%	2	100%	0		0	
<b>CALAVERAS</b>																		
American Legion	14	79%	0		2	100%	279	88%	0		2	100%	0		0		0	
AMR	7	86%	3	67%	0		299	86%	0		4	100%	0		0		0	
Ebbetts Pass	6	67%	1	0%	0		155	88%	0		4	100%	0		0		0	
San Andreas	7	57%	0		1	100%	375	88%	0		4	75%	1	100%	0		0	
Valley Springs	12	67%	5	0%	2	50%	468	93%	0		12	92%	0		0		0	
<b>MARIPOSA</b>																		
Mercy	19	68%	3	67%	0		496	83%	1	100%	7	100%	0		0		0	
<b>STANISLAUS</b>																		
AMR	309	88%	25	52%	4	75%	13047	91%	13	85%	318	87%	6	67%	2	100%	0	
Hughson	19	63%	10	50%	2	100%	671	92%	4	75%	11	91%	0		0		0	
Oak Valley	34	76%	1	100%	2	0%	1156	83%	5	80%	23	83%	0		0		0	
Patterson	17	65%	6	0%	1	100%	491	88%	4	75%	13	62%	0		0		0	
West Side	18	72%	3	0%	0		347	88%	0		9	89%	0		0		0	
<b>Helicopters</b>																		
Air Med	No Data Available																	
Medi Flight	34	88%	0		0		168	48%	2	50%	23	74%	0		0		2	100%
<b>TOTAL</b>	<b>538</b>	<b>72%</b>	<b>68</b>	<b>36%</b>	<b>18</b>	<b>69%</b>	<b>19639</b>	<b>85%</b>	<b>30</b>	<b>81%</b>	<b>455</b>	<b>86%</b>	<b>9</b>	<b>89%</b>	<b>2</b>	<b>100%</b>	<b>2</b>	<b>100%</b>

# = Total number of skills (successful and unsuccessful)

% = Percent of skill success

## Medication Administration 2003

	*TPA Activase	*Verap	*Amino	*Diltiazem	*Flumazenil	*Heparin	*Demerol	*Methylpre	*Nifedipine	*Nitroprus	*Norepine	*Phenobarb	*Pheny	*Racemic Epi	*Zemuron	*Vasopres
<b>ALPINE</b>																
Alpine EMS																
American Legion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>AMADOR</b>																
American Legion	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0
<b>CALAVERAS</b>																
American Legion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ebbetts Pass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Andreas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valley Springs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>MARIPOSA</b>																
Mercy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>STANISLAUS</b>																
AMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hughson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oak Valley	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Patterson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Helicopters</b>																
Air Med	0	0	0	0	0	0	3	0	0	0	0	0	0	0	44	0
Medi Flight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0
<b>TOTAL</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>0</b>

\* = Medications not in the EMT-P scope of practice except for monitoring only. These are for flight nurses and transfer nurses.

## Chest Pain: Suspected Cardiac Origin 2003

	# of Cases Per PCR	Confirmed Cases per ED	% Confirmed	TX Administered (% of Total)							ED Disposition			
				O2	Monitor	ASA	NTG	IV	MS	↓ Symp	Home	Died	Transferred	Admit
<b>ALPINE</b>														
Alpine EMS	0	N/A	N/A							N/A				
<b>AMADOR</b>														
American Legion	234			183	227	155	196	199	73		58	0	61	90
<b>CALAVERAS</b>														
American Legion	27			22	26	19	25	23	5		14	0	2	9
AMR	44			34	44	0	34	31	12		12	0	0	11
Ebbetts Pass	16			11	13	6	12	11	3		4	0	2	5
San Andreas	55			47	52	23	39	38	11		11	0	2	20
Valley Springs	65			28	49	21	51	52	17		21	0	3	25
<b>MARIPOSA</b>														
Mercy	65			54	64	30	48	45	18		3	0	3	1
<b>STANISLAUS</b>														
AMR	1282			1183	1243	0	781	953	165		207	1	0	224
Hughson	119			103	104	23	90	101	56		25	0	2	25
Oak Valley	150			135	132	49	98	108	19		41	0	8	30
Patterson	62			54	55	41	49	39	14		13	0	1	19
West Side	74			69	66	7	53	40	1		4	0	0	6
<b>Helicopters</b>														
Air Med	7			7	7	0	4	1	5		N/A	N/A	N/A	N/A
Medi Flight	0													
<b>TOTAL</b>	<b>2200</b>	<b>0</b>	<b>0</b>	<b>1930</b>	<b>2082</b>	<b>374</b>	<b>1480</b>	<b>1641</b>	<b>399</b>	<b>0</b>	<b>413</b>	<b>1</b>	<b>84</b>	<b>465</b>

\* N/A = Data Not Available

## Cardiac Arrest (Transported) 2003

	Initial Arrest Rhythm				TOTAL TRANS	E.D. Disposition							Discharge Disposition			
	VFib/Tach	PEA	Asystole	Other		Home	Admit Floor	ICU/CCU	Transfer	AMA	DOA/Died in ED	Unknown	Home	Died	Transferred	Unknown
<b>ALPINE</b>																
Alpine EMS					0											
<b>AMADOR</b>																
American Legion	2	1	12	4	19			2	2		13		N/A	N/A	N/A	N/A
<b>CALAVERAS</b>																
American Legion	1	1	4		6						4		N/A	N/A	N/A	N/A
AMR				4	4								N/A	N/A	N/A	N/A
Ebbetts Pass	1	1		1	3						3		N/A	N/A	N/A	N/A
San Andreas	4				4			2	1				N/A	N/A	N/A	N/A
Valley Springs	2		1	2	5	1					4		N/A	N/A	N/A	N/A
<b>MARIPOSA</b>																
Mercy	2	1	1	1	5						1		N/A	N/A	N/A	N/A
<b>STANISLAUS</b>																
AMR	45	44	111	27	227	4	12	7	2		65		1	4		
Hughson	2		7		9		1	1			4		1	1		
Oak Valley	4	8	5	1	18	2			1		12		N/A	N/A	N/A	N/A
Patterson	4	1	5	1	11			1	1		5		N/A	N/A	N/A	N/A
West Side	?	?	?	?	13			2			3		N/A	N/A	N/A	N/A
<b>Helicopters</b>																
Air Med	?	?	?	?	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medi Flight	?	?	?	?	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>TOTAL</b>	<b>67</b>	<b>57</b>	<b>146</b>	<b>41</b>	<b>333</b>	<b>7</b>	<b>13</b>	<b>15</b>	<b>7</b>	<b>0</b>	<b>114</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>

N/A = Data not available





**Pulseless V Fib /Tach (Witnessed)**  
2003

	Pre ALS TX (% of Total)			ALS TX Administered (% of Total)						%Return of Circulation	ED Disposition			Hosp Discharge		
	Citez CPR	AED	Shock<10min	Defib <1min	E.T	CO2 Detect	EPI	Lido	NaHCO3		Admit	Trans	Died	Home	Trans	Died
<b>ALPINE</b>																
Alpine EMS																
<b>AMADOR</b>																
American Legion																
<b>CALAVERAS</b>																
American Legion																
AMR																
Ebbetts Pass																
San Andreas																
Valley Springs																
<b>MARIPOSA</b>																
Mercy																
<b>STANISLAUS</b>																
AMR																
Hughson																
Oak Valley																
Patterson																
West Side																
<b>Helicopters</b>																
Air Med																
Medi Flight																
<b>TOTAL</b>																

## SOB: Suspected Bronchospasms 2003

	# of Cases Per PCR	Confirmed Cases per ED	% Confirmed	TX Administered (% of Total)							E.D. Disposition			
				O2	Monitor	Albuterol	IV	Nitro*	Lasix*	↓ Symp	Home	Died	Admit	Transfer
<b>ALPINE</b>														
Alpine EMS	0	N/A	N/A							N/A				
<b>AMADOR</b>														
American Legion	36			17	32	33	26	2	0		22	0	9	4
<b>CALAVERAS</b>														
American Legion	4			4	4	2	1	1	0		1	0	2	0
AMR	0													
Ebbetts Pass	1			0	1	1	0	0	0		0	0	0	0
San Andreas	9			3	8	9	7	2	0		0	0	3	1
Valley Springs	12			4	4	10	6	0	0		7	0	1	0
<b>MARIPOSA</b>														
Mercy	14			10	14	13	11	2	0		2	0	1	0
<b>STANISLAUS</b>														
AMR	186			148	158	152	89	2	0		38	0	21	2
Hughson	20			9	15	16	12	1	0		4	0	3	0
Oak Valley	34			15	14	31	12	2	0		17	0	5	0
Patterson	24			14	19	19	14	3	0		5	0	4	0
West Side	29			23	20	19	10	3	0		4	0	1	0
<b>Helicopters</b>														
Air Med	0													
Medi Flight	0													
<b>TOTAL</b>	<b>369</b>			<b>247</b>	<b>289</b>	<b>305</b>	<b>188</b>	<b>18</b>	<b>0</b>		<b>100</b>	<b>0</b>	<b>50</b>	<b>7</b>

\* Not per Protocol

\* N/A = Not Available

**SOB: Suspected Fluid Overload**  
2003

(patient transported)

	# of Cases Per PCR	Confirmed Cases per ED	% Confirmed	TX Administered (% of Total)									E.D. Disposition				
				O2	Monitor	NTG	IV	MS	Lasix	Dopamine	Albuter* <sup>x</sup>	↓ Symp	Home	Died	Admit	Transfer	
<b>ALPINE</b>																	
Alpine EMS	0	N/A	N/A										N/A				
<b>AMADOR</b>																	
American Legion	39			29	38	28	34	9	0	0	4		11	1	19	5	
<b>CALAVERAS</b>																	
American Legion	5			4	5	5	5	0	0	0	0		1	0	4	0	
AMR	0																
Ebbetts Pass	4			4	4	2	3	0	0	0	0		0	0	2	0	
San Andreas	11			8	10	9	9	0	0	0	4		1	0	8	1	
Valley Springs	7			2	7	4	7	1	0	0	2		0	0	4	0	
<b>MARIPOSA</b>																	
Mercy	6			6	6	5	4	0	0	0	1		0	0	0	0	
<b>STANISLAUS</b>																	
AMR	217			201	199	125	150	11	0	1	27		20	0	67	3	
Hughson	12			10	12	8	9	1	0	0	3		2	0	3	0	
Oak Valley	48			42	31	10	22	0	0	0	10		6	0	18	1	
Patterson	3			2	3	3	2	0	0	0	0		1	0	0	1	
West Side	19			17	18	14	7	0	0	0	3		1	0	3	0	
<b>Helicopters</b>																	
Air Med	0																
Medi Flight	0																
<b>TOTAL</b>	<b>371</b>	<b>0</b>	<b>0</b>	<b>325</b>	<b>333</b>	<b>213</b>	<b>252</b>	<b>22</b>	<b>0</b>	<b>1</b>	<b>54</b>	<b>0</b>	<b>43</b>	<b>1</b>	<b>128</b>	<b>11</b>	

\* Not per Protocol

\* N/A = Not Available

