

MARIN COUNTY
DEPARTMENT OF
HEALTH AND HUMAN SERVICES
HEALTH SERVICES DIVISION
EMS PROGRAM
ANNUAL STATISTICS FOR 2001

Type of Incident Report

From January 1, 2001 to December 31, 2001

Svc Area	AO with One or More Patients to Hospital		No Patient Transport		All Units Cancelled		Total
	Count	Percent	Count	Percent	Count	Percent	
A	2,072	67%	864	28%	152	5%	3,088
B	2,661	60%	821	18%	963	22%	4,445
C	1,984	68%	562	19%	381	13%	2,927
D	2,078	66%	794	25%	298	9%	3,170
E	461	49%	338	36%	151	16%	950
Other	25	29%	14	16%	46	54%	85
Total	9,281	63%	3,393	23%	1,991	14%	14,665

Prior year comparisons	Svc Area	1990	1994	1997	1998	1999	2000
	A	1,942	2,419	2,544	2,515	2,680	2,900
	B	3,639	3,457	3,676	3,652	3,838	4,181
	C	2,257	2,238	2,333	2,482	2,522	2,698
	D	3,782	2,265	2,415	2,583	2,690	2,882
	E	865	710	725	757	836	839
	Other	14	21	5	15	23	23
	Total	12,499	11,110	11,698	12,004	12,589	13,523

Definitions:

Patient Transport The number of times that an incident resulted in one or more patients going to a hospital. This is NOT a count of patients going to the hospital.

No Patient Transport The number of times that at least one of the units was not cancelled and there was no unit transporting a patient to the hospital.

All Units Cancelled The number of times that all units dispatched to the scene were cancelled.

Service Area A Code 3 Compliance Report

From January 1, 2001 to December 31, 2001

Total ALS Code 3 Incidents within Service Area: 2571

Elapsed Time from Dispatch to Arrive at Scene

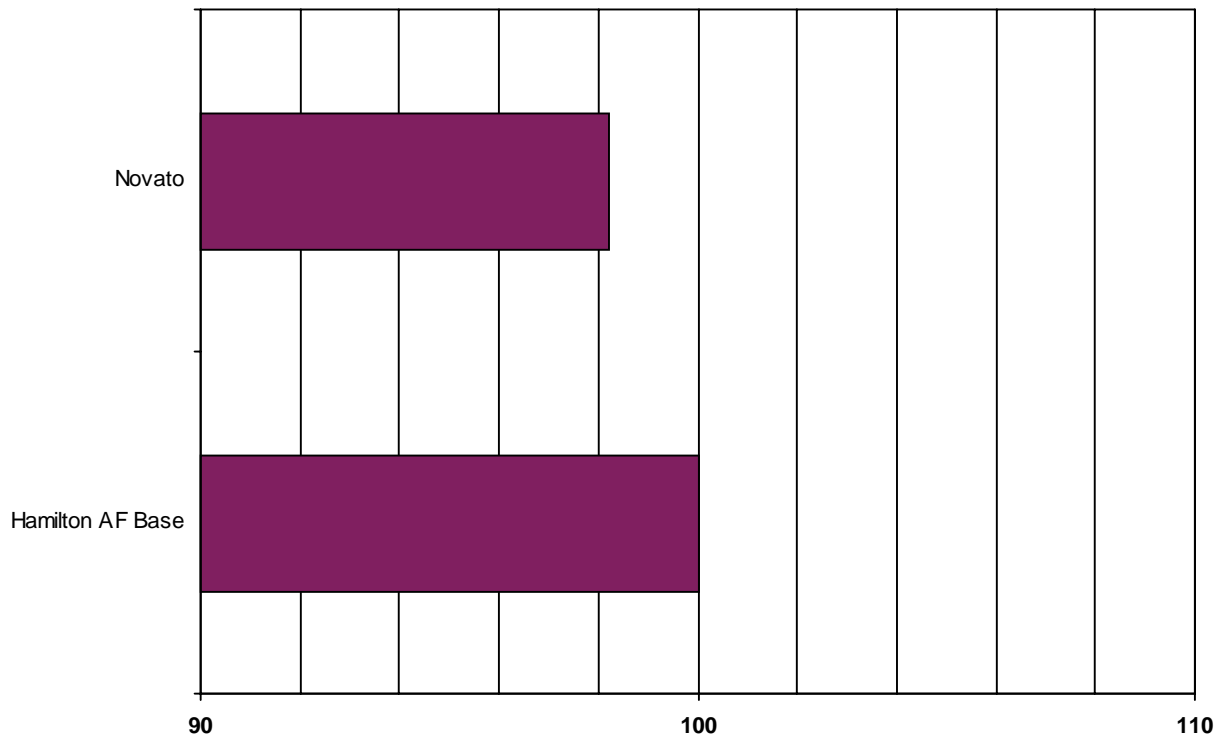
Minutes:	0-1	2	3	4	5	6	7	8	9	10	11-20	21-30	> 30
Count:	78	134	345	591	599	391	207	99	52	29	43	1	2
Percent:	3.0%	5.2%	13.4%	23.0%	23.3%	15.2%	8.1%	3.9%	2.0%	1.1%	1.7%	.0%	.1%
Overall %:	3.0%	8.2%	21.7%	44.7%	68.0%	83.2%	91.2%	95.1%	97.1%	98.2%	99.9%	99.9%	100.0%

Service Area A Code 3 Incidents

	Total ALS Code 3 Incidents	Exceeded Expected Times	Within Expected Times	Percent Within Expected Times
To Scene Times	2571	46	2525	98.21%

Report by City

Expected time to scene is within 10 minutes



	Hamilton AF Base	Novato
To Scene	100	98.2

Percentages

Service Area B Code 3 Compliance Report

From January 1, 2001 to December 31, 2001

Total ALS Code 3 Incidents within Service Area: 3254

Elapsed Time from Dispatch to Arrive at Scene

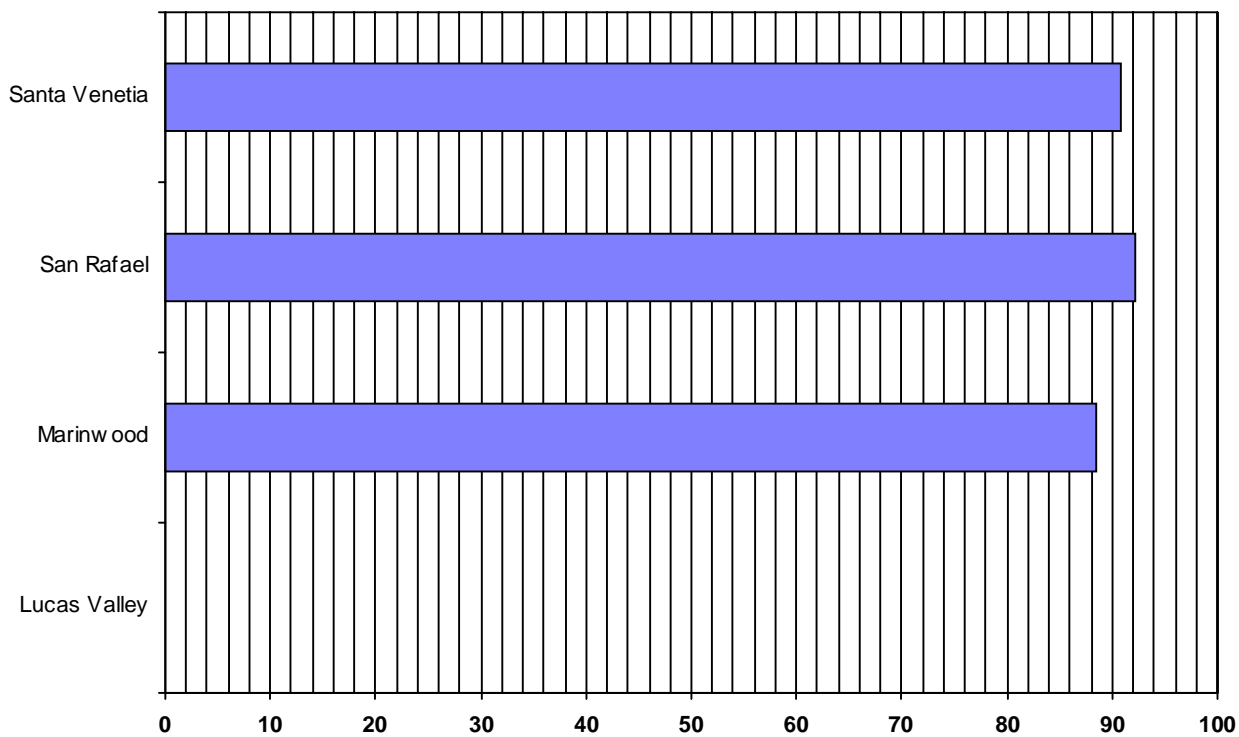
Minutes:	0-1	2	3	4	5	6	7	8	9	10	11-20	21-30	> 30
Count:	185	245	373	427	453	406	359	266	174	98	240	21	3
Percent:	5.7%	7.5%	11.5%	13.1%	13.9%	12.5%	11.0%	8.2%	5.3%	3.0%	7.4%	.6%	.1%
Overall %:	5.7%	13.2%	24.7%	37.8%	51.7%	64.2%	75.2%	83.4%	88.8%	91.8%	99.1%	99.8%	99.9%

Service Area B Code 3 Incidents

	Total ALS Code 3 Incidents	Exceeded Expected Times	Within Expected Times	Percent Within Expected Times
To Scene Times	3254	264	2990	91.88%

Report by City

Expected time to scene is within 10 minutes



	Lucas Valley	Marinwood	San Rafael	Santa Venetia
To Scene	0	88.57	92.21	90.74

Percentages

Service Area C Code 3 Compliance Report

From January 1, 2001 to December 31, 2001

Total ALS Code 3 Incidents within Service Area: 2231

Elapsed Time from Dispatch to Arrive at Scene

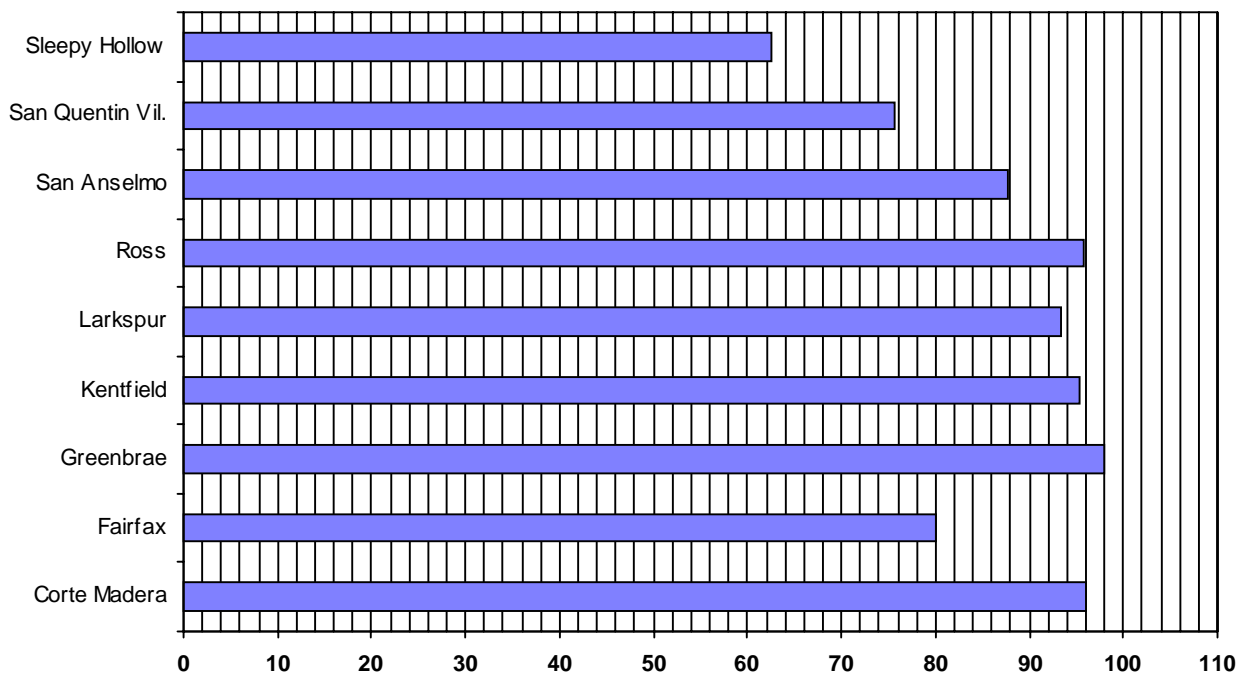
Minutes:	0-1	2	3	4	5	6	7	8	9	10	11-20	21-30	> 30
Count:	37	74	177	269	308	348	323	209	154	107	211	13	1
Percent:	1.7%	3.3%	7.9%	12.1%	13.8%	15.6%	14.5%	9.4%	6.9%	4.8%	9.5%	.6%	.0%
Overall %:	1.7%	5.0%	12.9%	25.0%	38.8%	54.4%	68.8%	78.2%	85.1%	89.9%	99.4%	100.0%	100.0%

Service Area C Code 3 Incidents

	Total ALS Code 3 Incidents	Exceeded Expected Times	Within Expected Times	Percent Within Expected Times
To Scene Times	2231	225	2006	89.91%

Report by City

Expected time to scene is within 10 minutes



	Corte Madera	Fairfax	Greenbrae	Kentfield	Larkspur	Ross	San Anselmo	San Quentin Vil.	Sleepy Hollow
■ To Scene	95.95	80.06	97.97	95.43	93.32	95.89	87.6	75.75	62.5

Percentages

Service Area D Code 3 Compliance Report

From January 1, 2001 to December 31, 2001

Total ALS Code 3 Incidents within Service Area: 2437

Elapsed Time from Dispatch to Arrive at Scene

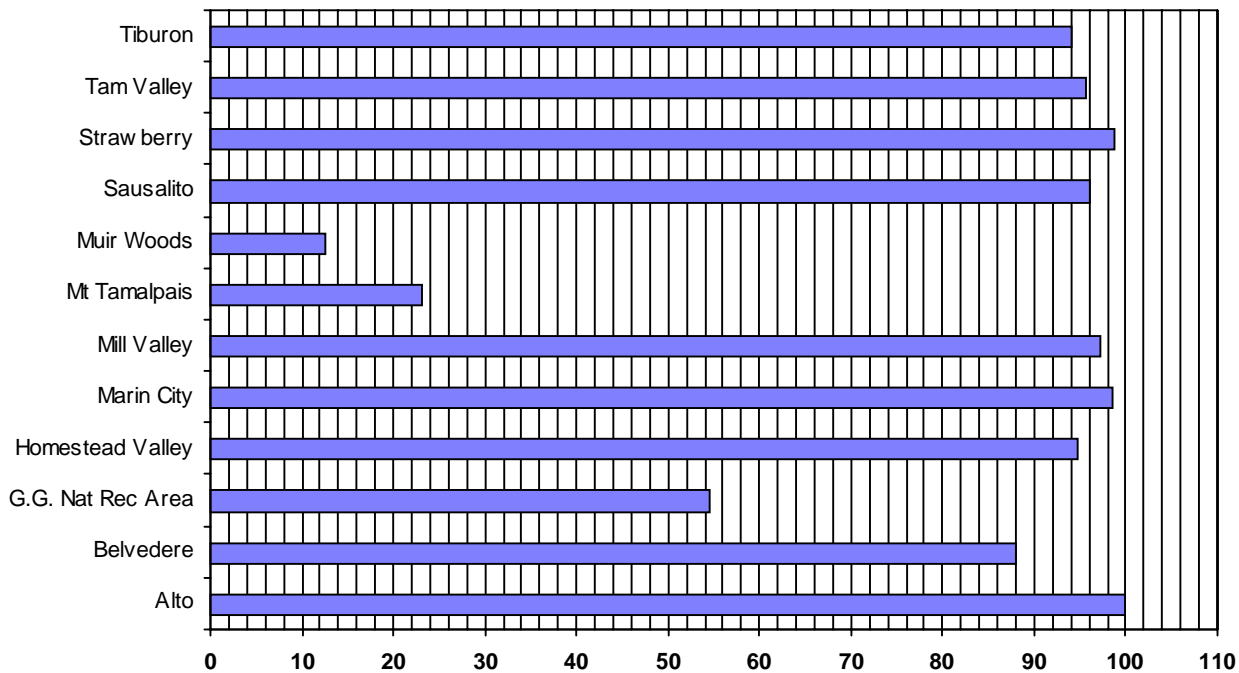
Minutes:	0-1	2	3	4	5	6	7	8	9	10	11-20	21-30	> 30
Count:	77	110	249	386	443	361	285	159	116	83	146	19	3
Percent:	3.2%	4.5%	10.2%	15.8%	18.2%	14.8%	11.7%	6.5%	4.8%	3.4%	6.0%	.8%	.1%
Overall %:	3.2%	7.7%	17.9%	33.7%	51.9%	66.7%	78.4%	84.9%	89.7%	93.1%	99.1%	99.9%	100.0%

Service Area D Code 3 Incidents

	Total ALS Code 3 Incidents	Exceeded Expected Times	Within Expected Times	Percent Within Expected Times
To Scene Times	2437	168	2269	93.1%

Report by City

Expected time to scene is within 10 minutes



	Alto	Belvedere	G.G. Nat Rec	Home stead Valley	Marin City	Mill Valley	Mt Tamalpais	Muir Wood s	Sausal ito	Straw berry	Tam Valley	Tiburo n
■ To Scene	100	88.09	54.54	94.73	98.52	97.17	23.07	12.5	95.97	98.74	95.65	93.97

Percentages

Service Area E Code 3 Compliance Report

Rural Areas - Compliance is 30 Minutes to the Scene

From January 1, 2001 to December 31, 2001

Total ALS Code 3 Incidents within Service Area: 266

Elapsed Time from Dispatch to Arrive at Scene

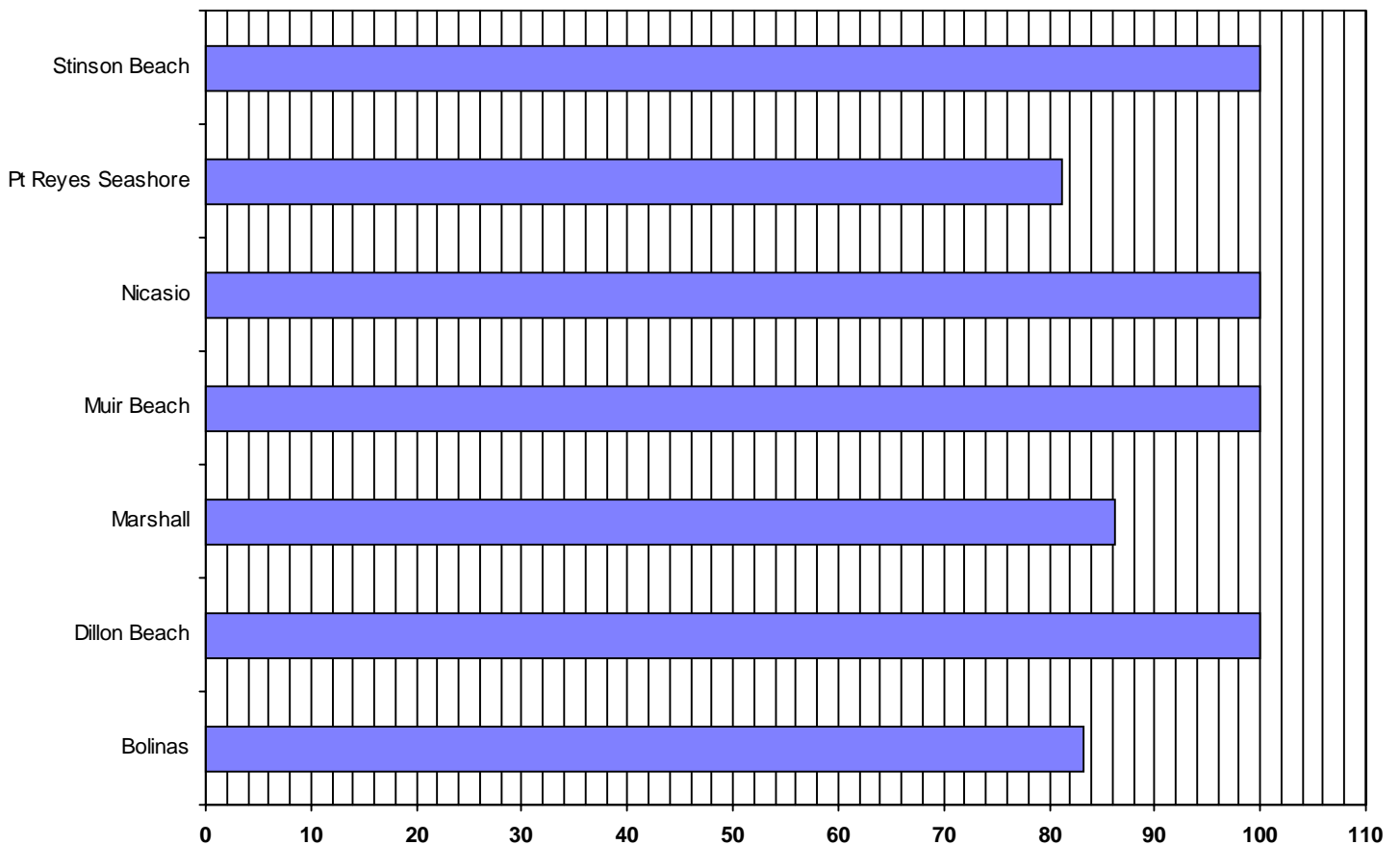
Minutes:	0-1	2	3	4	5	6	7	8	9	10	11-20	21-30	> 30
Count:	13	4	2	6	8	12	10	16	18	9	85	65	18
Percent:	4.9%	1.5%	.8%	2.3%	3.0%	4.5%	3.8%	6.0%	6.8%	3.4%	32.0%	24.4%	6.8%
Overall %:	4.9%	6.4%	7.1%	9.4%	12.4%	16.9%	20.7%	26.7%	33.5%	36.8%	68.8%	93.2%	100.0%

Service Area E Code 3 Incidents

	Total ALS Code 3 Incidents	Exceeded Expected Times	Within Expected Times	Percent Within Expected Times
To Scene Times	266	18	248	93.23%

Report by City

Expected time to scene is within 30 minutes



	Bolinas	Dillon Beach	Marshall	Muir Beach	Nicasio	Pt Reyes Seashore	Stinson Beach
To Scene	83.33	100	86.2	100	100	81.25	100

Percentages

Service Area E Code 3 Compliance Report

Urban Areas - Compliance is 10 Minutes to the Scene

From January 1, 2001 to December 31, 2001

Total ALS Code 3 Incidents within Service Area: 403

Elapsed Time from Dispatch to Arrive at Scene

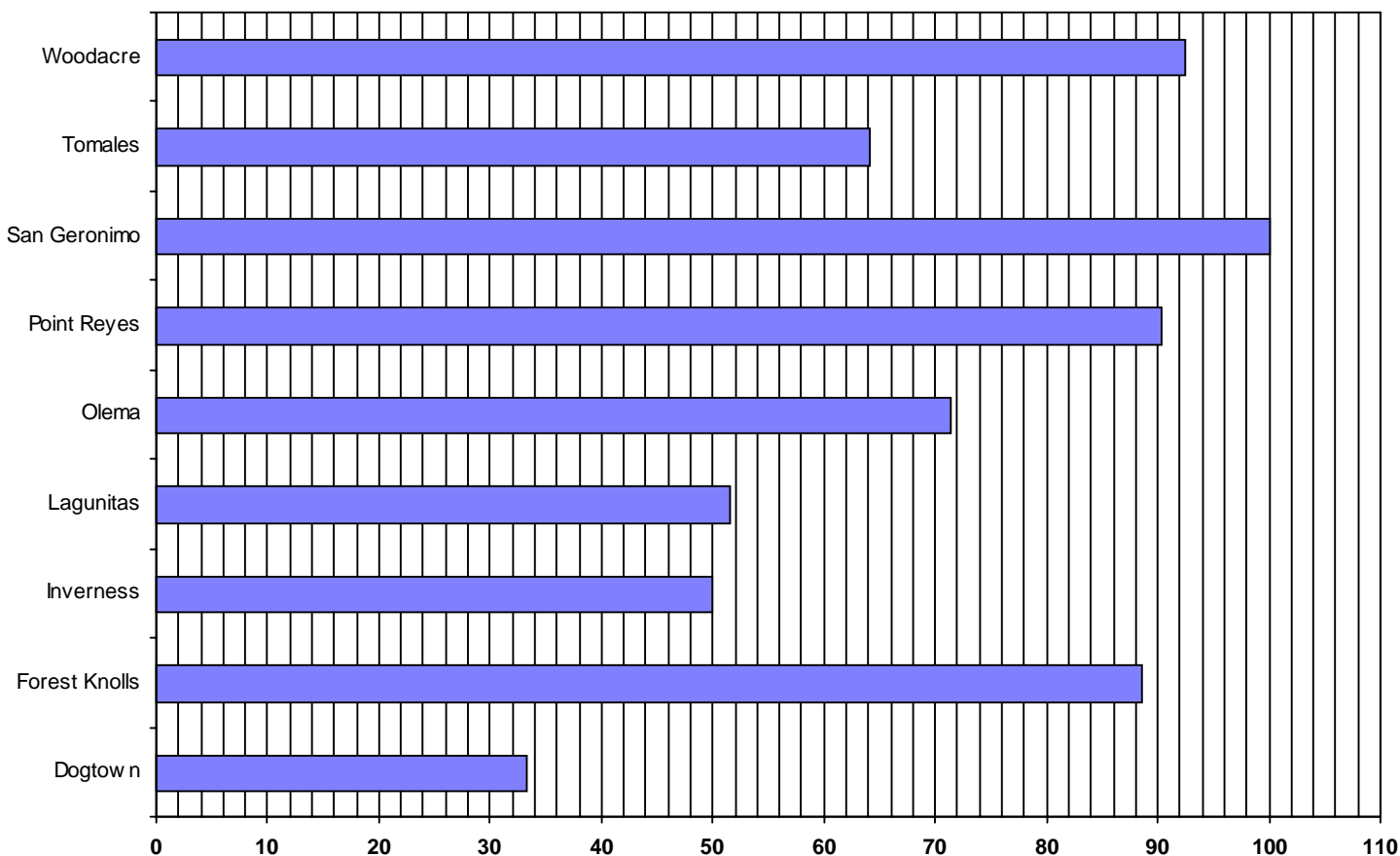
Minutes:	0-1	2	3	4	5	6	7	8	9	10	11-20	21-30	> 30
Count:	63	16	30	33	33	35	33	28	17	23	72	14	5
Percent:	15.6%	4.0%	7.4%	8.2%	8.2%	8.7%	8.2%	6.9%	4.2%	5.7%	17.9%	3.5%	1.2%
Overall %:	15.6%	19.6%	27.0%	35.2%	43.4%	52.1%	60.3%	67.2%	71.5%	77.2%	95.0%	98.5%	99.8%

Service Area E Code 3 Incidents

	Total ALS Code 3 Incidents	Exceeded Expected Times	Within Expected Times	Percent Within Expected Times
To Scene Times	403	91	312	77.41%

Report by City

Expected time to scene is within 10 minutes



	Dogtown	Forest Knolls	Inverness	Lagunitas	Olema	Point Reyes	San Geronimo	Tomales	Woodacre
To Scene	33.33	88.57	50	51.61	71.42	90.35	100	64.1	92.42

Percentages

Incidents by Day of Week Report

From January 1, 2001 to December 31, 2001

Months	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Jan	154	198	185	200	154	161	142
Feb	136	154	143	155	165	146	146
Mar	164	142	164	164	190	178	203
Apr	187	199	152	131	154	171	157
May	172	156	214	195	210	184	166
Jun	186	144	167	163	183	230	233
Jul	203	205	200	155	152	157	170
Aug	153	165	151	203	201	201	198
Sep	215	141	154	137	164	171	237
Oct	168	198	205	203	139	166	175
Nov	156	165	165	133	226	241	162
Dec	179	198	156	184	158	159	191
Grand Total:	2,073	2,065	2,056	2,023	2,096	2,165	2,180

Hourly Call Volume Report

From January 1, 2001 to December 31, 2001

Month	Hour																							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan	28	21	19	26	20	23	31	45	69	63	65	67	81	83	67	76	67	63	73	61	43	42	33	28
Feb	21	25	23	13	18	17	27	33	65	59	64	63	61	83	62	56	54	67	58	41	36	50	30	19
Mar	21	25	15	23	24	25	21	50	54	62	71	75	65	90	62	84	75	64	71	63	40	48	39	38
Apr	28	25	18	15	19	22	20	43	51	69	61	73	70	62	87	69	62	52	71	49	61	48	46	30
May	28	32	21	23	10	20	26	42	52	58	86	76	78	82	94	79	73	82	80	69	69	40	46	31
Jun	31	23	22	21	15	13	29	43	59	50	74	97	96	80	95	89	70	77	74	71	52	45	38	42
Jul	31	31	23	21	14	18	15	37	50	68	72	66	72	77	88	69	90	78	65	80	54	48	53	22
Aug	35	31	27	22	15	18	25	38	56	60	62	83	78	89	91	77	72	97	59	71	53	44	27	42
Sep	32	14	23	19	18	25	32	38	67	59	77	83	78	74	74	78	62	67	67	46	54	48	56	28
Oct	28	34	20	23	26	21	25	36	54	65	76	73	84	68	91	79	67	78	63	58	61	45	39	40
Nov	20	24	22	20	18	25	33	46	50	66	89	87	94	68	65	74	74	64	64	58	57	45	51	34
Dec	39	27	24	37	23	20	18	40	56	88	82	64	89	60	65	63	59	65	54	71	53	56	48	24
	342	312	257	263	220	247	302	491	683	767	889	918	958	929	955	908	841	871	817	757	653	580	528	401

Incident Dispatches by Service Area by Month

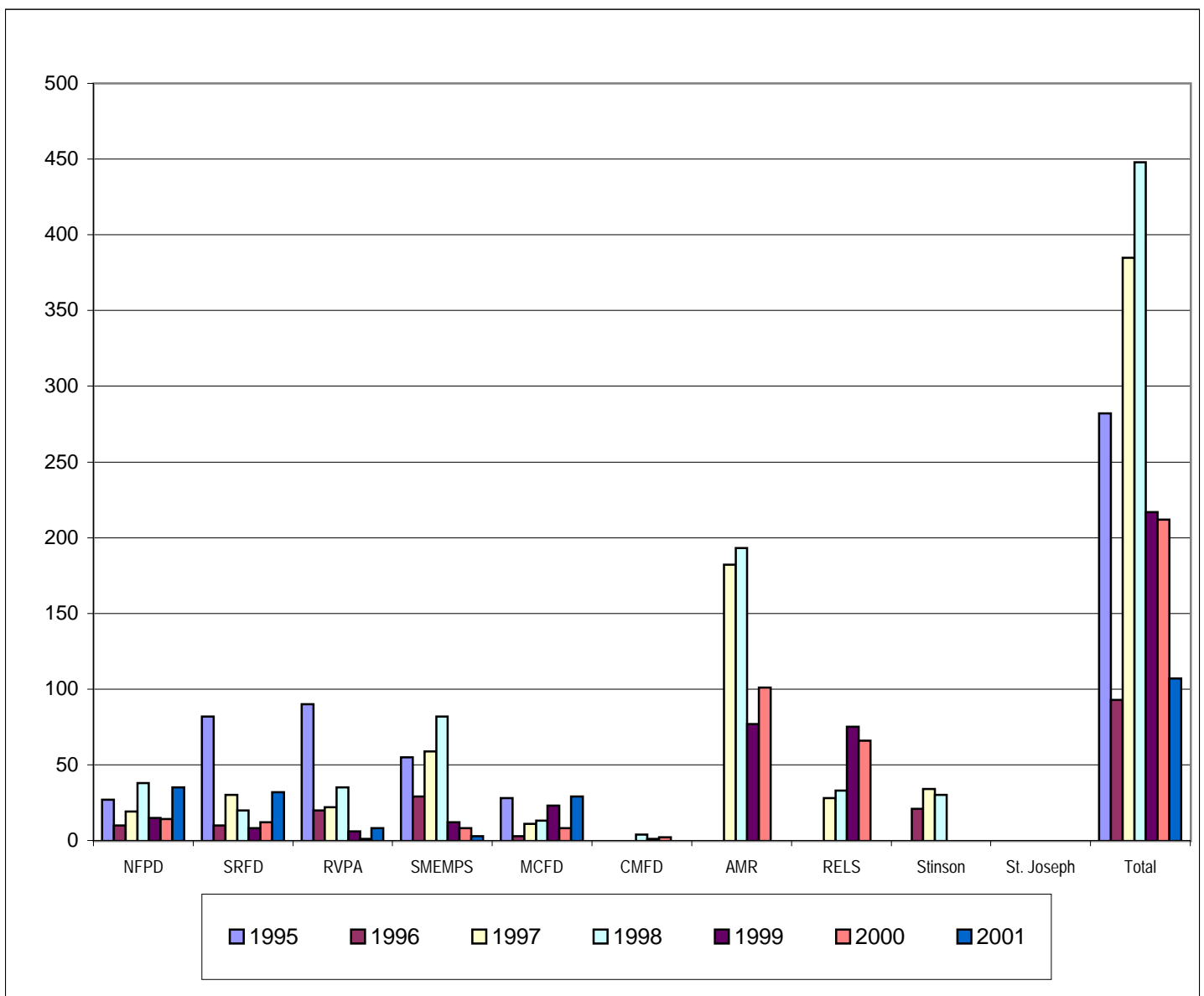
From January 1, 2001 to December 31, 2001

Month	PSA A	PSA B	PSA C	PSA D	PSA E	Other	Total
Jan	240	380	242	268	61	3	1,194
Feb	260	316	204	198	59	8	1,045
Mar	259	370	249	248	69	10	1,205
Apr	231	357	236	255	66	6	1,151
May	289	375	259	284	82	8	1,297
Jun	264	401	250	287	97	7	1,306
Jul	244	393	237	263	98	7	1,242
Aug	264	357	239	307	100	5	1,272
Sep	236	366	242	278	93	6	1,221
Oct	296	355	251	254	89	11	1,256
Nov	264	398	261	255	62	8	1,248
Dec	241	377	257	273	74	6	1,228
Total	3,088	4,445	2,927	3,170	950	85	14,665

Missing Patient Care Records

From January 1, 2001 to December 31, 2001

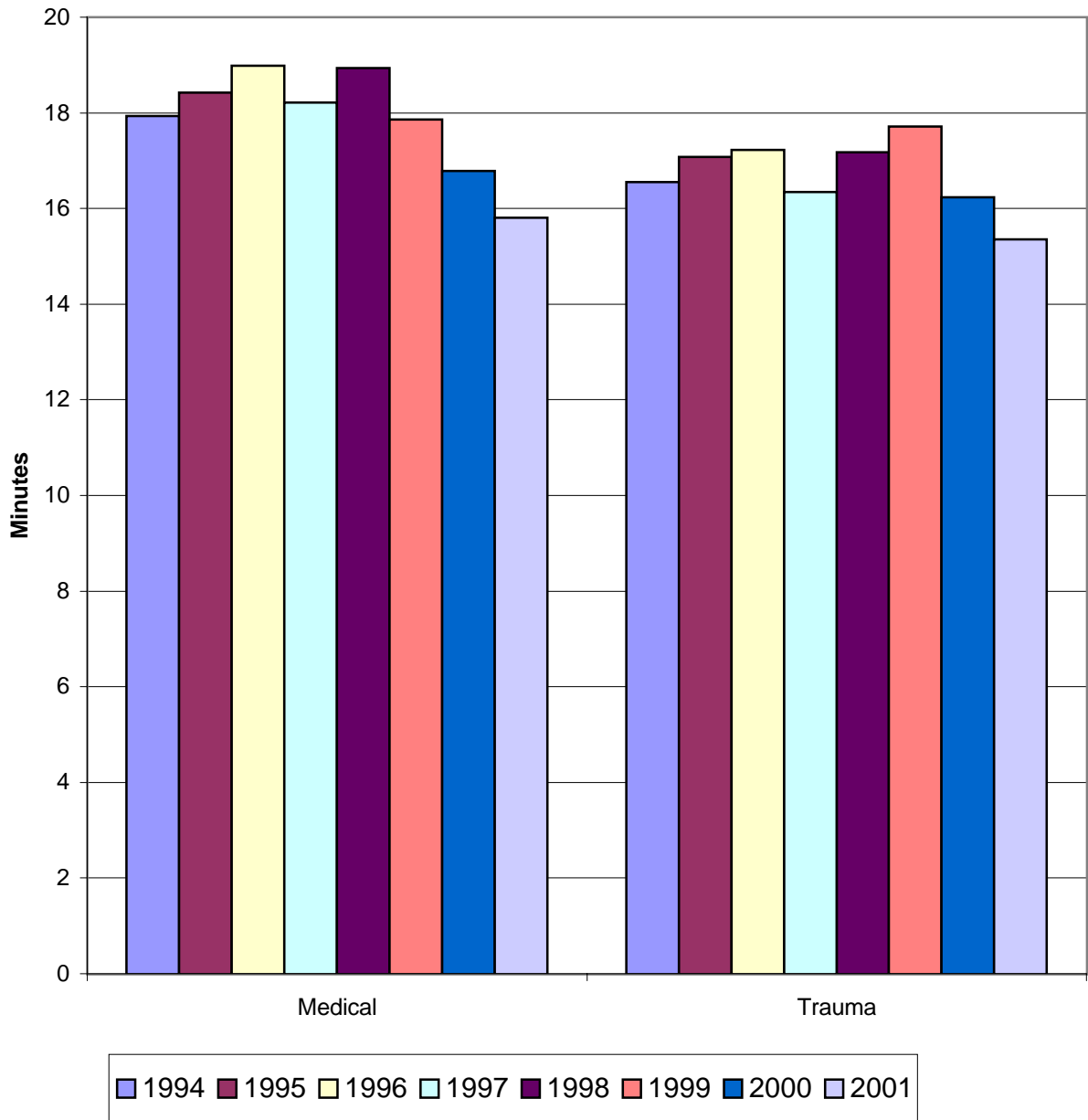
Missing Prehospital Care Records Comparison											
Year	NFPD	SRFD	RVPA	SMEMPS	MCFD	CMFD	AMR	RELS	Stinson	St. Joseph	Total
1995	27	82	90	55	28						282
1996	10	10	20	29	3				21		93
1997	19	30	22	59	11		182	28	34		385
1998	38	20	35	82	13	4	193	33	30		448
1999	15	8	6	12	23	1	77	75	0		217
2000	14	12	1	8	8	2	101	66	0		212
2001	35	32	8	3	29	0	0	0	0	0	107



Average Time at Scene

From January 1, 2001 to December 31, 2001

Comparison of Average Time at Scene								
	1994	1995	1996	1997	1998	1999	2000	2001
Medical	17.94	18.42	18.99	18.22	18.94	17.86	16.79	15.81
Trauma	16.55	17.08	17.22	16.35	17.17	17.71	16.23	15.36



BLS Procedures

From January 1, 2001 to December 31, 2001

Procedures	1994	1995	1996	1997		1998		1999		2000		2001	
	Count	Count	Count	Count	+/- 1996	Count	+/- 1997	Count	+/- 1998	Count	+/- 1999	Count	+/- 2001
Airway oral care	-	-	-	12	12	-	(12)	33	33	18	(15)	10	(8)
Airway adjuncts, OPA/nasal	38	51	133	174	41	153	(21)	136	(17)	142	6	168	26
CPR	86	113	117	142	25	128	(14)	164	36	139	(25)	164	25
Defibrillation, semi-automatic	13	9	21	46	25	54	8	38	(16)	43	5	55	12
Dress wounds/bandaging	151	221	318	451	133	577	126	595	18	608	13	687	79
Hemorrhage control	5	5	60	105	45	159	54	126	(33)	110	(16)	101	(9)
Obstetric assistance	1	2	10	6	(4)	7	1	3	(4)	6	3	9	3
Other BLS treatment	249	349	563	510	(53)	676	166	269	(407)	301	32	583	282
Oxygen Mask/Cannula	3,637	5,287	4,806	5,556	750	5,716	160	6,053	337	6,688	635	7,371	683
PPV, BVM	54	84	123	190	67	191	1	199	8	192	(7)	199	7
PPV, demand ventilator	12	7	11	32	21	42	10	50	8	32	(18)	33	1
PPV, mouth to mask	1	1	2	4	2	-	(4)	3	3	4	1	4	-
PPV, mouth to mouth	-	1	2	9	7	2	(7)	2	-	1	(1)	3	2
Psychiatric assistance	6	6	27	50	23	67	17	66	(1)	36	(30)	18	(18)
Restraints	3	1	24	28	4	37	9	25	(12)	25	-	25	-
Spinal Immobilization	1,532	1,795	832	1,141	309	1,225	84	1,049	(176)	1,139	90	1,247	108
Splint	253	317	255	362	107	427	65	390	(37)	379	(11)	391	12
Suction	87	99	97	124	27	118	(6)	137	19	106	(31)	101	(5)
Traction splint	1	1	5	5	-	6	1	11	5	8	(3)	8	-
	6,129	8,349	7,406	8,947	1,541	9,585	638	9,349	(236)	9,977	628	11,177	1,200

Procedure counts = number of times procedure was attempted

ALS Procedures

From January 1, 2001 to December 31, 2001

Procedures	1994	1995	1996	1997		1998		1999		2000		2001	
	Count	Count	Count	Count	+/- 1996	Count	+/- 1997	Count	+/- 1998	Count	+/- 1999	Count	+/- 2000
Blood draw	208	190	270	299	29	113	(186)	77	(36)	64	(13)	53	(11)
Cardiovert	-	1	-	7	7	7	-	3	(4)	12	9	6	(6)
Carotid sinus massage	-	-	-	-	-	-	-	-	-	-	-	-	-
Cricothyrotomy, needle	-	-	-	-	-	-	-	-	-	-	-	-	-
Defibrillation	72	304	157	135	(22)	164	29	143	(21)	150	7	218	68
ECG monitor	-	27	83	2,857	2,774	5,164	2,307	6,318	1,154	6,447	129	6,925	478
Endotracheal intubation, nasal	41	24	31	29	(2)	30	1	38	8	26	(12)	27	1
Endotracheal intubation, oral	115	181	141	161	20	140	(21)	156	16	151	(5)	169	18
EOA/EGA/EGTA	-	-	1	2	1	-	(2)	1	1	-	(1)	1	1
External Pacing	-	-	-	-	-	-	-	-	-	-	-	18	18
Fluid challenge	56	134	327	428	101	498	70	452	(46)	568	116	502	(66)
Foley catheter	-	-	-	-	-	-	-	-	-	-	-	-	-
Glucose determination	1,088	1,896	2,142	2,531	389	2,825	294	2,776	(49)	2,717	(59)	2,978	261
Heparin lock	-	-	-	-	-	-	-	-	-	-	-	-	-
Intraosseous infusion	6	2	1	8	7	1	(7)	6	5	1	(5)	1	-
MAST	1	6	8	9	1	-	(9)	2	2	-	(2)	-	-
Naso-gastic tube	-	-	-	-	-	-	-	-	-	-	-	-	-
Needle thoracostomy	-	-	-	2	2	1	(1)	-	(1)	2	2	-	(2)
Other ALS Treatment	-	8	9	127	118	165	38	26	(139)	16	(10)	303	287
Peripheral IV	2,531	2,690	2,592	4,005	1,413	4,247	242	4,907	660	5,179	272	5,629	450
Plural Decompression	-	-	-	-	-	-	-	-	-	-	-	2	2
Procainamide monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse oximetry	8	287	1,507	4,165	2,658	5,688	1,523	4,581	(1,107)	4,657	76	4,712	55
Removal of foreign body	-	1	5	4	(1)	3	(1)	9	6	10	1	1	(9)
Saline lock	29	24	58	200	142	293	93	324	31	325	1	349	24
Vagal maneuver	3	5	8	28	20	22	(6)	19	(3)	25	6	38	13
	4,158	5,780	7,340	14,997	7,657	19,361	4,364	19,838	477	20,350	512	21,932	1,582

Procedure counts = number of times procedure was attempted

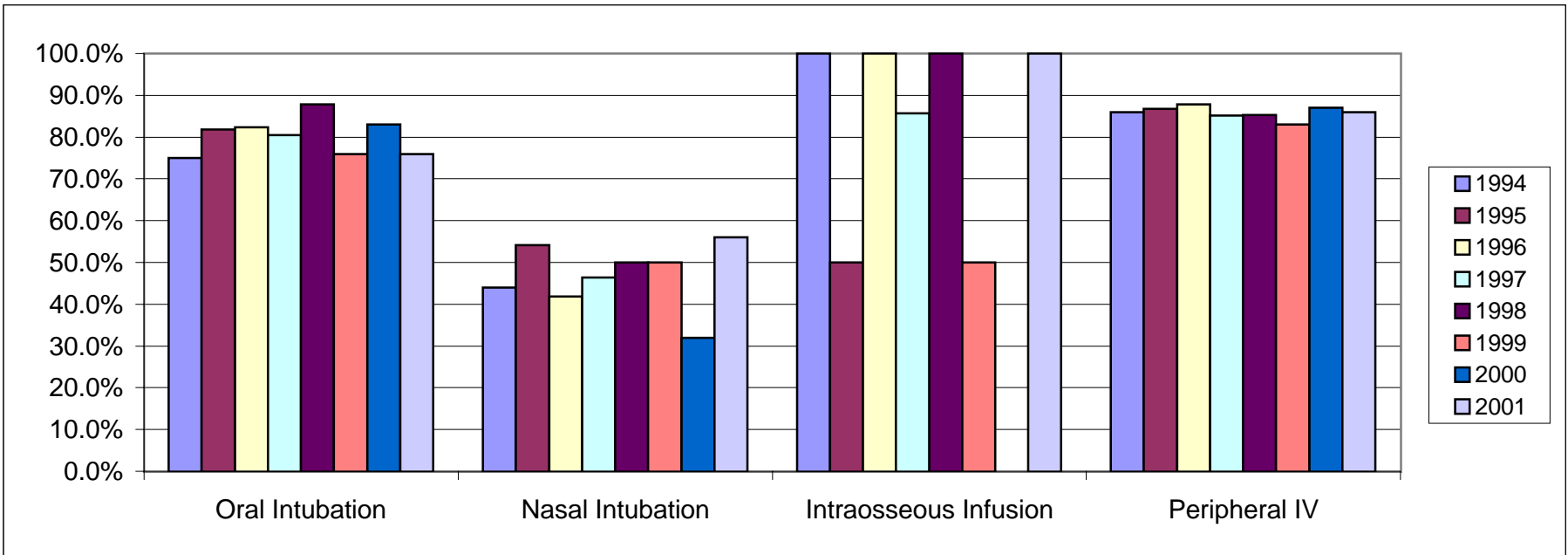
Successful Procedures

From January 1, 2001 to December 31, 2001

	1994	1995	1996	1997	1998	1999			2000			2001			Standard*
	Rate	Rate	Rate	Rate	Rate	Attempts	Success	Rate	Attempts	Success	Rate	Attempts	Success	Rate	
Oral Intubation	75%	82%	82%	85%	88%	156	118	76%	127	105	83%	152	115	76%	
Adult Oral Intubation									125	104	83%	148	112	76%	86.00%
Pediatric Oral Intubation									2	1	50%	4	3	75%	91.60%
Nasal Intubation	44%	54%	42%	46%	50%	38	19	50%	22	7	32%	27	15	56%	
EOA/EGA/EGTA			100%	100%		2	1	50%				1	0	0%	
Intraosseous Infusion	100%	50%	100%	86%	100%	2	1	50%	1	0	0%	1	1	100%	
Peripheral IV	86%	87%	88%	85%	85%	4,907	4,082	83%	5,273	4,604	87%	5,390	4,662	86%	81.00%

*Standard researched by Mountain Valley EMS Region, 2000. Details available at EMS Office.

Attempts are counted per patient



Transport

From January 1, 2001 to December 31, 2001

Transport Provider	1994	1995	1996	1997	1998			1999			2000			2001		
	Transport	Transport	Transport	Transport	Level of Care		Transport	Level of Care		Transport	Level of Care		Transport	Level of Care		Transport
					ALS	BLS		ALS	BLS		ALS	BLS		ALS	BLS	
NFPD	1239	1776	1841	1865	1299	477	1776	1130	795	1925	1201	837	2038	1417	813	2230
Percentage	31.8%	30.2%	26.1%	22.5%	73.1%	26.9%	20.8%	58.7%	41.3%	20.2%	58.9%	41.1%	20.8%	63.5%	36.5%	21.0%
SRFD	894	1433	1617	2248	1968	290	2258	1980	499	2479	2034	663	2697	2046	549	2595
Percentage	23.0%	24.4%	22.9%	27.1%	87.2%	12.8%	26.5%	79.9%	20.1%	26.0%	75.4%	24.6%	27.5%	78.8%	21.2%	24.4%
RVPA	622	897	969	906	817	89	906	831	57	888	798	185	983	905	79	984
Percentage	16.0%	15.3%	13.7%	10.9%	90.2%	9.8%	10.6%	93.6%	6.4%	9.3%	81.2%	18.8%	10.0%	92.0%	8.0%	9.3%
SMEMPS	860	1432	1477	1530	1166	512	1678	1353	471	1824	1448	531	1979	1605	745	2350
Percentage	22.1%	24.4%	21.0%	18.4%	69.5%	30.5%	19.7%	74.2%	25.8%	19.1%	73.2%	26.8%	20.2%	68.3%	31.7%	22.1%
MCFD	239	287	286	289	251	88	339	274	133	407	302	149	451	349	155	504
Percentage	6.1%	4.9%	4.1%	3.5%	74.0%	26.0%	4.0%	67.3%	32.7%	4.3%	67.0%	33.0%	4.6%	69.2%	30.8%	4.7%
CMFD	0	0	0	0	268	114	382	290	122	412	311	124	435	340	149	489
Percentage					70.2%	29.8%	4.5%	70.4%	29.6%	4.3%	71.5%	28.5%	4.4%	69.5%	30.5%	4.6%
AMR	0	0	790	1317	196	785	981	94	718	812	46	386	432	0	39	39
Percentage			11.2%	15.9%	20.0%	80.0%	11.5%	11.6%	88.4%	8.5%	10.6%	89.4%	4.4%	0.0%	100.0%	0.4%
RELS	0	0	23	105	73	86	159	82	552	634	71	593	664	98	584	682
Percentage			0.3%	1.3%	45.9%	54.1%	1.9%	12.9%	87.1%	6.6%	10.7%	89.3%	6.8%	14.4%	85.6%	6.4%
Stinson Beach	0	0	0	2	2	4	6	2	6	8	0	18	18	2	30	32
Percentage				0.0%	33.3%	66.7%	0.1%	25.0%	75.0%	0.1%	0.0%	100.0%	0.2%	6.3%	93.8%	0.3%
Coastal	0	0	0	0	0	3	3	10	16	26	17	11	28	0	1	1
Percentage					0.0%	100.0%	0.0%	38.5%	61.5%	0.3%	60.7%	39.3%	0.3%	0.0%	100.0%	0.0%
St. Joseph														3	679	682
Percentage														0.4%	99.6%	
RCH	19	17	20	21	29	3	32	33	8	41	43	0	43	26	4	30
Percentage	0.5%	0.3%	0.3%	0.3%	90.6%	9.4%	0.4%	80.5%	19.5%	0.4%	100.0%	0.0%	0.4%	86.7%	13.3%	0.3%
USC	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Percentage		0.0%		0.0%										0.0%	0.0%	0.0%
CHP	0	0	3	0	2	2	4	1	0	1	2	0	2	0	0	0
Percentage			0.0%		50.0%	50.0%	0.0%	100%	0.0%	0.01%	100.0%	0.0%	0.02%	0.0%	0.0%	0.0%
CALSTAR	0	0	0	0	6	0	6	14	0	14	15	0	15	2	3	5
Percentage					100.0%	0.0%	0.1%	100%	0.0%	0.1%	100.0%	0.0%	0.15%	40.0%	60.0%	0.0%
10H1	0	0	0	0	2	1	3	1	0	1	4	0	4	1	5	6
Percentage					66.7%	33.3%	0.0%	100%	0%	0.01%	100.0%	0.0%	0.04%	16.7%	83.3%	0.1%
Other	20	32	22	21	0	0	0	32	31	63	0	1	1	1	1	2
Percentage	0.5%	0.5%	0.3%	0.3%				50.8%	49.2%	0.7%	0.0%	100.0%	0.0%	50.0%	50.0%	0.0%
TOTAL	3,893	5,876	7,048	8,305	6,079	2,454	8,533	6,127	3,408	9,535	6,292	3,498	9,790	6,795	3,836	10,631
PERCENTAGE					71.2%	28.8%		64.3%	35.7%		64.3%	35.7%		63.9%	36.1%	

(Read percentages down)

Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Hospital	Transport Provider	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
California Pacific Medical Center														
	RELS-Marin				1									1
	SMEMPS	2	1	2	4	3	3	3	1	1	1	1	1	23
	St Joseph						1							1
	Corte Madera Fire Dept						1							1
	Total:	2	1	2	5	3	5	3	1	1	1	1	1	26
		0.2%	0.1%	0.2%	0.6%	0.4%	0.6%	0.4%	0.1%	0.1%	0.1%	0.1%	0.1%	
Children's Hospital Oakland														
	REACH						1							1
	Total:						1							
							0.1%							
Davies Medical Center														
	SMEMPS								1					1
	Total:								1					
									0.1%					
Doctors Hospital Pinole														
	REACH					2	1						1	4
	St Joseph		1											1
	CALS			1										1
	Total:		1	1		2	1						1	
			0.1%	0.1%		0.2%	0.1%						0.1%	
Eden Valley Hospital														
	SMEMPS				1									1
	San Rafael Fire Dept										1			1
	Total:				1						1			
					0.1%						0.1%			

Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Hospital	Transport Provider	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Highland Hospital														
	Novato Fire Protection D					1								1
	SMEMPS		1											1
	Total:		1			1								
			0.1%			0.1%								
John Muir Medical Center														
	CALS						1				1			2
	REACH				2	1	2	2						7
	Total:				2	1	3	2			1			
					0.2%	0.1%	0.3%	0.2%			0.1%			
Kaiser Hospital, Richmond														
	Novato Fire Protection D										2	1		3
	RELS-Marin								1					1
	AMR-Marin					1								1
	St Joseph						4	1	1	1	1			7
	Total:						1	4	2	1	3	1		
							0.1%	0.5%	0.2%	0.1%	0.4%	0.1%		
Kaiser Hospital, San Francisco														
	SMEMPS			2		5		1	4			1	1	14
	St Joseph												2	2
	Total:			2		5		1	4			1	3	
				0.2%		0.6%		0.1%	0.5%			0.1%	0.4%	
Kaiser Hospital, Santa Rosa														
	Bodega Bay FD	1				3			1	1				6
	Novato Fire Protection D						1		1					2
	Petaluma FD					1								1
	RELS-Marin											1		1
	Total:	1				4	1		2	1		1		
		0.1%				0.5%	0.1%		0.2%	0.1%		0.1%		

Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Hospital	Transport Provider	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Kaiser Hospital, Terra Linda														
	AMR-Marin	6	2	1		2								11
	St Joseph		22	8	15	13	13	25	12	11	16	17	22	174
	SMEMPS	41	25	29	23	25	38	27	41	37	31	22	33	372
	San Rafael Fire Dept	55	64	70	65	60	72	67	66	59	60	75	66	779
	Ross Valley Paramedic	12	17	14	16	13	23	11	9	19	16	18	17	185
	RELS-Marin	19	17	13	12	22	6	7	18	7	15	17	16	169
	Novato Fire Protection D	43	62	55	49	71	53	43	50	47	68	77	69	687
	Corte Madera Fire Dept	3	4	7	7	7	13	9	11	9	8	3	10	91
	Stinson Beach Fire Dept					1								1
	Marin County Fire Dept	9	11	10	14	10	13	10	10	12	11	7	8	125
	Total:	188	224	207	201	224	231	199	217	201	225	236	241	2594
		22.8%	29.2%	25.3%	24.2%	26.1%	25.6%	24.1%	25.5%	24.4%	27.2%	28.0%	28.8%	

Marin General Hospital

	AMR-Marin	16	1			3	1							21
	Marin County Fire Dept	19	15	23	18	24	29	27	25	18	18	14	22	252
	Novato Fire Protection D	20	22	13	18	20	11	12	11	10	19	17	11	184
	Other		1											1
	RELS-Marin	59	27	30	47	58	50	27	37	37	21	31	21	445
	Ross Valley Paramedic	65	47	77	67	58	60	75	67	65	57	62	68	768
	San Rafael Fire Dept	156	117	133	147	130	147	143	138	154	113	145	141	1664
	SMEMPS	142	100	126	140	130	138	140	144	141	141	133	160	1635
	St Joseph		43	46	40	49	53	44	41	37	46	49	34	482
	Stinson Beach Fire Dept							1		1				2
	Corte Madera Fire Dept	31	30	34	29	33	31	30	30	33	36	31	21	369
	Total:	508	403	482	506	505	520	499	493	496	451	482	478	5823
		61.7%	52.5%	59.0%	61.0%	58.9%	57.5%	60.3%	57.9%	60.1%	54.6%	57.1%	57.1%	

Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Hospital	Transport Provider	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Novato Community Hospital														
	San Rafael Fire Dept	4	5	2	2	7	8	7	8	7	12	7	4	73
	SMEMPS						1	1						2
	Ross Valley Paramedic	1				1							2	4
	RELS-Marin	2				3	1			1	1	1		9
	Novato Fire Protection D	109	118	109	98	91	118	98	111	97	111	101	96	1257
	Marin County Fire Dept	4	4	1		2	1	6	3	2	4	3	2	32
	Corte Madera Fire Dept		1		1		1	2					2	7
	St Joseph		3		2	3	1	2	2	5	6	6	2	32
	Other				1									1
	Total:	120	131	112	104	107	131	116	124	112	134	118	108	1417
		14.6%	17.1%	13.7%	12.5%	12.5%	14.5%	14.0%	14.6%	13.6%	16.2%	14.0%	12.9%	

Palm Drive Hospital

	REACH							1						1
	Total:							1						
								0.1%						

Petaluma Valley Hospital

	Petaluma FD	1				1								2
	REACH		1	1			1			3		1		7
	Novato Fire Protection D		2			1					2			5
	Marin County Fire Dept	1	1	6	1	1	2	1	1	6	3	1	2	26
	Bodega Bay FD		2	1	1	1	5		4					14
	Stinson Beach Fire Dept										1			1
	Total:	2	6	8	2	4	8	1	5	9	6	2	2	55
		0.2%	0.8%	1.0%	0.2%	0.5%	0.9%	0.1%	0.6%	1.1%	0.7%	0.2%	0.2%	

San Francisco General Hospital

	SMEMPS											1		1
	Total:											1		
												0.1%		

Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Hospital	Transport Provider	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Santa Rosa Memorial Hospital														
	Bodega Bay FD						1							1
	CALS							1						1
	Marin County Fire Dept								1					1
	Novato Fire Protection D	2			1					1	2			6
	REACH			3	7	1	1			1			1	14
	Total:	2		3	8	1	2	1	1	2	2		1	
		0.2%		0.4%	1.0%	0.1%	0.2%	0.1%	0.1%	0.2%	0.2%		0.1%	
St. Mary's Medical Center														
	SMEMPS													1
	Total:	1												
		0.1%												
U.C.S.F. Medical Center														
	St Joseph									1				1
	SMEMPS		1						1	1	2	1	2	8
	Total:		1						1	2	2	1	2	
			0.1%						0.1%	0.2%	0.2%	0.1%	0.2%	
Total:		824	768	817	829	857	904	827	851	825	826	844	837	

Provider Agency - Gender by Age Report

From January 1, 2001 to December 31, 2001

NOTE: Read gender percentages across

Provider Agency	Gender	Patient Age										Total
		Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
AMR-Marin												
	Female	0	0	0	1	0	0	0	2	2	7	12
					8.33%				16.67%	16.67%	58.33%	0.09%
	Male	0	0	0	0	0	0	8	9	2	3	22
								36.36%	40.91%	9.09%	13.64%	0.17%
		0	0	0	1	0	0	8	11	4	10	34
CMFD												
	Female	6	3	4	8	2	9	55	54	44	122	307
		1.95%	0.98%	1.30%	2.61%	0.65%	2.93%	17.92%	17.59%	14.33%	39.74%	2.31%
	Male	1	6	11	8	5	13	59	66	52	91	312
		0.32%	1.92%	3.53%	2.56%	1.60%	4.17%	18.91%	21.15%	16.67%	29.17%	2.35%
		7	9	15	16	7	22	114	120	96	213	619
MCFD												
	Female	1	5	9	15	6	23	74	89	64	103	389
		0.26%	1.29%	2.31%	3.86%	1.54%	5.91%	19.02%	22.88%	16.45%	26.48%	2.93%
	Male	0	3	10	28	17	40	98	74	61	91	422
			0.71%	2.37%	6.64%	4.03%	9.48%	23.22%	17.54%	14.45%	21.56%	3.18%
		1	8	19	43	23	63	172	163	125	194	811
NFPD												
	Female	6	7	30	39	17	66	177	247	242	723	1554
		0.39%	0.45%	1.93%	2.51%	1.09%	4.25%	11.39%	15.89%	15.57%	46.53%	11.70%
	Male	2	13	34	34	22	73	281	267	175	457	1358
		0.15%	0.96%	2.50%	2.50%	1.62%	5.38%	20.69%	19.66%	12.89%	33.65%	10.22%
		8	20	64	73	39	139	458	514	417	1180	2912

Provider Agency		Patient Age									
Gender	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	Total
Other											
Female	0	0	0	0	0	0	0	2	0	0	2
								100.00%			0.02%
Male	0	0	0	0	0	0	1	0	0	0	1
							100.00%				0.01%
	0	0	0	0	0	0	1	2	0	0	3
RELS-Marin											
Female	1	0	2	11	3	9	52	78	52	186	394
	0.25%		0.51%	2.79%	0.76%	2.28%	13.20%	19.80%	13.20%	47.21%	2.97%
Male	0	1	3	11	10	17	63	64	42	88	299
		0.33%	1.00%	3.68%	3.34%	5.69%	21.07%	21.40%	14.05%	29.43%	2.25%
	1	1	5	22	13	26	115	142	94	274	693
RVPA											
Female	0	1	13	12	14	26	88	135	98	394	781
		0.13%	1.66%	1.54%	1.79%	3.33%	11.27%	17.29%	12.55%	50.45%	5.88%
Male	0	9	21	23	19	24	92	102	68	284	642
		1.40%	3.27%	3.58%	2.96%	3.74%	14.33%	15.89%	10.59%	44.24%	4.83%
	0	10	34	35	33	50	180	237	166	678	1423
SMEMPS											
Female	4	9	34	22	14	55	283	253	210	581	1465
	0.27%	0.61%	2.32%	1.50%	0.96%	3.75%	19.32%	17.27%	14.33%	39.66%	11.03%
Male	6	15	42	64	24	52	320	246	203	393	1365
	0.44%	1.10%	3.08%	4.69%	1.76%	3.81%	23.44%	18.02%	14.87%	28.79%	10.28%
Unknown	0	0	1	0	0	0	0	0	0	1	2
			50.00%							50.00%	0.02%
	10	24	77	86	38	107	603	499	413	975	2832

Provider Agency	Gender	Patient Age									Total	
		Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70		> 70
SRFD												
	Female	0	14	22	23	13	48	257	248	210	827	1662
			0.84%	1.32%	1.38%	0.78%	2.89%	15.46%	14.92%	12.64%	49.76%	12.51%
	Male	1	11	27	30	25	53	339	320	241	523	1570
		0.06%	0.70%	1.72%	1.91%	1.59%	3.38%	21.59%	20.38%	15.35%	33.31%	11.82%
		1	25	49	53	38	101	596	568	451	1350	3232
St Joseph												
	Female	0	1	1	5	3	10	67	58	52	186	383
			0.26%	0.26%	1.31%	0.78%	2.61%	17.49%	15.14%	13.58%	48.56%	2.88%
	Male	0	0	3	6	7	23	99	75	22	54	289
				1.04%	2.08%	2.42%	7.96%	34.26%	25.95%	7.61%	18.69%	2.18%
		0	1	4	11	10	33	166	133	74	240	672
Stinson Beach												
	Female	0	0	1	3	2	1	9	3	7	6	32
				3.13%	9.38%	6.25%	3.13%	28.13%	9.38%	21.88%	18.75%	0.24%
	Male	0	0	2	1	1	2	3	4	5	1	19
				10.53%	5.26%	5.26%	10.53%	15.79%	21.05%	26.32%	5.26%	0.14%
		0	0	3	4	3	3	12	7	12	7	51
	Grand Total:	28	98	270	344	204	544	2425	2396	1852	5121	13282
	Read Grand Total percentages across:	0.21%	0.74%	2.03%	2.59%	1.54%	4.10%	18.26%	18.04%	13.94%	38.56%	

Type of Patient for Each Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Receiving Hospital	Type of Patient (See Footnote for Code Description)																										Total/Pct	
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	118	119	120	121	122	199	200	300	400			
California Pacific Medical Center						1									1		1			1		6	1	1	14	26	0.3%	
Children's Hospital Oakland																									3	3	0.0%	
Davies Medical Center																	1									1	0.0%	
Doctors Hospital Pinole	1			1		2																1			1	6	0.1%	
Eden Valley Hospital																									2	2	0.0%	
Highland Hospital				1		1																1				3	0.0%	
John Muir Medical Center																									9	9	0.1%	
Kaiser Hospital, Richmond																						3			9	12	0.1%	
Kaiser Hospital, San Francisco				1				2			1											5	3		4	16	0.2%	
Kaiser Hospital, Santa Rosa						2		1							2							2			3	10	0.1%	
Kaiser Hospital, Terra Linda	130	10	21	187	21	249	49	114	44	25	40	9	1	9	141	25	216	68	3	236	40	451	4	14	553	2,660	25.9%	
Marin General Hospital	292	21	62	481	60	484	76	223	50	95	68	14	5	6	257	70	420	205	11	452	80	865	47	56	1584	5,984	58.3%	
Novato Community Hospital	65	6	11	145	23	97	32	39	15	21	14	5		1	74	13	139	68	2	100	13	318	1	6	215	1,423	13.9%	
Palm Drive Hospital					1						1															2	0.0%	
Petaluma Valley Hospital	2		2	4	2	1	3	3			1	1			1	1	5	1	1	6	1	7		1	22	65	0.6%	
San Francisco General Hospital																									1	1	0.0%	
Santa Rosa Memorial Hospital						4		2																	17	23	0.2%	
St. Mary's Medical Center																									1	1	0.0%	
U.C.S.F. Medical Center	2			2		1									1							3				9	0.1%	
Total:	492	37	96	822	107	842	160	384	109	141	124	30	6	16	477	109	782	342	17	795	134	1662	56	78	2438	10,256		

Footnote - Description of Patient Type Codes

101 Abdominal Pain	108 CVA/Stroke/TIA	115 Pain, Non-Specific	199 Other Illness
102 Airway Obstruction	109 Diabetes Complication	116 Poisoning/OD	200 Obstetric
103 Allergic Reaction	110 Drug/Alcohol Intoxication	118 Respiratory Distress	300 Psychiatric
104 Altered Level of Consciousness	111 Hypotension	119 Seizure	400 Trauma/Traumatic Shock
105 Cardiac Arrest	112 Hypertension	120 Unconscious, Cause Unknown	
106 Chest Discomfort, Cardiac	113 Hypothermia/Frostbite	121 Syncope	
107 Chest Discomfort, Non-Cardiac	114 Heat Illness	122 Cardiac Dysrhythmia	

Mechanism of Injury by Receiving Hospital Report

From January 1, 2001 to December 31, 2001

Receiving Hospital	Mechanism of Injury (See Footnote for Description of Codes)																				Total/Pct			
	11	12	13	14	15	21	31	32	33	41	51	61	62	63	64	65	71	81	91	97			98	99
California Pacific Medical Center			8								4									1			13	0.5%
Children's Hospital Oakland						1					1												2	0.1%
Doctors Hospital Pinole											1		1										2	0.1%
Eden Valley Hospital											2												2	0.1%
John Muir Medical Center	3	2	3								1												9	0.3%
Kaiser Hospital, Richmond	4										4									1			9	0.3%
Kaiser Hospital, San Francisco			1								3						1						5	0.2%
Kaiser Hospital, Santa Rosa											4									1			5	0.2%
Kaiser Hospital, Terra Linda	188	15	19			10			15	1	313		1		2	1	5	9	16	8	5	21	629	23.4%
Marin General Hospital	430	36	161	3		47	5	18	81	2	739	3	5	1	2	1	4	13	22	52	25	71	1721	64.1%
Novato Community Hospital	37	1	3			3		2	10		157			2				2	3	8	6	10	244	9.1%
Palm Drive Hospital																						1	1	0.0%
Petaluma Valley Hospital	12	1	1							1	6								1	1			23	0.9%
San Francisco General Hospital	1																						1	0.0%
Santa Rosa Memorial Hospital	12	1									3									1			17	0.6%
St. Mary's Medical Center											1												1	0.0%
Total:	687	56	196	3		61	5	20	106	4	1239	3	7	3	4	2	10	24	43	72	36	103	2684	

Footnote - Description of Mechanism of Injury Code

11 Motor Vehicle Crash	31 Gunshot	62 Fire	91 Recreation/Sport
12 Motorcycle Crash	32 Stabbing	63 Explosion	97 Other Mechanism, Blunt
13 Bicycle Crash	33 Other Assault	64 Hazardous Material	98 Other Mechanism, Penetrating
14 Watercraft	41 Near Drowning/Drowning	65 Electrical	99 Other Mechanism, Not Specified
15 Aircraft	51 Fall	71 Animal	
21 Pedestrian vs Vehicle	61 Smoke/Fumes	81 Machinery	

Note: The total number of Mechanism of Injury does not equal the number of trauma patients on the "Type of Patient for Each Receiving Hospital Report". The reason is that some patients may have a traumatic injury along with being a medical patient (i.e., Cardiac with traumatic injury).

Type of Patient for Each Provider Agency Report

From January 1, 2001 to December 31, 2001

Provider Agency	Type of Patient (See Footnote for Code Description)																								Total/Pct		
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	118	119	120	121	122	199	200	300			400
AMR-Marin				1						1					5							7			20	34	0.3%
Corte Madera Fire Dept	19	5	13	36	15	43	11	21	12	15	2			2	6	3	37	19		68	11	71	3	8	190	610	4.6%
Marin County Fire Dept	29	7	18	33	15	45	16	26	11	11	3	2	1		27	12	39	17	2	43	18	145	2	5	283	810	6.1%
Novato Fire Protection District	100	17	18	229	88	176	58	63	36	27	23	8		3	142	19	211	89	3	174	22	693	13	19	651	2882	21.8%
Other																				1		1				2	0.0%
RELS-Marin	16	1	4	10	4	15	9	7	7	21				2	198	3	19	5		5	3	166		12	186	693	5.2%
Ross Valley Paramedic Authority	61	7	14	98	34	124	19	67	27	23	15	1	1	3	58	12	122	42	7	168	25	245	6	15	229	1423	10.8%
San Rafael Fire Dept	143	16	15	287	89	288	59	109	61	38	62	11		4	17	40	261	135	6	250	42	635	19	34	608	3229	24.5%
SMEMPS	132	14	46	195	67	170	42	101	40	38	21	8	8	7	113	38	180	92	3	176	23	472	16	13	782	2797	21.2%
St Joseph	23	1		3		1	6	1	3	16	1	1	2		56	1	8	9				176	2	13	349	672	5.1%
Stinson Beach Fire Dept	2		3			3		2		1					5			4		1		6			22	49	0.4%
Total:	525	68	131	892	312	865	220	397	197	191	127	31	12	21	627	128	877	412	21	886	144	2617	61	119	3320	13201	

Footnote - Description of Patient Type Codes

101 Abdominal Pain	108 CVA/Stroke/TIA	115 Pain, Non-Specific	199 Other Illness
102 Airway Obstruction	109 Diabetes Complication	116 Poisoning/OD	200 Obstetric
103 Allergic Reaction	110 Drug/Alcohol Intoxication	118 Respiratory Distress	300 Psychiatric
104 Altered Level of Consciousness	111 Hypotension	119 Seizure	400 Trauma/Traumatic Shock
105 Cardiac Arrest	112 Hypertension	120 Unconscious, Cause Unknown	
106 Chest Discomfort, Cardiac	113 Hypothermia/Frostbite	121 Syncope	
107 Chest Discomfort, Non-Cardiac	114 Heat Illness	122 Cardiac Dysrhythmia	

Age Over 65 Mechanism of Injury Report

From January 1, 2001 to December 31, 2001

Provider Agency	Mechanism of Injury (See Footnote for Description of Codes)																				Total		
	11	12	13	14	15	21	31	32	33	41	51	61	62	63	64	65	71	81	91	97		98	99
AMR-Marin	1										4										1		6
Corte Madera Fire Dept	5					1					38									1		1	46
Marin County Fire Dept	7										36		1							1		2	47
Novato Fire Protection District	23		1					1	1		187							2		3	2	2	222
RELS-Marin	7					1					97	2										8	115
Ross Valley Paramedic Authority	5					1	1				69								1			5	82
San Rafael Fire Dept	19					1					131		1	1						1		4	158
SMEMPS	20	1	3			1	1		1	1	183		1	1						1	2	4	220
St Joseph	3										124			1						1		2	131
Stinson Beach Fire Dept	1										3												4
Total:	91	1	4			5	2	1	2	1	872	2	3	3				2	1	8	5	28	1031

Footnote - Description of Mechanism of Injury Codes

11 Motor Vehicle Crash
 12 Motorcycle Crash
 13 Bicycle Crash
 14 Watercraft
 15 Aircraft
 21 Pedestrian vs Vehicle

31 Gunshot
 32 Stabbing
 33 Other Assault
 41 Near Drowning/Drowning
 51 Fall
 61 Smoke/Fumes

62 Fire
 63 Explosion
 64 Hazardous Material
 65 Electrical
 71 Animal
 81 Machinery

91 Recreation/Sport
 97 Other Mechanism, Blunt
 98 Other Mechanism, Penetrating
 99 Other Mechanism, Not Specifie

Protocol Followed by Age Report

From January 1, 2001 to December 31, 2001

Note: Read Percentages Down

Protocol	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Abdominal Pain	0	0	2	7	1	15	99	101	68	174	467
			1.82%	5.56%	0.97%	5.58%	7.30%	7.12%	5.28%	5.04%	5.72%
Acute Pulmonary Edema	0	0	0	0	0	0	1	7	18	134	160
							0.07%	0.49%	1.40%	3.89%	1.96%
Acute Respiratory Distress - Other	0	3	6	3	2	7	20	47	85	273	446
		7.50%	5.45%	2.38%	1.94%	2.60%	1.47%	3.31%	6.59%	7.92%	5.47%
Adult Pain Management	0	0	1	0	3	3	47	47	41	84	226
			0.91%		2.91%	1.12%	3.47%	3.31%	3.18%	2.44%	2.77%
Airway Obstruction	0	3	2	0	3	0	0	4	5	11	28
		7.50%	1.82%		2.91%			0.28%	0.39%	0.32%	0.34%
Allergic Reaction - Mild	0	1	3	2	0	0	17	22	13	7	65
		2.50%	2.73%	1.59%			1.25%	1.55%	1.01%	0.20%	0.80%
Allergic Reactions - Mod/Severe, Anaphylaxis	0	0	1	0	1	0	13	13	5	4	37
			0.91%		0.97%		0.96%	0.92%	0.39%	0.12%	0.45%
ALOC/Coma/CVA	0	3	2	3	13	30	206	241	290	799	1587
		7.50%	1.82%	2.38%	12.62%	11.15%	15.19%	17.00%	22.50%	23.17%	19.45%
Asthma - Mild/Moderate	0	0	2	11	3	5	8	19	6	37	91
			1.82%	8.73%	2.91%	1.86%	0.59%	1.34%	0.47%	1.07%	1.12%
Asthma - Severe	0	0	0	0	0	1	1	3	1	5	11
						0.37%	0.07%	0.21%	0.08%	0.14%	0.13%
Burns	0	0	0	0	0	0	4	8	3	3	18
							0.29%	0.56%	0.23%	0.09%	0.22%
Cardiopulmonary Arrest - Asystole	0	0	1	2	0	2	9	24	37	100	175
			0.91%	1.59%		0.74%	0.66%	1.69%	2.87%	2.90%	2.14%
Cardiopulmonary Arrest - PEA	0	0	0	0	0	0	2	6	8	25	41
							0.15%	0.42%	0.62%	0.72%	0.50%
Cardiopulmonary Arrest - VF/VT	0	0	0	0	0	2	1	10	17	20	50
						0.74%	0.07%	0.71%	1.32%	0.58%	0.61%

Protocol	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Chest Pain	0	0	0	0	0	2	43	173	185	448	851
						0.74%	3.17%	12.20%	14.35%	12.99%	10.43%
Chest Pain, Unlikely to be Cardiac	0	0	0	2	1	3	41	52	26	60	185
				1.59%	0.97%	1.12%	3.02%	3.67%	2.02%	1.74%	2.27%
Chronic Obstructive Pulmonary Disease	0	0	0	0	0	0	0	4	28	83	115
								0.28%	2.17%	2.41%	1.41%
Croup/Epiglottitis	0	0	2	1	0	0	0	0	0	0	3
			1.82%	0.79%							0.04%
Drowning/Near Drowning	0	0	1	1	1	2	0	0	0	1	6
			0.91%	0.79%	0.97%	0.74%				0.03%	0.07%
Dysrhythmias - Bradycardia	0	0	0	0	0	0	1	3	9	22	35
							0.07%	0.21%	0.70%	0.64%	0.43%
Dysrhythmias - Sust. V.T., pulse present	0	0	0	0	0	0	0	1	2	6	9
								0.07%	0.16%	0.17%	0.11%
Dysrhythmias - SVT	0	0	0	0	0	2	12	22	22	63	121
						0.74%	0.88%	1.55%	1.71%	1.83%	1.48%
Dysrhythmias - Ventricular Ectopy	0	0	0	0	0	0	2	4	5	17	28
							0.15%	0.28%	0.39%	0.49%	0.34%
Envenomation	0	0	0	0	0	0	0	1	0	0	1
								0.07%			0.01%
Gastrointestinal Bleeding	0	0	0	0	0	0	9	25	18	85	137
							0.66%	1.76%	1.40%	2.46%	1.68%
Heat Illness - Mild	0	0	0	0	0	1	3	2	3	7	16
						0.37%	0.22%	0.14%	0.23%	0.20%	0.20%
Heat Illness/Hyperthermia	0	0	0	1	0	0	1	1	0	4	7
				0.79%			0.07%	0.07%		0.12%	0.09%
Hypothermia/Frostbite	0	0	0	0	0	0	1	2	2	1	6
							0.07%	0.14%	0.16%	0.03%	0.07%
Imminent Delivery (normal/with complications)	0	4	0	0	0	4	20	1	0	0	29
		10.00%				1.49%	1.47%	0.07%			0.36%

Protocol	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
N/A	0	0	0	0	0	0	0	0	1	0	1
									0.08%		0.01%
Non-Traumatic Shock	0	0	0	0	1	2	14	24	33	67	141
					0.97%	0.74%	1.03%	1.69%	2.56%	1.94%	1.73%
Pediatric Allergic Reaction	0	0	5	1	0	0	0	0	0	0	6
			4.55%	0.79%							0.07%
Pediatric Altered Level of Consciousness	0	4	5	2	1	0	0	0	0	0	12
		10.00%	4.55%	1.59%	0.97%						0.15%
Pediatric Burns	0	1	0	0	0	0	0	0	0	1	2
		2.50%								0.03%	0.02%
Pediatric Cardiac Arrest	0	0	0	0	0	1	1	1	0	0	3
						0.37%	0.07%	0.07%			0.04%
Pediatric Respiratory Distress	0	11	7	5	0	0	0	0	0	0	23
		27.50%	6.36%	3.97%							0.28%
Pediatric Seizure	0	0	18	4	0	0	0	0	0	1	23
			16.36%	3.17%						0.03%	0.28%
Pediatric Tachycardia	0	2	0	0	0	0	0	0	0	0	2
		5.00%									0.02%
Pediatric Toxic Exposures	0	0	1	1	0	0	0	0	0	2	4
			0.91%	0.79%						0.06%	0.05%
Pediatric Trauma	0	4	14	10	0	0	0	0	0	1	29
		10.00%	12.73%	7.94%						0.03%	0.36%
Pneumothorax	0	0	0	0	0	0	0	0	1	0	1
									0.08%		0.01%
Poisons/Drugs	0	1	3	1	8	32	86	49	18	15	213
		2.50%	2.73%	0.79%	7.77%	11.90%	6.34%	3.46%	1.40%	0.43%	2.61%
Respiratory Arrest	0	0	1	0	0	0	0	2	2	7	12
			0.91%					0.14%	0.16%	0.20%	0.15%
Seizures	0	2	17	16	7	24	95	89	24	31	305
		5.00%	15.45%	12.70%	6.80%	8.92%	7.01%	6.28%	1.86%	0.90%	3.74%
Severe Pre-Eclampsia/Eclampsia	0	0	0	0	0	0	2	0	0	0	2
							0.15%				0.02%

Protocol	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Syncope/Near Syncope	0	0	0	9	13	26	120	118	170	576	1032
				7.14%	12.62%	9.67%	8.85%	8.32%	13.19%	16.70%	12.65%
Toxic Gas Inhalation	0	0	0	0	1	1	2	2	0	3	9
					0.97%	0.37%	0.15%	0.14%		0.09%	0.11%
Traumatic Injury	0	1	16	44	44	102	457	286	143	269	1362
		2.50%	14.55%	34.92%	42.72%	37.92%	33.70%	20.17%	11.09%	7.80%	16.69%
Vaginal Hemorrhage with/without shock	0	0	0	0	0	2	18	4	0	3	27
						0.74%	1.33%	0.28%		0.09%	0.33%
Grand Total:	0	40	110	126	103	269	1356	1418	1289	3449	8160
Read Grand Total Percentages Across:	0.00%	0.49%	1.35%	1.54%	1.26%	3.30%	16.62%	17.38%	15.80%	42.27%	

Mechanism of Injury by Age Report

From January 1, 2001 to December 31, 2001

Note: Read Percentages Down

Mechanism of Injury	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Animal	0	1	1	2	2	0	5	5	3	0	19
		6.25%	1.35%	1.08%	1.96%		0.51%	0.74%	0.82%		0.52%
Bicycle crash	0	0	4	16	9	12	129	62	19	3	254
			5.41%	8.65%	8.82%	4.33%	13.06%	9.12%	5.18%	0.32%	7.00%
Electrical	0	0	0	0	0	1	1	0	0	0	2
						0.36%	0.10%				0.06%
Explosion	0	0	0	0	0	0	1	0	0	3	4
							0.10%			0.32%	0.11%
Fall	2	12	42	98	25	27	168	173	180	815	1542
	66.67%	75.00%	56.76%	52.97%	24.51%	9.75%	17.00%	25.44%	49.05%	86.98%	42.49%
Fire	0	0	0	0	0	0	4	3	1	3	11
							0.40%	0.44%	0.27%	0.32%	0.30%
Gunshot	0	0	0	0	0	1	4	1	1	2	9
						0.36%	0.40%	0.15%	0.27%	0.21%	0.25%
Hazardous Material	0	0	0	0	0	1	3	0	0	0	4
						0.36%	0.30%				0.11%
Machinery	0	0	0	0	0	0	14	8	3	0	25
							1.42%	1.18%	0.82%		0.69%
Motor Vehicle crash	1	2	13	23	16	163	371	272	108	65	1034
	33.33%	12.50%	17.57%	12.43%	15.69%	58.84%	37.55%	40.00%	29.43%	6.94%	28.49%
Motorcycle crash	0	0	0	2	0	5	52	21	9	0	89
				1.08%		1.81%	5.26%	3.09%	2.45%		2.45%
Near drowning/drowning	0	0	1	2	0	2	0	0	1	0	6
			1.35%	1.08%		0.72%			0.27%		0.17%
Other Assault	0	0	0	0	12	32	83	33	6	1	167
					11.76%	11.55%	8.40%	4.85%	1.63%	0.11%	4.60%
Other mechanism, blunt	0	1	3	11	7	6	33	20	13	8	102
		6.25%	4.05%	5.95%	6.86%	2.17%	3.34%	2.94%	3.54%	0.85%	2.81%
Other mechanism, not specified	0	0	10	11	6	10	37	36	11	25	146
			13.51%	5.95%	5.88%	3.61%	3.74%	5.29%	3.00%	2.67%	4.02%

Mechanism of Injury	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Other mechanism, penetrating	0	0	0	3	2	4	25	14	1	5	54
				1.62%	1.96%	1.44%	2.53%	2.06%	0.27%	0.53%	1.49%
Pedestrian vs vehicle	0	0	0	5	7	3	29	21	6	4	75
				2.70%	6.86%	1.08%	2.94%	3.09%	1.63%	0.43%	2.07%
Recreation/Sport	0	0	0	12	15	10	12	6	2	0	57
				6.49%	14.71%	3.61%	1.21%	0.88%	0.54%		1.57%
Smoke/fumes	0	0	0	0	0	0	1	1	0	2	4
							0.10%	0.15%		0.21%	0.11%
Stabbing	0	0	0	0	1	0	15	3	1	1	21
					0.98%		1.52%	0.44%	0.27%	0.11%	0.58%
Watercraft	0	0	0	0	0	0	1	1	2	0	4
							0.10%	0.15%	0.54%		0.11%
Grand Total:	3	16	74	185	102	277	988	680	367	937	3629
Read Grand Total Percentages Across:	0.08%	0.44%	2.04%	5.10%	2.81%	7.63%	27.23%	18.74%	10.11%	25.82%	

Mechanism of Injury by Provider Agency Report

From January 1, 2001 to December 31, 2001

Provider Agency	Mechanism of Injury (See Footnote for Description of Codes)																				Total/Pct			
	11	12	13	14	15	21	31	32	33	41	51	61	62	63	64	65	71	81	91	97			98	99
AMR-Marin	8		1			1		1	1		9		1				1				1		24	0.7%
Corte Madera Fire Dept	50	7	13			3			4		64						2	3	5	4	3	10	168	4.6%
Marin County Fire Dept	88	32	27			3		1	4	3	111		3				4	2	14	12	4	13	321	8.8%
Novato Fire Protection District	272	13	19			12	1	5	31		301	1	1	1			2	6	12	24	12	21	734	20.2%
Other									1														1	0.0%
RELS-Marin	47	3	18			4		1	15		166	2			3		5	1	9	1	4	26	305	8.4%
Ross Valley Paramedic Authority	46	6	29			4	2		8		131						1		4	9	4	7	251	6.9%
San Rafael Fire Dept	223	8	27			24	3	7	33	1	223	1	2	1		1		7	7	14	7	21	610	16.8%
SMEMPS	221	17	111	4		12	3	4	43	1	330		3	1		1	3	5	2	21	15	27	824	22.7%
St Joseph	74	1	8			12		2	26		196		1	1	1			1	3	15	4	18	363	10.0%
Stinson Beach Fire Dept	4	2	1						1	1	11						1		1	2		3	27	0.7%
Total:	1033	89	254	4		75	9	21	167	6	1542	4	11	4	4	2	19	25	57	102	54	146	3628	

Footnote - Description of Mechanism of Injury Codes

11 Motor Vehicle Crash	31 Gunshot	62 Fire	91 Recreation/Sport
12 Motorcycle Crash	32 Stabbing	63 Explosion	97 Other Mechanism, Blunt
13 Bicycle Crash	33 Other Assault	64 Hazardous Material	98 Other Mechanism, Penetrating
14 Watercraft	41 Near Drowning/Drowning	65 Electrical	99 Other Mechanism, Not Specifie
15 Aircraft	51 Fall	71 Animal	
21 Pedestrian vs Vehicle	61 Smoke/Fumes	81 Machinery	

Type of Patient by Age Report

From January 1, 2001 to December 31, 2001

NOTE: Read percentages down

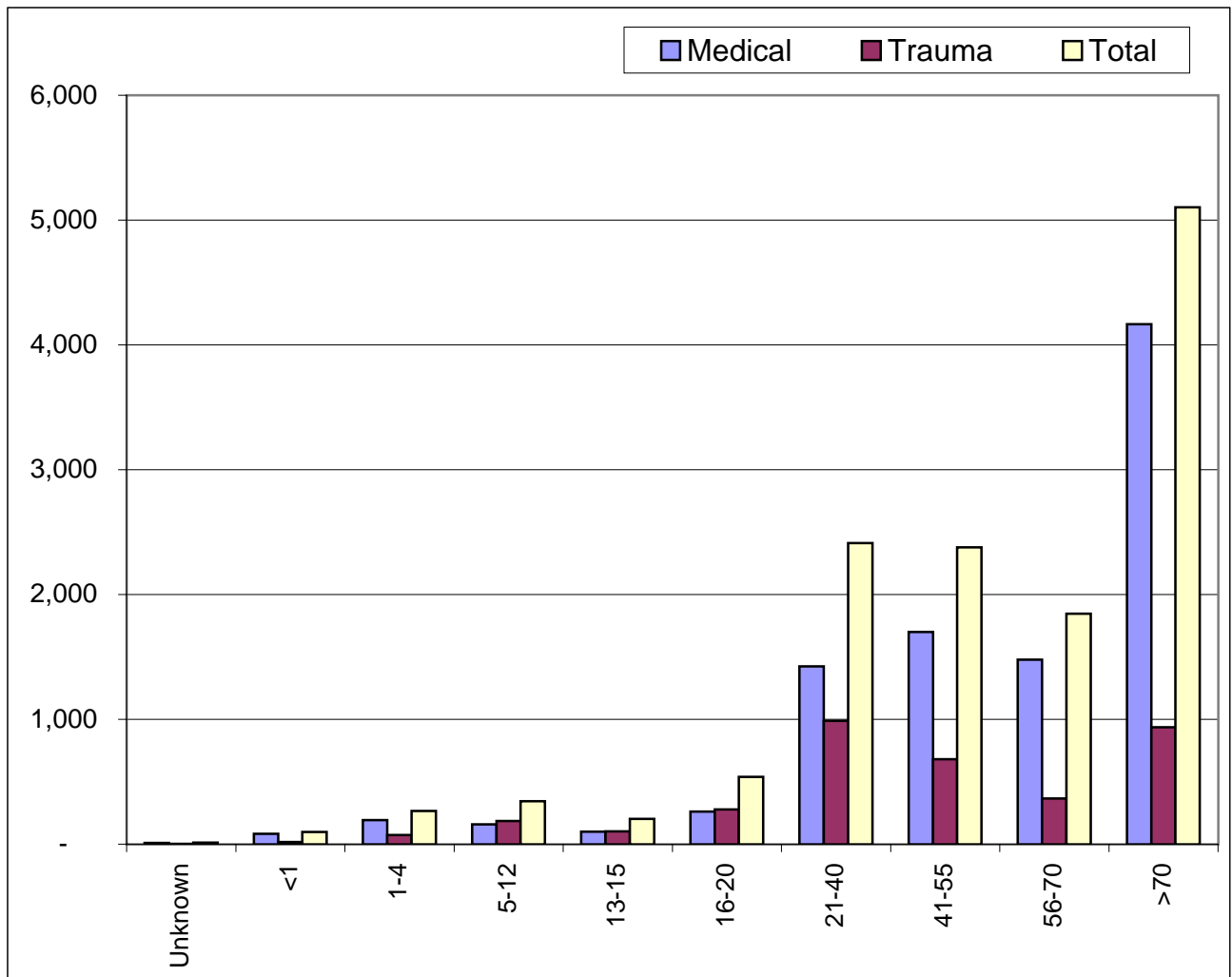
Type of Patient	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Abdominal pain	0	0	3	5	2	18	118	113	78	188	525
			1.13%	1.45%	0.99%	3.34%	4.89%	4.75%	4.23%	3.68%	3.98%
Airway obstruction	0	10	11	2	4	2	3	6	7	23	68
		10.20%	4.14%	0.58%	1.98%	0.37%	0.12%	0.25%	0.38%	0.45%	0.52%
Allergic reaction	0	3	12	6	1	0	41	37	20	11	131
		3.06%	4.51%	1.74%	0.50%		1.70%	1.56%	1.08%	0.22%	0.99%
Altered level of consciousness	0	8	6	4	10	24	143	148	118	431	892
		8.16%	2.26%	1.16%	4.95%	4.45%	5.93%	6.22%	6.39%	8.45%	6.76%
Cardiac Arrest	1	0	1	2	0	4	14	51	71	168	312
	7.69%		0.38%	0.58%		0.74%	0.58%	2.14%	3.85%	3.29%	2.36%
Cardiac dysrhythmia	0	1	0	0	0	1	12	19	26	85	144
		1.02%				0.19%	0.50%	0.80%	1.41%	1.67%	1.09%
Chest discomfort, cardiac	0	0	0	0	1	1	45	170	186	462	865
					0.50%	0.19%	1.87%	7.15%	10.08%	9.05%	6.55%
Chest discomfort, non-cardiac	0	0	1	3	1	7	44	67	27	70	220
			0.38%	0.87%	0.50%	1.30%	1.82%	2.82%	1.46%	1.37%	1.67%
CVA/Stroke/TIA	0	0	0	0	0	0	5	24	102	266	397
							0.21%	1.01%	5.53%	5.21%	3.01%
Diabetes complication	0	0	1	1	1	1	45	45	54	49	197
			0.38%	0.29%	0.50%	0.19%	1.87%	1.89%	2.93%	0.96%	1.49%
Drug/alcohol intoxication	1	0	1	0	11	20	69	62	19	8	191
	7.69%		0.38%		5.45%	3.71%	2.86%	2.61%	1.03%	0.16%	1.45%
Heat illness	0	0	1	1	0	1	4	4	3	7	21
			0.38%	0.29%		0.19%	0.17%	0.17%	0.16%	0.14%	0.16%
Hypertension	0	0	0	0	0	0	1	7	11	12	31
							0.04%	0.29%	0.60%	0.24%	0.23%
Hypotension/non-traumatic shock	0	0	0	0	0	1	9	24	33	60	127
						0.19%	0.37%	1.01%	1.79%	1.18%	0.96%

Type of Patient	Patient Age										Total
	Unknown	< 1	1-4	5-12	13-15	16-20	21-40	41-55	56-70	> 70	
Hypothermia/frostbite	0	0	0	0	0	0	4	5	2	1	12
							0.17%	0.21%	0.11%	0.02%	0.09%
Obstetric	0	3	0	0	0	7	47	2	0	2	61
		3.06%				1.30%	1.95%	0.08%		0.04%	0.46%
Other Illness	4	33	71	60	28	70	405	459	322	1165	2617
	30.77%	33.67%	26.69%	17.44%	13.86%	12.99%	16.79%	19.29%	17.44%	22.83%	19.82%
Pain	0	3	8	27	13	22	108	125	85	237	628
		3.06%	3.01%	7.85%	6.44%	4.08%	4.48%	5.25%	4.60%	4.64%	4.76%
Poisoning/OD	0	0	5	2	3	24	41	31	11	11	128
			1.88%	0.58%	1.49%	4.45%	1.70%	1.30%	0.60%	0.22%	0.97%
Psychiatric	0	0	0	2	0	5	46	36	13	17	119
				0.58%		0.93%	1.91%	1.51%	0.70%	0.33%	0.90%
Respiratory distress	0	17	26	21	6	16	38	94	139	520	877
		17.35%	9.77%	6.10%	2.97%	2.97%	1.58%	3.95%	7.53%	10.19%	6.64%
Seizure	2	5	48	20	8	27	129	108	32	33	412
	15.38%	5.10%	18.05%	5.81%	3.96%	5.01%	5.35%	4.54%	1.73%	0.65%	3.12%
Syncope/near-Syncope	0	0	1	9	15	25	106	99	156	475	886
			0.38%	2.62%	7.43%	4.64%	4.39%	4.16%	8.45%	9.31%	6.71%
Trauma/traumatic shock	5	15	70	178	98	261	932	639	329	793	3320
	38.46%	15.31%	26.32%	51.74%	48.51%	48.42%	38.64%	26.86%	17.82%	15.54%	25.15%
Unconscious, cause unknown	0	0	0	1	0	2	3	4	2	9	21
				0.29%		0.37%	0.12%	0.17%	0.11%	0.18%	0.16%
Grand Total:	13	98	266	344	202	539	2412	2379	1846	5103	13202
Read Grand Total percentages across:	0.10%	0.74%	2.01%	2.61%	1.53%	4.08%	18.27%	18.02%	13.98%	38.65%	

Medical vs Trauma by Age Group

From January 1, 2001 to December 31, 2001

Age Group	Medical	Trauma	Total
Unknown	10	3	13
<1	82	16	98
1-4	192	74	266
5-12	159	185	344
13-15	100	102	202
16-20	262	277	539
21-40	1,424	988	2,412
41-55	1,699	680	2,379
56-70	1,479	367	1,846
>70	4,166	937	5,103
Total	9573	3629	13202
Percent	68%	32%	



Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
Corte Madera Fire Dept		
	42	Chest Pain
	10	Chest Pain, Unlikely to be Cardiac
	3	Cardiopulmonary Arrest - VF/VT
	6	Cardiopulmonary Arrest - PEA
	5	Cardiopulmonary Arrest - Asystole
	1	Dysrhythmias - Bradycardia
	2	Dysrhythmias - Ventricular Ectopy
	1	Dysrhythmias - Sust. V.T., pulse present
	9	Dysrhythmias - SVT
	1	Heat Illness/Hyperthermia
	1	Heat Illness - Mild
	6	Poisons/Drugs
	4	Allergic Reactions - Mod/Severe, Anaphylaxis
	4	Allergic Reaction - Mild
	1	Pediatric Allergic Reaction
	4	Gastrointestinal Bleeding
	19	Abdominal Pain
	3	Non-Traumatic Shock
	69	Syncope/Near Syncope
	77	ALOC/Coma/CVA
	1	Pediatric Altered Level of Consciousness
	14	Seizures
	2	Pediatric Seizure
	1	Imminent Delivery (normal/with complications)
	2	Vaginal Hemorrhage with/without shock
	3	Asthma - Mild/Moderate
	4	Chronic Obstructive Pulmonary Disease
	9	Acute Pulmonary Edema
	15	Acute Respiratory Distress - Other
	57	Traumatic Injury
	12	Adult Pain Management
	388	Total for Provider

Marin County Fire Dept

	3	Pediatric Cardiac Arrest
	41	Chest Pain
	17	Chest Pain, Unlikely to be Cardiac
	2	Cardiopulmonary Arrest - VF/VT
	1	Cardiopulmonary Arrest - PEA

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
Marin County Fire Dept		
	11	Cardiopulmonary Arrest - Asystole
	1	Dysrhythmias - Bradycardia
	4	Dysrhythmias - Ventricular Ectopy
	9	Dysrhythmias - SVT
	1	Pediatric Tachycardia
	5	Burns
	2	Drowning/Near Drowning
	23	Poisons/Drugs
	7	Allergic Reactions - Mod/Severe, Anaphylaxis
	12	Allergic Reaction - Mild
	1	Pediatric Allergic Reaction
	4	Gastrointestinal Bleeding
	29	Abdominal Pain
	3	Non-Traumatic Shock
	62	Syncope/Near Syncope
	68	ALOC/Coma/CVA
	1	Pediatric Altered Level of Consciousness
	14	Seizures
	1	Vaginal Hemorrhage with/without shock
	11	Asthma - Mild/Moderate
	1	Asthma - Severe
	4	Airway Obstruction
	1	Croup/Epiglottitis
	3	Chronic Obstructive Pulmonary Disease
	3	Acute Pulmonary Edema
	17	Acute Respiratory Distress - Other
	3	Pediatric Respiratory Distress
	2	Toxic Gas Inhalation
	160	Traumatic Injury
	4	Pediatric Trauma
	31	Adult Pain Management
	562	Total for Provider

Novato Fire Protection District

174	Chest Pain
51	Chest Pain, Unlikely to be Cardiac
12	Cardiopulmonary Arrest - VF/VT
6	Cardiopulmonary Arrest - PEA
40	Cardiopulmonary Arrest - Asystole

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
Novato Fire Protection District		
	9	Dysrhythmias - Bradycardia
	3	Dysrhythmias - Ventricular Ectopy
	24	Dysrhythmias - SVT
	6	Heat Illness - Mild
	27	Poisons/Drugs
	7	Allergic Reactions - Mod/Severe, Anaphylaxis
	8	Allergic Reaction - Mild
	28	Gastrointestinal Bleeding
	100	Abdominal Pain
	25	Non-Traumatic Shock
	210	Syncope/Near Syncope
	342	ALOC/Coma/CVA
	70	Seizures
	10	Imminent Delivery (normal/with complications)
	3	Vaginal Hemorrhage with/without shock
	21	Asthma - Mild/Moderate
	3	Asthma - Severe
	4	Airway Obstruction
	1	Croup/Epiglottitis
	31	Chronic Obstructive Pulmonary Disease
	31	Acute Pulmonary Edema
	115	Acute Respiratory Distress - Other
	3	Pediatric Respiratory Distress
	196	Traumatic Injury
	2	Pediatric Trauma
	49	Adult Pain Management
	<hr/>	
	1611	Total for Provider
<hr/>		
Other		
	1	Syncope/Near Syncope
	<hr/>	
	1	Total for Provider
<hr/>		
RELS-Marín		
	17	Chest Pain
	6	Chest Pain, Unlikely to be Cardiac
	1	Cardiopulmonary Arrest - VF/VT
	1	Cardiopulmonary Arrest - PEA
	2	Cardiopulmonary Arrest - Asystole
	1	Dysrhythmias - Bradycardia

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
RELS-Marine		
	1	Dysrhythmias - Ventricular Ectopy
	2	Dysrhythmias - SVT
	5	Poisons/Drugs
	2	Allergic Reaction - Mild
	6	Abdominal Pain
	9	Syncope/Near Syncope
	20	ALOC/Coma/CVA
	1	Seizures
	2	Asthma - Severe
	2	Chronic Obstructive Pulmonary Disease
	4	Acute Pulmonary Edema
	7	Acute Respiratory Distress - Other
	1	Respiratory Arrest
	17	Traumatic Injury
	10	Adult Pain Management
	1	N/A
	118	Total for Provider

Ross Valley Paramedic Authority

120	Chest Pain
11	Chest Pain, Unlikely to be Cardiac
3	Cardiopulmonary Arrest - VF/VT
7	Cardiopulmonary Arrest - PEA
15	Cardiopulmonary Arrest - Asystole
5	Dysrhythmias - Bradycardia
3	Dysrhythmias - Ventricular Ectopy
4	Dysrhythmias - Sust. V.T., pulse present
18	Dysrhythmias - SVT
1	Hypothermia/Frostbite
2	Heat Illness/Hyperthermia
3	Heat Illness - Mild
16	Poisons/Drugs
5	Allergic Reactions - Mod/Severe, Anaphylaxis
6	Allergic Reaction - Mild
17	Gastrointestinal Bleeding
49	Abdominal Pain
8	Non-Traumatic Shock
196	Syncope/Near Syncope
206	ALOC/Coma/CVA

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
Ross Valley Paramedic Authority		
	1	Pediatric Altered Level of Consciousness
	22	Seizures
	4	Pediatric Seizure
	2	Imminent Delivery (normal/with complications)
	5	Vaginal Hemorrhage with/without shock
	15	Asthma - Mild/Moderate
	3	Asthma - Severe
	3	Airway Obstruction
	1	Croup/Epiglottitis
	22	Chronic Obstructive Pulmonary Disease
	24	Acute Pulmonary Edema
	41	Acute Respiratory Distress - Other
	1	Pediatric Respiratory Distress
	1	Pneumothorax
	1	Pediatric Toxic Exposures
	2	Respiratory Arrest
	114	Traumatic Injury
	8	Pediatric Trauma
	21	Adult Pain Management
	986	Total for Provider

San Rafael Fire Dept

286	Chest Pain
47	Chest Pain, Unlikely to be Cardiac
16	Cardiopulmonary Arrest - VF/VT
12	Cardiopulmonary Arrest - PEA
58	Cardiopulmonary Arrest - Asystole
10	Dysrhythmias - Bradycardia
11	Dysrhythmias - Ventricular Ectopy
3	Dysrhythmias - Sust. V.T., pulse present
42	Dysrhythmias - SVT
1	Pediatric Tachycardia
8	Burns
2	Pediatric Burns
1	Envenomation
3	Heat Illness - Mild
2	Drowning/Near Drowning
58	Poisons/Drugs
8	Allergic Reactions - Mod/Severe, Anaphylaxis

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
San Rafael Fire Dept		
	8	Allergic Reaction - Mild
	59	Gastrointestinal Bleeding
	133	Abdominal Pain
	73	Non-Traumatic Shock
	284	Syncope/Near Syncope
	506	ALOC/Coma/CVA
	4	Pediatric Altered Level of Consciousness
	107	Seizures
	7	Pediatric Seizure
	6	Imminent Delivery (normal/with complications)
	8	Vaginal Hemorrhage with/without shock
	2	Severe Pre-Eclampsia/Eclampsia
	14	Asthma - Mild/Moderate
	1	Asthma - Severe
	10	Airway Obstruction
	36	Chronic Obstructive Pulmonary Disease
	59	Acute Pulmonary Edema
	161	Acute Respiratory Distress - Other
	3	Pediatric Respiratory Distress
	5	Toxic Gas Inhalation
	6	Respiratory Arrest
	370	Traumatic Injury
	2	Pediatric Trauma
	29	Adult Pain Management
	<hr/>	
	2461	Total for Provider

SMEMPS

170	Chest Pain
43	Chest Pain, Unlikely to be Cardiac
13	Cardiopulmonary Arrest - VF/VT
8	Cardiopulmonary Arrest - PEA
44	Cardiopulmonary Arrest - Asystole
8	Dysrhythmias - Bradycardia
4	Dysrhythmias - Ventricular Ectopy
1	Dysrhythmias - Sust. V.T., pulse present
17	Dysrhythmias - SVT
5	Burns
5	Hypothermia/Frostbite
4	Heat Illness/Hyperthermia

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
SMEMPS		
	3	Heat Illness - Mild
	1	Drowning/Near Drowning
	77	Poisons/Drugs
	6	Allergic Reactions - Mod/Severe, Anaphylaxis
	24	Allergic Reaction - Mild
	4	Pediatric Allergic Reaction
	25	Gastrointestinal Bleeding
	129	Abdominal Pain
	29	Non-Traumatic Shock
	201	Syncope/Near Syncope
	367	ALOC/Coma/CVA
	5	Pediatric Altered Level of Consciousness
	76	Seizures
	10	Pediatric Seizure
	10	Imminent Delivery (normal/with complications)
	8	Vaginal Hemorrhage with/without shock
	27	Asthma - Mild/Moderate
	1	Asthma - Severe
	7	Airway Obstruction
	17	Chronic Obstructive Pulmonary Disease
	30	Acute Pulmonary Edema
	89	Acute Respiratory Distress - Other
	13	Pediatric Respiratory Distress
	2	Toxic Gas Inhalation
	3	Pediatric Toxic Exposures
	3	Respiratory Arrest
	436	Traumatic Injury
	13	Pediatric Trauma
	73	Adult Pain Management
	<hr/>	
	2011	Total for Provider
St Joseph		
	1	Poisons/Drugs
	1	Acute Respiratory Distress - Other
	2	Traumatic Injury
	<hr/>	
	4	Total for Provider
Stinson Beach Fire Dept		
	1	Chest Pain

Protocol by Provider Agency

From January 1, 2001 to December 31, 2001

Provider Agency	Count	Protocol
Stinson Beach Fire Dept		
	1	Drowning/Near Drowning
	1	Allergic Reaction - Mild
	2	Abdominal Pain
	1	ALOC/Coma/CVA
	1	Seizures
	10	Traumatic Injury
	1	Adult Pain Management
	<hr/>	
	18	Total for Provider
<hr/>		
	8160	Grand Total

MARIN COUNTY ANNUAL HELICOPTER REPORT

Year 2001

In 2001, helicopters were dispatched a total of 314 times, resulting in the air transport of 82 patients.

- Dispatches increased from 204 in 2000 to 314 in 2001.
- Air transports increased from 65 in 2000 to 82 in 2001.
- Of 314 dispatches, air transport occurred 82 times (26%). This is a decrease from 32% in 2000, and 43% in 1999:

YEAR	DISPATCHES	TRANSPORTS	%AIRTRANSPORTS
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%

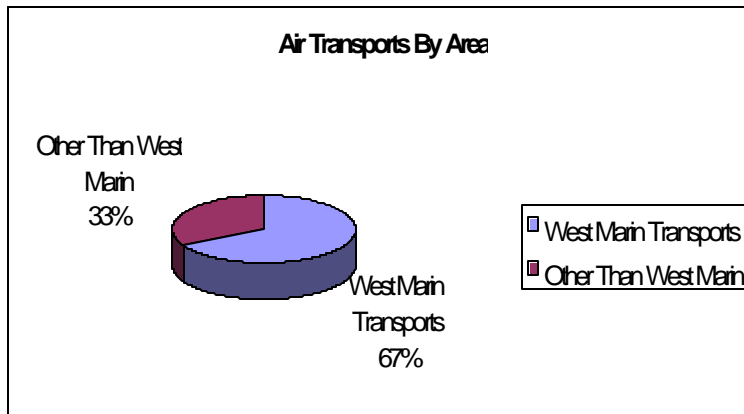
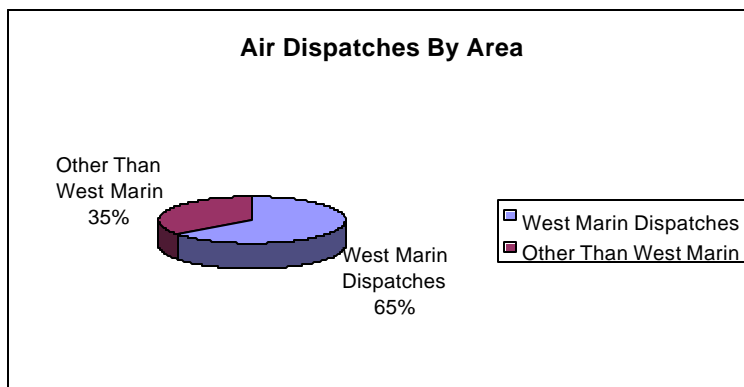
- Of 82 air transports, 34 were medical patients (42%) and 48 were trauma patients (58%). This distribution has been seen historically but differs from 2000 in that a higher percentage of patients in 2000 (71%) were trauma patients. Of note, Marin County's Trauma System was implemented in 2001, and the decrease in trauma patients air lifted to out of county facilities may be indicative of that implementation.

Medical Versus Trauma

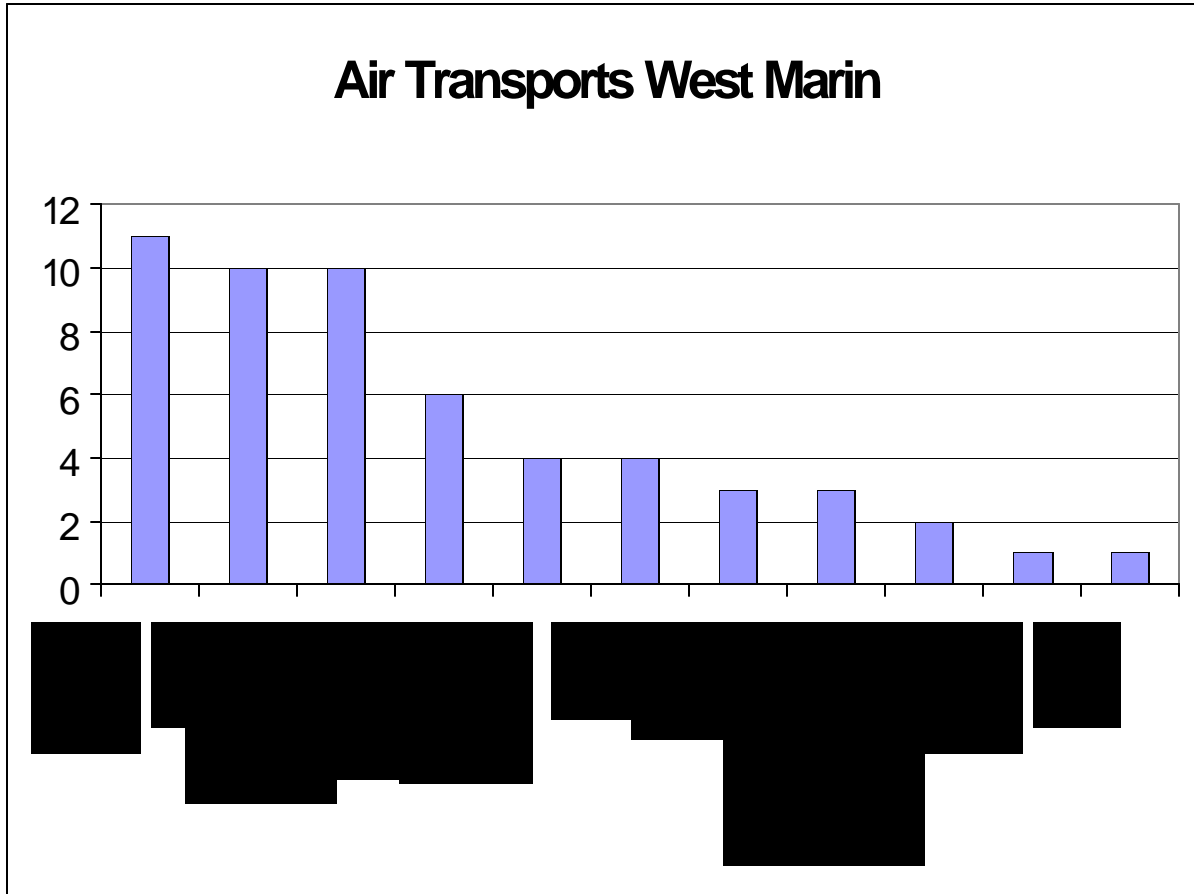
Year	Medical	Trauma	% Trauma
2001	34	48	59%
2000	12	52	71%
1999	20	48	71%
1998	23	24	51%
1997	18	25	58%
1996	15	33	69%

DISPATCH AND TRANSPORT LOCATIONS

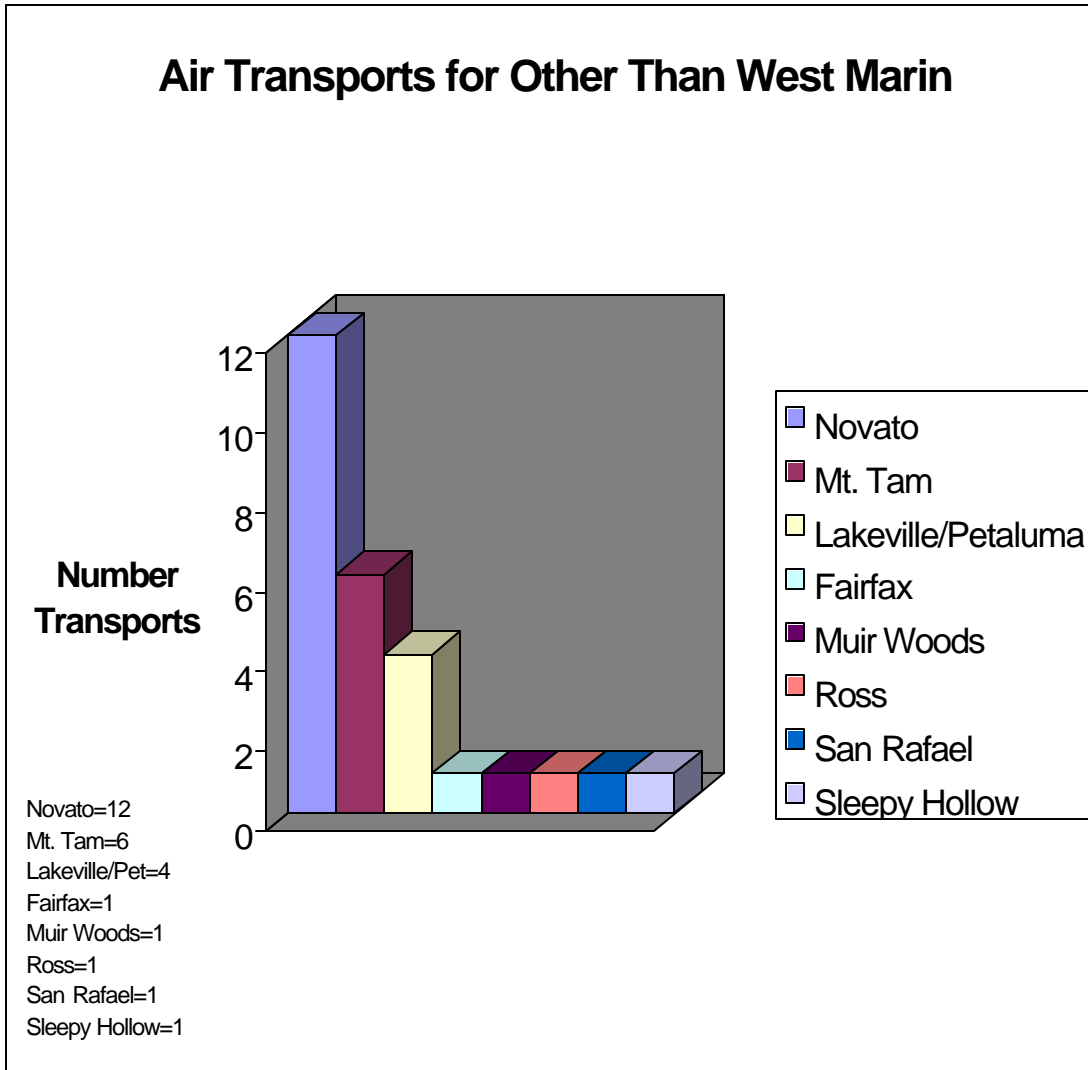
- Both dispatches and air transports occur primarily in the West Marin Area, with 203 dispatches (65% of the total) and 55 air transports (67% of the total) originating in that county area. West Marin is defined as Bolinas, Dillon Beach, Dogtown, Inverness, Marshall, Muir Beach, Nicasio, Olema, Point Reyes, Point Reyes Seashore, Stinson Beach, Tomales, and Lagunitas.



AIR TRANSPORTS: WEST MARIN



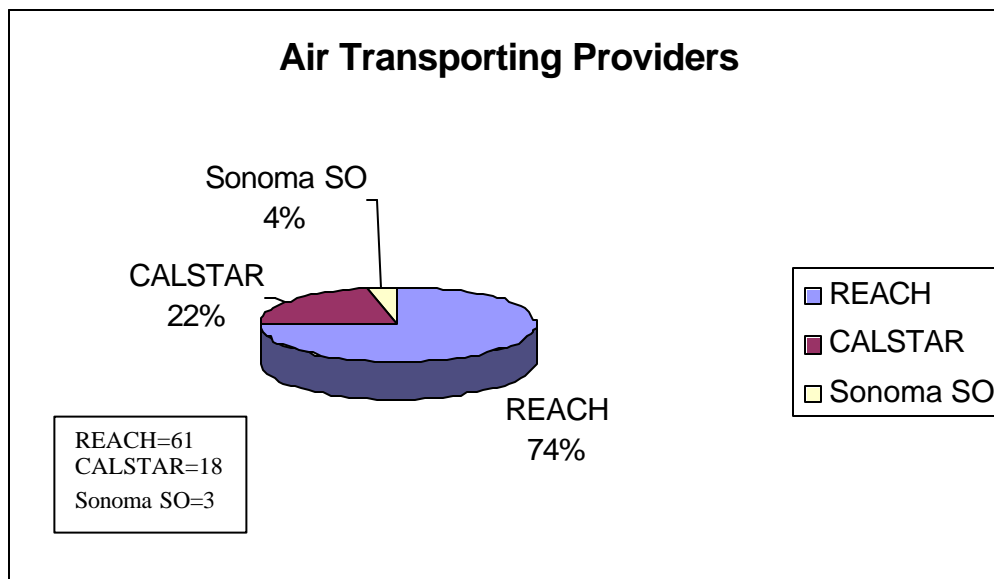
AIR TRANSPORTS: LOCATIONS OTHER THAN WEST MARIN



AIR TRANSPORT RECEIVING HOSPITALS

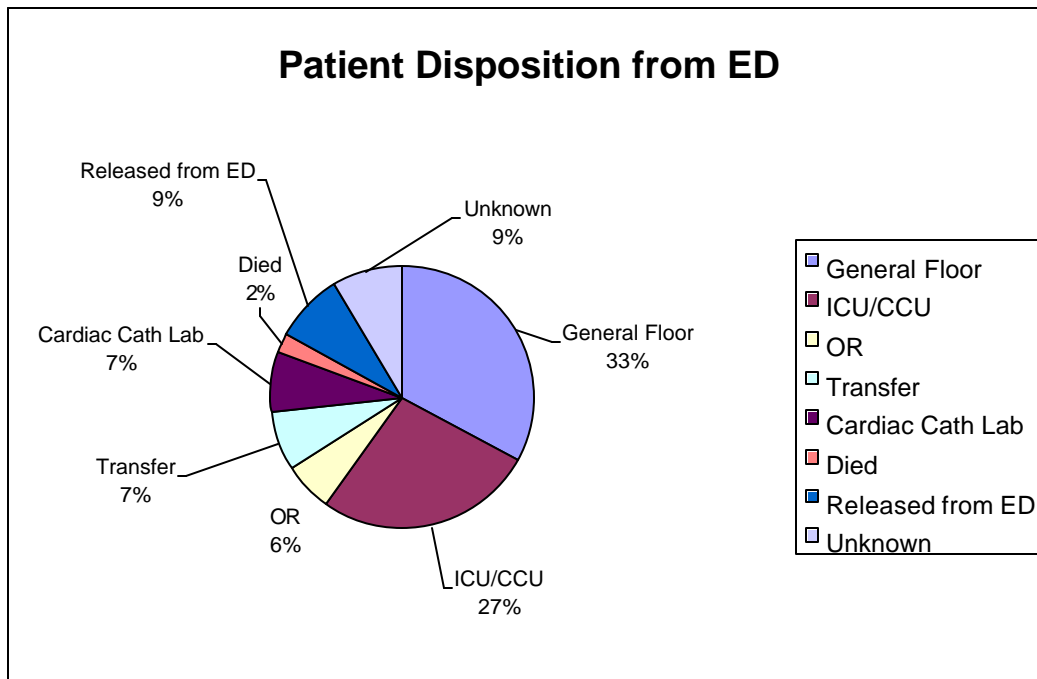
Receiving Hospital	Number Air Transports
Santa Rosa Memorial Hospital	35 (43%)
John Muir Medical Center	22
Doctor's Hospital San Pablo	11
Petaluma Valley Hospital	8
Children's Hospital Oakland	5
Palm Drive Hospital	1

TRANSPORTING PROVIDERS



PATIENT DISPOSITIONS FROM THE ED

There were eighty two (82) air transported patients. The majority of patients were admitted from the Emergency Department to a General Floor Unit. Twenty seven (27) percent of all air transported patients were admitted directly to an Intensive Care or Cardiac Care Unit from the Emergency Department. The following summarizes patient disposition from the Emergency Department:



Committee Activities: The Helicopter Utilization Review Committee continues to meet quarterly. A new subcommittee of the EMCC was formed this year to review the trauma system objective regarding helicopter landing pad(s) or designated landing

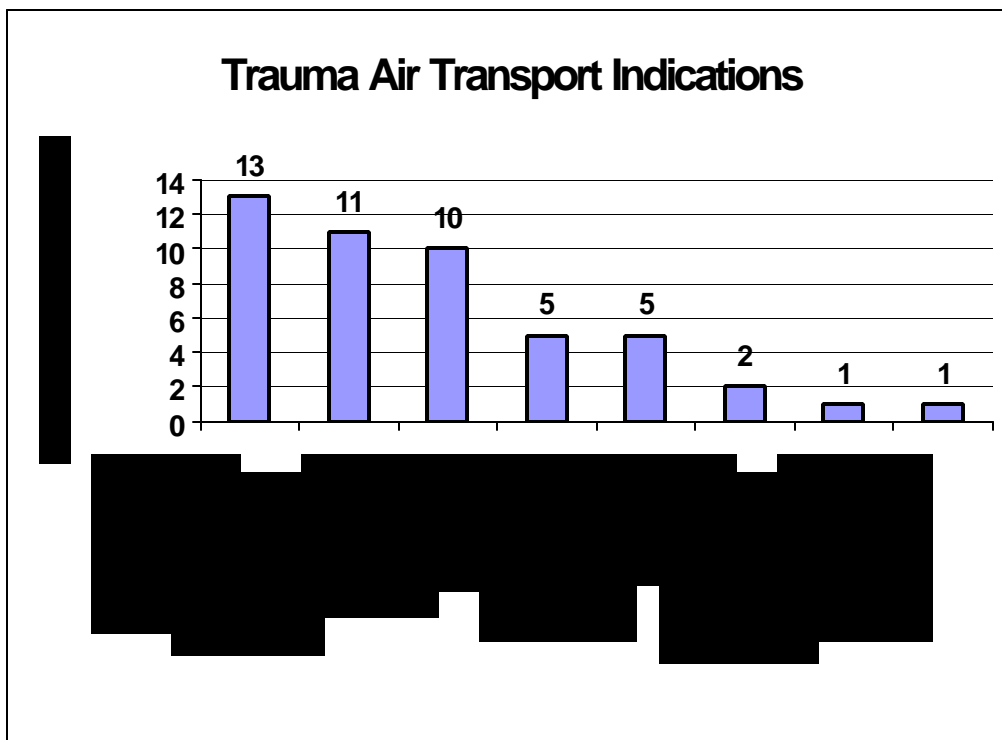
HELICOPTER TRANSPORTS AND TRAUMA

In 2001 there were 48 trauma patients who were air transported to an out of county receiving facility. Marin County Trauma Triage Criteria indicate air transport may be appropriate when:

- The patient is a multiple trauma patient
- The patient meets Anatomic or Physiologic criteria AND the closest receiving facility based on time is a Level II Trauma Center instead of the Level III Trauma Center
- The patient meets Level III or EDAT criteria AND the estimated ground transport time to definitive care is sixty minutes from the time of injury.

Almost 70% of all air transports (medical and trauma) are from the West Marin area, where ground transport time to an in-county Marin hospital may exceed one hour. Additionally, several areas within the county represent remote access areas, such as the Mount Tamalpais area, or the Watershed areas, where patients may be injured on a hiking or bike trail, making ground unit access or transport timely and difficult. The Helicopter Utilization Committee reviews all air transports for appropriateness.

Following is a summary of the indication for transport of trauma patients from Marin County:



HELICOPTER DISPATCH AND TRANSPORT REVIEW: 1997—2001
MARIN COUNTY EMS PROGRAM

*West Marin locations include: Bolinas, Dillon Beach, Dogtown, Inverness, Marshall, Muir Beach, Nicasio, Olema, Point Reyes, Point Reyes Seashore, Stinson Beach, Tomales, and Lagunitas.

DATA ELEMENT	2001	2000	1999	1998	1997
Helicopter Dispatches	314	203	158	132	120
Helicopter Transports	82	64	68	47	41
Percent (%) of dispatches resulting in air transports	26%	32%	43%	36%	36%
LOCATION					
WEST MARIN					
Percent (%) dispatched to West Marin*	65% (204 of 314)	67% (136 of 203)	72% (114 of 158)	64% (85 of 132)	76% (91 of 120)
Percent (%) air transported from West Marin	67% (55 of 82)	63% (40 of 64)	69% (47 of 68)	70% (33 of 47)	74% (30 of 41)
OTHER THAN WEST MARIN					
City of Novato: dispatches	15% (46 of 314)	12% (25 of 203)	8% (12 of 158)	13% (17 of 132)	3% (4 of 120)
City of Novato: transports	15% (12 of 82)	16% (10 of 64)	8% (7 of 68)	4% (2 of 47)	5% (2 of 41)
Mt. Tamalpais: dispatches	7%	4%	2%	2%^	3%
Mt. Tamalpais: transports	7%	0	3%	2%	0
MEDICAL VERSUS TRAUMA					
Medical Patients: Dispatch	128 (41%)	71 (35%)			
Medical Patients: Transports	34 (41%)	12 (19%)	20 (29%)	23 (49%)	18 (44%)
Trauma Patients: Dispatch	159 (51%)	106 (52%)			
Trauma Patients: Transports	48 (59%)	52 (81%)	48 (71%)	24 (51%)	25 (61%)
RECEIVING HOSPITALS					
Santa Rosa Memorial Hospital	35	30	19	17	19
John Muir Medical Center	22	16	24	12	11
Doctor's Hospital San Pablo	11	1	11	1	1
Oakland Children's Hospital	5	9	5	3	5

PREHOSPITAL TRAUMA ANNUAL REPORT 2001

I. Trauma Patient Volume

***Trauma Triage Criteria:** criteria which determines triage to a trauma center.

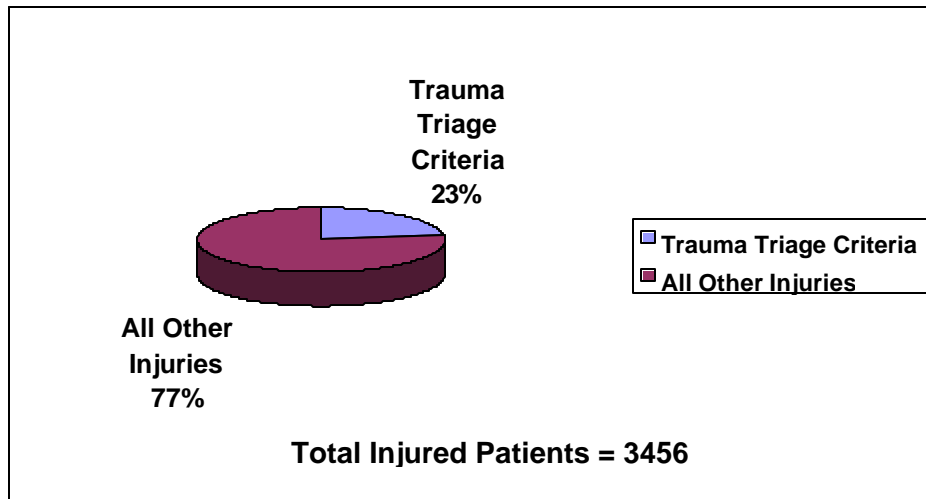
****All Other Injuries:** injured patients who do not meet trauma triage criteria.

*****ALL injured patients:** total patients who meet trauma triage criteria + total patients who meet all other injuries criteria.

Total Met TRAUMA TRIAGE CRITERIA	793
Total ALL OTHER INJURIES	2663
TOTAL ALL INJURED PATIENTS	3456
Percent (%) Met Trauma Triage Criteria	23%

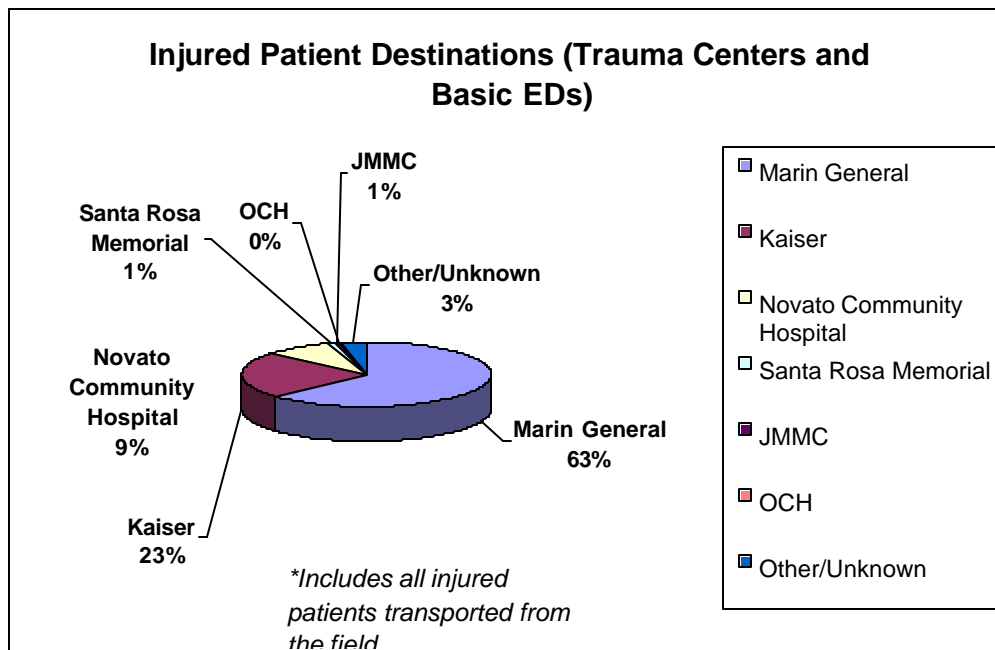
Summary

In 2001, 3,456 patients were injured who activated the 911 system in Marin County. Of those patients, 793, or 23%, met criteria to be transported to a Trauma Center. The majority of those patients (87%) were in fact transported via EMS. Of the 67% of injured patients who did NOT meet trauma triage criteria, 28% refused treatment or transport or were released on scene; 72% were transported and received basic Emergency Department services.

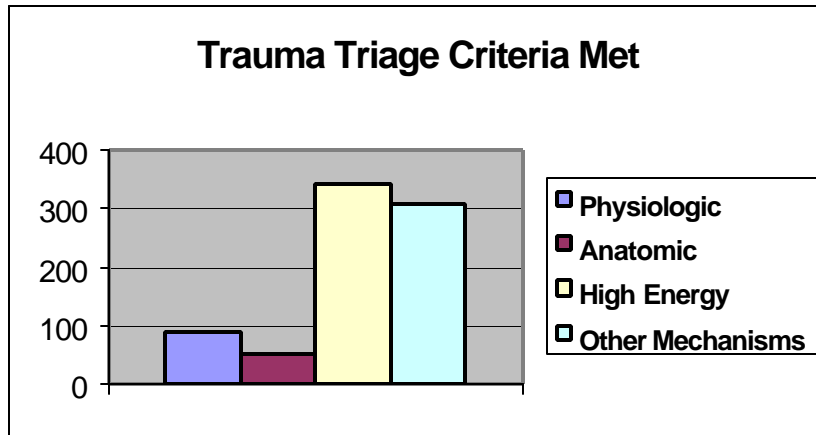


II. Patient Disposition: Transported Patients

DISPOSITION	Met Trauma Triage Criteria	Met All Other Injuries Criteria
Marin General Hospital	572 (78%)	1106 (57%)
Kaiser San Rafael	92 (12%)	518 (27%)
Novato Community	13 (2%)	227 (12%)
John Muir Medical Center	15	0
Santa Rosa Memorial	20	4
Oakland Children's Hospital	4	0
Other OR Unknown	21	70
TOTAL TRANSPORTED	737 (93%)	1925 (72%)



III. Trauma Triage Criteria Met



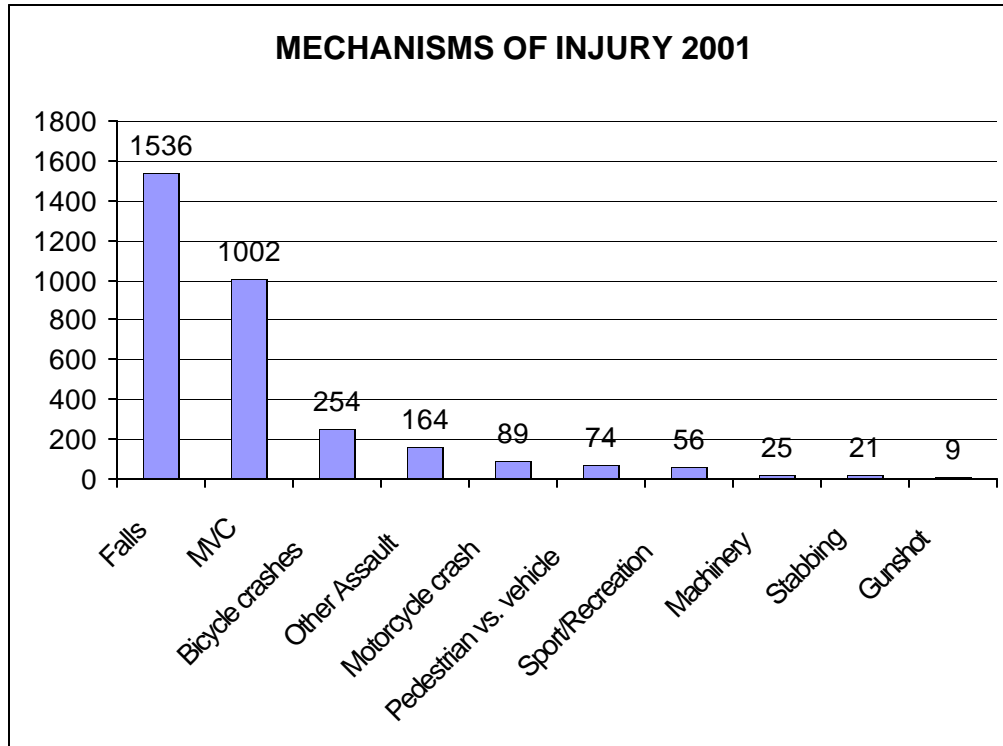
TOTAL MET CRITERIA	793
Physiologic	91 (11%)
Anatomic	52 (6%)
High Energy Mechanism	341 (43%)
Other Mechanism of Injury	309 (40%)

IV. Patient Disposition: Non-Transported Patients

	Met Trauma Triage Criteria	All Other Injuries
Refused Treatment	26	255
Released on Scene	20	448
Dead on Scene	51	1

V. Mechanisms of Injury

Falls and Motor Vehicle Crashes were the two most frequent mechanisms of injury resulting in an EMS 911 call:



VI. Trauma Calls by ALS Provider

There are six (6) ALS Provider Agencies in Marin County providing ALS care for trauma patients. There were 1327 patients for which the Traumatic Injury Protocol was utilized in the Prehospital setting in five provider zones:

Provider	#Traumatic Injury Protocols	Percent of Total
Southern Marin	428	33%
San Rafael	370	28%
Novato Fire	193	15%
Marin County Fire	164	12%
RVPA	115	8%
CMFD	57	4%

