



RIVERSIDE COUNTY EMS AGENCY
MEDICATIONS & PROCEDURES REPORT
2022

JUNE 28TH, 2023

PREPARED BY RIVERSIDE COUNTY EMS AGENCY, EMERGENCY MANAGEMENT DEPARTMENT

MEDICATIONS & PROCEDURES REPORT

Riverside County Emergency Medical Services (EMS) has a dual response system in which both non-transport units (fire departments) and transport units (ambulance agencies and some fire departments) are dispatched to every 9-1-1 medical emergency. While all paramedics in Riverside County, regardless of agency type, are governed by the same treatment protocols and policies, *Medications* and *Procedures* administered to EMS patients with the same presenting symptoms, can vary. Factors influencing these differences include patient comorbidities, interventions prior to EMS arrival, patient acuity and compliance with treatment, as well as logistical factors such as which agency arrived ‘first on scene’. Secondary factors such as field crew dynamics, experience, and differences in documentation practices can also influence how medications and procedures are utilized and documented.

REMSA Policy [3301](#), also known as ‘Drugs and Equipment list’, describes the available medications and procedures available to Riverside County EMS providers for therapeutic intervention in the field. This report summarizes the primary medications and procedures administered by Riverside County EMS providers over the course of one year as documented in the EMS electronic patient care report (ePCR) system.

Methodology

Data

Electronic Patient Care Reports (ePCRs) were extracted from ImageTrend® Elite Report Writer between 1/1/2022 and 12/31/2022. Records for 9-1-1 non-transport and ground transport responses with one or more documented medication or procedure were included in the analysis. Each medication & procedure had to be documented as performed by a Riverside County EMS Agency credentialed provider name & ID number. This resulted in **106,940 medication ePCRs** and **206,020 procedure ePCRs** for a total of **215,216 unique ePCR records**. The *Medications Dataset* where one or more medication/drug was documented, was created from 44 data fields. The *Procedures Dataset* where one or more procedure/equipment was documented, was created from 44 data fields. Data was collected from the REMSA 2021 *Patient Care Continuum Report* dataset for ePCRs where any patient contact was made to determine the number of records where at least one medication or procedure was performed. This resulted in **493,119 ePCRs** and was used to calculate relative percentages of records where no medications or procedures were documented.

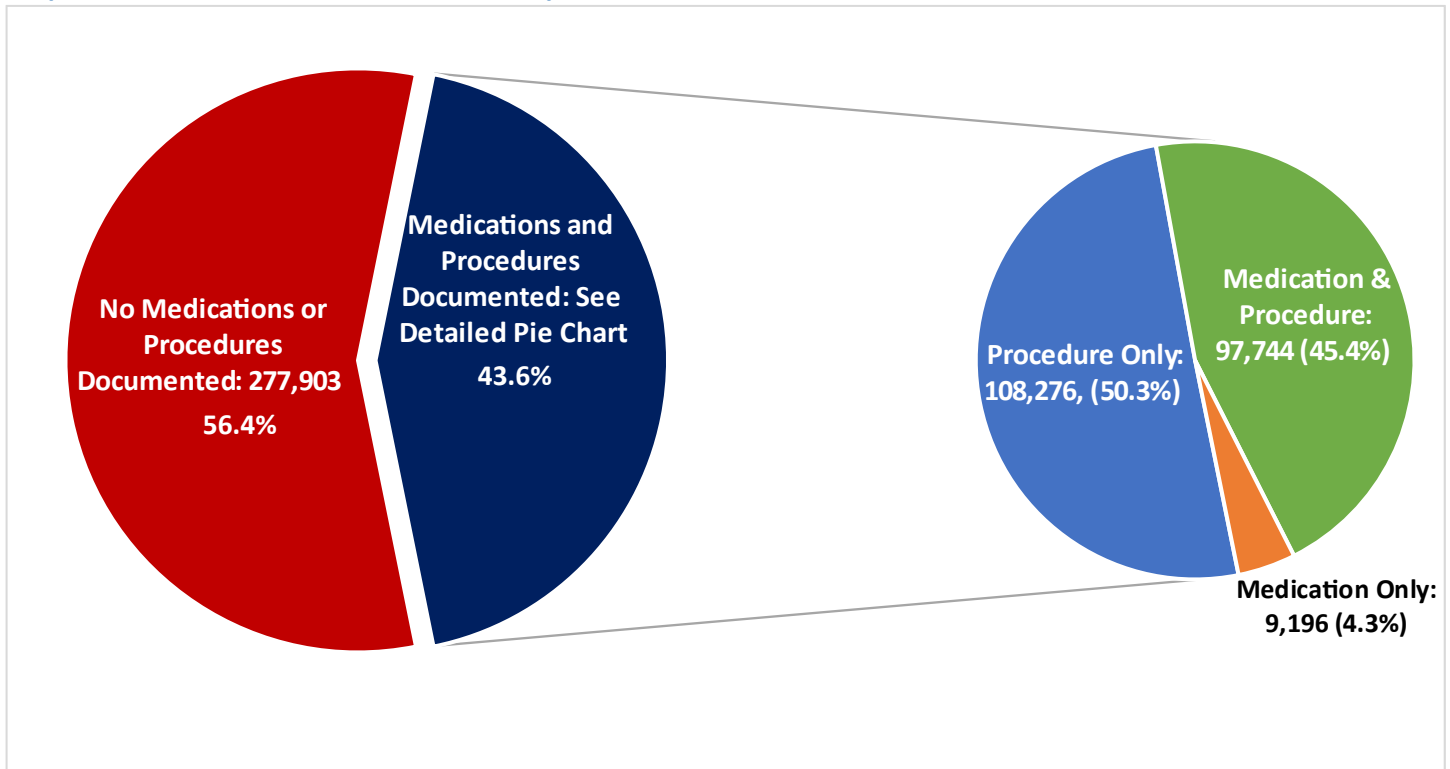
Exclusions

6,986 ePCRs (6.1%) from the Medications Dataset and **3,582 ePCRs (1.7%)** from the Procedures Dataset **were excluded** from the analysis. Exclusions were due to provider name, provider role, or provider ID being blank, or medication or procedure being documented as performed by “Other”. Additional Exclusions were for blank patient dispositions or dispositions indicating no patient contact was made (Canceled Enroute, Canceled Prior to Enroute, Canceled at Scene by Another Unit - No Patient Contact, No Patient Found, Non-Patient Transport, Standby: No Services or Support Provided, Standby: Public Safety, Fire, or EMS Operational Support Provided). No additional exclusions were made when the datasets were combined for analysis.

Systemwide Findings on Medications & Procedures

Out of **493,119 ePCRs** from 9-1-1 responses documenting patient contact, **215,216 (43.6%) ePCRs** documented that a medication and/or procedure was administered. In Graph 1, the pie chart on the left shows the breakdown in ePCRs with a documented patient contact disposition and the difference between when a medication or procedure was documented and when none were documented. The pie chart on the right gives a break down for this subset of patient contacts where a medication, procedure, or both, were documented. This allows for comparison of counts for medications and procedures performed during patient contacts.

Graph 1: Medication and Procedures Pie Graphs



Response Unit Type

Response unit type describes the primary role of the EMS unit which responded to the EMS call (eResponse.07 & eResponse.13). These have been categorized into non-transport units (quick response vehicles such as fire engines, fire trucks, and squads) and transport units (ambulances). This allows for a comparison between the number of interventions performed for non-transport and transport units.

Table 1 and Table 2 below provide a breakdown of medications given, and procedures performed, by response unit type.

Table 1: Medications by Agency and Unit Type

Medications	Medications Given	Medication ePCRs	Total ePCRs	Medication ePCR Percentage	Average Medications Given
Non-Transport	65,534	31,537	257,206	12.3%	2.1
Blythe Volunteer Fire Department	5	5	36	13.9%	1.0
Calimesa Fire Department	71	69	1,120	6.2%	1.0
Canyon Lake Fire Department	574	300	943	31.8%	1.9
Cathedral City Fire Department	834	366	5,754	6.4%	2.3
Corona Fire Department	5,735	2,436	8,438	28.9%	2.4
Hemet Fire Department	1,709	791	12,124	6.5%	2.2
Idyllwild Fire Protection District	14	4	35	11.4%	3.5
March Air Reserve Base Fire Department	1	1	53	1.9%	1.0
Morongo Fire Department	528	265	3,517	7.5%	2.0
Murrieta Fire Department	2,882	1,482	9,089	16.3%	1.9
Palm Springs Fire Department	3,379	1,842	10,067	18.3%	1.8
Pechanga Fire Department	388	197	826	23.8%	2.0
Riverside City Fire Department	11,989	5,798	35,243	16.5%	2.1
Riverside County Fire Department	37,171	17,857	168,908	10.6%	2.1
Soboba Fire Department	254	124	1,053	11.8%	2.0
Transport	138,459	75,404	235,913	32.0%	1.8
AMR - Desert Cities	18,361	10,053	34,068	29.5%	1.8
AMR - Hemet	35,572	17,917	47,197	38.0%	2.0
AMR - Riverside	68,688	39,010	124,630	31.3%	1.8
Cathedral City Fire Department	4,485	2,292	5,832	39.3%	2.0
Idyllwild Fire Protection District	284	129	553	23.3%	2.2
Riverside County Fire Department	11,069	6,003	23,633	25.4%	1.8
Grand Total	203,993	106,940	493,119	21.7%	1.9

Table 2: Procedures by Agency and Unit Type

Procedures	Procedures Performed	Procedure ePCRs	Total ePCRs	Procedure ePCR Percentage	Average Procedures Performed
Non-Transport	122,732	63,346	257,206	24.6%	1.9
Blythe Volunteer Fire Department	0	0	36	0%	0
Calimesa Fire Department	29	24	1,120	2.1%	1.2
Canyon Lake Fire Department	1,686	533	943	56.5%	3.2
Cathedral City Fire Department	1,140	779	5,754	13.5%	1.5
Corona Fire Department	10,207	5,053	8,438	59.9%	2.0
Hemet Fire Department	1,119	698	12,124	5.8%	1.6
Idyllwild Fire Protection District	7	3	35	8.6%	2.3
March Air Reserve Base Fire Department	2	2	53	3.8%	1.0
Morongo Fire Department	1,071	492	3,517	14.0%	2.2
Murrieta Fire Department	8,226	4,578	9,089	50.4%	1.8
Palm Springs Fire Department	5,484	2,820	10,067	28.0%	1.9
Pechanga Fire Department	883	317	826	38.4%	2.8
Riverside City Fire Department	29,518	14,706	35,243	41.7%	2.0
Riverside County Fire Department	62,975	33,159	168,908	19.6%	1.9
Soboba Fire Department	385	182	1,053	17.3%	2.1
Transport	448,409	142,674	235,913	60.5%	3.1
AMR - Desert Cities	66,038	21,714	34,068	63.7%	3.0
AMR - Hemet	113,608	32,585	47,197	69.0%	3.5
AMR - Riverside	243,093	75,899	124,630	60.9%	3.2
Cathedral City Fire Department	5,169	2,915	5,832	50.0%	1.8
Idyllwild Fire Protection District	362	133	553	24.1%	2.7
Riverside County Fire Department	20,139	9,428	23,633	39.9%	2.1
Grand Total	571,141	206,020	493,119	41.8%	2.8

Top Medications & Procedures

Table 3 and Table 4 below provide which medications or procedures are most used in the County’s EMS system by quantifying how often they are documented in ePCRs. To be included in this list, the medication or procedure had to appear in a minimum of 1% of the time in their dataset. 14 out of 25 medication classifications and 15 out of 69 procedure classifications met this threshold for inclusion in the tables below.

A complete alphabetical list of medications and procedures is available in Tables 5 and 6 in the following section.

Table 3: Top Medications

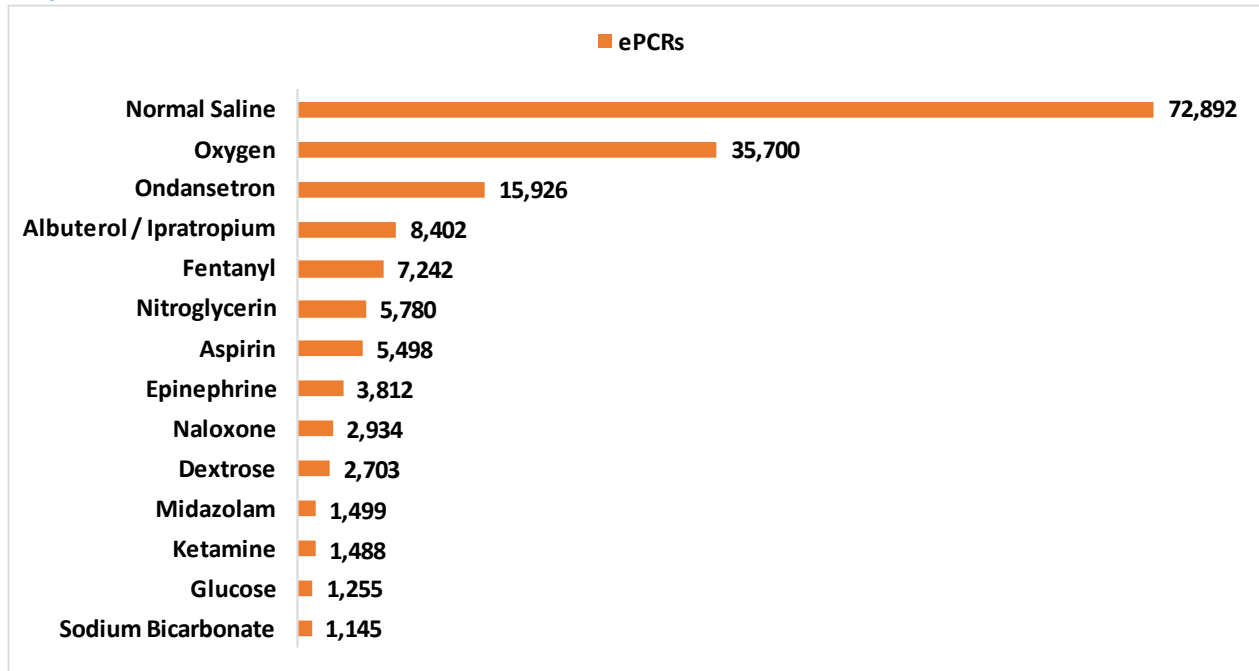
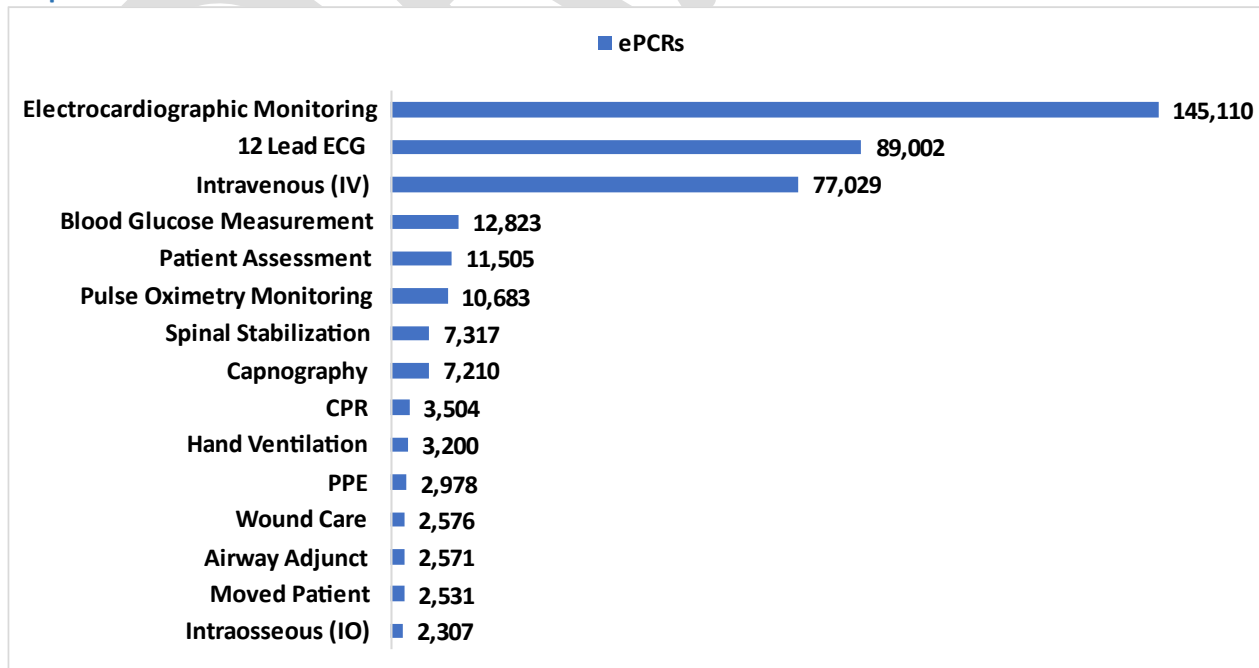


Table 4: Top Procedures



Findings by Medications Administered & Procedures Performed

In 2022, a total of 25 medication classifications were identified as administered in the ePCR system by EMS. A total of 181 unique procedures were identified as performed in the ePCR system by EMS and grouped into 81 categories. An average of *1.9 medications per ePCR with medication listed*, and *2.5 procedures per ePCR with a procedure listed*, occurred in 2022. (These averages exclude ePCRs where no medication or procedure was performed as well as ePCRs with a canceled or no patient contact disposition.)

Table 5 and Table 6 below are in alphabetical order and provide a breakdown of these findings. “Count” refers to the number of times a medication was administered, or a procedure was performed. “ePCRs” refers to the number of patient contact ePCRs where the medication or procedure appears in. “ePCR Percentage” is the relative rate of ePCRs the medication or procedure is documented in and is based on medication ePCRs or Procedure ePCRs. ***The sum of “% of ePCRs” will add up to more than 100% due to multiple medications or procedures being documented in an ePCR***

Table 5: Medications Administered

Medications	Medications Given	Medication ePCRs	Medication ePCR Percentage
Activated Charcoal	350	345	0.3%
Activated Charcoal (272)	350	345	0.3%
Adenosine	483	440	0.4%
Adenosine (Adenocard) (296)	483	440	0.4%
Albuterol / Ipratropium	9,213	8,402	7.9%
Albuterol (Proventil) (435)	5,202	4,421	4.1%
Albuterol (Proventil) Inhaler (90 µg / Metered Dose) (745682)	39	39	0.0%
Albuterol / Ipratropium (Combivent, DuoNeb) (214199)	2,051	2,038	1.9%
Ipratropium (Atrovent) (7213)	1,921	1,913	1.8%
Amiodarone	512	367	0.3%
Amiodarone (Cordarone) (703)	512	367	0.3%
Aspirin	5,506	5,498	5.1%
Aspirin (1191)	5,506	5,498	5.1%
Atropine / Pralidoxime	520	394	0.2%
Atropine (1223)	517	391	0.4%
Atropine / Pralidoxime (DuoDote) Auto-Injector (2.1 mg / 600 mg) (809819)	2	2	0.0%
Atropine / Pralidoxime (Mark-I) Auto-Injector (2 mg / 600 mg) (727414)	1	1	0.0%
Calcium	138	138	0.1%
10 ML Calcium Chloride 10 % Prefilled Syringe (828527)	1	1	0.0%
Calcium Chloride (1901)	126	126	0.1%
Calcium Chloride 10 % 10 ML Prefilled Syringe (828527)	11	11	0.0%
Dextrose	2,748	2,703	2.5%
Dextrose 10 GM per 100 ML Injectable Solution (237648)	25	25	0.0%
Dextrose 10% Half Normal Saline (244098)	4	4	0.0%
Dextrose 10% Normal Saline (244099)	2,247	2,209	2.1%
Dextrose 10% Water (237648)	316	312	0.3%
Dextrose 25% Water (260258)	108	108	0.1%
Dextrose 5% Quarter Normal Saline (630800)	14	14	0.0%
Dextrose 50% Water (237653)	32	32	0.0%
Dextrose 500 MG/ML Injectable Solution (237653)	2	1	0.0%

Diphenhydramine	761	750	0.7%
Diphenhydramine (Benadryl) (3498)	761	750	0.7%
Epinephrine	9,612	3,812	3.6%
Epinephrine (Epipen) Auto-Injector (0.15 mg) (727386)	2	1	0.0%
Epinephrine (Epipen) Auto-Injector (0.3 mg) (727347)	6	5	0.0%
Epinephrine 0.01 MG/ML (330545)	30	15	0.0%
Epinephrine 0.1 MG/ML (317361)	249	95	0.1%
Epinephrine 0.5 MG/ML (334666)	13	5	0.0%
Epinephrine 1 MG per 10 ML Prefilled Syringe (727373)	21	8	0.0%
Epinephrine 1 MG/ML (328316)	7	4	0.0%
Epinephrine 1:1,000 (1 mg/mL) (328316)	451	340	0.3%
Epinephrine 1:10,000 (0.1 mg/mL) (317361)	6,278	2,439	2.3%
Epinephrine 1:100,000 (Push Dose Epi) (330545)	2,016	1,003	0.9%
Epinephrine Diluted to 1:10,000 (Alternative Medication) (727373)	424	177	0.2%
Epinephrine Diluted to 1:100,000 (Alternative Medication) (1233778)	115	69	0.1%
Fentanyl	11,738	7,242	6.8%
Fentanyl (Sublimaze) (4337)	11,738	7,242	6.8%
Glucagon	392	390	0.4%
Glucagon (4832)	390	388	0.4%
Glucagon Auto-Injector (791870)	2	2	0.0%
Glucose	1,309	1,255	1.2%
Glucose (4850)	1,295	1,243	1.2%
Glucose 100 MG/ML / NaCl 0.154 MEQ/ML Injectable Solution (244099)	14	13	0.0%
Ketamine	1,864	1,488	1.4%
Ketamine (6130)	1,775	1,416	1.3%
Ketamine 10 MG/ML (330467)	89	72	0.1%
Lidocaine	92	91	0.1%
Lidocaine (Xylocaine) (6387)	89	88	0.1%
Lidocaine 2 % Injectable Solution (317567)	3	3	0.0%
Magnesium Sulfate	92	90	0.1%
Magnesium Sulfate (6585)	92	90	0.1%
Midazolam	1,754	1,499	1.4%
Midazolam (Versed) (6960)	1,754	1,499	1.4%
Naloxone	7,547	2,934	2.7%
Naloxone (Narcan) (7242)	7,212	2,788	2.6%
Naloxone (Narcan) Auto-Injector (727348)	327	154	0.1%
Narcan (CARES) (197117)	8	6	0.0%
Nitroglycerin	9,408	5,780	5.4%
Nitroglycerin (0.4 mg) (316365)	7,214	5,393	5.0%
Nitroglycerin (4917)	49	43	0.0%
Nitroglycerin 2 % Topical Ointment (242946)	45	45	0.0%
Nitroglycerin Paste 2% (242946)	2,079	2,067	1.9%
NTG 0.02 MG/MG Topical Ointment (242946)	21	21	0.0%

Normal Saline	82,776	72,892	68.2%
NaCl 0.154 MEQ/ML Injectable Solution (313002)	7	7	0.0%
NaCl 9 MG/ML Injectable Solution (313002)	8	8	0.0%
Normal Saline (125464)	2,280	1,835	1.7%
Normal Saline (313002)	80,338	70,910	66.3%
Sodium Chloride 9 MG/ML Injectable Solution (313002)	143	132	0.1%
Ondansetron	17,555	15,926	14.9%
Ondansetron (as ondansetron HCl) 4 MG Disintegrating Oral Tablet (104894)	2	2	0.0%
Ondansetron (as ondansetron hydrochloride) 4 MG Disintegrating Oral Tablet (104894)	119	119	0.1%
Ondansetron (Zofran) (26225)	17,434	15,821	14.8%
Oxygen	38,271	35,700	33.4%
Oxygen (7806)	38,271	35,700	33.4%
Sodium Bicarbonate	1,184	1,145	1.1%
NaHCO3 1 MEQ/ML Injectable Solution (237363)	2	2	0.0%
Sodium Bicarbonate (CARES) (36676)	29	29	0.0%
Sodium Bicarbonate 4.2% (237361)	2	2	0.0%
Sodium Bicarbonate 7.5% (316687)	2	2	0.0%
Sodium Bicarbonate 8.4% (237363)	1,129	1,096	1.0%
Sodium Bicarbonate 84 MG/ML Injectable Solution (237363)	20	17	0.0%
Sterile Water	4	4	0.0%
Sterile Water (107129)	4	4	0.0%
Tranexamic Acid	164	164	0.2%
Tranexamic Acid (TXA, Lysteda) (10691)	164	164	0.2%
Grand Total	203,993	106,940	100.0%

Table 6: Procedures Performed

Procedures	Procedures Performed	Procedure ePCRs	Procedure ePCR Percentage
12 Lead ECG	114,874	89,002	43.2%
12 Lead ECG (268400002)	114,781	88,995	43.2%
ECG Transmission (422952004)	93	87	0.0%
AED	38	38	0.0%
Automated External Defibrillator Placement (463194009)	38	38	0.0%
Airway Adjunct	2,664	2,571	1.2%
Nasopharyngeal Airway (182692007)	1,283	1,273	0.6%
Oropharyngeal Airway (7443007)	1,381	1,372	0.7%
Airway Management	987	847	0.4%
Airway Clearance by Finger Sweep (232706008)	3	3	0.0%
Airway Opened (232664002)	124	124	0.1%
Airway Suctioned (230040009)	802	710	0.3%
Assess Airway Device Cuff Pressure (448464001)	1	1	0.0%
Foreign Body Removed from Airway (232707004)	15	15	0.0%
Heimlich Maneuver (Airway) (236900002)	5	5	0.0%
Remove Device from Airway (232708009)	4	4	0.0%

Suction Newborn (18540005)	14	12	0.0%
Vomit Removed from Airway (225713007)	19	19	0.0%
Ambulance Requested	2	2	0.0%
Ambulance Requested (185406000)	2	2	0.0%
Assist with Toileting	2	2	0.0%
Assist with Toileting (313420001)	2	2	0.0%
Bleeding Control	783	690	0.3%
Direct Pressure for Bleeding (447686008)	361	352	0.2%
Hemostatic agent applied (QuikClot or other dressing) (713147009)	22	21	0.0%
Pressure Dressing for Bleeding (26906007)	294	280	0.1%
Pressure to Artery for Bleeding (233419004)	11	11	0.0%
Tourniquet for Bleeding (20655006)	95	87	0.0%
Blood Glucose Measurement	13,203	12,823	6.2%
Finger-prick (278450005)	9,368	9,170	4.5%
Glucose measurement, blood (33747003)	3,832	3,653	1.8%
Glucose measurement, post glucose dose (104690002)	3	2	0.0%
Burn Care	49	40	0.0%
Burn Care (133901003)	21	19	0.0%
Burn Dressing Applied (90660004)	28	24	0.0%
Capnography	7,444	7,210	3.5%
ETCO2 Colorimetric Detection (428482009)	318	313	0.2%
ETCO2 Digital Capnography (425543005)	7,126	7,062	3.4%
Cardiac Pacing	200	136	0.1%
Cardiac Pacing (18590009)	200	136	0.1%
Cardioversion	109	73	0.0%
Cardioversion (250980009)	109	73	0.0%
Central Line	3	3	0.0%
Central Line Care (226005007)	1	1	0.0%
Monitoring of Central Venous Catheter (449107008)	2	2	0.0%
Central Pulses Present	241	197	0.1%
Central pulses present (ROSC) (425598000)	241	197	0.1%
Childbirth	16	15	0.0%
Childbirth (236973005)	16	15	0.0%
Comfort Measures	1,698	1,688	0.8%
Comfort care management (385897008)	19	19	0.0%
Comfort Measures (133918004)	1,179	1,179	0.6%
Position of Comfort (225994009)	495	491	0.2%
Turn Patient in Bed (359962006)	5	5	0.0%
Comfort Survivors	16	16	0.0%
Comfort Survivors (171007003)	16	16	0.0%
CPAP	1,606	1,145	0.6%
CPAP (47545007)	1,167	1,103	0.5%
CPAP Titration (446573003)	439	285	0.1%
CPR	4,215	3,504	1.7%
Manual CPR (89666000)	3,764	3,303	1.6%
Mechanical Device CPR (429283006)	451	425	0.2%
Decontamination	14	14	0.0%

Decontamination (409530006)	14	14	0.0%
Defibrillation	1,417	555	0.3%
Defibrillation (426220008)	1,417	555	0.3%
Electrocardiographic Monitoring	276,314	145,110	70.4%
3 Lead ECG (428803005)	3,847	3,847	1.9%
Cardiac Monitor Surveillance (88140007)	546	546	0.3%
Electrocardiographic monitoring (46825001)	271,921	141,705	68.8%
Endotracheal Tube	277	201	0.1%
Check Endotracheal Tube for Security (225717008)	17	10	0.0%
Check Endotracheal Tube Position by Auscultation (432028000)	49	42	0.0%
Irrigate and Suction Endotracheal Tube (443533003)	3	3	0.0%
Remove Endotracheal Tube (271280005)	14	13	0.0%
Reposition Endotracheal Tube (225716004)	2	2	0.0%
Secure Endotracheal Tube by Hand (429618000)	5	4	0.0%
Secure Endotracheal Tube with Holder (429184008)	112	111	0.1%
Secure Endotracheal Tube with Tape (428626000)	2	2	0.0%
Suction Endotracheal Tube (225715000)	73	67	0.0%
Environmental Management	37	25	0.0%
Environmental Management for Comfort (386284008)	15	15	0.0%
Environmental Management for Safety (385873004)	22	22	0.0%
Eye Care	72	72	0.0%
Eye Bandaging (225692006)	14	14	0.0%
Eye Irrigation (49999004)	58	58	0.0%
Hand Ventilation	3,292	3,200	1.6%
Hand Ventilation (11140008)	3,059	2,969	1.4%
Hand Ventilation by Anesthesia Bag (243140006)	4	4	0.0%
Hand Ventilation by Bag Valve Mask (425447009)	212	211	0.1%
Hand Ventilation/PPV (11140008)	17	16	0.0%
Ice Pack	1,075	1,036	0.5%
Chemically-Activated Ice Pack Treatment (229583009)	18	18	0.0%
Cold/Ice Pack treatment (229585002)	1,057	1,018	0.5%
Intraosseous (IO)	2,375	2,307	1.1%
Intraosseous (IO) (430824005)	2,368	2,303	1.1%
Monitoring of Intraosseous (IO) Access (708010003)	7	7	0.0%
Intravenous (IV)	83,048	77,029	37.4%
Blood Draw for Labs (82078001)	150	149	0.1%
Intravenous (IV) (392230005)	81,425	75,794	36.8%
Intravenous (IV) Infusion Prior to This Unit's Care (14152002)	51	50	0.0%
IV Catheter Care (410109005)	1,208	1,134	0.6%
IV Catheter Removal (424287005)	162	162	0.1%
Venous Puncture (396540005)	52	45	0.0%
Intubation	1,289	1,109	0.5%
Cricoid Pressure Applied (241726007)	3	3	0.0%
Endotracheal Intubation-Video Laryngoscopy(itSNOMED.003)	3	3	0.0%
Extubation of trachea (309812005)	1	1	0.0%
Intubation of Existing Tracheostomy Stoma (232685002)	2	2	0.0%
Orotracheal Intubation (232674004)	1,140	1,099	0.5%
Use of Bougie / Introducer Stylet (397874007)	140	139	0.1%

Laryngoscopy	23	19	0.0%
Laryngoscopy (28760000)	16	15	0.0%
Laryngoscopy with Foreign Body Removal (19433002)	7	4	0.0%
Leave Behind Naloxone	116	116	0.1%
Leave behind Naloxone kit (left with patient/family/friend) (715740004)	116	116	0.1%
Lubrication	1	1	0.0%
Lubrication (257883005)	1	1	0.0%
Monitoring of J-tube	1	1	0.0%
Monitoring of J-tube (302353008)	1	1	0.0%
Monitoring of PEG Tube	1	1	0.0%
Monitoring of PEG Tube (423508006)	1	1	0.0%
Monitoring of PICC Line	1	1	0.0%
Monitoring of PICC Line (392020005)	1	1	0.0%
Monitoring of Wound Drain	1	1	0.0%
Monitoring of Wound Drain (710107001)	1	1	0.0%
Mouth-to-Mask/Mouth Ventilation	55	55	0.0%
Mouth-to-Mask/Mouth Ventilation (243180002)	55	55	0.0%
Moved Patient	3,435	2,531	1.2%
Moved Patient (56469005)	3,435	2,531	1.2%
Nasogastric or Orogastric Tube	43	43	0.0%
Orogastric Tube Insertion (235425002)	39	39	0.0%
Orogastric Tube Maintenance (235448007)	3	3	0.0%
Orogastric Tube Removal (235439002)	1	1	0.0%
Notifications	65	64	0.0%
Notifications (185087000)	3	2	0.0%
Notify Coroner (363049002)	41	41	0.0%
Unexpected death-Coroner told (finding) (270115005)	21	21	0.0%
Nutrition and Oral Intake	33	27	0.0%
Giving Oral Fluid (225285007)	21	19	0.0%
Provision of Food (710925007)	12	12	0.0%
Occlusive Wound Dressing	83	75	0.0%
Occlusive Wound Dressing (22206003)	83	75	0.0%
Orthostatic Vital Signs	989	978	0.5%
Orthostatic Vital Signs (425058005)	989	978	0.5%
Oxygen	167	166	0.1%
Blow by oxygen mask (physical object) (425478008)	7	7	0.0%
Nonrebreather oxygen mask (physical object) (427591007)	34	34	0.0%
Oxygen nasal cannula (physical object) (336623009)	82	82	0.0%
Oxygen Prior to This Unit's Care (57485005)	44	44	0.0%
Patient Assessment	15,082	11,505	5.6%
Continuous Patient Assessment (422618004)	3,768	3,761	1.8%
Initial Patient Assessment (315639002)	11,265	11,250	5.5%
Newborn Continuous Patient Assessment (423589000)	15	15	0.0%
Patient Assessment (Triage) (245581009)	34	34	0.0%
Physical Restraint	2,887	1,756	0.9%
Physical Restraint (386423001)	1,813	1,518	0.7%
Physical Restraint Checked and Maintained (35497000)	1,074	804	0.4%
Police Requested	13	13	0.0%

Police Requested (184966003)	13	13	0.0%
PPE	3,015	2,978	1.4%
Airborne Precautions (409524006)	28	28	0.0%
Aspiration Precautions (386519006)	2	2	0.0%
Blood and Fluids Precautions (65011002)	30	30	0.0%
Contact Precautions (409529001)	42	42	0.0%
Face mask/covering for Patient (465635009)	151	150	0.1%
Isolation (40174006)	1	1	0.0%
Respiratory Secretion Precautions (409525007)	6	6	0.0%
Standard Precautions (409522005)	2,755	2,746	1.3%
Psycho-spiritual Comforting	939	927	0.4%
Psycho-spiritual Comforting (385728004)	939	927	0.4%
Pulse Oximetry Monitoring	10,690	10,683	5.2%
Pulse Oximetry Monitoring (284034009)	10,690	10,683	5.2%
Removal of Foreign Body	5	5	0.0%
Removal of Foreign Body (10849003)	3	3	0.0%
Removal of Foreign Body from Skin (302421003)	2	2	0.0%
Removal of Ring from Finger	5	4	0.0%
Removal of Ring from Finger (426509009)	5	4	0.0%
Report	3,002	1,815	0.9%
Report to Nurse (385775004)	1,768	1,765	0.9%
Report to Physician (304562007)	1,234	1,231	0.6%
Return of Spontaneous Circulation (ROSC)	2	2	0.0%
Cardiopulmonary resuscitation discontinued due to return of spontaneous circulation (situation) (426970003)	2	2	0.0%
Safety Management	32	32	0.0%
Safety Management	32	32	0.0%
Spinal Stabilization	7,618	7,317	3.6%
Cervical Collar Applied (49689007)	6,900	6,892	3.3%
Cervical Spine Stabilization (398041008)	434	434	0.2%
Manual Cervical Spine Stabilization (449199004)	284	282	0.1%
Splint	1,776	1,695	0.8%
Air Splint Applied (274475000)	440	431	0.2%
Application of skeletal traction via the femur (239656007)	1	1	0.0%
Extrication splint device (physical object) (421925007)	3	3	0.0%
Sling Applied (182558000)	293	293	0.1%
Sling Maintained (81533008)	11	11	0.0%
Splint Applied (79321009)	797	777	0.4%
Splint Maintained (10442004)	20	18	0.0%
Traction Maintained (48035000)	4	4	0.0%
Traction Splint Applied (302488007)	50	50	0.0%
Vacuum Splint Applied (427996005)	157	154	0.1%
Supraglottic Airway	42	42	0.0%
iGel Insertion (405640005)	41	41	0.0%
Laryngeal Mask Airway (424979004)	1	1	0.0%
Temperature Management	358	353	0.2%
Active External Cooling (431774007)	225	220	0.1%
Active External Warming (431949004)	133	133	0.1%

Thoracostomy	109	85	0.0%
Needle Chest Decompression (182705007)	109	85	0.0%
Time of death	43	43	0.0%
Time of death (observable entity) (398299004)	43	43	0.0%
Tracheostomy Care/Monitoring	1	1	0.0%
Tracheostomy Care/Monitoring (410213006)	1	1	0.0%
Ultrasound	40	34	0.0%
2D mode ultrasound (qualifier value) (399064001)	11	8	0.0%
Butterfly Ultrasound (Prehospital Study) (399064001)	29	26	0.0%
Vagal Maneuver	215	197	0.1%
Vagal Maneuver (128968000)	215	197	0.1%
Ventilator Management	1	1	0.0%
Ventilator Care and Adjustment (385857005)	1	1	0.0%
Wound Care	2,890	2,576	1.3%
Wound Care (225358003)	81	80	0.0%
Wound Dressing (182531007)	2,567	2,410	1.2%
Wound Irrigation (225116006)	242	230	0.1%
Grand Total	571,141	206,020	100.0%

Data in this report is provided by the efforts of the Riverside County EMS System and its EMS Providers in ensuring quality care and documentation of patient encounters.

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