

RIVERSIDE COUNTY



EMCC Members Per Board of Supervisors Resolution No. 2013-052:

PMAC Physician Representative

I.a. Stephen Patterson, MD

Hospital Association Representative

I.b. Megan Barajas

Riverside County Medical Association

I.c. James Rhee, MD

County Contracted Emergency Ambulance

I.d. Peter Hubbard

Ambulance Association Representative

I.e. Dawn Downs

County Permitted Air Ambulance Provider

I.f. Brian Harrison

Riverside County Fire Chiefs' Association

I.g. Brian Young

Coachella Valley Association of Governments

I.h. Mark Scott

Western Riverside Council of Governments

I.i. Gary Nordquist (primary)
Chris Mann (secondary)

Riv Co Law Enforcement Agency Admin Assoc

I.j. Vacant

PMAC Prehospital Representative

I.k. Magdalena Robles

Riverside Co Fire Dept Rep

I.l. Vacant

Supervisorial District One

I.m. David McCarthy

Supervisorial District Two

I.m. Stan Grube

Supervisorial District Three

I.m. Jerry Holldber

Supervisorial District Four

I.k. Claudia Galvez

Supervisorial District Five

I.m. Jock Johnson

The next meeting of the EMCC is on:

Wednesday, June 23, 2021

9:00 AM – 10:30 AM

Microsoft Teams

Public Conference Call Information (Audio Only)

(951) 465-8390 United States, Riverside

Conference ID: 697 466 859#

1. CALL TO ORDER

Chair—Stan Grube

2. ROUNDTABLE INTRODUCTIONS (5 Minutes)

Chair—Stan Grube

3. APPROVAL OF MINUTES (5 Minutes)

March 31, 2021 Draft Minutes—Stan Grube (Attachment A)

4. UNFINISHED / NEW BUSINESS (20 Minutes)

4.1 Chairperson and Vice-Chairperson Nominations – Dan Bates

4.2 COVID-19 Situation Update – Misty Plumley

4.3 RUHS Public Health Report – Marie Weller

5. EMS AGENCY REPORTS (30 Minutes)

5.1 Administrative Unit Updates – Dan Bates

5.2 Clinical Unit Updates – Shanna Kissel/Dustin Rascon

- 2021 Policy Manual Update

- FirstPass and CQI Update

- Specialty Care Updates

5.3 Data Unit Updates – Catherine Farrokhi/Sean Hakam

- Riverside County Overdose Data to Action (RODA)

- Medications and Procedures Report (Attachment B)

- ePCR Evaluation Summary (Attachment C)

6. OTHER REPORTS (20 Minutes)

6.1 PMAC - Steven Patterson, MD / Magdalena Robles

6.2 EMD Preparedness Division – Dan Bates

6.3 EMD Operations Division - Mark Bassett

7. OPEN COMMENTS (5 Minutes)

8. NEXT MEETING / ADJOURNMENT (1 Minute)

Wednesday, September 22, 2021; 9AM – 10:30AM

NOTICE: Items on the agenda: Any member of the public may address this meeting of the Emergency Medical Care Committee or any items appearing on the agenda by raising their hand to be recognized by the Chair or acting Committee Chairperson. If a member of the public desires to speak, they must do this before or anytime during discussion of the item. All comments are to be directed to the Emergency Medical Care Committee and shall not consist of any personal attacks. Members of the public are expected to maintain a professional, courteous decorum during their comments. A three-minute limitation shall apply to each member of the public, unless the Chair extends such time. No member of the public shall be permitted to “share” his/her three minutes with any other member of the public.

Items not on the agenda: Any member of the public may address this meeting of the Emergency Medical Care Committee on any item that does not appear on the agenda, but is of interest to the general public and is an item upon which the Committee may act. All comments are to be directed to the Emergency Medical Care Committee and shall not consist of any personal attacks. Members of the public are expected to maintain a professional, courteous decorum during their comments. A three-minute limitation shall apply to each member of the public who wishes to address the Committee on a matter not on the agenda. No member of the public shall be permitted to “share” his/her three minutes with any other member of the public. Usually, any items received under this heading are referred to the staff for further study, research, completion, and/or future action.

It is the responsibility of the members of the committee to disseminate information from EMCC meetings to the organizations they represent. Any questions regarding meeting or agenda items may be addressed to Dan Bates, Riverside County EMS Agency at (951) 358-5029.

Next meeting:

TBD.

EMCC agendas with attachments are available online at www.rivcoems.org

The County of Riverside does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services or activities. It is committed to ensuring that its programs, services, and activities are fully accessible to and usable by people with disabilities. If you have a disability and need assistance, contact Dan Bates at (951) 358-5029.

EMCC meetings are audio recorded to facilitate dictation for minutes.

EMCC Meeting Minutes
March 31, 2021

TOPIC	DISCUSSION	ACTION
1. CALL TO ORDER Stan Grube	Stan Grube commenced the meeting at 9:00 am	
2. ROUNDTABLE INTRODUCTIONS Dan Bates	Roundtable introductions was facilitated by Dan Bates.	
3. APPROVAL OF MINUTES	Chief Jock Johnson and Stan Grube approved meeting minutes.	Information only.
4. UNFINISHED /NEW BUSINESS		
4.1 MEMBERSHIP Dan Bates	<p>Dan Bates reviewed the current 6 open vacancies that need to be filled.</p> <ul style="list-style-type: none"> -Megan Barajas with HASC is taking over for Kevin Porter, needs to get approved by the board of supervisors. - Ambulance association for Riverside county -created vacancy -one vacancy with Air Ambulance Provider -Merci Air created for PMAC -District Four has one vacancy. Claudia Galvez has been appointed to PMAC <p>Dr. Patterson –Representative for air ambulance provider is 2021 Bryan Harrison from Mercy Air 2022 Grant Lopez from Reach</p>	Attachment B
4.2 EMCC 2021 Proposed scheduled Dan Bates	<p>EMCC Meetings, Stan Grube approved the next meetings for calendar 2021</p> <ol style="list-style-type: none"> 1. 6/23/2021 2. 9/22/2021 3. 12/08/2021 	Attachment C
4.3 COVID-19 SITUATION UPDATE Dan Bates/Misty Plumley	<p>Dan- EMS System is starting to stabilize, seeing normal trend/volume. Resource request from healthcare facilities have decreased regarding Covid- 19 activity. Durable Medical equipment that the state sent (300 ventilators, hospital beds, IV pumps, PPE), trying to preposition, will be located in the operational areas that need them. Will be monitored until the end of calendar year. Hospitals have limited space -will continue to monitor</p> <p>Misty P- COVID update -Riverside cases as of today Case rate is trending at 3.8%, overall positivity 2.1% and health equity positivity rate for the most disadvantage is at 2.4 %.</p> <p>Vaccines efforts continue with partnerships from different facilities (clinics, pharmacies, UC, primary care providers, public health etc.) Open appointments for vaccines are available, as of APRIL 1st will offer vaccines to riverside county employees. Starting April 15th individuals 16 years and older will be eligible for the Pfizer vaccine.</p>	Information only.

EMCC Meeting Minutes
March 31, 2021

	7 mobile teams -serving from Blythe to corona providing services to the vulnerable 50+ and who have transportation issues.	
4.4 RUHS Public Health Report Marie Weller	<p>Nurse Marie Weller from Pubic Health is involved in the incident response for the vaccinations. Provided the following updates:</p> <ul style="list-style-type: none"> - As of 3/30/21- 991,156 Riverside residents have been vaccinated, Meeting one million mark in a day or two. - Vaccinating based on tiers (job titles, age) - As of 4/01/2021 anyone 50 years + will be able to receive the Covid-19 vaccine at one of our clinics - Anticipate clinics will open for everyone on April 13 or April 14 - 4 stationary sites/mobile sites -are reaching out who don't have access to healthcare. - Community providers are beginning to receive the vaccine (Kaiser, riverside medical group) - Pharmacy providing 1st and 2nd doses - Rivcoph.org (for more information) 	Information only
5.1 Administrative Unit Updates Dan Bates	<p>EMD Relocated to a new office building 450 E. Alessandro Blvd., Riverside, CA 92508</p> <p>-Staff changes –</p> <p>-Georgia Herbaugh retired, EMD boarded her replacement -Mary Hall from USC.</p> <p>-EMS Specialist vacancy -disciplinary and Enforcement Unit-open for internal and external county applicants (open for 2 weeks)</p> <p>-Ambulance permit Process working under an extension due to Covid, send notice and packages for applications and are due by May 30th -as of July 1st will go back to Normal Ambulance permits in Riverside.</p>	Information only.
5.2 Clinical Unit Updates Shanna Kissel	<p><u>Vaccines site update:</u> Working with IMT under the agencies branch. Within First Response and Law Enforcement agencies, getting them vaccinated at County Fire and AMR Clinics. Will be sending links out to all First Repose contacts.</p> <p><u>Clinical Site update:</u></p> <ul style="list-style-type: none"> -Submitted STEMI/Stroke/Trauma plans to EMSA. Been approved (see attachments). -Dash board has been updated at Rivcoems.org showing the plans and numbers being produced by the hospital and are being updated quarterly. -Beginning April 2021, the 2021 Spring policy Manual will be uploaded on the website, one new change will be the format of the policy themselves, content is the same. -A mobile app has been developed, you can download it on your phone that has the policies, hospital contacts, section for education, link for frequent calling numbers. -Working with First watch to implement First pass for CQI, trying to push policies so we can see CQI Procedures, 	Attachment D Attachment E Attachment F

EMCC Meeting Minutes
March 31, 2021

	<p>medications, specific specialty care regarding STEMI/stroke and Trauma.</p> <p>-REMSA has designated Desert Regional Medical Center and Temecula Valley as a comprehensive Stroke Center and we have designated Riverside Community Hospital as a level 1 trauma center.</p>	
<p>5.3 Emergency Medical Dispatch EMD Update James lee</p>	<p>-This is a continuation EMD report that started in 2018 and this is now a 2020 Data report.</p> <p>-Sean Hakam being recognized for this report and Data</p> <p>-The only note of change in the report comes from the City of Murrieta who has implemented their emergency medical dispatch as of August 2020.</p> <p>-City of Hemet is still in the implementation process.</p> <p>-Cathedral city is also anticipating starting their implementation of EMD in June/summer of 2021</p> <p>- EMD utilization -graphs (see page 3)</p> <p>- EMD Integration (see page 4) slowly increasing the numbers.</p> <p>- Medical Priority Dispatch system breakdown into 6 sections (see page 5)</p>	Attachment G
<p>5.4 Data Unit Updates Catherine Farrokhi</p>	<p><u>Catherine Farrokhi</u> Resources were funneled into Covid response with data and state reporting. Maintained three primary functions with system data reporting:</p> <ol style="list-style-type: none"> 1. Ambulance patient offload delay times in both weekly and monthly reports. Included number of responses to the reports. 2. Annual reports will show a year over year review. 3. Policy 7701 report <p><u>-Sean Hakam</u> <i>Strategy 9</i> Empowering Individuals to make safer choices. -Focusing on intervention and prevention. - Training first responders and providing Courses by Dr. Tammy McCoy-Arballo. (10 sessions) This training will help educate first responders and help with stress and how it can affect. It's a preventive type of training so they can handle stress in the field. -Intervention ideas- Bystander Naloxone training and Crisis response team.</p> <p><u>-Stephani Harrington</u> RODA- Overdose data to action – -Partnership with Public health, behavioral health and sheriff's departments. -Monitoring all emergency overdose data -Develop interventions strategies in collaboration with different agencies to mitigate the impact of overdose in Riverside County. RODA Grant overview – <i>Strategy 3</i> Innovate Morbidity/Mortality Surveillance -provided data of overdose in 2021- 684 Opiate overdose and 26 overdose fatality in 2021 and it shows that the numbers have decreased.</p>	Information only.

EMCC Meeting Minutes
March 31, 2021

	Tony From RUHS Behavioral Health – requesting information regarding training presented by Sean and will provide updates in future meetings.	
6.1 PMAC Steven Patterson, MD	All items discussed at PMAC were summarized as: -Working through adjustments for PMAC representations, seeking a position within EMT at large -Air Transport provider Representation has been filled. -A plan for study on EMS use of ultrasounds, who providers within the county will participate and provide Data. -Kobe Bryant Privacy law (647.9) distribution of photographs with fines up to \$1,000 has been reported to all agencies within the county to educate all the providers and everyone in the field.	Information only.
6.2 EMD Preparedness Division Dan Bates	Projects – <u>Alert and warning project</u> - brand under the name Alert Rivco, reached 5 yr. contract with Swift Reach. The state put Alert and warning guideless. An Evaluation team got together who represented big cities, county departments, RSO, EMD, County fire, looked at the best practices and lessons learned and experiences to improve the process and notify our residents in a timely manner. Will support permission based sub-accounts. The new vendor for Alert Rivco is <u>Genesis</u> . It's a 5-year contract; 3 yr. contract with 2, 1 yr. extensions. <u>Mountain Top project.</u> – Idyllwild and San Jacinto mountain area; is an outdoor warning station and traveler information station. The goal is to expand the alert and warning platform. Outdoor warning sirens will give real time actionable messages to people. -Emergency services coordinator position open with preparedness division. HPP supplemental funds for Covid response will close June 2021. Preparedness Division fully dedicated to the vaccine incident management team. Estimating 75 logistical support positions from the state, and approximately 300 vaccinators from various staffing agencies.	Information only.
6.3 EMD Operations Division Mark Bassett	Currently involved with US border surge. Provided transportation needs throughout the country. Received CBP intel regarding surge from Central America and Mexico. Working with public health on testing individuals. EMD is partnering with housing and homeless prevention, work force solutions department, DPSS, and probation and facilities management. Individuals who test positive for Covid19 are quarantined. The timeline is estimated at 18 months.	Information only.
7. OPEN COMMENTS	No comments	

EMCC Meeting Minutes
March 31, 2021

8. NEXT MEETING ADJOURNMENT	June 23, 2021	Approved by EMCC.
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FOR CONSIDERATION BY EMCC

Attachment B
Page 1 of 1

DATE: June 23, 2021

TO: EMCC

FROM: Catherine Borna Farrokhi, Ph.D. - Data & Reporting Unit

SUBJECT: Medications and Procedures Report, 2020

ACTION: Received and File Information

Please see attached Riverside County EMS Agency Medications and Procedures Report, 2020.

http://remsa.us/documents/reports/annual/REMSA_Medications_and_Procedures_Report_2020.pdf



**RIVERSIDE COUNTY EMS
MEDICATIONS & PROCEDURES REPORT
2020**

MARCH 19TH, 2021

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, compliance with treatment, as well as logistical factors such as which agency arrives '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.

Riverside County EMS Agency (REMSA) Operational Policy [3301](#), also known as the 'Drugs and Equipment List', describes the medications and procedures available to Riverside County EMS field providers for patient evaluation and intervention. This report summarizes the medications given and procedures performed by Riverside County EMS providers over the course of one-year (2020) 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 1/1/2020 and 12/31/2020. 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 and procedure had to be documented as performed by a Riverside County EMS Agency credentialed provider name and identification number. This resulted in **185,644 unique ePCR records**.

A total of 56 unique medication names were identified and classified into **29 Medication Classifications**. A total of 141 unique procedure names were also extracted and classified under **67 Procedure Categories**. The *Medications Dataset*, where one or more medication/drug was documented in each record, included **88,286 ePCRs** consisting of 40 data fields and 6,804,040 datapoints. The *Procedures Dataset*, where one or more procedure/equipment was documented in each record, included **179,161 ePCRs** consisting of 44 data fields and 18,616,840 datapoints.

To determine the overall proportion of responses where medications and/or procedures were administered, a separate dataset was extracted from the REMSA *2020 Patient Care Continuum Report* dataset to identify all records indicating that patient contact was made. This resulted in a total of 314,797 unique ePCRs for patient contact in 2020 regardless of medications given or procedures performed.

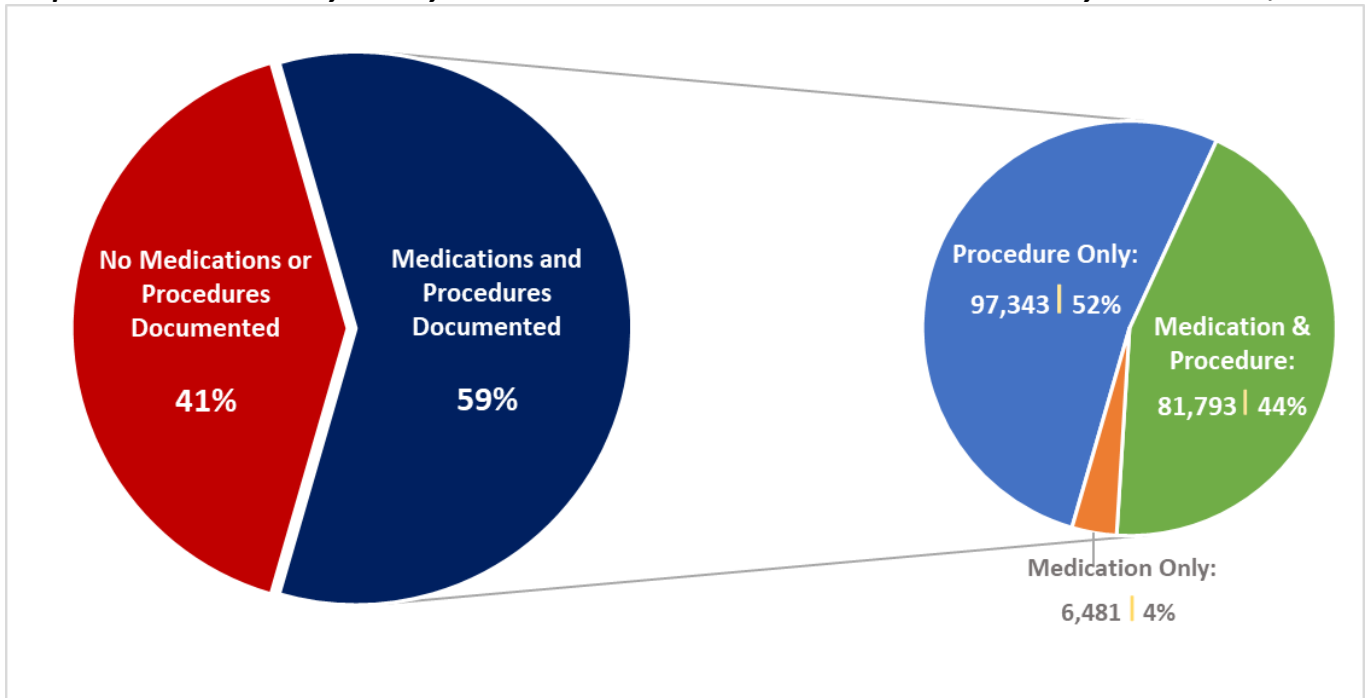
Exclusions

5,060 ePCRs (5.7%) from the Medications Dataset and **4,345 ePCRs (2.4%)** 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.

Systemwide Distribution of Medications Given & Procedures Performed

Of **314,797** 9-1-1 response records documenting patient contact was made, **59%** included documentation that a medication and/or procedure was administered (185,644 ePCRs). Graph 1 below illustrates this breakdown between records with and without medications or procedures, along with how often medications and procedures intersected on the same records.

Graph 1. Riverside County EMS System Medications and Procedures documented by record count, 2020



Response Unit Type

Response unit type describes the primary role of the EMS unit responding to the EMS call (eResponse.07 & eResponse.13). Response Unit Type has 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 between the non-transport and transport units.

The following two tables (Table 1 and Table 2) provide a breakdown of records by 'Response Unit Type' and 'Riverside County EMS Provider' which indicated medications and/or procedures were administered.

Table 1. Medications by Agency and Unit Type, 2020

Medications	Total Medications	Total ePCRs with Medications	ePCRs with Patient Contact	% of ePCRs with Medications	Average Medications Given
Non-Transport Units	42,436	20,788	140,168	14.8%	2.0
Cathedral City Fire Department	210	73	984	7.4%	2.9
Corona Fire Department	4,034	1,847	6,848	27.0%	2.2
Hemet Fire Department	1,124	548	8,177	6.7%	2.1
Morongo Fire Department	283	133	2,016	6.6%	2.1
Murrieta Fire Department	2,097	1,049	6,387	16.4%	2.0
Palm Springs Fire Department	2,352	1,190	6,710	17.7%	2.0
Pechanga Fire Department	156	97	569	17.0%	1.6
Riverside City Fire Department	6,711	3,473	23,984	14.5%	1.9
Riverside County Fire Department	25,332	12,305	83,164	14.8%	2.1
Soboba Fire Department	137	73	566	12.9%	1.9
Transport Units	109,982	62,438	174,629	35.8%	1.8
AMR - Desert Cities	12,589	7,316	23,849	30.7%	1.7
AMR - Hemet	24,466	13,224	32,547	40.6%	1.9
AMR - Riverside	60,673	35,121	97,070	36.2%	1.7
Cathedral City Fire Department	3,359	1,741	4,321	40.3%	1.9
Idyllwild Fire Protection District	223	118	518	22.8%	1.9
Riverside County Fire Department	8,672	4,918	16,324	30.1%	1.8
Grand Total	152,418	83,226	314,797	26.4%	1.8

Table 2. Procedures by Agency and Unit Type, 2020

Procedures	Procedures Performed	Total ePCRs with Procedures	ePCRs with Patient Contact	% of ePCRs with Procedures	Average Procedures Performed
Non-Transport Units	86,946	45,754	140,168	32.6%	1.9
Calimesa Fire Department	10	8	738	1.1%	1.3
Cathedral City Fire Department	306	190	984	19.3%	1.6
Corona Fire Department	6,752	3,506	6,848	51.2%	1.9
Hemet Fire Department	978	594	8,177	7.3%	1.6
Morongo Fire Department	689	346	2,016	17.2%	2.0
Murrieta Fire Department	6,465	3,572	6,387	55.9%	1.8
Palm Springs Fire Department	4,574	2,432	6,710	36.2%	1.9
Pechanga Fire Department	147	119	569	20.9%	1.2
Riverside City Fire Department	19,195	9,744	23,984	40.6%	2.0
Riverside County Fire Department	47,604	25,116	83,164	30.2%	1.9
Soboba Fire Department	226	127	566	22.4%	1.8
Transport Units	304,170	129,062	174,629	73.9%	2.4
AMR - Desert Cities	37,823	17,786	23,849	74.6%	2.1
AMR - Hemet	67,190	27,145	32,547	83.4%	2.5
AMR - Riverside	178,980	73,687	97,070	75.9%	2.4
Cathedral City Fire Department	4,354	2,565	4,321	59.4%	1.7
Idyllwild Fire Protection District	414	122	518	23.6%	3.4
Riverside County Fire Department	15,409	7,757	16,324	47.5%	2.0
Grand Total	391,116	174,816	314,797	55.5%	2.2

Top Medications & Procedures

Table 3 and Table 4 below illustrate which medications and procedures are most used by EMS based on the frequency they appeared in the patient records (ePCRs). To be included in this list, the medication or procedure had to appear in a minimum of 1% of patient records in the corresponding dataset. *Sixteen out of 29 Medication classifications, and 15 of 67 Procedure classifications met this threshold for inclusion.*

A complete alphabetical list of medications and procedures is available in Tables 5 and 6 at the end of this report.

Table 3. Top Medications, 2020

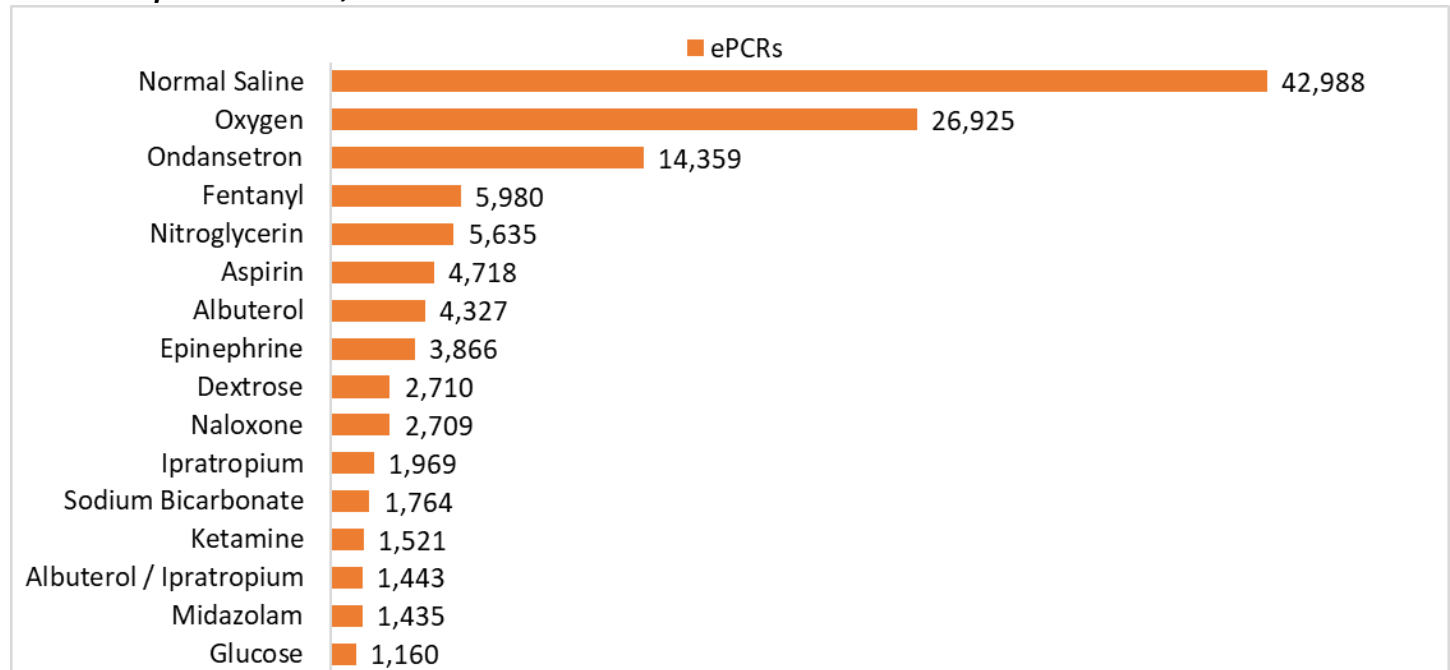
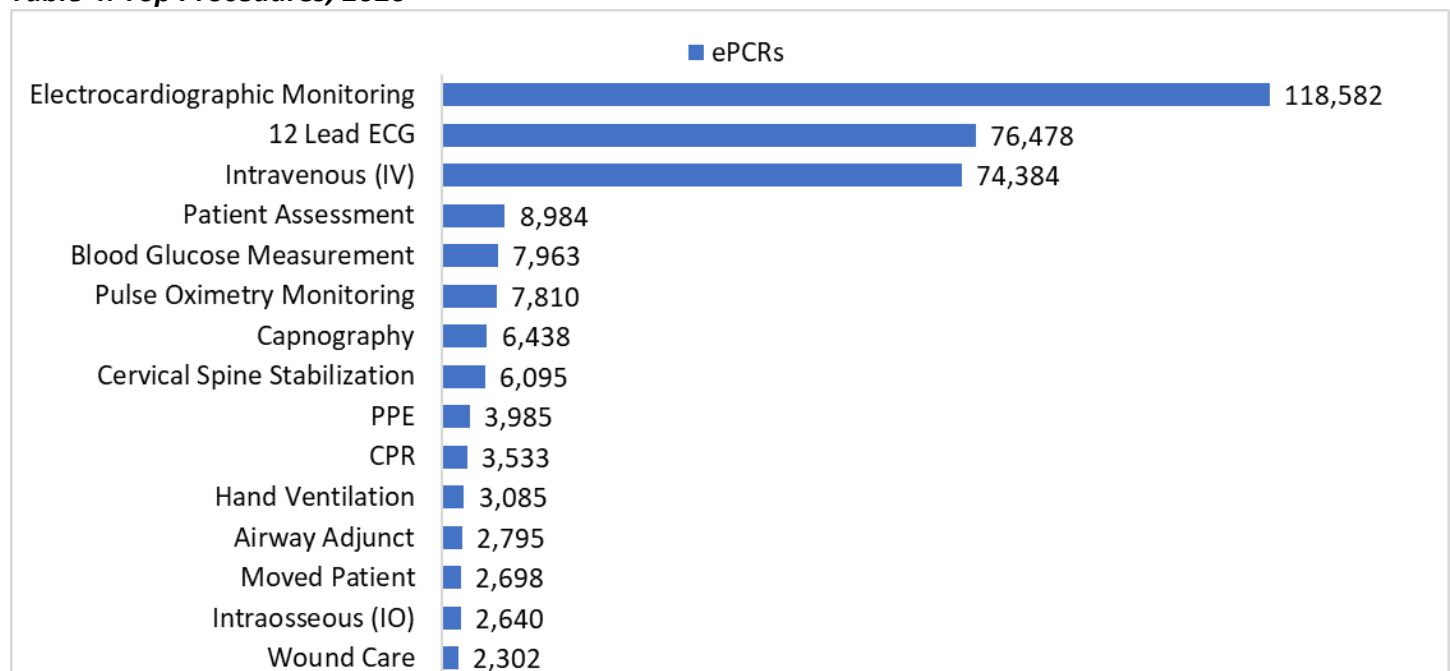


Table 4. Top Procedures, 2020



Medications & Procedures Summary of Findings, 2020

- In 2020, **nearly 60%** of all Riverside County EMS system patient encounters resulted in administration of **at least one medication or procedure**.
- The Riverside County EMS system documented administering **29 medication classifications across approximately 88,000 ePCR records**. A total of **141 unique procedures** grouped into 67 categories were also identified **across nearly 180,000 ePCR records**.
- This results in an average of 1.8 medications and 2.2 procedures administered per patient record. (These averages exclude ePCRs where no medication or procedure was performed as well as ePCRs with a canceled or no patient contact disposition).
- While procedures were performed in the absence of a medication given in nearly half of the records evaluated, most medications were accompanied by at least one documented procedure.
- The impact of the COVID-19 pandemic on medication and procedure usage by EMS is not yet known; however, atypical patterns may emerge as data prior to, and after, the pandemic response is analyzed.
- The tables below provide a full breakdown of Medications (Table 5) and Procedures (Table 6) administered within the Riverside County EMS patient care record system in 2020.

Table 5. Medications Administered, 2020

The following is a complete list of EMS medications documented in 2020, in alphabetical order. “Count” refers to the number of times a medication was given, 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***

Medications	Medication Count	Medication ePCRs	Medication ePCR Percentage
Activated Charcoal	338	329	0.4%
Activated Charcoal (272)	338	329	0.4%
Adenosine	407	368	0.4%
Adenosine (Adenocard) (296)	407	368	0.4%
Albuterol	5,048	4,327	5.2%
Albuterol (Proventil) (435)	5,020	4,309	5.2%
Albuterol (Proventil) Inhaler (90 mg / Metered Dose) (745682)	28	27	0.0%
Albuterol / Ipratropium	1,447	1,443	1.7%
Albuterol / Ipratropium (Combivent, Duoneb) (214199)	1,447	1,443	1.7%
Amiodarone	601	426	0.5%
Amiodarone (Cordarone) (703)	601	426	0.5%
Aspirin	4,725	4,718	5.7%
Aspirin (1191)	4,725	4,718	5.7%
Atropine	377	280	0.3%
Atropine (1223)	377	280	0.3%
Atropine/Pralidoxime	3	3	0.0%
Atropine/Pralidoxime (Duodote) Auto-Injector (2.1 mg/600 mg)(809819)	1	1	0.0%
Atropine/Pralidoxime (Mark-I) Auto-Injector (2 mg/600 mg)(727414)	2	2	0.0%
Calcium Chloride	172	167	0.2%
10 mL Calcium Chloride 10 % Prefilled Syringe (828527)	2	2	0.0%
Calcium Chloride (1901)	157	152	0.2%
Calcium Chloride 10 % 10 mL Prefilled Syringe (828527)	13	13	0.0%
Dextrose	2,744	2,710	3.3%
Dextrose 10% Half Normal Saline (244098)	3	3	0.0%
Dextrose 10% Normal Saline (244099)	1,694	1,673	2.0%
Dextrose 10% Water (237648)	945	938	1.1%
Dextrose 25% Water (260258)	39	38	0.0%
Dextrose 5% Quarter Normal Saline (630800)	5	5	0.0%
Dextrose 50% Water (237653)	58	58	0.1%
Diphenhydramine	754	735	0.9%
Diphenhydramine (Benadryl) (3498)	754	735	0.9%
Epinephrine	9,933	3,866	4.6%
Epinephrine (3992)	41	16	0.0%
Epinephrine (Epipen) Auto-Injector (0.15 mg) (727386)	8	5	0.0%
Epinephrine (Epipen) Auto-Injector (0.3 mg) (727347)	9	7	0.0%
Epinephrine 1:1,000 (1 mg/mL) (328316)	444	319	0.4%
Epinephrine 1:10,000 (0.1 mg/mL) (317361)	8,559	3,211	3.9%
Epinephrine 1:100,000 (Push Dose Epi) (330545)	872	504	0.6%
Fentanyl	9,364	5,980	7.2%

Fentanyl (Sublimaze) (4337)	9,364	5,980	7.2%
Glucagon	484	476	0.6%
Glucagon (4832)	480	472	0.6%
Glucagon Auto-Injector (791870)	4	4	0.0%
Glucose	1,232	1,160	1.4%
Glucose (4850)	1,232	1,160	1.4%
Ipratropium	1,982	1,969	2.4%
Ipratropium (Atrovent) (7213)	1,982	1,969	2.4%
Ketamine	1,873	1,521	1.8%
Ketamine (6130)	1,822	1,472	1.8%
Ketamine 10 mg/mL (330467)	51	49	0.1%
Lidocaine	91	91	0.1%
Lidocaine (Xylocaine) (6387)	87	87	0.1%
Lidocaine 2 % Injectable Solution (317567)	4	4	0.0%
Magnesium Sulfate	78	70	0.1%
Magnesium Sulfate (6585)	78	70	0.1%
Midazolam	1,722	1,435	1.7%
Midazolam (Versed) (6960)	1,722	1,435	1.7%
Morphine	57	37	0.0%
Morphine (7052)	57	37	0.0%
Naloxone	5,901	2,709	3.3%
Naloxone (Narcan) (7242)	5,553	2,546	3.1%
Naloxone (Narcan) Auto-Injector (727348)	341	168	0.2%
Naloxone Nasal Spray [Narcan] (1725061)	1	1	0.0%
Narcan (Cares) (197117)	6	6	0.0%
Nitroglycerin	9,172	5,635	6.8%
Nitroglycerin (0.4 mg) (316365)	6,581	4,850	5.8%
Nitroglycerin (4917)	679	513	0.6%
Nitroglycerin Paste 2% (242946)	1,912	1,900	2.3%
Normal Saline	47,415	42,988	51.7%
Normal Saline (125464)	1,629	1,401	1.7%
Normal Saline (313002)	45,785	41,622	50.0%
Quarter Normal Saline (1301606)	1	1	0.0%
Ondansetron	15,606	14,359	17.3%
Ondansetron (Ondansetron Hydrochloride) 4mg Oral Tablet (104894)	97	96	0.1%
Ondansetron (Zofran) (26225)	15,509	14,269	17.1%
Oxygen	28,914	26,925	32.4%
Oxygen (7806)	28,914	26,925	32.4%
Sodium Bicarbonate	1,815	1,764	2.1%
Sodium Bicarbonate (Cares) (36676)	103	100	0.1%
Sodium Bicarbonate 7.5% (316687)	2	2	0.0%
Sodium Bicarbonate 8.4% (237363)	1,710	1,666	2.0%
Sterile Water	3	3	0.0%
Sterile Water (107129)	3	3	0.0%
Tranexamic Acid	160	160	0.2%
Tranexamic Acid (TXA, Lysteda) (10691)	160	160	0.2%
Grand Total	152,418	83,226	

Table 6. Procedures Performed, 2020

The following is a complete list of EMS procedures documented in 2020, in alphabetical order. “Count” refers to the number of times a medication was given, 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***

Procedures	Procedure Count	Procedure ePCRs	Procedure ePCR Percentage
12 Lead ECG	111,509	76,478	43.7%
12 Lead ECG (268400002)	111,409	76,447	43.7%
ECG Transmission (422952004)	100	98	0.1%
Active External Cooling	226	207	0.1%
Active External Cooling (431774007)	226	207	0.1%
Active External Warming	102	102	0.1%
Active External Warming (431949004)	102	102	0.1%
Airway Adjunct	2,876	2,795	1.6%
Nasopharyngeal Airway (182692007)	1,109	1,096	0.6%
Oropharyngeal Airway (7443007)	1,767	1,753	1.0%
Airway Opened	187	186	0.1%
Airway Opened (232664002)	187	186	0.1%
Airway Suctioning	1,088	924	0.5%
Airway Suctioned (230040009)	967	852	0.5%
Irrigate And Suction Endotracheal Tube (443533003)	7	7	0.0%
Suction Endotracheal Tube (225715000)	73	68	0.0%
Suction Newborn (18540005)	9	9	0.0%
Vomit Removed From Airway (225713007)	32	26	0.0%
Ambulance Requested	3	3	0.0%
Ambulance Requested (185406000)	3	3	0.0%
Assess Airway Device Cuff Pressure	2	2	0.0%
Assess Airway Device Cuff Pressure (448464001)	2	2	0.0%
Assist with Toileting	5	5	0.0%
Assist With Toileting (313420001)	5	5	0.0%
Bleeding Control	867	787	0.5%
Direct Pressure For Bleeding (447686008)	417	402	0.2%
Hemostatic Agent Applied (Quikclot Or Other Dressing) (713147009)	20	19	0.0%
Pressure Dressing For Bleeding (26906007)	329	321	0.2%
Pressure To Artery For Bleeding (233419004)	7	7	0.0%
Tourniquet For Bleeding (20655006)	94	91	0.1%
Blood Glucose Measurement	8,318	7,963	4.6%
Finger-Prick (278450005)	5,337	5,200	3.0%
Glucose Measurement, Blood (33747003)	2,977	2,763	1.6%
Glucose Measurement, Post Glucose Dose (104690002)	4	4	0.0%
Burn Care	51	39	0.0%
Burn Care (133901003)	19	16	0.0%
Burn Dressing Applied (90660004)	32	25	0.0%

Capnography	6,815	6,438	3.7%
EtCO2 Colorimetric Detection (428482009)	37	37	0.0%
EtCO2 Digital Capnography (425543005)	6,778	6,407	3.7%
Cardiac Pacing	240	129	0.1%
Cardiac Pacing (18590009)	240	129	0.1%
Cardioversion	58	45	0.0%
Cardioversion (250980009)	58	45	0.0%
Central Pulses Present	162	140	0.1%
Central Pulses Present (ROSC) (425598000)	162	140	0.1%
Cervical Spine Stabilization	6,497	6,095	3.5%
Cervical Collar Applied (49689007)	5,549	5,543	3.2%
Cervical Spine Stabilization (398041008)	592	588	0.3%
Manual Cervical Spine Stabilization (449199004)	356	353	0.2%
Childbirth	18	18	0.0%
Childbirth (236973005)	18	18	0.0%
Comfort Measures	1,106	1,090	0.6%
Comfort Care Management (385897008)	16	16	0.0%
Comfort Measures (133918004)	795	794	0.5%
Position of Comfort (225994009)	293	292	0.2%
Turn Patient In Bed (359962006)	2	2	0.0%
Comfort Survivors	14	14	0.0%
Comfort Survivors (171007003)	14	14	0.0%
CPAP	1,770	1,326	0.8%
CPAP (47545007)	1,341	1,275	0.7%
CPAP Titration (446573003)	429	275	0.2%
CPR	4,102	3,533	2.0%
Manual CPR (89666000)	3,555	3,274	1.9%
Mechanical Device CPR (429283006)	547	529	0.3%
Decontamination	29	28	0.0%
Decontamination (409530006)	29	28	0.0%
Defibrillation	1,861	719	0.4%
Defibrillation (426220008)	1,861	719	0.4%
Electrocardiographic Monitoring	120,459	118,582	67.8%
3 Lead ECG (428803005)	4,159	4,148	2.4%
Cardiac Monitor Surveillance (88140007)	1,151	1,150	0.7%
Electrocardiographic Monitoring (46825001)	115,149	114,231	65.3%
Endotracheal Tube	369	301	0.2%
Check Endotracheal Tube For Security (225717008)	9	9	0.0%
Check Endotracheal Tube Position By Auscultation (432028000)	66	61	0.0%
Remove Endotracheal Tube (271280005)	35	35	0.0%
Reposition Endotracheal Tube (225716004)	5	5	0.0%
Secure Endotracheal Tube By Hand (429618000)	2	2	0.0%
Secure Endotracheal Tube With Holder (429184008)	250	248	0.1%
Secure Endotracheal Tube With Tape (428626000)	2	2	0.0%
Environmental Management	107	75	0.0%
Environmental Management For Comfort (386284008)	57	57	0.0%
Environmental Management For Safety (385873004)	50	49	0.0%

Extubation of Trachea	2	2	0.0%
Extubation of Trachea (309812005)	2	2	0.0%
Eye Care	83	78	0.0%
Eye Bandaging (225692006)	12	12	0.0%
Eye Irrigation (49999004)	71	67	0.0%
Hand Ventilation	3,115	3,085	1.8%
Hand Ventilation (11140008)	2,946	2,918	1.7%
Hand Ventilation by Bag Valve Mask (425447009)	169	167	0.1%
Heimlich Maneuver	6	6	0.0%
Heimlich Maneuver (Airway) (23690002)	6	6	0.0%
Ice Pack	637	626	0.4%
Chemically-Activated Ice Pack Treatment (229583009)	13	13	0.0%
Cold/Ice Pack Treatment (229585002)	624	613	0.4%
Intraosseous (IO)	2,712	2,640	1.5%
Intraosseous (IO) (430824005)	2,694	2,629	1.5%
Monitoring Of Intraosseous (IO) Access (708010003)	18	18	0.0%
Intravenous (IV)	78,881	74,384	42.5%
Blood Draw For Labs (82078001)	257	257	0.1%
Conversion Of Intravenous Infusion To Saline Lock (425074000)	1	1	0.0%
Intravenous (IV) (392230005)	77,898	73,795	42.2%
Intravenous (IV) Infusion Prior To This Unit's Care (14152002)	170	167	0.1%
IV Catheter Care (410109005)	397	384	0.2%
IV Catheter Removal (424287005)	117	117	0.1%
Venous Puncture (396540005)	41	38	0.0%
Intubation	1,348	1,200	0.7%
Bougie, Device (Physical Object) (26128008)	14	14	0.0%
Cricoid Pressure Applied (241726007)	5	5	0.0%
Intubation Of Existing Tracheostomy Stoma (232685002)	2	2	0.0%
Orotracheal Intubation (232674004)	1,243	1,187	0.7%
Use Of Bougie / Introducer Stylet (397874007)	84	80	0.0%
King Airway	2	2	0.0%
King Airway (426153007)	2	2	0.0%
Laryngoscopy	35	32	0.0%
Flexible Fiberoptic Laryngoscopy (49077009)	2	2	0.0%
Laryngoscopy (28760000)	27	24	0.0%
Laryngoscopy With Foreign Body Removal (19433002)	6	6	0.0%
Lubrication	3	3	0.0%
Lubrication (257883005)	3	3	0.0%
Monitoring of J-tube	4	3	0.0%
Monitoring Of J-Tube (302353008)	4	3	0.0%
Monitoring of Wound Drain	1	1	0.0%
Monitoring Of Wound Drain (710107001)	1	1	0.0%
Mouth-to-Mask/Mouth Ventilation	95	93	0.1%
Mouth-To-Mask/Mouth Ventilation (243180002)	95	93	0.1%
Moved Patient	3,465	2,698	1.5%
Moved Patient (56469005)	3,465	2,698	1.5%
Needle Chest Decompression	93	73	0.0%
Needle Chest Decompression (182705007)	93	73	0.0%

Notify Coroner	89	88	0.1%
Notify Coroner (363049002)	89	88	0.1%
Occlusive Wound Dressing	86	74	0.0%
Occlusive Wound Dressing (22206003)	86	74	0.0%
Orthostatic Vital Signs	611	604	0.3%
Orthostatic Vital Signs (425058005)	611	604	0.3%
Oxygen	161	157	0.1%
Blow By Oxygen Mask (Physical Object) (425478008)	1	1	0.0%
Nonrebreather Oxygen Mask (Physical Object) (427591007)	31	31	0.0%
Oxygen Nasal Cannula (Physical Object) (336623009)	83	82	0.0%
Oxygen Prior To This Unit's Care (57485005)	46	46	0.0%
Patient Assessment	10,164	8,984	5.1%
Continuous Patient Assessment (422618004)	1,362	1,352	0.8%
Initial Patient Assessment (315639002)	8,652	8,648	4.9%
Newborn Continuous Patient Assessment (423589000)	22	16	0.0%
Patient Assessment (Triage) (245581009)	128	128	0.1%
Physical Restraint	2,460	1,630	0.9%
Physical Restraint (386423001)	1,520	1,352	0.8%
Physical Restraint Checked And Maintained (35497000)	940	708	0.4%
Police Requested	23	23	0.0%
Police Requested (184966003)	23	23	0.0%
PPE	4,230	3,985	2.3%
Airborne Precautions (409524006)	579	576	0.3%
Aspiration Precautions (386519006)	3	3	0.0%
Blood And Fluids Precautions (65011002)	88	87	0.0%
Contact Precautions (409529001)	107	105	0.1%
Face Mask/Covering For Patient (465635009)	487	487	0.3%
Isolation (40174006)	21	20	0.0%
Respiratory Secretion Precautions (409525007)	82	82	0.0%
Standard Precautions (409522005)	2,863	2,856	1.6%
Protection of surroundings from individual	1	1	0.0%
Protection Of Surroundings From Individual (18038006)	1	1	0.0%
Psycho-spiritual Comforting	235	228	0.1%
Psycho-Spiritual Comforting (385728004)	235	228	0.1%
Pulse Oximetry Monitoring	7,821	7,810	4.5%
Pulse Oximetry Monitoring (284034009)	7,821	7,810	4.5%
Removal of Foreign Body	12	12	0.0%
Foreign Body Removed From Airway (232707004)	5	5	0.0%
Removal Of Foreign Body (10849003)	6	6	0.0%
Removal Of Foreign Body From Skin (302421003)	1	1	0.0%
Removal of Ring from Finger	13	13	0.0%
Removal Of Ring From Finger (426509009)	13	13	0.0%
Remove Device from Airway	4	4	0.0%
Remove Device From Airway (232708009)	4	4	0.0%
Report	1,448	1,033	0.6%
Report To Nurse (385775004)	1,020	1,018	0.6%
Report To Physician (304562007)	428	425	0.2%

Safety Management	51	51	0.0%
Safety Management (712991000)	51	51	0.0%
Sling	259	252	0.1%
Sling Applied (182558000)	246	245	0.1%
Sling Maintained (81533008)	13	13	0.0%
Splint	1,170	1,136	0.6%
Air Splint Applied (274475000)	326	316	0.2%
Extrication Splint Device (Physical Object) (421925007)	3	3	0.0%
Splint Applied (79321009)	712	700	0.4%
Splint Maintained (10442004)	16	15	0.0%
Vacuum Splint Applied (427996005)	113	111	0.1%
Time of death	58	58	0.0%
Time Of Death (Observable Entity) (398299004)	58	58	0.0%
Tracheostomy Care/Monitoring	4	4	0.0%
Tracheostomy Care/Monitoring (410213006)	4	4	0.0%
Traction	53	49	0.0%
Application Of Skeletal Traction Via The Femur (239656007)	3	3	0.0%
Traction Maintained (48035000)	6	6	0.0%
Traction Splint Applied (302488007)	44	44	0.0%
Unexpected death-Coroner told	19	19	0.0%
Unexpected Death-Coroner Told (Finding) (270115005)	19	19	0.0%
Vagal Maneuver	192	179	0.1%
Vagal Maneuver (128968000)	192	179	0.1%
Wound Care	2,629	2,302	1.3%
Wound Care (225358003)	75	75	0.0%
Wound Dressing (182531007)	2,285	2,116	1.2%
Wound Irrigation (225116006)	269	259	0.1%
Grand Total	391,116	174,816	

For more information, please contact Riverside County EMS Administrator, Trevor Douville tdouville@rivco.org

Report prepared by Riverside County EMS Agency, Data & Reporting Unit, Sean Hakam & Catherine Borna Farrokhi

FOR CONSIDERATION BY EMCC

Attachment C
Page 1 of 1

DATE: June 23, 2021

TO: EMCC

FROM: Catherine Borna Farrokhi, Ph.D. - Data & Reporting Unit

SUBJECT: Annual ePCR Evaluation Report, 2020

ACTION: Received and File Information

Please see attached Riverside County EMS Agency Annual ePCR Evaluation Report, 2020.

http://remsa.us/documents/reports/annual/REMSA_Policy7701_Annual_ePCR_Report_2020_FINAL_20210219.pdf



RIVERSIDE COUNTY EMS AGENCY
ANNUAL EPCR EVALUATION REPORT
2020

FEBRUARY 18TH, 2021
PREPARED FOR RIVERSIDE COUNTY EMS AGENCY, EMERGENCY MANAGEMENT DEPARTMENT

ELECTRONIC PATIENT RECORD EVALUATION REPORT SUMMARY

This past year (January 1st, 2020- December 31st, 2020), has presented some unique trends in data behavior. Following the COVID-19 shutdowns, and stay at home orders, there was a sudden drop in electronic patient care record (ePCRs) volume as well as overall 9-1-1 medical responses. This report aims to create a comprehensive view into the Emergency Medical Services (EMS) system from the perspective of ePCR submissions. [REMSA policy 7701](#) requires electronic patient care reports to be completed in compliance with Title 22, Chapter 4, Article 8, and Section 100170 and uploaded into the electronic system within 2 hours of patient transfer to an emergency department or prior to the end of shift when subsequent emergency response is required. An analysis was done on the electronic patient records (ePCR) system which found that less than 1% of ePCR submissions are entered and/or modified the following day which declined to nearly 0% (0.01%) after 7 days. To get a more in depth look at the efficiency of the ePCR entry, data was also pulled each day in weekly increments, and evaluated based on any changes in count or record for the previous days and/or months. The data was also evaluated based on total count of ePCR submissions, hour of day, day of week, transport type, and response. This was done in order to understand the efficiency and overall layout of Riverside County EMS data collection system for the 2020 year.

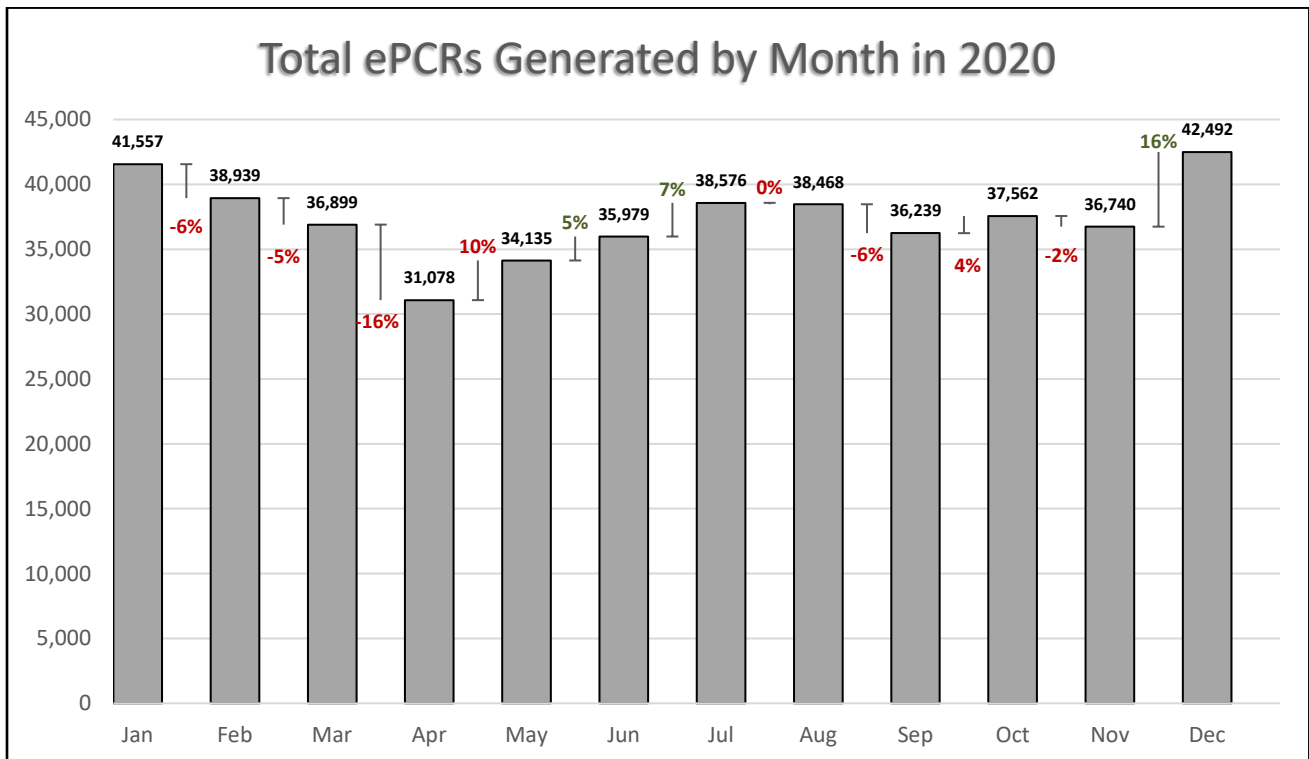
CONCLUSION: Overall, this evaluation noted that less than 1% of records were entered or modified beyond 24 hours, suggesting most records are entered in compliance with ePCR documentation standards of [REMSA policy 7701](#). After three months, there was an average increase of 0.5% in report submissions. For the entire year, there was a total of 448,664 reports generated. December displayed the greatest number of ePCRs generated in 2020 for a single month with 42,492 reports. More incidents occurred during the 3PM hour (hour 15) than any other. Weekdays generated a greater volume of incidents than weekends. Ambulance records made up the majority of reports submitted each month except for December 2020 which displayed a greater frequency of records from First Response agencies. Emergency responses accounted for nearly 90% (87.7%, 393,325 reports) of all ePCRs submitted, and Riverside County Fire Department and AMR-Riverside submitted the majority of the ePCRs for the year (61%, 273,978 reports).

ePCR Evaluation

METHODOLOGY

Data was extracted each day from ImageTrend Elite® using the Report Writer analysis feature. Variables selected were part of the National EMS Information System (NEMSIS) universal standard for how patient care information resulting from an emergency 911 call for assistance is collected. The variables extracted were Incident Date, Incident Month Name-Year, Incident Week, Agency Name (dAgency.03), Response Type of Service Requested (eResponse.05), Incident Patient Disposition (eDisposition.12), Scene Incident Location Type (eScene.09), and Count of Incident Patient Care Record Number-PCR (eRecord.01). Response categories were developed and collapsed as follows: Emergency- 911 Response; Non-Emergency- Interfacility Transport & Medical Transport; and Other- Intercept, Mutual Aid, Public Assistance.

Figure 1: Total Number of ePCRs Generated in 2020 by Month



The figure above displays the counts of ePCRs that were generated each month and the variation from month to month. The total number of electronic patient records (ePCRs) generated in 2020 was 448,664. The greatest decrease in ePCR volume occurred from March to April (-16%). This decline in volume followed the COVID-19 epidemic response which created an overall decrease in EMS utilization. The greatest increase occurred from the month of November to December in 2020 (+16%).

Figure 2: Average Percentage Difference in ePCR Delivery by Day

Figure 2 represents the average change in ePCR submission 1-7 days after the incident occurred. The highest rate of change occurred 1 day later with a 0.4% increase in the count of ePCRs, and that rate incrementally decreased on days 2-7. These findings state 99.5% of all intended ePCRs were submitted within 1-day of the incident.

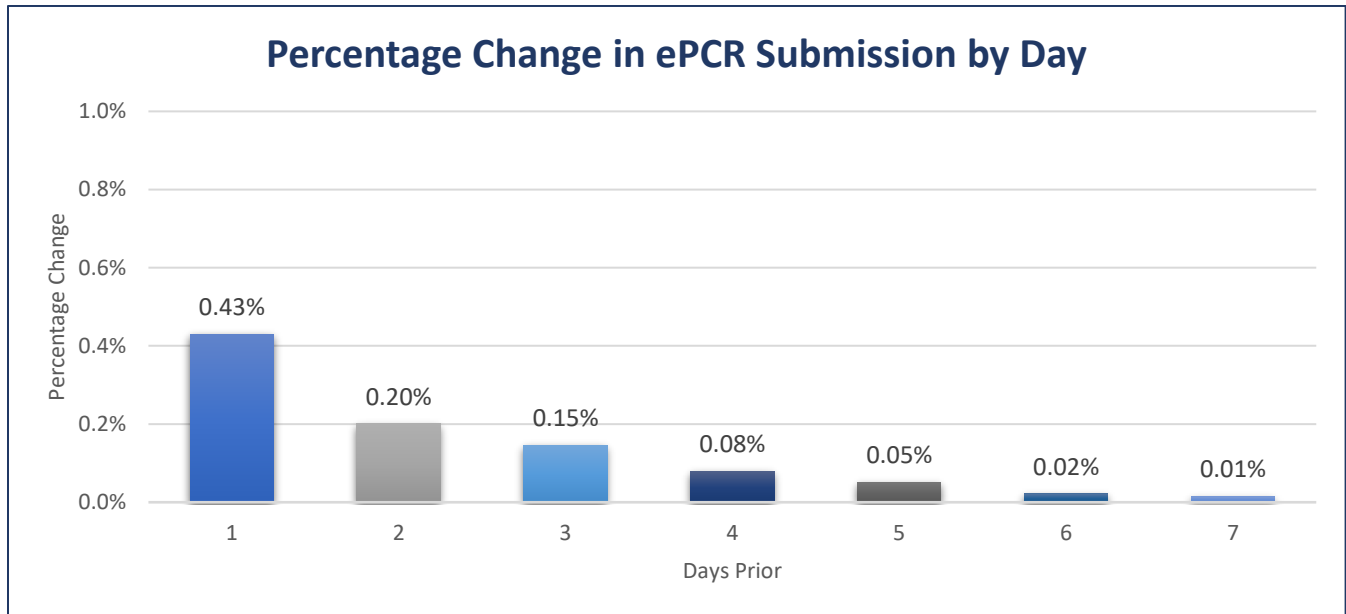


Figure 3: Percentage Difference in ePCR Submission after 3 months

The figure below represents change in ePCR submissions following three months. Two week's worth of ePCRs were collected daily for one week and evaluated again three months later. The average rate of change was found to be a 0.5% increase 3 months later. These findings imply that the completion rate remains stable over time, and supports that over 99% of intended ePCRs are submitted within the same day as the incident.

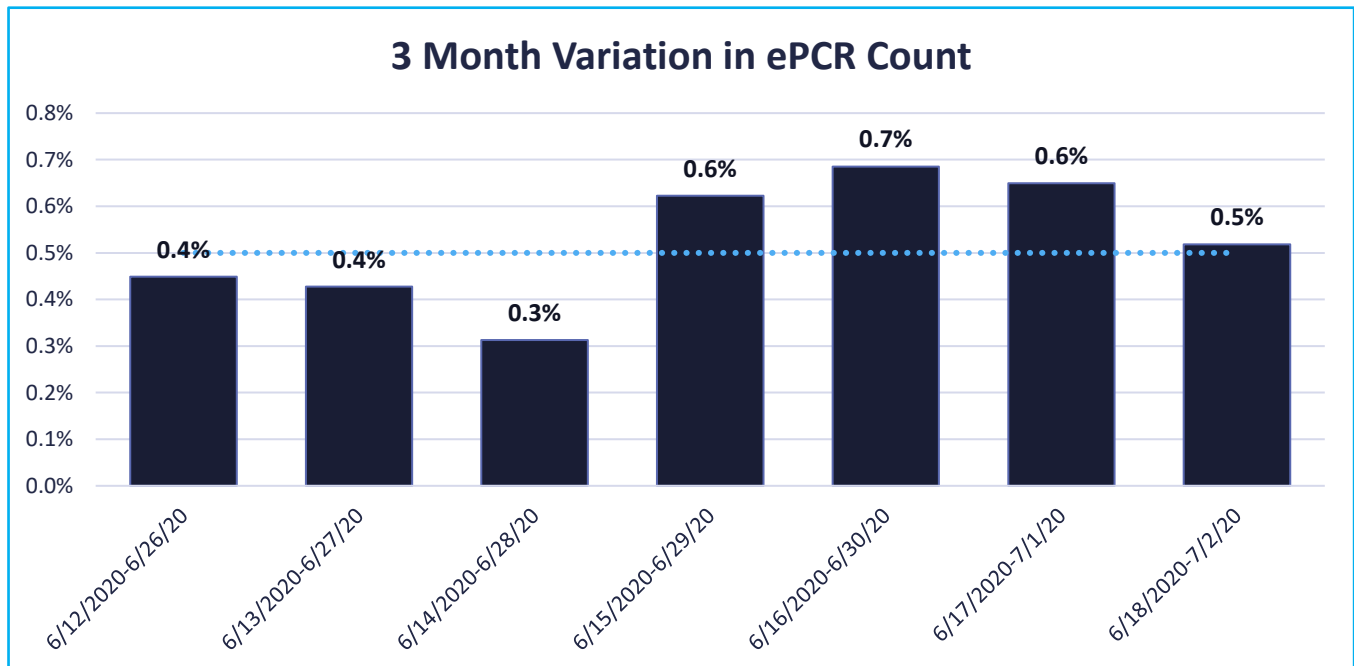


Figure 4: Total ePCRs Generated in 2020 by Incident Hour of Day

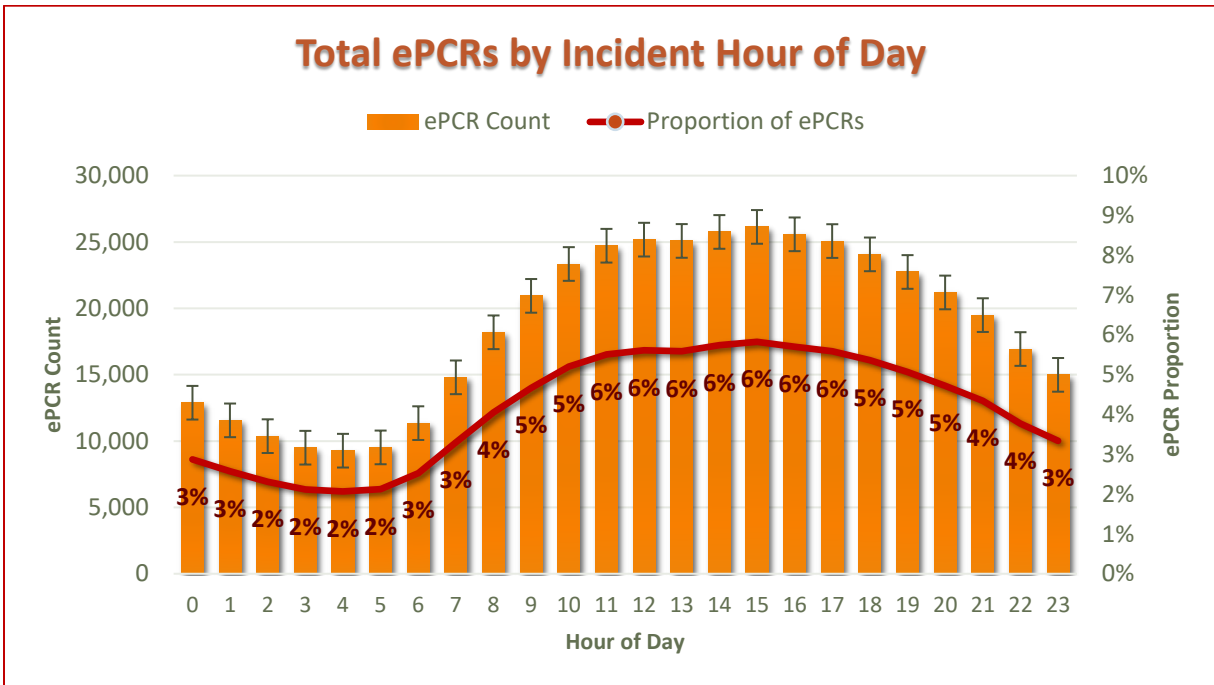


Figure 4 above represents the distribution of EMS incidents by ‘hour of day’ reported in each ePCR generated. It shows that the majority of incidents occurred between the hours of 9AM-9PM (69%). Error bars that do not overlap suggest significant difference between those hours. For instance, there is a significant difference between EMS incidents that occurred at 7AM and 8AM.

Figure 5: Total ePCRs Generated in 2020 by Incident Day of Week

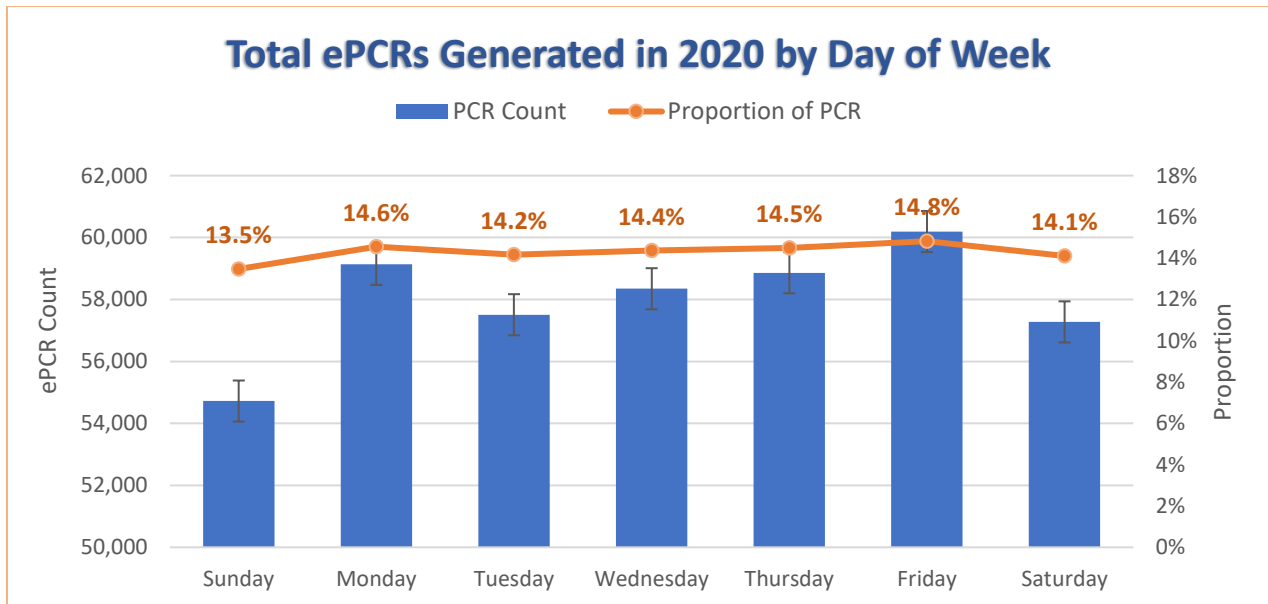


Figure 5 above represents the distribution of EMS incidents by the ‘day of week’ reported in each ePCR generated. Sunday represents the day of the week with the fewest ePCRs generated/fewest EMS responses at 13.5% (54,721 records). Error bars that do not overlap suggest significant difference among those days. For example, there is a significant difference in ePCRs generated on Fridays (60,195 records) compared to Sundays (54,721 records).

Figure 6: Total ePCRs Generated by EMS Provider Types in 2020 (Monthly Aggregate)

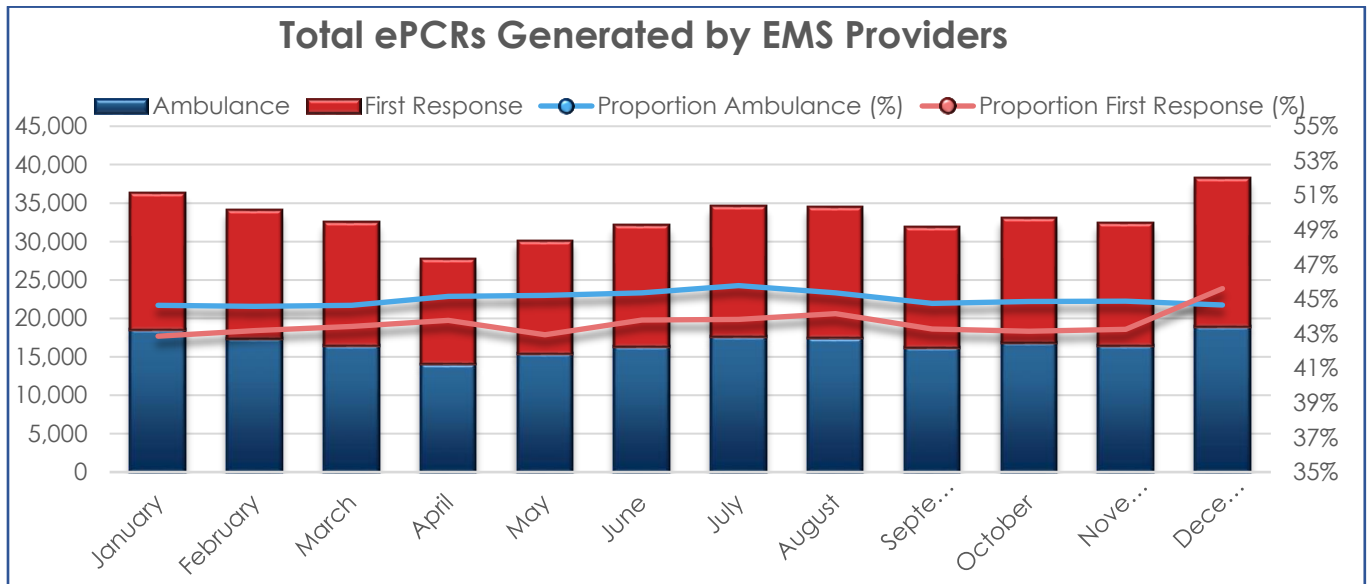


Figure 6 above represents the total number of electronic patient care records generated by EMS Providers in 2020. ‘Ambulance’ accounts for ground ambulance transport providers in Riverside County, and ‘First Response’ includes all fire department agencies. December was the month with the greatest number of ePCRs for both Ambulance and First Response agencies. It was also the only month in which the proportion of first response records surpassed the proportion of ambulance transport records according to ePCR submissions. April was the month with the lowest number of ePCRs for both Ambulance and First Response providers.

Figure 7: Change Over Time in ePCR Submissions

The figure below displays ‘change over time’ in ePCR submission over three days by agency type. ‘Ambulance’ accounts for ground ambulance transport providers in Riverside County, and ‘First Response’ includes all fire department agencies. The rates are shown as percentages and counts to get a more comprehensive look at changes in ePCR submissions. The data indicates First Response agencies submit the largest volume of delayed reports over the course of three days; however, the total delayed records make up less than 1% of records and most of those are submitted the next day, with nearly no delayed records submitted by day three.

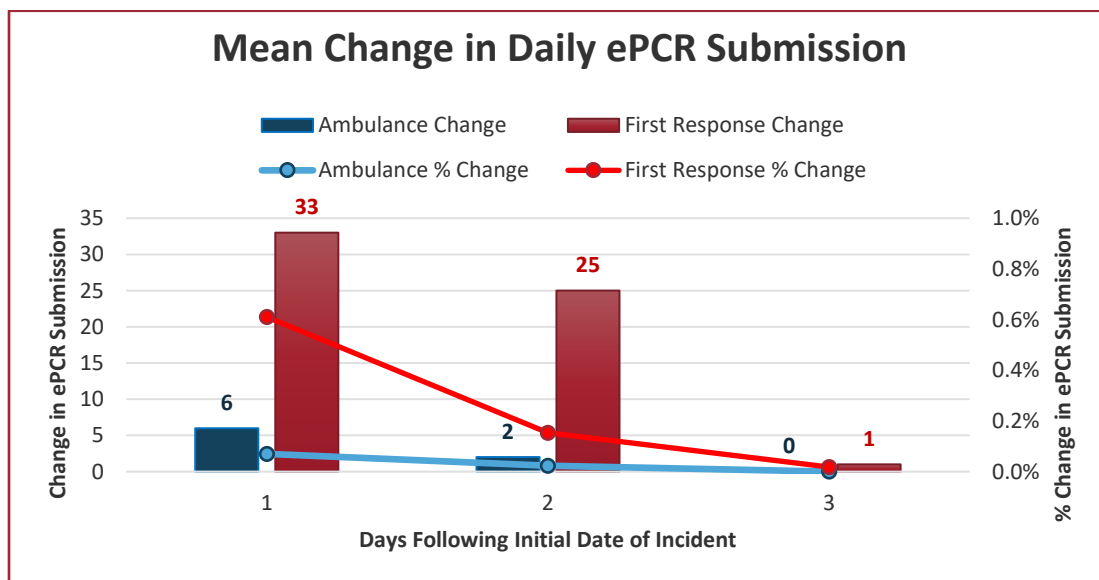


Figure 8: ePCR by Response Type

The figure below represents the distribution of ePCRs generated by each type of EMS response in 2020 by 9-1-1 'Emergency Response', 'Non-emergency Response' (interfacility or medical), and 'All Other Classifications'. Emergency responses made up the majority of ePCRs generated throughout 2020 (393,325; 87.7%). December had the greatest number of emergency response records (37,927 reports), while January displayed the greatest number of non-emergency response records (5,284 reports). A total of 272 records did not have a response type.

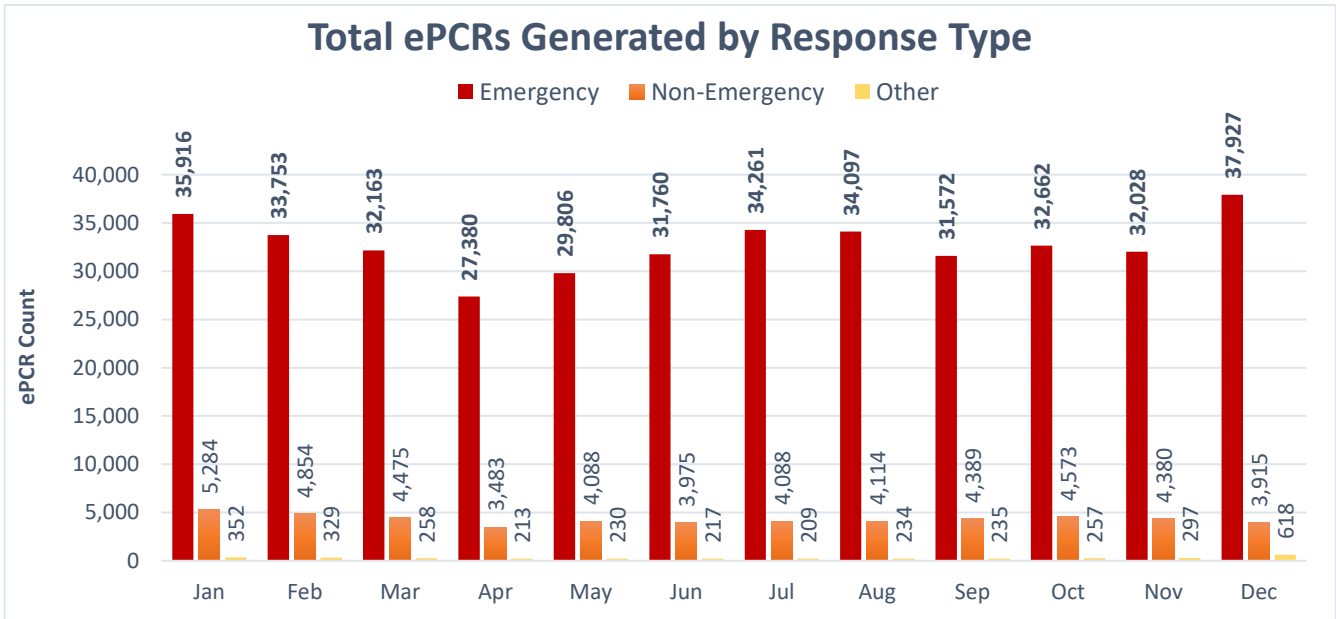


Figure 9: Incident Patient Disposition by Total Count/Proportion of All ePCRs

The figure below represents the total number and proportion of ePCRs in 2020 by Incident Patient Disposition. Patient incident disposition is taken from NEMSIS value eDisposition.12. This data shows most patients encountered were treated and transported by an EMS unit (290,248 records, 65%). Approximately, 15% of the reports submitted were documented as canceled calls.

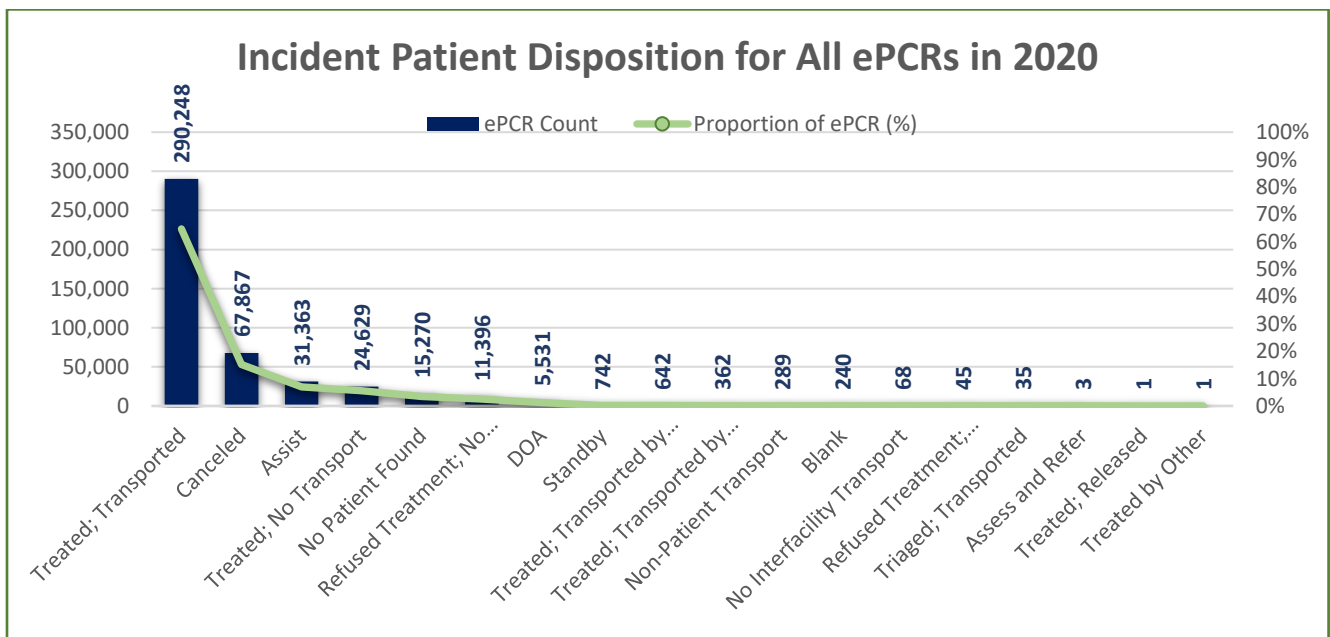
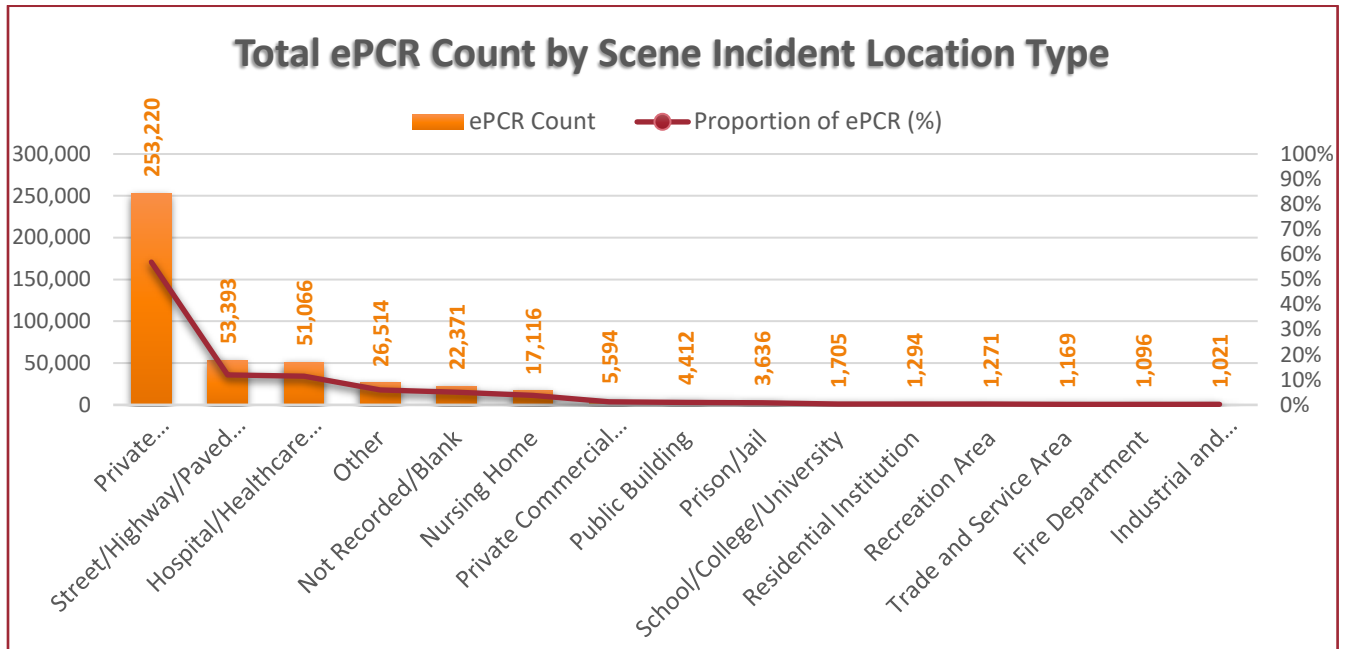
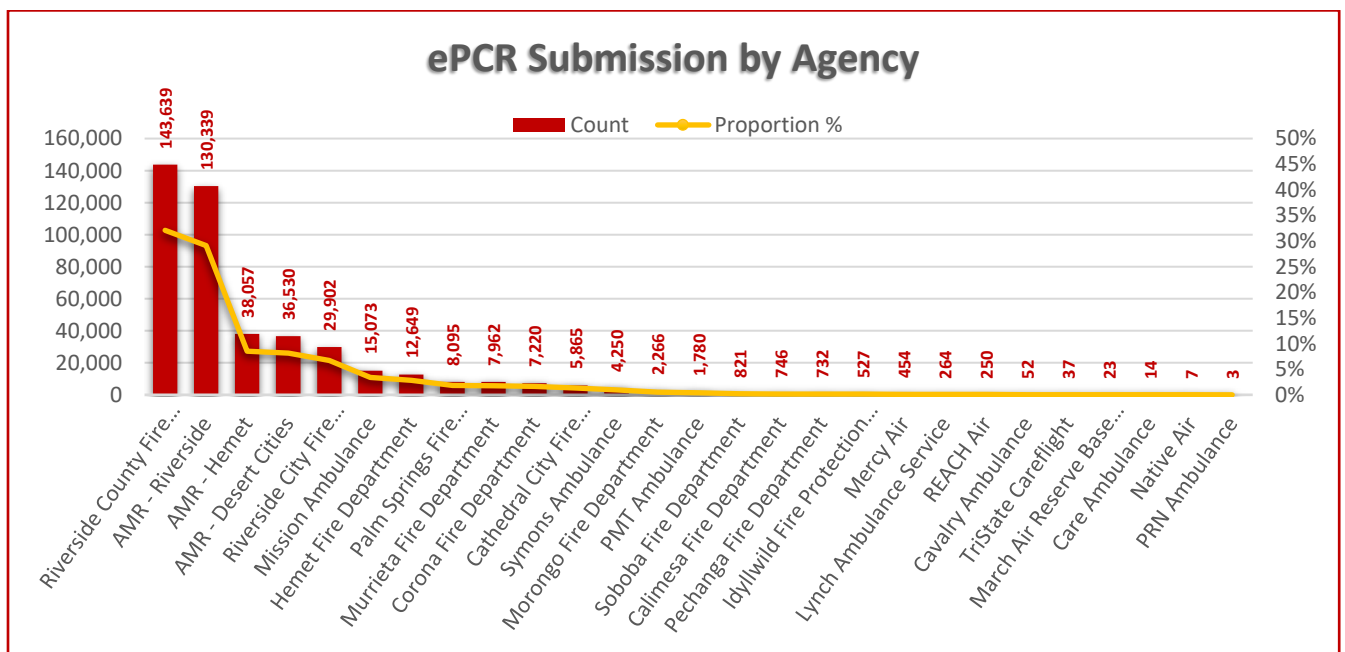


Figure 10: Total ePCR Count by ‘Scene Incident Location Type’ (see Appendix for full breakdown)



The figure above displays the total number and proportion of ePCRs in 2020 by ‘Scene Incident Location Type’. The 15 scene types with greatest frequency of records are shown in this figure. There were more than 65 different location types that were then collapsed into 29 categories (shown in appendix). Most of the incidents occurred at a private residence or apartment (253,220 records, 57%). 5% (22,371 records) of the total ePCRs submitted did not include a scene incident location type, shown as “Not Recorded/Blank”.

Figure 11: Total Number of ePCRs Generated by Agency



The figure above shows the distribution of EMS patient care reports submitted by each provider agency in 2020. Riverside County Fire Department represents the highest number of ePCRs generated in 2020 with 143,639 reports. AMR- Riverside had the 2nd highest with 130,399 reports.

References

- Riverside County Emergency Medical Services Agency Policy 7701
<https://www.remsa.us/policy/7701.pdf>
- State of California. California Code of Regulations, Title 22. Social Security, Division 9. Prehospital Emergency Medical Services. State of California Emergency Medical Services Authority / Health and Human Services Agency. 2014.
<http://www.emsa.ca.gov/Media/Default/PDF/Title%2022%20Division%209%20Regulations.pdf#View=FitV>
- Riverside County Emergency Medical Services Agency Report. All EMS System ePCRs - Week 15, 2019.
<http://remsa.us/documents/reports/APOT/Week15ePCRs.pdf>

For more information, please contact Riverside County EMS Administrator, Trevor Douville tdouville@rivco.org

Report prepared by Stephani Harrington & Catherine Borna Farrokhi, Data & Reporting Unit, Riverside County EMS Agency

Appendix

Table 1. The table below is in reference to Figure 10 of this report which outlines the Incident Location Scene Type”. It includes all scene types entered in eScene.09 field to describe the incident scene type.

Original Scene Location Type	Count	Scene Location Type	Count	Proportion
Airport/Transport Center	754	Airport/Transport Center	754	0.17%
Beach/Ocean/Lake/River	175	Beach/Ocean/Lake/River	175	0.04%
Farm	4	Farm/Ranch	254	0.06%
Farm/Ranch	250			
Fire Department	1,096	Fire Department	1,096	0.24%
Health care provider office	354	Hospital/Health Care Provider Office/Clinic	51,066	11.38%
Healthcare provider office/clinic	7,776			
Hospital	40,613			
Urgent care	2,323			
Health Club/Gym	314	Health Club/Gym	314	0.07%
Industrial and construction area	26	Industrial and Construction Area	1,021	0.23%
Industrial and construction area as the place of occurrence of the external cause	7			
Industrial or construction area	988			
Military base	43	Military Base	43	0.01%
Institutional (nonprivate) residence	392	Non-Private Residence	504	0.11%
Institutional (nonprivate) residence as the place of occurrence of the external cause	112			
Not Recorded	52	Not Recorded/Blank	22,371	4.99%
(blank)	22,319			
Nursing home	1,523	Nursing Home	17,116	3.81%
Skilled Nursing Facility	15,593			
Other	23,386			
Other places	2,605	Other	26,514	5.91%
Other places as the place of occurrence of the external cause	523			
Other ambulatory health services establishments	316	Other Health Service Facility	406	0.09%
Other ambulatory health services establishments as the place of occurrence of the external cause	90			
Prison	2	Prison/Jail	3,636	0.81%
Prison/Jail	3,634			
Private Commercial Establishment	5,594	Private Commercial Establishment	5,594	1.25%
Non-institutional (private) residence	17,269	Private Residence/Apartment	253,220	56.43%
Non-institutional (private) residence as the place of occurrence of the external cause	3,552			
Private Residence/Apartment	232,399			
Public Building	4,412	Public Building	4,412	0.98%
Railroad Track	93	Railroad Track	93	0.02%
Recreation area	1,271	Recreation Area	1,271	0.28%
Residential institution	1,294	Residential Institution	1,294	0.29%
School, other institution and public administrative area	395	School/College/University	1,705	0.38%
School, other institution and public administrative area as the place of occurrence of the external cause	154			
School/College/University	1,156			
Sports and athletics area	109	Sports and Athletics Area	141	0.03%

Sports and athletics area as the place of occurrence of the external cause	32			
Street, highway and other paved roadways as the place of occurrence of the external cause	744	Street/Highway/Paved Roadway	53,392	11.90%
Street and Highway	49,248			
Street, highway and other paved roadways	3,400			
Ambulatory surgery center	9	Surgery Center	13	0.00%
Ambulatory surgery center as the place of occurrence of the external cause	4			
Swimming Pool	98	Swimming Pool	214	0.05%
Swimming pool (public)	1			
Swimming-pool in single-family (private) house or garden as the place of occurrence of the external cause	10			
Swimming-pool of boarding-house as the place of occurrence of the external cause	1			
Swimming-pool of mobile home as the place of occurrence of the external cause	3			
Swimming-pool of nursing home as the place of occurrence of the external cause	5			
Swimming-pool of other non-institutional residence as the place of occurrence of the external cause	3			
Swimming-pool of prison as the place of occurrence of the external cause	4			
Swimming-pool on military base as the place of occurrence of the external cause	4			
Swimming-pool, boarding-house	9			
Swimming-pool, mobile home	7			
Swimming-pool, nursing home	18			
Swimming-pool, other institutional (nonprivate) residence	12			
Swimming-pool, other non-institutional (private) residence	12			
Swimming-pool, prison	14			
Swimming-pool, reform school	1			
Swimming-pool, single-family residence	12			
Trade and service area	999	Trade and Service Area	1,169	0.26%
Trade and service area as the place of occurrence of the external cause	170			
Unspecified place	245	Unspecified Place	245	0.05%
Transport vehicle as the place of occurrence of the external cause	8	Vehicle	8	0.00%
Wilderness area	691	Wilderness Area	691	0.15%