



PREHOSPITAL MEDICAL ADVISORY COMMITTEE MEETING AGENDA (PMAC)

PMAC MEMBERS PER POLICY 8202:

Air Transport Provider Representative
11-Brian Harrison

American Medical Response
5-Douglas Key
Seth Dukes, MD (Chair)

BLS Ambulance Service Representative
12-Lori Lopez

Cathedral City Fire Department
5-Justin Vondriska

Corona Regional Medical Center
1-Robert Steele, MD
4-Tamera Roy

County Fire Chiefs' Non-Transport ALS Provider
10-VACANT

County Fire Chiefs' Non-Transport BLS Provider
9-Phil Rawlings

Desert Regional Medical Center
1-Joel Stillings, D.O
4-G. Stanley Hall

Eisenhower Health
1-Mandeep Daliwhal, MD (Ibanez)
4-Tasha Anderson

EMT / EMT-P Training Programs
6-Maggie Robles

EMT-at-Large
13 David Olivas

Paramedic-at-Large
14-Patrick Anderson

Hemet Valley Medical Center
1-Todd Hanna, MD
4-Victoria Moor

Idyllwild Fire Protection District
5-Patrick Reitz

Inland Valley Regional Medical Center
1-Zeke Foster, MD
4-Daniel Sitar

JFK Memorial Hospital
1-Timothy Rupp, MD
4- Evelin Millsap

Kaiser Permanente Riverside
1-Jonathan Dyreyes, MD
4-Carol Fuste

**This Meeting of PMAC is on:
Monday, February 22, 2021
9:00 AM to 11:00 AM
Virtual Session via Microsoft TEAMS**

- 1. CALL TO ORDER & HOUSEKEEPING (3 Minutes)**
Seth Dukes, MD (Chair)
 - 2. VIRTUAL ATTENDANCE (taken based on participant list)**
Evelyn Pham (REMSA)
 - 3. APPROVAL OF MINUTES (3 Minutes)**
November 16, 2020 Minutes— Seth Dukes, MD (Attachment A)
 - 4. STANDING REPORTS**
 - 4.1.** Trauma System—Shanna Kissel (Attachment B)
 - 4.2.** STEMI System— Leslie Duke (Attachment C)
 - 4.3.** Stroke System— Leslie Duke (Attachment D)
 - 5. Other Reports**
 - 5.1.** EMCC Report – Dan Bates
 - 6. DISCUSSION ITEMS, UNFINISHED & NEW BUSINESS**
 - 6.1.** Unfinished Business –
 - 6.1.1.** PMAC Representation
 - 6.1.1.1.** RCFCA Non-Transport ALS provider position
 - 6.1.1.2.** EMT-at-Large position
 - 6.1.2.** HEMS Unified Protocol – Brian Harrison, Mercy Air
 - 6.2.** CQI Update – Lisa Madrid (Attachment E = Attached Reports)
 - 6.3.** Video Laryngoscopy – Stephen Patterson, MD, RCH
 - 6.4.** Research Study: Use of Ultrasound by EMS – Reza Vaezazizi, MD
 - 6.5.** Education / Policy Update – Dustin Rascon
 - 6.6.** RODA Grant – Public Health
 - 6.7.** COVID Update – Misty Plumley
 - 6.8.** PMAC November Date
 - 6.9.** Action Item Review – REMSA Clinical Team
- 7. REQUEST FOR DISCUSSIONS**
Members can request that items be placed on the agenda for discussion at the following PMAC meeting. References to studies, presentations and supporting literature must be submitted to REMSA three weeks prior to the next PMAC meeting to allow ample time for preparation, distribution and review among committee members and other interested parties.

Loma Linda University Med. Center Murrieta

1-Kevin Flaig, MD
4-Kristin Butler

Menifee Valley Medical Center

1-Todd Hanna, MD
4-Janny Nelsen

Kaiser Permanente Moreno Valley

1-George Salameh, MD
4-Katherine Heichel-Casas

Palo Verde Hospital

1-David Sincavage, MD
4-Carmelita Aquines

Parkview Community Hospital

1-Chad Clark, MD
4-Guillean Estrada

Rancho Springs Medical Center

1-Zeke Foster, MD
4-Sarah Young

Riverside Community Hospital

1-Stephen Patterson, MD
4-Sabrina Yamashiro

Riverside County Fire Department

5-Scott Visyak
8-

Riverside County Police Association

7-Sean Hadden

Riverside University Health System Med. Center

1-Michael Mesisca, DO (Vice Chair)
4-Lori Maddox

San Geronio Memorial Medical Center

1-Richard Preci, MD
4-Trish Ritarita

Temecula Valley Hospital

1-Pranav Kachhi, MD
4-Jacquelyn Ramirez

Trauma Audit Comm. & Trauma Program Managers

2-
3-Charlie Hendra

Ex-officio Members:

1-Cameron Kaiser, MD, Public Health Officer
2-Reza Vaezazizi, MD, REMSA Medical Director
3-Bruce Barton, REMSA Director
4-Jeff Grange, MD, LLUMC
5-Phong Nguyen, MD, Redlands Community Hospital
6-Rodney Borger, MD, Arrowhead Regional Medical Center

8. ANNOUNCEMENTS (15 Minutes)

This is the time/place in which committee members and non-committee members can speak on items not on the agenda but within the purview of PMAC. Each announcement should be limited to two minutes unless extended by the PMAC Chairperson.

9. NEXT MEETING / ADJOURNMENT (1 Minute)

—Virtual Session via web platform

Members are requested to please sit at the table with name plates in order to identify members for an accurate count of votes

Please come prepared to discuss the agenda items. If you have any questions or comments, call or email Evelyn Pham at (951) 358-5029 / epham@rivco.org. PMAC Agendas with attachments are available at: www.rivcoems.org. Meeting minutes are audio recorded to facilitate dictation for minutes.

PMAC Draft Minutes
November 16, 2020

TOPIC	DISCUSSION	ACTION
1. CALL TO ORDER	PMAC Chair Dr. Seth Dukes called the meeting to order at 9:04 a.m.	
2. Virtual Attendance	Attendance taken based on participant list on Zoom.	
3. Approval of Minutes		The August 24, 2020 PMAC meeting minutes were approved with no changes.
4. STANDING REPORTS		
4.1 Trauma System Updates	<p>2019 Trauma plan update has been submitted to EMSA and is pending approval.</p> <p>Traumatic arrest data is now reported out at TAC and will be a standing report for the committee.</p> <p>Trauma diversions are now being reported out monthly to APOT reports.</p>	Information only.
4.2 STEMI System Updates	<p>REMSA has hired Leslie Duke as their full-time Specialty Care System Coordinator for the STEMI and Stroke Programs. Dan Sitar's consultant contact will be phased out by the end of November 2020.</p> <p>The REMSA STEMI System Advisory Committee has begun to meet quarterly in regional meetings with the ICEMA STEMI CQI Committee.</p> <p>STEMI specific education is being finalized and will be ready for the Spring 2021 Policy Update Course.</p> <p>An annual EMS plan update will be sent out to the State for approval. Goals for 2021 are included in the update and pending approval.</p> <p>No changes on STEMI treatment policies.</p> <p>The next STEMI Committee meeting is on January 12th, 2021 via online platform.</p>	Information only.
4.3 Stroke System Updates	<p>Stroke specific education is being finalized and will be ready for the Spring 2021 Policy Update course.</p> <p>Isolated stroke diversion was eliminated on July 1st, 2020.</p> <p>To align with other specialty care programs, each designated stroke center will be required to maintain a dedicated recorded phone or radio line for all incoming EMS patients by July 1st, 2021.</p> <p>The annual EMS plan update will be sent to the State for approval. Goals for 2021 are included in the update and pending approval.</p> <p>The REMSA Stroke System Advisory Committee is planning to regionalize one of their quarterly meetings with the ICEMA Stroke CQI Committee.</p> <p>No changes on stroke treatment policies.</p>	Information only.

PMAC Draft Minutes
November 16, 2020

	The next Stroke Committee meeting is on February 11 th , 2021.	
5. OTHER REPORTS		
5.1 EMCC Report	<p>EMCC's last meeting in August focused on spreading the word and situational awareness regarding the COVID response. Discussed 5150s taking a major role in APOD along with the surge. A 5150-task force has been developed and further conversation on this topic will be reviewed at the next meeting in December. COVID cases have been trending upward again and Dan reminded providers to stay vigilant and safe, also reach out if any assistance is needed.</p> <p>The next EMCC meeting is on December 16th, 2020.</p>	Information only.
6. DISCUSSION ITEMS, UNFINISHED & NEW BUSINESS		
6.1 Unfinished Business	Unfinished business	
<p>6.1.1 PMAC Representation</p> <p>6.1.1.1 Resignation of Air Transport Providers Representative</p> <p>6.1.1.2 Changes in RCFCA Non-Transport ALS Provider Position</p>	<p>Brian Harrison, Mercy Air accepted his nomination as the new Air Transport Provider Representative. Mercy Air and REACH has agreed to alternate years as representative for air transport providers. Brent Lopez from REACH will take on the following year. PMAC approved Brian Harrison as the new representative for 2021.</p> <p>RCFCA Non-Transport ALS provider position will be tabled and reported back to PMAC after their next meeting on Thursday.</p> <p>EMT-at-Large David Olivas has retired. Nominations will open at the next PMAC Meeting.</p> <p>Paramedic-at-Large position, Patrick Anderson, Riverside City Fire and Jacob Ragsdale, Palm Springs Fire were nominated. Patrick Anderson gave a brief presentation on behalf of his nomination. PMAC voted and approved Patrick Anderson, Riverside City Fire as the new Paramedic-at-Large representative.</p>	<p>Brian Harrison, Mercy Air approved as the new Air Transport Provider Representative for 2021.</p> <p>Patrick Anderson, Riverside City Fire approved as the new Paramedic-at-Large representative.</p>
6.2 CQI Update	<p>CQI reports attached to the agenda, which includes medical cardiac arrest and traumatic cardiac arrest will become standing items and placed on the SCOPE dashboard to be updated more frequently.</p> <p>Helicopter EMS calls by provider 2020 was presented in a map and will be discussed further at the next CQILT meeting.</p> <p>REMSA is working on getting the FirstPass system up and running. More details will be provided when it is finalized.</p> <p>The next CQILT meeting RUHS will discuss ketamine expanded uses in pediatrics.</p> <p>Next CQILT meeting is on January 21st, 2021 via web platform</p>	Information only.

PMAC Draft Minutes
November 16, 2020

<p>6.3 Literature Review</p>	<p>Literature review that was published in September 2020 on association of intra-arrest transport vs continued on-scene resuscitation with survival to hospital discharge among patients with out-of-hospital cardiac arrest was discussed. The study uses a look-back in the resuscitation outcome consortium registry. The findings from the literature shows the patients that were transported during resuscitation during CPR did worse, vs patients who were resuscitated on scene. It suggests that the concept of staying on scene and aggressively resuscitating for medical arrests results in better hospital discharge. This study also aligns with the same principles we have adopted over the last year or so in our protocols and education.</p> <p>Dan Davis, Air Methods commented that they have operationally been using the same methodology as the literature internally from a document to incorporate some of these ideas to their crews.</p>	<p>Information only.</p>
<p>6.4 Education/ Policy Update</p>	<p>In response to the poll that was sent out by REMSA to field providers and stakeholders on their perception of the current policy and procedure manual, REMSA has come up with a completely new version of the policy manual based on their feedback. Dustin Rascon presented with a PowerPoint presentation on an overview of the changes and new policy format which includes the addition of the 100 series and modifications to the 4000 series. The 4000 series will also introduce new and updated 4100 series policy with weight conversion matrix, skills list, ALS drug index and the do not attempt/discontinue resuscitation policy.</p> <p>Going forward in Spring 2021, REMSA will no longer reference, use or publish policy #4102 (Universal Patient Protocol). All necessary information is now included in the individual treatment protocols in policy #4104 (skills list) or both. REMSA will no longer reference use of public policy 7201 (Purpose Statement – Intro to Performance Standards) and/or policies 7301 through 7602 and policy 9102 (References).</p> <p>Further instances of and references to “Broselow Tape”, “King Airway(s)” and or “Rescue airway(s)”, “Anxiety associated with pain” (4204), “Anxiety associated with traumatic injury or injuries” (4302) have been found and removed as well.</p> <p>Public comment will be available and open next week for stakeholders to provide feedback on these changes and close by mid-December before finalizing and implementation for Spring 2021.</p> <p>After feedback is received, the changes will be available in a PowerPoint presentation for train to trainers to use in their education/training.</p>	<p>Information only.</p>

PMAC Draft Minutes
November 16, 2020

6.5 BVM, CPAP Device	Gad on behalf of Cal Fire asked to table this agenda item for an indefinite time. The trail study on ambulance program and the use of the new BVM CPAP device was unable to start due to the lack of response from the manufacturer/vendor. He thanked PMAC for their consideration and will follow up when they are able to contact the vendor.	Information only.
6.6 HEMS Unified Protocol	Brian Harrison, Mercy Air presented with a PowerPoint for their proposal of HEMS Unified Scope of Practice. Their goal is to establish a uniform approach to patient care between the qualified Paramedic and RN partner during patient care, with the purpose to ensure proper balance of work while avoiding task saturation to ensure the highest quality of patient care. The presentation included case reviews and data to support their proposal. PMAC deliberated on the idea and due to the lack of time, PMAC decided their proposal warrants further discussion before reaching a decision and has decided to table this item to continue at the next PMAC meeting.	Information only.
6.7 Video Laryngoscopy	Tabled to next PMAC meeting.	
6.8 COVID update	Riverside County is continuing our COVID-19 response via the MH DOC. Currently, Riverside County is in the purple tier assignment, meaning widespread risk level. The county will continue testing efforts, engaging providers to be annually fit tested and monitoring PPE inventory and burn rates.	
6.9 Legislation Update	The new “Kobe Bryant Privacy Law” bans accident scene photography by first responders. January 1 st , 2021 the law goes into effect, making it a misdemeanor for first responders to take unauthorized photographs of deceased persons at accident or crime scenes.	
6.10 PMAC 2021 Meeting Dates	Monday, February 22, 2021 Monday, May 17, 2021 Monday, August 23, 2021 Monday, November 15, 2021 From 9:00 – 11:00 a.m. via web platform.	PMAC 2021 meeting dates approved, with the correction of the November date to be corrected to November 15 th .
6.11 Action Item Review		
7. Request for Discussions	<ul style="list-style-type: none"> • Continuation of HEMS Unified Protocol discussion • Video Laryngoscopy • TXA for postpartum hemorrhage, will be discussed at CQILT first, then added to the agenda for PMAC 	
8. Announcements	TAC on Wednesday will be electing a new chair. REMSA will share the address of their new office after the move.	
9. NEXT MEETING/ADJOURNMENT	Monday, February 22 nd , 2021 (9:00 – 11:00 a.m.) Virtual Platform - Zoom	Information only.

FOR CONSIDERATION BY PMAC

DATE: February 8, 2021

TO: PMAC

FROM: Shanna Kissel, RN, Assistant Nurse Manager

SUBJECT: Trauma System

1. 2019 Trauma plan update submitted to EMSA. Pending approval.
2. Traumatic arrest data continues to be reported out at TAC committee meetings.
3. RUHS received ACS Level I verification, this does not affect EMS field triage for trauma patients.

ACTION: PMAC should be prepared to receive the information and provide feedback to REMSA.

FOR CONSIDERATION BY PMAC

DATE: February 8, 2021

TO: PMAC

FROM: Leslie Duke, Specialty Care Coordinator, RN

SUBJECT: STEMI System

1. The REMSA STEMI System Advisory Regional Committee has aligned the metric of first medical contact to cath lab team activation as a regional goal for 2021.
2. STEMI-specific education is finalized and has been sent to providers for the Spring 2021 Policy Update Course.
3. ePCR auditing has begun for OHCA with ROSC related to transporting to a STEMI Center and aspirin administration. Opportunities for improvement will be sent to the corresponding agency for review and loop closure.
4. Policies: Changes to STEMI treatment policies were only related to formatting and re-numbering. Policy 4402 Suspect Acute Coronary Syndrome was re-numbered 4401 and Policy 4406 Cardiac Arrest was re-numbered 4405.
5. STEMI dashboard posted on Rivcoems.org was updated January 2021 to reflect Q3 data related to Image Trend STEMI patient registry. This was the first electronic pull from data entered by each specialty center.

Next STEMI Committee meeting is on April 13th, 2021 via video conference

Action: PMAC should be prepared to receive the information and provide feedback to the EMS Agency

FOR CONSIDERATION BY PMAC

DATE: February 8, 2021

TO: PMAC

FROM: Leslie Duke, Specialty Care Coordinator, RN

SUBJECT: Stroke System

1. The REMSA Stroke System Advisory Committee will merge one of the scheduled quarterly meetings into a Regional Committee with ICEMA. This year the meeting will occur on May 13, 2021. Collaboration between the two systems allows for knowledge sharing and improvement of patient care across county lines.
2. Stroke-specific education is finalized and has been sent to providers for the Spring 2021 Policy Update Course.
3. Policies: Changes to Stroke treatment policies were only related to formatting and re-numbering. Policy 4503 is now re-numbered 4502.
4. The REMSA Stroke System Advisory Committee meeting for February 11th, 2021 was cancelled due to the overwhelming and increased workload the facilities and providers are facing with the COVID-19 surge. The stroke managers meeting proceeded as scheduled.
5. Stroke dashboard posted on Rivcoems.org was updated December 2020 to reflect Q3 data related to Image Trend Stroke patient registry. This was the first electronic pull from data entered by each specialty center.

Next Stroke Committee meeting is on May 13th, 2021 via video conference

Action: PMAC should be prepared to receive the information and provide feedback to the EMS Agency



**CQI Leadership Team Meeting and HEMS
January 21, 2021
4210 Riverwalk Parkway, #300, Riverside, CA 92505**

Attendance:

Lisa Madrid, REMSA
Brian Harrison, Air Methods
Lori Maddox, RUHS
Leslie Duke, REMSA
Nick Ritchey, REMSA
Tony Espique, Air Methods
Holly Anderson, Cal Fire
Noelle Toering, RFD
Dustin Rascon, REMSA
Sudha Mahesh, REMSA
Stephanie Dvorak, Cal Fire

Bryan Hanley, REMSA
Evelin Millsap, JFK
Sean Hakam, REMSA
Shane Race, Air Methods
Sabrina Yamashiro, RCH
Dr Reza Vaezazizi, REMSA
Lisa Mackie, RUHS
Dan Sitar, IVMC
Henry Olson, REMSA
Melissa Schmidt, Hemet Fire
Thomas Wofford, EMC

Richard Blumel, AMR
Stan Hall, DRMC
Christopher Linke, AMR
Chris Madrid, Air Methods
Ryan Besneatte, Mission Amb.
Ronald Taggart, REACH
Jennifer Antonucci, Murrieta F
Catherine Farrokhi, REMSA
Patrice Shepherd, REMSA
Evelyn Pham, REMSA

Agenda Item	Discussion	Action
1. Introduction	Attendance is taken through the participants list on Microsoft TEAMS.	
2. Discuss Previous Meeting Minutes	<ul style="list-style-type: none"> • HEMS dispatch information, will be meeting with the providers soon for updates • Policy Manual update and the launching of the new App • Still working through NEMSIS 3.5 • Base Hospital Audits have been pushed back to second quarter due to the COVID-19 surge • Working through Base Hospital logs issues. Change processes will be posted on the board for users to view when logging into Elite • CCT Module is up and running. Once it is published on the REMSIS level and implemented, providers will be notified 	There were no objections to the October 15, 2020 CQILT meeting minutes.
3. Action Items		
4. HEMS	<p>HEMS data was displayed in charts and reviewed for all data in 2020. Inclusion criteria includes all air responses, 9-1-1 calls originating from Riverside County. Exclusions are IFTs and out of county origins. Going through the numbers, the driving cause for HEMS utilization was driven by distance and how much time will be saved over ground transport. Volume by month remained mostly consistent, except for a dip in April, that could be due to the start of the COVID-19 pandemic. Mercy Air had the highest number of flights, along with Desert Regional facility as the highest destination. Areas of documentation that could use improvement was medication use and destination.</p>	Discussion.
5. Case Review/Discussion	Riverside University Health System presented a case that adjudicated with needing improvement on communication and collaborative education.	Information only.
6. System Issues	Medical cardiac arrest report was reviewed from quarter 2, 2019 to quarter 4, 2020. Data showed improvement is still needed for calling on scene. An emphasis was also put on STEMI center transports vs non-STEMI centers. The Committee discussed the importance of staying on scene to give good CPR and to avoid transporting patients during active CPR unless necessary. If transport is essential, they should be transported to a STEMI center. Data from quarter 2, 2020 showed an	Information only.

	<p>increase in time, that could be due to the COVID-19 pandemic. Data from this quarter forward will continue to be monitored.</p> <p>Traumatic cardiac arrest report was reviewed from quarter 1, 2019 to quarter 4, 2020. Discussion was had regarding reiterating our education to transport destinations.</p> <p>REMSA is working on the CQI dashboards to have these reports up on SCOPE as a standing item soon.</p>	
7. Protocol/Policy Update	<p>Updated draft policy manual for 2021 is live and posted on REMSA.US for users to view. The biggest changes to the manual was mostly formatting and the 4000 treatment protocol series.</p> <p>REMSA is finalizing the Policy App that will be available to everyone for free. Individual users are encouraged to create their own profile when downloading the App. Upon installing the app, the user will be asked to provide their first and last name along with an email. The email option includes a request to be added to the mailing list to keep the user informed on any updates regarding the app. The App will also be available in a desktop version. Dustin Rascon previewed navigating through the App and the Committee expressed their excitement with how it looked and the ease of use.</p>	Information only.
8. Roundtable	<p>Nick Ritchey brought forward the QI initiative with getting information from field, regarding transport unit. Bryan Hanley proposed sending out a short video for training purposes and a quick explanation of the transfer process and why it is important for ePCR record transfer and upload/download.</p> <p>STEMI and Stroke education will be 30-minutes each and included in the upcoming Spring PUC training. Education for STEMI and Stroke will be done twice a year during PUC.</p> <p>Next CQILT and HEMS meeting is on April 15th, 2021, from 9:00 a.m. to noon via Microsoft TEAMS.</p>	

Agency	Count
Mercy Air	154
Tri State Care Flight	47
Reach	33
Native Air	12
Grand Total	246

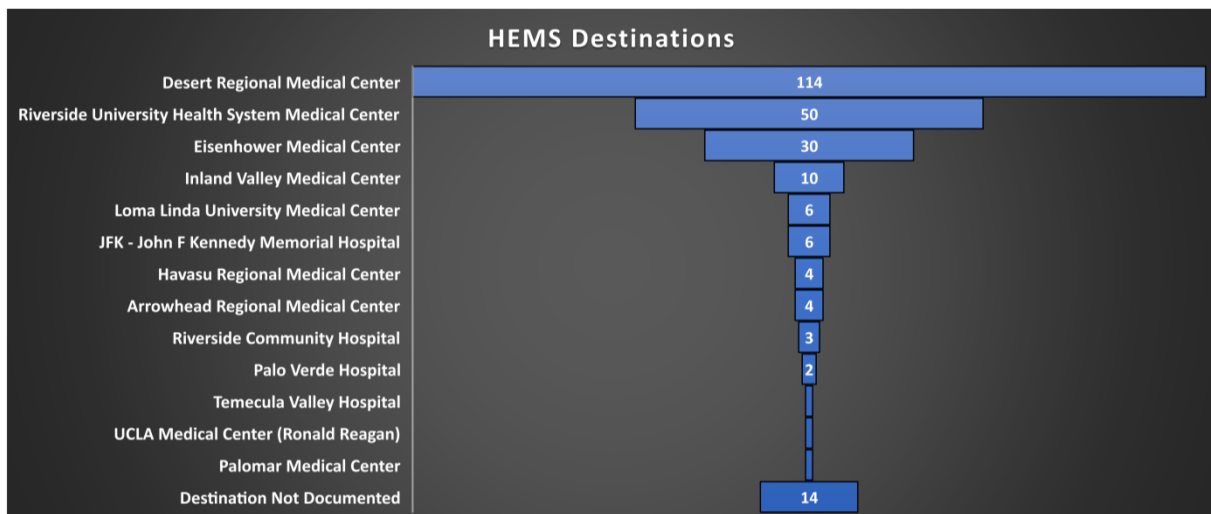
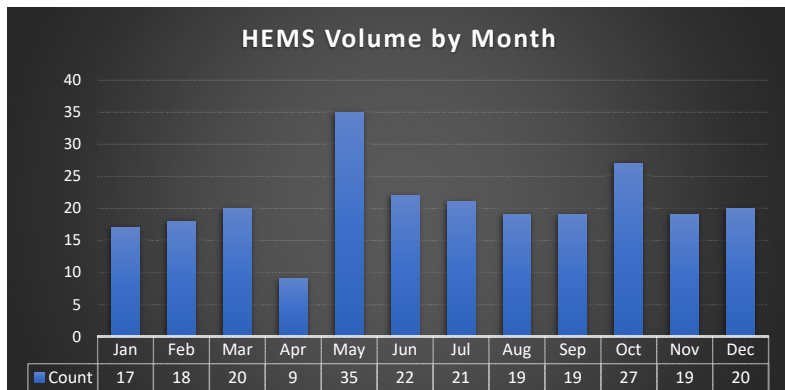
Month	Count
Jan	17
Feb	18
Mar	20
Apr	9
May	35
Jun	22
Jul	21
Aug	19
Sep	19
Oct	27
Nov	19
Dec	20
Total	246

Medications	Count
Fentanyl	85
Ketamine	47
Ondansetron	41
Normal Saline	30
Rocuronium	30
Oxygen	26
Midazolam	8
Lorazepam	7
Tranexamic Acid	5
Vasopressin	4
No Medication Documented	78
Other Medication	34
Total	317

Destination	Count
Desert Regional Medical Center	114
Riverside University Health System Medical Center	50
Eisenhower Medical Center	30
Inland Valley Medical Center	10
Loma Linda University Medical Center	6
JFK - John F Kennedy Memorial Hospital	6
Havasu Regional Medical Center	4
Arrowhead Regional Medical Center	4
Riverside Community Hospital	3
Palo Verde Hospital	2
Temecula Valley Hospital	1
UCLA Medical Center (Ronald Reagan)	1
Palomar Medical Center	1
Destination Not Documented	14
Total	246

Procedures	Count
Safety Precautions	123
Report to Physician	101
Cardiac Monitoring	53
Intravenous (IV)	50
Orotracheal Intubation	31
Monitor Patient	17
Cervical Spine Stabilization	16
Stabilization of Spine	15
Capillary Blood Glucose Measurement	13
12 Lead ECG	12
No Procedure Documented	49
Other Procedure	104
Total	535

City	Count
Blythe	55
Anza	23
Mountain Center	18
Hemet	15
Thermal	13
Aguaanga	10
Indio	9
Desert Center	8
Mecca	8
Banning	6
Temecula	5
Idyllwild	4
Salton City	4
San Jacinto	3
Cactus City	2
Chiriaco Summit	2
Corona	2
Murrieta	2
Perris	2
Winchester	2
Coachella	1
Desert Hot Springs	1
Lake Elsinore	1
Menifee	1
Palm Desert	1
Riverside	1
Wildomar	1
Not Recorded	46
Total	246



Medical Cardiac Arrest- 4/1/2019- 12/31/2020

"911 Response", "Cardiac arrest during EMS event is not blank ", Primary or Secondary impression "Cardiac arrest"

	2019				2020				Average	
	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4			
Total Incidents	1317	1255	1381	1649	1610	1631	2072		1474	
Total Approx., Patients	938	886	992	1175	1212	1260	1472		1077	
By Age group	Children (<=12)	15 2%	23 3%	9 1%	12 1%	15 1%	11 1%	13 1%	14 1%	
	Adolescents (13-17)	6 1%	6 1%	4 0.4%	7 1%	4 0.3%	7 1%	5 0.3%	6 1%	
	Young Adults (18-35)	70 7%	59 7%	70 7%	94 8%	94 8%	113 9%	113 8%	88 8%	
	Adults(36-64)	328 35%	296 33%	335 34%	392 33%	393 32%	424 34%	503 34%	382 35%	
	Adults(65-79)	296 32%	283 32%	334 34%	371 32%	415 34%	426 34%	477 32%	372 35%	
	Older Adults (>=80)	223 24%	218 25%	239 24%	299 25%	291 24%	279 22%	361 25%	273 25%	
ROSC	Yes	195 21%	161 18%	156 16%	233 20%	173 14%	183 15%	206 14%	187 17%	
	No	743 79%	725 82%	836 84%	942 80%	1039 86%	1077 85%	1266 86%	947 88%	
Cardiac Arrest during EMS event	Yes, Prior to EMS Arrival	855 91%	822 93%	926 93.3%	1079 91.8%	1117 92%	1174 93.2%	1377 93.5%	996 92.4%	
	Yes, After EMS Arrival	83 9%	64 7%	64 6.5%	94 8.0%	95 8%	84 6.7%	92 6.3%	81 7.5%	
	No			2 0.2%	2 0.2%		2 0.2%	3 0.2%	2 0.2%	
Disposition	Treated and Transported	288 31%	257 29%	248 25%	323 27%	262 22%	274 22%	316 21%	275 26%	
	Pronounced in Field	650 69%	629 71%	744 75%	852 73%	949 78%	986 78%	1156 79%	802 74%	

	2019						2020						Average			
	Qtr2		Qtr3		Qtr4		Qtr1		Qtr2		Qtr3				Qtr4	
Total Transports	288		257		248		323		263		276		316		282	
STEMI center	143	50%	139	54%	140	56%	190	59%	151	57%	167	61%	177	56%	158	56%
Riverside Community Hospital	49	34%	53	38%	41	29%	64	34%	49	32%	49	29%	60	34%	52	33%
Desert Regional Medical Center	21	15%	23	17%	28	20%	34	18%	23	15%	30	18%	27	15%	27	17%
Loma Linda University Medical Center, Murrieta	24	17%	18	13%	30	21%	33	17%	31	21%	36	22%	37	21%	30	19%
Eisenhower Medical Center	29	20%	15	11%	14	10%	30	16%	20	13%	17	10%	24	14%	21	13%
JFK - John F Kennedy Memorial Hospital	9	6%	21	15%	19	14%	23	12%	25	17%	25	15%	24	14%	21	13%
Temecula Valley Hospital	11	8%	9	6%	8	6%	6	3%	3	2%	10	6%	5	3%	7	5%
Non-STEMI Center	145	50%	118	46%	108	44%	133	41%	112	43%	109	39%	134	42%	123	44%
Hemet Valley Medical Center	25	17%	24	20%	26	22%	34	26%	24	18%	20	15%	28	21%	26	21%
Riverside University Health System Medical Center	30	21%	15	13%	22	19%	21	16%	14	11%	18	14%	18	14%	20	16%
Corona Regional Medical Center	17	12%	10	8%	10	8%	17	13%	20	15%	18	14%	19	14%	16	13%
San Geronio Memorial Hospital	13	9%	14	12%	11	9%	13	10%	8	6%	14	11%	13	10%	12	10%
Inland Valley Medical Center	15	10%	10	8%	6	5%	10	8%	7	5%	5	4%	8	6%	9	7%
Parkview Community Hospital Medical Center	9	6%	11	9%	6	5%	7	5%	14	11%	5	4%	18	14%	10	8%
Kaiser Permanente, Riverside	11	8%	5	4%	4	3%	12	9%	4	3%	11	8%	9	7%	8	7%
Menifee Valley Medical Center	7	5%	5	4%	8	7%	5	4%	4	3%	1	1%	4	3%	5	4%
Kaiser Permanente, Ontario	5	3%	9	8%	1	1%	2	2%	2	2%	2	2%	7	5%	4	3%
Palo Verde Hospital	2	1%	6	5%	3	3%	3	2%	5	4%	2	2%	1	1%	3	3%
Rancho Springs Medical Center	3	2%	2	2%	5	4%	3	3%	4	3%	3	2%	3	2%	3	3%
Kaiser Permanente, Moreno Valley	2	2%			2	2%			2	2%	3	2%	1	1%	2	2%
Redlands Community Hospital	1	1%	2	2%											2	1%
Loma Linda University Medical Center	1	1%							1	1%	2	2%	2	2%	2	1%
Hemet Valley Healthcare Center	1	1%													1	1%
Kindred Hospital, Ontario					1	1%									1	1%
Kaiser Permanente, Fontana									1	1%	1	1%	2	2%	1	1%
Facility name not available	3	3%	5	4%	3	3%	6	5%	2	2%	4	3%			4	3%

Median Time		2019			2020				Average
		Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	
Patient contact time (etimes07-etimes03)	First Response	0:06:57	0:07:08	0:07:39	0:07:07	0:07:59	0:07:57	0:07:52	0:07:31
	Ground Transport	0:08:11	0:08:28	0:09:08	0:08:48	0:08:29	0:08:46	0:09:18	0:08:44
	Total	0:07:34	0:07:48	0:08:23	0:07:58	0:08:11	0:08:19	0:08:15	0:08:04
Scene time (etimes09-etimes07)	First Response	0:20:19	0:23:06	0:20:00	0:22:34	0:19:57	0:22:49	0:23:00	0:21:41
	Ground Transport	0:17:08	0:18:21	0:16:44	0:18:03	0:18:58	0:18:00	0:19:44	0:18:08
	Total	0:18:43	0:20:44	0:18:22	0:20:18	0:19:22	0:19:34	0:21:10	0:19:45
First CPR to Determination of Death (earrest15-earrest19) Disposition : "Dead at Scene"	First Response	0:25:01	0:26:00	0:24:57	0:25:00	0:24:58	0:24:43		0:25:07
	Ground Transport	0:27:03	0:26:52	0:24:45	0:26:21	0:25:44	0:26:40		0:26:14
	Total	0:26:02	0:26:26	0:24:51	0:25:41	0:25:11	0:25:10		0:25:33
First CPR to Transport (etimes09-earrest19)	Ground Transport	0:22:21	0:23:53	0:22:51	0:24:45	0:24:19	0:24:02	0:26:12	0:24:03
Patient contact to transport time (etimes11-etimes07) Dispo= "Patient treated and transported by this unit"	Ground Transport	0:27:48	0:27:57	0:27:56	0:29:28	0:29:18	0:30:15	0:30:02	0:28:58
Patient contact to determination of death (earrest15-etimes07)	First Response								
	Dead at Scene, No Resuscitation, No Transport	0:01:00	0:01:00	0:00:44	0:01:00	0:01:00	0:00:42		0:00:54
	Resuscitation Attempted, Dead at Scene, No Transport	0:22:32	0:23:26	0:23:00	0:23:00	0:23:08	0:23:06		0:23:02
	Ground Transport								
	Dead at Scene, No Resuscitation, No Transport	0:02:00	0:01:05	0:01:36	0:01:07	0:01:05	0:01:00		0:01:19
	Resuscitation Attempted, Dead at Scene, No Transport	0:23:14	0:23:15	0:21:31	0:22:00	0:22:00	0:21:43		0:22:17

**Data is based on Incidents and documentation*

Traumatic Cardiac Arrest *Transport Facility*

	2019				2020				Average
	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	
Total Transports Dispo:Treated and Transported by this unit	28	30	31	29	25	20	25	28	27
Trauma center	15 54%	17 57%	21 68%	21 72%	17 68%	13 65%	14 56%	17 61%	17 62%
Riverside Community Hospital	5 18%	7 23%	8 26%	7 24%	2 8%	1 5%	3 12%	7 25%	5 17%
Riverside University Health System Medical Center	3 11%	4 13%	7 23%	8 28%	6 24%	7 35%	5 20%	4 14%	6 21%
Desert Regional Medical Center	4 14%	3 10%	3 10%	4 14%	5 20%	1 5%	5 20%	4 14%	4 13%
Inland Valley Medical Center	3 11%	3 10%	3 10%	2 7%	4 16%	4 20%	1 4%	2 7%	3 11%
Non-Trauma Center	13 46%	13 43%	10 32%	8 28%	8 32%	7 35%	11 44%	11 39%	10 37%
Hemet Valley Medical Center	2 7%	2 7%	2 6%	4 14%		3 15%	3 12%	3 11%	3 10%
JFK - John F Kennedy Memorial Hospital	1 4%	3 10%	1 3%	2 7%		1 5%	1 4%	3 11%	2 6%
Corona Regional Medical Center	2 7%	2 7%			1 4%	1 5%	2 8%		2 6%
San Gorgonio Memorial Hospital	3 11%		1 3%		1 4%		1 4%		2 6%
Eisenhower Medical Center	1 4%	3 10%	1 3%	1 3%		1 5%		1 4%	1 5%
Palo Verde Hospital	2 7%		1 3%			1 5%	1 4%		1 5%
Rancho Springs Medical Center	1 4%	1 3%		1 3%					1 4%
Menifee Valley Medical Center		1 3%	1 3%		1 4%				1 4%
Kaiser Riverside Medical Center			1 3%		1 4%				1 4%
Loma Linda University Medical Center, Murrieta					4 16%		2 8%	2 7%	3 11%
Temecula Valley Hospital		1 3%	2 6%					1 4%	2 6%
Parkview Community Hospital Medical Center	1 4%						1 4%		1 4%
Kaiser Permanente, Ontario								1 4%	1 4%

Traumatic Cardiac Arrest *Base Hospital Contact*

Hospital contact("Yes/No") (itdisposition By Agency	2019								2020								Average	
	Qtr1		Qtr2		Qtr3		Qtr4		Qtr1		Qtr2		Qtr3		Qtr4			
	112	159	153	147	137	129	175	176	149									
Yes	29	26%	46	29%	42	27%	47	32%	30	22%	27	21%	32	18%	20	11%	34	23%
First Response	16	14%	24	15%	21	14%	23	16%	19	14%	15	12%	13	7%	13	7%	18	12%
Ground Transport	13	12%	22	14%	21	14%	24	16%	11	8%	12	9%	19	11%	7	4%	16	11%
No	83	74%	113	71%	111	73%	100	68%	107	78%	102	79%	143	82%	156	89%	114	77%
First Response	49	44%	77	48%	73	48%	69	47%	64	47%	72	56%	96	55%	100	57%	75	51%
Ground Transport	34	30%	36	23%	38	25%	31	21%	43	31%	30	23%	47	27%	56	32%	39	27%
By Disposition (edisposition.12)																		
Yes	29	26%	46	29%	42	27%	47	32%	30	22%	27	21%	32	18%	20	11%	34	25%
Patient Treated and Transported by this EMS Unit	11	38%	15	33%	19	45%	20	43%	11	37%	10	37%	8	25%	6	30%	13	37%
Dead at scene	7	24%	19	41%	10	24%	15	32%	7	23%	7	26%	9	28%	5	25%	10	29%
Patient Treated and Transported with this Crew in Another EMS Unit	10	34%	12	26%	13	31%	9	19%	11	37%	9	33%	6	19%	9	45%	10	28%
Patient Treated and Care Transferred to Another EMS Unit	1	3%					3	6%	1	3%	1	4%					2	4%
No	83	74%	113	71%	111	73%	100	68%	107	78%	102	79%	143	82%	156	89%	114	75%
Dead at scene	59	71%	90	80%	84	76%	88	88%	86	80%	86	84%	127	89%	122	78%	93	82%
Patient Treated and Transported by this EMS Unit	17	20%	15	13%	12	11%	9	9%	14	13%	10	10%	8	6%	22	14%	13	11%
Patient Treated and Transported with this Crew in Another EMS Unit	7	8%	7	6%	13	12%	3	3%	6	6%	6	6%	6	4%	11	7%	7	6%
Patient Treated and Care Transferred to Another EMS Unit			1	1%	2	2%			1	1%			2	1%	1	1%	1	1%

Traumatic Cardiac Arrest *Response Times*

Median Time		2019				2020				Average Median Value
		Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	
Patient contact time (etimes07-etimes03)	First Response	0:08:10	0:07:32	0:07:59	0:08:10	0:07:48	0:08:22	0:08:18	0:08:35	0:08:03
	Ground Transport	0:09:21	0:07:09	0:09:18	0:07:37	0:08:28	0:08:06	0:08:20	0:09:03	0:08:20
	Total	0:08:45	0:07:20	0:08:39	0:07:53	0:08:08	0:08:20	0:08:18	0:08:43	0:08:12
Scene time (etimes09-etimes07)	First Response	0:16:36	0:10:06	0:16:00	0:12:12	0:14:52	0:11:01	* 0:25:07	0:16:06	0:15:08
	Ground Transport	0:08:19	0:09:03	0:08:52	0:08:34	0:10:06	0:09:16	0:09:11	0:10:22	0:09:03
	Total	0:12:28	0:09:34	0:12:26	0:10:23	0:12:29	0:11:01	0:13:56	0:14:11	0:11:45
First CPR to Determination of Death (earrest15-earrest19) Disposition :"Res., attempted, Dead at Scene"	First Response	N<10	N<10	N<10	0:22:39	N<10	N<10	0:24:00		N<10
	Ground Transport	N<10	N<10	N<10	N<10	N<10	N<10	0:26:04		N<10
	Total	N<10	0:23:37	N<10	0:23:41	N<10	0:13:04	0:24:11		0:21:08
First CPR to Transport (etimes09-earrest19)	Ground Transport	0:13:24	0:09:11	0:13:42	0:15:53	0:16:58	N<10	0:18:51	N<10	0:14:40
Patient contact to transport time (etimes11-etimes07) Dispo= "Patient treated and transported by this unit"	Ground Transport	0:19:11	0:15:04	0:17:30	0:24:10	0:25:56	0:24:59	0:24:28	0:25:42	0:22:08
Patient contact to determination of death (earrest15-etimes07)	First Response									
	Dead at Scene, No Resuscitation, No Transport	0:01:39	0:02:10	0:02:00	0:01:00	0:01:00	0:01:00	0:00:50		0:01:23
	Resuscitation Attempted, Dead at Scene, No Transport	N<10	0:20:58	0:20:00	0:18:15	0:16:45	0:11:32	** 0:20:30		0:17:30
	Ground Transport									
	Dead at Scene, No Resuscitation, No Transport	N<10	N<10	N<10	0:02:13	0:01:32	0:00:40	0:01:57		0:01:35
	Resuscitation Attempted, Dead at Scene, No Transport	N<10	N<10	N<10	0:21:00	0:18:09	0:17:11	0:19:29		0:18:57

* In Q3, 2020 12 responses by First Response agencies reported >20min scene time. These included 8 penetrating, 1 blunt, and 3 drowning incidents.

** In Q3,2020 15 responses by First Response Agencies had time intervals greater than 20 minutes. Of these, 8 involved drowning incidents.

Number of Responses		2019				2020				Median
		Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	
Patient contact time (etimes07-etimes03)	First Response	65	101	94	92	83	85	100	113	92
	Ground Transport	47	58	59	55	54	42	66	63	55
	Total	112	159	153	147	137	127	166	176	147
Scene time (etimes09-etimes07)	First Response	22	23	29	20	22	17	22	23	22
	Ground Transport	27	30	32	27	26	21	25	29	27
	Total	49	53	61	47	48	38	47	52	48
First CPR to Determination of Death (earrest15-earrest19) Disposition: "Res., attempted, Dead at Scene"	First Response	2	7	6	13	5	8	16		7
	Ground Transport	1	7	3	8	4	4	12		4
	Total	3	14	9	21	9	12	28		12
First CPR to Transport (etimes09-earrest19)	Ground Transport	13	14	12	10	12	9	10	8	12
Patient contact to transport time (etimes11-etimes07) Dispo= "Patient treated and transported by this unit"	Ground Transport	26	28	29	27	24	20	24	28	26
Patient contact to determination of death (earrest15-etimes07)	First Response	14	29	28	67	52	60	69		52
	Dead at Scene, No Resuscitation, No Transport	12	16	18	43	38	41	46		38
	Resuscitation Attempted, Dead at Scene, No Transport	2	13	10	24	14	19	23		14
	Ground Transport	3	10	14	27	28	20	35		20
	Dead at Scene, No Resuscitation, No Transport	1	3	6	14	16	10	16		10
	Resuscitation Attempted, Dead at Scene, No Transport	2	7	8	13	12	10	19		10
		17	39	42	94	80	80	104		80