RIVERSIDE COUNTY
Emergency Medical Care Committee

The next meeting of the EMCC is on:

Wednesday, Oct 02, 2019
9:00 AM – 10:30 AM

The Towers of Riverwalk
4210 Riverwalk Parkway, Riverside
First Floor, Orange Conference Room

1. CALL TO ORDER
   Chair—Stan Grube

2. ROUNDTABLE INTRODUCTIONS (5 Minutes)
   Chair—Stan Grube

3. APPROVAL OF MINUTES (5 Minutes)
   May 22, 2019 Draft Minutes—Stan Grube (Attachment A)

4. UNFINISHED / NEW BUSINESS (30 Minutes)
   4.1 Membership – Dan Bates (Attachment B)
       - Chair and Vice Chair selection for 2020
   4.2 2020 Proposed Schedule – Dan Bates (Attachment C)
   4.2 EMCC 2018 Annual Update – Jerry Holldber
   4.3 Influenza Preparedness Activity – RUHS Public Health

5. EMS AGENCY REPORTS (20 Minutes)
   5.1 Patient Care Continuum Draft – Catherine Farrokhi (Attachment D)
   5.2 Open Public Comment – Catherine Farrokhi (Attachment E)
   5.3 Special Seasonal Reports – Catherine Farrokhi (Attachment F)
   5.4 EMS Administrative Unit Updates – Dan Bates
   5.5 Data Systems Unit Updates - Catherine Farrokhi

6. OTHER REPORTS (20 Minutes)
   6.1 PMAC – Steven Patterson, MD / Magdalena Robles
   6.2 EMD Preparedness Division – Brian Tisdale
   6.3 EMD Emergency Services Division – Mark Bassett

7. OPEN COMMENTS (10 Minutes)

8. NEXT MEETING / ADJOURNMENT (1 Minute)
   TBD
   4210 Riverwalk Parkway Riverside
   Orange Room

NOTICE: <u>Items on the agenda</u>: 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.

<u>Items not on the agenda</u>: 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, Deputy EMS Administrator Riverside County EMS Agency at (951) 358-5029.

Next meeting:
TBD
The Towers of Riverwalk Building
4210 Riverwalk Parkway, Riverside, CA
Orange Conference Rooms

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
Trevor Douville at (951) 358-5029.

EMCC meetings are audio recorded to facilitate dictation for minutes.

EMCC Draft Minutes
May 22, 2019

TOPIC	DISCUSSION	ACTION
1. **ALL TO ORDER** **Stan Grube**	Stan Grube commenced the meeting at 9:00 AM.	
2. **ROUNDTABLE INTRODUCTION** **Stan Grube**	Roundtable introductions was facilitated by Chair, Stan Grube.	
3. **APPROVAL OF MINUTES**	Jerry Holldber and Peter Hubbard introduced a motion to approve October 3, 2018 meeting minutes.	Information only.
4. **UNFINISHED / NEW BUSINESS**		
4.1 MEMBERSHIP **Trevor Douville**	Trevor reviewed the current open vacancies: RCMA since 2018, Supervisory District One, and Supervisory District Four. Changes in positions: Dr. Patterson was reappointed as the PMAC representative for EMCC, thru 2020. Rosemary Dudevoir will be the new Ambulance Association Representative for this year thru 2020, pending Form -11 approval by the Board of Supervisors. Air Ambulance Provider representative will expire July 2019. Mercy and Reach Air's nomination will be requested. Chief Brian Young is the new Riverside Fire Committee Representative, pending Form-11 approval by the Board of Supervisors. CVAG has been contacted to reappoint or nominate another Representative. Randal Bynder, who is the current representative, has not attended the last four EMCC meetings. The CVAG reappointment is pending. Gary Norquist and Chris Mann will be the alternate representatives for WRCOG pending Form-11 approval by the Board of Supervisors. Riverside County Law Enforcement Association reappointment or alternate appointment pending RCLEAA's decision. Magdalena Robles was appointed to be the new PMAC Representative, pending Form-11 approval by the Board of Supervisors. Chief Jock Johnson was appointed under Supervisorial District 5; Form-11 was approved by the Board of Supervisors.	Attachment B. Trevor will request Mercy and Reach Airs nomination.
4.2 EMCC 2018 ANNUAL UPDATE **Jerry Holldber**	Jerry and Trevor have met and discussed the 2018 EMCC annual update. Jerry will present the draft 2018 to EMCC at the next EMCC meeting in July.	

EMCC Draft Minutes
May 22, 2019

TOPIC	DISCUSSION	ACTION
4.3 PUBLIC ACCESS AED PROGRAM **Dan Bates**	Dan presented a PowerPoint reflecting the new procedure to register an AED for the private sector. The process will allow the public to register their AED device information at www.rivcoems.org. This new application provides a link to map the location of the AED device. There will be map of the exact location of a nearby AED to give the public access to the device in the moment of need. Would like to collaborate with Riverside County Colleges to help confirm device locations. It was stated by Stan Grube to revisit this topic in the next meeting.	Revisit this topic next meeting.
5. EMS AGENCY REPORTS		
5.1 Draft/5150 Impact Report **Trevor Douville**	Trevor presented the first draft of the 5150 Impact Summary Report. We are analyzing the impact of 5150s on EMS transportation and first response in Riverside County. This will be going out for public comment. Trevor reviewed the data and findings of the report. The map within the report is reflective of the amount of responses. The Patient Care Continuum report will align some of the same definitions you see in this report to update the findings.	This report will be going out for public comment. Structure the Patient Care Continuum report to update 5150 Impact report findings.
5.2 Draft/EMD Report **Trevor Douville**	Trevor reviewed the Emergency Medical Dispatch Report. This report will be released twice annually, calendar year end and fiscal year end. The report reflects the rate of EMD integration within EMS Electronic Patient Care Records (ePCRs) for all 911-provider agencies in Riverside County. 83% of Riverside County has adopted EMD into their dispatching system.	Attachment B, information only.
5. 3 REMSA Policy 6104 **Trevor Douville**	Trevor reviewed REMSA Policy 6104. March 20th, the EMS Agency implemented Policy 6104 to mitigate severe ambulance patient off load delay issues. Since implementing, the policy there has been a massive reduction in patient off load delay times. This policy is provisional for now and expires on June 20th.	Attachment E. Implement Policy 6104 as a permanent policy.
5.4 Special Seasonal (APOT) **Misty Heyden**	Misty summarizes the APOT Report, this report reflects week 20. We are seeing a	Information only.

EMCC Draft Minutes
May 22, 2019

TOPIC	DISCUSSION	ACTION
	recovery from the flu season. The APOT hours have been low with only one redirect. REMSA will be releasing the APOT reports weekly on the REMSA website.	
5.5 EMS Agency Updates **Trevor Douville**	EMD has been very active with support for the fire response, fire incident reports, evacuations, operations, shelters, and hospitals for 2018. The most activations on record. We have changed our staffing model and hired three researchers in the last two years in exchange for our operational positions. This new business model has proven positive. Karen Petrilla, our EMS disciplinary specialist, is now assisting ICEMA with their disciplinary needs due to the vacated discipline position at ICEMA. Misty Heyden will now be implementing automation and data collection into the discipline process, to improve processing time. The EMS Administrator candidate is still pending; an announcement should be made within the next 30 days.	Information only.
6. OTHER REPORTS		
6.1 PMAC **Steve Patterson, MD/** **Maggie Robles**		Tabled for next meeting.
6.2 EMD Preparedness Division **Anne Accurso**		Tabled for next meeting.
6.3 EMD Operations Division **Mark Bassett**		Tabled for next meeting.
7. OPEN COMMENTS	Rodrick Verbick Psy. D, MFT from Mental Health Services commented that Riverside County has three mental health urgent care centers: Riverside, Palm Springs, and Perris. Palm Springs and Perris are receiving patients 13 years and up at their locations. If you are diagnosed as a 5150 patient, your stay is for 23 hours and 59 minutes with the same level of care by ETS or physic emergency without being on hold. To help with process efficiency with Riverside Police we have one police liaison with Riverside and we adding two more.	Information only.

EMCC Draft Minutes
May 22, 2019

TOPIC	DISCUSSION	ACTION
	We do not have pediatric care in place, funding is difficult for children but we are looking into grant opportunities. Hemet Unified School District is interested in putting a facility within their school district.	
8. NEXT MEETING/ ADJOURNMENT	July 10, 2019	Information only.

FOR CONSIDERATION BY EMCC

DATE: Oct 02, 2019

TO: EMCC

FROM: Dan Bates, Deputy EMS Administrator

SUBJECT: 2019/2020 Membership Date

ACTION: Review of Term Dates

Sec.	#	Representing	Current Membership	2019-2020 Term Dates
1.a	1	PMAC Physician	Stephen Patterson	07/01/18—06/30/21
1.b	2	HASC	Keven Porter	NA
1.c	3	RCMA	James Rhee	07/01/18—06/30/21
1.d	4	AMR	Peter Hubbard	NA
1.e	5	Ambulance Association	Rosemary Dudevoir	07/01/19—06/30/22
1.f	6	Air Ambulance Provider	Vacant	07/01/19—06/30/22
1.g	7	RCFCA	Brian Young	07/01/18—06/30/21
1.h	8	CVAG	Mark Scott	07/01/19—06/30/22
1.i	9	WRCOG	Gary Nordquist Chris Mann	07/01/19—06/30/22
1.j	10	RCLEAA	Colleen Walker	07/01/19—06/30/22
1.k	11	PMAC Prehospital	Magdalena Robles	07/01/19—06/30/22
1.l	12	Riverside Co Fire Dept.	Phil Rawlings	NA
1.m	13	District One	Vacant	07/01/17—06/30/20
1.m	14	District Two	Stan Grube	07/01/17—06/30/20
1.m	15	District Three	Jerry Holldber	07/01/17—06/30/20
1.m	16	District Four	Vacant	07/01/17—06/30/20
1.m	17	District Five	Jock Johnson	07/01/18—06/30/21

FOR CONSIDERATION BY EMCC
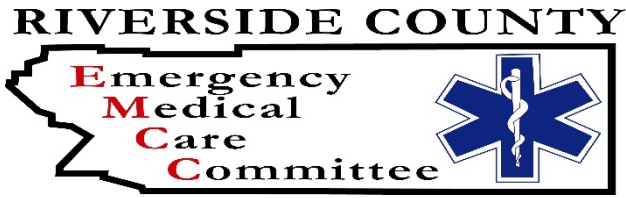
2020
EMCC MEETING SCHEDULE
Proposed

	OPT#1	OPT#2	TIME	LOCATION
EMCC	01/08/2020		9am – 10:30 am	**Towers at Riverwalk Building** **4210 Riverwalk Parkway** **Riverside, CA 92505**
EMCC	04/01/2020	03/18/2020	9am – 10:30 am	**Towers at Riverwalk Building** **4210 Riverwalk Parkway** **Riverside, CA 92505**
EMCC	07/01/2020	06/17/2020	9am – 10:30 am	**Towers at Riverwalk Building** **4210 Riverwalk Parkway** **Riverside, CA 92505**
EMCC	10/07/2020	9/16/2020	9am – 10:30 am	**Towers at Riverwalk Building** **4210 Riverwalk Parkway** **Riverside, CA 92505**
EMCC		12/16/2020	9am – 10:30 am	**Towers at Riverwalk Building** **4210 Riverwalk Parkway** **Riverside, CA 92505**

RIVERSIDE COUNTY EMS AGENCY
## PATIENT CARE CONTINUUM REPORT
2018

PATIENT CARE CONTINUUM REPORT

The purpose of this report is to provide analysis of the prehospital time intervals identified in REMSA Policy 2203-Patient Care Continuum Time Standards. Additional time intervals were added to the analysis to further measure the prehospital continuum of patient care from dispatch to hospital arrival.

Below are time interval definitions and their corresponding NEMSIS 3.4 timestamps. Time intervals in italics are intervals not currently in Policy 2203.

- Alarm Answering Time – eTimes.01 to eTimes.02
- Alarm Transfer Time – eTimes.01 to eTimes.02 (when the call is transferred to another designated entity)
- Alarm Handling Time – eTimes.01 to eTimes.03
- Alarm Processing Time – eTimes.02 to eTimes.03
- Turnout Time – eTimes.03 to eTimes.05
- Travel Time – eTimes.05 to eTimes.06
- Intervention Time – eTimes.06 to eTimes.07
- *Unit Response Time – eTimes.03 to eTimes.06*
- Total Response Time – eTimes.01 to eTimes.07
- *Arrived On Scene To Arrived At Destination Time – eTimes.06 to eTimes.11*
- *Total On Scene Time – eTimes.06 to eTimes.09*
- *Total Time On Scene With Patient – eTimes.07 to eTimes.09*
- *Transport Time – eTimes.09 to eTimes.11*
  - *Unit Prehospital Time With Patient – eTimes.07 to eTimes.11*
- *Total Unit Prehospital Time – eTimes.03 to eTimes.11*
- *Total Prehospital Interval – eTimes.01 to eTimes.11*

Pre-hospital Patient Care Continuum from dispatch to arrival at patient. *Adapted from REMSA Policy 2203.*
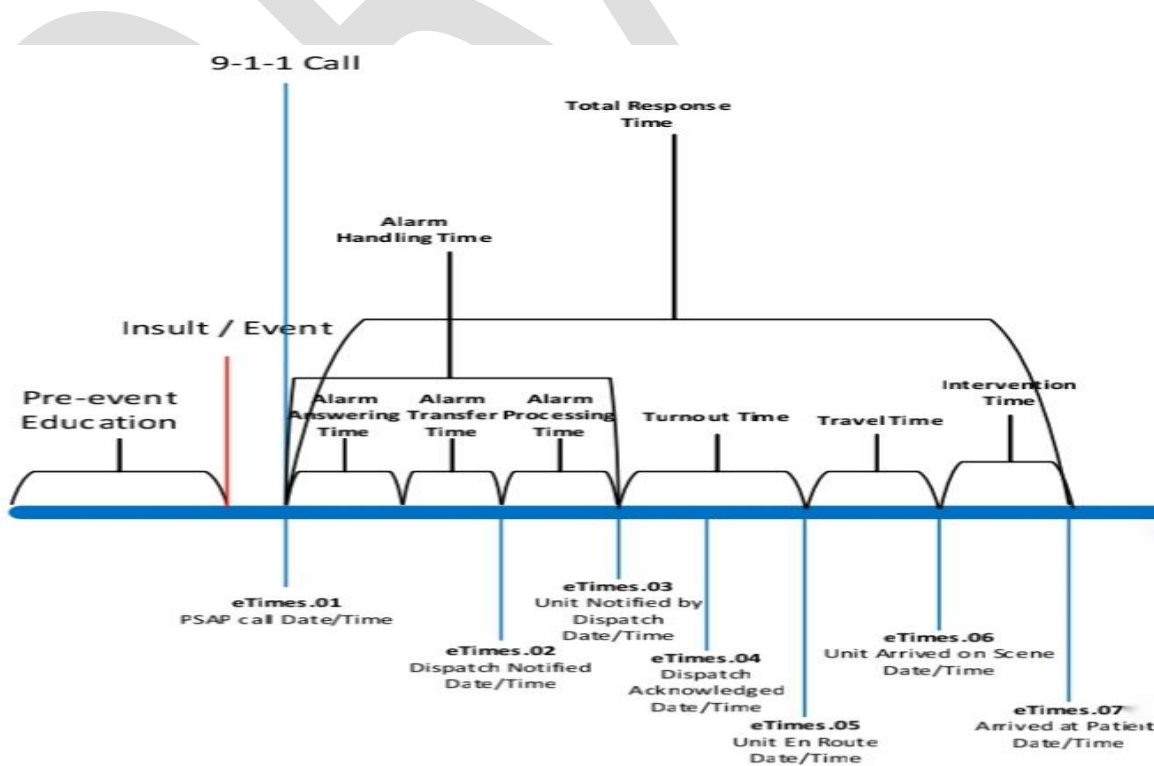
Data

373,169 ePCRs (electronic patient care records) were initially identified on ImageTrend Elite Report Writer between 1/1/2018 and 12/31/2018. *Thirty* fields were generated for each ePCR utilized, resulting in 11,195,070 possible datapoints for analysis. **261,041 ePCRs** were then identified for use in time interval analysis after downloading, compiling, and cleaning the raw data. The final dataset was created utilizing 7,831,230 datapoints.

Exclusions

112,128 (30.05% of total) ePCRs were excluded due to missing data points, incorrect times, disposition, or a combination of these. ePCRs were excluded for the following dispositions: Canceled Prior to Enroute, Canceled Enroute, Canceled at Scene by Another Unit, No Patient Contact, No Patient Found, Standby: No Services or Support Provided, Standby: Public Safety, Fire, or EMS Operational Support Provided, or for leaving the disposition field blank. ePCRs were excluded for missing time stamps for eTimes.01, eTimes.02, and eTimes.07. ePCRs were also excluded for being unable to calculate time intervals: Incident Dispatch Notified To Unit Arrived At Patient In Minutes (eTimes.02 to eTimes.07), and Total Response Time (eTimes.01 to eTimes.07). These intervals were unable to be calculated due to either a missing timestamp or an incorrect time stamp. Additional ePCRs were excluded due to having an Incident Dispatch Notified To Unit Arrived At Patient or Total Response Time interval greater than or equal to 60 minutes.

Inclusions:

Data from 8 timestamps were included and used to create the time intervals from REMSA Policy 2203 as well as the additional intervals created. 16-time intervals were included in this dataset. Data from 16 agencies were included in the dataset. To be included, the agency had to be a fire department or transport agency providing 911 services in Riverside County. Disposition and EMD card data were also included in the dataset.

Timeline and Findings

Total Prehospital Interval – eTimes.01 to eTimes.11 begins when a 911 call is made to a public safety answering point (PSAP) requesting an EMS unit response and ends when the responding EMS unit arrives with the patient at the hospital or alternate destination.
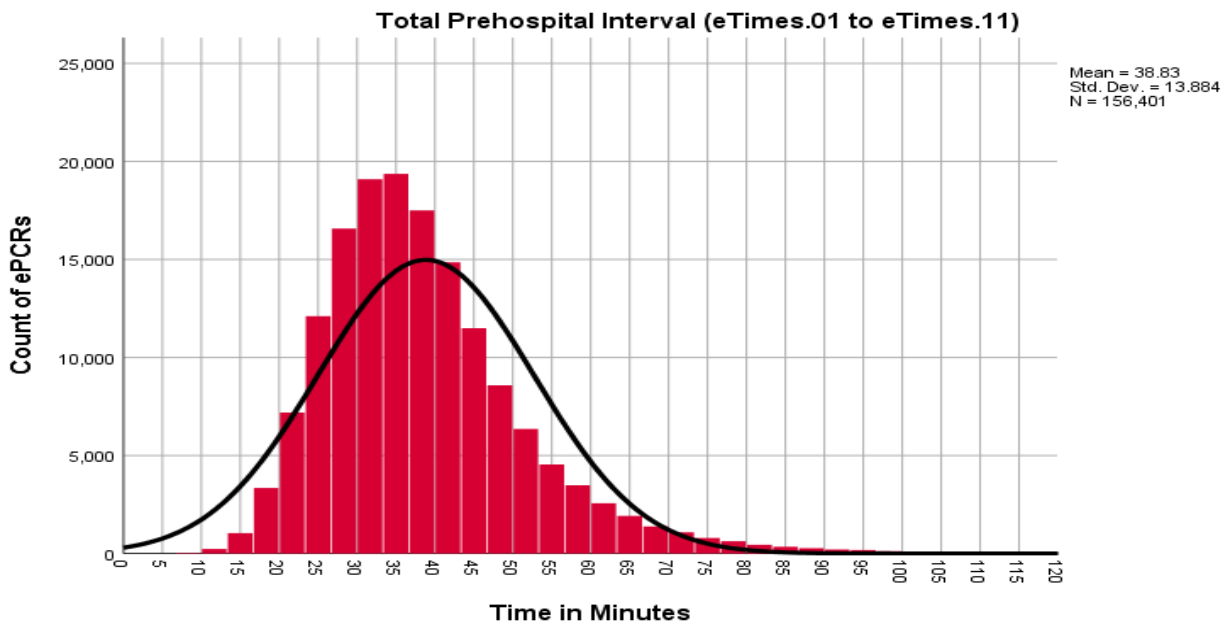

Total Prehospital Interval (eTimes.01 to eTimes.11)

Mean = 38.83
Std. Dev. = 13.884
N = 156,401

Total Response Time – eTimes.01 to eTimes.07 begins when a 911 call is made to a public safety answering point (PSAP) requesting an EMS unit response and ends when the responding EMS unit arrive at the patient's side.

Total Response Time (eTimes.01 to eTimes.07)

Mean = 10.75
Std. Dev. = 5.698
N = 261,041
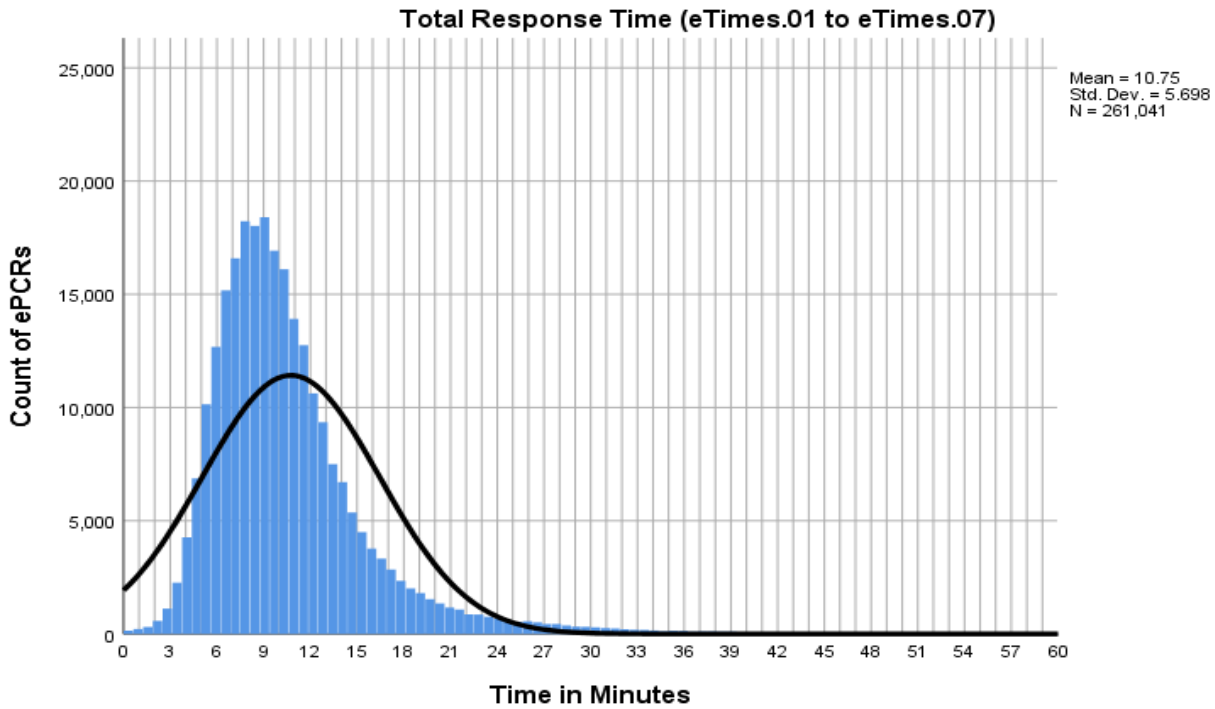
Unit Response Time – eTimes.03 to eTimes.06 begins when the responding EMS unit is notified by dispatch and ends when the responding EMS unit arrives on the scene.

Unit Response Time (eTimes.03 to eTimes.06)

Mean = 7.61
Std. Dev. = 4.465
N = 261,041
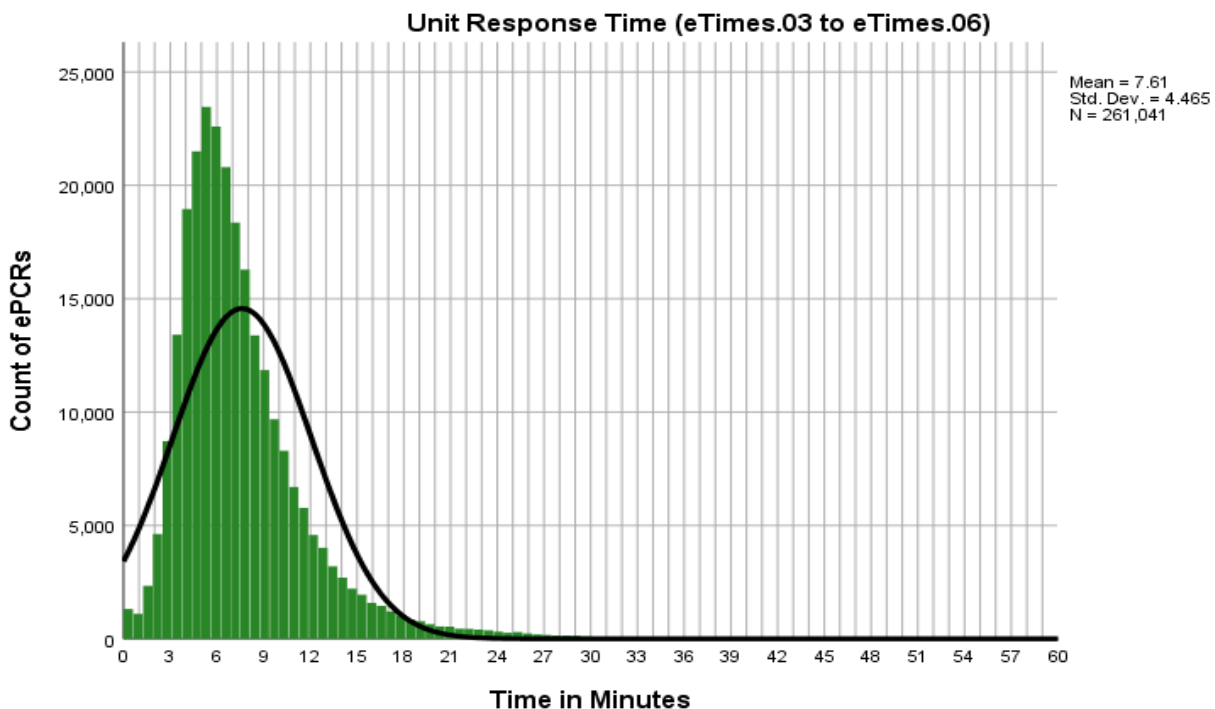
Unit Responses by Hour shows call volumes by time-of-day and indicates which hours are busiest on average. It contains ePCR data for the entire 2018 year.
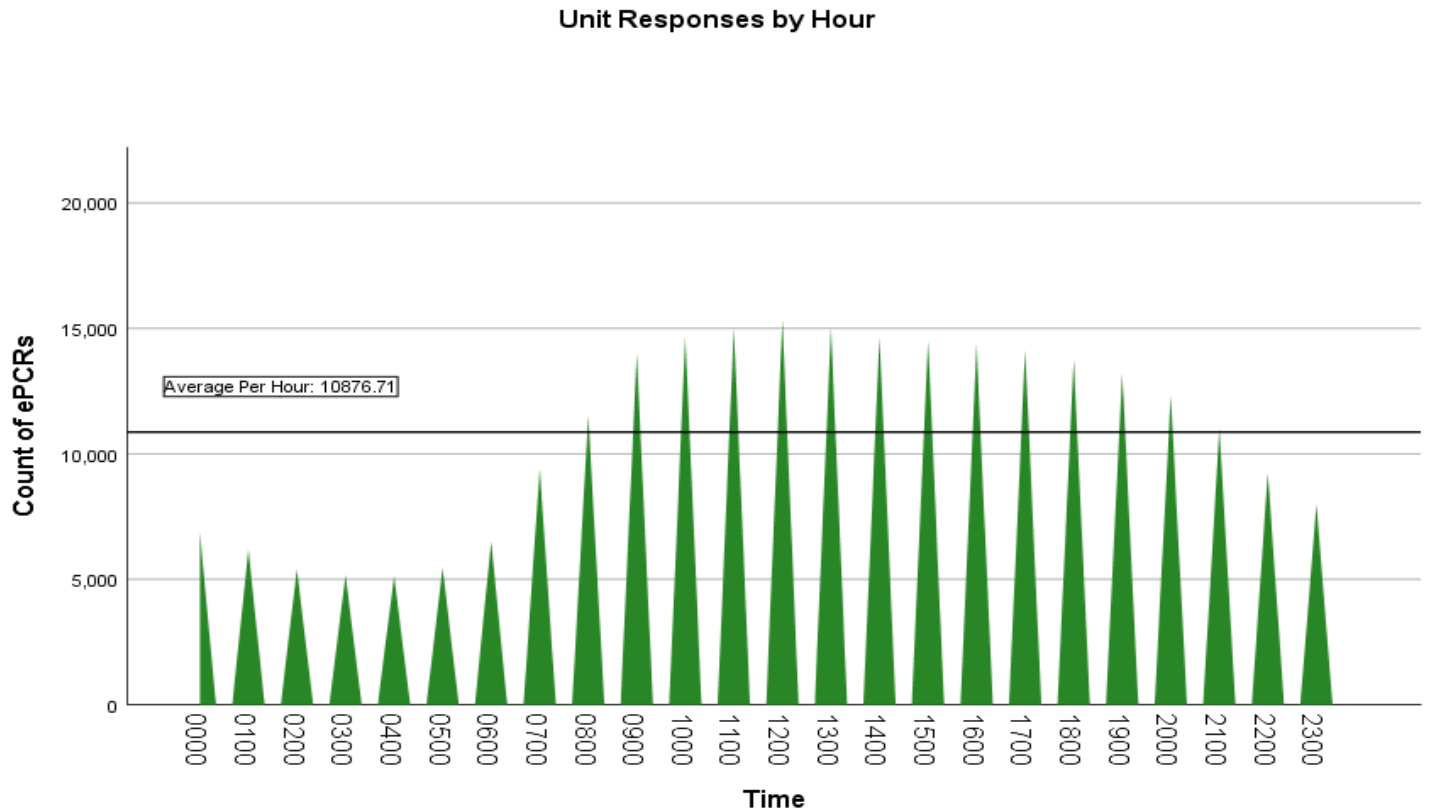
Time Interval Analysis

The tables below contain time interval statistics for all fire department and transport agencies providing 911 services in Riverside County. The intervals are listed at the top of the tables along with their corresponding NEMSIS 3.4 timestamps.

Statistics Definitions Used
- **N Total** is the total number of ePCRs.
- **N Valid** is the number of cases which met criteria for the time interval analysis.
- **N Missing** is the number of cases excluded from the **N Valid** cases for calculation of the time interval. These exclusions are due to incorrect or missing data points.
- **Mean** represents the average of the data in minutes.
- **Median** represents the midpoint in the data in minutes.
- **Standard Deviation (Std. Deviation)** measures distribution of the data in minutes.
- **90th Percentile (Percentile 90)** represents time in minutes at which 90% of the responses fall under.

Total Response Time

Table I. Time interval statistics from *dispatch to hospital arrival* (a) and from *dispatch to patient contact* (b) for all fire departments and transport agencies providing 911 services in Riverside County. The intervals are listed at the top of the tables along with their corresponding NEMSIS 3.4 timestamps.

All 911 Agencies		Alarm Answering/Alarm Transfer Time (eTimes.01 to eTimes.02)	Alarm Handling Time (eTimes.01 to eTimes.03)	Alarm Processing Time (eTimes.02 to eTimes.03)	Turnout Time (eTimes.03 to eTimes.05)	Travel Time (eTimes.05 to eTimes.06)	Intervention Time (eTimes.06 to eTimes.07)	Unit Response Time (eTimes.03 to eTimes.06)	Total Response Time (eTimes.01 to eTimes.07)
N	Total	373,169	373,169	373,169	373,169	373,169	373,169	**373,169**	**373,169**
	Valid	239,364	260,871	261,041	261,041	261,041	261,038	**261,041**	**261,041**
	Missing	21,677	170	0	0	0	3	**0**	**0**
Mean		0.69	1.44	0.84	0.97	6.64	1.70	**7.61**	**10.75**
Median		0.00	0.48	0.28	0.70	5.58	1.15	**6.62**	**9.58**
Std. Deviation		1.29	2.73	2.51	1.00	4.48	2.09	**4.47**	**5.70**
90th Percentile		2.40	3.22	1.35	2.13	11.82	3.00	**12.67**	**16.70**

All 911 Agencies		Total On Scene Time (eTimes.06 to eTimes.09)	Total Time On Scene With Patient (eTimes.07 to eTimes.09)	Arrived On Scene To Arrived At Destination Time (eTimes.06 to eTimes.11)	Transport Time (eTimes.09 to eTimes.11)	Unit Prehospital Time With Patient (eTimes.07 to eTimes.11)	Total Unit Prehospital Time (eTimes.03 to eTimes.11)	Total Prehospital Interval (eTimes.01 to eTimes.11)
N	Total	373,169	373,169	373,169	373,169	373,169	373,169	**373,169**
	Valid	160,444	160,444	156,400	156,385	156,396	156,401	**156,401**
	Missing	100,597	100,597	104,641	104,656	104,645	104,640	**104,640**
Mean		14.79	13.11	29.02	14.34	27.34	37.59	**38.83**
Median		13.70	12.02	27.12	12.40	25.48	35.47	**36.52**
Std. Deviation		7.14	6.96	11.89	9.27	11.71	13.50	**13.88**
90th Percentile		23.37	21.55	43.18	25.15	41.32	53.77	**55.35**

Total Response Time *by Agency Type*

Table III. Time interval statistics from *dispatch to patient contact* for all *transport agencies* providing 911 services in Riverside County. The intervals are listed at the top of the tables along with their corresponding NEMSIS 3.4 timestamps.

Transport Agencies		Alarm Answering/ Alarm Transfer Time (eTimes.01 to eTimes.02)	Alarm Handling Time (eTimes.01 to eTimes.03)	Alarm Processing Time (eTimes.02 to eTimes.03)	Turnout Time (eTimes.03 to eTimes.05)	Travel Time (eTimes.05 to eTimes.06)	Intervention Time (eTimes.06 to eTimes.07)	Unit Response Time (eTimes.03 to eTimes.06)	Total Response Time (eTimes.01 to eTimes.07)
N	Total	174,904	174,904	174,904	174,904	174,904	174,904	174,904	174,904
	Valid	150,243	150,257	150,287	150,287	150,287	150,286	150,287	150,287
	Missing	44	30	0	0	0	1	0	0
Mean		0.00	1.05	1.05	0.62	8.03	1.69	8.65	11.38
Median		0.00	0.30	0.30	0.35	6.97	1.07	7.57	9.85
Std. Deviation		0.18	3.14	3.14	0.89	4.99	2.10	5.09	6.55
90th Percentile		0.00	1.77	1.75	1.38	13.85	3.00	14.57	18.67

Table IV. Time interval statistics from *dispatch to patient contact* for all *fire departments* providing 911 services in Riverside County. The intervals are listed at the top of the tables along with their corresponding NEMSIS 3.4 timestamps.

First Response Agencies		Alarm Answering/ Alarm Transfer Time (eTimes.01 to eTimes.02)	Alarm Handling Time (eTimes.01 to eTimes.03)	Alarm Processing Time (eTimes.02 to eTimes.03)	Turnout Time (eTimes.03 to eTimes.05)	Travel Time (eTimes.05 to eTimes.06)	Intervention Time (eTimes.06 to eTimes.07)	Unit Response Time (eTimes.03 to eTimes.06)	Total Response Time (eTimes.01 to eTimes.07)
N	Total	198,265	198,265	198,265	198,265	198,265	198,265	198,265	198,265
	Valid	89,121	110,614	110,754	110,754	110,754	110,752	110,754	110,754
	Missing	21,633	140	0	0	0	2	0	0
Mean		1.86	1.98	0.55	1.44	4.76	1.72	6.20	9.89
Median		1.87	1.97	0.28	1.33	4.28	1.23	5.73	9.30
Std. Deviation		1.50	1.91	1.14	0.94	2.72	2.07	2.90	4.12
90th Percentile		3.18	3.62	1.12	2.55	7.88	3.12	9.57	14.28

Total Response Time *by Agency*

Table V. *Total Response Time – eTimes.01 to eTimes.07* begins when a 911 call is made to a public safety answering point (PSAP) requesting EMS services and ends when the responding EMS unit arrive at the patient's side. The tables below show Total Response Times by each agency providing 911 services in Riverside County. One agency has been excluded from the analysis due to all of their ePCRs missing required timestamps. A 90th percentile was not calculated for one agency due to a low volume of ePCRs.

Total Response Time (eTimes.01 to eTimes.07)	Agency 1	Agency 2	Agency 3	Agency 4	Agency 5
Mean	11.7	10.42	11.62	7.31	11.1
Median	9.33	8.83	10.32	6.63	10.4
Std. Deviation	7.94	6.49	6.18	3.5	3.98
90th Percentiles	21.85	16.85	18.65	10.53	15.2

Total Response Time (eTimes.01 to eTimes.07)	Agency 6	Agency 7	Agency 8	Agency 9	Agency 10
Mean	10.64	8.8	8.59	7.77	8.57
Median	9.95	8.52	8.1	7.33	7.8
Std. Deviation	4.42	2.67	3.17	2.8	3.97
90th Percentiles	15.26	11.5	12.03	10.85	12.39

Total Response Time (eTimes.01 to eTimes.07)	Agency 11	Agency 12	Agency 13	Agency 14	Agency 15
Mean	11.59	5.31	12.01	10.73	9.94
Median	10.82	6.28	11.9	9.63	9.22
Std. Deviation	4.10	2.03	3.35	4.59	2.94
90th Percentiles	16.56		15.49	16.69	15.33

DATE: Oct 02, 2019

TO: EMCC

FROM: Catherine Farrokhi, Supervising Research Specialist

SUBJECT: Open Public Comment Period

ACTION: Receive and discuss

The Riverside County EMS Agency has drafted the following reports:

1. PATIENT CARE CONTINUUM REPORT - 2018
2. EMERGENCY MEDICAL DISPATCH REPORT - 2018
3. WIC 5150 IMPACT REPORT - 2018

Effective October 02, 2019 these reports are open for Public Comment. The open Public Comment period will be 45 days and will close on November 15, 2019.

Please click this link to make comments to the reports:

https://www.surveymonkey.com/r/REMSA_Public_Comment_Form

Special Seasonal Report

RIVERSIDE COUNTY EMS AGENCY

Ambulance Patient Offload Time

Week 38 (09/15/19 – 09/21/19)

*2019-20 Seasonal Report*

SPECIAL SEASONAL REPORT

In an effort to monitor seasonal surge in Ambulance Patient Offload Time (APOT) during the 2018-19 Influenza season, Riverside County EMS Agency is publishing weekly reports. The following charts represent weekly aggregate APOT/APOD data for the past 10 weeks, updated weekly.

Weekly Transports and APODs
2019 Week 29 through 38
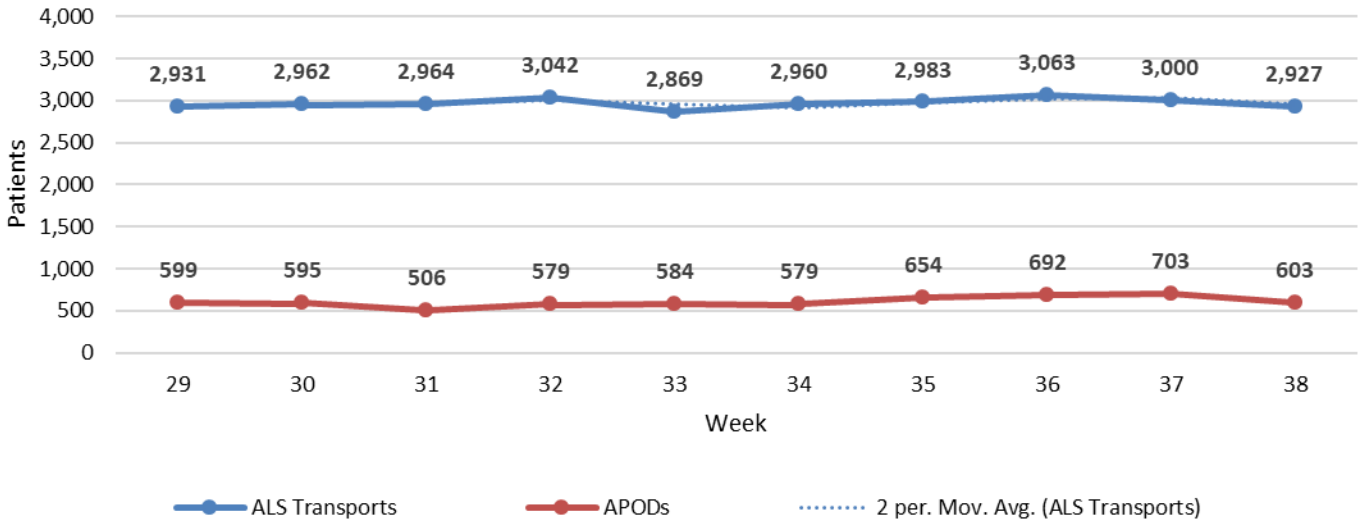
- During 2019 Week 38, there was a total of **2927 transports in Riverside County**— a **2.4%** DECREASE from the previous week's 3000 transports.
- The number of **APODs in Week 38 was 603,** which is **14.2%** BELOW the previous week's total of 703 APODs.

Weekly APOT and APOD Hours
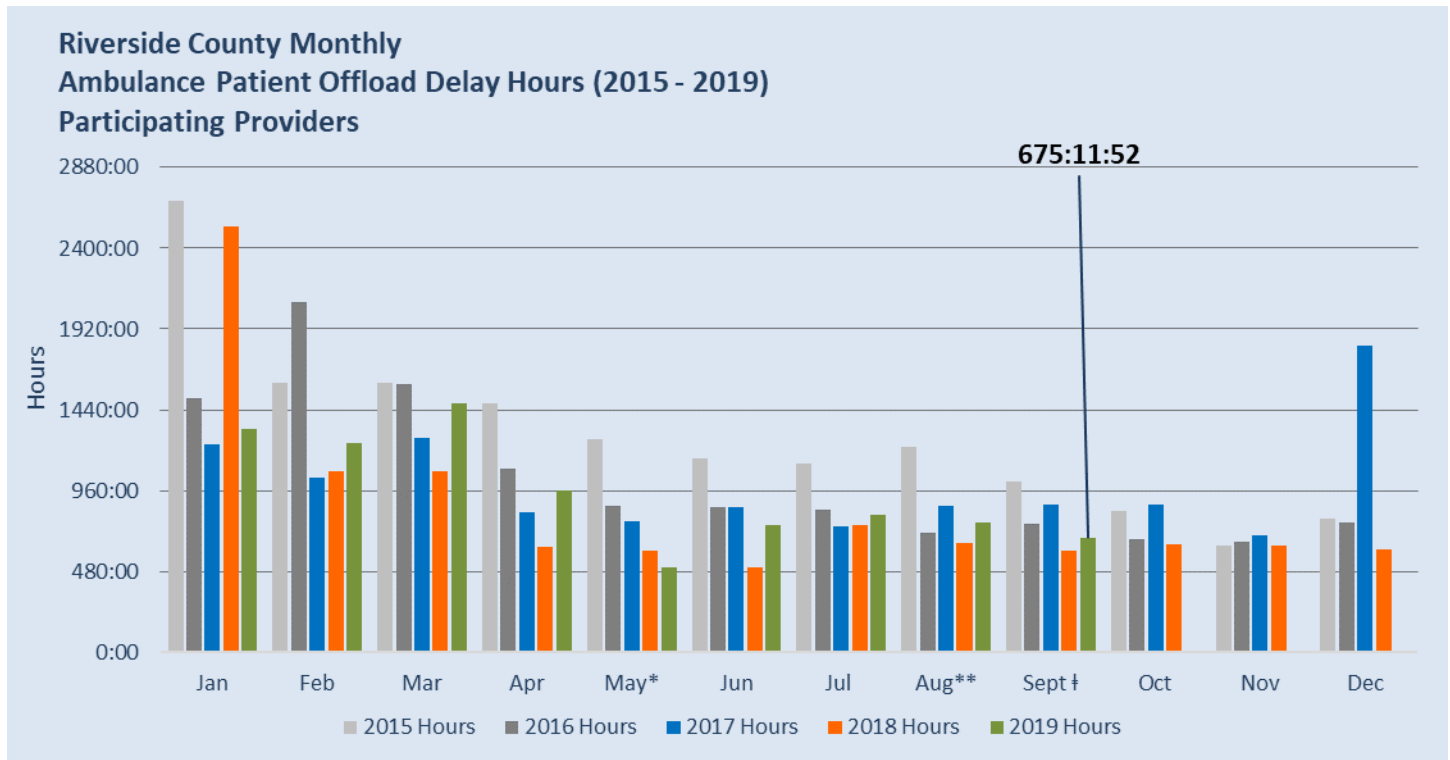**2019 Weeks 29 through 38**
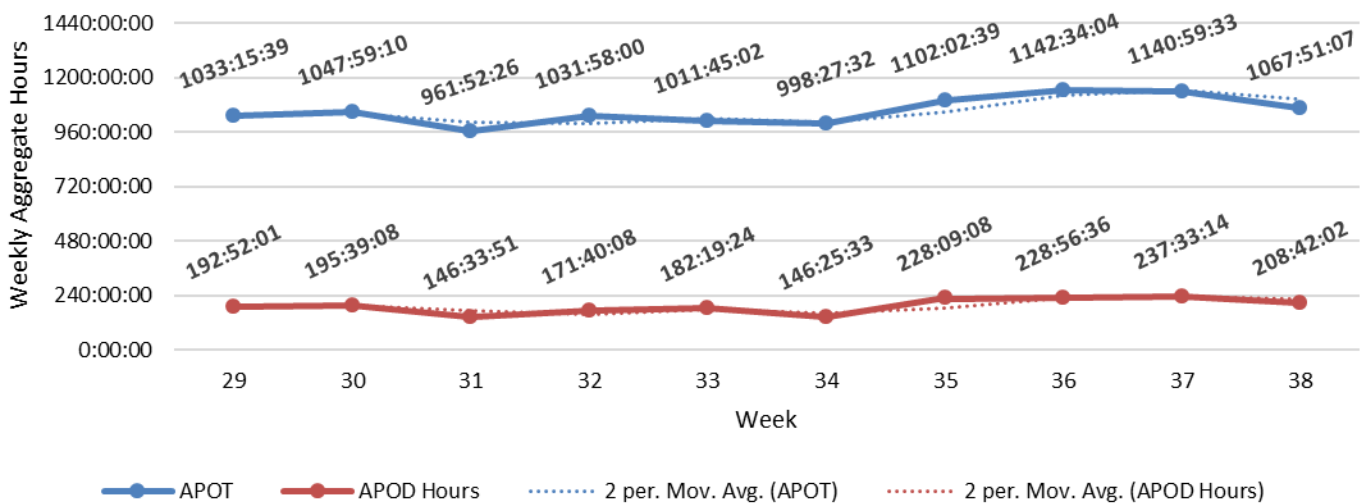
- During 2019 Week 38, **APOT county-wide totaled 1068.0 hours** —**6.4 %** BELOW the previous week's total of 1141.0 hours.
- County-wide **APOD hours for Week 38 totaled 209.0 hours,** a **12.1%** DECREASE from the previous week's total of 237.5 hours.

RIVERSIDE COUNTY AMBULANCE PATIENT OFFLOAD TIME

The data provided illustrates total ambulance patient offload delay time (hh:mm:ss) by month for 2015 through the current week 38 from hospitals within Riverside County. To qualify for this chart, the duration of offload delay must be greater than 30 minutes, and only the time period after the first 30 minutes is summed.

Beginning January 2017, offload times represented are measured using time of patient arrival at hospital (eTimes.11) until the time of patient transfer (eTimes.12) as represented on the ePCR (electronic patient care report). This represents a different methodology in offload time measurement. Prior to January 2017, offload times were calculated using CAD times, beginning with the time that dispatch placed the ambulance on bed delay status until the time the ambulance left the hospital. This chart represents the difference in the old vs. current by displaying the former time measurement/methodology in grayscale.

Riverside County Monthly Ambulance Patient Offload Delay Hours (2015 - 2019) Participating Providers

675:11:52

Legend: 2015 Hours, 2016 Hours, 2017 Hours, 2018 Hours, 2019 Hours

For May of 2016, actual totals may have been slightly higher than are reported due to a 3-day CAD outage.
**Beginning August 2017, times represented include all participating providers. Prior to August, data included AMR responses only.*
ǂ*September 2019 is a partial month*

APOD AMBULANCE REDIRECTION

On March 20, 2019, Riverside County EMS Agency activated Provisional Policy 6104 (http://www.remsa.us/policy/6104.pdf) to allow provisional redirection of Ambulances from hospitals that have extended Ambulance Patient Offload Delay (APOD)--to the closest most appropriate hospital that does not have extended APOD. Extended APOD is a patient remaining on an ambulance gurney for 90 minutes or greater after arrival at a hospital. The table below shows the ambulance diversions that occurred during Week 38.

|	Occurrences of APOD Redirection
Hemet Valley Medical Center	1
Kaiser Permanente Riverside Medical Center	1
Loma Linda University Medical Center--Murrieta	1
Riverside Community Hospital	3
Grand Total	**6**

AMBULANCE PATIENT OFFLOAD TIME BY HOSPITAL

For 2019 Week 38

APOT Snapshot				
ALS Transports	**APOT**	**APOD Hours**	**APODs**	**APOD Compliance**
Corona Regional Med Ctr	171	84:29:34	27:09:37	60	64.9%
Desert Regional Med Ctr	230	54:01:15	1:31:24	13	94.3%
Eisenhower Health	308	56:37:15	1:17:51	6	98.1%
Hemet Valley Hospital	**329**	155:54:24	33:27:28	114	65.3%
Inland Valley Med Ctr	188	60:13:33	8:09:05	32	83.0%
JFK Hospital	150	21:27:08	0:54:49	4	97.3%
Kaiser Hospital Riverside	128	55:03:10	14:39:21	34	73.4%
Loma Linda Univ Med Ctr Mur	136	66:33:30	18:13:46	37	72.8%
Menifee Med Ctr	72	26:10:57	5:06:11	11	84.7%
Moreno Valley Hospital	74	27:06:47	5:07:40	14	81.1%
Palo Verde Hospital	**32**	**3:01:59**	**0:00:00**	**0**	**100.0%**
Parkview Community Hospital	133	45:33:39	6:03:53	24	82.0%
Rancho Springs Med Ctr	95	25:33:11	0:45:37	7	92.6%
Riverside Community Hospital	306	**180:39:52**	**60:30:10**	**145**	**52.6%**
Riverside University Health System	325	129:26:52	21:18:23	78	76.0%
San Gorgonio Mem Hospital	122	34:19:12	0:43:27	7	94.3%
Temecula Valley Hospital	128	41:38:49	3:43:20	17	86.7%
Totals	**2,927**	**1067:51:07**	**208:42:02**	**603**	**79.4%**

Transports and APODs by Hospital
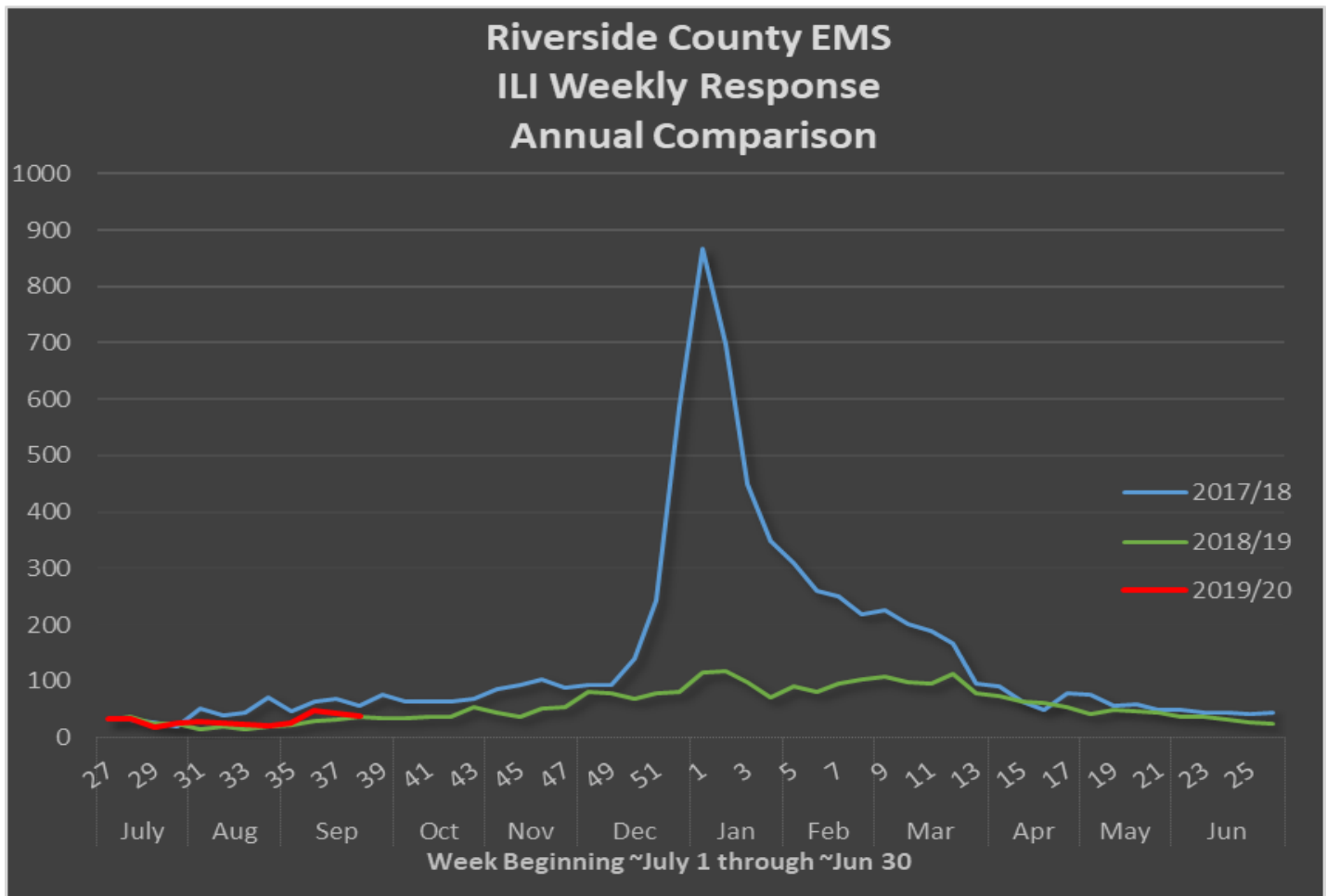2019 Week 38
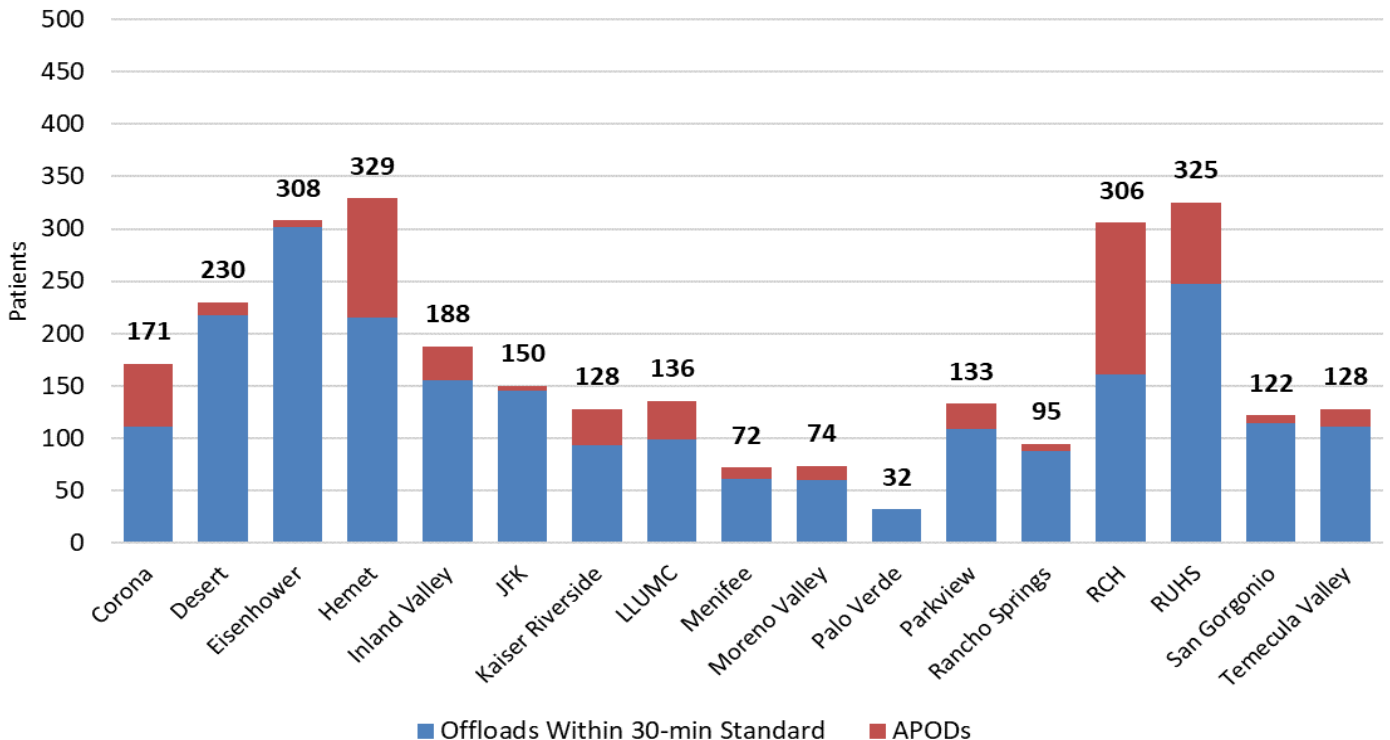
ILI -INFLUENZA-LIKE ILLNESS RESPONSE

The purpose of the REMSA ILI (Influenza-like Illness) trigger and report is to improve tracking of influenza related activity and facilitate EMS preparedness in the event of a significant influenza surge event, similar or greater than that observed during the 2017-18 flu season.

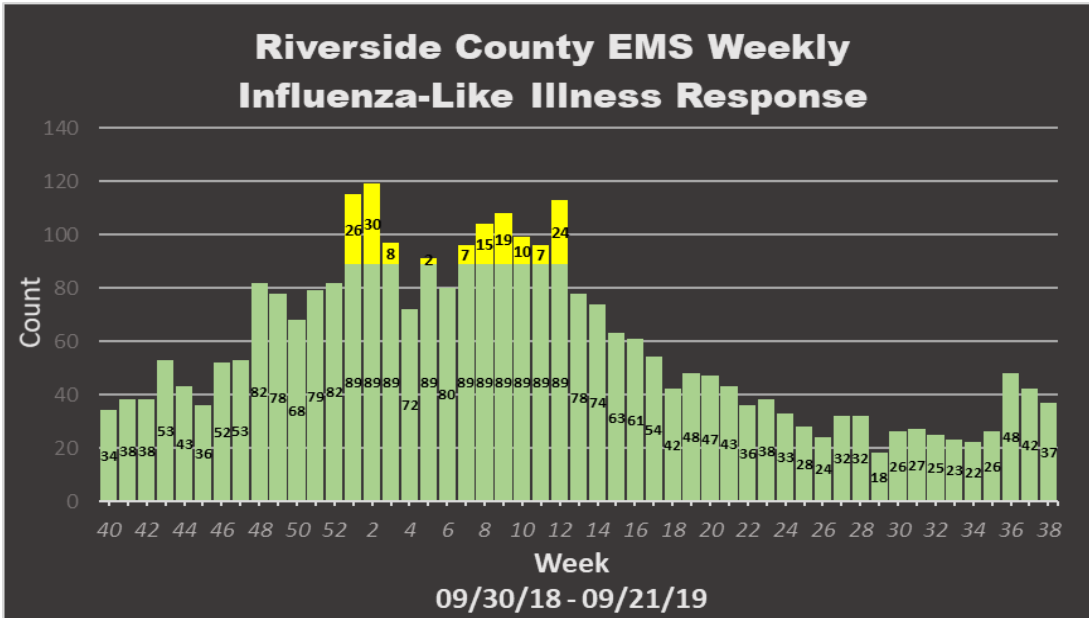The ILI trigger evaluates electronic patient report (ePCR) data using the following methodology:

1. Filters primary or secondary impression of code J11 (Influenza due to unidentified influenza virus) OR
2. A primary / secondary impression code J80, J98.09 (Acute respiratory distress syndrome, Respiratory disorder unspecified) with a match in the narrative for ILI, influenza like illness, Flu, Flu-, Flu\., or influenza OR
3. Any incident with a match in the narrative for ILI, influenza like illness, Flu, Flu-, Flu\., or influenza.

Beginning Week-31 of the 2019-20 season, the ILI trigger methodology was modified to improve detection of ILI-related incidents and further reduce false-positive detection rates. This change has been applied to all data presented resulting in a slight shift of ILI- related ePCR counts and alert threshold when compared to previous weekly reports.

October - Week 40 is defined by the Center for Diease Control (CDC) as the expected seasonal start of increasing flu activity. In Week 38, EMS ILI response DECREASED by 11.9% compared to the previous week and was 35.6% LOWER than the rolling annual average.


EMS ILI response two standard deviations above the calculated baseline average during non-peak flu seasons is considered a surge in flu activity. Surges are identified as color levels adapted from the *CDPH Standards and Guidelines for Healthcare Surge During Emergencies*:

https://www.cdph.ca.gov/Programs/EPO/CDPH%20Document%20Library/FinalEOM712011.pdf

DOPH

Riverside County Public Health provides Emergency Department (ED) ILI activity information from participating hospitals throughout the county. The graph on the right provides a comparison between EMS and ED related ILI activity.
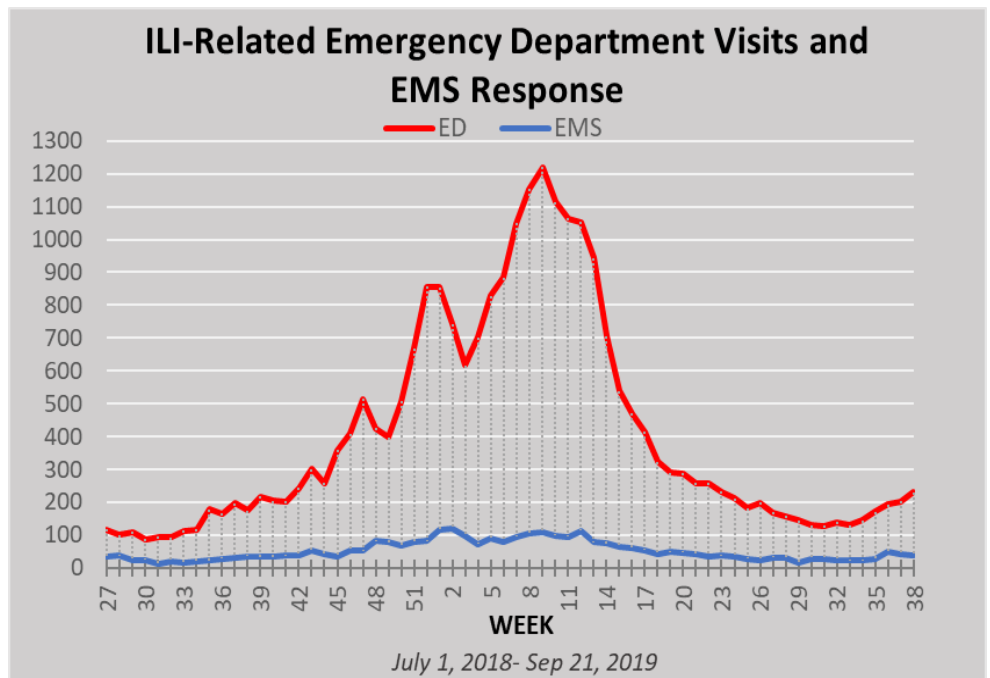
ILI data compiled by Catherine Farrokhi and Sudha Mahesh, Riverside County EMS Agency.
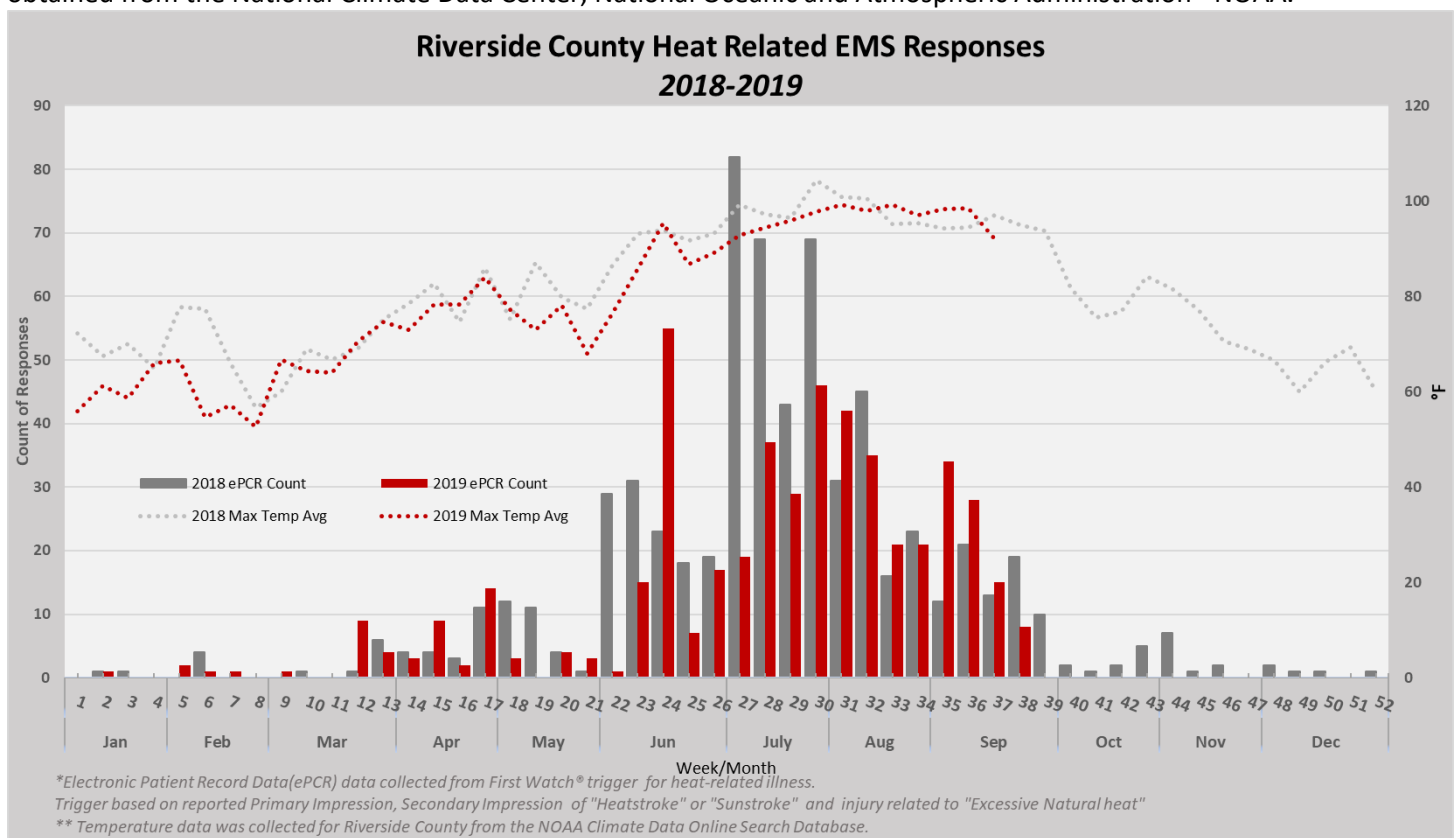
HEAT-RELATED RESPONSE

Excessive heat exposure kills more people than any other weather-related phenomenon, aggravates chronic diseases, and causes direct heat illness[7,8,9,10]. Relationships between extreme heat and health can be identified through increased hospitalizations, emergency department visits and demand for emergency medical services (EMS). The purpose of the REMSA Environmental Heat trigger is to analyze EMS demand associated with extreme heat, using response data from electronic patient care reports (ePCRs).

The HEAT trigger evaluates ePCRs using the following methodology:
1. Primary or Secondary Impression as "Heatstroke" or "Sunstroke"
   OR
2. Injury related to "Excessive Natural Heat".

The graph below illustrates total EMS heat-related responses by week from 2018 through the current week 38 and compares them against maximum temperature averages across Riverside County for the same week. Climate data is obtained from the National Climate Data Center, National Oceanic and Atmospheric Administration - NOAA.

Electronic Patient Record Data(ePCR) data collected from First Watch® trigger for heat-related illness.
Trigger based on reported Primary Impression, Secondary Impression of "Heatstroke" or "Sunstroke" and injury related to "Excessive Natural heat"
** Temperature data was collected for Riverside County from the NOAA Climate Data Online Search Database.

Heat-related EMS response in Riverside County, ePCR distribution map: Week 38 – Sep 15, 2019 through Sep 21, 2019

APOT AND APOD DEFINITIONS

Ambulance Patient Offload Time (APOT)
The Time interval between the arrival of an ambulance patient at an ED and the time the patient is transferred to the ED gurney, bed, chair, or other acceptable location and the emergency department assumes the responsibility for care of the patient.[1] The Clock Start (eTimes.11) is the time of patient arrival at the destination (hospital), and the Clock Stop (eTimes.12) is time the care of the patient is transferred.[2] REMSA obtains both times from the ePCR.

APOT -1 Specifications
Criteria: All 911 transports to a hospital emergency department for which the patient arrival and transfer dates and times are "logical and present."[3]
Method: Aggregate of all transfer times and reported at the 90th percentile (the value for which 90% of the times are shorter).

APOD Compliance
A frequency comparision between the total number of transports and those resulting in APOD.

Ambulance Patient Offload Delay (APOD)
Any delay in ambulance patient offload time (APOT) that exceeds the local ambulance patient offload time standard of 25/30 minutes (Riverside County EMS Agency applies a 30-minute standard). This shall also be synonymous with "non-standard patient offload time" as referenced in the Health and Safety Code.[4] If the transfer of care and patient offloading from the ambulance gurney exceeds the 30 minute standard, it will be documented and tracked as APOD.[5]

Data Definitions
Data in this report includes all transports to the 17 hospitals monitored by REMSA in the respective month relative to the date and time the incident originates (eTimes.03--Dispatch Notified Date/Time). *For example, if an incident originates on June 30, and the patient is subsequently transferred to the care of an emergency department on July 1, that incident will be included in the month of June.*

Canceled calls, calls for which both arrival and transfer times are not present, and calls with erroneous/negative offload times are excluded. Certain incidents with offload times exceeding six hours and 12 hours are verified for accuracy, and incidents are excluded if the timeline cannot be validated.

> Data for this report has been collected from ePCRs (electronic patient care reports) from FirstWatch® and are available after they have been completed by the provider. There is, therefore, an inherent latency to the availability of these records. Due to this latency, subsequent reports may feature higher aggregate numbers than earlier reports for the same reporting period. The difference is insignificant (averaging less than .07%) and does not impact overall compliance.

[1] Health and Safety Code Division 2.5, Chapter 3, Article 1, Section 1797.120(b)
[2] Ambulance Patient Offload Time (APOT) Standardized Methods for Data Collection and Reporting, approved by EMS Commission 12/14/2016.
[3] Ibid., APOT-1 Specifications.
[4] REMSA Policy 9101.6. http://www.remsa.us/policy/9101.pdf
[5] REMSA Policy 4204, Transfer of Patient Care. http://www.remsa.us/policy/4204.pdf
[7] Calkins MM, Isaksen TB, Stubbs BA, Yost MG, Fenske RA (2016). Impacts of extreme heat on emergency medical service calls in King County, Washington, 2007-2012:relative risk and time series analyses of basic and advanced life support. Environ Health. doi: 10.1186/s12940-016-0109-0
[8] Sheridan SC, Kalkstein AM, Kalkstein LS (2009). Trends in heat-related mortality in the United States, 1975–2004. Natural Hazards 50:1, 145-160
[9] Guo Y, Gasparrini A, Armstrong BG (2017). Heat Wave and Mortality: A Multicountry, Multicommunity Study. Environ Health Perspect. 2017;125(8):087006. doi:10.1289/EHP1026
[10] CDC, Climate and Health Program. 2010. https://www.cdc.gov/climateandhealth/effects/default.htm