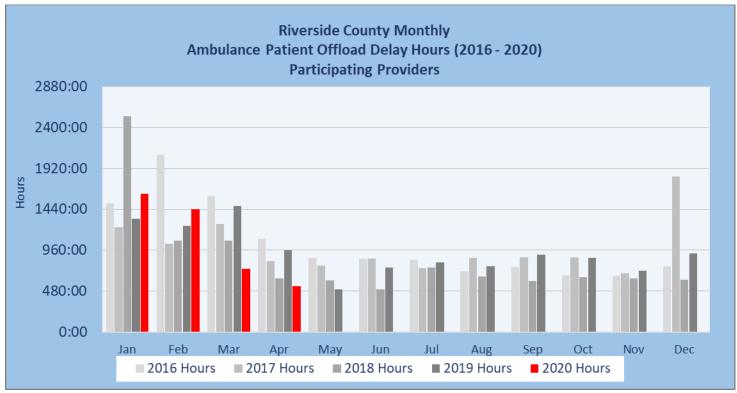


# Ambulance Patient Offload Time April 2020



# RIVERSIDE COUNTY AMBULANCE PATIENT OFFLOAD TIME

These charts represent total ambulance patient offload times (APOT) and delays (APOD) from hospitals within Riverside County. APOD includes delays greater than 30 minutes, and only the time after the first 30 minutes has passed.



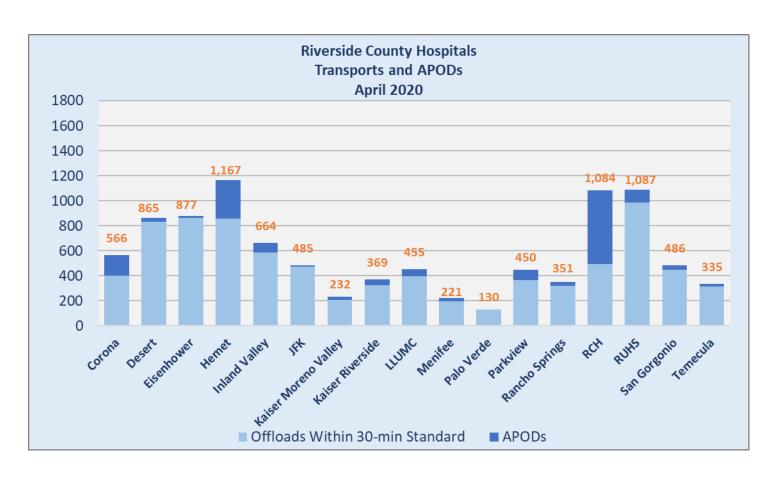
APOD times for 2016 were measured using a different methodology. See page 6 for details.

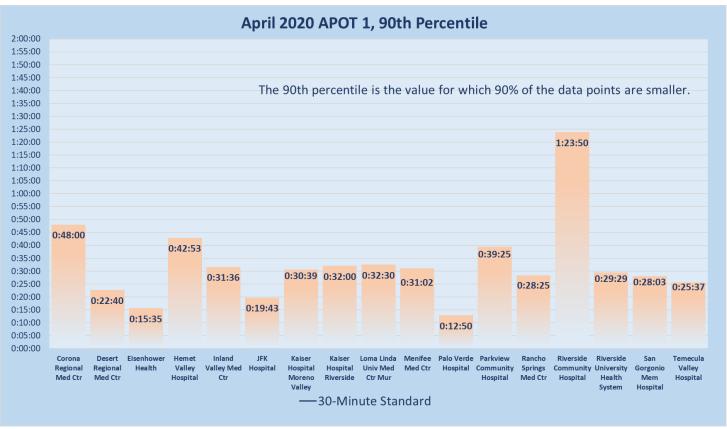
<sup>\*\*</sup>Beginning August 2017, times represented include all participating providers. Prior to August, data included AMR responses only.

		April 202	0			
	ALS Transports	АРОТ	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	566	238:37:14	45:23:44	166	70.7%	0:48:00
<b>Desert Regional Med Ctr</b>	865	176:40:28	8:48:38	35	96.0%	0:22:40
Eisenhower Health	877	141:05:08	3:10:06	13	98.5%	0:15:35
Hemet Valley Hospital	1,167	463:56:54	66:18:22	311	73.4%	0:42:53
Inland Valley Med Ctr	664	188:22:34	15:25:54	78	88.3%	0:31:36
JFK Hospital	485	76:34:47	1:25:55	11	97.7%	0:19:43
Kaiser Hospital Moreno Valley	232	64:42:20	9:57:49	25	89.2%	0:30:39
Kaiser Hospital Riverside	369	104:15:13	8:46:03	44	88.1%	0:32:00
Loma Linda Univ Med Ctr Mur	455	141:46:27	9:32:10	59	87.0%	0:32:30
Menifee Med Ctr	221	68:05:45	3:34:56	26	88.2%	0:31:02
Palo Verde Hospital	130	13:28:00	0:00:00	0	100.0%	0:12:50
Parkview Community Hospital	450	156:54:18	18:52:25	83	81.6%	0:39:25
Rancho Springs Med Ctr	351	93:50:37	6:42:21	30	91.5%	0:28:25
Riverside Community Hospital	1,084	754:39:44	312:50:40	590	45.6%	1:23:50
Riverside University Health System	1,087	320:25:42	15:29:08	99	90.9%	0:29:29
San Gorgonio Mem Hospital	486	130:48:07	5:29:22	39	92.0%	0:28:03
Temecula Valley Hospital	335	78:46:11	3:31:09	21	93.7%	0:25:37
Grand Total	9,824	3212:59:29	535:18:42	1,630	83.4%	0:38:23

Key	High	Low

For May of 2016, actual totals may have been slightly higher than are reported due to a 3-day CAD outage.

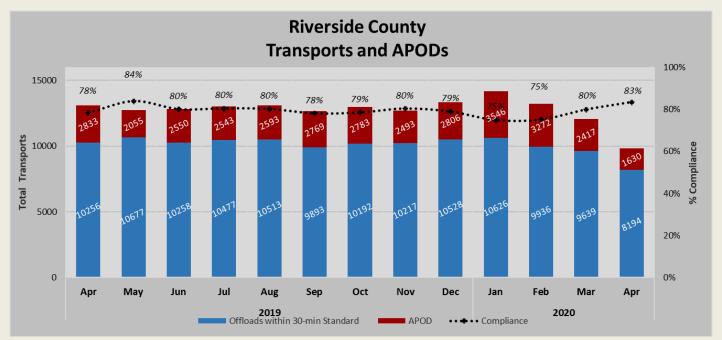




Data for this report has been collected from ePCRs (electronic patient care records) via FirstWatch® and are available after they have been completed by the provider. There is, therefore, an inherent latency to the availability of these records. Due to this latency, subsequent reports may feature higher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

# APOT AND APOD TRENDS: ROLLING ANNUAL REVIEW

The first chart represents Riverside County's total number of *ambulance 9-1-1 transports, patient offload delay (APOD),* and percent compliance for the current month and a rolling 12 months prior.



APOD hours only include the time after the 30-minute standard has elapsed.

TRANSPORT VOLUME. Transport volume for each hospital over a 12 month period compared to the current month is described below. Each hospital can be categorized as a low to high volume facility relative to all facilities in the county. Hospitals are color coded ranging from low to high based on an average transports of the last 12 months.

								Trans	port Vo	lume	Lo	w		High
Hospital	2019											2020		Avg
Hospital	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Avg
Corona Regional Med Ctr	710	705	771	819	802	780	790	753	799	821	797	700	566	755
Desert Regional Med Ctr	1193	1083	1098	1138	1137	1052	1079	1152	1151	1275	1180	1029	865	1,110
Eisenhower Health	1389	1293	1276	1218	1139	1240	1250	1353	1378	1564	1467	1198	877	1,280
Hemet Valley Hospital	1487	1416	1375	1465	1435	1429	1501	1380	1472	1535	1348	1287	1167	1,407
Inland Valley Med Ctr	836	829	851	895	913	886	894	919	844	972	902	785	664	861
JFK Hospital	737	597	638	685	627	580	627	688	659	699	663	582	485	636
Kaiser Hospital Moreno Valley	322	328	338	341	367	330	317	283	317	353	311	292	232	318
Kaiser Hospital Riverside	507	515	535	506	515	542	511	485	542	556	506	482	369	505
Loma Linda Univ Med Ctr Mur	604	623	627	637	594	599	561	583	588	594	565	502	455	579
Menifee Med Ctr	329	319	338	343	377	311	299	280	336	334	350	328	221	320
Palo Verde Hospital	182	169	162	154	192	166	153	133	152	163	165	168	130	161
Parkview Community Hospital	519	454	480	554	572	510	513	489	594	688	610	524	450	535
Rancho Springs Med Ctr	453	431	454	448	463	440	499	456	470	564	524	431	351	460
Riverside Comm Hospital	1388	1472	1461	1366	1470	1351	1451	1380	1381	1292	1381	1415	1084	1,376
Riverside Univ Health System	1275	1337	1255	1314	1377	1381	1440	1284	1438	1487	1378	1329	1087	1,337
San Gorgonio Mem Hospital	594	588	563	587	542	563	560	547	585	657	528	488	486	561
Temecula Valley Hospital	564	573	586	550	584	502	530	545	628	618	533	516	335	543
Riverside County Total	13089	12732	12808	13020	13106	12662	12975	12710	13334	14172	13208	12056	9824	12746

**COMPLIANCE**. Compliance is a frequency comparison between the total number of transports and those resulting in APOD. The table below shows compliance by hospital for the last 12 months compared to the current month. **Compliance** 

											High			_ow			
APOT % Compliance by Hospital for the last 12 months																	
		2019										2020					
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Avg			
Corona Regional Med Ctr	75%	76%	74%	67%	72%	66%	69%	70%	75%	68%	69%	76%	71%	71%			
Desert Regional Med Ctr	95%	97%	94%	95%	89%	90%	94%	87%	89%	83%	83%	90%	96%	91%			
Eisenhower Health	98%	99%	99%	98%	99%	98%	98%	99%	99%	98%	98%	99%	99%	98%			
Hemet Valley Hospital	62%	68%	64%	62%	72%	65%	70%	71%	66%	59%	55%	63%	73%	65%			
Inland Valley Med Ctr	83%	85%	81%	80%	84%	82%	81%	82%	88%	74%	76%	87%	88%	82%			
JFK Hospital	98%	98%	99%	99%	99%	98%	99%	99%	99%	98%	98%	98%	98%	99%			
Kaiser Hospital Moreno Valley	78%	88%	83%	88%	80%	78%	81%	82%	80%	79%	72%	85%	89%	82%			
Kaiser Hospital Riverside	80%	83%	80%	89%	84%	78%	75%	71%	79%	71%	73%	82%	88%	79%			
Loma Linda Univ Med Ctr Mur	55%	68%	65%	74%	73%	72%	71%	73%	70%	70%	75%	80%	87%	72%			
Menifee Med Ctr	74%	76%	71%	76%	78%	77%	66%	75%	72%	75%	71%	75%	88%	75%			
Palo Verde Hospital	98%	99%	100%	99%	100%	100%	99%	100%	99%	97%	98%	98%	100%	99%			
Parkview Community Hospital	73%	86%	81%	83%	83%	78%	84%	86%	74%	63%	68%	72%	82%	78%			
Rancho Springs Med Ctr	92%	89%	93%	91%	93%	90%	89%	90%	91%	88%	89%	89%	91%	90%			
Riverside Community Hospital	55%	76%	60%	54%	50%	52%	55%	63%	49%	41%	44%	51%	46%	54%			
Riverside University Health System	76%	84%	84%	87%	84%	75%	73%	77%	82%	80%	78%	84%	91%	81%			
San Gorgonio Mem Hospital	86%	89%	85%	89%	89%	92%	90%	86%	89%	90%	93%	92%	92%	89%			
Temecula Valley Hospital	76%	81%	78%	82%	82%	85%	77%	79%	71%	67%	75%	82%	94%	79%			
Riverside County Compliance	78%	84%	80%	80%	80%	78%	79%	80%	79%	75%	75%	80%	83%	79%			

APOT-1. APOT-1 is an Ambulance Patient Offload Time interval measure of the 90<sup>th</sup> percentile. This metric is a continuous variable measured in hours and minutes then aggregated and reported at the 90th percentile. The table below illustrates APOT-1 by hospital for the last 12 months compared to the current month.

APOT-1 for the last 12 Months														
	2019										2020			Avg
Hospital	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	APOT-1
Corona Regional Med Ctr	0:43	0:46	0:51	1:04	0:48	1:05	0:58	0:54	0:49	1:00	1:00	0:47	0:48	0:53
Desert Regional Med Ctr	0:22	0:20	0:24	0:22	0:31	0:30	0:26	0:34	0:32	0:40	0:40	0:31	0:23	0:28
Eisenhower Health	0:19	0:17	0:17	0:17	0:16	0:18	0:17	0:17	0:16	0:19	0:18	0:17	0:16	0:17
Hemet Valley Hospital	0:54	0:46	0:50	0:52	0:45	0:50	0:44	0:45	0:45	0:59	1:09	0:49	0:43	0:50
Inland Valley Med Ctr	0:39	0:38	0:43	0:39	0:37	0:39	0:42	0:42	0:32	0:54	0:49	0:33	0:32	0:39
JFK Hospital	0:17	0:15	0:17	0:17	0:17	0:16	0:16	0:16	0:15	0:16	0:16	0:18	0:20	0:16
Kaiser Hospital Moreno Valley	0:42	0:33	0:43	0:35	0:42	0:47	0:54	0:46	0:43	0:51	1:16	0:38	0:31	0:44
Kaiser Hospital Riverside	0:43	0:36	0:42	0:31	0:36	0:49	0:51	0:55	0:46	1:09	1:00	0:40	0:32	0:45
Loma Linda Univ Med Ctr Mur	1:05	0:48	0:48	0:43	0:43	0:43	0:47	0:44	0:51	0:45	0:42	0:37	0:33	0:45
Menifee Med Ctr	0:54	0:46	0:55	0:46	0:46	0:45	1:10	0:45	0:54	0:55	0:56	0:46	0:31	0:49
Palo Verde Hospital	0:14	0:12	0:10	0:12	0:13	0:11	0:09	0:12	0:12	0:13	0:13	0:13	0:13	0:12
Parkview Community Hospital	0:46	0:35	0:41	0:38	0:38	0:46	0:37	0:34	0:41	1:15	0:55	0:51	0:39	0:44
Rancho Springs Med Ctr	0:28	0:31	0:28	0:29	0:27	0:30	0:32	0:30	0:29	0:33	0:32	0:30	0:28	0:29
Riverside Comm Hospital	1:10	0:40	0:54	1:03	1:08	1:06	0:58	0:48	1:10	1:33	1:23	1:03	1:24	1:06
Riverside Univ Health System	0:41	0:35	0:35	0:32	0:36	0:41	0:45	0:40	0:35	0:38	0:42	0:37	0:29	0:37
San Gorgonio Mem Hospital	0:33	0:31	0:35	0:31	0:31	0:29	0:31	0:33	0:31	0:31	0:26	0:28	0:28	0:30
Temecula Valley Hospital	0:47	0:39	0:42	0:35	0:40	0:35	0:43	0:41	0:51	0:55	0:43	0:36	0:26	0:41
Riverside County Compliance	0:43	0:36	0:40	0:40	0:40	0:43	0:43	0:39	0:41	0:50	0:50	0:41	0:38	0:42

# APOD AMBULANCE REDIRECTION

On October 1, 2019, Riverside County EMS Agency activated Policy 6104 (<a href="http://www.remsa.us/policy/6104.pdf">http://www.remsa.us/policy/6104.pdf</a>) to allow 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 total number of ambulance redirections that occurred since activation of the provisional policy for the current month and a rolling 12 months prior.

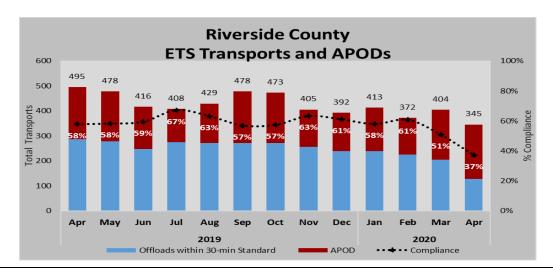
	2019									2020				Total Redirection
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Redirection
Corona Regional Medical Center	3	4	3	10		10	12	9	6	18	11	5	1	92
Desert Regional Medical Center								2	2	3	9	2		18
Hemet Valley Medical Center	5	2		2	2	2	2	1		5	21	1		43
Inland Valley Medical Center	3	2		2	2		6	5		10	7	1		38
Kaiser Hospital Moreno Valley			1			4	12	2	1	4	12		1	37
Kaiser Hospital Riverside	1					4	2	5	5	10	8	1		36
Loma Linda Univ Med Ctr Murrieta	15	1	5	1	3	2	12	2	7	7	10	1		66
Menifee Valley Medical Center	5		4	3	3	4	8	1	2	4	6	1		41
Parkview Community Hospital	1					2			1	17	8	4		33
Rancho Springs Medical Center						2				1		1		4
Riverside Community Hospital	21	1	6	21	21	38	10		16	45	36	7	20	242
Riverside University Health System	1		1		1		14				2			19
Temecula Valley Hospital	2		2					1	1	2				8
Total Redirection	57	10	22	39	32	68	78	28	41	126	130	24	22	677

# EMERGENCY TREATMENT SERVICES

Transports to Emergency Treatment Services (ETS) comprise over 3% of overall transports. This is significant enough to impact the EMS system and, therefore, warrants reporting. However, transports to ETS do not meet the EMSA definitions for APOT (see page 6); therefore, they are not included with the previous APOT aggregates.

April 2020 - Emergency Treatment Services											
		<b>Total Offload</b>			APOD						
	Transports to ETS	Time	APOD Hours	APODs	Compliance						
<b>Emergency Treatment Services</b>	345	296:50:14	146:34:33	217	37.1%						

The chart below represents Riverside County's total number of *ETS ambulance transports, patient offload delay (APOD),* and percent compliance for the current month and a rolling 12 months prior.



# 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. 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. 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."<sup>3</sup>

Method: Aggregate of all transfer times and reported at the 90<sup>th</sup> percentile (the value for which 90% of the times are shorter).

## 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. 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.

## **APOD Compliance**

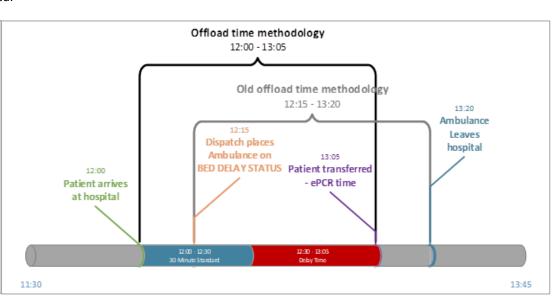
A frequency comparison between the total number of transports and those resulting in APOD.

## 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.

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 record). Prior to January 2017, offload times were calculated using CAD times, beginning with the time that dispatch placed the ambulance on bed delay until the time the ambulance left the hospital.



<sup>&</sup>lt;sup>1</sup> Health and Safety Code Division 2.5, Chapter 3, Article 1, Section 1797.120(b)

<sup>&</sup>lt;sup>2</sup> Ambulance Patient Offload Time (APOT) Standardized Methods for Data Collection and Reporting, approved by EMS Commission 12/14/2016.

<sup>&</sup>lt;sup>3</sup> Ibid., APOT-1 Specifications.

<sup>&</sup>lt;sup>4</sup> REMSA Policy 9101.6. http://www.remsa.us/policy/9101.pdf

<sup>&</sup>lt;sup>5</sup> REMSA Policy 4204, Transfer of Patient Care. <a href="http://www.remsa.us/policy/4204.pdf">http://www.remsa.us/policy/4204.pdf</a>