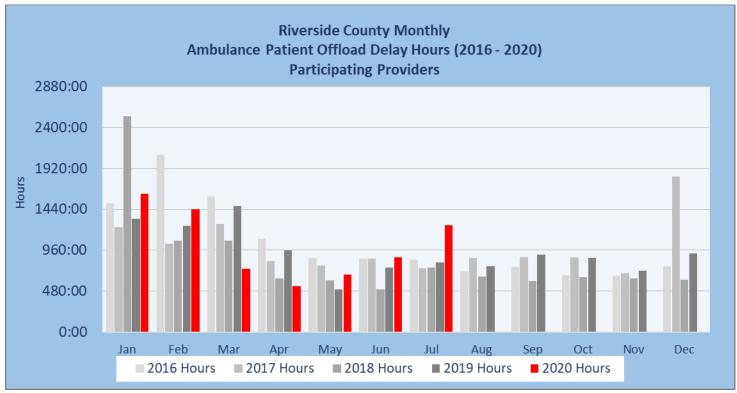


Ambulance Patient Offload Time July 2020

Monthly Report

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.



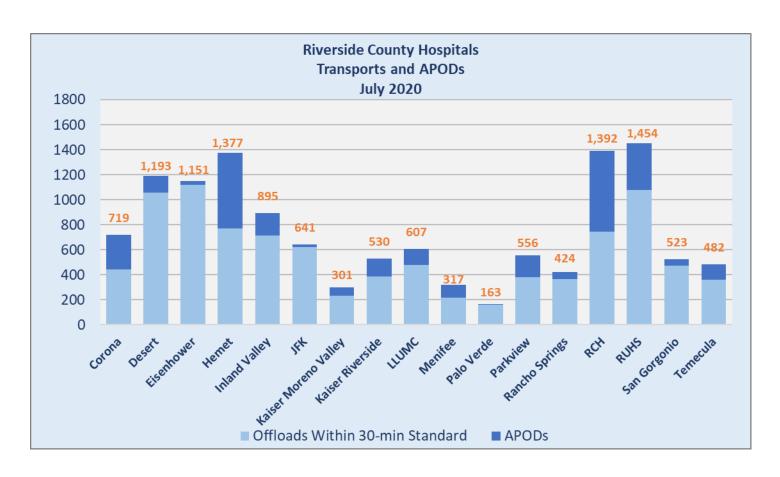
APOD times for 2016 were measured using a different methodology. See page 6 for details.

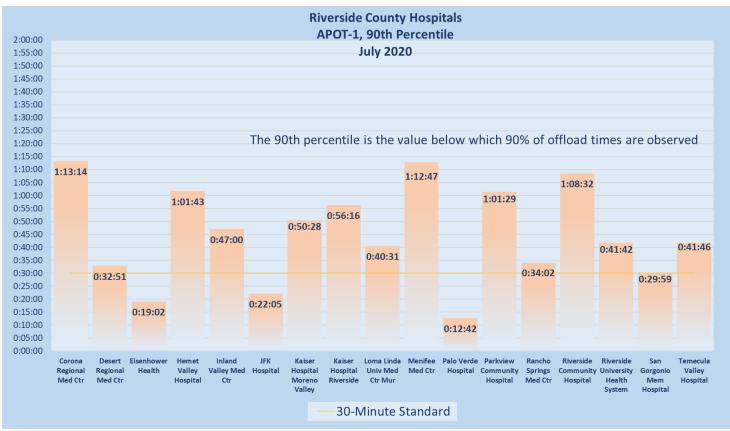
^{**}Beginning August 2017, times represented include all participating providers. Prior to August, data included AMR responses only.

		July 2020				
	ALS Transports	АРОТ	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	719	410:18:54	147:49:40	277	61.5%	1:13:14
Desert Regional Med Ctr	1,193	317:58:09	45:05:55	136	88.6%	0:32:51
Eisenhower Health	1,151	207:49:35	6:40:22	31	97.3%	0:19:02
Hemet Valley Hospital	1,377	771:08:38	241:21:09	608	55.8%	1:01:43
Inland Valley Med Ctr	895	342:47:52	80:00:43	181	79.8%	0:47:00
JFK Hospital	641	111:56:35	7:56:23	21	96.7%	0:22:05
Kaiser Hospital Moreno Valley	301	118:44:25	31:47:10	68	77.4%	0:50:28
Kaiser Hospital Riverside	530	238:40:48	64:38:47	145	72.6%	0:56:16
Loma Linda Univ Med Ctr Mur	607	229:10:53	39:53:53	131	78.4%	0:40:31
Menifee Med Ctr	317	170:11:46	60:45:56	100	68.5%	1:12:47
Palo Verde Hospital	163	17:39:12	2:35:38	2	98.8%	0:12:42
Parkview Community Hospital	556	287:17:11	94:30:05	173	68.9%	1:01:29
Rancho Springs Med Ctr	424	132:40:33	13:56:49	60	85.8%	0:34:02
Riverside Community Hospital	1,392	839:45:46	300:59:15	647	53.5%	1:08:32
Riverside University Health System	1,454	571:10:13	81:09:11	374	74.3%	0:41:42
San Gorgonio Mem Hospital	523	158:18:57	8:06:55	51	90.2%	0:29:59
Temecula Valley Hospital	482	185:15:44	28:19:54	119	75.3%	0:41:46
Grand Total	12,725	5110:55:11	1255:37:45	3,124	75.4%	0:48:00

Key	High	Low

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

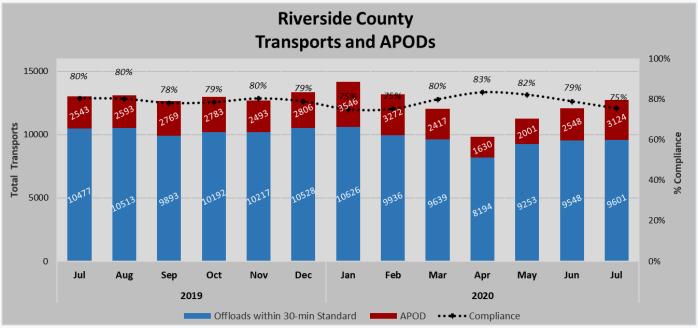




Data for this report has been collected from ePCRs (electronic patient care records) via FirstWatch® and are available after they have been completed by the provider. There is, therefore, an inherent latency to the availability of these records. Due to this latency, subsequent reports may feature higher 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	ort Vol	ume	Lov	N		High
Hospital	2019							2020						Monthly
Hospital	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Avg
Corona Regional Med Ctr	819	802	780	790	753	799	821	797	700	566	664	627	719	741
Desert Regional Med Ctr	1138	1137	1052	1079	1152	1151	1275	1180	1029	865	1082	1162	1193	1,115
Eisenhower Health	1218	1139	1240	1250	1353	1378	1564	1467	1198	877	1119	1125	1151	1,237
Hemet Valley Hospital	1465	1435	1429	1501	1380	1472	1535	1348	1287	1167	1197	1279	1377	1,375
Inland Valley Med Ctr	895	913	886	894	919	844	972	902	785	664	796	800	895	859
JFK Hospital	685	627	580	627	688	659	699	663	582	485	595	659	641	630
Kaiser Hospital Moreno Valley	341	367	330	317	283	317	353	311	292	232	239	248	301	302
Kaiser Hospital Riverside	506	515	542	511	485	542	556	506	482	369	435	490	530	498
Loma Linda Univ Med Ctr Mur	637	594	599	561	583	588	594	565	502	455	512	582	607	568
Menifee Med Ctr	343	377	311	299	280	336	334	350	328	221	259	316	317	313
Palo Verde Hospital	154	192	166	153	133	152	163	165	168	130	163	153	163	158
Parkview Community Hospital	554	572	510	513	489	594	688	610	524	450	464	518	556	542
Rancho Springs Med Ctr	448	463	440	499	456	470	564	524	431	351	363	392	424	448
Riverside Comm Hospital	1366	1470	1351	1451	1380	1381	1292	1381	1415	1084	1218	1325	1392	1,347
Riverside Univ Health System	1314	1377	1381	1440	1284	1438	1487	1378	1329	1087	1261	1375	1454	1,354
San Gorgonio Mem Hospital	587	542	563	560	547	585	657	528	488	486	488	550	523	546
Temecula Valley Hospital	550	584	502	530	545	628	618	533	516	335	399	495	482	517
Riverside County Total	13020	13106	12662	12975	12710	13334	14172	13208	12056	9824	11254	12096	12725	12549

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.

												High		Lov
	APO ⁻	Т % Со	mplian	ice by	Hospit	al for	the la	st 12 n	nonths					
			20	19						2020				Monthly
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Avg
Corona Regional Med Ctr	67%	72%	66%	69%	70%	75%	68%	69%	76%	71%	70%	65%	61%	69%
Desert Regional Med Ctr	95%	89%	90%	94%	87%	89%	83%	83%	90%	96%	92%	87%	89%	90%
Eisenhower Health	98%	99%	98%	98%	99%	99%	98%	98%	99%	99%	99%	97%	97%	98%
Hemet Valley Hospital	62%	72%	65%	70%	71%	66%	59%	55%	63%	73%	70%	69%	56%	66%
Inland Valley Med Ctr	80%	84%	82%	81%	82%	88%	74%	76%	87%	88%	89%	85%	80%	83%
JFK Hospital	99%	99%	98%	99%	99%	99%	98%	98%	98%	98%	99%	97%	97%	98%
Kaiser Hospital Moreno Valley	88%	80%	78%	81%	82%	80%	79%	72%	85%	89%	88%	75%	77%	81%
Kaiser Hospital Riverside	89%	84%	78%	75%	71%	79%	71%	73%	82%	88%	84%	74%	73%	78%
Loma Linda Univ Med Ctr Mur	74%	73%	72%	71%	73%	70%	70%	75%	80%	87%	82%	82%	78%	76%
Menifee Med Ctr	76%	78%	77%	66%	75%	72%	75%	71%	75%	88%	85%	80%	68%	76%
Palo Verde Hospital	99%	100%	100%	99%	100%	99%	97%	98%	98%	100%	97%	99%	99%	99%
Parkview Community Hospital	83%	83%	78%	84%	86%	74%	63%	68%	72%	82%	74%	65%	69%	75%
Rancho Springs Med Ctr	91%	93%	90%	89%	90%	91%	88%	89%	89%	91%	94%	90%	86%	90%
Riverside Community Hospital	54%	50%	52%	55%	63%	49%	41%	44%	51%	46%	49%	55%	54%	51%
Riverside University Health System	87%	84%	75%	73%	77%	82%	80%	78%	84%	91%	85%	78%	74%	81%
San Gorgonio Mem Hospital	89%	89%	92%	90%	86%	89%	90%	93%	92%	92%	93%	91%	90%	90%
Temecula Valley Hospital	82%	82%	85%	77%	79%	71%	67%	75%	82%	94%	91%	83%	75%	80%
Riverside County Compliance	80%	80%	78%	79%	80%	79%	75%	75%	80%	83%	82%	79%	75%	79%

APOT-1. APOT-1 is an Ambulance Patient Offload Time interval measure of the 90th 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 (90th Percentile) for the last 12 Months														
	2019										Avg			
Hospital	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	APOT-1
Corona Regional Med Ctr	1:04	0:48	1:05	0:58	0:54	0:49	1:00	1:00	0:47	0:48	0:48	0:56	1:13	0:56
Desert Regional Med Ctr	0:22	0:31	0:30	0:26	0:34	0:32	0:40	0:40	0:31	0:23	0:28	0:33	0:33	0:31
Eisenhower Health	0:17	0:16	0:18	0:17	0:17	0:16	0:19	0:18	0:17	0:16	0:16	0:18	0:19	0:17
Hemet Valley Hospital	0:52	0:45	0:50	0:44	0:45	0:45	0:59	1:09	0:49	0:43	0:44	0:45	1:02	0:50
Inland Valley Med Ctr	0:39	0:37	0:39	0:42	0:42	0:32	0:54	0:49	0:33	0:32	0:31	0:35	0:47	0:39
JFK Hospital	0:17	0:17	0:16	0:16	0:16	0:15	0:16	0:16	0:18	0:20	0:19	0:20	0:22	0:17
Kaiser Hospital Moreno Valley	0:35	0:42	0:47	0:54	0:46	0:43	0:51	1:16	0:38	0:31	0:32	0:56	0:50	0:46
Kaiser Hospital Riverside	0:31	0:36	0:49	0:51	0:55	0:46	1:09	1:00	0:40	0:32	0:40	0:54	0:56	0:47
Loma Linda Univ Med Ctr Mur	0:43	0:43	0:43	0:47	0:44	0:51	0:45	0:42	0:37	0:33	0:36	0:38	0:41	0:41
Menifee Med Ctr	0:46	0:46	0:45	1:10	0:45	0:54	0:55	0:56	0:46	0:31	0:35	0:41	1:13	0:49
Palo Verde Hospital	0:12	0:13	0:11	0:09	0:12	0:12	0:13	0:13	0:13	0:13	0:16	0:13	0:13	0:12
Parkview Community Hospital	0:38	0:38	0:46	0:37	0:34	0:41	1:15	0:55	0:51	0:39	0:50	1:06	1:01	0:48
Rancho Springs Med Ctr	0:29	0:27	0:30	0:32	0:30	0:29	0:33	0:32	0:30	0:28	0:24	0:30	0:34	0:29
Riverside Comm Hospital	1:03	1:08	1:06	0:58	0:48	1:10	1:33	1:23	1:03	1:24	1:12	1:05	1:09	1:09
Riverside Univ Health System	0:32	0:36	0:41	0:45	0:40	0:35	0:38	0:42	0:37	0:29	0:34	0:39	0:42	0:37
San Gorgonio Mem Hospital	0:31	0:31	0:29	0:31	0:33	0:31	0:31	0:26	0:28	0:28	0:28	0:30	0:30	0:29
Temecula Valley Hospital	0:35	0:40	0:35	0:43	0:41	0:51	0:55	0:43	0:36	0:26	0:29	0:35	0:42	0:39
Riverside County Compliance	0:40	0:40	0:44	0:43	0:40	0:42	0:51	0:50	0:41	0:38	0:39	0:42	0:48	0:42

APOD AMBULANCE REDIRECTION

On October 1, 2019, Riverside County EMS Agency activated Policy 6104 (http://www.remsa.us/policy/6104.pdf) 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.

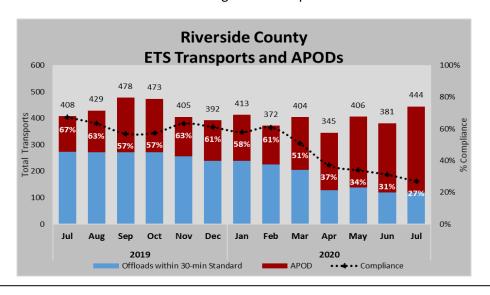
	2019						2020							Total Redirection
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Corona Regional Medical Center	10		10	12	9	6	18	11	5	1	3	5	15	105
Desert Regional Medical Center					2	2	3	9	2		7	8	2	35
Eisenhower Health											1			1
Hemet Valley Medical Center	2	2	2	2	1		5	21	1			1	17	54
Inland Valley Medical Center	2	2		6	5		10	7	1				7	40
John F. Kennedy Memorial Hospital												2	1	3
Kaiser Hospital Moreno Valley			4	12	2	1	4	12		1	2	6	4	48
Kaiser Hospital Riverside			4	2	5	5	10	8	1			9	7	51
Loma Linda Univ Med Ctr Murrieta	1	3	2	12	2	7	7	10	1			2	1	48
Menifee Valley Medical Center	3	3	4	8	1	2	4	6	1			3	11	46
Palo Verde Hospital											1		1	2
Parkview Community Hospital			2			1	17	8	4		4	17	12	65
Rancho Springs Medical Center			2				1		1				2	6
Riverside Community Hospital	21	21	38	10		16	45	35	7	20	23	24	25	285
Riverside University Health System		1		14				2				1		18
Temecula Valley Hospital					1	1	2							4
Total Redirection	39	32	68	78	28	41	126	129	24	22	41	78	105	811

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.

July 2020 - Emergency Treatment Services											
Total Offload											
Transports to ETS Time APOD Hours APODs											
Emergency Treatment Services	444	352:49:44	154:26:27	324	27.0%						

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."³

Method: Aggregate of all transfer times and reported at the 90th 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

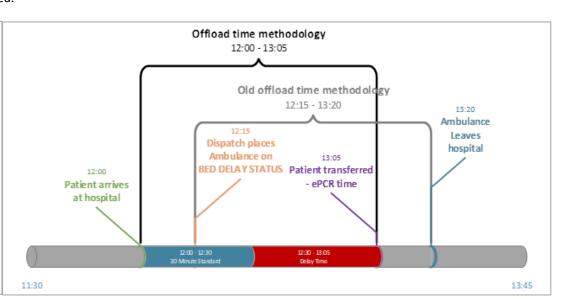
A frequency comparison between the total number of transports and those resulting in APOD.

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.



- -For inquiries, please contact Riverside County EMS Agency EMS Administrator, TDouville@rivco.org
- -Report prepared by Catherine Farrokhi, Riverside County EMS Agency

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. <u>http://www.remsa.us/policy/4204.pdf</u>