



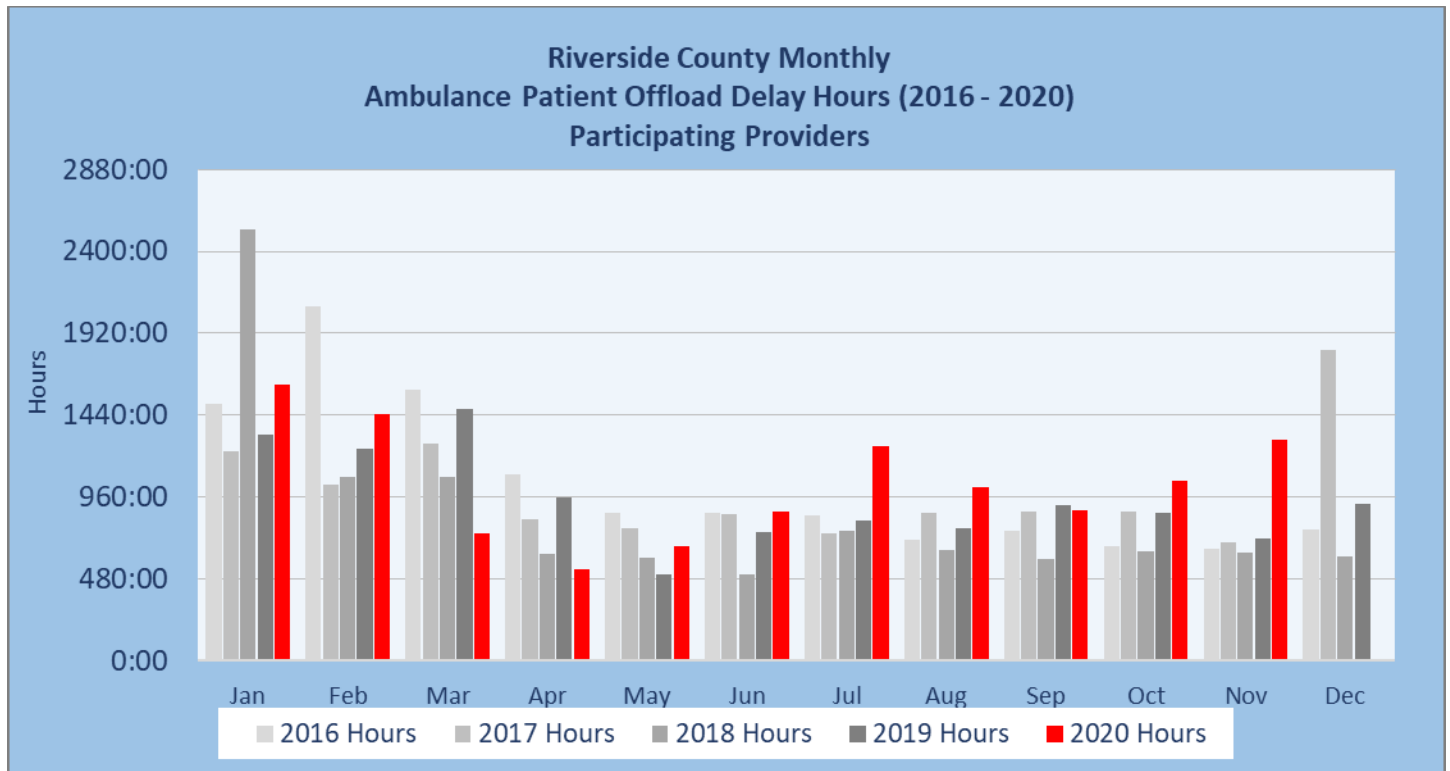
Ambulance Patient Offload Time

November 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.

*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.

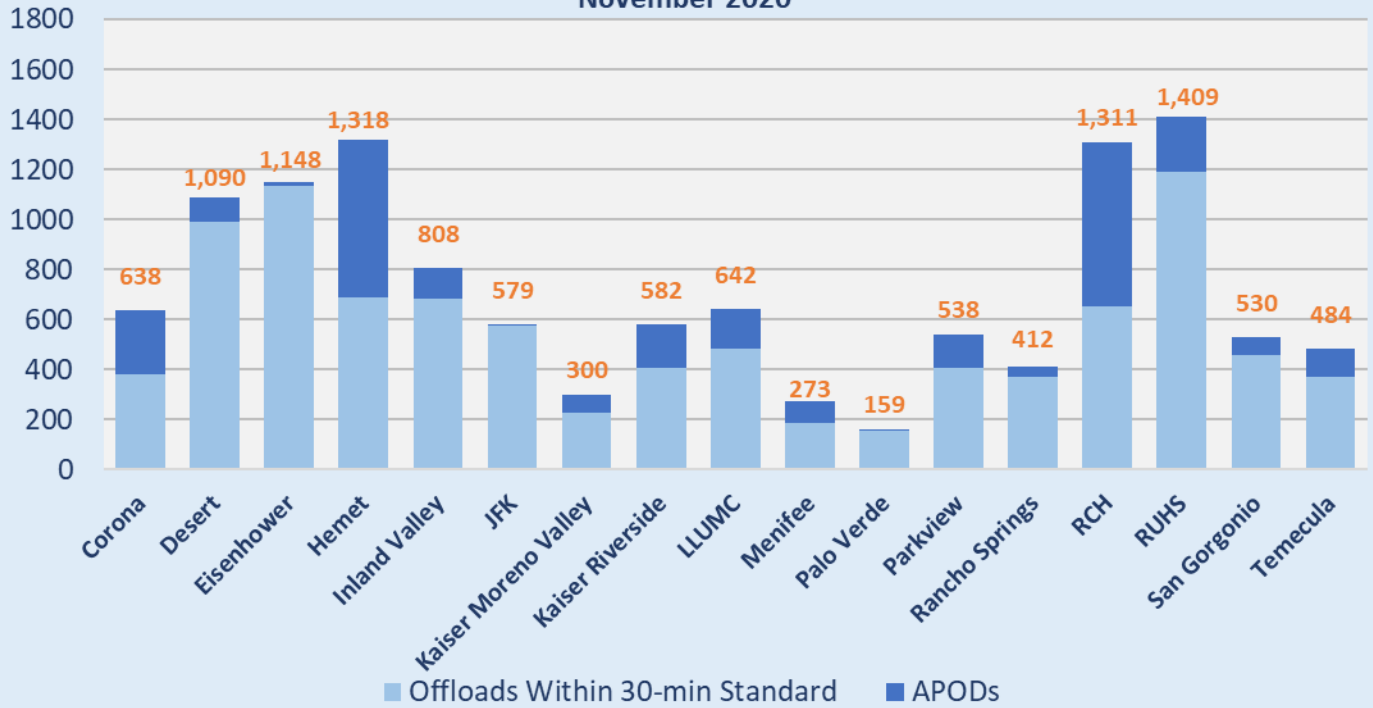
November 2020						
	ALS Transports	APOT	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	638	453:52:04	215:49:30	257	59.7%	1:38:28
Desert Regional Med Ctr	1,090	259:57:37	26:50:09	99	90.9%	0:29:55
Eisenhower Health	1,148	173:42:02	2:22:18	13	98.9%	0:15:48
Hemet Valley Hospital	1,318	812:39:06	288:03:51	631	52.1%	1:08:03
Inland Valley Med Ctr	808	265:33:17	43:22:56	123	84.8%	0:37:42
JFK Hospital	579	74:51:18	0:03:30	2	99.7%	0:15:11
Kaiser Hospital Moreno Valley	300	137:24:57	50:16:24	73	75.7%	1:04:21
Kaiser Hospital Riverside	582	279:40:43	90:06:05	175	69.9%	1:04:15
Loma Linda Univ Med Ctr Mur	642	250:13:56	47:16:15	157	75.5%	0:44:02
Menifee Med Ctr	273	162:07:54	68:49:37	89	67.4%	1:25:48
Palo Verde Hospital	159	23:39:42	2:30:38	6	96.2%	0:17:25
Parkview Community Hospital	538	206:59:44	35:30:16	131	75.7%	0:42:06
Rancho Springs Med Ctr	412	119:59:29	8:53:28	41	90.0%	0:30:00
Riverside Community Hospital	1,311	836:54:08	319:01:13	659	49.7%	1:13:25
Riverside University Health System	1,409	490:47:04	53:09:38	219	84.5%	0:35:35
San Geronio Mem Hospital	530	185:47:52	20:06:02	71	86.6%	0:34:14
Temecula Valley Hospital	484	181:18:50	24:52:50	114	76.4%	0:39:47
Grand Total	12,221	4915:29:43	1297:04:40	2,860	76.6%	0:48:41

Key

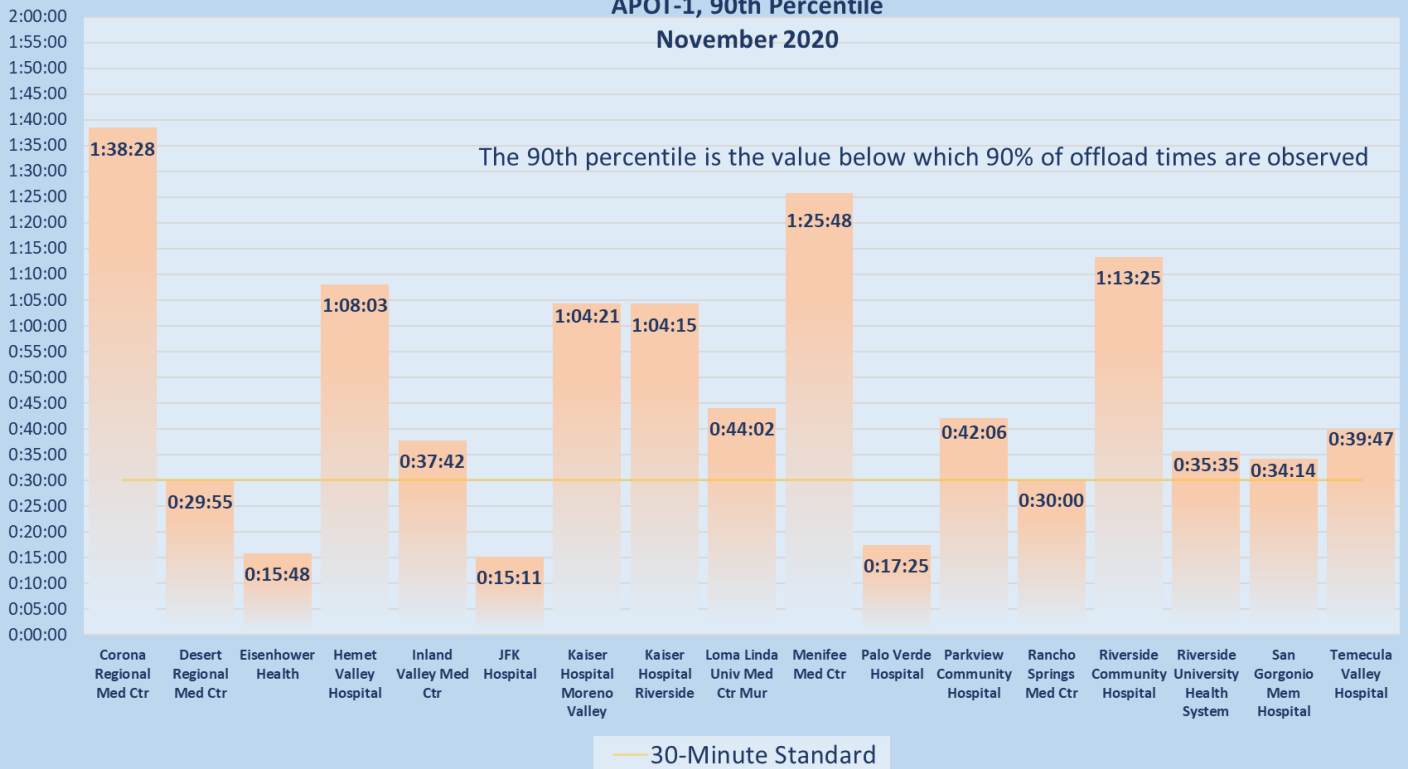
High

Low

Riverside County Hospitals Transports and APODs November 2020



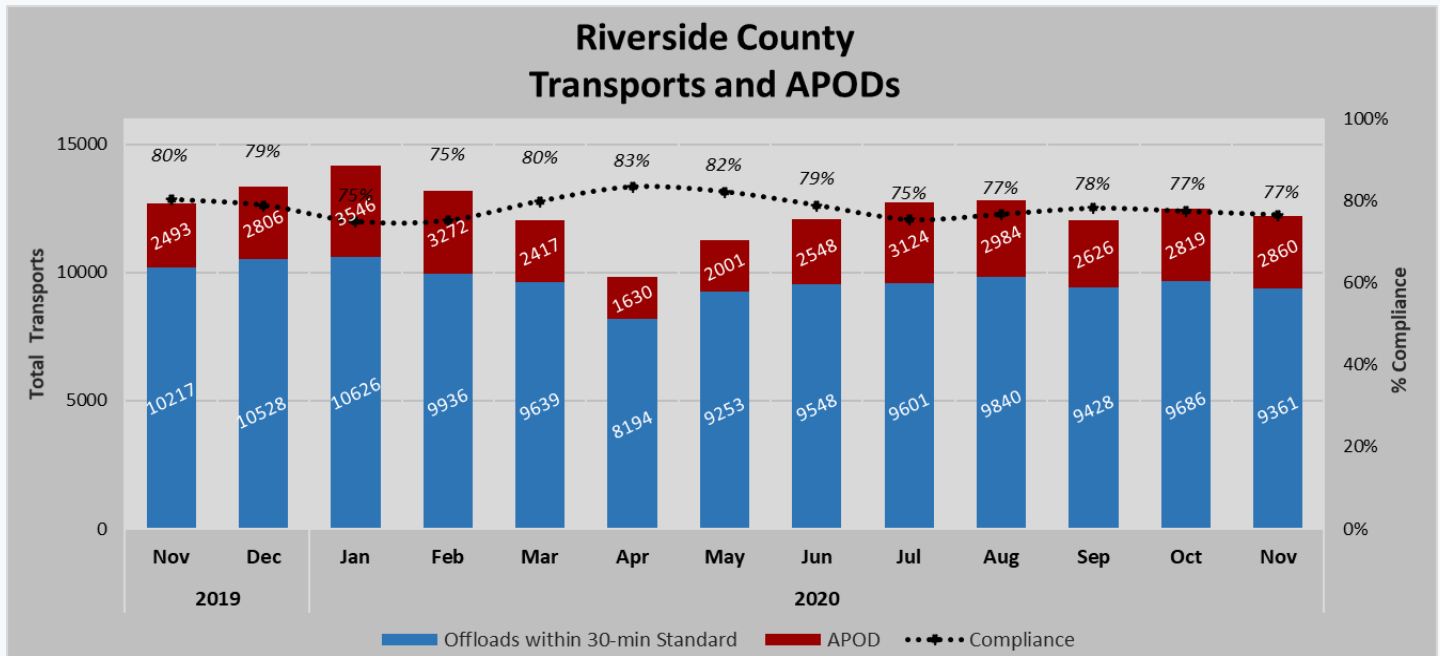
Riverside County Hospitals APOT-1, 90th Percentile November 2020



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.

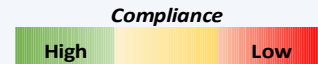


APOD hours only include the time after the 30-minute standard has elapsed.

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.

Hospital	Transport Volume												Monthly	
	2019						2020						Nov	Avg
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Avg
Corona Regional Med Ctr	753	799	821	797	700	566	664	627	719	729	642	720	638	706
Desert Regional Med Ctr	1152	1151	1275	1180	1029	865	1082	1162	1193	1122	1070	1122	1090	1,115
Eisenhower Health	1353	1378	1564	1467	1198	877	1119	1125	1151	1134	1098	1142	1148	1,212
Hemet Valley Hospital	1380	1472	1535	1348	1287	1167	1197	1279	1377	1406	1230	1322	1318	1,332
Inland Valley Med Ctr	919	844	972	902	785	664	796	800	895	869	870	824	808	842
JFK Hospital	688	659	699	663	582	485	595	659	641	620	573	603	579	619
Kaiser Hospital Moreno Valley	283	317	353	311	292	232	239	248	301	317	286	309	300	291
Kaiser Hospital Riverside	485	542	556	506	482	369	435	490	530	531	521	561	582	507
Loma Linda Univ Med Ctr Mur	583	588	594	565	502	455	512	582	607	634	591	642	642	577
Menifee Med Ctr	280	336	334	350	328	221	259	316	317	292	239	270	273	293
Palo Verde Hospital	133	152	163	165	168	130	163	153	163	148	137	139	159	152
Parkview Community Hospital	489	594	688	610	524	450	464	518	556	523	517	543	538	540
Rancho Springs Med Ctr	456	470	564	524	431	351	363	392	424	461	416	414	412	437
Riverside Comm Hospital	1380	1381	1292	1381	1415	1084	1218	1325	1392	1494	1422	1376	1311	1,344
Riverside Univ Health System	1284	1438	1487	1378	1329	1087	1261	1375	1454	1445	1395	1420	1409	1,366
San Geronio Mem Hospital	547	585	657	528	488	486	488	550	523	569	557	563	530	544
Temecula Valley Hospital	545	628	618	533	516	335	399	495	482	530	490	535	484	507
Riverside County Total	12710	13334	14172	13208	12056	9824	11254	12096	12725	12824	12054	12505	12221	12383

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.



APOT % Compliance by Hospital for the last 12 months														
	2019					2020							Monthly	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Average
Corona Regional Med Ctr	70%	75%	68%	69%	76%	71%	70%	65%	61%	68%	69%	65%	60%	68%
Desert Regional Med Ctr	87%	89%	83%	83%	90%	96%	92%	87%	89%	92%	93%	91%	91%	89%
Eisenhower Health	99%	99%	98%	98%	99%	99%	99%	97%	97%	98%	99%	99%	99%	98%
Hemet Valley Hospital	71%	66%	59%	55%	63%	73%	70%	69%	56%	52%	61%	59%	52%	62%
Inland Valley Med Ctr	82%	88%	74%	76%	87%	88%	89%	85%	80%	79%	80%	78%	85%	82%
JFK Hospital	99%	99%	98%	98%	98%	98%	99%	97%	97%	100%	99%	99%	100%	99%
Kaiser Hospital Moreno Valley	82%	80%	79%	72%	85%	89%	88%	75%	77%	74%	78%	73%	76%	79%
Kaiser Hospital Riverside	71%	79%	71%	73%	82%	88%	84%	74%	73%	78%	74%	75%	70%	76%
Loma Linda Univ Med Ctr Mur	73%	70%	70%	75%	80%	87%	82%	82%	78%	76%	81%	81%	76%	78%
Menifee Med Ctr	75%	72%	75%	71%	75%	88%	85%	80%	68%	70%	77%	70%	67%	75%
Palo Verde Hospital	100%	99%	97%	98%	98%	100%	97%	99%	99%	99%	99%	98%	96%	98%
Parkview Community Hospital	86%	74%	63%	68%	72%	82%	74%	65%	69%	64%	69%	77%	76%	72%
Rancho Springs Med Ctr	90%	91%	88%	89%	89%	91%	94%	90%	86%	91%	91%	89%	90%	90%
Riverside Community Hospital	63%	49%	41%	44%	51%	46%	49%	55%	54%	50%	49%	49%	50%	50%
Riverside University Health System	77%	82%	80%	78%	84%	91%	85%	78%	74%	84%	88%	83%	84%	82%
San Geronio Mem Hospital	86%	89%	90%	93%	92%	92%	93%	91%	90%	92%	82%	87%	87%	89%
Temecula Valley Hospital	79%	71%	67%	75%	82%	94%	91%	83%	75%	82%	73%	78%	76%	79%
Riverside County Compliance	80%	79%	75%	75%	80%	83%	82%	79%	75%	77%	78%	77%	77%	78%

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

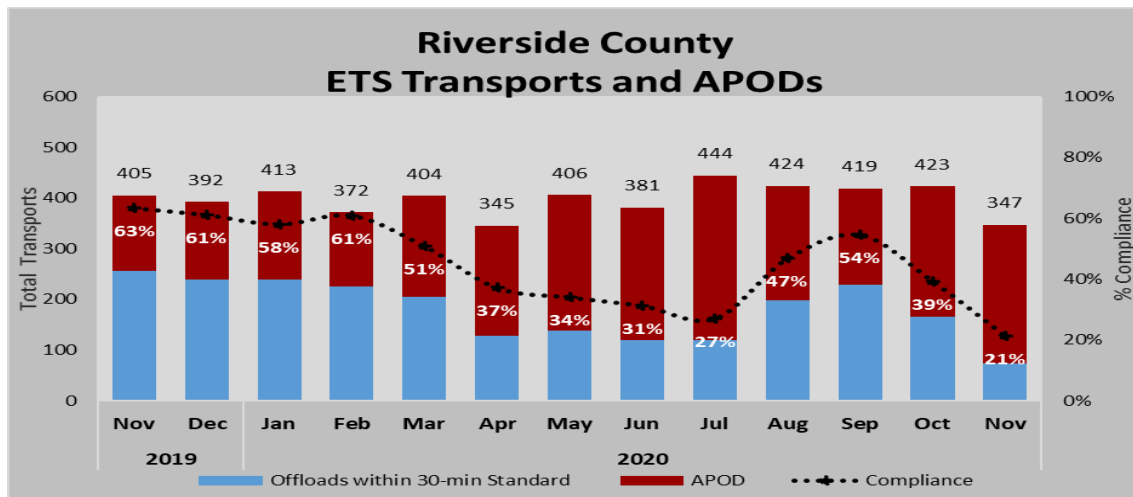
APOT-1 (90th Percentile) for the last 12 Months														
Hospital	2019				2020								Avg	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	APOT-1
Corona Regional Med Ctr	0:54	0:49	1:00	1:00	0:47	0:48	0:48	0:56	1:13	0:52	0:51	0:55	1:38	0:57
Desert Regional Med Ctr	0:34	0:32	0:40	0:40	0:31	0:23	0:28	0:33	0:33	0:27	0:25	0:29	0:30	0:31
Eisenhower Health	0:17	0:16	0:19	0:18	0:17	0:16	0:16	0:18	0:19	0:19	0:15	0:16	0:16	0:17
Hemet Valley Hospital	0:45	0:45	0:59	1:09	0:49	0:43	0:44	0:45	1:02	1:04	0:51	0:54	1:08	0:53
Inland Valley Med Ctr	0:42	0:32	0:54	0:49	0:33	0:32	0:31	0:35	0:47	0:43	0:43	0:48	0:38	0:40
JFK Hospital	0:16	0:15	0:16	0:16	0:18	0:20	0:19	0:20	0:22	0:15	0:15	0:16	0:15	0:17
Kaiser Hospital Moreno Valley	0:46	0:43	0:51	1:16	0:38	0:31	0:32	0:56	0:50	0:56	0:52	0:54	1:04	0:49
Kaiser Hospital Riverside	0:55	0:46	1:09	1:00	0:40	0:32	0:40	0:54	0:56	0:41	0:49	0:46	1:04	0:50
Loma Linda Univ Med Ctr Mur	0:44	0:51	0:45	0:42	0:37	0:33	0:36	0:38	0:41	0:44	0:38	0:39	0:44	0:40
Menifee Med Ctr	0:45	0:54	0:55	0:56	0:46	0:31	0:35	0:41	1:13	1:07	0:48	1:05	1:26	0:54
Palo Verde Hospital	0:12	0:12	0:13	0:13	0:13	0:13	0:16	0:13	0:13	0:10	0:12	0:15	0:17	0:13
Parkview Community Hospital	0:34	0:41	1:15	0:55	0:51	0:39	0:50	1:06	1:01	0:58	0:54	0:42	0:42	0:51
Rancho Springs Med Ctr	0:30	0:29	0:33	0:32	0:30	0:28	0:24	0:30	0:34	0:30	0:30	0:32	0:30	0:30
Riverside Comm Hospital	0:48	1:10	1:33	1:23	1:03	1:24	1:12	1:05	1:09	1:00	1:07	1:14	1:13	1:10
Riverside Univ Health System	0:40	0:35	0:38	0:42	0:37	0:29	0:34	0:39	0:42	0:35	0:32	0:36	0:36	0:36
San Geronio Mem Hospital	0:33	0:31	0:31	0:26	0:28	0:28	0:28	0:30	0:30	0:28	0:36	0:33	0:34	0:30
Temecula Valley Hospital	0:41	0:51	0:55	0:43	0:36	0:26	0:29	0:35	0:42	0:36	0:43	0:39	0:40	0:39
Riverside County Compliance	0:40	0:42	0:51	0:50	0:41	0:38	0:39	0:42	0:48	0:45	0:44	0:45	0:49	0:44

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.

November 2020 - Emergency Treatment Services					
	Total Offload			APOD Compliance	
	Transports to ETS	Time	APOD Hours		
Emergency Treatment Services	347	281:45:51	124:01:38	273	21.3%

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.



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 experiencing extended Ambulance Patient Offload Delay (APOD) to the closest most appropriate hospital. 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 by hospital for the current month and a rolling 12 months prior.

Facilities	2019												Total Redirection	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		
Corona Regional Medical Center	9	6	18	11	5	1	3	5	15	5	7	8	31	124
Desert Regional Medical Center	2	2	3	9	2		7	8	2	2	1	5	3	46
Eisenhower Health							1							1
Hemet Valley Medical Center	1		5	21	1			1	17	16	4	4	20	90
Inland Valley Medical Center	5		10	7	1				7	2	2	7	3	44
John F. Kennedy Memorial Hospital								2	1					3
Kaiser Hospital Moreno Valley	2	1	4	12		1	2	6	4	2	1	1	8	44
Kaiser Hospital Riverside	5	5	10	8	1			9	7		4	3	7	59
Loma Linda Univ Med Ctr Murrieta	2	7	7	10	1			2	1	2	2	2	3	39
Menifee Valley Medical Center	1	2	4	6	1			3	11	5	2	8	16	59
Palo Verde Hospital							1		1					2
Parkview Community Hospital		1	17	8	4		4	17	12	14	4	2	1	84
Rancho Springs Medical Center			1		1				2			1		5
Riverside Community Hospital		16	45	35	7	20	23	24	25	13	21	35	37	301
Riverside University Health System				2				1				1		4
San Geronio Memorial Hospital													1	1
Temecula Valley Hospital	1	1	2								2			6
Total Redirection	28	41	126	129	24	22	41	78	105	61	50	77	130	912

AMBULANCE DIVERSIONS

REMSA Policy 6103 (<https://www.remsa.us/policy/6103.pdf>) describes how a Riverside County hospital can be placed on ground and air ambulance diversion to facilitate safe transport of patients to the closest alternate facility. Ambulance Diversions are defined here as those due to unusual circumstances at a facility limiting access to emergency care (*Internal Disaster - INT*) or a temporary outage in Specialty Care services (*STEMI, Stroke, Trauma*). The following tables provide diversion history by facility for count of occurrences and total hours/minutes on diversion for a rolling 12 months compared to the current month. Hospitals not listed had no diversions during this evaluation period.

Diversions by Count		2019												2020	Total
Diversion Category/Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		
INT		1	1	1	1	1			1		5	8		19	
Corona Regional Medical Center											1			1	
Menifee Valley Medical Center		1					1		1			1		4	
Riverside Community Hospital											1			1	
San Gorgonio Memorial Hospital				1										1	
Temecula Valley Hospital											1			1	
Inland Valley Medical Center											2			2	
Loma Linda University Medical Center--Murrieta			1		1								3	5	
Rancho Springs Medical Center												4		4	
STEMI			1	2	1					1	2	1		8	
John F. Kennedy Memorial Hospital				2	1									3	
Riverside Community Hospital											1			1	
Temecula Valley Hospital											1			1	
Loma Linda University Medical Center--Murrieta			1							1		1		3	
Stroke	1	1	3	5	3	1	1	1			4	3		23	
Corona Regional Medical Center											1	1		2	
Desert Regional Medical Center					1									1	
John F. Kennedy Memorial Hospital					2									2	
Riverside Community Hospital											1			1	
Temecula Valley Hospital											1			1	
Inland Valley Medical Center											1			1	
Kaiser Permanente Moreno Valley Medical Center				1										1	
Kaiser Permanente Riverside Medical Center						1								1	
Rancho Springs Medical Center	1	1	3	4			1	1				2		13	
Trauma	3	3	4				4	4	8	6	5	1	9	47	
Riverside Community Hospital	1									1	1		3	6	
Inland Valley Medical Center	1	3	2						1	2	2	1		12	
Riverside University Health System	1		2				4	4	7	3	2		6	29	
Total	4	5	9	8	5	2	5	5	9	7	16	13	9	97	

Diversions by HH:MM		2019												2020	Total
Diversion Category/Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		
INT		0:24	2:18	2:44	0:43	0:31			0:37		96:38	15:02			
Corona Regional Medical Center											59:44				
Menifee Valley Medical Center		0:24				0:31			0:37			0:25			
Riverside Community Hospital											2:08				
San Gorgonio Memorial Hospital				2:44											
Temecula Valley Hospital											29:51				
Inland Valley Medical Center											4:55				
Loma Linda University Medical Center--Murrieta			2:18		0:43							1:59			
Rancho Springs Medical Center												12:38			
STEMI			3:46	18:35	1:44					1:30	192:30	1:26			
John F. Kennedy Memorial Hospital				18:35	1:44										
Riverside Community Hospital											2:02				
Temecula Valley Hospital											190:28				
Loma Linda University Medical Center--Murrieta			3:46							1:30		1:26			
Stroke	3:31	3:39	13:12	17:27	9:18	0:58	5:03	9:44			83:00	27:53			
Corona Regional Medical Center											71:58	10:57			
Desert Regional Medical Center					6:55										
John F. Kennedy Memorial Hospital					2:23										
Riverside Community Hospital											2:02				
Temecula Valley Hospital											1:47				
Inland Valley Medical Center											7:13				
Kaiser Permanente Moreno Valley Medical Center				5:23											
Kaiser Permanente Riverside Medical Center						0:58									
Rancho Springs Medical Center	3:31	3:39	13:12	12:04			5:03	9:44				16:56			
Trauma	12:29	3:36	9:38				5:38	6:00	21:17	7:53	7:22	2:01	9:49		
Riverside Community Hospital	5:07										2:53	2:00	2:40		
Inland Valley Medical Center	1:45	3:36	4:38						1:54	2:09	3:44	2:01			
Riverside University Health System	5:37		5:00				5:38	6:00	19:23	2:51	1:38		7:09		
Total	16:00	7:39	28:54	38:46	11:45	1:29	10:41	15:44	21:54	9:23	379:30	46:22	9:49		

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).

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

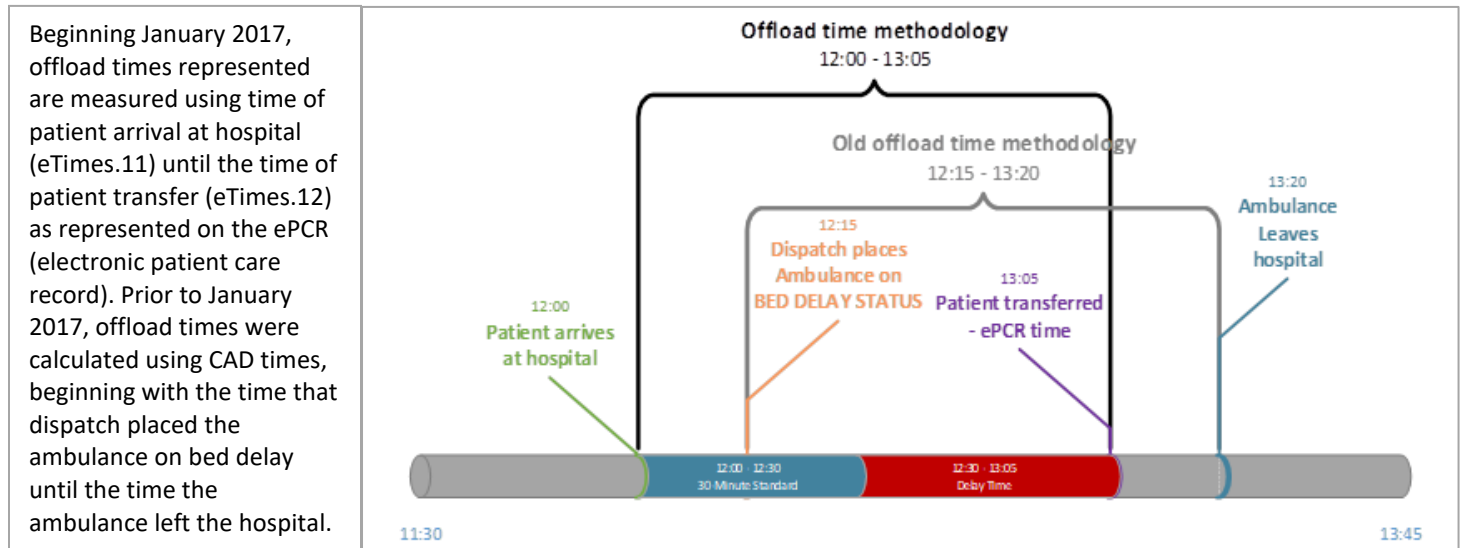
APOD Compliance

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.



-For inquiries, please contact Riverside County EMS Agency EMS Administrator, TDouville@rivco.org

-Report prepared by Sudha Mahesh & Catherine Farrokh, 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. <http://www.remsa.us/policy/4204.pdf>