



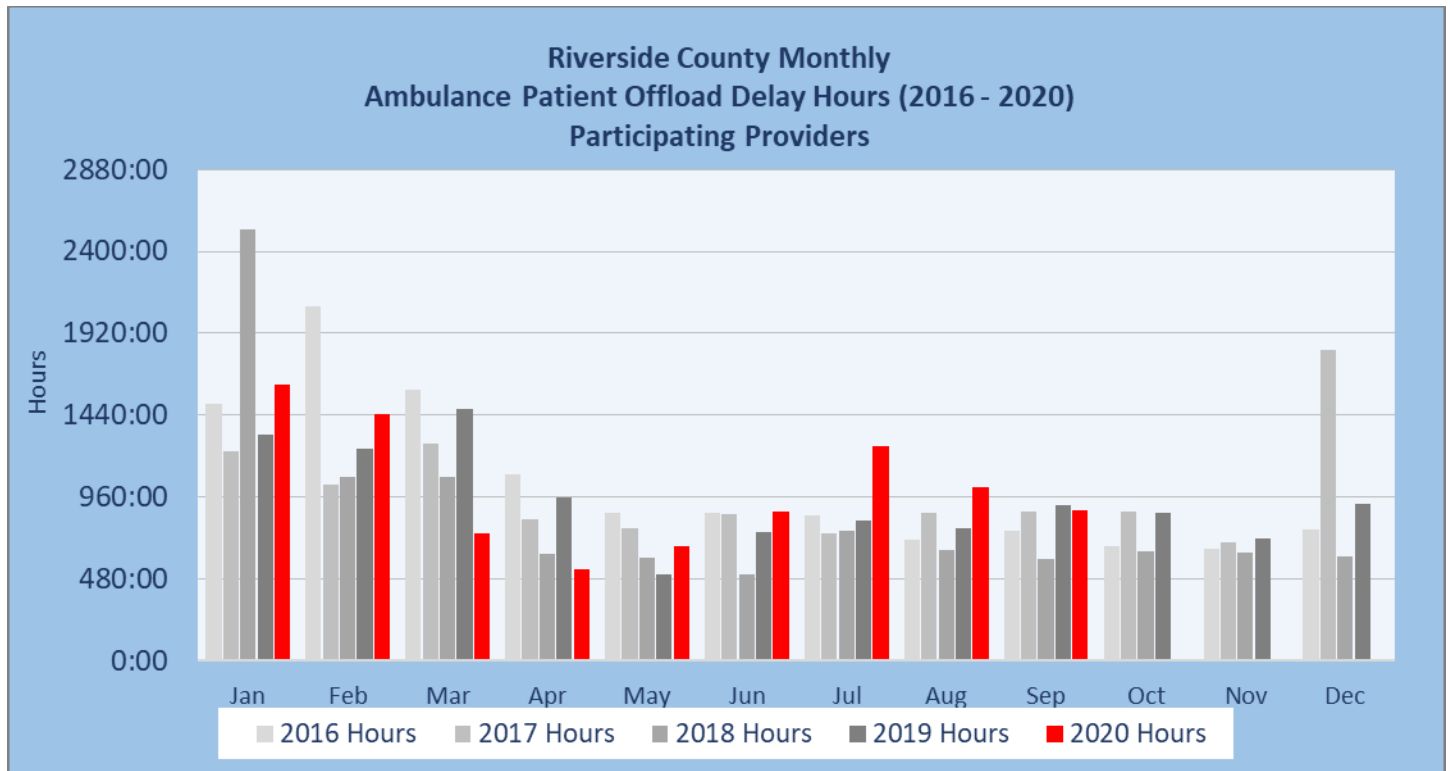
Ambulance Patient Offload Time

September 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.

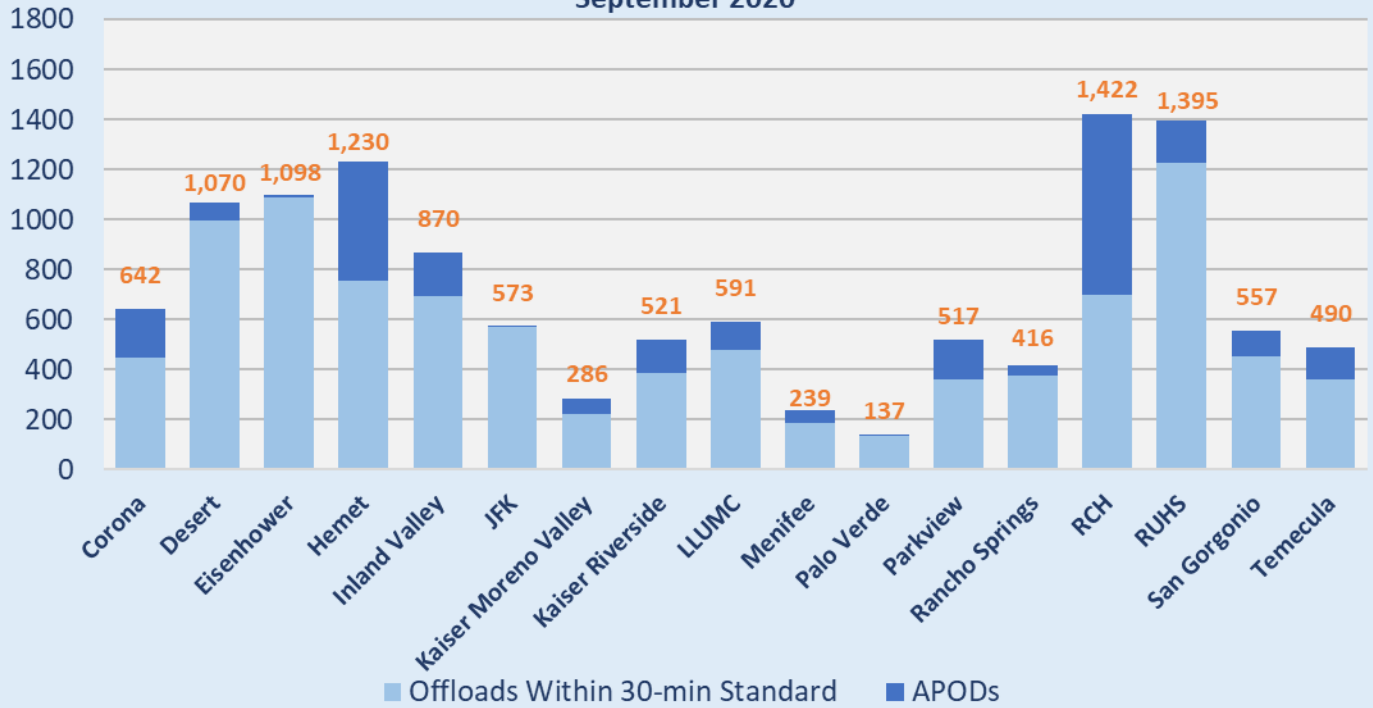
September 2020						
	ALS Transports	APOT	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	642	294:45:54	72:47:36	196	69.5%	0:50:37
Desert Regional Med Ctr	1,070	240:22:59	19:59:37	74	93.1%	0:25:21
Eisenhower Health	1,098	165:23:55	2:18:26	10	99.1%	0:15:19
Hemet Valley Hospital	1,230	605:04:57	136:59:35	476	61.3%	0:51:00
Inland Valley Med Ctr	870	314:22:28	57:03:13	178	79.5%	0:42:59
JFK Hospital	573	76:59:44	0:10:56	3	99.5%	0:15:18
Kaiser Hospital Moreno Valley	286	114:36:06	31:05:41	64	77.6%	0:51:44
Kaiser Hospital Riverside	521	223:03:27	53:02:26	133	74.5%	0:48:59
Loma Linda Univ Med Ctr Mur	591	212:57:15	30:02:08	113	80.9%	0:37:35
Menifee Med Ctr	239	92:36:36	20:37:13	54	77.4%	0:47:39
Palo Verde Hospital	137	14:20:25	1:31:49	2	98.5%	0:12:29
Parkview Community Hospital	517	243:24:21	63:13:53	159	69.2%	0:54:00
Rancho Springs Med Ctr	416	124:46:35	13:31:45	38	90.9%	0:29:59
Riverside Community Hospital	1,422	871:52:15	297:55:41	724	49.1%	1:07:23
Riverside University Health System	1,395	437:49:22	30:10:22	167	88.0%	0:32:02
San Gorgonio Mem Hospital	557	199:14:22	18:11:24	103	81.5%	0:35:41
Temecula Valley Hospital	490	198:51:28	34:25:09	132	73.1%	0:43:27
Grand Total	12,054	4430:32:09	883:06:54	2,626	78.2%	0:43:47

Key

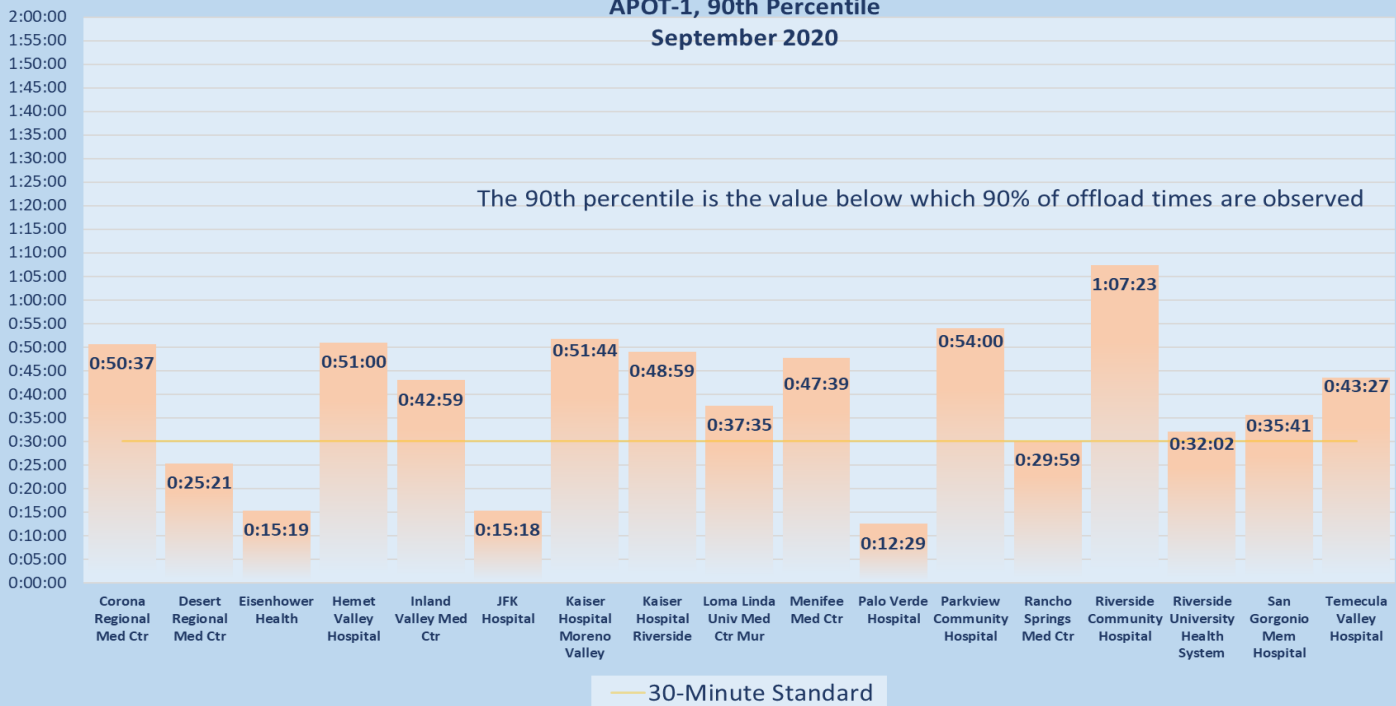
High

Low

Riverside County Hospitals Transports and APODs September 2020



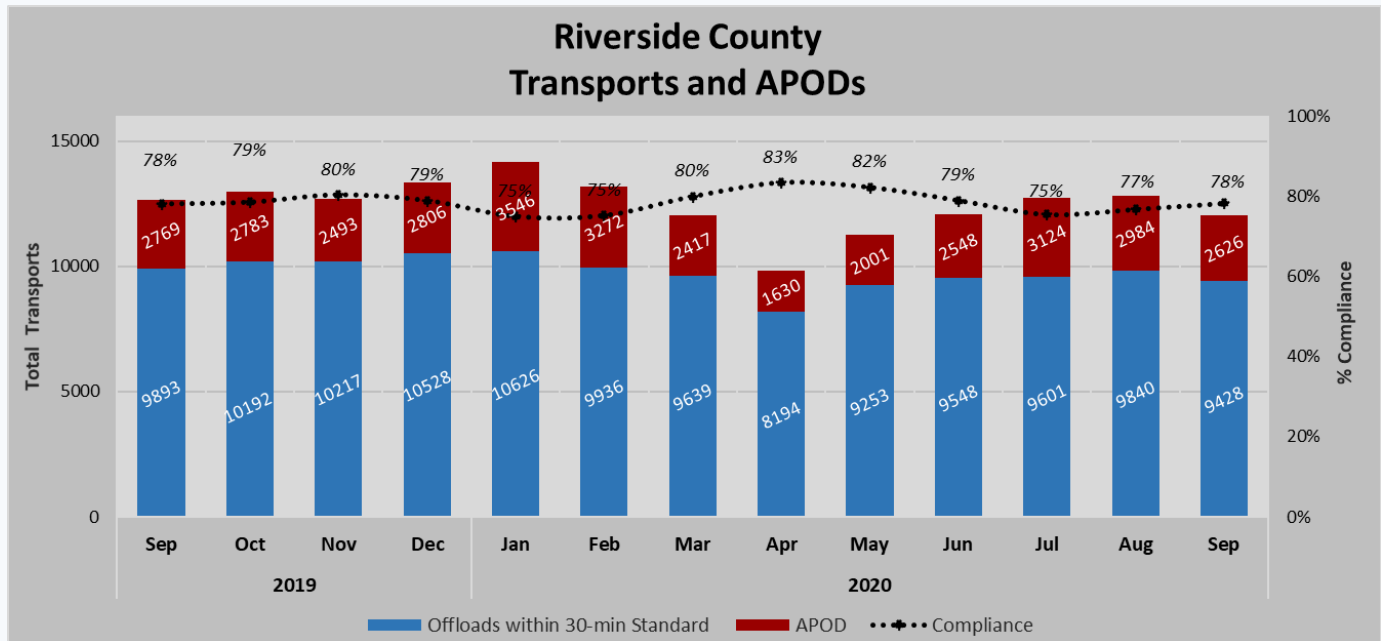
Riverside County Hospitals APOT-1, 90th Percentile September 2020



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.

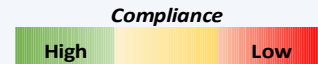


APOD hours only include the time after the 30-minute standard has elapsed.

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						Low	High
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Avg
Corona Regional Med Ctr	780	790	753	799	821	797	700	566	664	627	719	729	642	722
Desert Regional Med Ctr	1052	1079	1152	1151	1275	1180	1029	865	1082	1162	1193	1122	1070	1,109
Eisenhower Health	1240	1250	1353	1378	1564	1467	1198	877	1119	1125	1151	1134	1098	1,227
Hemet Valley Hospital	1429	1501	1380	1472	1535	1348	1287	1167	1197	1279	1377	1406	1230	1,354
Inland Valley Med Ctr	886	894	919	844	972	902	785	664	796	800	895	869	870	854
JFK Hospital	580	627	688	659	699	663	582	485	595	659	641	620	573	621
Kaiser Hospital Moreno Valley	330	317	283	317	353	311	292	232	239	248	301	317	286	294
Kaiser Hospital Riverside	542	511	485	542	556	506	482	369	435	490	530	531	521	500
Loma Linda Univ Med Ctr Mur	599	561	583	588	594	565	502	455	512	582	607	634	591	567
Menifee Med Ctr	311	299	280	336	334	350	328	221	259	316	317	292	239	299
Palo Verde Hospital	166	153	133	152	163	165	168	130	163	153	163	148	137	153
Parkview Community Hospital	510	513	489	594	688	610	524	450	464	518	556	523	517	535
Rancho Springs Med Ctr	440	499	456	470	564	524	431	351	363	392	424	461	416	445
Riverside Comm Hospital	1351	1451	1380	1381	1292	1381	1415	1084	1218	1325	1392	1494	1422	1,353
Riverside Univ Health System	1381	1440	1284	1438	1487	1378	1329	1087	1261	1375	1454	1445	1395	1,366
San Geronio Mem Hospital	563	560	547	585	657	528	488	486	488	550	523	569	557	546
Temecula Valley Hospital	502	530	545	628	618	533	516	335	399	495	482	530	490	508
Riverside County Total	12662	12975	12710	13334	14172	13208	12056	9824	11254	12096	12725	12824	12054	12453

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	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Avg
Corona Regional Med Ctr	66%	69%	70%	75%	68%	69%	76%	71%	70%	65%	61%	68%	69%	69%
Desert Regional Med Ctr	90%	94%	87%	89%	83%	83%	90%	96%	92%	87%	89%	92%	93%	90%
Eisenhower Health	98%	98%	99%	99%	98%	98%	99%	99%	99%	97%	97%	98%	99%	98%
Hemet Valley Hospital	65%	70%	71%	66%	59%	55%	63%	73%	70%	69%	56%	52%	61%	64%
Inland Valley Med Ctr	82%	81%	82%	88%	74%	76%	87%	88%	89%	85%	80%	79%	80%	82%
JFK Hospital	98%	99%	99%	99%	98%	98%	98%	98%	99%	97%	97%	100%	99%	98%
Kaiser Hospital Moreno Valley	78%	81%	82%	80%	79%	72%	85%	89%	88%	75%	77%	74%	78%	80%
Kaiser Hospital Riverside	78%	75%	71%	79%	71%	73%	82%	88%	84%	74%	73%	78%	74%	77%
Loma Linda Univ Med Ctr Mur	72%	71%	73%	70%	70%	75%	80%	87%	82%	82%	78%	76%	81%	77%
Menifee Med Ctr	77%	66%	75%	72%	75%	71%	75%	88%	85%	80%	68%	70%	77%	75%
Palo Verde Hospital	100%	99%	100%	99%	97%	98%	98%	100%	97%	99%	99%	99%	99%	99%
Parkview Community Hospital	78%	84%	86%	74%	63%	68%	72%	82%	74%	65%	69%	64%	69%	73%
Rancho Springs Med Ctr	90%	89%	90%	91%	88%	89%	89%	91%	94%	90%	86%	91%	91%	90%
Riverside Community Hospital	52%	55%	63%	49%	41%	44%	51%	46%	49%	55%	54%	50%	49%	50%
Riverside University Health System	75%	73%	77%	82%	80%	78%	84%	91%	85%	78%	74%	84%	88%	81%
San Gorgonio Mem Hospital	92%	90%	86%	89%	90%	93%	92%	92%	93%	91%	90%	92%	82%	90%
Temecula Valley Hospital	85%	77%	79%	71%	67%	75%	82%	94%	91%	83%	75%	82%	73%	80%
Riverside County Compliance	78%	79%	80%	79%	75%	75%	80%	83%	82%	79%	75%	77%	78%	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														
Hospital	2019				2020								Avg	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	APOT-1
Corona Regional Med Ctr	1:05	0:58	0:54	0:49	1:00	1:00	0:47	0:48	0:48	0:56	1:13	0:52	0:51	0:55
Desert Regional Med Ctr	0:30	0:26	0:34	0:32	0:40	0:40	0:31	0:23	0:28	0:33	0:33	0:27	0:25	0:30
Eisenhower Health	0:18	0:17	0:17	0:16	0:19	0:18	0:17	0:16	0:16	0:18	0:19	0:19	0:15	0:17
Hemet Valley Hospital	0:50	0:44	0:45	0:45	0:59	1:09	0:49	0:43	0:44	0:45	1:02	1:04	0:51	0:51
Inland Valley Med Ctr	0:39	0:42	0:42	0:32	0:54	0:49	0:33	0:32	0:31	0:35	0:47	0:43	0:43	0:40
JFK Hospital	0:16	0:16	0:16	0:15	0:16	0:16	0:18	0:20	0:19	0:20	0:22	0:15	0:15	0:17
Kaiser Hospital Moreno Valley	0:47	0:54	0:46	0:43	0:51	1:16	0:38	0:31	0:32	0:56	0:50	0:56	0:52	0:48
Kaiser Hospital Riverside	0:49	0:51	0:55	0:46	1:09	1:00	0:40	0:32	0:40	0:54	0:56	0:41	0:49	0:49
Loma Linda Univ Med Ctr Mur	0:43	0:47	0:44	0:51	0:45	0:42	0:37	0:33	0:36	0:38	0:41	0:44	0:38	0:41
Menifee Med Ctr	0:45	1:10	0:45	0:54	0:55	0:56	0:46	0:31	0:35	0:41	1:13	1:07	0:48	0:51
Palo Verde Hospital	0:11	0:09	0:12	0:12	0:13	0:13	0:13	0:13	0:16	0:13	0:13	0:10	0:12	0:12
Parkview Community Hospital	0:46	0:37	0:34	0:41	1:15	0:55	0:51	0:39	0:50	1:06	1:01	0:58	0:54	0:51
Rancho Springs Med Ctr	0:30	0:32	0:30	0:29	0:33	0:32	0:30	0:28	0:24	0:30	0:34	0:30	0:30	0:30
Riverside Comm Hospital	1:06	0:58	0:48	1:10	1:33	1:23	1:03	1:24	1:12	1:05	1:09	1:00	1:07	1:09
Riverside Univ Health System	0:41	0:45	0:40	0:35	0:38	0:42	0:37	0:29	0:34	0:39	0:42	0:35	0:32	0:37
San Gorgonio Mem Hospital	0:29	0:31	0:33	0:31	0:31	0:26	0:28	0:28	0:28	0:30	0:30	0:28	0:36	0:29
Temecula Valley Hospital	0:35	0:43	0:41	0:51	0:55	0:43	0:36	0:26	0:29	0:35	0:42	0:36	0:43	0:39
Riverside County Compliance	0:44	0:43	0:40	0:42	0:51	0:50	0:41	0:38	0:39	0:42	0:48	0:45	0:44	0:43

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.

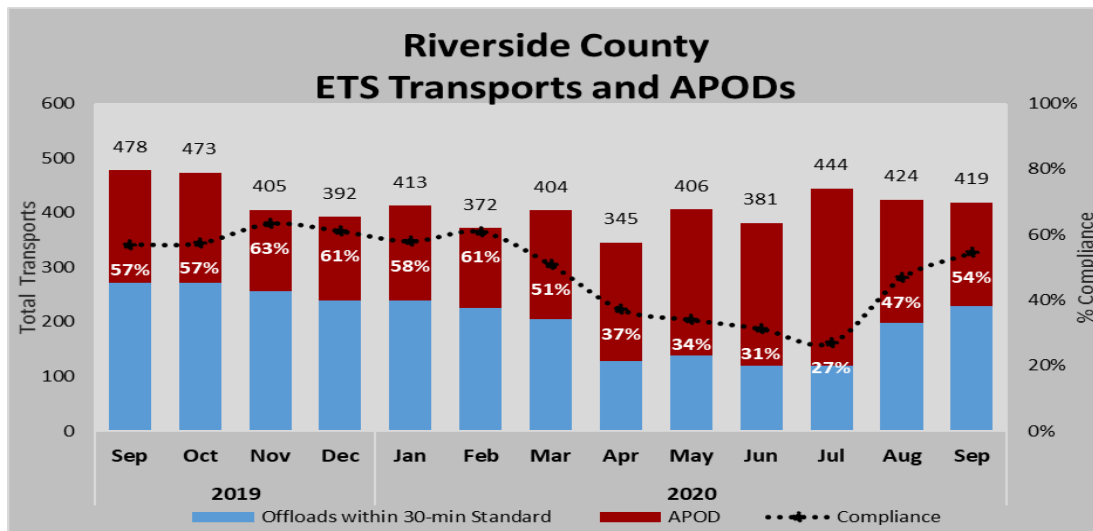
Facilities	2019			2020										Total Redirection
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Corona Regional Medical Center	10	12	9	6	18	11	5	1	3	5	15	5	7	107
Desert Regional Medical Center			2	2	3	9	2			7	8	2	1	38
Eisenhower Health									1					1
Hemet Valley Medical Center	2	2	1		5	21	1			1	17	16	4	70
Inland Valley Medical Center		6	5		10	7	1				7	2	2	40
John F. Kennedy Memorial Hospital										2	1			3
Kaiser Hospital Moreno Valley	4	12	2	1	4	12		1	2	6	4	2	1	51
Kaiser Hospital Riverside	4	2	5	5	10	8	1			9	7		4	55
Loma Linda Univ Med Ctr Murrieta	2	12	2	7	7	10	1			2	1	2	2	48
Menifee Valley Medical Center	4	8	1	2	4	6	1			3	11	5	2	47
Palo Verde Hospital									1		1			2
Parkview Community Hospital	2			1	17	8	4		4	17	12	14	4	83
Rancho Springs Medical Center	2				1		1					2		6
Riverside Community Hospital	38	10		16	45	35	7	20	23	24	25	13	21	277
Riverside University Health System		14				2				1				17
Temecula Valley Hospital			1	1	2								2	6
Total Redirection	68	78	28	41	126	129	24	22	41	78	105	61	50	851

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.

September 2020 - Emergency Treatment Services					
	Transports to ETS	Total Offload Time	APOD Hours	APODs	APOD Compliance
Emergency Treatment Services	419	229:50:40	57:00:02	191	54.4%

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.



SPECIALTY CARE DIVERSIONS

REMSA Policy 6103 (<https://www.remsa.us/policy/6103.pdf>) describes the criteria and process for placing a Riverside County receiving center on ground and air ambulance diversion during which time patients can be safely transported to the closest alternate facility. The following tables provide diversion history by facility for count of diversion occurrences and total minutes on diversion for a rolling 12 months compared to the current month in review. Hospitals not listed show no history of diversions for the covered evaluation period.

Diversions by Count	2019				2020								Total		
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		Sep	
INT	1	1		1	1	1	1	1					5	13	
Corona Regional Medical Center													1	1	
Menifee Valley Medical Center				1				1			1			3	
Riverside Community Hospital													1	1	
San Geronio Memorial Hospital						1								1	
Temecula Valley Hospital		1											1	2	
Inland Valley Medical Center													2	2	
Loma Linda University Medical Center--Murrieta					1		1							2	
Riverside University Health System	1													1	
STEMI	2				1	2	1					1	2	9	
John F. Kennedy Memorial Hospital	2					2	1							5	
Riverside Community Hospital													1	1	
Temecula Valley Hospital													1	1	
Loma Linda University Medical Center--Murrieta					1							1		2	
Stroke	1	3	1	1	3	5	3	1	1	1			4	24	
Corona Regional Medical Center													1	1	
Desert Regional Medical Center							1							1	
John F. Kennedy Memorial Hospital							2							2	
Riverside Community Hospital		1											1	2	
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						2	
Rancho Springs Medical Center	1	1	1	1	3	4			1	1				13	
Trauma	2	1	3	3	4					4	4	8	6	5	40
Riverside Community Hospital	1		1										1	4	
Inland Valley Medical Center			1	3	2							1	2	11	
Riverside University Health System	1	1	1		2				4	4	7	3	2	25	
Total	6	5	4	5	9	8	5	2	5	5	9	7	16	86	

Diversions by HH:MM	2019				2020								Total	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		Sep
INT	0:29	1:54		0:24	2:18	2:44	0:43	0:31				0:37		96:38
Corona Regional Medical Center														59:44
Menifee Valley Medical Center				0:24				0:31				0:37		
Riverside Community Hospital														2:08
San Geronio Memorial Hospital						2:44								
Temecula Valley Hospital		1:54												29:51
Inland Valley Medical Center														4:55
Loma Linda University Medical Center--Murrieta					2:18		0:43							
Riverside University Health System	0:29													
STEMI	15:56				3:46	18:35	1:44					1:30		192:30
John F. Kennedy Memorial Hospital	15:56					18:35	1:44							
Riverside Community Hospital														2:02
Temecula Valley Hospital														190:28
Loma Linda University Medical Center--Murrieta					3:46							1:30		
Stroke	28:41	3:44	3:31	3:39	13:12	17:27	9:18	0:58	5:03	9:44				83:00
Corona Regional Medical Center														71:58
Desert Regional Medical Center							6:55							
John F. Kennedy Memorial Hospital							2:23							
Riverside Community Hospital		0:34												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		0:02						0:58						
Rancho Springs Medical Center	28:41	3:08	3:31	3:39	13:12	12:04			5:03	9:44				
Trauma	4:15	0:43	12:29	3:36	9:38				5:38	6:00	21:17	7:53		7:22
Riverside Community Hospital	1:59		5:07										2:53	2:00
Inland Valley Medical Center			1:45	3:36	4:38						1:54	2:09		3:44
Riverside University Health System	2:16	0:43	5:37		5:00				5:38	6:00	19:23	2:51		1:38
Total	49:21	6:21	16:00	7:39	28:54	38:46	11:45	1:29	10:41	15:44	21:54	9:23		379:30

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

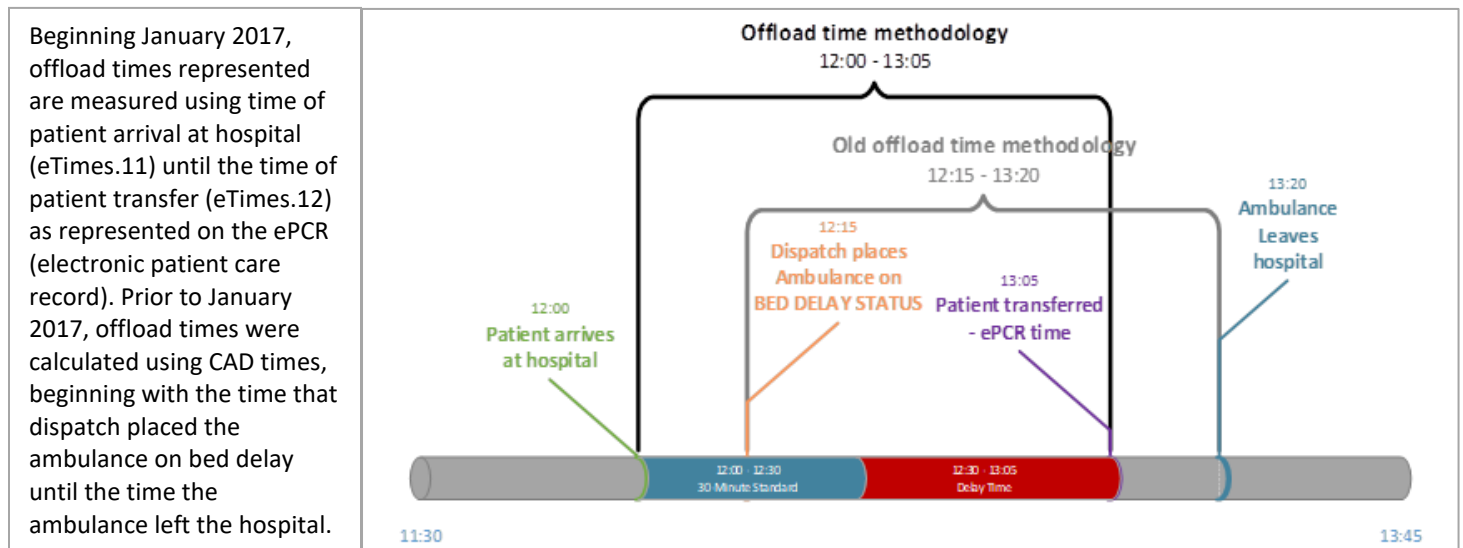
APOD Compliance

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.



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