



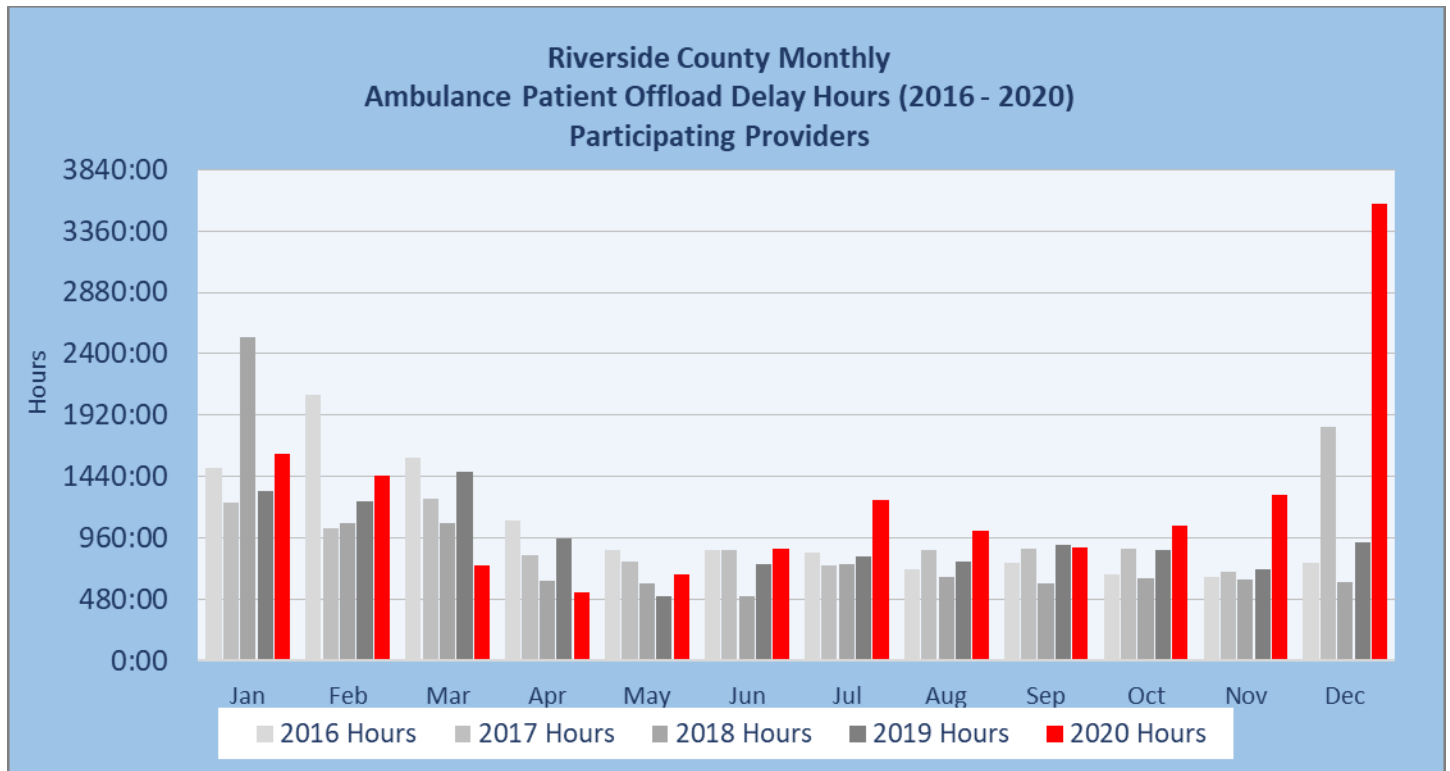
Ambulance Patient Offload Time

December 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.

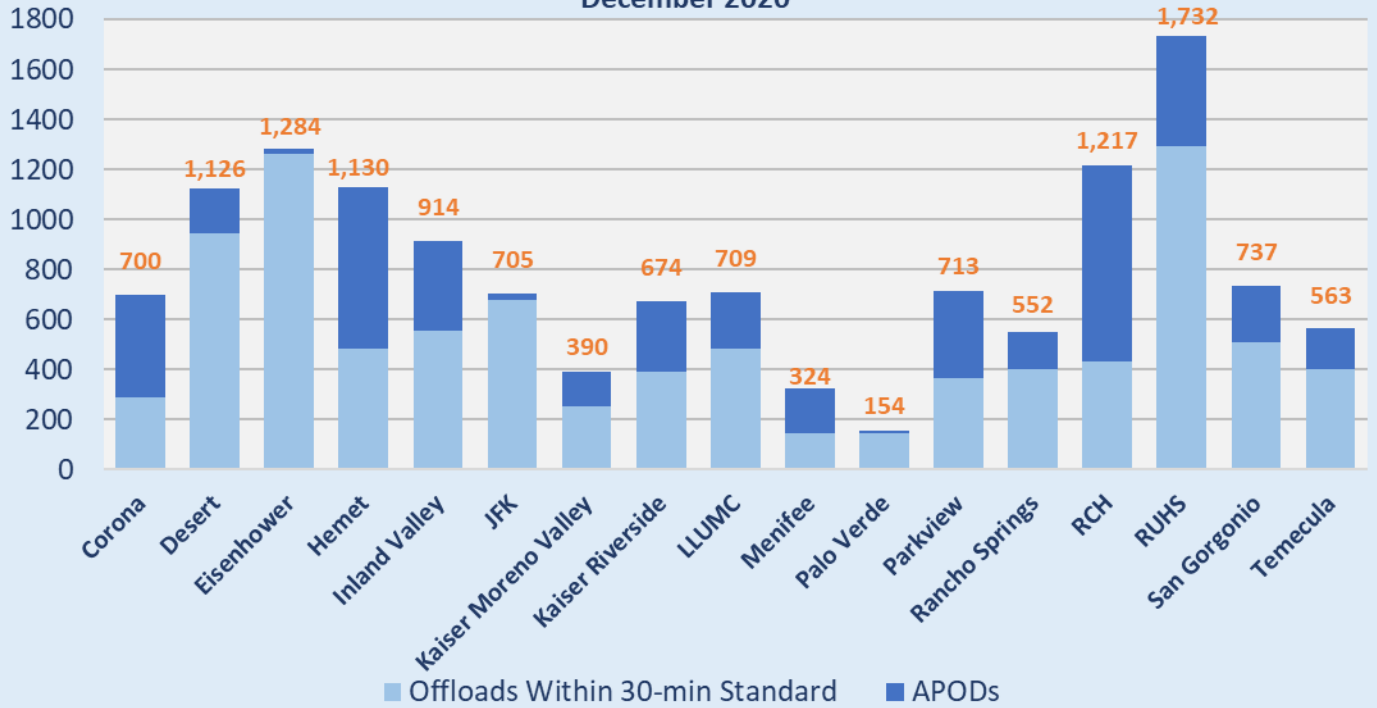
December 2020						
	ALS Transports	APOT	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	700	724:49:29	434:59:53	411	41.3%	2:37:34
Desert Regional Med Ctr	1,126	359:48:16	84:42:14	181	83.9%	0:41:19
Eisenhower Health	1,284	218:41:57	4:01:40	21	98.4%	0:17:26
Hemet Valley Hospital	1,130	993:19:28	537:47:21	647	42.7%	1:56:00
Inland Valley Med Ctr	914	556:49:26	230:23:20	361	60.5%	1:20:37
JFK Hospital	705	115:55:56	8:57:27	25	96.5%	0:19:46
Kaiser Hospital Moreno Valley	390	268:51:06	138:28:49	137	64.9%	1:52:38
Kaiser Hospital Riverside	674	477:26:33	229:37:30	284	57.9%	1:43:02
Loma Linda Univ Med Ctr Mur	709	409:51:37	177:32:17	226	68.1%	1:10:13
Menifee Med Ctr	324	382:28:17	256:35:07	178	45.1%	2:56:25
Palo Verde Hospital	154	25:55:59	4:22:55	10	93.5%	0:20:40
Parkview Community Hospital	713	659:34:43	385:18:15	346	51.5%	2:12:58
Rancho Springs Med Ctr	552	278:16:11	103:34:58	153	72.3%	1:02:39
Riverside Community Hospital	1,217	1230:50:15	725:05:40	786	35.4%	2:19:16
Riverside University Health System	1,732	684:29:10	94:42:19	440	74.6%	0:41:47
San Geronio Mem Hospital	737	376:35:22	114:29:46	229	68.9%	0:59:12
Temecula Valley Hospital	563	239:44:22	44:33:03	161	71.4%	0:45:53
Grand Total	13,624	8003:28:07	3575:12:34	4,596	66.3%	1:20:19

Key

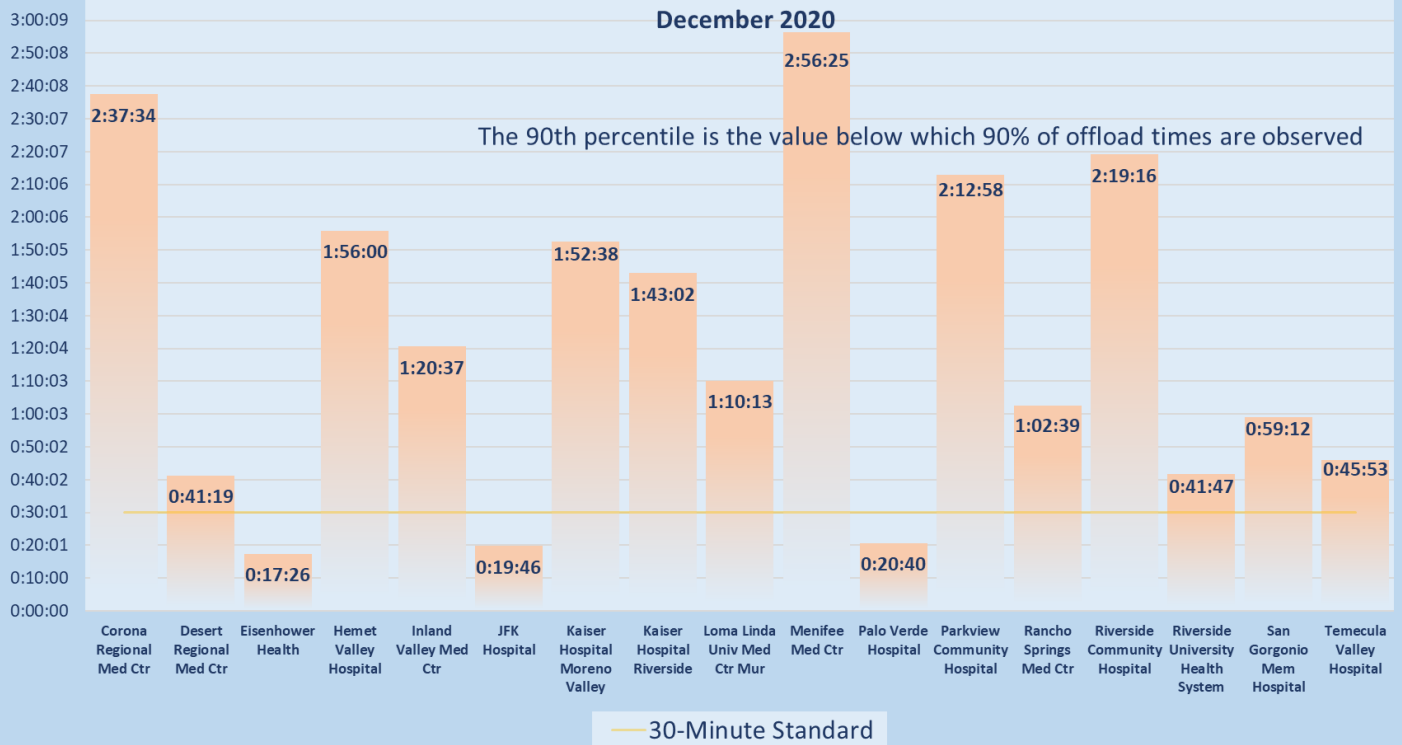
High

Low

Riverside County Hospitals Transports and APODs December 2020



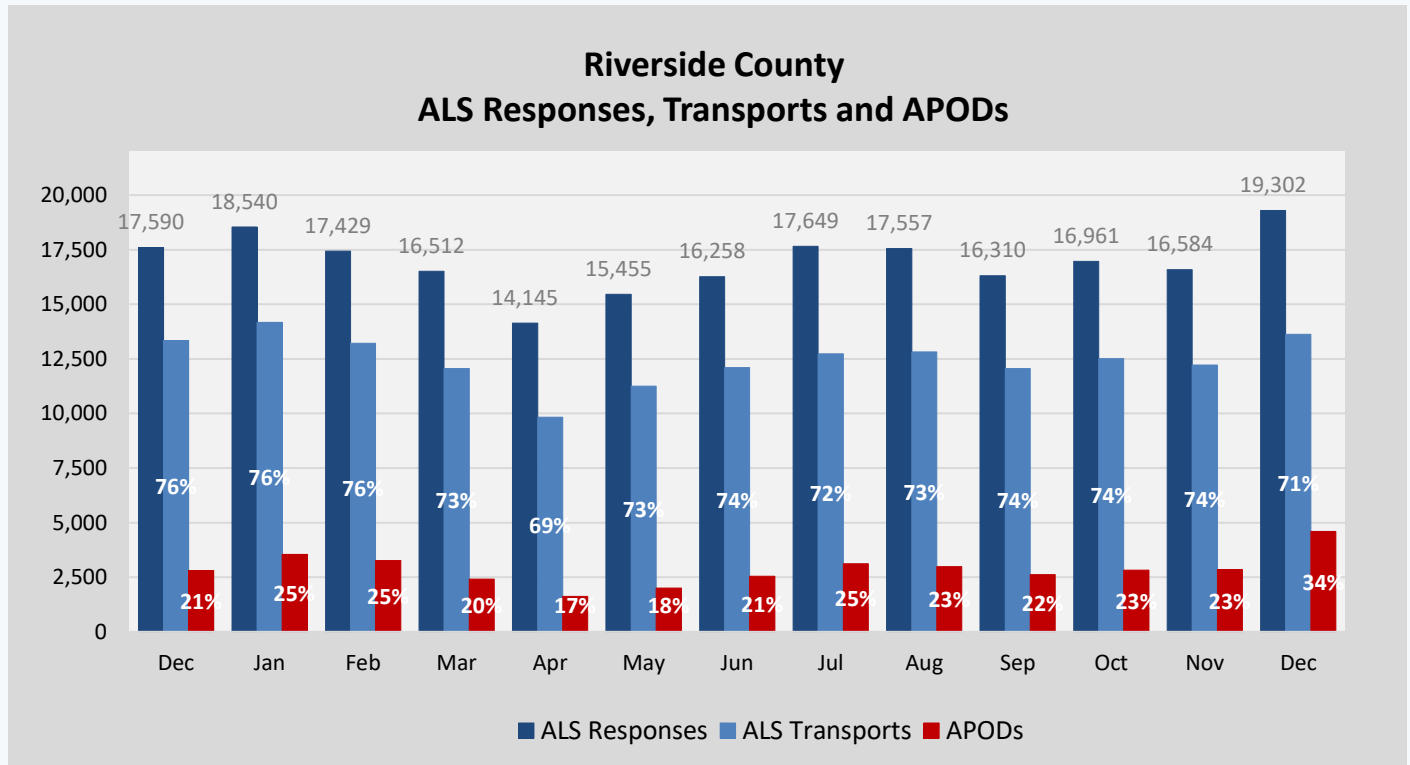
Riverside County Hospitals APOT-1, 90th Percentile December 2020



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 a summary of Riverside County’s total 9-1-1 ambulance (ALS) responses, transports, and total transports resulting in patient offload delay (APOD) for a rolling 12-months compared to the current month.



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	
	2020											Low	High	
	2019 Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Corona Regional Med Ctr	799	821	797	700	566	664	627	719	729	642	720	638	700	702
Desert Regional Med Ctr	1151	1275	1180	1029	865	1082	1162	1193	1122	1070	1122	1090	1126	1,113
Eisenhower Health	1378	1564	1467	1198	877	1119	1125	1151	1134	1098	1142	1148	1284	1,207
Hemet Valley Hospital	1472	1535	1348	1287	1167	1197	1279	1377	1406	1230	1322	1318	1130	1,313
Inland Valley Med Ctr	844	972	902	785	664	796	800	895	869	870	824	808	914	842
JFK Hospital	659	699	663	582	485	595	659	641	620	573	603	579	705	620
Kaiser Hospital Moreno Valley	317	353	311	292	232	239	248	301	317	286	309	300	390	300
Kaiser Hospital Riverside	542	556	506	482	369	435	490	530	531	521	561	582	674	521
Loma Linda Univ Med Ctr Mur	588	594	565	502	455	512	582	607	634	591	642	642	709	586
Menifee Med Ctr	336	334	350	328	221	259	316	317	292	239	270	273	324	297
Palo Verde Hospital	152	163	165	168	130	163	153	163	148	137	139	159	154	153
Parkview Community Hospital	594	688	610	524	450	464	518	556	523	517	543	538	713	557
Rancho Springs Med Ctr	470	564	524	431	351	363	392	424	461	416	414	412	552	444
Riverside Comm Hospital	1381	1292	1381	1415	1084	1218	1325	1392	1494	1422	1376	1311	1217	1,331
Riverside Univ Health System	1438	1487	1378	1329	1087	1261	1375	1454	1445	1395	1420	1409	1732	1,401
San Geronio Mem Hospital	585	657	528	488	486	488	550	523	569	557	563	530	737	559
Temecula Valley Hospital	628	618	533	516	335	399	495	482	530	490	535	484	563	508
Riverside County Total	13334	14172	13208	12056	9824	11254	12096	12725	12824	12054	12505	12221	13624	12454

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.

														<i>Compliance</i>	
														High	Low
APOT % Compliance by Hospital for the last 12 months															
													<i>Monthly Average</i>		
	2019		2020												
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Corona Regional Med Ctr	75%	68%	69%	76%	71%	70%	65%	61%	68%	69%	65%	60%	41%	66%	
Desert Regional Med Ctr	89%	83%	83%	90%	96%	92%	87%	89%	92%	93%	91%	91%	84%	89%	
Eisenhower Health	99%	98%	98%	99%	99%	99%	97%	97%	98%	99%	99%	99%	98%	98%	
Hemet Valley Hospital	66%	59%	55%	63%	73%	70%	69%	56%	52%	61%	59%	52%	43%	60%	
Inland Valley Med Ctr	88%	74%	76%	87%	88%	89%	85%	80%	79%	80%	78%	85%	61%	81%	
JFK Hospital	99%	98%	98%	98%	98%	99%	97%	97%	100%	99%	99%	100%	96%	98%	
Kaiser Hospital Moreno Valley	80%	79%	72%	85%	89%	88%	75%	77%	74%	78%	73%	76%	65%	78%	
Kaiser Hospital Riverside	79%	71%	73%	82%	88%	84%	74%	73%	78%	74%	75%	70%	58%	75%	
Loma Linda Univ Med Ctr Mur	70%	70%	75%	80%	87%	82%	82%	78%	76%	81%	81%	76%	68%	77%	
Menifee Med Ctr	72%	75%	71%	75%	88%	85%	80%	68%	70%	77%	70%	67%	45%	73%	
Palo Verde Hospital	99%	97%	98%	98%	100%	97%	99%	99%	99%	99%	98%	96%	94%	98%	
Parkview Community Hospital	74%	63%	68%	72%	82%	74%	65%	69%	64%	69%	77%	76%	51%	70%	
Rancho Springs Med Ctr	91%	88%	89%	89%	91%	94%	90%	86%	91%	91%	89%	90%	72%	89%	
Riverside Community Hospital	49%	41%	44%	51%	46%	49%	55%	54%	50%	49%	49%	50%	35%	48%	
Riverside University Health System	82%	80%	78%	84%	91%	85%	78%	74%	84%	88%	83%	84%	75%	82%	
San Gorgonio Mem Hospital	89%	90%	93%	92%	92%	93%	91%	90%	92%	82%	87%	87%	69%	88%	
Temecula Valley Hospital	71%	67%	75%	82%	94%	91%	83%	75%	82%	73%	78%	76%	71%	79%	
Riverside County Compliance	79%	75%	75%	80%	83%	82%	79%	75%	77%	78%	77%	77%	66%	77%	

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	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	APOT-1	
Corona Regional Med Ctr	0:49	1:00	1:00	0:47	0:48	0:48	0:56	1:13	0:52	0:51	0:55	1:38	2:38	1:05	
Desert Regional Med Ctr	0:32	0:40	0:40	0:31	0:23	0:28	0:33	0:33	0:27	0:25	0:29	0:30	0:41	0:31	
Eisenhower Health	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	0:17	
Hemet Valley Hospital	0:45	0:59	1:09	0:49	0:43	0:44	0:45	1:02	1:04	0:51	0:54	1:08	1:56	0:59	
Inland Valley Med Ctr	0:32	0:54	0:49	0:33	0:32	0:31	0:35	0:47	0:43	0:43	0:48	0:38	1:21	0:43	
JFK Hospital	0:15	0:16	0:16	0:18	0:20	0:19	0:20	0:22	0:15	0:15	0:16	0:15	0:20	0:17	
Kaiser Hospital Moreno Valley	0:43	0:51	1:16	0:38	0:31	0:32	0:56	0:50	0:56	0:52	0:54	1:04	1:53	0:55	
Kaiser Hospital Riverside	0:46	1:09	1:00	0:40	0:32	0:40	0:54	0:56	0:41	0:49	0:46	1:04	1:43	0:53	
Loma Linda Univ Med Ctr Mur	0:51	0:45	0:42	0:37	0:33	0:36	0:38	0:41	0:44	0:38	0:39	0:44	1:10	0:42	
Menifee Med Ctr	0:54	0:55	0:56	0:46	0:31	0:35	0:41	1:13	1:07	0:48	1:05	1:26	2:56	1:04	
Palo Verde Hospital	0:12	0:13	0:13	0:13	0:13	0:16	0:13	0:13	0:10	0:12	0:15	0:17	0:21	0:13	
Parkview Community Hospital	0:41	1:15	0:55	0:51	0:39	0:50	1:06	1:01	0:58	0:54	0:42	0:42	2:13	0:59	
Rancho Springs Med Ctr	0:29	0:33	0:32	0:30	0:28	0:24	0:30	0:34	0:30	0:30	0:32	0:30	1:03	0:32	
Riverside Comm Hospital	1:10	1:33	1:23	1:03	1:24	1:12	1:05	1:09	1:00	1:07	1:14	1:13	2:19	1:17	
Riverside Univ Health System	0:35	0:38	0:42	0:37	0:29	0:34	0:39	0:42	0:35	0:32	0:36	0:36	0:42	0:36	
San Gorgonio Mem Hospital	0:31	0:31	0:26	0:28	0:28	0:28	0:30	0:30	0:28	0:36	0:33	0:34	0:59	0:32	
Temecula Valley Hospital	0:51	0:55	0:43	0:36	0:26	0:29	0:35	0:42	0:36	0:43	0:39	0:40	0:46	0:40	
Riverside County Compliance	0:42	0:51	0:50	0:41	0:38	0:39	0:42	0:48	0:45	0:44	0:45	0:49	1:20	0:47	

AMBULANCE DIVERSIONS

REMSA Policy 6103 (<https://www.remsa.us/policy/6103.pdf>) describes ground and air ambulance diversions to facilitate safe transport of patients to the closest alternate facility. Ambulance Diversions described here are those activated as a result of 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 count of occurrences and total hours/minutes by facility for a rolling 12 months compared to the current month. *Hospitals not listed had no diversions during this evaluation period.*

Diversions by Count Diversion Category/Facility	2019			2020								Total		
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		Nov	Dec
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	3	5	3	1	1	1			4	3		2	24
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	3	4			1	1				2			12
Riverside University Health System													1	1
Parkview Community Hospital													1	1
Trauma	3	4				4	4	8	6	5	1	8	4	47
Riverside Community Hospital									1	1		3		5
Inland Valley Medical Center	3	2						1	2	2	1			11
Riverside University Health System		2				4	4	7	3	2		5	4	31
Total	5	9	8	5	2	5	5	9	7	16	13	8	6	98

Diversions by HH:MM Diversion Category/Facility	2019		2020										Total	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Dec
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	3:39	13:12	17:27	9:18	0:58	5:03	9:44			83:00	27:53		5:27	
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	3:39	13:12	12:04			5:03	9:44				16:56			
Riverside University Health System														0:08
Parkview Community Hospital														5:19
Trauma	3:36	9:38				5:38	6:00	21:17	7:53	7:22	2:01	9:20		1:31
Riverside Community Hospital										2:53	2:00	2:40		
Inland Valley Medical Center	3:36	4:38						1:54	2:09	3:44	2:01			
Riverside University Health System		5:00				5:38	6:00	19:23	2:51	1:38		6:40		1:31
Total	7:39	28:54	38:46	11:45	1:29	10:41	15:44	21:54	9:23	379:30	46:22	9:20		6:58

APOD AMBULANCE REDIRECTION

REMSA Policy 6104 (<http://www.remsa.us/policy/6104.pdf>) allows redirection of ambulances from hospitals experiencing extended Ambulance Patient Offload Delay (APOD) to the closest most appropriate hospital. Extended APOD is defined as 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.

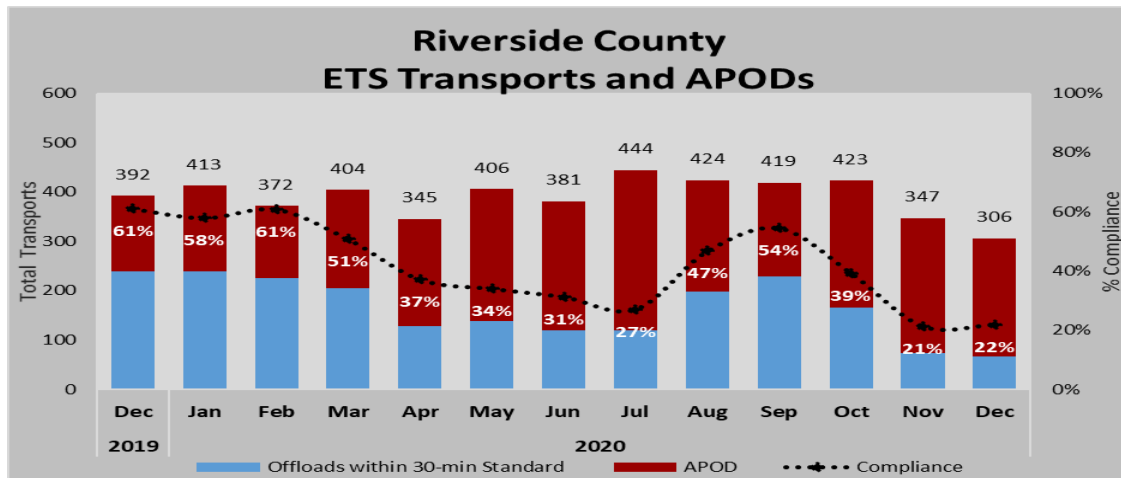
Facilities	2019												2020												Total Redirection		
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		Nov	Dec
Corona Regional Medical Center	6	18	11	5	1	3	5	15	5	7	8	31	91	6	18	11	5	1	3	5	15	5	7	8	31	91	206
Desert Regional Medical Center	2	3	9	2		7	8	2	2	1	5	3	8	2	3	9	2		7	8	2	2	1	5	3	8	52
Eisenhower Health						1							1						1							1	1
Hemet Valley Medical Center		5	21	1			1	17	16	4	4	20	87		5	21	1			1	17	16	4	4	20	87	176
Inland Valley Medical Center		10	7	1				7	2	2	7	3	32		10	7	1				7	2	2	7	3	32	71
John F. Kennedy Memorial Hospital							2	1					3							2	1					3	3
Kaiser Hospital Moreno Valley	1	4	12		1	2	6	4	2	1	1	8	34	1	4	12		1	2	6	4	2	1	1	8	34	76
Kaiser Hospital Riverside	5	10	8	1			9	7		4	3	7	63	5	10	8	1			9	7		4	3	7	63	117
Loma Linda Univ Med Ctr Murrieta	7	7	10	1			2	1	2	2	2	3	32	7	7	10	1			2	1	2	2	2	3	32	69
Menifee Valley Medical Center	2	4	6	1			3	11	5	2	8	16	68	2	4	6	1			3	11	5	2	8	16	68	126
Palo Verde Hospital						1		1					1						1							1	3
Parkview Community Hospital	1	17	8	4		4	17	12	14	4	2	1	77	1	17	8	4		4	17	12	14	4	2	1	77	161
Rancho Springs Medical Center		1		1				2			1		15		1		1				2			1		15	20
Riverside Community Hospital	16	45	35	7	20	23	24	25	13	21	35	37	131	16	45	35	7	20	23	24	25	13	21	35	37	131	432
Riverside University Health System			2				1				1		6			2				1				1		6	10
San Geronio Memorial Hospital												1	11											1		11	12
Temecula Valley Hospital	1	2								2			7	1	2							2				7	12
Total Redirection	41	126	129	24	22	41	78	105	61	50	77	130	663	41	126	129	24	22	41	78	105	61	50	77	130	663	1547

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.

December 2020 - Emergency Treatment Services					
	Total Offload			APOD	
	Transports to ETS	Time	APOD Hours	APODs	Compliance
Emergency Treatment Services	306	285:56:27	151:25:23	239	21.9%

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.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.

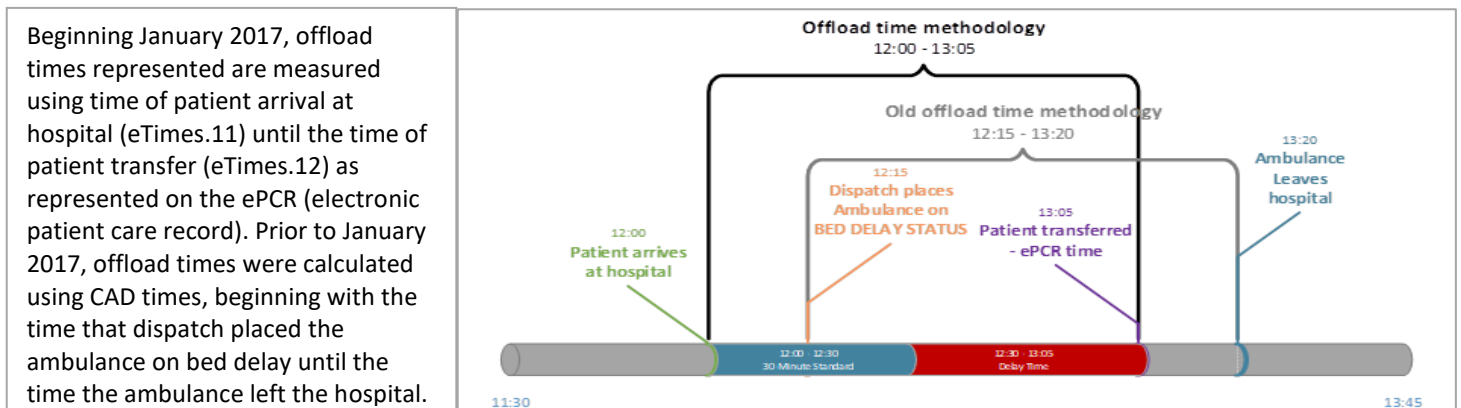
9-1-1 Ambulance Response

For the purpose of reporting patient offload time and delays, only ground transport units responding to 9-1-1 incidents are included in this report. It excludes all records from First Responder Fire agencies arriving on scene as part of the dual 9-1-1 medical response system in Riverside County. It also excludes interfacility transports and other types of 9-1-1 responses such as air ambulance responses.

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

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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>