



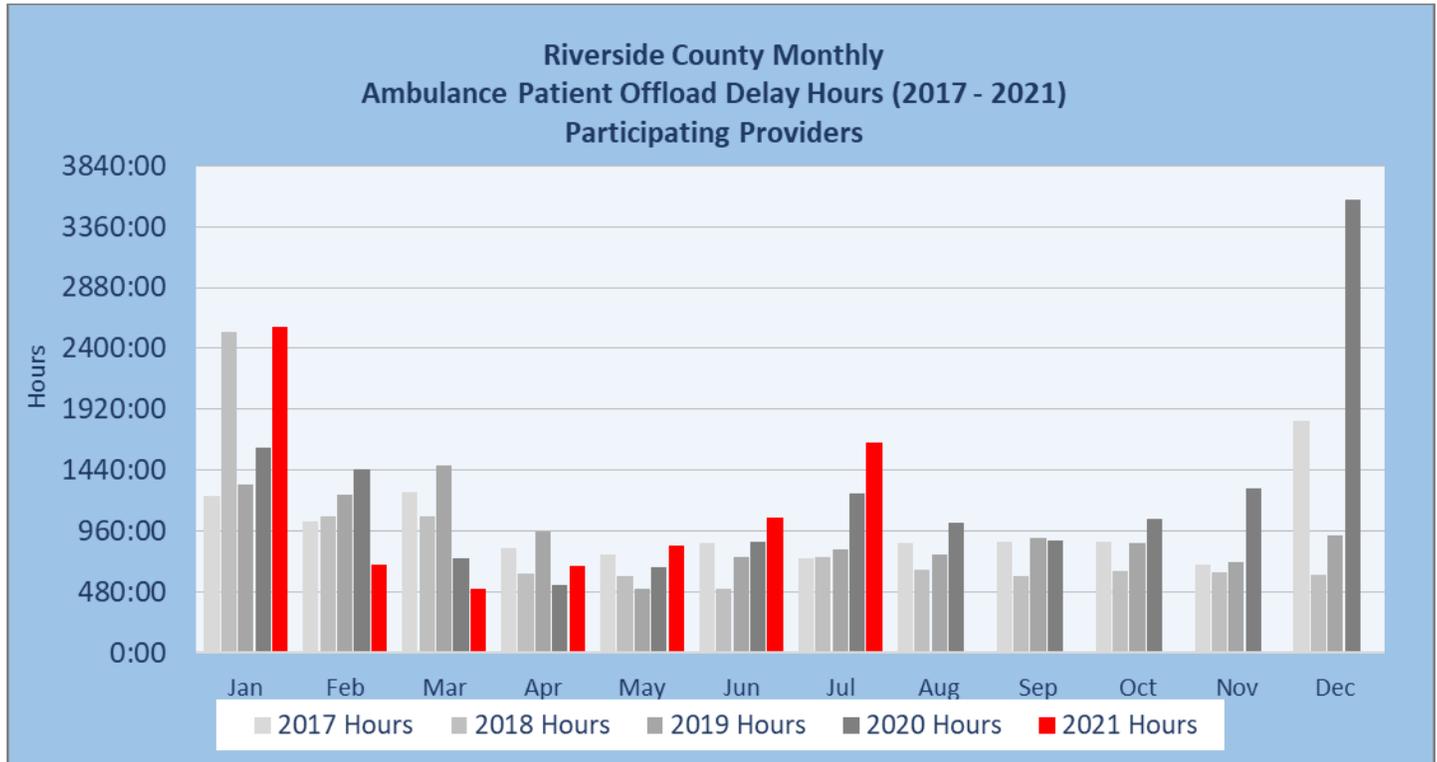
Ambulance Patient Offload Time

July 2021

*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.

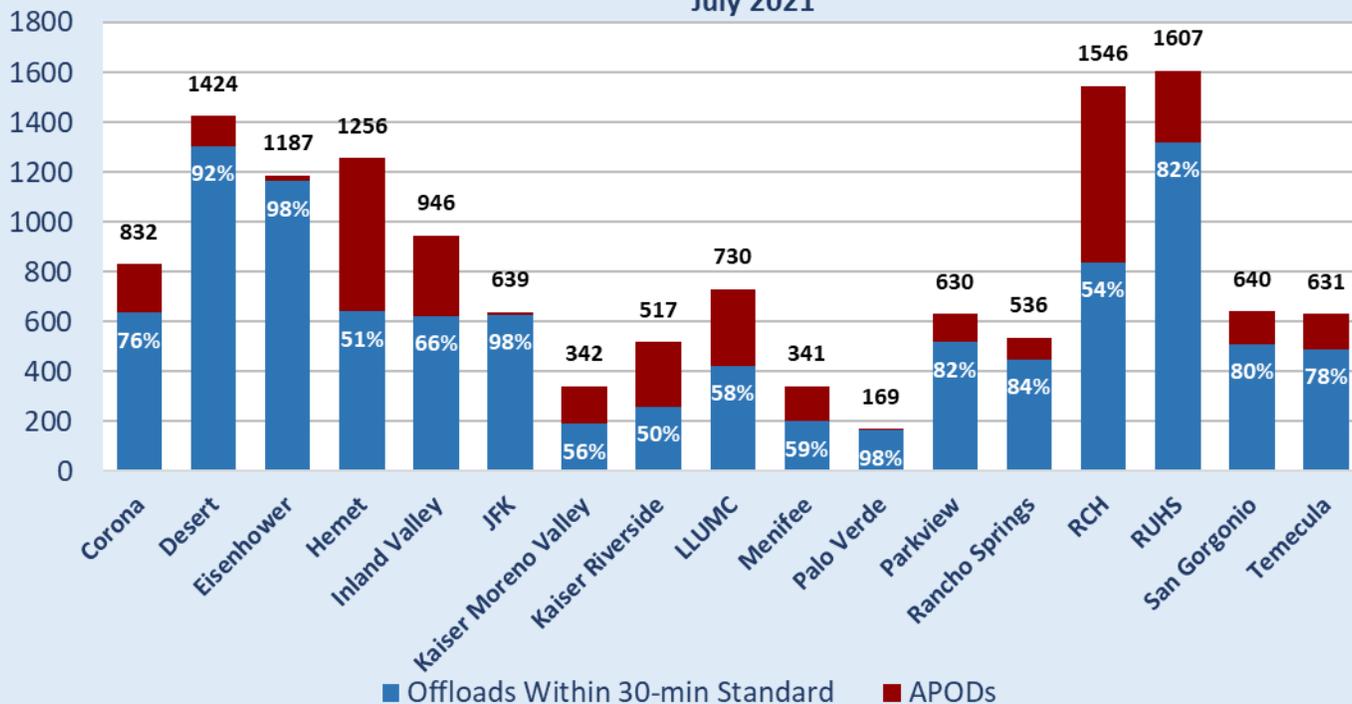


**Beginning August 2017, times represented include all participating providers. Prior to August, data included AMR responses only.

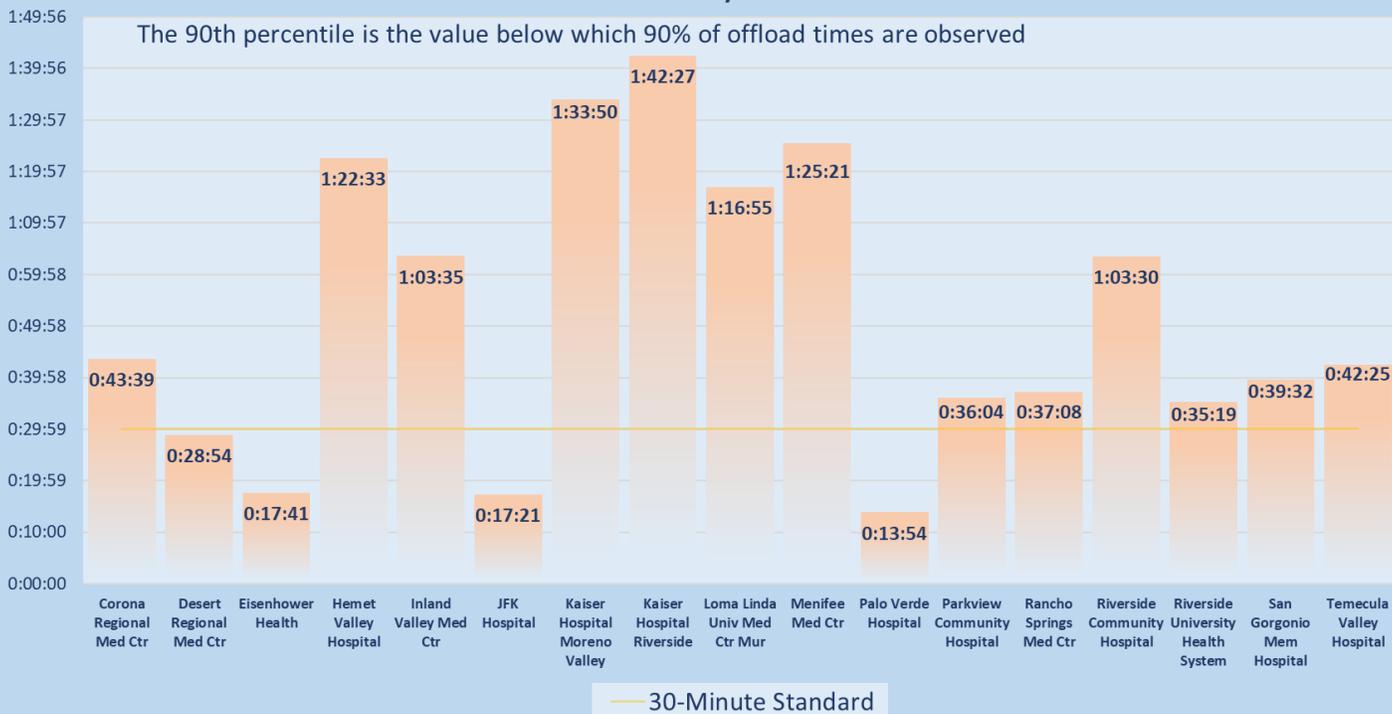
July 2021						
	ALS Transports	APOT	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	832	331:36:21	61:55:46	197	76.3%	0:43:39
Desert Regional Med Ctr	1,424	358:58:48	49:44:07	119	91.6%	0:28:54
Eisenhower Health	1,187	199:46:15	3:54:07	23	98.1%	0:17:41
Hemet Valley Hospital	1,256	877:26:40	372:56:25	616	51.0%	1:22:33
Inland Valley Med Ctr	946	474:12:20	152:47:06	324	65.8%	1:03:35
JFK Hospital	639	83:34:56	1:00:44	11	98.3%	0:17:21
Kaiser Hospital Moreno Valley	342	222:22:12	97:54:04	152	55.6%	1:33:50
Kaiser Hospital Riverside	517	394:34:19	191:45:02	257	50.3%	1:42:27
Loma Linda Univ Med Ctr Mur	730	454:13:34	179:18:34	306	58.1%	1:16:55
Menifee Med Ctr	341	218:22:17	88:28:38	140	58.9%	1:25:21
Palo Verde Hospital	169	17:33:19	0:42:42	4	97.6%	0:13:54
Parkview Community Hospital	630	222:18:53	21:02:28	113	82.1%	0:36:04
Rancho Springs Med Ctr	536	192:04:53	27:52:03	88	83.6%	0:37:08
Riverside Community Hospital	1,546	892:48:15	285:44:48	708	54.2%	1:03:30
Riverside University Health System	1,607	566:31:17	49:50:00	288	82.1%	0:35:19
San Geronio Mem Hospital	640	247:19:45	37:01:54	131	79.5%	0:39:32
Temecula Valley Hospital	631	242:54:33	37:03:49	140	77.8%	0:42:25
Grand Total	13,973	5996:38:37	1659:02:17	3,617	74.1%	0:50:14

Key High Low

Riverside County Hospitals Transports, APODs and % Compliance July 2021



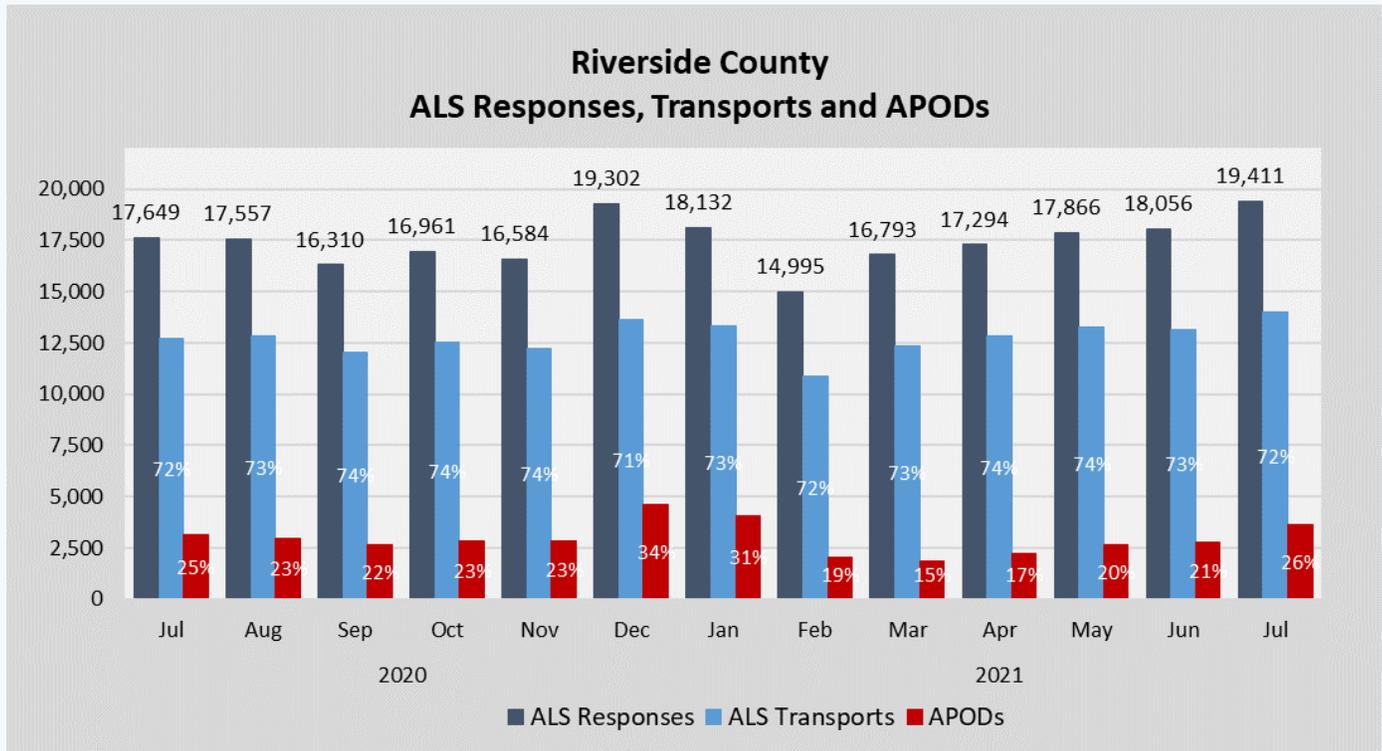
Riverside County Hospitals APOT-1, 90th Percentile July 2021



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						2021						Low	High
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Avg
Corona Regional Med Ctr	719	729	642	720	638	700	683	606	680	625	757	747	832	698
Desert Regional Med Ctr	1193	1122	1070	1122	1090	1126	1174	969	1242	1406	1417	1395	1424	1,212
Eisenhower Health	1151	1134	1098	1142	1148	1284	1302	1051	1272	1273	1220	1112	1187	1,183
Hemet Valley Hospital	1377	1406	1230	1322	1318	1130	1085	1006	1229	1286	1339	1302	1256	1,253
Inland Valley Med Ctr	895	869	870	824	808	914	806	733	829	847	943	910	946	861
JFK Hospital	641	620	573	603	579	705	618	520	574	577	639	627	639	609
Kaiser Hospital Moreno Valley	301	317	286	309	300	390	400	266	308	310	263	309	342	315
Kaiser Hospital Riverside	530	531	521	561	582	674	642	459	507	505	523	540	517	546
Loma Linda Univ Med Ctr Mur	607	634	591	642	642	709	714	546	630	589	652	639	730	640
Menifee Med Ctr	317	292	239	270	273	324	274	204	237	249	241	269	341	272
Palo Verde Hospital	163	148	137	139	159	154	169	128	110	147	148	143	169	147
Parkview Community Hospital	556	523	517	543	538	713	565	384	442	487	537	526	630	535
Rancho Springs Med Ctr	424	461	416	414	412	552	586	449	454	462	503	500	536	475
Riverside Comm Hospital	1392	1494	1422	1376	1311	1217	1405	1242	1406	1552	1456	1511	1546	1,410
Riverside Univ Health System	1454	1445	1395	1420	1409	1732	1643	1240	1388	1421	1514	1476	1607	1,473
San Geronio Mem Hospital	523	569	557	563	530	737	669	541	507	577	566	602	640	583
Temecula Valley Hospital	482	530	490	535	484	563	586	504	505	537	525	539	631	532
Riverside County Total	12725	12824	12054	12505	12221	13624	13321	10848	12320	12850	13243	13147	13973	12743

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													Average
	APOT % Compliance by Hospital for the last 12 months													
	2020						2021						Jul	
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Corona Regional Med Ctr	61%	68%	69%	65%	60%	41%	55%	72%	75%	76%	73%	74%	76%	67%
Desert Regional Med Ctr	89%	92%	93%	91%	91%	84%	85%	91%	88%	89%	85%	90%	92%	89%
Eisenhower Health	97%	98%	99%	99%	99%	98%	98%	99%	99%	98%	97%	98%	98%	98%
Hemet Valley Hospital	56%	52%	61%	59%	52%	43%	42%	53%	69%	70%	64%	62%	51%	57%
Inland Valley Med Ctr	80%	79%	80%	78%	85%	61%	60%	80%	88%	85%	85%	82%	66%	78%
JFK Hospital	97%	100%	99%	99%	100%	96%	97%	99%	99%	99%	98%	97%	98%	98%
Kaiser Hospital Moreno Valley	77%	74%	78%	73%	76%	65%	78%	83%	85%	72%	72%	73%	56%	74%
Kaiser Hospital Riverside	73%	78%	74%	75%	70%	58%	69%	80%	76%	71%	74%	63%	50%	70%
Loma Linda Univ Med Ctr Mur	78%	76%	81%	81%	76%	68%	70%	76%	76%	74%	66%	69%	58%	73%
Menifee Med Ctr	68%	70%	77%	70%	67%	45%	45%	67%	80%	75%	83%	72%	59%	68%
Palo Verde Hospital	99%	99%	99%	98%	96%	94%	97%	99%	99%	100%	99%	100%	98%	98%
Parkview Community Hospital	69%	64%	69%	77%	76%	51%	61%	80%	85%	77%	86%	78%	82%	73%
Rancho Springs Med Ctr	86%	91%	91%	89%	90%	72%	64%	91%	93%	92%	94%	90%	84%	87%
Riverside Community Hospital	54%	50%	49%	49%	50%	35%	44%	66%	80%	68%	56%	58%	54%	55%
Riverside University Health System	74%	84%	88%	83%	84%	75%	82%	91%	92%	91%	89%	90%	82%	85%
San Geronio Mem Hospital	90%	92%	82%	87%	87%	69%	64%	86%	86%	87%	85%	79%	80%	83%
Temecula Valley Hospital	75%	82%	73%	78%	76%	71%	71%	87%	83%	84%	86%	86%	78%	79%
Riverside County Compliance	75%	77%	78%	77%	77%	66%	69%	81%	85%	83%	80%	79%	74%	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

Hospital	APOT-1 (90th Percentile) for the last 12 Months													Avg APOT-1
	2020						2021						Avg	
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Corona Regional Med Ctr	1:13	0:52	0:51	0:55	1:38	2:38	2:01	0:48	0:45	0:44	0:44	0:49	0:44	1:07
Desert Regional Med Ctr	0:33	0:27	0:25	0:29	0:30	0:41	0:37	0:30	0:34	0:32	0:40	0:31	0:29	0:32
Eisenhower Health	0:19	0:19	0:15	0:16	0:16	0:17	0:17	0:14	0:16	0:18	0:19	0:18	0:18	0:17
Hemet Valley Hospital	1:02	1:04	0:51	0:54	1:08	1:56	1:58	1:12	0:45	0:45	0:45	1:00	1:23	1:07
Inland Valley Med Ctr	0:47	0:43	0:43	0:48	0:38	1:21	1:17	0:43	0:33	0:35	0:37	0:43	1:04	0:48
JFK Hospital	0:22	0:15	0:15	0:16	0:15	0:20	0:19	0:16	0:18	0:16	0:17	0:18	0:17	0:17
Kaiser Hospital Moreno Valley	0:50	0:56	0:52	0:54	1:04	1:53	0:58	0:37	0:41	1:00	1:02	1:07	1:34	1:02
Kaiser Hospital Riverside	0:56	0:41	0:49	0:46	1:04	1:43	1:05	0:42	0:46	1:04	0:50	1:15	1:42	1:01
Loma Linda Univ Med Ctr Mur	0:41	0:44	0:38	0:39	0:44	1:10	1:09	0:50	0:48	0:49	0:57	0:54	1:17	0:52
Menifee Med Ctr	1:13	1:07	0:48	1:05	1:26	2:56	2:39	1:02	0:40	0:44	0:36	0:45	1:25	1:15
Palo Verde Hospital	0:13	0:10	0:12	0:15	0:17	0:21	0:20	0:14	0:11	0:14	0:13	0:14	0:14	0:14
Parkview Community Hospital	1:01	0:58	0:54	0:42	0:42	2:13	1:21	0:41	0:35	0:41	0:34	0:41	0:36	0:53
Rancho Springs Med Ctr	0:34	0:30	0:30	0:32	0:30	1:03	1:17	0:29	0:26	0:27	0:26	0:29	0:37	0:36
Riverside Comm Hospital	1:09	1:00	1:07	1:14	1:13	2:19	1:15	0:48	0:37	0:49	1:01	1:03	1:04	1:07
Riverside Univ Health System	0:42	0:35	0:32	0:36	0:36	0:42	0:35	0:29	0:29	0:29	0:31	0:30	0:35	0:33
San Geronio Mem Hospital	0:30	0:28	0:36	0:33	0:34	0:59	1:13	0:36	0:34	0:33	0:34	0:41	0:40	0:39
Temecula Valley Hospital	0:42	0:36	0:43	0:39	0:40	0:46	0:45	0:34	0:37	0:37	0:33	0:34	0:42	0:39
Riverside County Compliance	0:48	0:45	0:44	0:45	0:49	1:20	1:03	0:40	0:35	0:38	0:41	0:44	0:50	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	2020						2021						Total	
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		Jul
INT	1		5	8			2		1	1	1	2		21
Corona Regional Medical Center			1											1
Menifee Valley Medical Center	1			1										2
Riverside Community Hospital			1								1			2
Temecula Valley Hospital			1											1
Inland Valley Medical Center			2				1		1					4
Loma Linda University Medical Center--Murrieta				3			1							4
Rancho Springs Medical Center				4										4
Eisenhower Health										1				1
Palo Verde Hospital												2		2
STEMI		1	2	1			1						1	6
Riverside Community Hospital			1				1							2
Temecula Valley Hospital			1											1
Loma Linda University Medical Center--Murrieta		1		1									1	3
Stroke			4	3		2	1						1	11
Corona Regional Medical Center			1	1										2
Riverside Community Hospital			1				1							2
Temecula Valley Hospital			1											1
Inland Valley Medical Center			1											1
Rancho Springs Medical Center				2									1	3
Riverside University Health System						1								1
Parkview Community Hospital						1								1
Trauma	8	6	5	1	8	4	1	5	2	1	2	5	3	51
Riverside Community Hospital		1	1		3						1	1	1	8
Inland Valley Medical Center	1	2	2	1			1		1			2	1	11
Riverside University Health System	7	3	2		5	4		5	1	1	1	2	1	32
Total	9	7	16	13	8	6	5	5	3	2	3	7	5	89

Diversions by HH:MM	2020						2021						Total
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
INT	0:37		96:38	15:02			1:53		0:09	0:14	3:32	18:05	
Corona Regional Medical Center			59:44										
Menifee Valley Medical Center	0:37			0:25									
Riverside Community Hospital			2:08								3:32		
Temecula Valley Hospital			29:51										
Inland Valley Medical Center			4:55				1:26		0:09				
Loma Linda University Medical Center--Murrieta				1:59			0:27						
Rancho Springs Medical Center				12:38									
Eisenhower Health									0:14				
Palo Verde Hospital												18:05	
STEMI		1:30	192:30	1:26			2:01						4:11
Riverside Community Hospital			2:02				2:01						
Temecula Valley Hospital			190:28										
Loma Linda University Medical Center--Murrieta		1:30		1:26									4:11
Stroke			83:00	27:53		5:27	2:02						0:17
Corona Regional Medical Center			71:58	10:57									
Riverside Community Hospital			2:02				2:02						
Temecula Valley Hospital			1:47										
Inland Valley Medical Center			7:13										
Rancho Springs Medical Center				16:56									0:17
Riverside University Health System						0:08							
Parkview Community Hospital						5:19							
Trauma	21:17	7:53	7:22	2:01	9:20	1:31	2:03	8:15	2:42	0:51	1:48	7:58	9:52
Riverside Community Hospital		2:53	2:00		2:40						0:51	3:42	5:01
Inland Valley Medical Center	1:54	2:09	3:44	2:01			2:03		0:13			1:51	0:50
Riverside University Health System	19:23	2:51	1:38		6:40	1:31		8:15	2:29	0:51	0:57	2:25	4:01
Total	21:54	9:23	379:30	46:22	9:20	6:58	7:59	8:15	2:51	1:05	5:20	26:03	14:20

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.

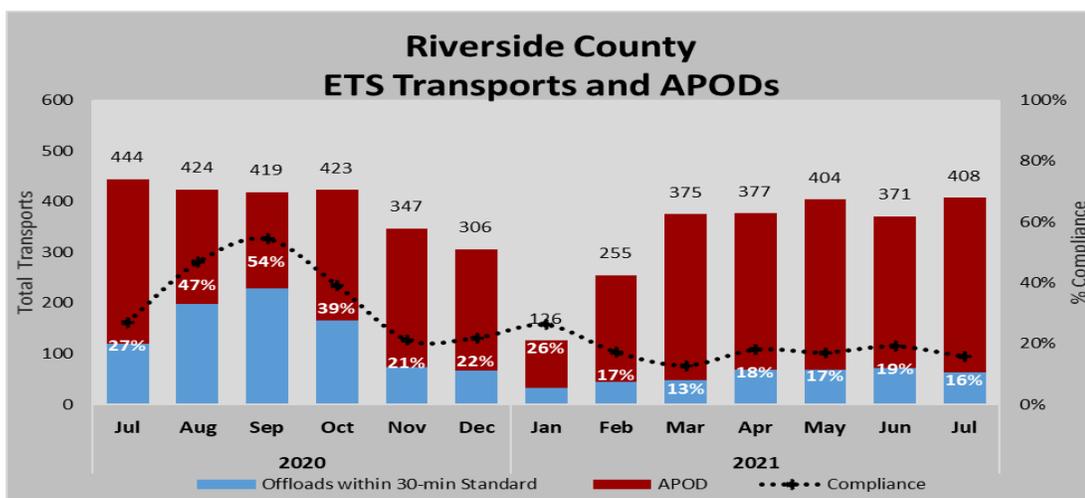
Facilities	2020					2021								Total Redirection
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Corona Regional Medical Center	15	5	7	8	31	91	61	5	1	3	3	7	7	244
Desert Regional Medical Center	2	2	1	5	3	8	14	3	6	5	13	8	7	77
Eisenhower Health							1				1			2
Hemet Valley Medical Center	17	16	4	4	20	87	86	31	1	9	1	14	56	346
Inland Valley Medical Center	7	2	2	7	3	32	45	5		2	1	5	23	134
John F. Kennedy Memorial Hospital	1										1			2
Kaiser Hospital Moreno Valley	4	2	1	1	8	34	16	1	3	8	4	7	19	108
Kaiser Hospital Riverside	7		4	3	7	63	25	1	4	6	7	18	40	185
Loma Linda Univ Med Ctr Murrieta	1	2	2	2	3	32	38	6	3	7	11	12	26	145
Menifee Valley Medical Center	11	5	2	8	16	68	43	6	1		1	2	14	177
Palo Verde Hospital	1					1	1							3
Parkview Community Hospital	12	14	4	2	1	77	41	1		1	1	2	1	157
Rancho Springs Medical Center	2			1		15	24						5	47
Riverside Community Hospital	25	13	21	35	37	131	46	3		2	26	21	24	384
Riverside University Health System				1		6							1	8
San Geronio Memorial Hospital					1	11	19	2					3	36
Temecula Valley Hospital			2			7	6		1		1		1	18
Total Redirection	105	61	50	77	130	663	466	64	20	43	71	96	227	2073

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 2021 - Emergency Treatment Services					
	Total Offload			APOD Compliance	
	Transports to ETS	Time	APOD Hours		
Emergency Treatment Services	408	387:50:45	195:31:41	344	15.7%

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.

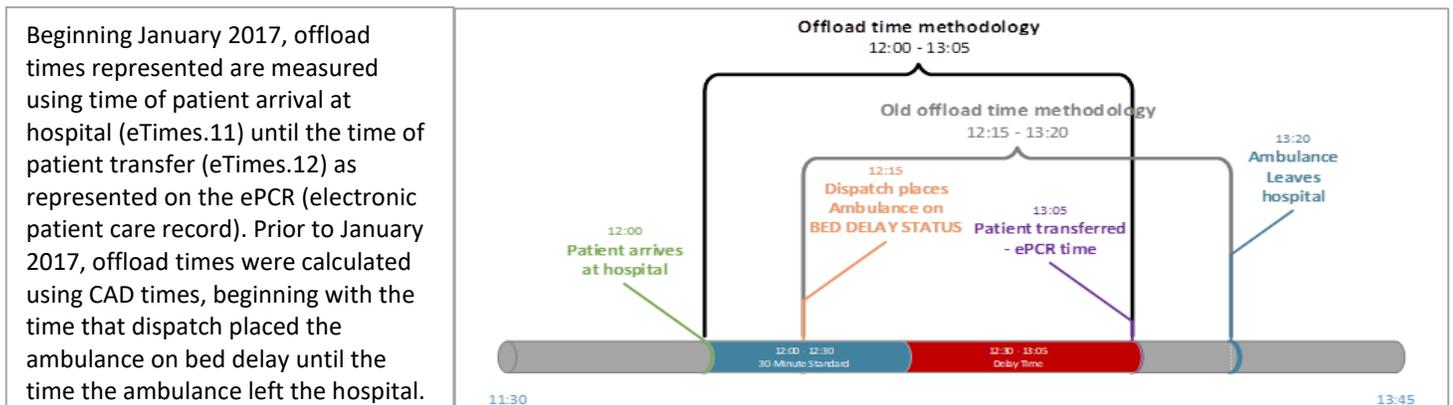
9-1-1 Ambulance Response

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

-Report prepared by Sudha Mahesh & 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>