



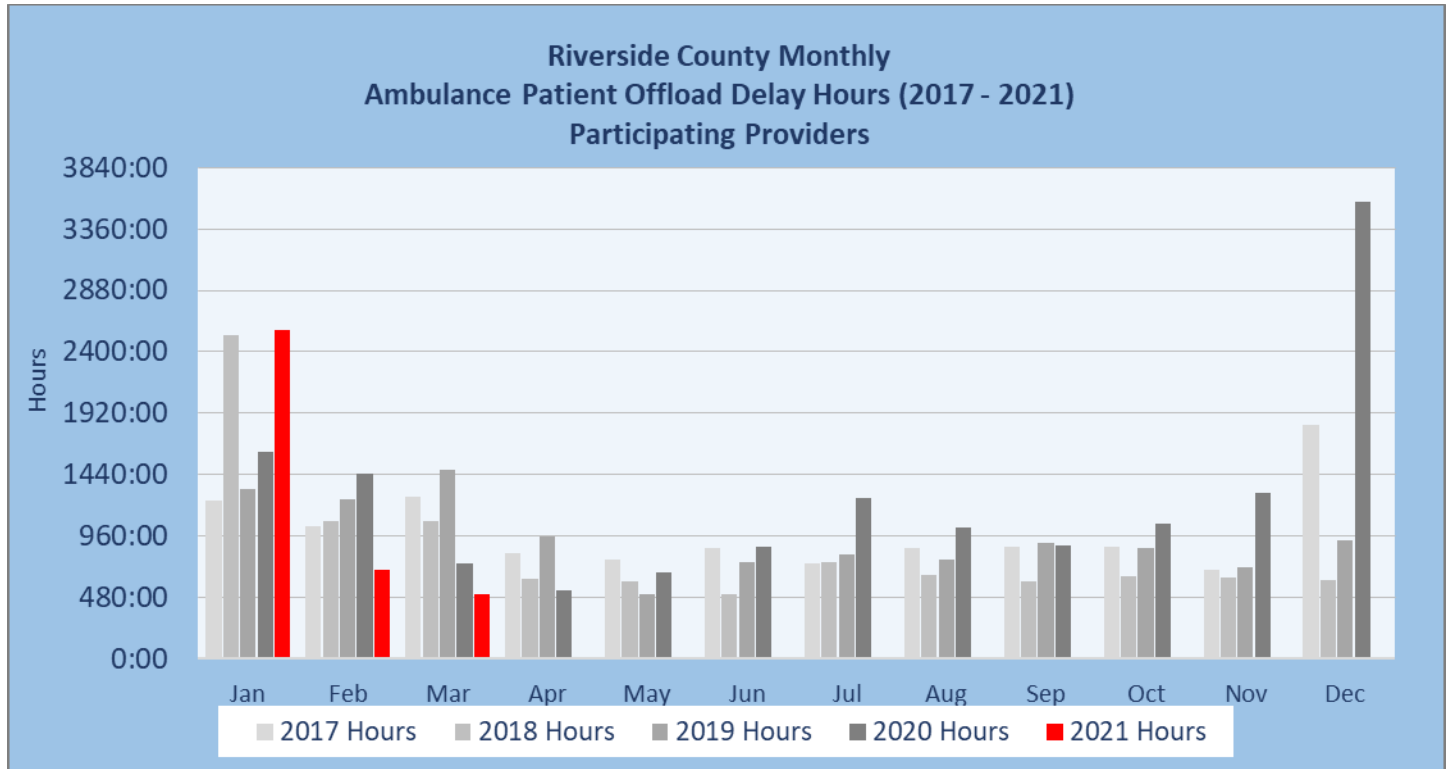
Ambulance Patient Offload Time

March 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.



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.

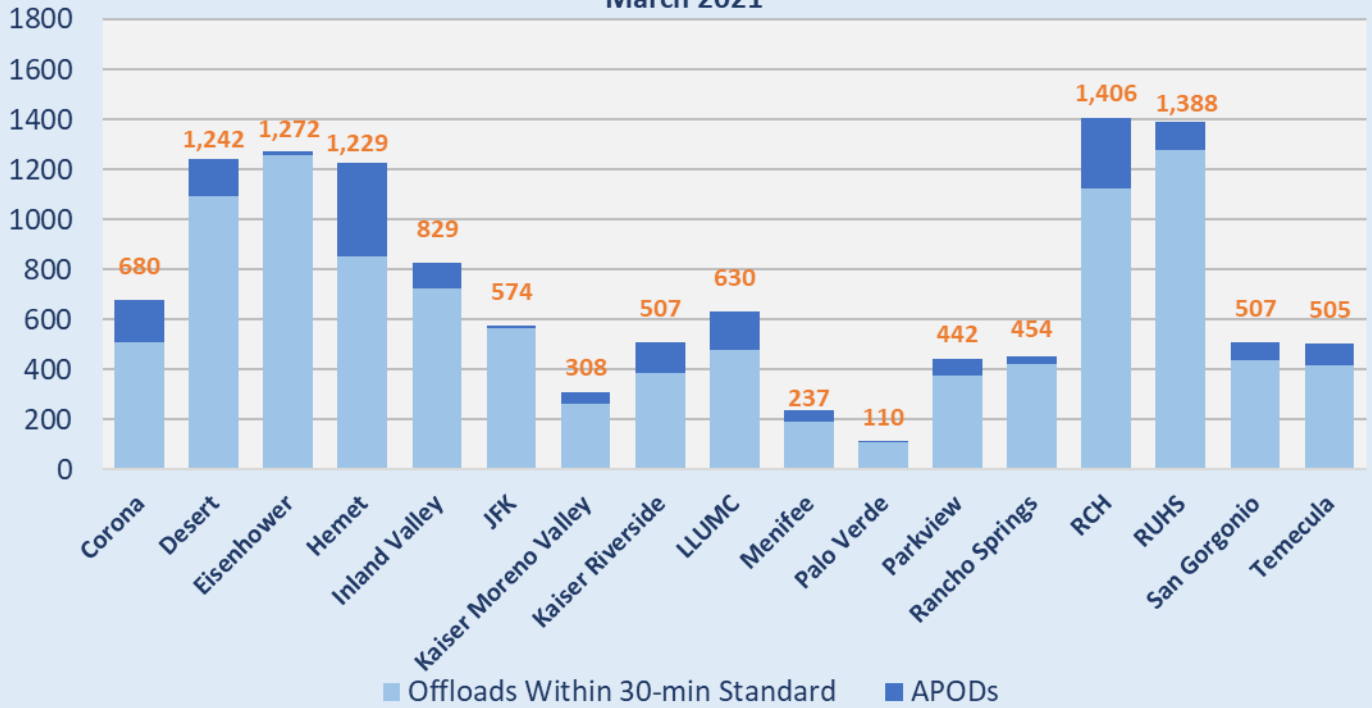
March 2021						
	ALS Transports	APOT	APOD Hours	APODs	APOD Compliance	APOT - 1
Corona Regional Med Ctr	680	278:05:49	51:39:33	173	74.6%	0:45:12
Desert Regional Med Ctr	1,242	347:26:28	56:34:13	150	87.9%	0:33:41
Eisenhower Health	1,272	203:06:47	2:20:31	17	98.7%	0:16:29
Hemet Valley Hospital	1,229	529:34:55	83:50:59	376	69.4%	0:44:40
Inland Valley Med Ctr	829	232:45:10	22:45:04	103	87.6%	0:32:43
JFK Hospital	574	79:27:14	0:44:33	8	98.6%	0:17:38
Kaiser Hospital Moreno Valley	308	108:35:25	23:33:47	46	85.1%	0:41:09
Kaiser Hospital Riverside	507	201:46:00	43:33:40	123	75.7%	0:45:58
Loma Linda Univ Med Ctr Mur	630	261:48:46	60:03:24	150	76.2%	0:47:56
Menifee Med Ctr	237	84:06:27	10:56:39	47	80.2%	0:40:00
Palo Verde Hospital	110	8:42:53	0:22:46	1	99.1%	0:11:03
Parkview Community Hospital	442	143:54:51	14:25:41	67	84.8%	0:34:33
Rancho Springs Med Ctr	454	116:20:14	5:25:06	30	93.4%	0:26:07
Riverside Community Hospital	1,406	517:24:52	52:49:51	284	79.8%	0:37:29
Riverside University Health System	1,388	433:41:11	36:22:18	112	91.9%	0:28:40
San Geronio Mem Hospital	507	167:24:57	16:55:01	69	86.4%	0:33:45
Temecula Valley Hospital	505	173:15:48	20:01:22	86	83.0%	0:36:37
Grand Total	12,320	3887:27:47	502:24:28	1,842	85.0%	0:35:15

Key

High

Low

Riverside County Hospitals Transports and APODs March 2021



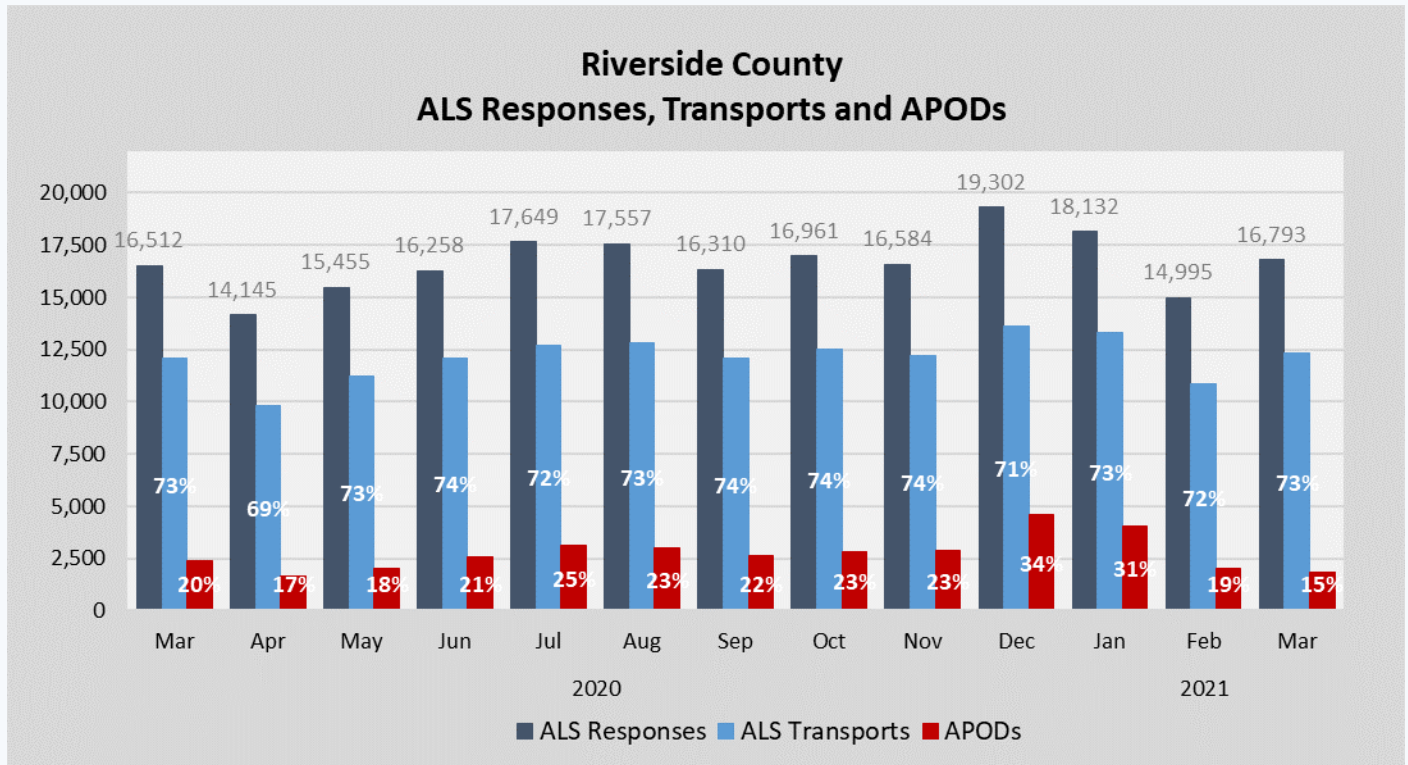
Riverside County Hospitals APOT-1, 90th Percentile March 2021



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*

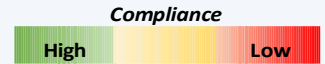
The first chart represents a summary of Riverside County’s total 9-1-1 ambulance (ALS) responses, transports, and total transports resulting in patient offload delay (APOD) for a rolling 12-months compared to the current month.



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											Low		High	
	2020											2021		Monthly	
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Avg	
Corona Regional Med Ctr	700	566	664	627	719	729	642	720	638	700	683	606	680	667	
Desert Regional Med Ctr	1029	865	1082	1162	1193	1122	1070	1122	1090	1126	1174	969	1242	1,096	
Eisenhower Health	1198	877	1119	1125	1151	1134	1098	1142	1148	1284	1302	1051	1272	1,146	
Hemet Valley Hospital	1287	1167	1197	1279	1377	1406	1230	1322	1318	1130	1085	1006	1229	1,233	
Inland Valley Med Ctr	785	664	796	800	895	869	870	824	808	914	806	733	829	815	
JFK Hospital	582	485	595	659	641	620	573	603	579	705	618	520	574	596	
Kaiser Hospital Moreno Valley	292	232	239	248	301	317	286	309	300	390	400	266	308	299	
Kaiser Hospital Riverside	482	369	435	490	530	531	521	561	582	674	642	459	507	522	
Loma Linda Univ Med Ctr Mur	502	455	512	582	607	634	591	642	642	709	714	546	630	597	
Menifee Med Ctr	328	221	259	316	317	292	239	270	273	324	274	204	237	273	
Palo Verde Hospital	168	130	163	153	163	148	137	139	159	154	169	128	110	148	
Parkview Community Hospital	524	450	464	518	556	523	517	543	538	713	565	384	442	518	
Rancho Springs Med Ctr	431	351	363	392	424	461	416	414	412	552	586	449	454	439	
Riverside Comm Hospital	1415	1084	1218	1325	1392	1494	1422	1376	1311	1217	1405	1242	1406	1,331	
Riverside Univ Health System	1329	1087	1261	1375	1454	1445	1395	1420	1409	1732	1643	1240	1388	1,398	
San Geronio Mem Hospital	488	486	488	550	523	569	557	563	530	737	669	541	507	554	
Temecula Valley Hospital	516	335	399	495	482	530	490	535	484	563	586	504	505	494	
Riverside County Total	12056	9824	11254	12096	12725	12824	12054	12505	12221	13624	13321	10848	12320	12129	

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															
	2020												2021		Monthly Average
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Corona Regional Med Ctr	76%	71%	70%	65%	61%	68%	69%	65%	60%	41%	55%	72%	75%	65%	
Desert Regional Med Ctr	90%	96%	92%	87%	89%	92%	93%	91%	91%	84%	85%	91%	88%	90%	
Eisenhower Health	99%	99%	99%	97%	97%	98%	99%	99%	99%	98%	98%	99%	99%	98%	
Hemet Valley Hospital	63%	73%	70%	69%	56%	52%	61%	59%	52%	43%	42%	53%	69%	59%	
Inland Valley Med Ctr	87%	88%	89%	85%	80%	79%	80%	78%	85%	61%	60%	80%	88%	80%	
JFK Hospital	98%	98%	99%	97%	97%	100%	99%	99%	100%	96%	97%	99%	99%	98%	
Kaiser Hospital Moreno Valley	85%	89%	88%	75%	77%	74%	78%	73%	76%	65%	78%	83%	85%	79%	
Kaiser Hospital Riverside	82%	88%	84%	74%	73%	78%	74%	75%	70%	58%	69%	80%	76%	75%	
Loma Linda Univ Med Ctr Mur	80%	87%	82%	82%	78%	76%	81%	81%	76%	68%	70%	76%	76%	78%	
Menifee Med Ctr	75%	88%	85%	80%	68%	70%	77%	70%	67%	45%	45%	67%	80%	71%	
Palo Verde Hospital	98%	100%	97%	99%	99%	99%	99%	98%	96%	94%	97%	99%	99%	98%	
Parkview Community Hospital	72%	82%	74%	65%	69%	64%	69%	77%	76%	51%	61%	80%	85%	71%	
Rancho Springs Med Ctr	89%	91%	94%	90%	86%	91%	91%	89%	90%	72%	64%	91%	93%	87%	
Riverside Community Hospital	51%	46%	49%	55%	54%	50%	49%	49%	50%	35%	44%	66%	80%	52%	
Riverside University Health System	84%	91%	85%	78%	74%	84%	88%	83%	84%	75%	82%	91%	92%	84%	
San Geronio Mem Hospital	92%	92%	93%	91%	90%	92%	82%	87%	87%	69%	64%	86%	86%	85%	
Temecula Valley Hospital	82%	94%	91%	83%	75%	82%	73%	78%	76%	71%	71%	87%	83%	81%	
Riverside County Compliance	80%	83%	82%	79%	75%	77%	78%	77%	77%	66%	69%	81%	85%	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	2020												2021		Avg APOT-1
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Corona Regional Med Ctr	0:47	0:48	0:48	0:56	1:13	0:52	0:51	0:55	1:38	2:38	2:01	0:48	0:45	1:09	
Desert Regional Med Ctr	0:31	0:23	0:28	0:33	0:33	0:27	0:25	0:29	0:30	0:41	0:37	0:30	0:34	0:30	
Eisenhower Health	0:17	0:16	0:16	0:18	0:19	0:19	0:15	0:16	0:16	0:17	0:17	0:14	0:16	0:16	
Hemet Valley Hospital	0:49	0:43	0:44	0:45	1:02	1:04	0:51	0:54	1:08	1:56	1:58	1:12	0:45	1:03	
Inland Valley Med Ctr	0:33	0:32	0:31	0:35	0:47	0:43	0:43	0:48	0:38	1:21	1:17	0:43	0:33	0:44	
JFK Hospital	0:18	0:20	0:19	0:20	0:22	0:15	0:15	0:16	0:15	0:20	0:19	0:16	0:18	0:17	
Kaiser Hospital Moreno Valley	0:38	0:31	0:32	0:56	0:50	0:56	0:52	0:54	1:04	1:53	0:58	0:37	0:41	0:52	
Kaiser Hospital Riverside	0:40	0:32	0:40	0:54	0:56	0:41	0:49	0:46	1:04	1:43	1:05	0:42	0:46	0:52	
Loma Linda Univ Med Ctr Mur	0:37	0:33	0:36	0:38	0:41	0:44	0:38	0:39	0:44	1:10	1:09	0:50	0:48	0:45	
Menifee Med Ctr	0:46	0:31	0:35	0:41	1:13	1:07	0:48	1:05	1:26	2:56	2:39	1:02	0:40	1:11	
Palo Verde Hospital	0:13	0:13	0:16	0:13	0:13	0:10	0:12	0:15	0:17	0:21	0:20	0:14	0:11	0:14	
Parkview Community Hospital	0:51	0:39	0:50	1:06	1:01	0:58	0:54	0:42	0:42	2:13	1:21	0:41	0:35	0:57	
Rancho Springs Med Ctr	0:30	0:28	0:24	0:30	0:34	0:30	0:30	0:32	0:30	1:03	1:17	0:29	0:26	0:35	
Riverside Comm Hospital	1:03	1:24	1:12	1:05	1:09	1:00	1:07	1:14	1:13	2:19	1:15	0:48	0:37	1:11	
Riverside Univ Health System	0:37	0:29	0:34	0:39	0:42	0:35	0:32	0:36	0:36	0:42	0:35	0:29	0:29	0:35	
San Geronio Mem Hospital	0:28	0:28	0:28	0:30	0:30	0:28	0:36	0:33	0:34	0:59	1:13	0:36	0:34	0:36	
Temecula Valley Hospital	0:36	0:26	0:29	0:35	0:42	0:36	0:43	0:39	0:40	0:46	0:45	0:34	0:37	0:37	
Riverside County Compliance	0:50	0:41	0:38	0:39	0:42	0:48	0:45	0:44	0:45	0:49	1:03	0:40	0:35	0:44	

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		2019												2020												Total		
Diversion Category/Facility		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
INT		1	1		1	1		5	8			2		1	1												1	19
Corona Regional Medical Center								1																				1
Menifee Valley Medical Center			1			1				1																		3
Riverside Community Hospital								1																				1
Temecula Valley Hospital								1																				1
Inland Valley Medical Center								2				1		1											1		4	
Loma Linda University Medical Center--Murrieta		1								3		1															5	
Rancho Springs Medical Center										4																	4	
STEMI		1						1	2	1			1														6	
John F. Kennedy Memorial Hospital		1																									1	
Riverside Community Hospital								1				1															2	
Temecula Valley Hospital								1																			1	
Loma Linda University Medical Center--Murrieta								1		1																	2	
Stroke		3	1	1	1			4	3		2	1															16	
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															2	
Temecula Valley Hospital								1																			1	
Inland Valley Medical Center								1																			1	
Kaiser Permanente Riverside Medical Center			1																								1	
Rancho Springs Medical Center				1	1					2																	4	
Riverside University Health System												1															1	
Parkview Community Hospital												1															1	
Trauma				4	4	8	6	5	1	8	4	1	5	2													48	
Riverside Community Hospital								1	1	3																	5	
Inland Valley Medical Center						1	2	2	1			1													1		8	
Riverside University Health System				4	4	7	3	2		5	4		5	1													35	
Total		5	2	5	5	9	7	16	13	8	6	5	5	3													89	

Diversions by HH:MM		2020												2020												Total	
Diversion Category/Facility		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
INT		0:43	0:31			0:37		96:38	15:02				1:53		0:43												0:09
Corona Regional Medical Center								59:44																			
Menifee Valley Medical Center			0:31			0:37			0:25																		
Riverside Community Hospital								2:08																			
Temecula Valley Hospital								29:51																			
Inland Valley Medical Center								4:55				1:26		0:09													
Loma Linda University Medical Center--Murrieta		0:43							1:59			0:27															
Rancho Springs Medical Center									12:38																		
STEMI		1:44					1:30	192:30	1:26			2:01		1:44													
John F. Kennedy Memorial Hospital		1:44																									
Riverside Community Hospital								2:02				2:01															
Temecula Valley Hospital								190:28																			
Loma Linda University Medical Center--Murrieta							1:30		1:26																		
Stroke		9:18	0:58	5:03	9:44			83:00	27:53		5:27	2:02		9:18	0:58	5:03	9:44										
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				2:02															
Temecula Valley Hospital								1:47																			
Inland Valley Medical Center								7:13																			
Kaiser Permanente Riverside Medical Center			0:58																								
Rancho Springs Medical Center				5:03	9:44					16:56																	
Riverside University Health System											0:08																
Parkview Community Hospital											5:19																
Trauma				5:38	6:00	21:17	7:53	7:22	2:01	9:20	1:31	2:03	8:15	2:42													
Riverside Community Hospital								2:53	2:00		2:40																
Inland Valley Medical Center						1:54	2:09	3:44	2:01			2:03		0:13													
Riverside University Health System				5:38	6:00	19:23	2:51	1:38		6:40	1:31		8:15	2:29													
Total		11:45	1:29	10:41	15:44	21:54	9:23	379:30	46:22	9:20	6:58	7:59	8:15	2:51													

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.

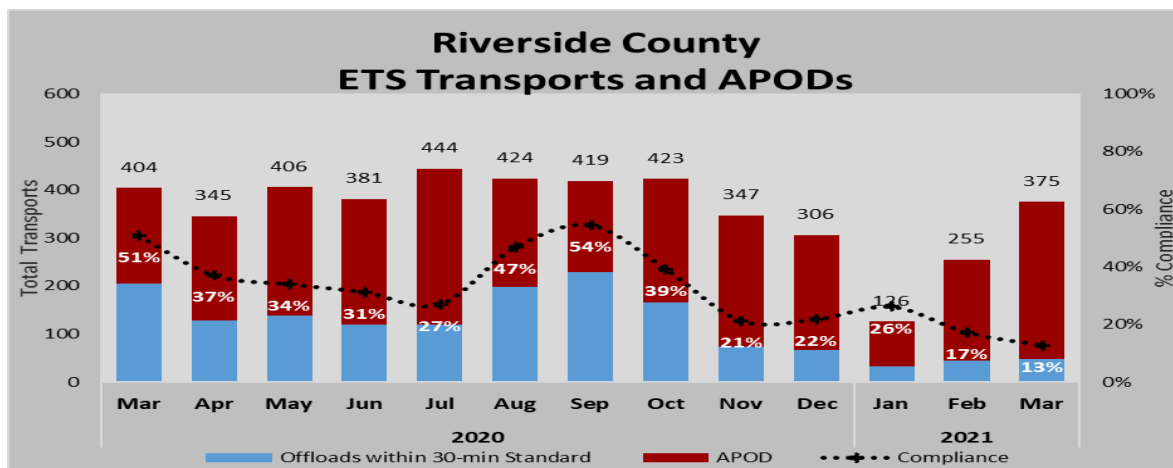
Facilities	2020												Total Redirection	
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Corona Regional Medical Center	5	1	3	5	15	5	7	8	31	91	61	5	1	238
Desert Regional Medical Center	2		7	8	2	2	1	5	3	8	14	3	6	61
Eisenhower Health			1								1			2
Hemet Valley Medical Center	1			1	17	16	4	4	20	87	86	31	1	268
Inland Valley Medical Center	1				7	2	2	7	3	32	45	5		104
John F. Kennedy Memorial Hospital				2	1									3
Kaiser Hospital Moreno Valley		1	2	6	4	2	1	1	8	34	16	1	3	79
Kaiser Hospital Riverside	1			9	7		4	3	7	63	25	1	4	124
Loma Linda Univ Med Ctr Murrieta	1			2	1	2	2	2	3	32	38	6	3	92
Menifee Valley Medical Center	1			3	11	5	2	8	16	68	43	6	1	164
Palo Verde Hospital			1		1					1	1			4
Parkview Community Hospital	4		4	17	12	14	4	2	1	77	41	1		177
Rancho Springs Medical Center	1				2			1		15	24			43
Riverside Community Hospital	7	20	23	24	25	13	21	35	37	131	46	3		385
Riverside University Health System				1				1		6				8
San Geronio Memorial Hospital									1	11	19	2		33
Temecula Valley Hospital								2		7	6		1	16
Total Redirection	24	22	41	78	105	61	50	77	130	663	466	64	20	1801

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.

March 2021 - Emergency Treatment Services				
	Transports to ETS	Total Offload Time	APOD Hours	APOD Compliance
Emergency Treatment Services	375	371:26:17	195:15:06	12.8%

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.

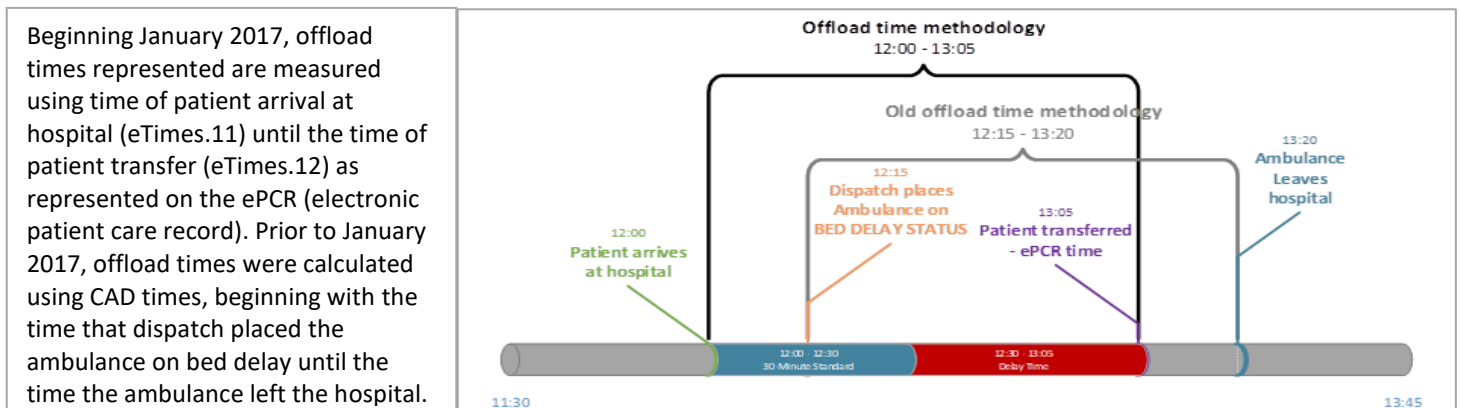
9-1-1 Ambulance Response

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>