



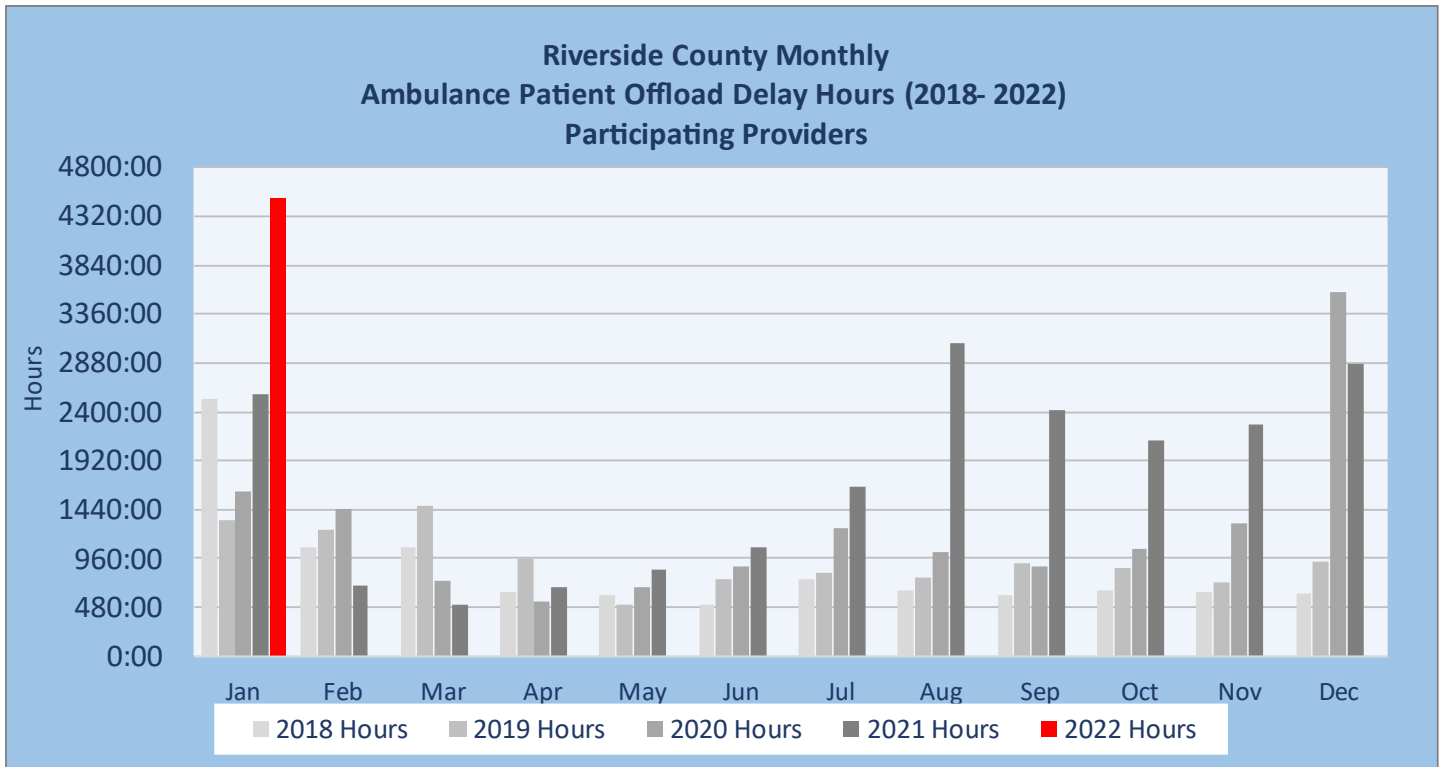
Ambulance Patient Offload Time

January 2022

*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.

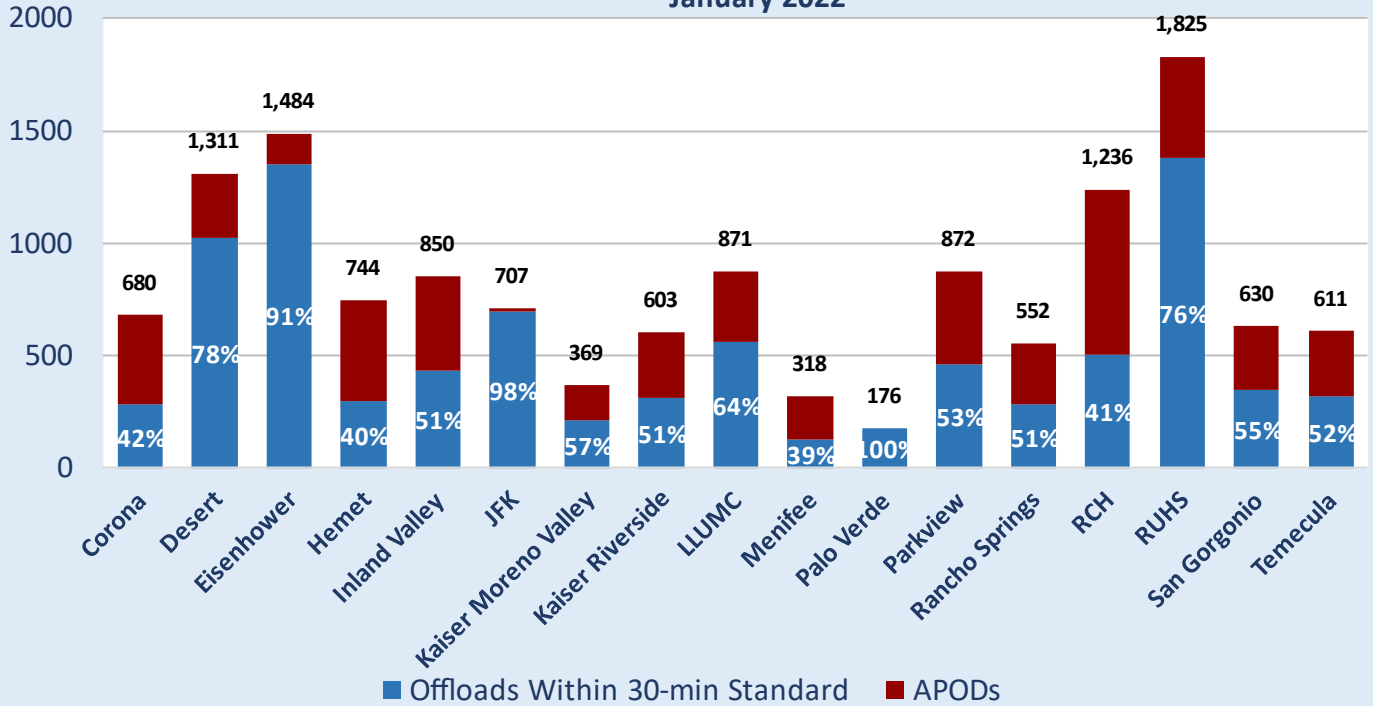


**Beginning August 2017, times represented include all participating providers. Prior to August, data included AMR responses only.

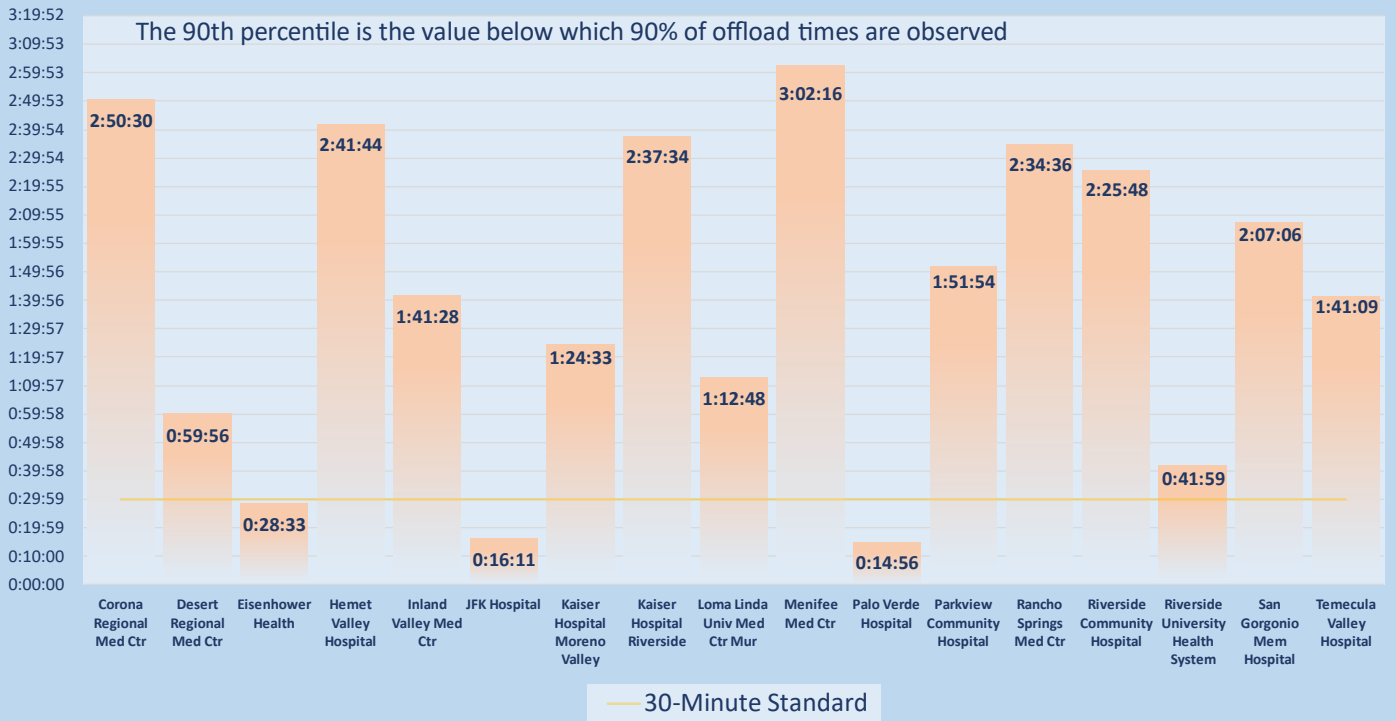
January 2022						
	ALS Transports	APOT	APOD Hours	APODs	POD Compliance	APOT - 1
Corona Regional Med Ctr	680	750:07:50	464:07:39	397	41.6%	2:50:30
Desert Regional Med Ctr	1,311	584:27:47	220:52:13	285	78.3%	0:59:56
Eisenhower Health	1,484	385:47:23	60:15:45	130	91.2%	0:28:33
Hemet Valley Hospital	744	833:46:48	515:56:05	449	39.7%	2:41:44
Inland Valley Med Ctr	850	628:09:05	295:39:49	415	51.2%	1:41:28
JFK Hospital	707	103:46:52	2:13:13	12	98.3%	0:16:11
Kaiser Hospital Moreno Valley	369	255:01:06	117:52:09	158	57.2%	1:24:33
Kaiser Hospital Riverside	603	595:44:18	359:30:48	294	51.2%	2:37:34
Loma Linda Univ Med Ctr Mur	871	500:32:04	186:03:35	310	64.4%	1:12:48
Menifee Med Ctr	318	396:01:04	259:40:12	193	39.3%	3:02:16
Palo Verde Hospital	176	21:39:57	0:00:00	0	100.0%	0:14:56
Parkview Community Hospital	872	711:18:58	366:43:55	414	52.5%	1:51:54
Rancho Springs Med Ctr	552	526:34:53	316:18:29	268	51.4%	2:34:36
Riverside Community Hospital	1,236	1241:54:35	724:17:37	734	40.6%	2:25:48
Riverside University Health System	1,825	743:51:31	95:37:59	446	75.6%	0:41:59
San Geronio Mem Hospital	630	525:21:58	281:59:31	285	54.8%	2:07:06
Temecula Valley Hospital	611	470:03:07	234:55:23	291	52.4%	1:41:09
Grand Total	13,839	9274:09:16	4502:04:22	5081	63.3%	1:36:56

Key High Low

Riverside County Hospitals Transports, APODs and % Compliance January 2022



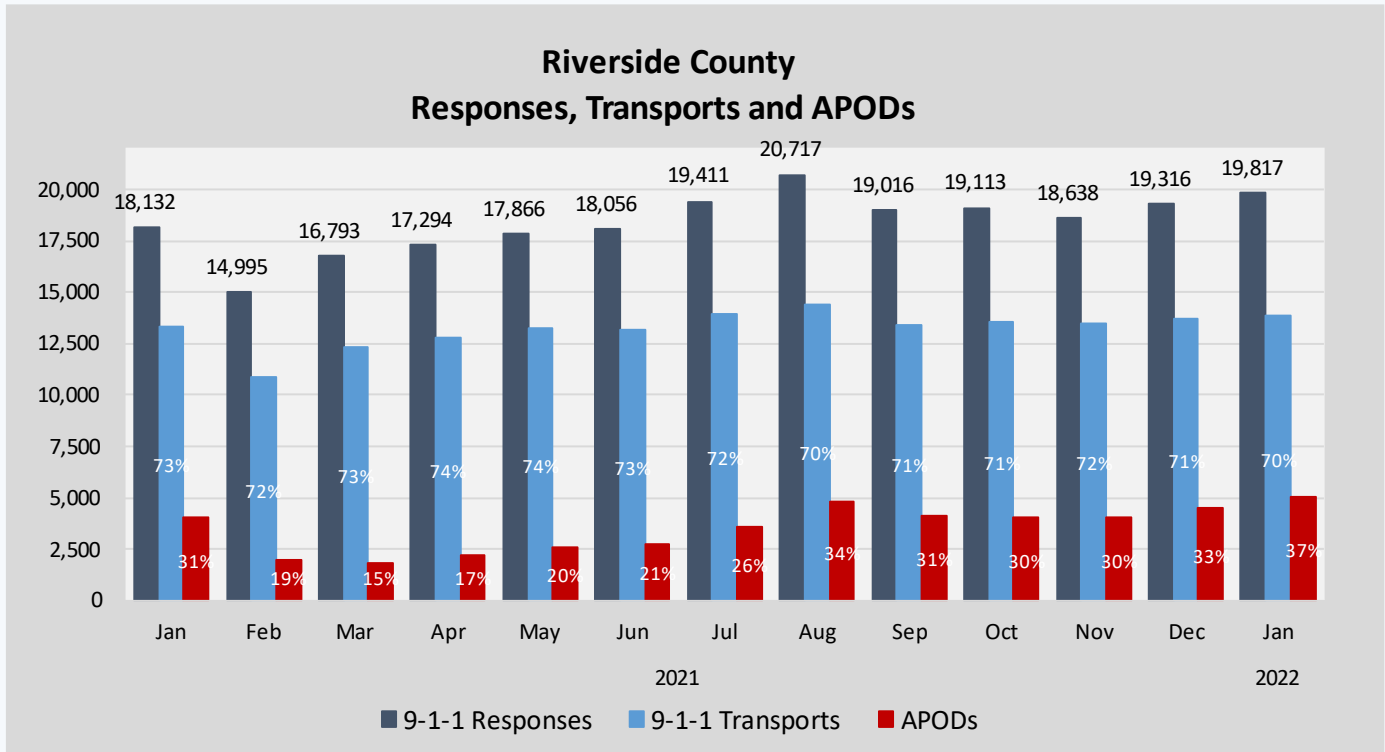
Riverside County Hospitals APOT-1, 90th Percentile January 2022



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												2022 Jan	2022 Monthly Avg
	<div style="display: flex; justify-content: space-between;"> Low Medium High </div>													
	2021 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Corona Regional Med Ctr	683	606	680	624	757	747	832	800	735	792	812	771	680	732
Desert Regional Med Ctr	1174	969	1242	1406	1417	1395	1424	1346	1262	1247	1281	1263	1311	1,287
Eisenhower Health	1302	1051	1272	1273	1220	1112	1187	1286	1213	1299	1348	1402	1484	1,265
Hemet Valley Hospital	1085	1006	1229	1286	1339	1302	1256	1214	1135	1199	1037	1045	744	1,144
Inland Valley Med Ctr	806	733	829	847	943	910	946	953	886	958	882	926	850	882
JFK Hospital	618	520	574	577	639	627	639	670	634	634	658	694	707	630
Kaiser Hospital Moreno Valley	400	266	308	310	263	309	342	363	332	344	339	334	369	329
Kaiser Hospital Riverside	642	459	507	505	523	540	517	579	519	527	550	578	603	542
Loma Linda Univ Med Ctr Mur	714	546	630	589	652	639	730	666	694	658	714	769	871	682
Menifee Med Ctr	274	204	237	249	241	269	341	359	311	286	319	341	318	288
Palo Verde Hospital	169	128	110	147	148	143	169	162	157	168	176	176	176	156
Parkview Community Hospital	565	384	442	486	537	526	630	668	674	653	677	730	872	603
Rancho Springs Med Ctr	586	449	454	462	503	500	536	611	567	563	530	548	552	528
Riverside Comm Hospital	1405	1242	1406	1544	1456	1511	1546	1560	1461	1506	1454	1406	1236	1,441
Riverside Univ Health System	1643	1240	1388	1415	1514	1476	1607	1804	1619	1516	1529	1552	1825	1,548
San Geronio Mem Hospital	669	541	507	575	566	602	640	697	628	632	622	603	630	609
Temecula Valley Hospital	586	504	505	537	525	539	631	664	595	596	559	591	611	573
Riverside County Total	13321	10848	12320	12832	13243	13147	13973	14402	13422	13578	13487	13729	13839	13242

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													Monthly Avg
	APOT % Compliance by Hospital for the last 12 months													
	2021												2022	
Hospital	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Avg
Corona Regional Med Ctr	55%	72%	75%	75%	73%	74%	76%	54%	67%	70%	67%	62%	42%	66%
Desert Regional Med Ctr	85%	91%	88%	89%	85%	90%	92%	82%	84%	85%	88%	79%	78%	86%
Eisenhower Health	98%	99%	99%	98%	97%	98%	98%	96%	95%	94%	94%	93%	91%	96%
Hemet Valley Hospital	42%	53%	69%	70%	64%	62%	51%	49%	47%	48%	41%	39%	40%	52%
Inland Valley Med Ctr	60%	80%	88%	85%	85%	82%	66%	52%	60%	61%	64%	63%	51%	69%
JFK Hospital	97%	99%	99%	99%	98%	97%	98%	99%	97%	98%	98%	99%	98%	98%
Kaiser Hospital Moreno Valley	78%	83%	85%	72%	72%	73%	56%	57%	66%	58%	56%	60%	57%	67%
Kaiser Hospital Riverside	69%	80%	76%	71%	74%	63%	50%	53%	61%	58%	51%	56%	51%	62%
Loma Linda Univ Med Ctr Mur	70%	76%	76%	74%	66%	69%	58%	52%	62%	62%	70%	66%	64%	66%
Menifee Med Ctr	45%	67%	80%	75%	83%	72%	59%	51%	42%	54%	51%	46%	39%	59%
Palo Verde Hospital	97%	99%	99%	100%	99%	100%	98%	99%	96%	95%	94%	97%	100%	98%
Parkview Community Hospital	61%	80%	85%	77%	86%	78%	82%	68%	67%	72%	64%	62%	53%	72%
Rancho Springs Med Ctr	64%	91%	93%	92%	94%	90%	84%	64%	69%	62%	70%	68%	51%	76%
Riverside Community Hospital	44%	66%	80%	68%	56%	58%	54%	45%	46%	45%	46%	41%	41%	53%
Riverside University Health System	82%	91%	92%	91%	89%	90%	82%	79%	80%	84%	85%	81%	76%	85%
San Geronio Mem Hospital	64%	86%	86%	87%	85%	79%	80%	60%	74%	69%	66%	67%	55%	74%
Temecula Valley Hospital	71%	87%	83%	84%	86%	86%	78%	63%	64%	76%	63%	59%	52%	73%
Riverside County Compliance	69%	81%	85%	83%	80%	79%	74%	66%	69%	70%	70%	67%	63%	74%

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
	2021												2022	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
Corona Regional Med Ctr	2:01	0:48	0:45	0:44	0:44	0:49	0:44	1:29	1:02	0:53	1:03	1:16	2:51	1:09
Desert Regional Med Ctr	0:37	0:30	0:34	0:32	0:40	0:31	0:29	0:48	0:42	0:40	0:33	0:53	1:00	0:39
Eisenhower Health	0:17	0:14	0:16	0:18	0:19	0:18	0:18	0:21	0:21	0:24	0:24	0:26	0:29	0:20
Hemet Valley Hospital	1:58	1:12	0:45	0:45	0:45	1:00	1:23	1:34	1:34	1:22	1:44	2:00	2:42	1:26
Inland Valley Med Ctr	1:17	0:43	0:33	0:35	0:37	0:43	1:04	1:31	1:21	1:20	1:11	1:12	1:41	1:03
JFK Hospital	0:19	0:16	0:18	0:16	0:17	0:18	0:17	0:17	0:17	0:18	0:16	0:16	0:16	0:17
Kaiser Hospital Moreno Valley	0:58	0:37	0:41	1:00	1:02	1:07	1:34	1:42	1:16	1:12	1:22	1:10	1:25	1:09
Kaiser Hospital Riverside	1:05	0:42	0:46	1:04	0:50	1:15	1:42	1:41	1:16	1:16	1:35	1:44	2:38	1:21
Loma Linda Univ Med Ctr Mur	1:09	0:50	0:48	0:49	0:57	0:54	1:17	2:04	1:20	1:26	0:56	0:59	1:13	1:07
Menifee Med Ctr	2:39	1:02	0:40	0:44	0:36	0:45	1:25	1:48	2:04	1:15	1:43	2:00	3:02	1:31
Palo Verde Hospital	0:20	0:14	0:11	0:14	0:13	0:14	0:14	0:14	0:15	0:23	0:21	0:17	0:15	0:15
Parkview Community Hospital	1:21	0:41	0:35	0:41	0:34	0:41	0:36	1:02	1:00	0:49	1:02	1:15	1:52	0:56
Rancho Springs Med Ctr	1:17	0:29	0:26	0:27	0:26	0:29	0:37	1:18	1:06	1:30	1:16	1:09	2:35	1:00
Riverside Comm Hospital	1:15	0:48	0:37	0:49	1:01	1:03	1:04	1:28	1:34	1:30	1:22	1:50	2:26	1:17
Riverside Univ Health System	0:35	0:29	0:29	0:29	0:31	0:30	0:35	0:39	0:38	0:34	0:35	0:38	0:42	0:34
San Geronio Mem Hospital	1:13	0:36	0:34	0:33	0:34	0:41	0:40	1:28	0:56	1:00	1:07	1:10	2:07	0:58
Temecula Valley Hospital	0:45	0:34	0:37	0:37	0:33	0:34	0:42	1:01	0:57	0:44	1:05	1:10	1:41	0:50
Riverside County Compliance	1:03	0:40	0:35	0:38	0:41	0:44	0:50	1:11	1:03	1:01	1:03	1:11	1:37	0:56

AMBULANCE DIVERSIONS

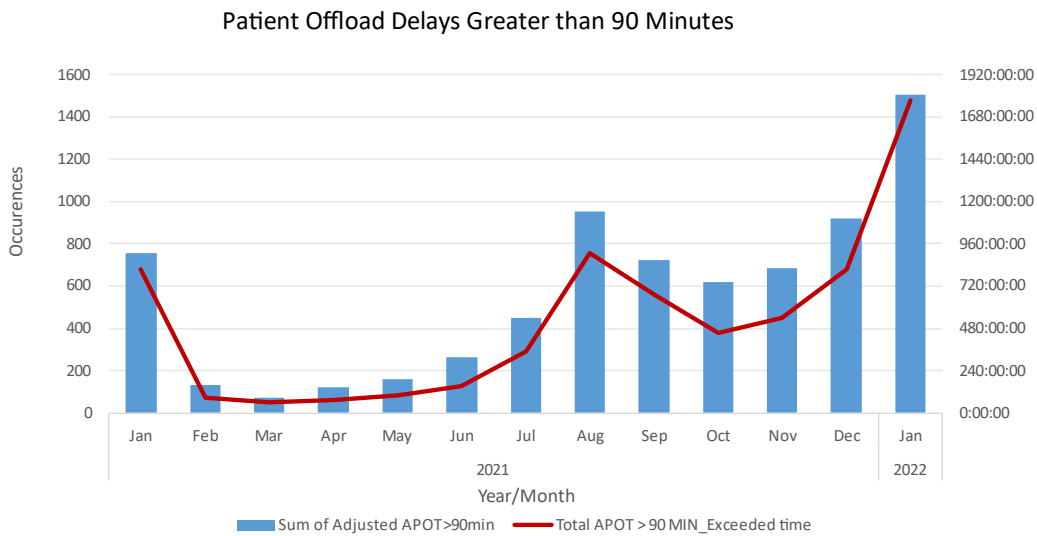
REMSA Policy 6103 (<https://www.remsa.us/policy/6103.pdf>) describes ground and air ambulance diversions to facilitate safe transport of patients to the closest alternate facility. Ambulance Diversions described here are those activated as a result of unusual circumstances at a facility limiting access 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	2021												2022	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
INT	2		1	1	1	2		1	1	2	2		1	14
Corona Regional Medical Center										2				2
Desert Regional Medical Center									1		1			2
Menifee Valley Medical Center								1					1	2
Riverside Community Hospital					1									1
Inland Valley Medical Center	1		1									1		3
Loma Linda University Medical Center--Murrieta	1													1
Eisenhower Health				1										1
Palo Verde Hospital						2								2
STEMI	1						1		2		1		1	6
Desert Regional Medical Center									2		1			3
Riverside Community Hospital	1													1
Loma Linda University Medical Center--Murrieta							1						1	2
Stroke	1						1	1						3
Riverside Community Hospital	1													1
Rancho Springs Medical Center							1							1
Riverside University Health System								1						1
Trauma	1	5	2	1	2	5	3	1	1	4	3	1	3	32
Riverside Community Hospital					1	1	1			2				5
Inland Valley Medical Center	1		1			2	1		1			1	2	9
Riverside University Health System		5	1	1	1	2	1	1		2	3		1	18
Total	5	5	3	2	3	7	5	3	4	6	6	1	5	55

Diversions by HH:MM	2021												2022
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
INT	1:53		0:09	0:14	3:32	18:05		1:56	3:16	20:19	1:03		0:41
Corona Regional Medical Center										20:19			
Desert Regional Medical Center									3:16		0:27		
Menifee Valley Medical Center								1:56					0:41
Riverside Community Hospital					3:32								
Inland Valley Medical Center	1:26		0:09									0:36	
Loma Linda University Medical Center--Murrieta	0:27												
Eisenhower Health				0:14									
Palo Verde Hospital						18:05							
STEMI	2:01						4:11		13:42		0:19		2:21
Desert Regional Medical Center									13:42		0:19		
Riverside Community Hospital	2:01												
Loma Linda University Medical Center--Murrieta							4:11						2:21
Stroke	2:02						0:17	0:01					
Riverside Community Hospital	2:02												
Rancho Springs Medical Center							0:17						
Riverside University Health System								0:01					
Trauma	2:03	8:15	2:42	0:51	1:48	7:58	9:52	0:11	0:53	2:23	4:36	0:19	4:15
Riverside Community Hospital					0:51	3:42	5:01			1:03			
Inland Valley Medical Center	2:03		0:13			1:51	0:50		0:53			0:19	3:01
Riverside University Health System		8:15	2:29	0:51	0:57	2:25	4:01	0:11		1:20	4:36		1:14
Total	7:59	8:15	2:51	1:05	5:20	26:03	14:20	2:08	17:51	22:42	5:58	0:19	7:17

AMBULANCE REDIRECTION

REMSA [Policy 6104](#) allows redirection of ambulances away from hospitals experiencing significant Ambulance Patient Offload Delays (APOD) to the next most appropriate facility. *Significant* APOD is defined as a patient remaining on an ambulance gurney for **90 minutes or greater after arrival at the hospital** (APOT < 90 min). Standard transfer of care is 30 minutes or less (APOT<30 min). Until the transfer of care is complete (patient is removed from the gurney and hospital staff assume care of the patient), ambulance crews must remain at the hospital and continue care. While patients held on excessive APODs are generally those classified as lower acuity, approximately one-third of the County’s ~600 daily 9-1-1 medical responses are determined by dispatch as critical, requiring immediate medical attention (e.g. cardiac arrest, stroke, traumatic injury). As a result, excessive, or multiple APODs within the same service area impact ambulance timeliness and availability in the field posing direct risk to 9-1-1 patient safety. Ambulance redirection is one strategy to reduce the consequential backlog of EMS services which occurs when there are excessive ambulance delays at hospital emergency departments. Below is the countywide breakdown of APOD occurrences where ambulances were documented as held for greater than 90 minutes before transfer of care for the last 12 months compared to the current month.



The table below shows the count of ambulances that held for greater than 90 minutes and total hours accumulated after 90 minute threshold by facility for the reporting month.

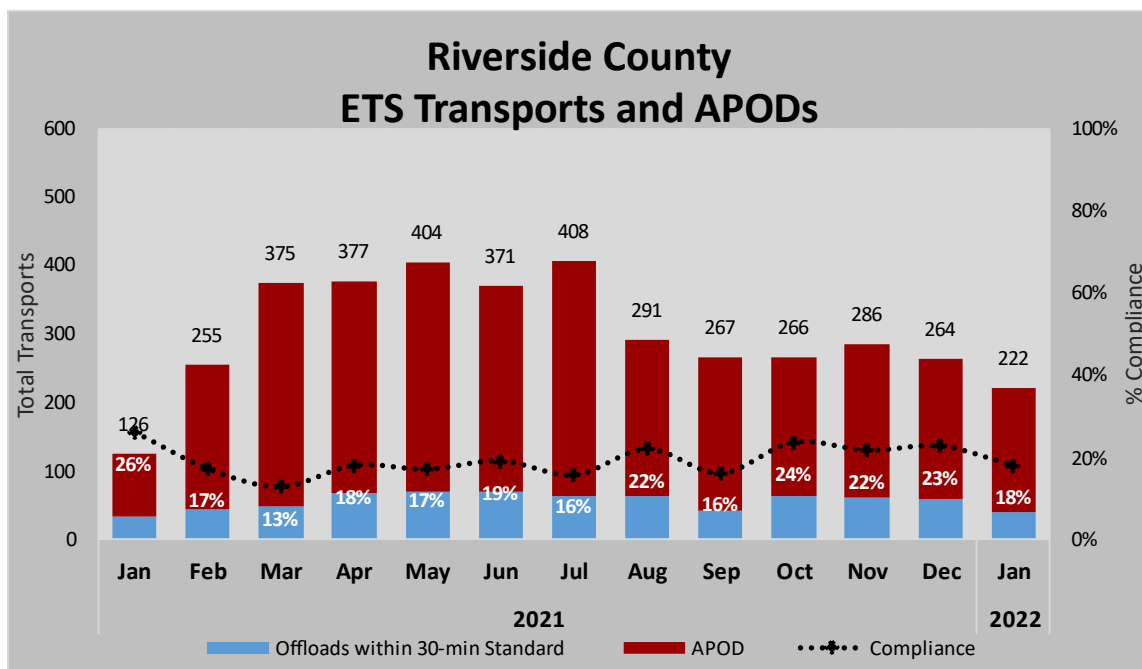
Facility	Total Time	
	APOT>90 min (HR:MM:SS)	Total Incidents APOT>90 min
Corona Regional Med Ctr	220:18:04	166
Desert Regional Med Ctr	78:19:55	75
Eisenhower Health	9:29:42	17
Hemet Valley Hospital	249:10:38	157
Inland Valley Med Ctr	84:49:58	99
JFK Hospital	0:00:00	0
Kaiser Hospital Moreno Valley	39:28:29	36
Kaiser Hospital Riverside	162:04:17	134
Loma Linda Univ Med Ctr Mur	46:23:14	60
Menifee Med Ctr	130:47:23	90
Palo Verde Hospital	0:00:00	0
Parkview Community Hospital	138:26:20	122
Rancho Springs Med Ctr	145:30:27	115
Riverside Community Hospital	285:26:06	248
Riverside University Health System	1:02:17	6
San Geronio Mem Hospital	106:55:42	106
Temecula Valley Hospital	71:50:41	76
Grand Total	1770:03:13	1507

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.

January 2022 - Emergency Treatment Services					
	Transports to ETS	Total Offload		APODs	APOD Compliance
		Time	APOD Hours		
Emergency Treatment Services	222	215:22:58	114:27:36	182	18.0%

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

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. To avoid duplicate response counts, this excludes all records from First Responder Fire agencies also arriving on scene as part of Riverside County's dual 9-1-1 medical response system. It also excludes interfacility transports and other call types such as air ambulances.

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."¹

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 Time (APOT)

The Time interval between the arrival of an 9-1-1 patient at an Emergency Department (ED) and the time that patient is transferred from the ambulance gurney to a bed, chair, or other acceptable location, and the ED assumes responsibility of care.² The Clock Start (eTimes.11) is the time of patient arrival at the destination (hospital), and the Clock Stop (eTimes.12) is the time patient care is transferred.³ REMSA obtains both times from the ePCR.

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 offload from the ambulance gurney exceeds the 30-minute standard, it will be documented and tracked as APOD.⁵ *The Riverside County ePCR system requires medics to enter an "APOD Reason" when APOT exceeds the 30-minute standard. While the number of APODs documented as non-ED-related is nominal, beginning in Week-1 of 2022, only delays identified as having an ED origin are counted against APOD compliance for a more precise metric.*

APOD Compliance

Frequency comparison between the total number of transports and those resulting in APODs with an ED-related origin.

¹ Ibid., APOT-1 Specifications.

² Health and Safety Code Division 2.5, Chapter 3, Article 1, Section 1797.120(b)

³ Ambulance Patient Offload Time (APOT) Standardized Methods for Data Collection and Reporting, approved by EMS Commission 12/14/2016. https://emsa.ca.gov/wp-content/uploads/sites/71/2017/09/APOT-Methodology_Guidance-2016.pdf

³ Ibid., APOT-1 Specifications

⁵ REMSA Policy 4109, Transfer of Patient Care. <https://www.remsa.us/policy/4109.pdf>

⁷ Calkins MM, Isaksen TB, Stubbs BA, Yost MG, Fenske RA (2016). Impacts of extreme heat on emergency medical service calls in King County, Washington, 2007-2012: relative risk and time series analyses of basic and advanced life support. *Environ Health*. doi: 10.1186/s12940-016-0109-0

⁸ Sheridan SC, Kalkstein AM, Kalkstein LS (2009). Trends in heat-related mortality in the United States, 1975–2004. *Natural Hazards* 50:1, 145-160

⁹ Guo Y, Gasparrini A, Armstrong BG (2017). Heat Wave and Mortality: A Multicountry, Multicommunity Study. *Environ Health Perspect*. 2017;125(8):087006. doi:10.1289/EHP1026