Special Seasonal Report

Ambulance Patient Offload Time

Week 42 (10/13/19 – 10/19/19)

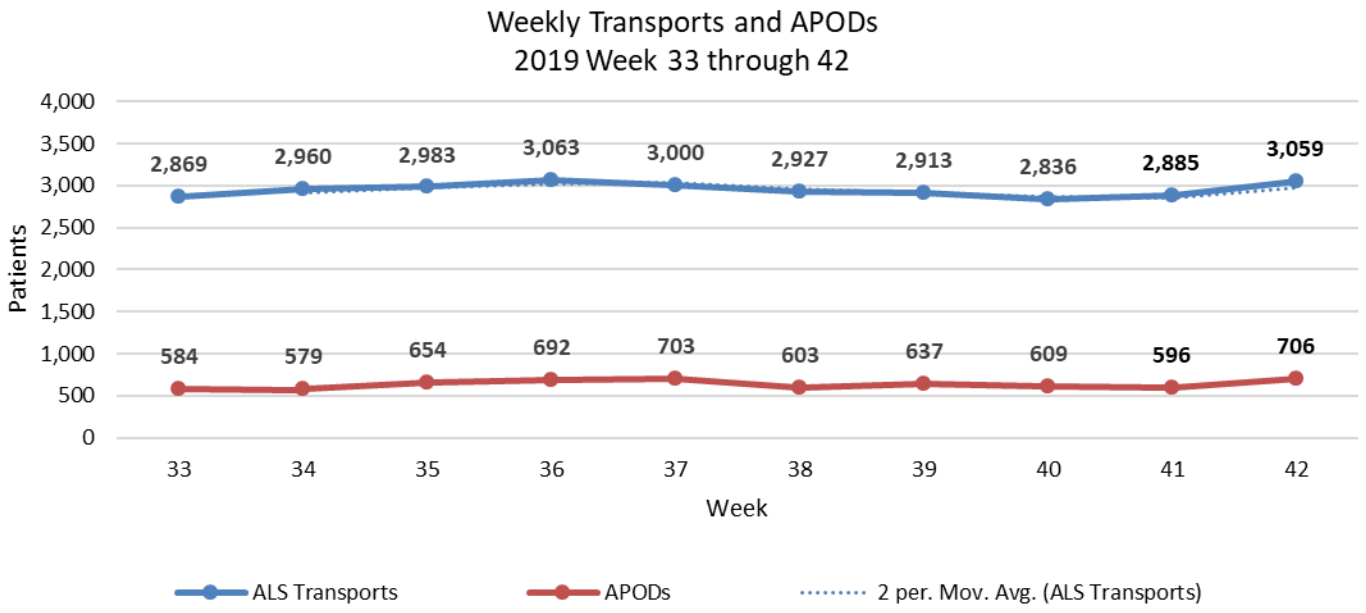
2019-20 Seasonal Report

This report and all current and recent APOT reports can be found online at:
http://www.rivcoems.org/Documents/Reports-Current

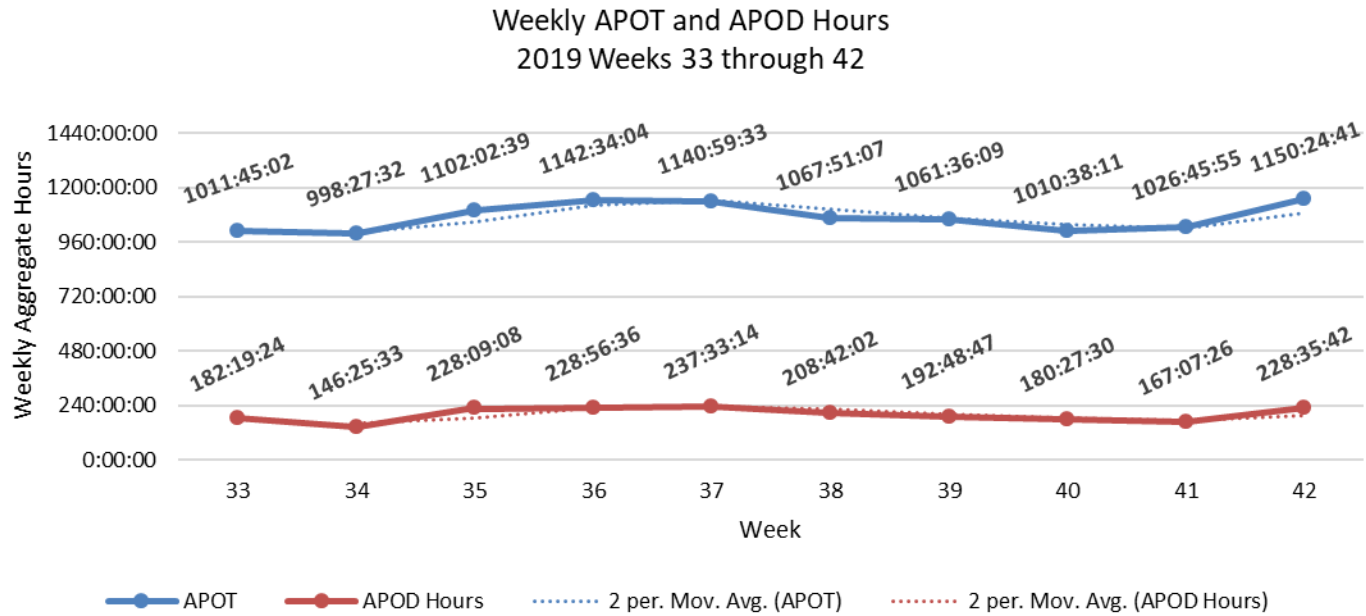
Prepared by Sudha Mahesh, Riverside County EMS Agency – October 22, 2019

SPECIAL SEASONAL REPORT

In an effort to monitor seasonal surge in Ambulance Patient Offload Time (APOT) during the 2019-20 Influenza season, Riverside County EMS Agency is publishing weekly reports. The following charts represent weekly aggregate APOT/APOD data for the past 10 weeks, updated weekly.



- During 2019 Week 42, there was a total of **3059 transports in Riverside County**— a **6.0%** INCREASE from the previous week's 2885 transports.
- The number of **APODs in Week 42 was 706,** which is **18.5%** ABOVE the previous week's total of 596 APODs.

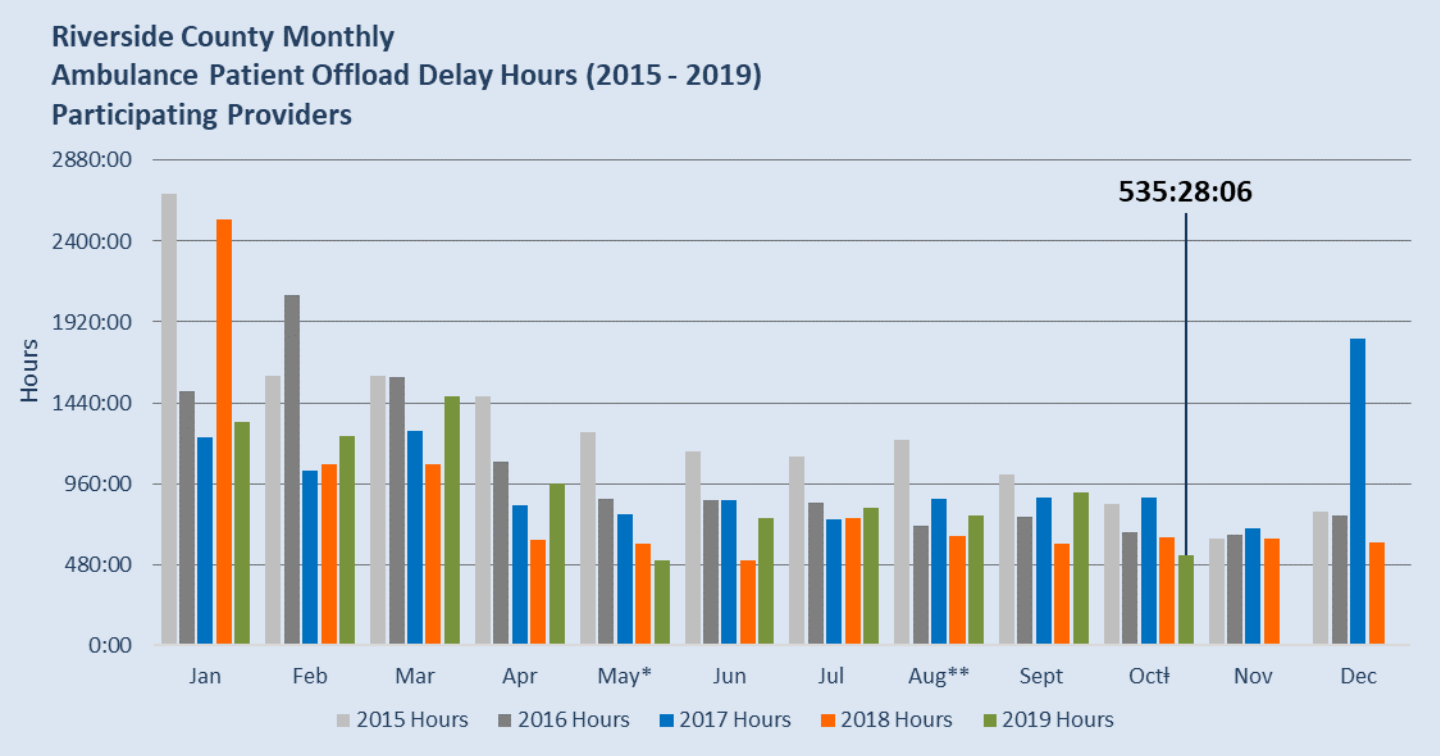


- During 2019 Week 42, **APOT county-wide totaled 1150.4 hours** —**12.0 %** ABOVE the previous week's total of 1026.8 hours.
- County-wide **APOD hours for Week 42 totaled 228.6 hours**, a **36.8%** INCREASE from the previous week's total of 167.1 hours.

RIVERSIDE COUNTY AMBULANCE PATIENT OFFLOAD TIME

The data provided illustrates total ambulance patient offload delay time (hh:mm:ss) by month for 2015 through the current Week 42 from hospitals within Riverside County. To qualify for this chart, the duration of offload delay must be greater than 30 minutes, and only the time period after the first 30 minutes is summed.

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 report). This represents a different methodology in offload time measurement. Prior to January 2017, offload times were calculated using CAD times, beginning with the time that dispatch placed the ambulance on bed delay status until the time the ambulance left the hospital. This chart represents the difference in the old vs. current by displaying the former time measurement/methodology in grayscale.



**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.*
‡October 2019 is a partial month

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 ambulance diversions that occurred during Week 42.

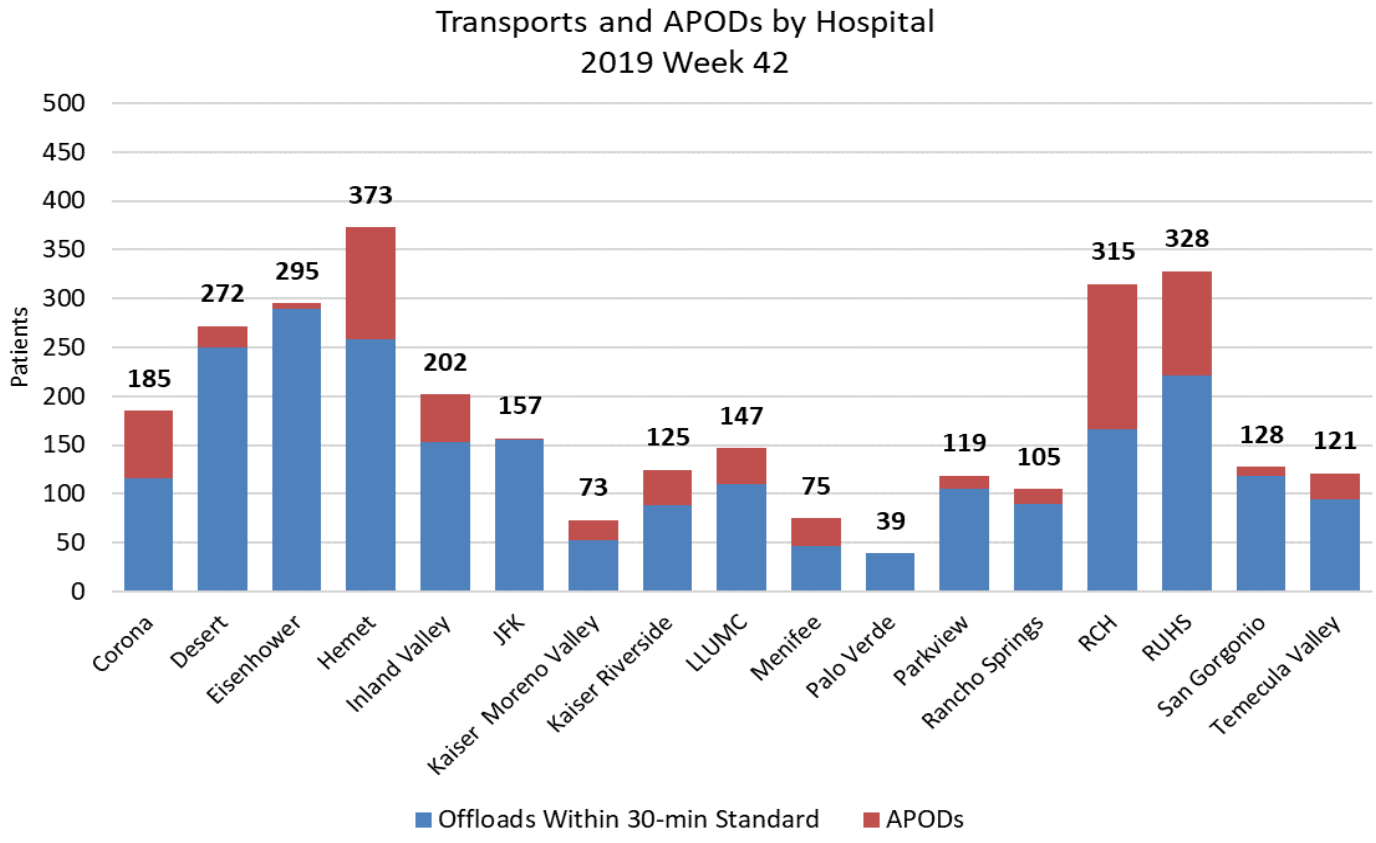
	Occurrences of APOD Redirection
Corona Regional Medical Center	1
Hemet Valley Medical Center	1
Inland Valley Medical Center	1
Kaiser Permanente Moreno Valley Medical Center	1
Riverside University Health System	5
Grand Total	**9**

AMBULANCE PATIENT OFFLOAD TIME BY HOSPITAL

For 2019 Week 42

Key: **High** **Low/Best**

	APOT Snapshot				
	ALS Transports	APOT	APOD Hours	APODs	APOD Compliance
Corona Regional Med Ctr	185	94:33:37	29:36:36	69	62.7%
Desert Regional Med Ctr	272	69:15:55	5:39:32	22	91.9%
Eisenhower Health	295	49:35:23	0:50:36	6	98.0%
Hemet Valley Hospital	**373**	162:13:06	27:36:08	115	69.2%
Inland Valley Med Ctr	202	85:07:22	18:57:48	49	75.7%
JFK Hospital	157	22:11:05	0:05:00	1	99.4%
Kaiser Hospital Moreno Valley	73	32:53:38	9:01:07	20	72.6%
Kaiser Hospital Riverside	125	51:49:40	12:26:08	37	70.4%
Loma Linda Univ Med Ctr Mur	147	59:12:55	8:09:07	37	74.8%
Menifee Med Ctr	75	39:08:21	13:46:00	28	62.7%
Palo Verde Hospital	**39**	**3:16:31**	**0:00:00**	**0**	**100.0%**
Parkview Community Hospital	119	33:38:04	2:29:58	14	88.2%
Rancho Springs Med Ctr	105	33:29:25	3:21:23	15	85.7%
Riverside Community Hospital	315	**175:59:19**	**50:50:19**	**149**	**52.7%**
Riverside University Health System	328	152:20:59	36:06:21	107	67.4%
San Gorgonio Mem Hospital	128	36:52:05	1:07:24	10	92.2%
Temecula Valley Hospital	121	48:47:16	8:32:15	27	77.7%
Totals	**3,059**	**1150:24:41**	**228:35:42**	**706**	**76.9%**

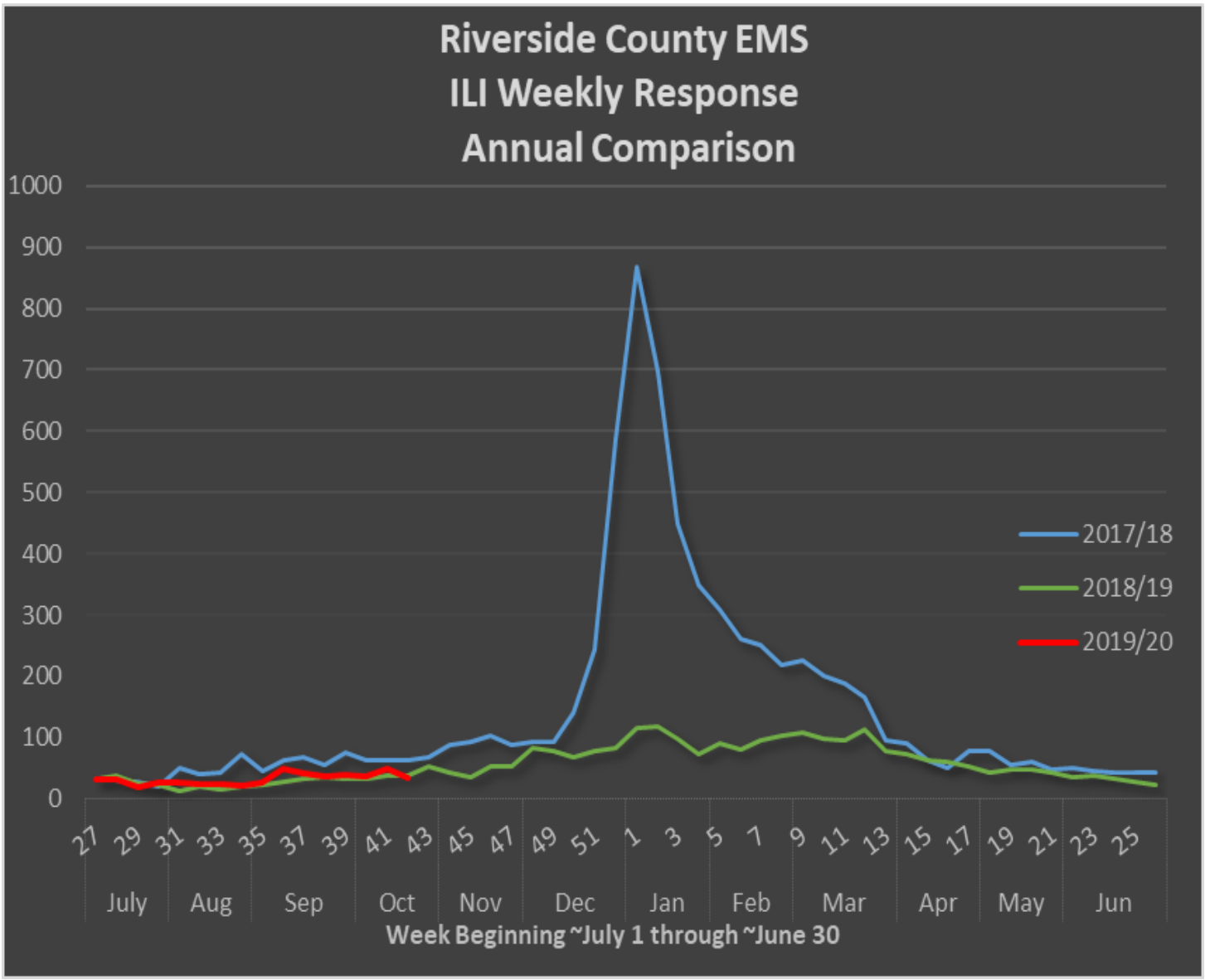


ILI - INFLUENZA-LIKE ILLNESS RESPONSE

The purpose of the REMSA ILI (Influenza-like Illness) trigger and report is to improve tracking of influenza-related activity and facilitate EMS preparedness in the event of a significant influenza surge event, similar or greater than that observed during the 2017-18 flu season.

The ILI trigger evaluates electronic patient report (ePCR) data using the following methodology:

1. Filters primary or secondary impression of code J11 (Influenza due to unidentified influenza virus)
   OR
2. A primary / secondary impression code J80, J98.09 (Acute respiratory distress syndrome, Respiratory disorder unspecified) with a match in the narrative for ILI, influenza like illness, Flu, Flu-, Flu\., or influenza
   OR
3. Any incident with a match in the narrative for ILI, influenza like illness, Flu, Flu-, Flu\., or influenza.

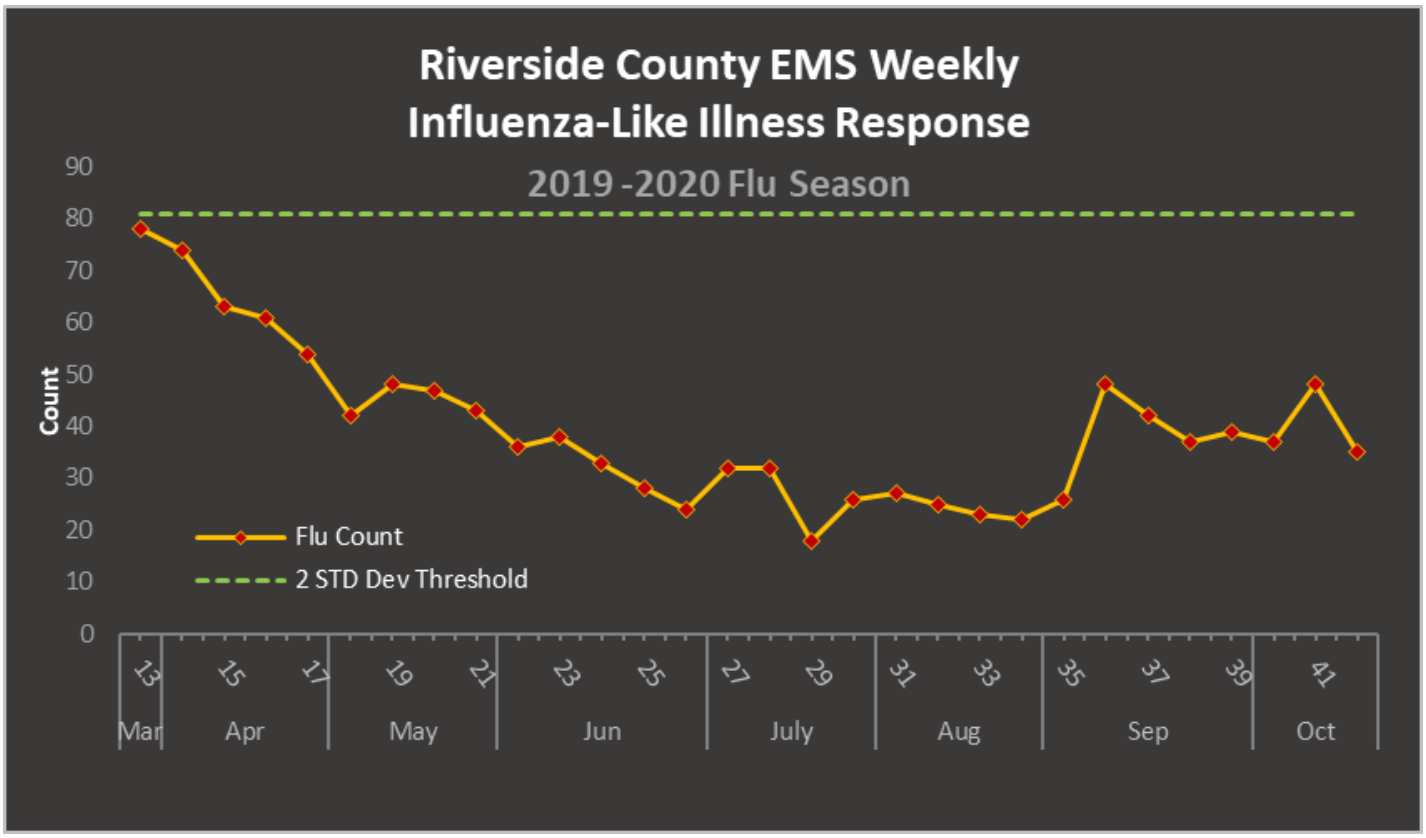


Week 41 (~October 1st) is defined by the Center for Disease Control (CDC) as the expected start of increasing influenza activity, or “flu season”. Riverside County EMS Agency monitors influenza-like illness (ILI) year-round for better detection of seasonal or abnormal surges which can impact EMS utilization.

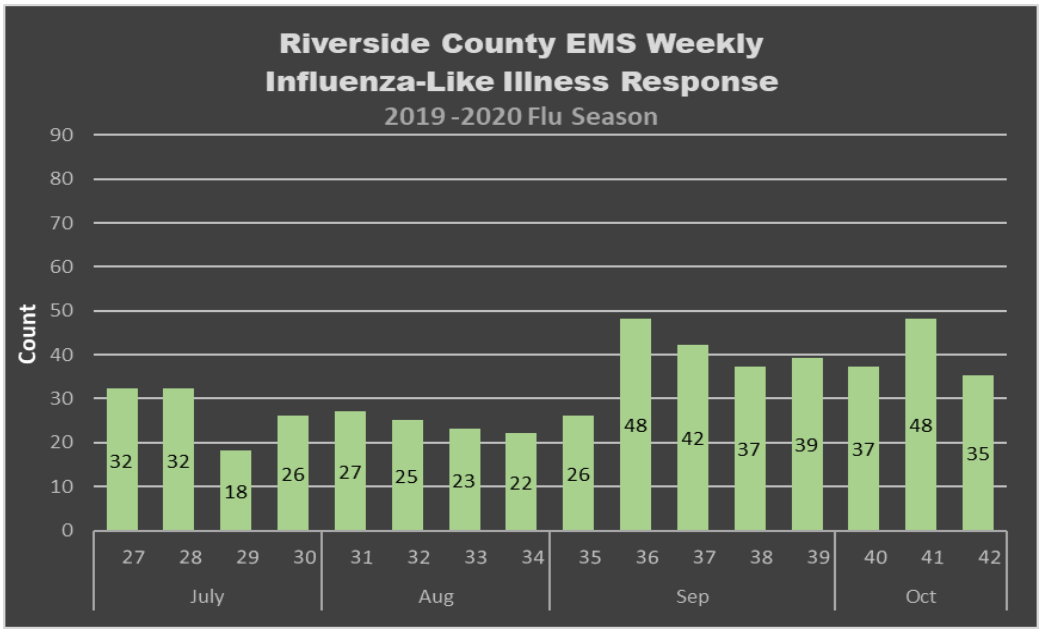
ILI - INFLUENZA-LIKE ILLNESS RESPONSE *(CONT.)*

EMS ILI response two standard deviations above the calculated baseline average during non-peak flu seasons is considered a surge in flu activity. Surges are identified as color levels adapted from the *CDPH Standards and Guidelines for Healthcare Surge During Emergencies*:

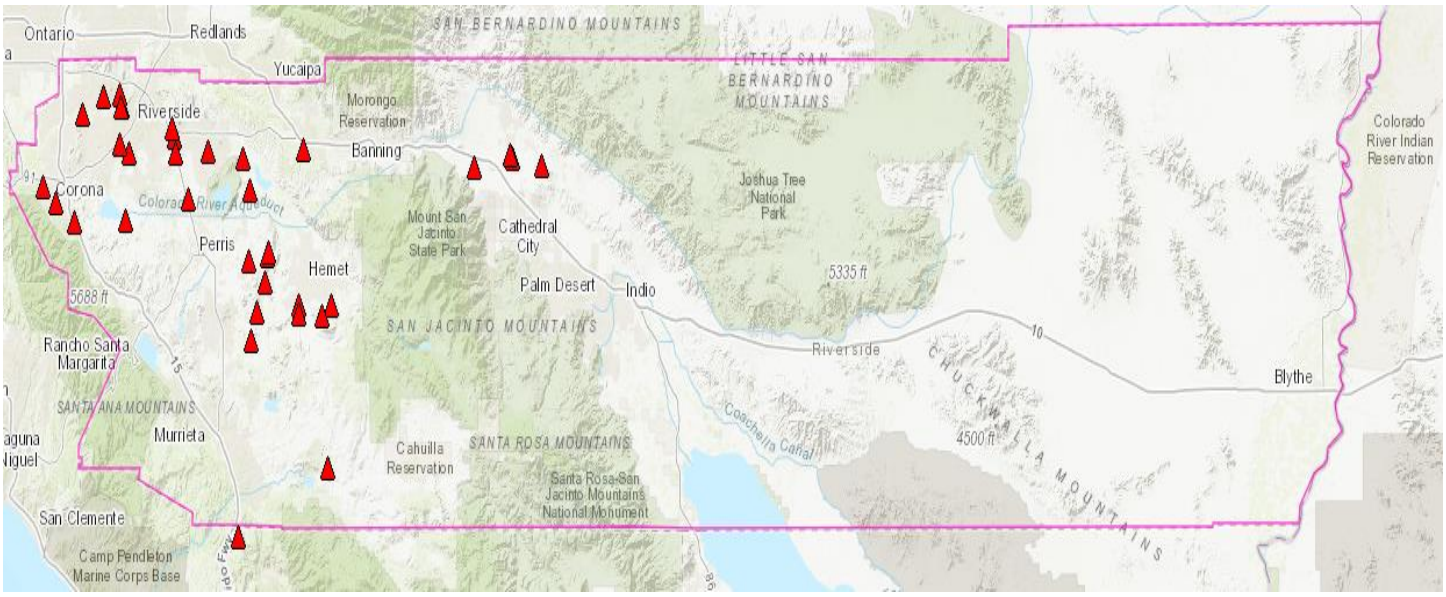
https://www.cdph.ca.gov/Programs/EPO/CDPH%20Document%20Library/FinalEOM712011.pdf



In Week 42, EMS ILI response was 16.7% LOWER than the baseline average of non-peak flu season activity levels (weeks 13-38) and was 27.1% LOWER than the previous week.



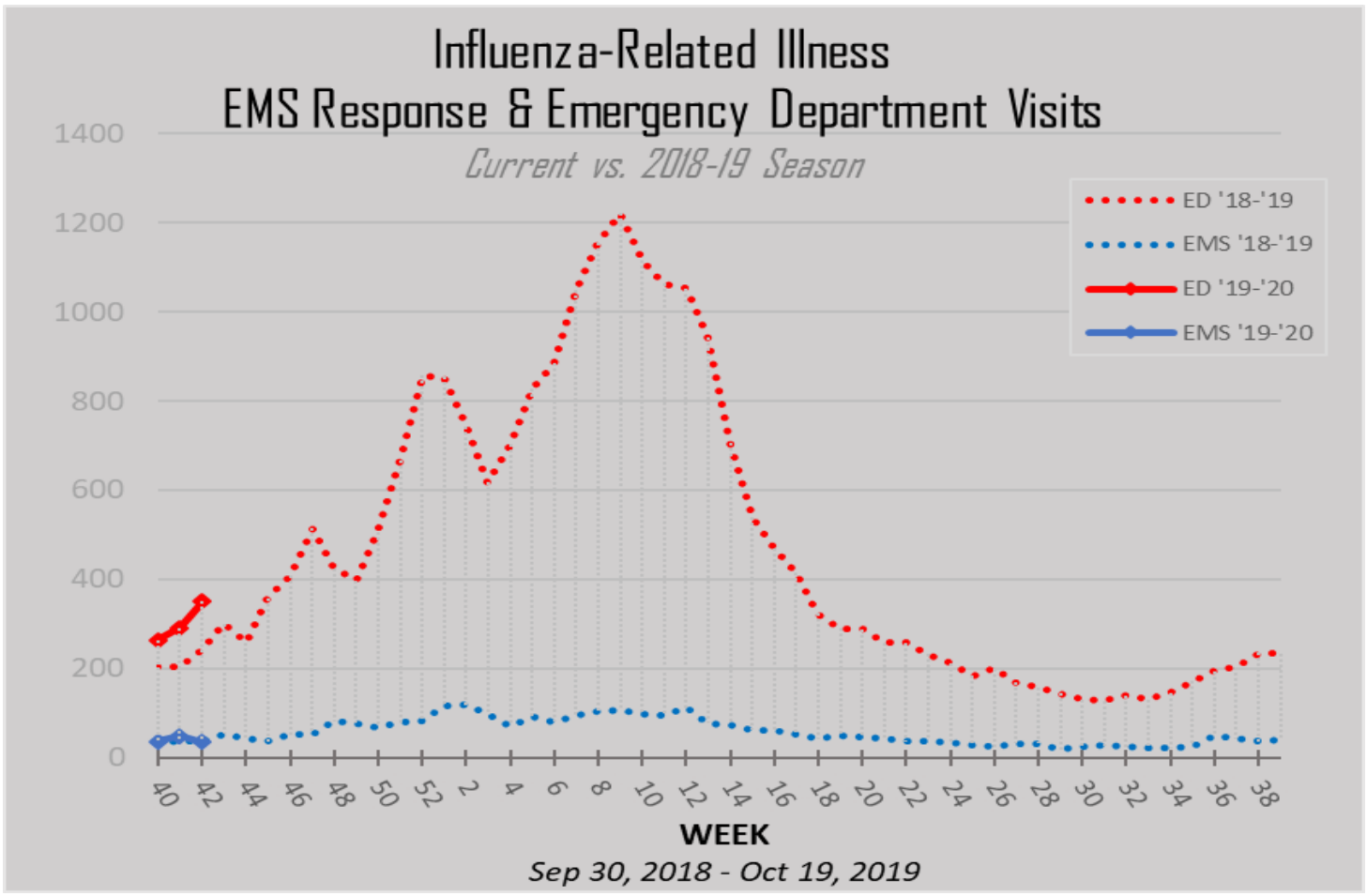
PUBLIC HEALTH AND MEDICAL SYSTEM STATUS	
Green	The Public Health and Medical System is in usual day-to-day status. Situation resolved; no assistance is required.
Yellow	The Public Health and Medical System is managing the incident using local resources or existing agreements. No assistance is required.
Orange	The Public Health and Medical System requires assistance from within the local jurisdiction/Operational Area.
Red	The Public Health and Medical System requires assistance from outside the local jurisdiction/Operational Area.
Black	The Public Health and Medical System requires significant assistance from outside the local jurisdiction/Operational Area.
Grey	Unknown.



ILI-related EMS response in Riverside County, ePCR distribution map: Week 42 – Oct 13, 2019 through Oct 19, 2019

RIVERSIDE COUNTY PUBLIC HEALTH ILI DATA

Riverside County Public Health Department - DOPH - provides Emergency Department (ED) ILI activity data from 14 of 17 participating hospitals throughout the county. The graph below provides a comparison between EMS and ED related ILI activity for the current year compared to the previous year.



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).

APOD Compliance
Frequency comparison between the total number of transports and those resulting in APOD.

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]

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.

Data for this report has been collected from ePCRs (electronic patient care reports) from 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.

EMS Data compiled by Sudha Mahesh and Catherine Farrokhi, Riverside County EMS Agency.
ED Data compiled by Rick Lopez, Riverside County Department of Public Health.

[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