



# California EMS System Core Quality Measures Report Calendar Year 2023 NEMSIS V3.4 and V3.5

Emergency Medical Services Authority  
California Health and Human Services Agency

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## ACKNOWLEDGEMENTS

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## BACKGROUND

Data and quality improvement (QI) leaders from local EMS agencies (LEMSAs), EMS providers, hospitals, and the California Emergency Medical Services Authority (EMSA) joined together to develop the California Emergency Medical Services (EMS) System Core Quality Measures Project to conduct statewide evaluation of EMS performance. Each year, a workgroup consisting of EMSA and LEMSA stakeholders updates the measures according to data system changes and operational considerations. The project's measures focus on evidence-based processes and treatments for a condition or illness. The measures are intended to help EMS systems improve the quality of patient care by focusing measurement specifications on key processes and results of care. The *California EMS Systems Core Quality Measures Instruction Manual (EMSA #SYS 100-11)* defines essential data elements and provides instructions for reporting each performance measure. Please refer to the manual for additional information and detailed instructions on core quality measure reporting. The manual is accessible via the California Emergency Medical Services Authority website at <https://emsa.ca.gov/ems-core-quality-measures-project/>.

The EMS system quality improvement regulations (CCR, Title 22, Division 9, Chapter 12) define the reporting requirements for LEMSAs, EMS providers, and base hospitals in their role as part of the EMS system. These requirements include, but are not limited to, the implementation of an EMS quality improvement program and the use of defined indicators to assess the local EMS system, as outlined in EMSA #SYS 100-11.

For the 2023 calendar year, EMSA requested that each LEMSA use the National Emergency Medical Services Information System (NEMSIS) Version 3.4 and Version 3.5 data standards to report data for six core quality measures. The six measures are:

- TRA-2: Transport of Trauma Patients to a Trauma Center
- HYP-1: Treatment Administered for Hypoglycemia
- STR-1: Prehospital Screening for Suspected Stroke Patients
- PED-3: Respiratory Assessment for Pediatric Patients
- RST-4: 911 Requests for Services That Included a Lights and/or Sirens Response
- RST-5: 911 Requests for Services That Included a Lights and/or Sirens Transport

## METHODOLOGY

For the 2023 calendar year, EMSA requested that all LEMSAs use the specifications in the [California EMS Systems Core Quality Measures Instruction Manual \(EMSA #SYS 100-11\)](#) and the [California EMS Core Quality Measures Instruction Manual – NEMSIS 3.5 Update for 2023 Data](#) when executing their data reports and to refrain from using any custom elements or fields specific to their local jurisdiction or EMS providers. Universal fidelity to the consensus specifications is key to meaningfully comparing the reported results throughout California. Each measure specification contains essential data elements required for calculation. The six measures included in the 2023 measure data set contain a numerator and denominator to calculate percentage scores. Some measures also include exclusion criteria in the numerator and/or denominator. The numerator is the subpopulation and defines the processes or outcomes expected for all patients/encounters as defined in the denominator. The denominator, or initial population, are the patients/encounters being evaluated for performance. Exclusions are used to specify patients/encounters that should be removed from the numerator and/or denominator before determining if the criteria are met.

The specifications were drafted by a workgroup consisting of EMSA and LEMSA representatives. Each of the six measures were discussed at length and supporting evidence from research, specification, and testing were gathered and evaluated. LEMSA questions and comments regarding the specifications are an essential part of core quality measure improvement and incorporated into the revision process. The specifications were updated in November 2023 and published in the most current version of the Core Quality Measures Instruction Manual (EMSA #SYS 100-11).

The LEMSAs execute their core quality measure reports from their local database and submit aggregate results to EMSA on an annual basis. Since each of the 34 LEMSAs maintains their own EMS database and each is dependent on EMS provider agencies to submit data, there is variability in their capability to report core quality measures and some intrinsic variation in the results exists. Utilization of the California Emergency Medical Services Information System (CEMSIS) will enhance core quality measure reporting. Participation in CEMSIS by all LEMSAs is required, consistent with HSC 1797.102.

## LIMITATIONS AND CHALLENGES

Quality measure analysis, integrity, and reliability depend on the development of compatible data systems and standardized data collection regimes at various levels of the EMS system. Commonly understood data measures are essential to quality improvement efforts and to data driven medical decision making. The demonstrated commitment of all of California's EMS decision makers to meaningful quality measures promises to provide our State's citizens with the reliable medical quality improvement that they have come to expect from mature healthcare sectors. Ongoing efforts to improve the quality and validity between CEMIS and LEMSA data will increase the reliability and usability of the measure results. Limitations and challenges to reporting the measures are enumerated below.

### Participation in Core Quality Measures Reporting

All 34 LEMSAs in California were contacted to provide core quality measure information to EMSA by a set date. For the 2023 reporting year, 30 of the 34 LEMSAs (representing approximately 87% of the state population<sup>1</sup>) provided a formal response to EMSA's request for CQMs by the submission deadline. Two LEMSAs submitted their data after the deadline and their data is not reflected in this report. Two LEMSAs did not provide a response to the request. Of the 34 LEMSAs, 30 reported data for at least one measure. Of the participating LEMSAs, 33% (10 of 30) reported CQMs for both NEMIS V3.4 and NEMIS V3.5 while 40% (12 of 30) of participating LEMSAs only reported CQMs for NEMIS V3.4 and 27% (8 of 30) of participating LEMSAs only reported CQMs for NEMIS V3.5.

### Partial System Representation

Only a portion of the actual EMS business conducted in California is represented in this report; the values reported by the LEMSAs do not represent 100% of the providers in the State. Some LEMSAs reported that not all providers in their region were represented in their reporting for various reasons, or the providers were not utilizing the proper data elements and codes specified in the 2023 Core Quality Measures Instruction Manual (EMSA #SYS 100-11). LEMSAs also reported that the transition from NEMIS V3.4 to NEMIS V3.5 varied between providers and their reporting periods of their submissions vary.

<sup>1</sup>Population data obtained from the California Census 2020 (<https://census.ca.gov/reports/>)

## TABLES AND CHARTS GENERATED FROM CORE QUALITY MEASURES REPORTS

### **LEMSAs Reporting Data for Core Quality Measures 2009-2023**

The table on page 11 shows which LEMSAs submitted data for years 2009-2023. For 2023, 30 LEMSAs reported information for at least one measure. If a LEMSA submitted a value for any of the measures found in the [California EMS Systems Core Quality Measures Instruction Manual \(EMSA #SYS 100-11\)](#), the cell associated with that data year is populated with a check mark "✓" and shaded light blue. For LEMSAs that did not submit any core quality measure data to EMSA, the cell for that corresponding year appears blank.

### **LEMSA Participation in the 2023 Core Quality Measures Report**

The map of California on page 12 shows which LEMSAs (single county and multi-county EMS agencies) submitted data for 2023. These regions are shaded light yellow. LEMSA participation in the California Core Quality Measures Report remained the same from the 2022 to 2023 reporting calendar year.

### **2023 Core Quality Measures Aggregate Results for California**

The aggregate results include the total number of LEMSAs that reported a value for each measure (response count), the percentage of LEMSAs that reported a value for each measure (response rate), the aggregate numerator total (subpopulation) of all responses, the aggregate denominator total (population) of all responses, and the mean (average) and median reported value for each measure. The results table is located on page 14 for NEMSIS V3.4 and on page 34 for NEMSIS V3.5.

### **2023 Core Quality Measures Results: Charts and Tables**

This report includes charts and tables for the six core quality measures. Each measure includes a column chart with reported values, mean, and median values for all submissions. Additionally, there are two tables provided for each measure. The first table includes reported values for the measure, and the second table includes the LEMSA response count, response rate, numerator, denominator, and the mean and median values for all submissions. The charts and tables are populated directly from the values provided by the LEMSAs. A brief summarization of the measure results and feedback from LEMSAs is provided, as well as a link to the corresponding measure specifications for reference. The charts and tables are located on pages 15-33 for NEMSIS V3.4 and on pages 35-52 for NEMSIS V3.5.

### **Comparison of Core Quality Measures Results**

The column chart on page 53 displays the average core quality measure results as reported by LEMSAs over the past five calendar years (2019-2023).



**Appendix: Responses from LEMSAs for the 2023 Core Quality Measures Report**

The appendix contains tables (pages 54-91) with the data and information provided by each LEMSA for this report.

# LEMSAs REPORTING DATA FOR CORE QUALITY MEASURES 2009-2023

Local EMS Agency	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Alameda County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Central California EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Coastal Valleys EMS				✓	✓	✓	✓	✓	✓				✓		✓*
Contra Costa County EMS		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
El Dorado County EMS				✓	✓	✓					✓		✓	✓	✓
Imperial County EMS													✓	✓	✓
Inland Counties EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kern County EMS		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		
Los Angeles County EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Marin County EMS		✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓
Merced County EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Monterey County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mountain Counties EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Napa County EMS					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
North Coast EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Northern California EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Orange County EMS					✓	✓	✓	✓	✓		✓			✓	✓
Riverside County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sacramento County EMS		✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓
San Benito County EMS					✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
San Diego County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*
San Francisco EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
San Joaquin County EMS				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
San Luis Obispo County EMS		✓	✓		✓	✓	✓	✓	✓				✓	✓	✓
San Mateo County EMS		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Santa Barbara County EMS	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓
Santa Clara County EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Santa Cruz County EMS	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sierra-Sacramento Valley EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Solano County EMS				✓	✓	✓					✓		✓		✓
Stanislaus County EMS														✓	✓
Tuolumne County EMS		✓	✓	✓	✓	✓	✓		✓			✓	✓	✓	✓
Ventura County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Yolo County EMS					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>TOTAL PARTICIPANTS:</b>	<b>10</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>32</b>	<b>32</b>	<b>29</b>	<b>28</b>	<b>30</b>	<b>20</b>	<b>26</b>	<b>25</b>	<b>32</b>	<b>30</b>	<b>32</b>

\*Coastal Valleys and San Diego County submitted data after the submission deadline, so while they receive submission credit, their data is not included in the annual report for reporting year 2023.

# LEMSA PARTICIPATION IN THE 2023 CORE QUALITY MEASURES REPORT

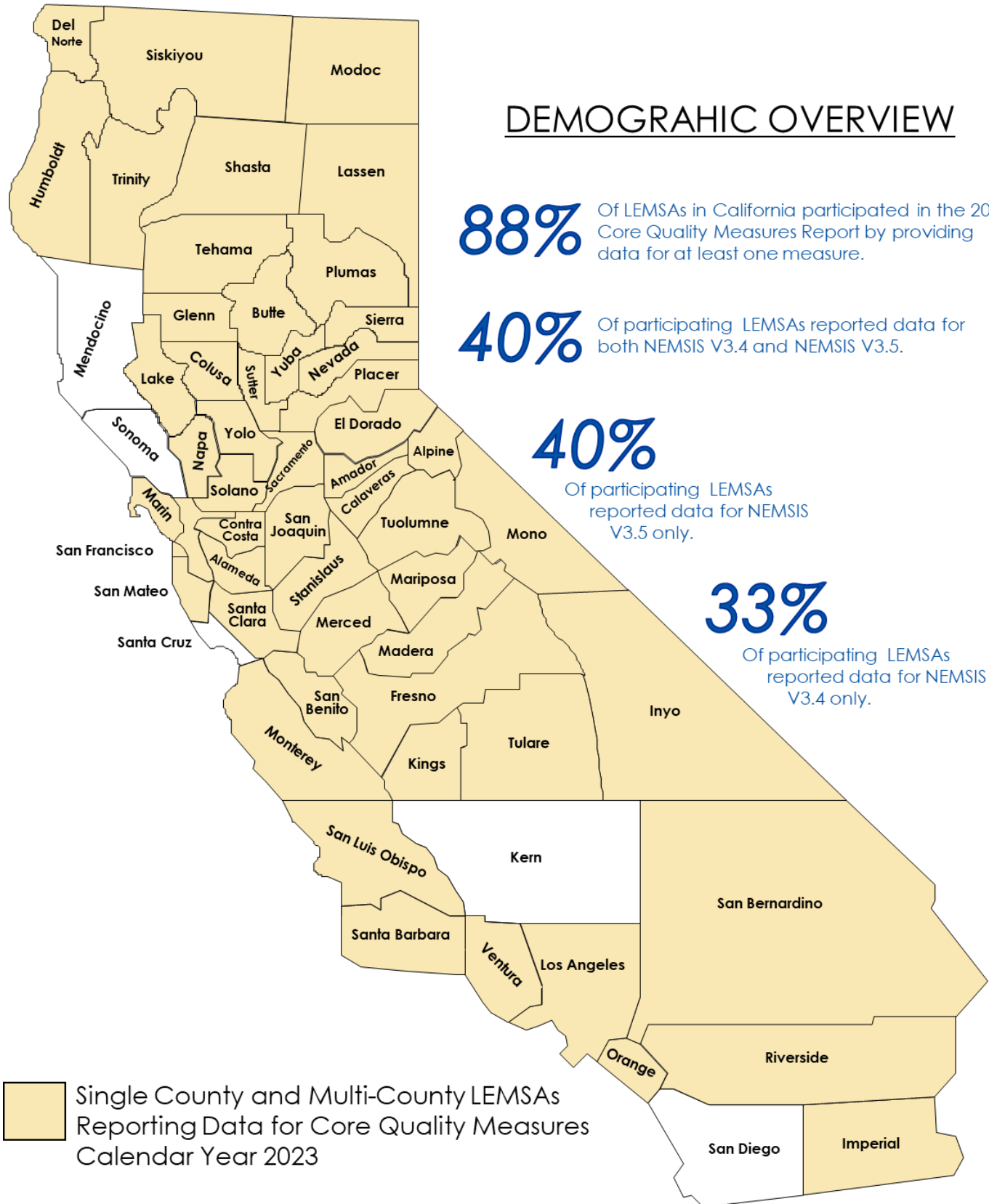
## DEMOGRAPHIC OVERVIEW

**88%** Of LEMSAs in California participated in the 2023 Core Quality Measures Report by providing data for at least one measure.

**40%** Of participating LEMSAs reported data for both NEMSIS V3.4 and NEMSIS V3.5.

**40%** Of participating LEMSAs reported data for NEMSIS V3.5 only.

**33%** Of participating LEMSAs reported data for NEMSIS V3.4 only.



# 2023 CORE QUALITY MEASURES RESULTS

## **Considerations for the information presented in the following tables and charts:**

- Non-participating LEMSA(s) did not indicate why they were unable to report information on the 2023 core quality measures.
- The transition from NEMSIS V3.4 to NEMSIS V3.5 varied between LEMSAs.
- Participating LEMSAs indicated the reporting period for their data in their submission varied.
- Multiple factors impact the validity and analysis of the retrospective data, including but not limited to incomplete documentation, documentation not reflective of services provided prior to ambulance arrival, inability to collect hospital outcome data, inconsistent data dictionary definitions between local jurisdictions, LEMSA policy not aligning with measure specifications causing a misrepresentation of patient volume and/or EMS performance, and geographic resource disparities.
- These limitations caution against comparison between jurisdictions and limit the reliability of the aggregate values.
- Efforts to collect, validate, and evaluate core quality measures data in CEMSIS are ongoing.

## V3.4 2023 CORE QUALITY MEASURES AGGREGATE RESULTS FOR CALIFORNIA

Measure ID	TRA-2	HYP-1	STR-1	PED-3	RST-4	RST-5
<b>LEMSA Response Count*</b>	22	22	22	22	20	21
<b>Response Rate (n=34)</b>	65%	65%	65%	65%	59%	62%
<b>Numerator Total</b>	32,243	29,872	40,628	8,254	1,634,226	292,068
<b>Denominator Total</b>	39,141	38,922	43,869	8,548	2,175,245	1,477,567
<b>Mean (Average)</b>	80%	77%	85%	92%	75%	13%
<b>Median</b>	91%	81%	92%	97%	75%	9%

\*LEMSA Response Count is defined as the number of LEMSAs that submitted a reported value for a measure.

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## TRA-2: TRANSPORT OF TRAUMA PATIENTS TO A TRAUMA CENTER (V3.4)

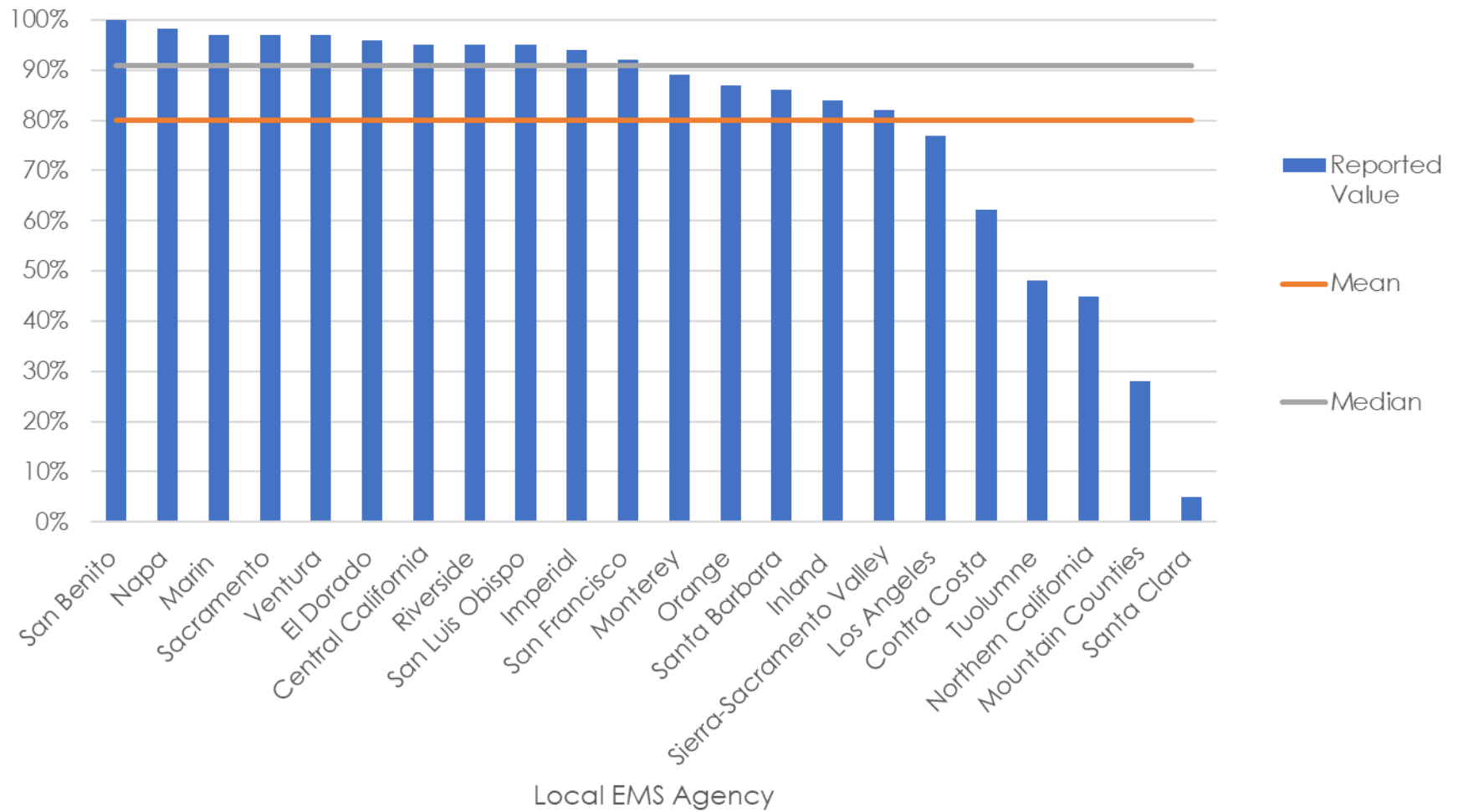
TRA-2 focuses on the percentage of trauma patients meeting [CDC Field Trauma Triage Criteria Step 1 or 2 or 3](#) that were transported to a trauma center originating from a 911 response. For the 2023 reporting year, 22 of 34 LEMSAs provided TRA-2 data for NEMESIS V3.4. Of the 39,141 patients identified as meeting trauma triage criteria, 32,243 (82%) patients were transported to a trauma center. The median value was 91%. The average number of patients meeting trauma triage criteria who were transported to a trauma center remained the same (80%) from the 2022 to 2023 data years.

For the 2023 measure set, EMSA revised the TRA-2 specifications to include the data element eDisposition.02 (Destination/Transferred To, Code) along with a list of designated trauma center facilities in California. Based on feedback from various LEMSAs as well as discussion with the core quality measures workgroup, it was noted that several LEMSAs experience data collection and mapping issues with the data element eDisposition.23 (Hospital Capability) and suggested the inclusion of other data elements to specify hospitals that are designated trauma facilities. The inclusion of eDisposition.02 allows for this capability. Additionally, trauma centers are not always available or accessible in certain regions, therefore the inclusion of eDisposition.02 may increase the collection of data for LEMSAs that transport patients to trauma centers outside of their region.

Some LEMSAs reported issues with the TRA-2 measure such as inaccurate documentation and collection or mapping issues with NEMESIS data elements eInjury.03, eDisposition.12, and eDisposition.23. Issues with these NEMESIS data elements led to slightly lower counts of patients. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to TRA-2 measure specifications](#)

Chart 1: TRA-2 Transport of Trauma Patients to Trauma Centers (V3.4)



NEMSIS V3.4				
LEMSA	TRA-2 Numerator	TRA-2 Denominator	TRA-2 Reported Value	Reporting Period
San Benito	45	45	100%	January – June
Napa	110	112	98%	January – November
Marin	260	267	97%	
Sacramento	2,077	2,135	97%	
Ventura	583	603	97%	January 1 – October 16
El Dorado	239	248	96%	January – November
Central California	1,448	1,527	95%	January – December
Riverside	4,097	4,292	95%	January – December
San Luis Obispo	302	318	95%	
Imperial	165	175	94%	January – December
San Francisco	1,196	1,304	92%	January – October
Monterey	714	799	89%	January – December
Orange	3,650	4,411	87%	January – October
Santa Barbara	572	663	86%	
Inland	2,611	3,100	84%	January – December
Sierra-Sacramento Valley	1,218	1,484	82%	January – October
Los Angeles	11,307	14,776	77%	January – September
Contra Costa	1,546	2,486	62%	January – December
Tuolumne	10	21	48%	January – December
Northern California	28	62	45%	January – October
Mountain Counties	60	218	28%	
Santa Clara	5	95	5%	January 1 – December 5

TRA-2 Data	
Response Count	22
Response Rate (n=34)	65%
Numerator Total	32,243
Denominator Total	39,141
Mean	80%
Median	91%

Not Reporting: Alameda, Coastal Valleys, Kern, Merced, North Coast, San Diego, San Joaquin, San Mateo, Santa Cruz, Solano, Stanislaus, Yolo



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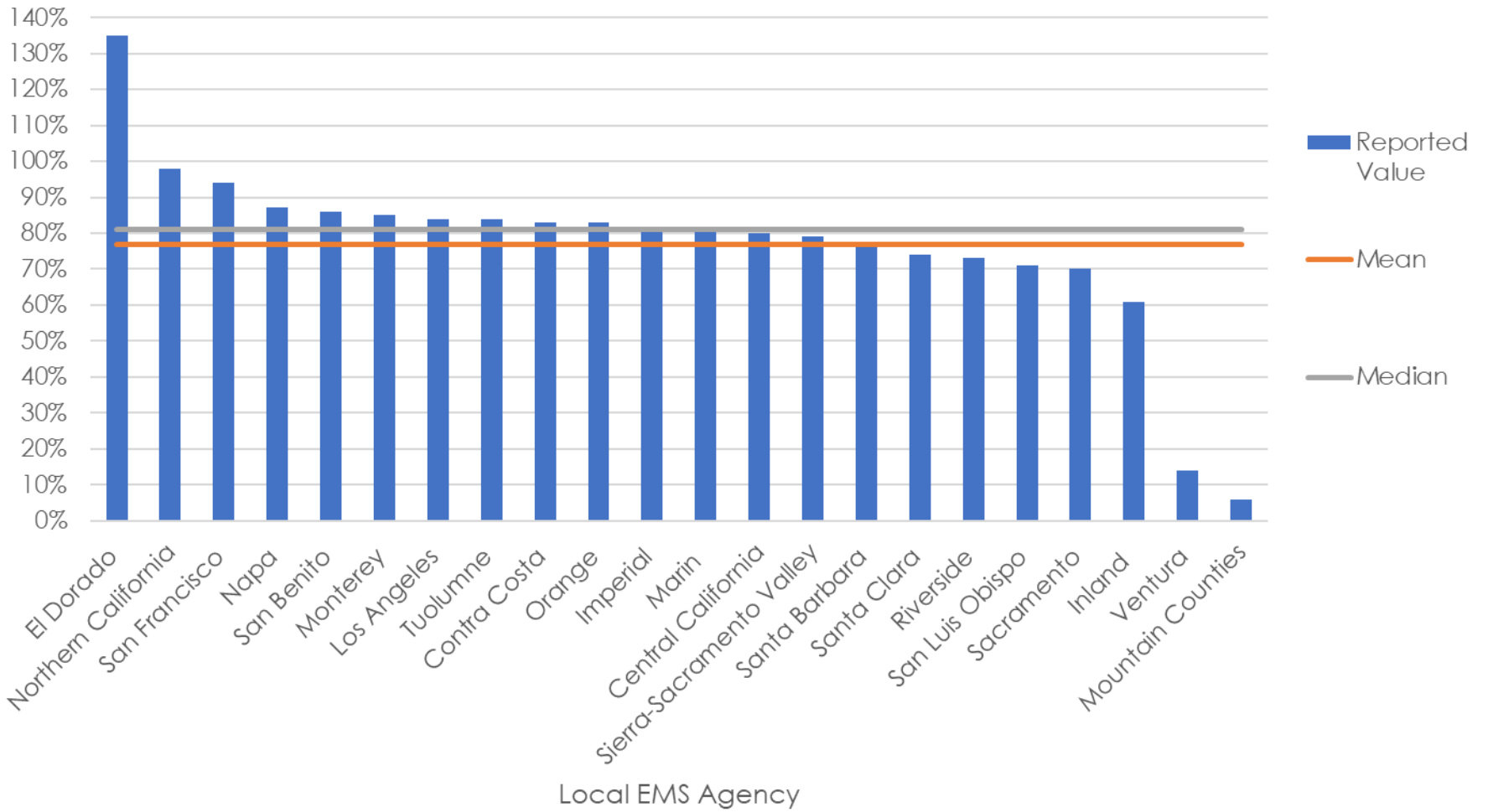
## HYP-1: TREATMENT ADMINISTERED FOR HYPOGLYCEMIA (V3.4)

HYP-1 focuses on the percentage of patients that received treatment to correct their hypoglycemia originating from a 911 response. For the 2023 reporting year, 22 of 34 LEMSAs provided HYP-1 data for NEMESIS V3.4. Of the 38,922 patients who had a blood glucose level indicating hypoglycemia, 29,872 (77%) patients received treatment to correct their hypoglycemia. The median value was 81%.

For the 2023 measure set, EMSA revised the HYP-1 specifications to include eMedications.03 (Medication Given) = “Contains any dextrose”. Some LEMSAs reported documentation issues with the collection or mapping of medication given, including the provision of patient’s own food/drink as treatment administered, oral medication categorized as a fluid rather than medication, data codes for medication given not submitted by providers or accounted for, documentation of medication given in the narrative rather than the medication drop-down, and duplicate counts for patients. One LEMSA noted that eMedications.03 (Medication Given) = “Contains any dextrose” was not utilized in their reporting as a data specification. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to HYP-1 measure specifications](#)

**Chart 2: HYP-1 Treatment Administered for Hypoglycemia (V3.4)**



NEMSIS V3.4				
LEMSA	HYP-1 Numerator	HYP-1 Denominator	HYP-1 Reported Value	Reporting Period
El Dorado	319	236	135%	January – November
Northern California	83	85	98%	January – October
San Francisco	709	757	94%	January – October
Napa	117	134	87%	January – November
San Benito	18	21	86%	January – June
Monterey	417	488	85%	January – December
Los Angeles	4,902	5,868	84%	January – September
Tuolumne	66	79	84%	January – December
Contra Costa	12,055	14,499	83%	January – December
Orange	1,511	1,818	83%	January – October
Imperial	208	257	81%	January – December
Marin	122	150	81%	
Central California	1,815	2,271	80%	January – December
Sierra-Sacramento Valley	1,205	1,527	79%	January – October
Santa Barbara	240	316	76%	
Santa Clara	87	117	74%	January 1 – December 5
Riverside	2,133	2,918	73%	January – December
San Luis Obispo	115	161	71%	
Sacramento	1,476	2,116	70%	
Inland	2,122	3,483	61%	January – November
Ventura	99	731	14%	January 1 – October 16
Mountain Counties	53	890	6%	

Not Reporting: Alameda, Coastal Valleys, Kern, Merced, North Coast, San Diego, San Joaquin, San Mateo, Santa Cruz, Solano, Stanislaus, Yolo

HYP-1 Data	
Response Count	22
Response Rate (n=34)	65%
Numerator Total	29,872
Denominator Total	38,922
Mean	77%
Median	81%

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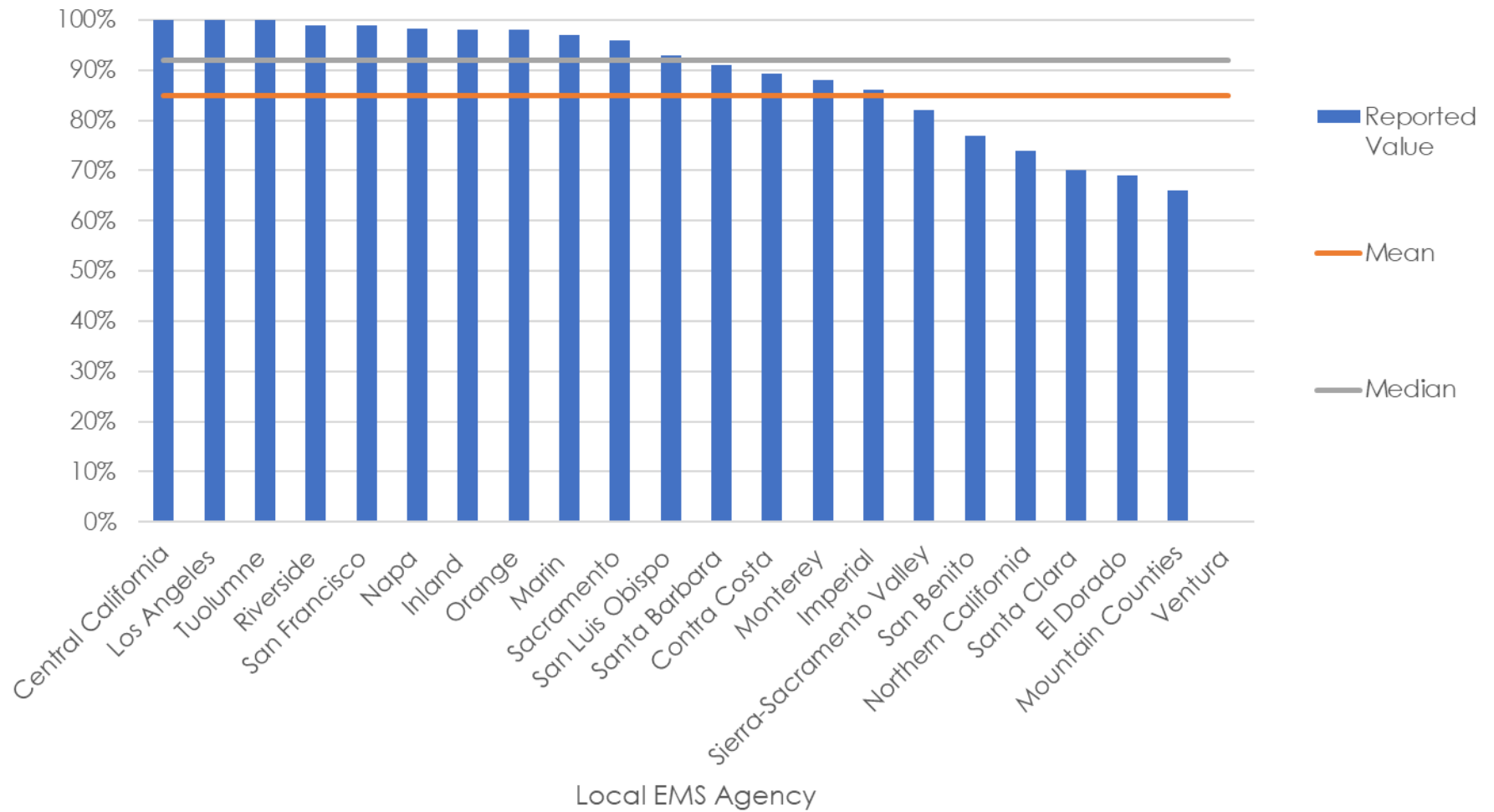
## STR-1: PREHOSPITAL SCREENING FOR SUSPECTED STROKE PATIENTS (V3.4)

STR-1 focuses on the percentage of suspected stroke patients that received a prehospital stroke screening originating from a 911 response. For the 2023 reporting year, 22 of 34 LEMSAs provided STR-1 data. Of the 43,869 patients who had a primary or secondary impression of stroke, 40,628 (85%) patients received a documented stroke assessment. The median value was 92%.

One LEMSA reported documentation issues, including documentation of stroke using custom fields rather than the required data element eVitals.29 (Stroke Scale Score). This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to STR-1 measure specifications](#)

**Chart 3: STR-1 Prehospital Screening for Suspected Stroke Patients (V3.4)**



NEMSIS V3.4				
LEMSA	STR-1 Numerator	STR-1 Denominator	STR-1 Reported Value	Reporting Period
Central California	2,641	2,641	100%	January – December
Los Angeles	9,480	9,485	100%	January – September
Tuolumne	111	111	100%	January – December
Riverside	5,909	5,962	99%	January – December
San Francisco	1,284	1,296	99%	January – October
Napa	300	305	98%	January – November
Inland	5,370	5,493	98%	January – November
Orange	2,502	2,565	98%	January – October
Marin	290	299	97%	
Sacramento	4,139	4,331	96%	
San Luis Obispo	499	538	93%	
Santa Barbara	556	610	91%	
Contra Costa	2,172	2,432	89%	January – December
Monterey	1,010	1,143	88%	January – December
Imperial	275	318	86%	January – December
Sierra-Sacramento Valley	3,132	3,798	82%	January – October
San Benito	33	43	77%	January – June
Northern California	108	145	74%	January – October
Santa Clara	286	408	70%	January 1 – December 5
El Dorado	400	583	69%	January – November
Mountain Counties	131	197	66%	
Ventura	0	1,166	0%	January 1 – October 16

STR-1 Data	
Response Count	22
Response Rate (n=34)	65%
Numerator Total	40,628
Denominator Total	43,869
Mean	85%
Median	92%

Not Reporting: Alameda, Coastal Valleys, Kern, Merced, North Coast, San Diego, San Joaquin, San Mateo, Santa Cruz, Solano, Stanislaus, Yolo

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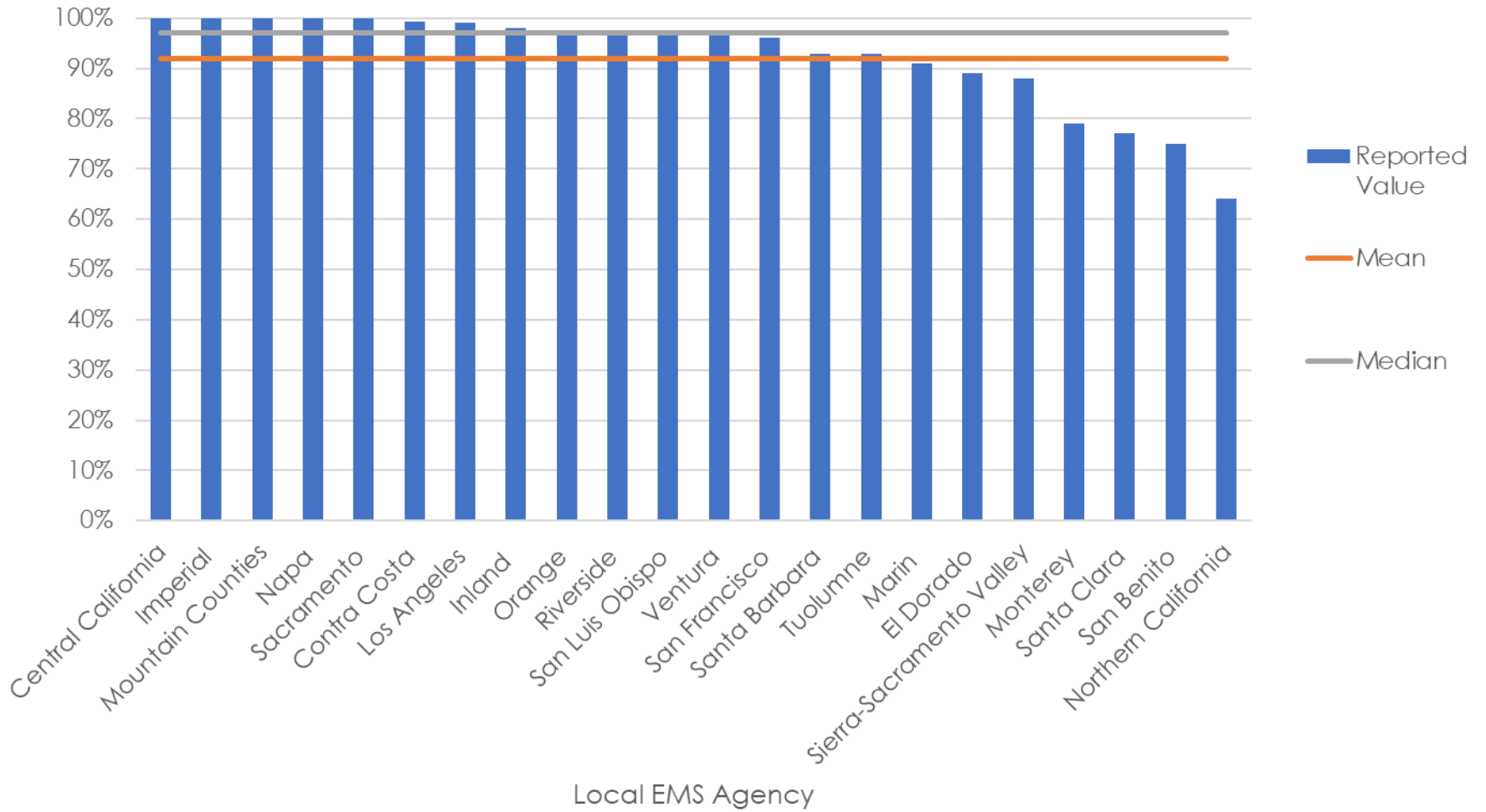
## PED-3: RESPIRATORY ASSESSMENT FOR PEDIATRIC PATIENTS (V3.4)

PED-3 focuses on the percentage of pediatric patients that had a primary or secondary impression of respiratory distress and received a documented respiratory assessment originating from a 911 response. For the 2023 reporting year, 22 of 34 LEMSAs provided PED-3 data. Of the 8,548 pediatric patients who had a primary or secondary impression of respiratory distress, 8,254 (92%) patients received a documented respiratory assessment. The median value was 97%.

For the 2023 measure set, EMSA revised the PED-3 specifications to include pertinent negative values for eVitals.12 (Pulse Oximetry), eVitals.14 (Respiratory Rate), and eVitals.16 ((End Tidal Carbon Dioxide (ETCO<sub>2</sub>)). EMSA also updated the pediatric age criteria from <15 years of age to ≤14 years of age for this measure. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to PED-3 measure specifications](#)

**Chart 4: PED-3 Respiratory Assessment for Pediatric Patients (V3.4)**





NEMSIS V3.4				
LEMSA	PED-3 Numerator	PED-3 Denominator	PED-3 Reported Value	Reporting Period
Central California	464	464	100%	January – December
Imperial	42	42	100%	January - December
Mountain Counties	25	25	100%	
Napa	55	55	100%	January – November
Sacramento	584	584	100%	
Contra Costa	323	325	99%	January - December
Los Angeles	1,317	1,335	99%	January - September
Inland	2,253	2,308	98%	January – November
Orange	462	477	97%	January – October
Riverside	1,400	1,440	97%	January - December
San Luis Obispo	61	63	97%	
Ventura	199	206	97%	January 1 – October 16
San Francisco	146	152	96%	January – October
Santa Barbara	84	90	93%	
Tuolumne	25	27	93%	January - December
Marin	72	79	91%	
El Dorado	49	55	89%	January – November
Sierra-Sacramento Valley	462	524	88%	January – October
Monterey	165	209	79%	January - December
Santa Clara	54	70	77%	January 1 – December 5
San Benito	3	4	75%	January – June
Northern California	9	14	64%	January – October

Not Reporting: Alameda, Coastal Valleys, Kern, Merced, North Coast, San Diego, San Joaquin, San Mateo, Santa Cruz, Solano, Stanislaus, Yolo

PED-3 Data	
Response Count	22
Response Rate (n=34)	65%
Numerator Total	8,254
Denominator Total	8,548
Mean	92%
Median	95%

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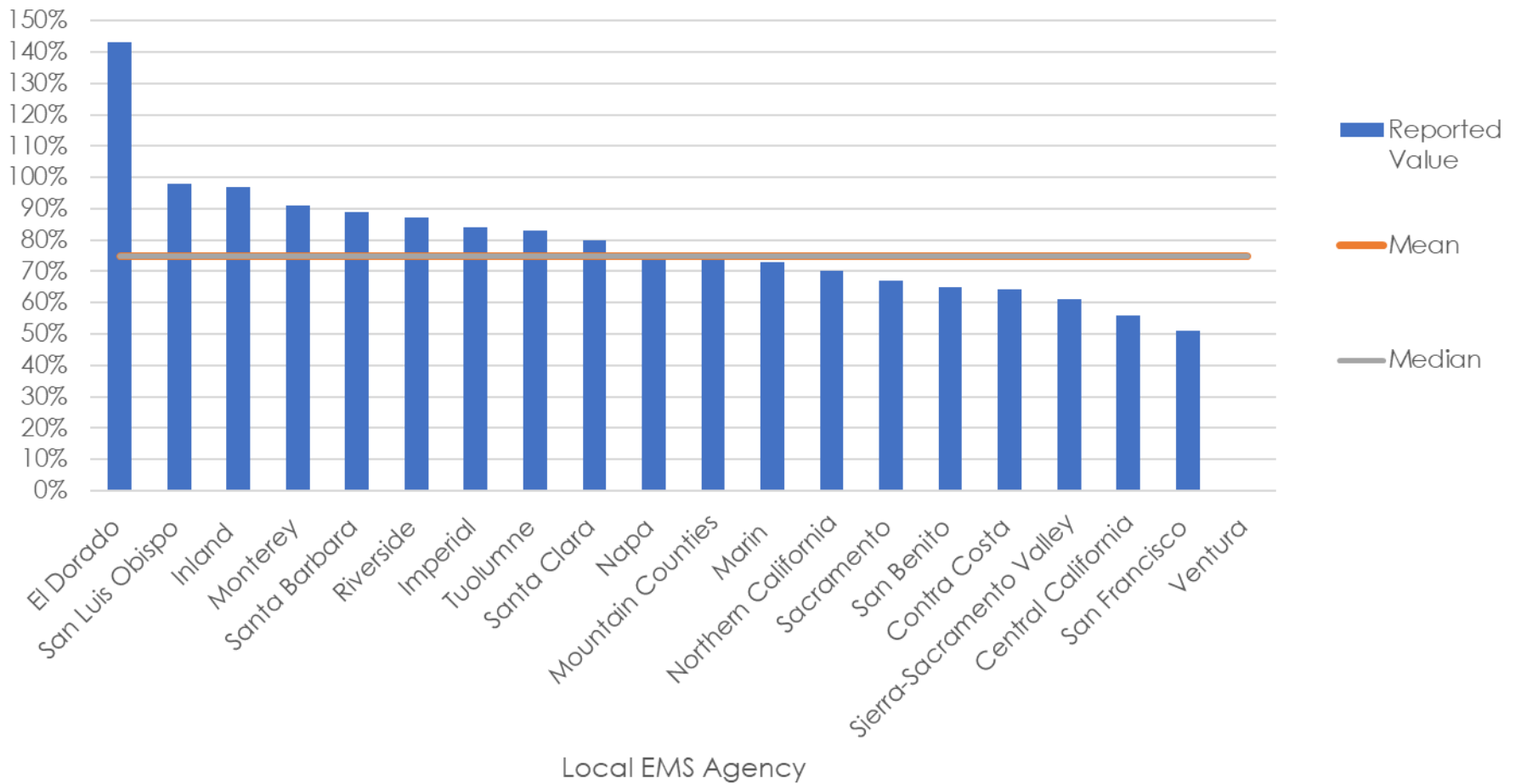
## RST-4: 911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS RESPONSE (V3.4)

RST-4 focuses on the percentage of EMS responses originating from a 911 request that included the use of lights and/or sirens during a response. For the 2023 reporting year, 20 of 34 LEMSAs provided RST-4 data. Of the 2,175,245 EMS responses originating from a 911 request, 1,634,226 (75%) included a lights and/or sirens response. The median value was 75%. For this measure, a lower reported value generally indicates better quality.

Two LEMSAs were unable to report data for this measure due to specific data fields not being utilized in their region (e.g. level of response to scene not collected). Two LEMSAs reported documentation issues such as underutilized or inconsistent values in data element eResponse.24 (Additional Response Mode Descriptors). One LEMSA reported a numerator greater than the denominator due to multiple ALS units dispatched to the same incident. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to RST-4 measure specifications](#)

**Chart 5: RST-4 911 Requests for Services that Included a Lights and/or Sirens Response (V3.4)**



NEMSIS V3.4				
LEMSA	RST-4 Numerator	RST-4 Denominator	RST-4 Reported Value	Reporting Period
El Dorado	27,808	19,427	143%	January – November
San Luis Obispo	27,057	27,526	98%	
Inland	440,384	454,976	97%	January – November
Monterey	60,051	65,873	91%	January – December
Santa Barbara	74,562	83,407	89%	
Riverside	441,865	507,840	87%	January – December
Imperial	125	148	84%	January – December
Tuolumne	5,949	7,161	83%	January – December
Santa Clara	21,000	26,098	80%	January 1 – December 5
Napa	9,791	12,852	76%	January – November
Mountain Counties	7,152	9,638	74%	
Marin	18,656	25,583	73%	
Northern California	6,086	8,713	70%	January – October
Sacramento	159,909	237,889	67%	
San Benito	1,802	2,753	65%	January – June
Contra Costa	81,230	126,298	64%	January – December
Sierra-Sacramento Valley	56,918	94,075	61%	January – October
Central California	143,507	256,128	56%	January – December
San Francisco	50,374	98,389	51%	January – October
Ventura	0	110,471	0%	January 1 – October 16

RST-4 Data	
Response Count	20
Response Rate (n=34)	59%
Numerator Total	1,634,226
Denominator Total	2,175,245
Mean	75%
Median	75%

Not Reporting: Alameda, Coastal Valleys, Kern, Los Angeles, Merced, North Coast, Orange, San Diego, San Joaquin, San Mateo, Santa Cruz, Solano, Stanislaus, Yolo

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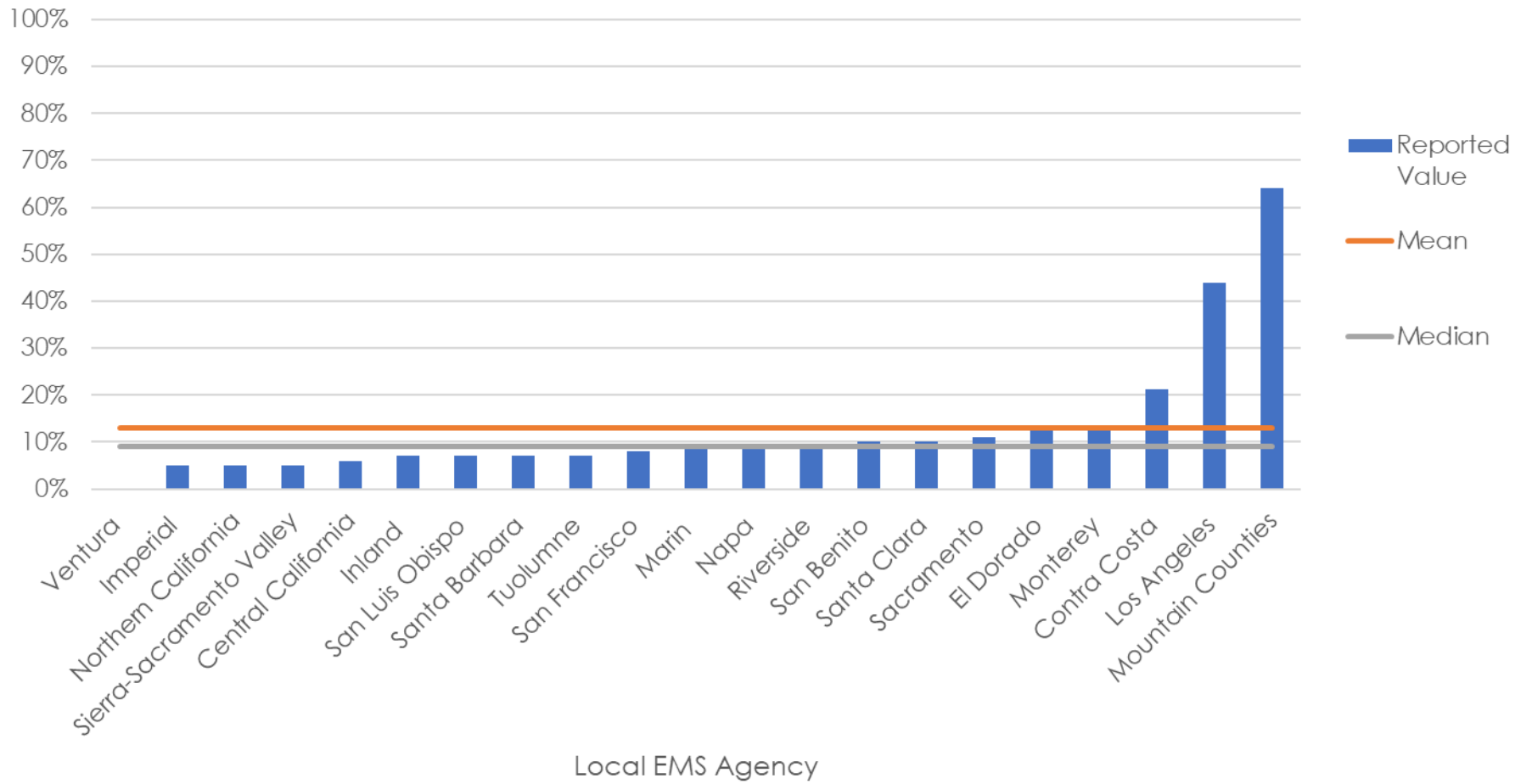
## RST-5: 911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS TRANSPORT (V3.4)

RST-5 focuses on the percentage of EMS transports originating from a 911 request that included the use of lights and/or sirens during patient transport. For the 2022 reporting year, 21 of 34 LEMSAs provided RST-5 data. Of the 1,477,567 EMS transports originating from a 911 request, 292,068 (13%) included a lights and/or sirens transport. The median value was 9%. For this measure, a lower reported value generally indicates better quality.

Two LEMSAs were unable to report data for this measure due to specific data fields not being utilized in their region. Two LEMSAs reported documentation issues, including underutilized or inconsistent values in data element eDisposition.18 (Additional Transport Mode Descriptors). One LEMSA reported documentation issues with mapping data element eDisposition.18 (Additional Transport Mode Descriptors). One LEMSA reported documentation issues in the utilizing data element eDisposition.12 (Incident/Patient Disposition). This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to RST-5 measure specifications](#)

**Chart 6: RST-5 911 Requests for Services that Included a Lights and/or Sirens Transport (V3.4)**



NEMSIS V3.4				
LEMSA	RST-5 Numerator	RST-5 Denominator	RST-5 Reported Value	Reporting Period
Ventura	0	40,784	0%	January 1 – October 16
Imperial	140	2,848	5%	January – December
Northern California	218	4,304	5%	January – October
Sierra-Sacramento Valley	3,756	79,642	5%	January – October
Central California	10,442	176,368	6%	January – December
Inland	11,086	157,060	7%	January – November
San Luis Obispo	1,406	18,821	7%	
Santa Barbara	2,025	27,576	7%	
Tuolumne	391	5,505	7%	January – December
San Francisco	5,004	64,964	8%	January – October
Marin	1,154	13,299	9%	
Napa	833	9,445	9%	January – November
Riverside	15,507	175,582	9%	January – December
San Benito	105	1,100	10%	January – June
Santa Clara	139	1,401	10%	January 1 – December 5
Sacramento	11,237	106,635	11%	
El Dorado	1,531	11,618	13%	January – November
Monterey	3,696	27,454	13%	January – December
Contra Costa	21,251	99,922	21%	January – December
Los Angeles	196,428	444,266	44%	January – September
Mountain Counties	5,719	8,973	64%	

Not Reporting: Alameda, Coastal Valleys, Kern, Merced, North Coast, Orange, San Diego, San Joaquin, San Mateo, Santa Cruz, Solano, Stanislaus, Yolo

RST-5 Data	
Response Count	21
Response Rate (n=34)	62%
Numerator Total	292,068
Denominator Total	1,477,567
Mean	13%
Median	9%

## V3.5 2023 CORE QUALITY MEASURES AGGREGATE RESULTS FOR CALIFORNIA

Measure ID	TRA-2	HYP-1	STR-1	PED-3	RST-4	RST-5
<b>LEMSA Response Count*</b>	18	18	18	18	18	17
<b>Response Rate (n=34)</b>	53%	53%	53%	53%	53%	50%
<b>Numerator Total</b>	11,669	9,154	20,502	4,887	1,040,484	58,938
<b>Denominator Total</b>	17,014	12,511	22,497	5,219	1,585,694	769,690
<b>Mean (Average)</b>	82%	72%	85%	95%	67%	8%
<b>Median</b>	90%	74%	94%	99%	73%	8%

\*LEMSA Response Count is defined as the number of LEMSAs that submitted a reported value for a measur



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## TRA-2: TRANSPORT OF TRAUMA PATIENTS TO A TRAUMA CENTER (V3.5)

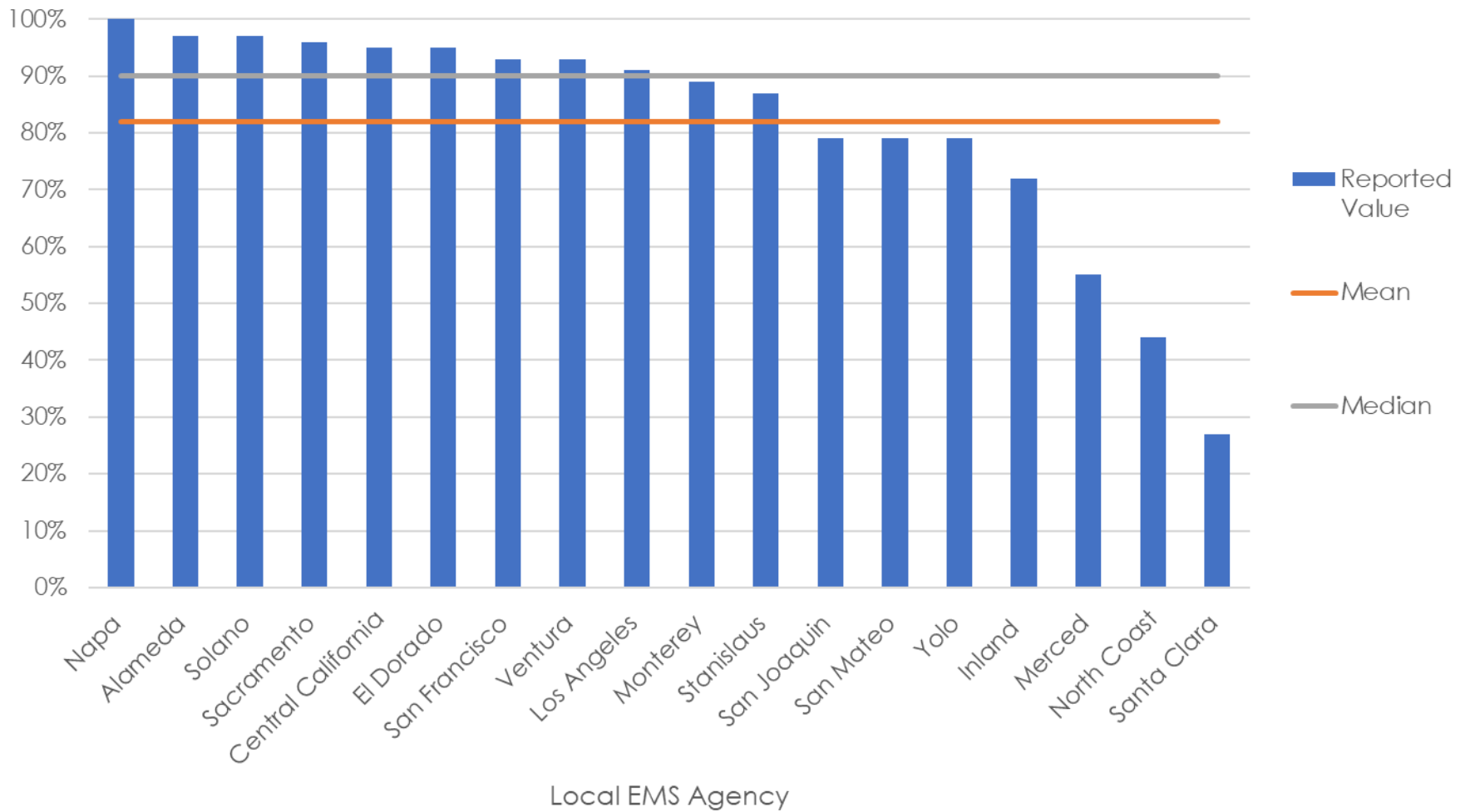
TRA-2 focuses on the percentage of trauma patients meeting [CDC Field Trauma Triage Criteria Step 1 or 2 or 3](#) that were transported to a trauma center originating from an Emergency Response (Primary Response Area). For the 2023 reporting year, 18 of 34 LEMSAs provided TRA-2 data. Of the 17,014 patients identified as meeting trauma triage criteria, 11,669 (82%) patients were transported to a trauma center. The median value was 90%. The average number of patients meeting trauma triage criteria who were transported to a trauma center increased from 77% to 82% from the 2022 to 2023 data years. Efforts to improve data collection and mapping by the LEMSAs, as well as revisions to the TRA-2 measure, likely impacted the ability of LEMSAs to report this measure more accurately.

For the 2023 measure set and transition to NEMSIS V3.5, EMSA revised the TRA-2 specifications to replace the data element eDisposition.12 (Incident/Patient Disposition) with data element eDisposition.30 (Transport Disposition).

One LEMSA reported issues with the TRA-2 measure such as inaccurate documentation and collection or mapping issues with NEMSIS data elements, eDisposition.23 (Hospital Capability) and eDisposition.30 (Transport Disposition). One LEMSA reported cited documentation issues with their providers selecting incorrect trauma criteria. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to TRA-2 measure specifications](#)

Chart 7: TRA-2 Transport of Trauma Patients to Trauma Centers (V3.5)



NEMSIS V3.5				
LEMSA	TRA-2 Numerator	TRA-2 Denominator	TRA-2 Reported Value	Reporting Period
Napa	8	8	100%	November – December
Alameda	951	983	97%	January – December
Solano	655	672	97%	
Sacramento	22	23	96%	
Central California	1,448	1,527	95%	January – December
El Dorado	19	20	95%	November – December
San Francisco	409	438	93%	November – December
Ventura	218	235	93%	October 17 – December 31
Los Angeles	2,740	3,008	91%	October – December
Monterey	714	799	89%	January – December
Stanislaus	90	104	87%	January – December
San Joaquin	381	483	79%	January – December
San Mateo	1,722	2,176	79%	
Yolo	340	433	79%	
Inland	206	288	72%	December
Merced	254	459	55%	January – December
North Coast	50	113	44%	
Santa Clara	1,442	5,245	27%	December 6 – 31

TRA-2 Data	
Response Count	18
Response Rate (n=34)	53%
Numerator Total	11,669
Denominator Total	17,014
Mean	82%
Median	90%

Not Reporting: Coastal Valleys, Contra Costa, Imperial, Kern, Marin, Mountain Counties, Northern California, Orange, Riverside, San Benito, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Sierra-Sacramento Valley, Tuolumne

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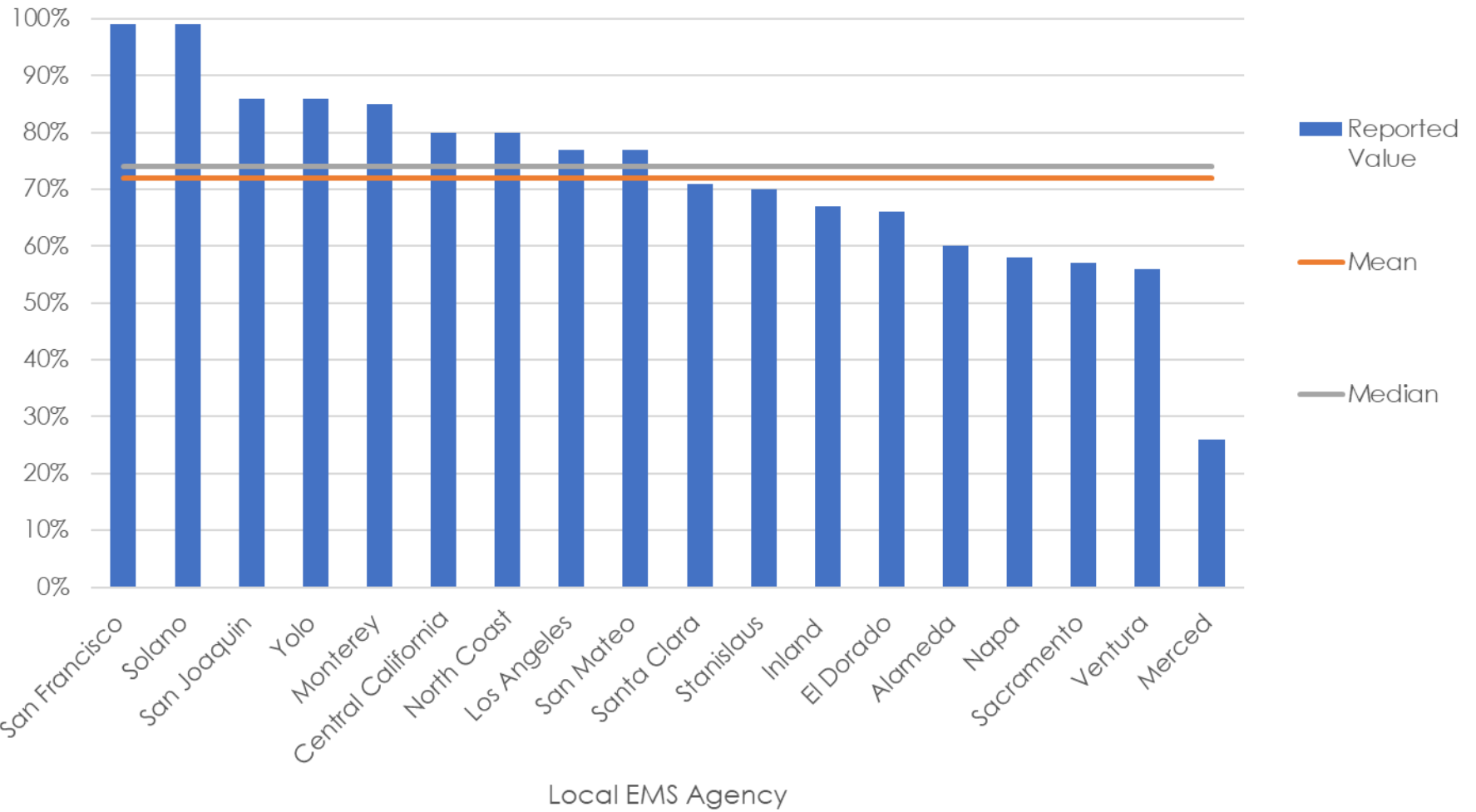
## HYP-1: TREATMENT ADMINISTERED FOR HYPOGLYCEMIA (V3.5)

HYP-1 focuses on the percentage of patients that received treatment to correct their hypoglycemia originating from an Emergency Response (Primary Response Area). For the 2023 reporting year, 18 of 34 LEMSAs provided HYP-1 data. Of the 12,511 patients who had a blood glucose level indicating hypoglycemia, 9,154 (72%) patients received treatment to correct their hypoglycemia. The median value was 74%.

One LEMSA indicated their data included duplicate patient counts as a result of the inclusion of BLS first responders. One LEMSA reported documentation issues with provider narratives and the provision of patient's own food/drink as treatment administered, oral medication categorized as a fluid rather than medication. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to HYP-1 measure specifications](#)

Chart 8: HYP-1 Treatment Administered for Hypoglycemia (V3.5)



NEMSIS V3.5				
LEMSA	HYP-1 Numerator	HYP-1 Denominator	HYP-1 Reported Value	Reporting Period
San Francisco	192	193	99%	November – December
Solano	351	355	99%	
San Joaquin	852	990	86%	January – December
Yolo	126	147	86%	
Monterey	417	488	85%	January – December
Central California	1,815	2,271	80%	January – December
North Coast	165	206	80%	
Los Angeles	1,121	1,456	77%	October – December
San Mateo	275	359	77%	
Santa Clara	1,060	1,490	71%	December 6 – 31
Stanislaus	693	984	70%	January – December
Inland	209	311	67%	December
El Dorado	31	47	66%	November – December
Alameda	1,680	2,801	60%	January – December
Napa	7	12	58%	November – December
Sacramento	4	7	57%	
Ventura	99	176	56%	October 17 – December 31
Merced	57	218	26%	January – December

Not Reporting: Coastal Valleys, Contra Costa, Imperial, Kern, Marin, Mountain Counties, Northern California, Orange, Riverside, San Benito, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Sierra-Sacramento Valley, Tuolumne

HYP-1 Data	
Response Count	18
Response Rate (n=34)	53%
Numerator Total	9,154
Denominator Total	12,511
Mean	72%
Median	74%

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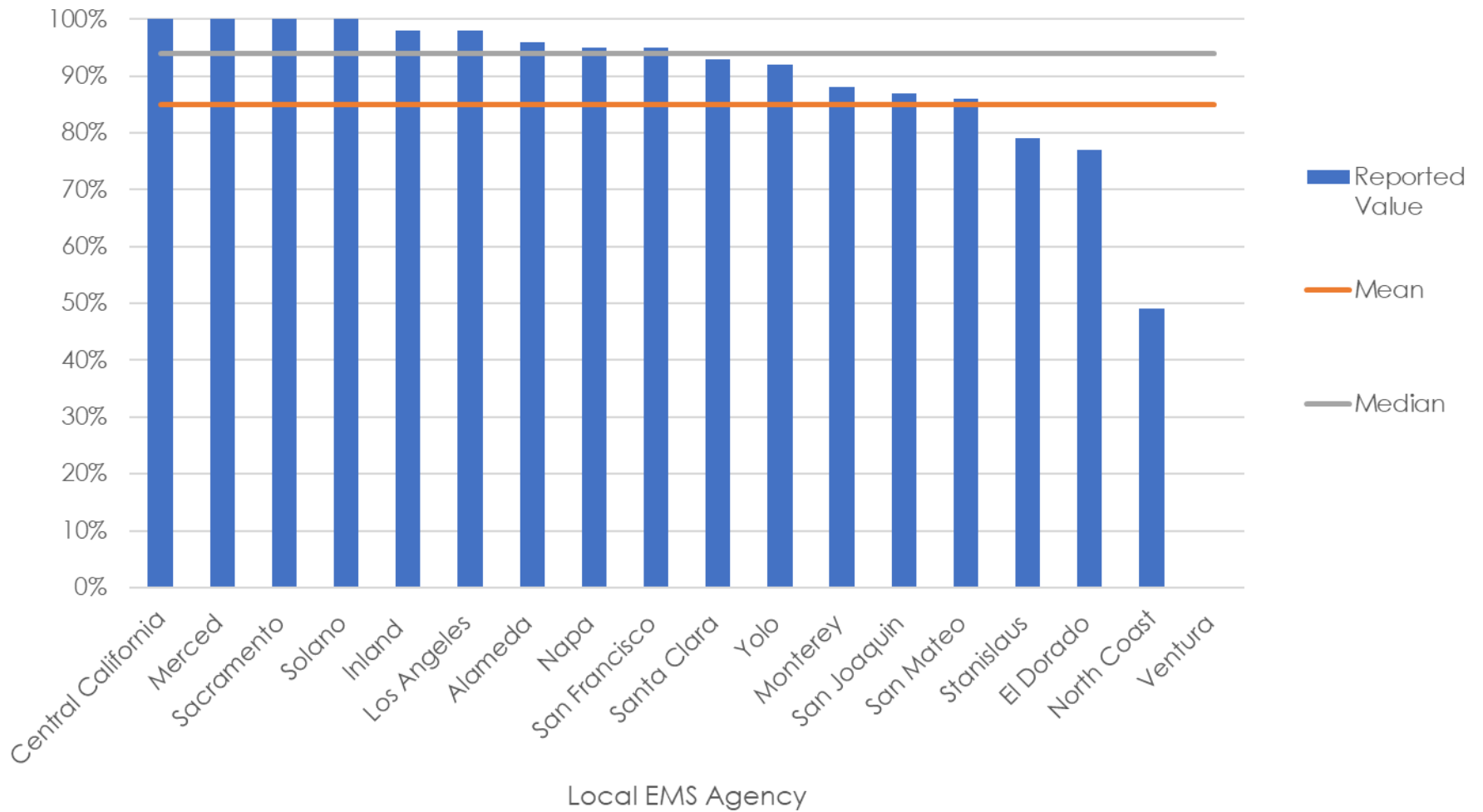
## STR-1: PREHOSPITAL SCREENING FOR SUSPECTED STROKE PATIENTS (V3.5)

STR-1 focuses on the percentage of suspected stroke patients that received a prehospital stroke screening originating from an Emergency Response (Primary Response Area). For the 2023 reporting year, 18 of 34 LEMSAs provided STR-1 data. Of the 22,497 patients who had a primary or secondary impression of stroke, 20,502 (85%) patients received a documented stroke assessment. The median value was 94%.

One LEMSA indicated their data included duplicate patient counts as a result of the inclusion of BLS first responders. One LEMSA was unable to report data due to data element eVitals.29 not being utilized in their region. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to STR-1 measure specifications](#)

Chart 9: STR-1 Prehospital Screening for Suspected Stroke Patients (V3.5)





NEMSIS V3.5				
LEMSA	STR-1 Numerator	STR-1 Denominator	STR-1 Reported Value	Reporting Period
Central California	2,641	2,641	100%	January – December
Merced	463	463	100%	January – December
Sacramento	40	40	100%	
Solano	1,037	1,039	100%	
Inland	471	482	98%	December
Los Angeles	2,609	2,667	98%	October – December
Alameda	3,049	3,188	96%	January – December
Napa	42	44	95%	November – December
San Francisco	376	397	95%	November – December
Santa Clara	4,378	4,689	93%	December 6 – 31
Yolo	370	402	92%	
Monterey	1,010	1,143	88%	January – December
San Joaquin	1,354	1,558	87%	January – December
San Mateo	1,062	1,232	86%	
Stanislaus	1,323	1,671	79%	January – December
El Dorado	69	90	77%	November – December
North Coast	208	425	49%	
Ventura	0	326	0%	October 17 – December 31

STR-1 Data	
Response Count	18
Response Rate (n=34)	53%
Numerator Total	20,502
Denominator Total	22,497
Mean	85%
Median	94%

Not Reporting: Coastal Valleys, Contra Costa, Imperial, Kern, Marin, Mountain Counties, Northern California, Orange, Riverside, San Benito, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Sierra-Sacramento Valley, Tuolumne

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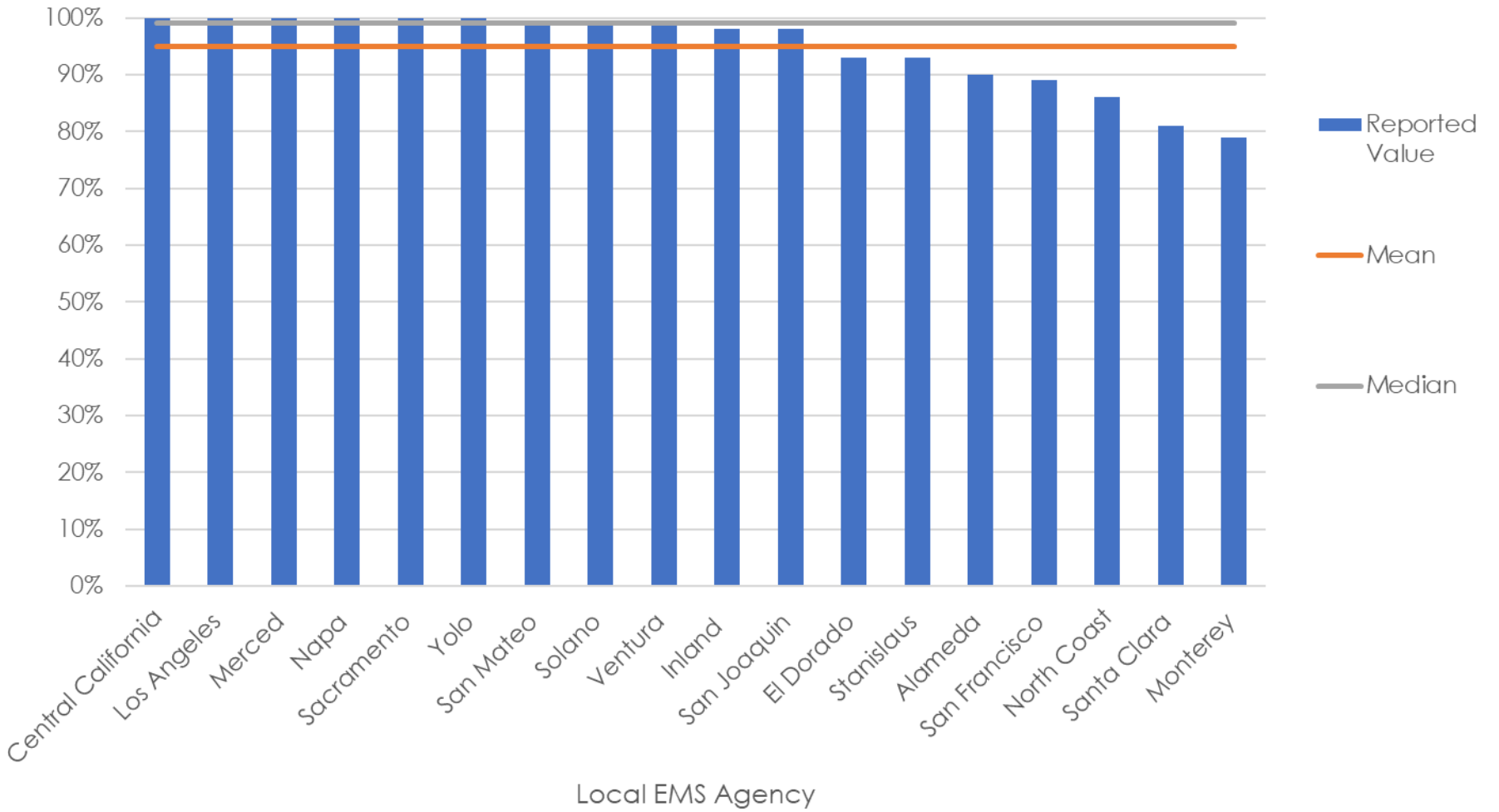
## PED-3: RESPIRATORY ASSESSMENT FOR PEDIATRIC PATIENTS (V3.5)

PED-3 focuses on the percentage of pediatric patients that had a primary or secondary impression of respiratory distress and received a documented respiratory assessment originating from an Emergency Response (Primary Response Area). For the 2023 reporting year, 18 of 34 LEMSAs provided PED-3 data. Of the 5,219 pediatric patients who had a primary or secondary impression of respiratory distress, 4,887 (95%) patients received a documented respiratory assessment. The median value was 99%.

One LEMSA reported documentation issues including low usage rates of the pertinent negative data fields and duplicate counts of patients. This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to PED-3 measure specifications](#)

Chart 10: PED-3 Respiratory Assessment for Pediatric Patients (V3.5)



NEMSIS V3.5				
LEMSA	PED-3 Numerator	PED-3 Denominator	PED-3 Reported Value	Reporting Period
Central California	464	464	100%	January - December
Los Angeles	543	543	100%	October – December
Merced	93	93	100%	January – December
Napa	9	9	100%	November – December
Sacramento	1	1	100%	
Yolo	76	76	100%	
San Mateo	135	136	99%	
Solano	1,042	1,053	99%	
Ventura	73	74	99%	October 17 – December 31
Inland	221	225	98%	December
San Joaquin	343	350	98%	January – December
El Dorado	13	14	93%	November – December
Stanislaus	317	342	93%	January – December
Alameda	621	688	90%	January – December
San Francisco	41	46	89%	November – December
North Coast	56	65	86%	
Santa Clara	674	831	81%	December 6 – 31
Monterey	165	209	79%	January - December

Not Reporting: Coastal Valleys, Contra Costa, Imperial, Kern, Marin, Mountain Counties, Northern California, Orange, Riverside, San Benito, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Sierra-Sacramento Valley, Tuolumne

PED-3 Data	
Response Count	18
Response Rate (n=34)	53%
Numerator Total	4,887
Denominator Total	5,219
Mean	95%
Median	99%

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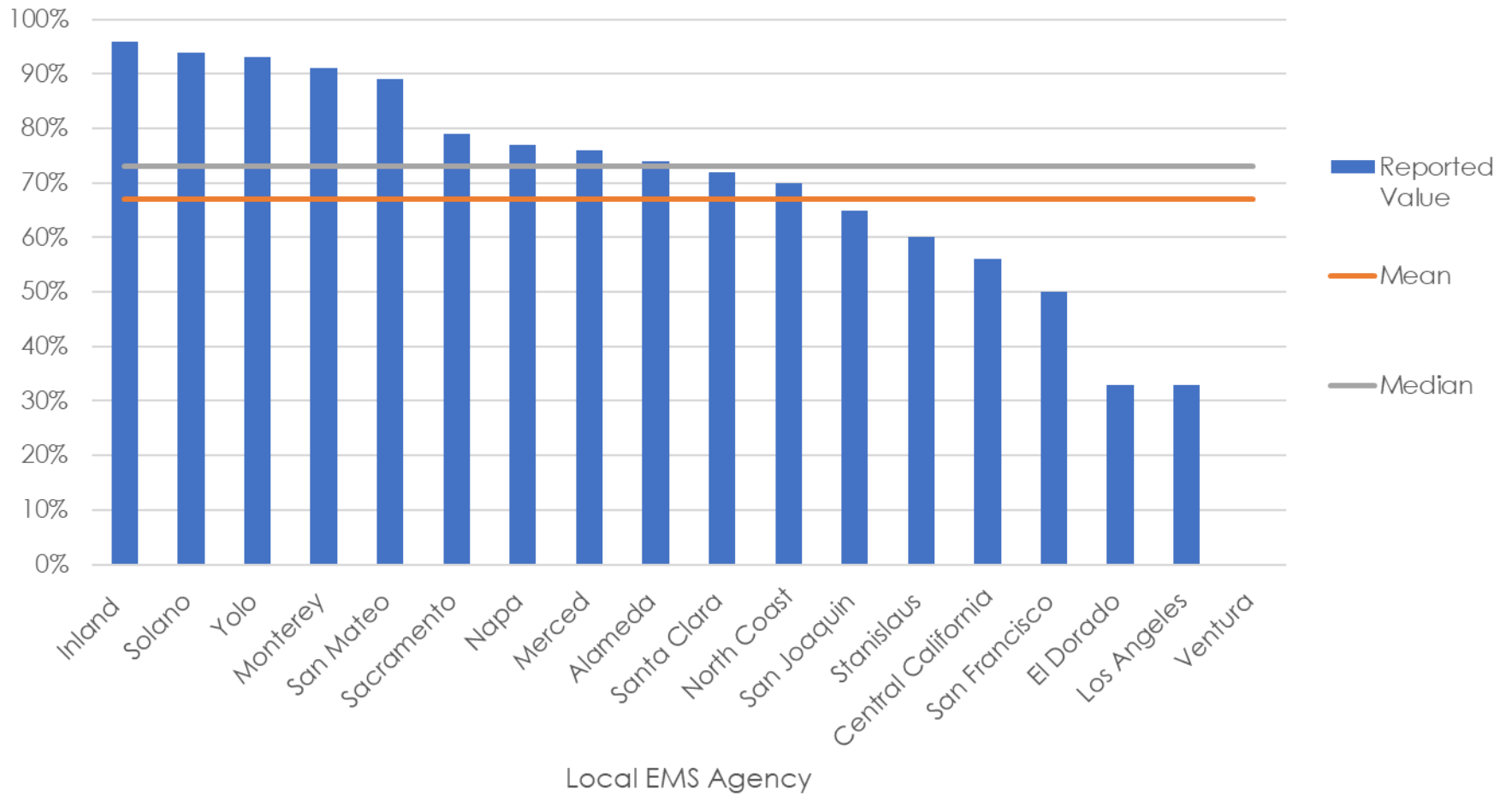
## RST-4: 911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS RESPONSE (V3.5)

RST-4 focuses on the percentage of EMS responses originating from a 911 request that included the use of lights and/or sirens during a response. For the 2023 reporting year, 18 of 34 LEMSAs provided RST-4 data. Of the 1,585,694 EMS responses originating from an Emergency Response (Primary Response Area), 1,040,484 (67%) included a lights and/or sirens response. The median value was 73%. For this measure, a lower reported value generally indicates better quality.

One LEMSA was unable to report data for the numerator due to data element eResponse.24 (Additional Response Mode Descriptors) not being utilized in their region. One LEMSA reported documentation issues including providers using inconsistent values in eResponse.24 (Additional Response Mode Descriptors). This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to RST-4 measure specifications](#)

**Chart 11: RST-4 911 Requests for Services that Included a Lights and/or Sirens Response (V3.5)**



NEMSIS V3.5				
LEMSA	RST-4 Numerator	RST-4 Denominator	RST-4 Reported Value	Reporting Period
Inland	36,371	38,021	96%	December
Solano	46,157	49,157	94%	
Yolo	22,792	24,517	93%	
Monterey	60,051	65,873	91%	January – December
San Mateo	56,301	63,230	89%	
Sacramento	670	850	79%	
Napa	1,393	1,817	77%	November – December
Merced	22,603	29,918	76%	January – December
Alameda	242,819	328,003	74%	January – December
Santa Clara	214,006	296,883	72%	December 6 – 31
North Coast	17,202	24,700	70%	
San Joaquin	59,467	91,281	65%	January – December
Stanislaus	42,083	69,748	60%	January – December
Central California	143,507	256,128	56%	January – December
San Francisco	14,153	28,460	50%	November – December
El Dorado	1,435	4,397	33%	November – December
Los Angeles	59,474	181,861	33%	October – December
Ventura	0	30,850	0%	October 17 – December 31

RST-4 Data	
Response Count	18
Response Rate (n=34)	53%
Numerator Total	1,040,484
Denominator Total	1,585,694
Mean	67%
Median	73%

Not Reporting: Coastal Valleys, Contra Costa, Imperial, Kern, Marin, Mountain Counties, Northern California, Orange, Riverside, San Benito, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Sierra-Sacramento Valley, Tuolumne

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## RST-5: 911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS TRANSPORT (V3.5)

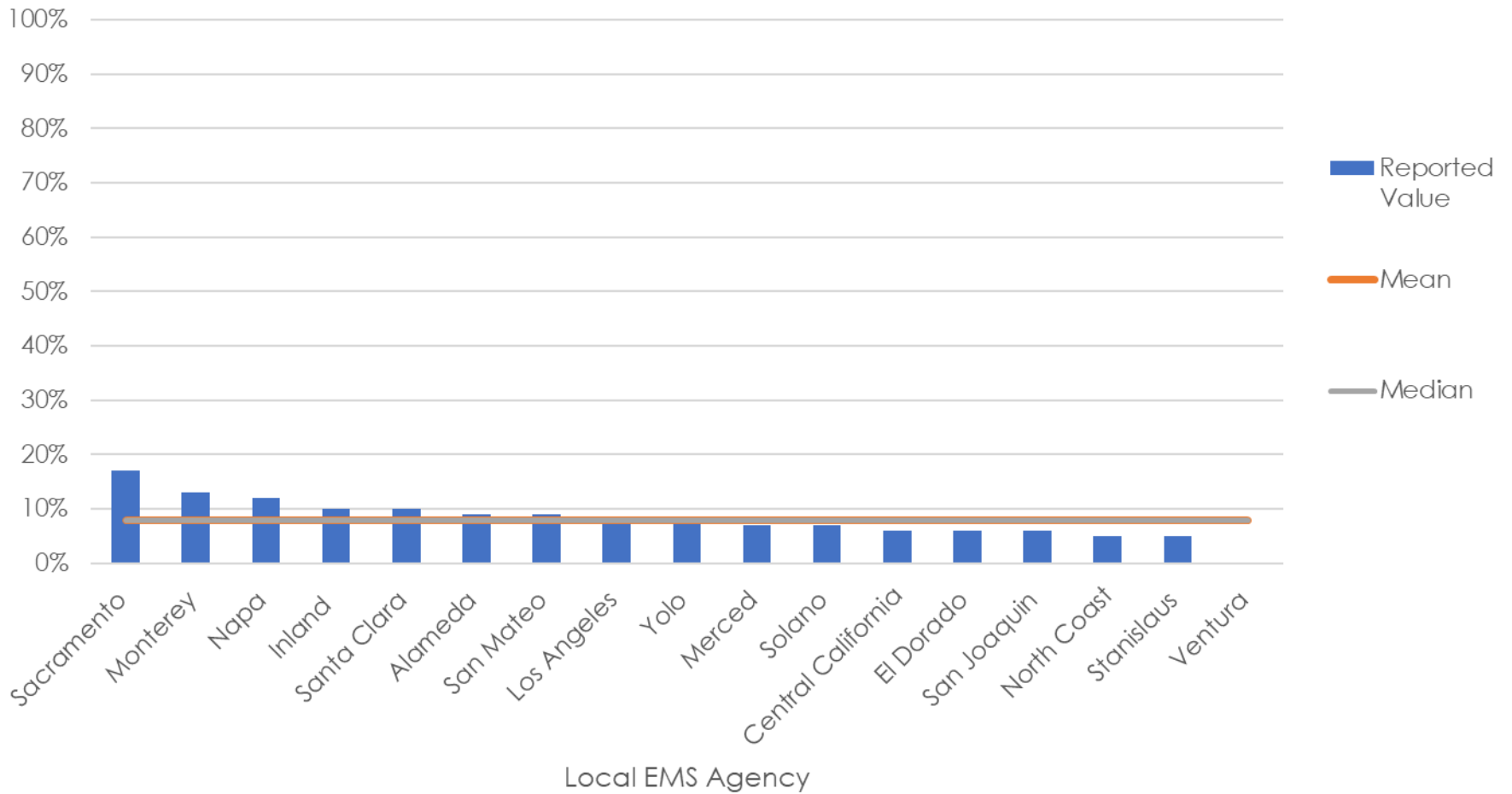
RST-5 focuses on the percentage of EMS transports originating from an Emergency Response (Primary Response Area) that included the use of lights and/or sirens during patient transport. For the 2023 reporting year, 17 of 34 LEMSAs provided RST-5 data. Of the 769,690 EMS transports originating from a 911 request, 58,938 (8%) included a lights and/or sirens transport. The median value was 8%. For this measure, a lower reported value generally indicates better quality.

One LEMSA was unable to report data for this measure due to specific data fields not being utilized in their region. One LEMSA reported documentation issues, including underutilized or inconsistent values in data element eDisposition.18 (Additional Transport Mode Descriptors). One LEMSA reported documentation issues with mapping data element eDisposition.18 (Additional Transport Mode Descriptors). This measure will be evaluated for future reporting years with consideration of LEMSA feedback.

[Link to RST-5 measure specifications](#)



**Chart 12: RST-5 911 Requests for Services that Included a Lights and/or Sirens Transport (V3.5)**



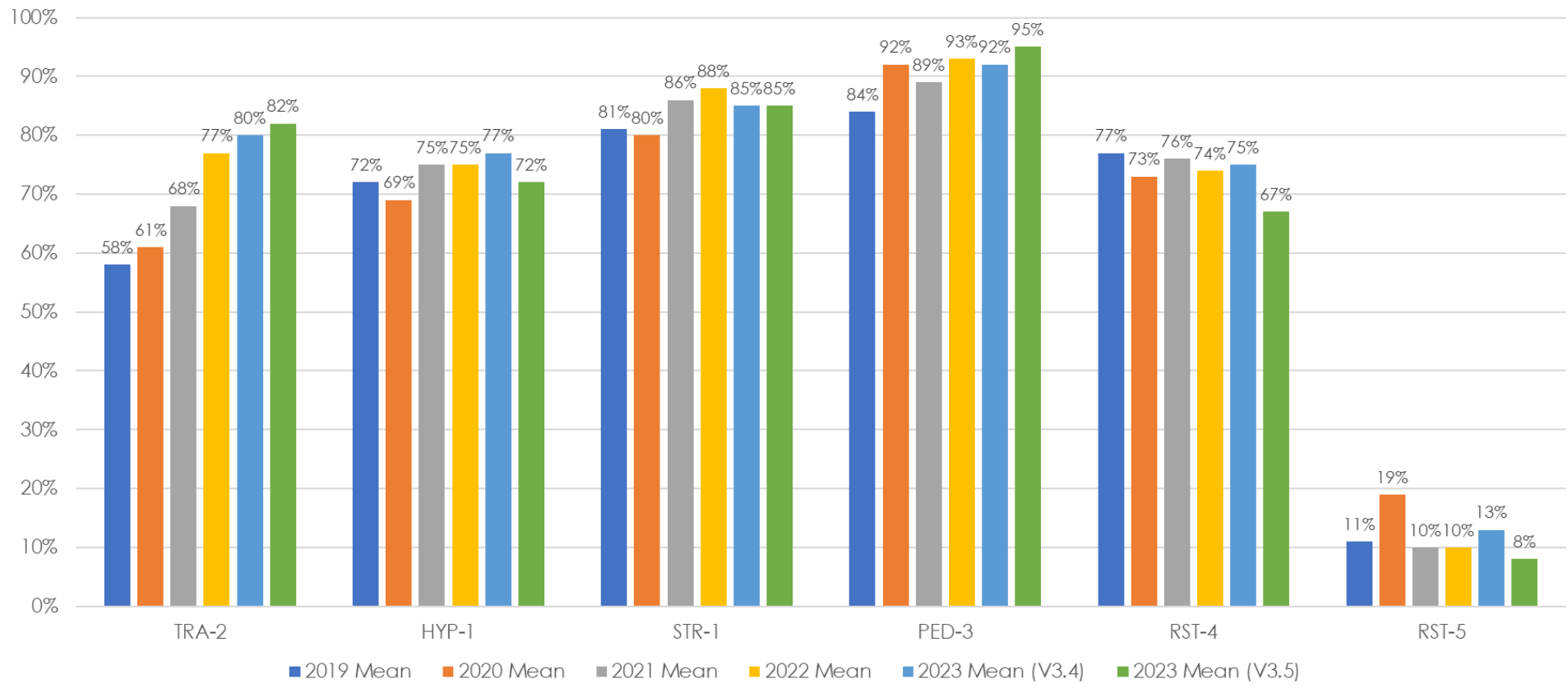
NEMSIS V3.5				
LEMSA	RST-5 Numerator	RST-5 Denominator	RST-5 Reported Value	Reporting Period
Ventura	0	11,364	0%	October 17 – December 31
North Coast	971	18,957	5%	
Stanislaus	2,242	41,741	5%	January – December
Central California	10,442	176,368	6%	January – December
El Dorado	109	1,775	6%	November – December
San Joaquin	4,393	70,382	6%	January – December
Merced	1,413	21,560	7%	January – December
Solano	2,668	39,792	7%	
Los Angeles	6,883	81,742	8%	October – December
Yolo	1,081	14,318	8%	
Alameda	10,452	115,444	9%	January – December
San Mateo	3,640	39,476	9%	
Inland	1,406	13,924	10%	December
Santa Clara	9,252	93,259	10%	December 6 – 31
Napa	155	1,322	12%	November – December
Monterey	3,696	27,454	13%	January – December
Sacramento	135	812	17%	

RST-5 Data	
Response Count	17
Response Rate (n=34)	50%
Numerator Total	58,938
Denominator Total	769,690
Mean	8%
Median	8%

Not Reporting: Coastal Valleys, Contra Costa, Imperial, Kern, Marin, Mountain Counties, Northern California, Orange, Riverside, San Benito, San Diego, San Francisco, San Luis Obispo, Santa Barbara, Santa Cruz, Sierra-Sacramento Valley, Tuolumne

# COMPARISON OF CORE QUALITY MEASURE RESULTS

Chart 13: California Core Quality Measures Averages 2019-2023



Average core quality measure results as reported by LEMSAs over the past four calendar years (2019-2023). Published reports for the 2019-2023 calendar years are accessible via the California Emergency Medical Services Authority Quality Improvement webpage at <https://ems.ca.gov/quality-improvement/>.

Please note, these results may not accurately represent EMS performance or changes in performance across the State over time. Results may be impacted by annual revisions to measure specifications; improvements in data collection, training, and other efforts at the LEMSAs level; variations in LEMSAs participation/reporting from year to year; and other considerations described in this report (refer to pages 8 and 13).

## APPENDIX: RESPONSES FROM LEMSAs FOR THE 2023 CORE QUALITY MEASURES REPORT

The following tables include data and information provided by LEMSAs for this report. All notes and feedback from the LEMSAs will be evaluated by EMSA and the core quality measures workgroup for future reporting years.

ALAMEDA COUNTY EMS AGENCY

NEMSIS V3.5   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	951	983	97%	All measure reports were built in ESO Insights with "OR" statements including both NEMSIS v3.4.0 and v3.5.0 data.
HYP-1	1,680	2,801	60%	All measure reports were built in ESO Insights with "OR" statements including both NEMSIS v3.4.0 and v3.5.0 data.
STR-1	3,049	3,188	96%	All measure reports were built in ESO Insights with "OR" statements including both NEMSIS v3.4.0 and v3.5.0 data.
PED-3	621	688	90%	All measure reports were built in ESO Insights with "OR" statements including both NEMSIS v3.4.0 and v3.5.0 data.
RST-4	242,819	328,003	74%	All measure reports were built in ESO Insights with "OR" statements including both NEMSIS v3.4.0 and v3.5.0 data.
RST-5	10,452	115,444	9%	All measure reports were built in ESO Insights with "OR" statements including both NEMSIS v3.4.0 and v3.5.0 data.

CENTRAL CALIFORNIA EMS AGENCY

NEMSIS V3.4   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,448	1,527	95%	
HYP-1	1,815	2,271	80%	
STR-1	2,641	2,641	100%	
PED-3	464	464	100%	
RST-4	143,507	256,128	56%	
RST-5	10,442	176,368	6%	

NEMSIS V3.5   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,448	1,527	95%	
HYP-1	1,815	2,271	80%	
STR-1	2,641	2,641	100%	
PED-3	464	464	100%	
RST-4	143,507	256,128	56%	
RST-5	10,442	176,368	6%	

CONTRA COSTA COUNTY EMS AGENCY

CY 2023   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,546	2,486	62%	
HYP-1	12,055	14,499	83%	
STR-1	2,172	2,432	89%	
PED-3	323	325	99%	
RST-4	81,230	126,298	64%	
RST-5	21,251	99,922	21%	

EL DORADO COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January 1 – November 14, 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	239	248	96%	All receiving facilities in El Dorado County are at least L3 trauma centers.
HYP-1	319	236	135%	We do not have a confident explanation for this statistical impossibility, though we suspect multiple PCRs per patient is likely the cause.
STR-1	400	583	69%	
PED-3	49	55	89%	
RST-4	27,808	19,427	143%	Most likely, the numerator exceeding the denominator is due to multiple ALS units dispatched on the same incident.
RST-5	1,531	11,618	13%	

NEMSIS V3.5   Reporting Period: November 15 – December 31, 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	19	20	95%	
HYP-1	31	47	66%	
STR-1	69	90	77%	
PED-3	13	14	93%	
RST-4	1,435	4,397	33%	
RST-5	109	1,775	6%	



**ADJUSTED NEMSIS V3.4 | Reporting Period: January 1 – November 14, 2023**

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	203	213	95%	
HYP-1	148	148	100%	EDCEMSA produced the FirstPass test based on e.vitals.18<60 and the list of e.medications.o3, but excluded calls that were not genuinely diabetic in nature. This value is accurate based on those adjustments.
STR-1	516	588	88%	See 'Overview' tab for explanation of the exceptions applied.
PED-3	52	57	91%	
RST-4	15,465	17,628	88%	For the adjustment, we altered the numerator and denominator to include ambulance responses only, in order to obviate the problem on numerator exceeding the denominator.
RST-5	1,243	13,880	9%	

**ADJUSTED NEMSIS V3.5 | Reporting Period: November 15 – December 31, 2023**

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	30	32	94%	
HYP-1	17	18	94%	
STR-1	88	89	99%	
PED-3	9	10	90%	
RST-4	156	178	88%	
RST-5	10	167	6%	

El Dorado County EMS Agency also included the following notes with their submission:

**Overview**

The first two NEMSIS tabs in this sheet reflect the data requested in the manner it was requested by EMSA. The El Dorado County EMS Agency considers much of these data inaccurate for reasons stated in the 'Notes' sections.

The subsequent NEMIS tabs reflect actual clinical performance against the core quality measures, as determined by a manual review of all 'denominator' PCRs that did not meet 'numerator' criteria through raw calculation. El Dorado County EMS considers these values to be accurate indicators of patient-centric 'quality' for the purposes of the Core Measures project.

While EDCEMSA values precise documentation and strenuously emphasizes proper utilization of NEMIS fields when documenting, we do not conflate the distinct objectives of 'good documentation' and 'good patient care'. We will continue to work with our provider agencies to proffer best documentation practices in the future, but we will also continue to prioritize good clinical decision making and competent execution when measuring system performance.

### **Adjustment Method**

EDCEMSA uses the 'FirstPass' utility in the FirstWatch software suite to perform daily monitoring of County Performance Measures compliance (inclusive of those mandated under CQM).

The denominator and numerator criteria are built into live 'tests' that indicate compliance or non-compliance in near-real-time. When a record flags for non-compliance, EDCEMSA staff review the record manually, considering contextual details not captured by the NEMIS fields alone. When closer review of the clinical ground truth justifies an exception, LEMSA staff apply the exception, which manually places the call into the numerator - or removes it from the denominator.

Common Exceptions

### **Common Exceptions**

"Documented in the Narrative"

This is the most common exception applied. Despite consistent messaging on the necessity of documentation in the NEMIS fields, many providers document findings like lung sounds or stroke screen results in the narrative instead of the designated fields. EDCEMSA marks the call compliant if the care is correct, even if the documentation isn't ideal.

"Primary Care by Another Unit"

As a fire-based EMS system, we have non-transporting ALS crews responding to almost every call with the ambulance. Since our documentation policy requires ALS providers to document their own actions (in line with Title 22, Sec.100171) we have many engine PCRs flagged for non-compliance even though the patient received the CQM indicated care, as documented on the primary crew's PCR.

"Treatment Not Indicated"

There are many cases where a provider selects a primary or secondary impression based on what they feel is the best fit, though they correctly assign a low level of confidence to that impression. As a result, a provider may withhold treatments or

procedures that would be indicated if stroke (for example) were genuinely suspected but are otherwise not indicated by the full clinical presentation.

These are just a few examples, but all exceptions proceed on the same principle of factoring in contextual details not captured by the NEMIS fields and arriving at a more patient-focused determination of quality.

IMPERIAL COUNTY EMS AGENCY

NEMESIS V3.4   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	165	175	94%	
HYP-1	208	257	81%	
STR-1	275	318	86%	
PED-3	42	42	100%	
RST-4	125	148	84%	
RST-5	140	2,848	5%	

INLAND COUNTIES EMERGENCY MEDICAL AGENCY

NEMESIS V3.4   Reporting Period: January – November 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	2,611	3,100	84%	
HYP-1	2,122	3,483	61%	
STR-1	5,370	5,493	98%	
PED-3	2,253	2,308	98%	
RST-4	440,384	454,976	97%	
RST-5	11,086	157,060	7%	

NEMESIS V3.5   Reporting Period: December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	206	288	72%	
HYP-1	209	311	67%	
STR-1	471	482	98%	
PED-3	221	225	98%	
RST-4	36,371	38,021	96%	
RST-5	1,406	13,924	10%	

LOS ANGELES COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – September 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	11,307	14,776	77%	
HYP-1	4,902	5,868	84%	
STR-1	9,480	9,485	100%	
PED-3	1,317	1,335	99%	
RST-4	N/A	N/A	N/A	Los Angeles County never on any NEMSIS data standard prior to October 1, 2023. Level of response to scene was not collected.
RST-5	196,428	444,266	44%	

NEMSIS V3.5   October – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	2,740	3,008	91%	
HYP-1	1,121	1,456	77%	
STR-1	2,609	2,667	98%	
PED-3	543	543	100%	
RST-4	59,474	181,861	33%	
RST-5	6,883	81,742	8%	

NEMESIS V3.5 Modified | October – December 2023

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	2,693	2,938	92%	eResponse.01 -- Excluded LA County's EOA providers: AMR (S19-50204), Falck (S19-51126), and Westmed (S19-50088) to avoid duplicate patients.
HYP-1	1,121	1,395	80%	eResponse.01 -- Excluded LA County's EOA providers: AMR (S19-50204), Falck (S19-51126), and Westmed (S19-50088) to avoid duplicate patients.
STR-1	2,531	2,586	98%	eResponse.01 -- Excluded LA County's EOA providers: AMR (S19-50204), Falck (S19-51126), and Westmed (S19-50088) to avoid duplicate patients.
PED-3	520	520	100%	eResponse.01 -- Excluded LA County's EOA providers: AMR (S19-50204), Falck (S19-51126), and Westmed (S19-50088) to avoid duplicate patients.
RST-4	59,474	181,861	33%	
RST-5	6,883	81,742	8%	

MARIN COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	260	267	97%	
HYP-1	122	150	81%	
STR-1	290	299	97%	
PED-3	72	79	91%	
RST-4	18,656	25,583	73%	
RST-5	1,154	13,299	9%	



MERCED COUNTY EMS AGENCY

NEMSIS V3.5   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	254	459	55%	
HYP-1	57	218	26%	
STR-1	463	463	100%	
PED-3	93	93	100%	
RST-4	22,603	29,918	76%	
RST-5	1,413	21,560	7%	

MONTEREY COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	714	799	89%	
HYP-1	417	488	85%	
STR-1	1,010	1,143	88%	
PED-3	165	209	79%	
RST-4	60,051	65,873	91%	
RST-5	3,696	27,454	13%	

NEMSIS V3.5   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	714	799	89%	***Our ESO system was unable to include all potentially relevant trauma centers on the EMSA list, though this does appear to be close to what we might have anticipated. ***
HYP-1	417	488	85%	*** We believe there are two issues with this number that significantly affect the outcome. One is provider documentation and ESO's system not capturing oral glucose/food/drink. ***
STR-1	1,010	1,143	88%	
PED-3	165	209	79%	
RST-4	60,051	65,873	91%	
RST-5	3,696	27,454	13%	

MOUNTAIN COUNTIES EMS AGENCY

NEMESIS V3.4				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	60	218	28%	
HYP-1	53	890	6%	
STR-1	131	197	66%	
PED-3	25	25	100%	
RST-4	7,152	9,638	74%	
RST-5	5,719	8,973	64%	

\*\*All CY 2023 data is in V3.4.0 format. V3.5.0 was not implemented until late 2023.

NAPA COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – November 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	110	112	98%	Queen of the Valley received most patients; Air resources (REACH and CHP) typically transport to Santa Rosa Memorial, but can go to John Muir, Children's Hospital, and/or UC Davis. This value includes all destinations despite Napa County EMS only designating Queen of the Valley as a Trauma Center.
HYP-1	117	134	87%	
STR-1	300	305	98%	Overlap of months due to some providers coming online with v3.5 before others. Only counts v3.4 PCRs in this report.
PED-3	55	55	100%	
RST-4	9,791	12,852	76%	"Count by patients..." statement is not part of this measure. Multiple units with multiple response mode descriptions based on EMD categories and requests.
RST-5	833	9,445	9%	

NEMSIS V3.5 | Reporting Period: November – December 2023

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	8	8	100%	Queen of the Valley received most patients; Air resources (REACH and CHP) typically transport to Santa Rosa Memorial, but can go to John Muir, Children's Hospital, and/or UC Davis. This value includes all destinations despite Napa County EMS only designating Queen of the Valley as a Trauma Center.
HYP-1	7	12	58%	
STR-1	42	44	95%	Overlap of months due to some providers coming online with v3.5 before others. Only counts v3.5 PCR's in this report.
PED-3	9	9	100%	
RST-4	1,393	1,817	77%	Count by patients..." statement is not part of this measure. Multiple units with multiple response mode descriptions based on EMD categories and requests.
RST-5	155	1,322	12%	

NORTH COAST EMS AGENCY

NEMESIS V3.5				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	50	113	44%	
HYP-1	165	206	80%	
STR-1	208	425	49%	
PED-3	56	65	86%	
RST-4	17,202	24,700	70%	
RST-5	971	18,957	5%	

NORTHERN CALIFORNIA EMS AGENCY

NEMSIS V3.4   Reporting Period: January – October 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	28	62	45%	
HYP-1	83	85	98%	
STR-1	108	145	74%	
PED-3	9	14	64%	
RST-4	6,086	8,713	70%	
RST-5	218	4,304	5%	

ORANGE COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – September 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	3,650	4,411	87%	Current data field elnjury.03 does not allow for exclusive selection of criteria as listed in the manual. Unable to capture entirely accurate denominator and numerator due to inclusion of "not" values and several criteria not listed in manual.
HYP-1	1,511	1,818	83%	Current data does not capture provision of patients' own food/drink as treatment administered. Improvement seen over 2022 data despite same issue.
STR-1	2,502	2,565	98%	Improvement seen over 2022 data.
PED-3	462	477	97%	Opportunity for improvement was noted in 2022 data. Current 2023 data shows great improvement.
RST-4	N/A	N/A	N/A	Data not utilized for reporting year due to specified data field(s) not utilized.
RST-5	N/A	N/A	N/A	Data not utilized for reporting year due to specified data field(s) not utilized.



RIVERSIDE COUNTY EMS AGENCY

NEMESIS V3.4   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	4,097	4,292	95%	Criteria includes eDisposition.30 but it was active since Oct 2023, so to pull the entire data, eDisposition.12 ="Patient treated and transported by this EMS unit" was used. Eisenhower Medical Center is a Trauma center but not listed in the 2023 CORE Measures manual. Significant increase in numerator/denominator volume for 2023 compared to previous years due only to change in Imagetrend ReportWriter query for "contains" v. "contains any". Change in query results in significantly more cases although no impact on reported value.
HYP-1	2,133	2,918	73%	Data is based on patient level using incident date/hour, name, age, gender. 3% decrease in reported value in 2023 v. 2022 and approximately 10% reduction in numerator and denominator in 2023 v. 2022. Same data by response level: Numerator: 2625, Denominator: 3856.
STR-1	5,909	5,962	99%	Data is based on patient level using incident date/hour, name, age, gender. Same data by response level: Numerator: 7278, Denominator: 7433.
PED-3	1,400	1,440	97%	Data is based on patient level using incident date/hour, name, age, gender.
RST-4	441,865	507,840	87%	Response level only. No patient level modifications made so all responses could be accounted for (Fire and Ambulance).
RST-5	15,507	175,582	9%	No modifications or patient level needed as criteria already includes eResponse.07="Ground Transport"; and eDisposition12="Treated, Transported by this EMS Unit" which accounts predominantly for patient level. Criteria includes eDisposition.30 but it was active since Oct 2023, so to pull the entire data, eDisposition.12 ="Patient treated and transported by this EMS unit" was used.

SACRAMENTO COUNTY EMS AGENCY

NEMESIS V3.4				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	2,077	2,135	97%	
HYP-1	1,476	2,116	70%	
STR-1	4,139	4,331	96%	
PED-3	584	584	100%	
RST-4	159,909	237,889	67%	
RST-5	11,237	106,635	11%	

NEMESIS V3.5				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	22	23	96%	
HYP-1	4	7	57%	
STR-1	40	40	100%	
PED-3	1	1	100%	
RST-4	670	850	79%	
RST-5	135	812	17%	

SAN BENITO COUNTY EMS AGENCY

NEMSIS V3.4 | Reporting Period: January – June 2023

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	45	45	100%	
HYP-1	18	21	86%	
STR-1	33	43	77%	
PED-3	3	4	75%	
RST-4	1,802	2,753	65%	
RST-5	105	1,100	10%	

SAN FRANCISCO EMS AGENCY

NEMESIS V3.4   Reporting Period: January – October 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,196	1,304	92%	Unknown value numerator=131 with 1304 denominator. Total reported value including both true and unknown is 99%. Deviation is likely due to documentation under eDisposition.23. San Francisco currently has 1 trauma center (L1) and all patients who meet trauma criteria are transported to the L1 trauma center. Since EMS providers only option for a trauma transport is our sole trauma center the total denominator is likely underreported. Actual reported data from Level 1 Trauma center Registry=2586 Scene to ZSFG Pt. for 2023.
HYP-1	709	757	94%	Numerator is self-calculated and deviates slightly from the defined metric. San Francisco treats hypoglycemia with oral glucose, glucagon, and dextrose 10%, however, dextrose 10% is categorized in our PCRs as a fluid rather than a medication. The numerator given was calculated using occurrences of Glucose and Glucagon in eMedication, or the words 'dextrose' or 'd10' in the narrative. The numerator given by the conventional definition would be 413.
STR-1	1,284	1,296	99%	Total for 2023 using NEMESIS 3.4 & 3.5 by definition is 1693. Using other descriptors in BioSpatial, actual number of patients with a positive stroke scale is 1984. Current PCRs uses "eVitals.Stroke Scale Group" for stroke assessment results instead of core definition "eVitals.Stroke Scale Score".
PED-3	146	152	96%	Combined total in NEMESIS version 3.4 & 3.5 in 2023 gives a numerator of 187 with denominator of 197.
RST-4	50,374	98,389	51%	Unknown value 11,362 of 98,389 (11.55%). True and unknown: Numerator=61,736 or 63% for NEMESIS 3.4. Providers using Inconsistent values in eResponse.24.
RST-5	5,004	64,964	8%	Unknown 2 of 64,964 (0%). Providers using inconsistent value eDisposition.18.

NEMESIS V3.5 | Reporting Period: November – December 2023

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	409	438	93%	Unknown value numerator=25 with 438 denominator. Total reported value including both True and unknown is 98%. Deviation is likely due to documentation under eDisposition.23. San Francisco currently has 1 trauma center (L1) and all patients who meet trauma criteria are transported to the L1 trauma center. Combined NEMESIS version 3.4 & 3.5 gives a true numerator of 1605 and denominator of 1742. Unknown values give a numerator of 131 and denominator of 1742. Total including true and unknown gives 1736 to 1742. Actual reported data from Level 1 Trauma center Registry=2586 Scene to ZSFG Pt. for 2023.
HYP-1	192	193	99%	The numerator is self-calculated and deviates slightly from the defined metric. San Francisco treats hypoglycemia with oral glucose, glucagon, and dextrose 10%, however, dextrose 10% is categorized in our PCRs as a fluid rather than a medication. The numerator given was calculated using occurrences of Glucose and Glucagon in eMedication, or the words 'dextrose' or 'd10' in the narrative. The numerator given by the conventional definition would be 106. Combined NEMESIS version 3.4 & 3.5 gives a numerator of 943 and denominator of 950.
STR-1	376	397	95%	Total for 2023 using NEMESIS 3.4 & 3.5 by description is 1693. Using other descriptors in BioSpatial actual number of patients with a positive stroke scale is 1984. Current PCRs uses "eVitals.Stroke Scale Group" for stroke assessment results instead of core definition "eVitals.Stroke Scale Score".
PED-3	41	46	89%	Combined total in NEMESIS version 3.4 & 3.5 in 2023 gives a numerator of 187 with denominator of 197.
RST-4	14,153	28,460	50%	Unknown 1396 of 28,460 (4.91%)15,549 or 55% for true and unknown. Providers using Inconsistent values in eResponse.24.
RST-5	0	0	0%	Providers using inconsistent values in eDisposition. 18. Using RST-5 metric in NEMESIS 3.5 it shows "No Data Available" for San

				Francisco, California benchmark, and other neighboring counties.
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SAN JOAQUIN COUNTY EMS AGENCY

NEMESIS V3.5   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	381	483	79%	Please note a potential variance of roughly 0.17% (0.00168). This is due to a variance in the mapping of 3.5.0 eDisposition.30 to 3.4.0 eDisposition.12 affecting records that originated from version 3.5.0.
HYP-1	852	990	86%	Codeless value "Contains any dextrose" unused due to ambiguous meaning. eMedications.03 criteria include a codeless value of "Contains any dextrose", but without any clarification. Is there a code with this description that the value just wasn't included for? Does this mean other medications not included in the list along the lines of D5, D10, etc.? Or maybe it is neither of those cases. A specific set is listed, then this "code" is tacked onto the end, and we're unclear as to its true intent and purpose, thus it was not used in gathering our data and results.
STR-1	1,354	1,558	87%	
PED-3	343	350	98%	Depending on the version of the document being used (across 3.4.0, 3.5.0 and modified versions of each of those documents), eVitals.12/14/16 seem inconsistent in their handling and inclusion of Pertinent Negative value <b>8801005 Exam Finding Not Present</b> . This may result in minor variances in data results depending on the version of the document used by a given entity.
RST-4	59,467	91,281	65%	
RST-5	4,393	70,382	6%	Please note a potential variance of roughly 0.17% (0.00168). This is due to a variance in the mapping of 3.5.0 eDisposition.30 to 3.4.0 eDisposition.12 affecting records that originated from version 3.5.0.





SAN LUIS OBISPO COUNTY EMS AGENCY

CY 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	302	318	95%	
HYP-1	115	161	71%	
STR-1	499	538	93%	
PED-3	61	63	97%	
RST-4	27,057	27,526	98%	
RST-5	1,406	18,821	7%	

SAN MATEO COUNTY EMS AGENCY

NEMESIS V3.5				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,722	2,176	79%	
HYP-1	275	359	77%	
STR-1	1,062	1,232	86%	
PED-3	135	136	99%	
RST-4	56,301	63,230	89%	
RST-5	3,640	39,476	9%	

SANTA BARBARA COUNTY EMS AGENCY

CY 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	572	663	86%	In addition to Santa Barbara Cottage Hospital (20398) and Marian Regional Medical Center (20267), providers use Landing Zone (62315) to list that they transferred to an EMS aircraft to facilitate quicker transport time to a definitive trauma care facility.
HYP-1	240	316	76%	
STR-1	556	610	91%	
PED-3	84	90	93%	
RST-4	74,562	83,407	89%	
RST-5	2,025	27,576	7%	

SANTA CLARA COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January 1 – December 5, 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	5	95	5%	
HYP-1	87	117	74%	
STR-1	286	408	70%	
PED-3	54	70	77%	
RST-4	21,000	26,098	80%	
RST-5	139	1,401	10%	

NEMSIS V3.5   Reporting Period: December 6 – 31, 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,442	5,245	27%	
HYP-1	1,060	1,490	71%	
STR-1	4,378	4,689	93%	
PED-3	674	831	81%	
RST-4	214,006	296,883	72%	
RST-5	9,252	93,259	10%	

# SIERRA-SACRAMENTO VALLEY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – October 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1,218	1,484	82%	Identified prehospital provider documentation inconsistencies related to eResponse.05 and eDisposition.12 which is currently being addressed to ensure data completeness/validity.
HYP-1	1,205	1,527	79%	
STR-1	3,132	3,798	82%	
PED-3	462	524	88%	
RST-4	56,918	94,075	61%	
RST-5	3,756	79,642	5%	Identified prehospital provider documentation inconsistencies related to eDisposition.12 which is currently being addressed to ensure data completeness/validity.

\*\*IMPORTANT NOTES: S-SV EMS prehospital providers transitioned from NEMSIS v3.4 to v3.5 on a staggered basis between April - October 2023 (with most provider transitions occurring in October 2023). Multiple attempts to run NEMSIS v3.5 Core Measures data in CEMIS on several different occasions were unsuccessful as the ImageTrend Report Writer kept 'timing out' and would not produce any valid data results. Additionally, it was recently identified that the NEMSIS v3.5 eResponse.05 descriptions were not correctly updated by ImageTrend (recently reported to and discussed with Mark Roberts), resulting in invalid values for some of the Core Measures that utilize this field. CY 2024 Core Measures data (if still produced by the LEMSA and not EMSA directly) will include all NEMSIS v3.5 data, but we were unable to produce NEMSIS v 3.5 FY 2023 Core Measures data for the reasons indicated.

SOLANO COUNTY EMS AGENCY

NEMESIS V3.5				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	655	672	97%	
HYP-1	351	355	99%	
STR-1	1,037	1,039	100%	
PED-3	1,042	1,053	99%	
RST-4	46,157	49,157	94%	
RST-5	2,668	39,792	7%	

STANISLAUS COUNTY EMS AGENCY

NEMESIS V3.5   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	90	104	87%	The results for this metric are not an accurate representation of the patients meeting Stanislaus County Trauma Triage criteria. There is a documentation issue, with the field providers not selecting the appropriate trauma triage criteria. When identifying patients that experienced a traumatic injury AND were identified as a "Trauma Alert" there were <b>1371 patients transported to a Level I or II Trauma Center.</b>
HYP-1	693	984	70%	The denominator for this metric includes first responders. The majority are BLS responders which causes a duplicate count for patients (295). If you only count ALS transport providers, the metric would be <b>591/689 = 85.78%</b>
STR-1	1,323	1,671	79%	This metric also includes BLS first responders which causes a duplicate patient count. The totals for ALS transport providers are <b>1013/1195 = 84.77%</b>
PED-3	317	342	93%	This metric also includes BLS first responders which causes a duplicate patient count. The totals for ALS transport providers are <b>317/342 = 92.69%</b>
RST-4	42,083	69,748	60%	
RST-5	2,242	41,741	5%	

TUOLUMNE COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January – December 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	10	21	48%	
HYP-1	66	79	84%	
STR-1	111	111	100%	
PED-3	25	27	93%	
RST-4	5,949	7,161	83%	
RST-5	391	5,505	7%	



VENTURA COUNTY EMS AGENCY

NEMSIS V3.4   Reporting Period: January 1 – October 16, 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	583	603	97%	
HYP-1	99	731	14%	
STR-1	0	1,166	0%	eVitals.29 is not utilized. We utilize a locally defined field to identify positive stroke scale patients.
PED-3	199	206	97%	
RST-4	0	110,471	0%	eResponse.24 not collected. eResponse.23 is collected for the purposes of documenting response mode.
RST-5	0	40,784	0%	eDisposition.18 not collected. eDisposition.17 is collected for the purposes of documenting response mode.

NEMSIS V3.5   Reporting Period: October 17 – December 31, 2023				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	218	235	93%	
HYP-1	99	176	56%	
STR-1	0	326	0%	eVitals.29 is not utilized. We utilize a locally defined field to identify positive stroke scale patients.
PED-3	73	74	99%	
RST-4	0	30,850	0%	eResponse.24 not collected. eResponse.23 is collected for the purposes of documenting response mode.
RST-5	0	11,364	0%	eDisposition.18 not collected. eDisposition.17 is collected for the purposes of documenting response mode.

YOLO COUNTY EMS AGENCY

NEMESIS V3.5				
Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	340	433	79%	
HYP-1	126	147	86%	
STR-1	370	402	92%	
PED-3	76	76	100%	
RST-4	22,792	24,517	93%	
RST-5	1,081	14,318	8%	

## QUESTIONS OR COMMENTS?



Additional information about the California Core Quality Measures Project, including reports for previous years, is accessible via the California Emergency Medical Services Authority Quality Improvement webpage at <https://emsa.ca.gov/quality-improvement/>.

For questions or comments about the California Core Quality Measures Report – CY 2023, please contact Audrey Vong at (916) 533-1856 or [EMSDData@emsa.ca.gov](mailto:EMSDData@emsa.ca.gov).

# California EMS System Core Quality Measures Report

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