



# LOS ANGELES COUNTY EMS SYSTEM REPORT

DECEMBER 1, 2025

ISSUE 14

## Message from the Director and Medical Director

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We are dedicating this 14<sup>th</sup> edition of the Los Angeles County Emergency Medical Services (EMS) System Data Report to Chris Clare who retired in September 2025. The EMS Agency first met Chris in 2007 when she came to the EMS Agency with an impressive nursing resume from various facilities both in and outside the County. Her variety of experiences as an emergency department nurse, nursing director, educator and mobile intensive care nurse was a good fit for the Prehospital Care Operations division. One of Chris' first assignment was to manage the EMS Data Repository of the Trauma and Emergency Medicine Information System (TEMIS). In this capacity, she laid the groundwork for transitioning our EMS providers from paper-based EMS reports to electronic data capture. She developed system reports and data dictionaries for each system component, established data clean-up processes and collaborated with our EMS provider agencies and 9-1-1 receiving hospitals to develop performance metrics utilizing TEMIS.

In 2013, Chris was the EMS Agency's Outstanding Nurse of the Year. In her tenure, Chris also managed the Hospital Programs and Data Systems Management and Re-



Richard Tadeo  
Director

search divisions. In these roles, she was instrumental in establishing and revising standards for 9-1-1 receiving hospitals and specialty care centers such as Trauma, STEMI, Stroke, Pediatric Medical Care, Emergency Department Approved for Pediatrics, Sexual Assault Response Team and Extracorporeal Cardiopulmonary Resuscitation. Her experience with establishing systems of care was essential in providing analysis to proposed specialty care center regulatory changes in California.

In 2022, Chris promoted to Nursing Director, which expanded her management role to include overseeing prehospital care, ambulance licensing, enforcement & investigation, policy and protocol revisions, and contract development.

Chris' extensive knowledge and expertise with the various EMS programs has enabled the EMS Agency to develop our comprehensive data systems to support the various EMS programs and regionalize systems of care. Chris' work has profoundly impacted the medical care of Los Angeles County residents who call 9-1-1 and has provided a solid foundation for our EMS system to continue evolving and innovating to meet the constantly



Dr. Nichole Bosson  
Medical Director

changing needs of our patients. We extend our best wishes for a happy retirement to Chris.

## 2025 System Demographics

### 69 9-1-1 Receiving Hospitals

- 37 EDAP (Emergency Department Approved for Pediatrics)
- 8 Pediatric Medical Centers
- 7 Pediatric Trauma Centers
- 15 Trauma Centers
- 21 Paramedic Base Hospitals
- 35 STEMI Receiving Centers
- 27 Comprehensive Stroke Centers
- 25 Primary Stroke Centers
- 44 Perinatal Centers
- 42 Hospitals with Neonatal ICU
- 13 SART (Sexual Assault Response Team)
- 13 Disaster Resource Centers
- 7 Psychiatric Urgent Care Centers

### EMS Provider Agencies

- 33 Public Safety EMS Provider Agencies
- 38 Licensed Basic Life Support Ambulance Operators
- 16 Licensed Advanced Life Support Ambulance Operators
- 16 Licensed Specialty Care Transport Ambulance Operators
- 2 Licensed Ambulette Operators

### EMS Practitioners

- 4,606 Accredited Paramedics
- 8,349 Certified EMTs by LA Co EMS Agency
- 877 Certified Mobile Intensive Care Nurses

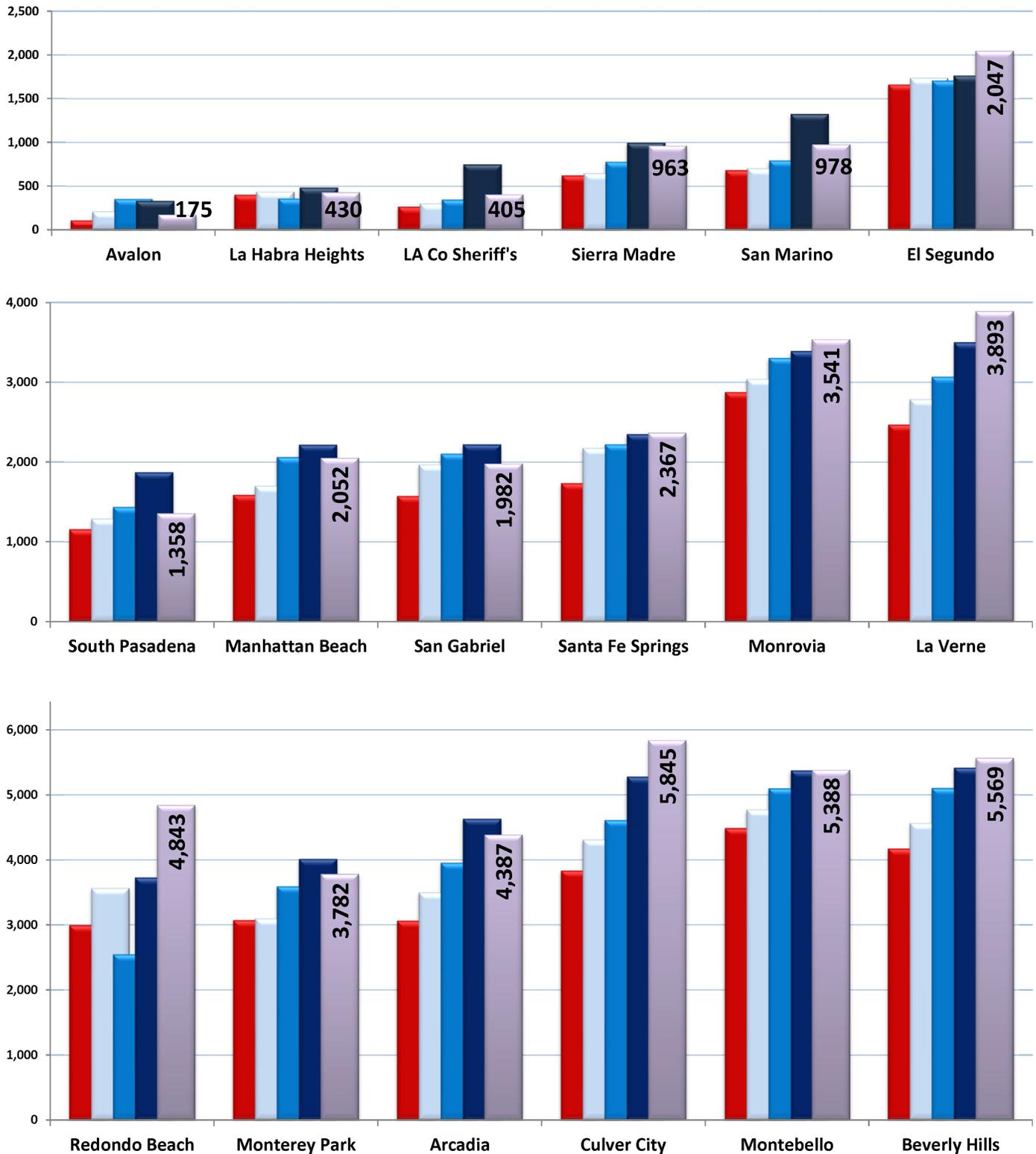
### SPECIAL POINTS OF INTEREST:

- Emergency Severity Index (page 7)
- Trauma Mechanism of Injury (page 10)
- STEMI Performance Metrics (pages 12-13)
- OHCA Overall Survival (pages 14-17)
- Stroke Performance Metrics (page 19)



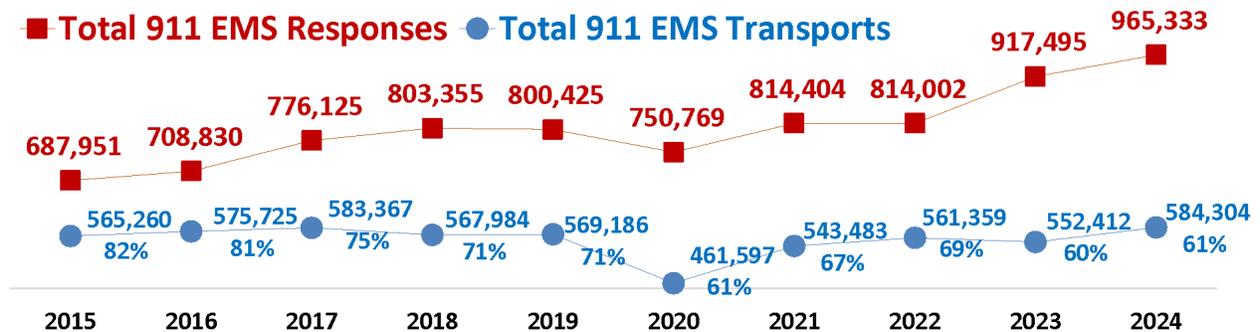
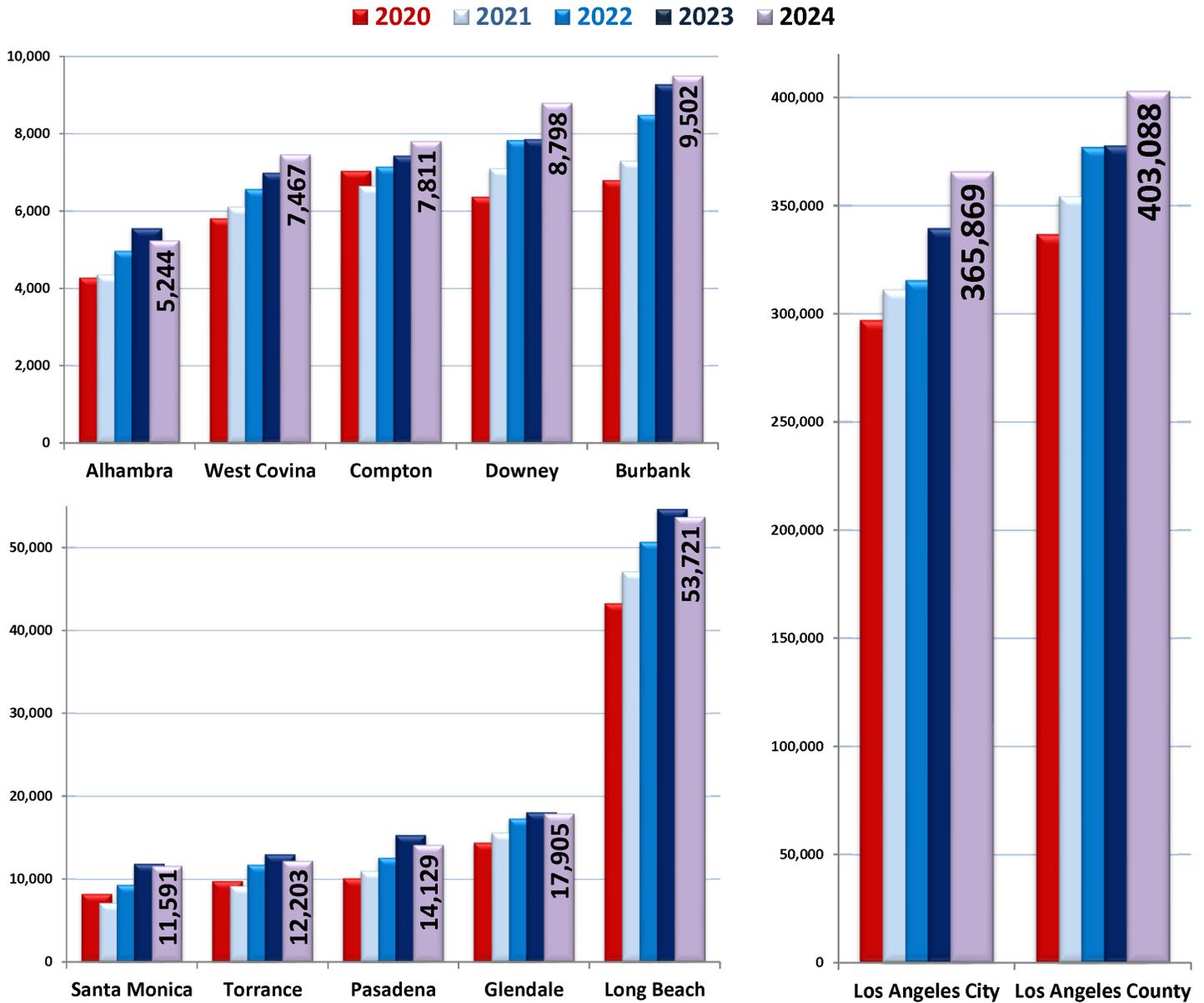
## EMS Responses by 9-1-1 Jurisdictional Provider Agency

■ 2020 ■ 2021 ■ 2022 ■ 2023 ■ 2024





## EMS Responses by 9-1-1 Jurisdictional Provider Agency

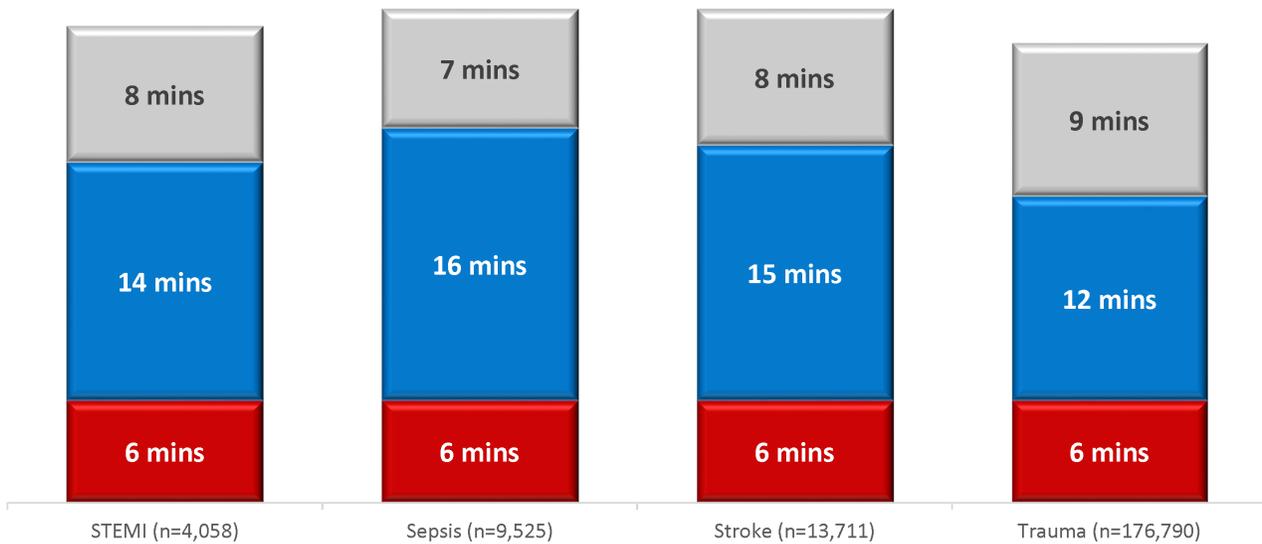




## 2024 EMS Times: Adult (Median)

### Provider Impressions: STEMI, Stroke, Sepsis and Traumatic Injuries

- Transport Time (Time Left Scene to Time Arrived at Hospital)
- Scene Time (Time Arrived at Scene to Time Left Scene)
- Response Time (Time of Dispatch to Time Arrived at Scene)



## 2024 EMS Times Adult: (90<sup>th</sup> Percentile)

- Transport Time (Time Left Scene to Time Arrived at Hospital)
- Scene Time (Time Arrived at Scene to Time Left Scene)
- Response Time (Time of Dispatch to Time Arrived at Scene)

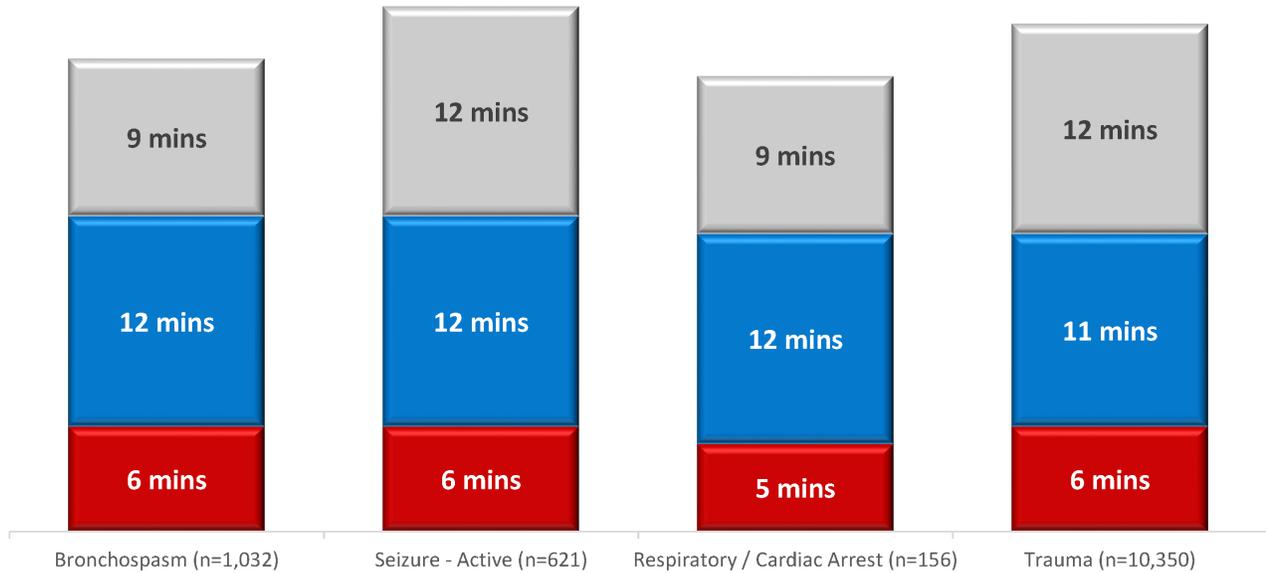




## 2024 EMS Times: Pediatric (Median)

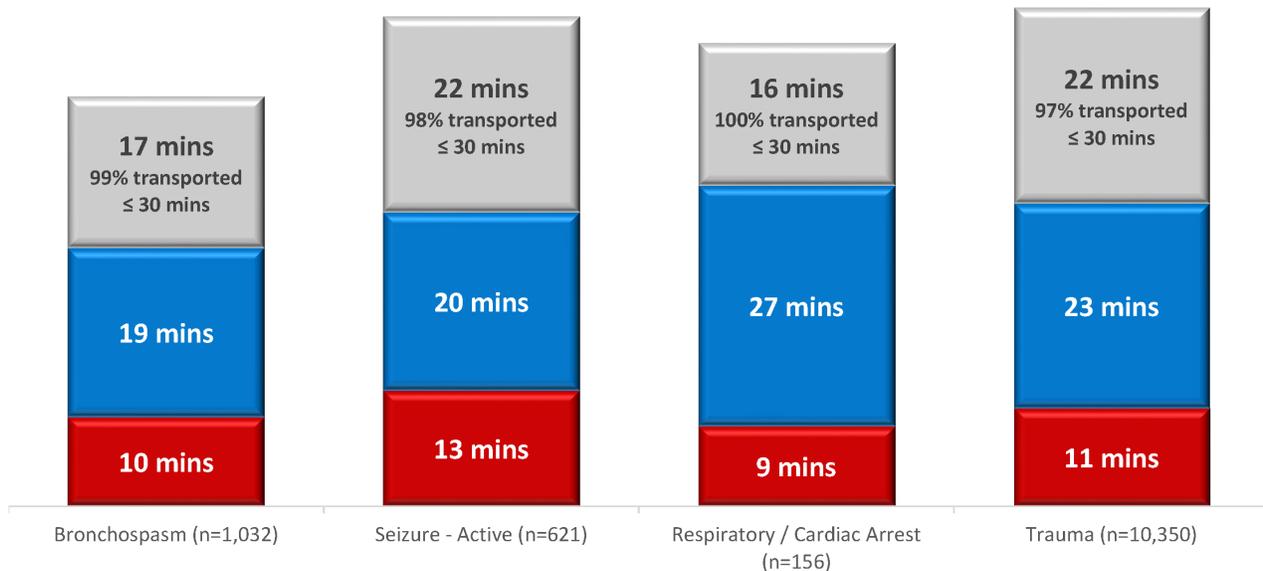
Provider Impressions: Bronchospasm, Seizure, Respiratory/Cardiac Arrest and Traumatic Injuries

- Transport Time (Time Left Scene to Time Arrived at Hospital)
- Scene Time (Time Arrived at Scene to Time Left Scene)
- Response Time (Time of Dispatch to Time Arrived at Scene)



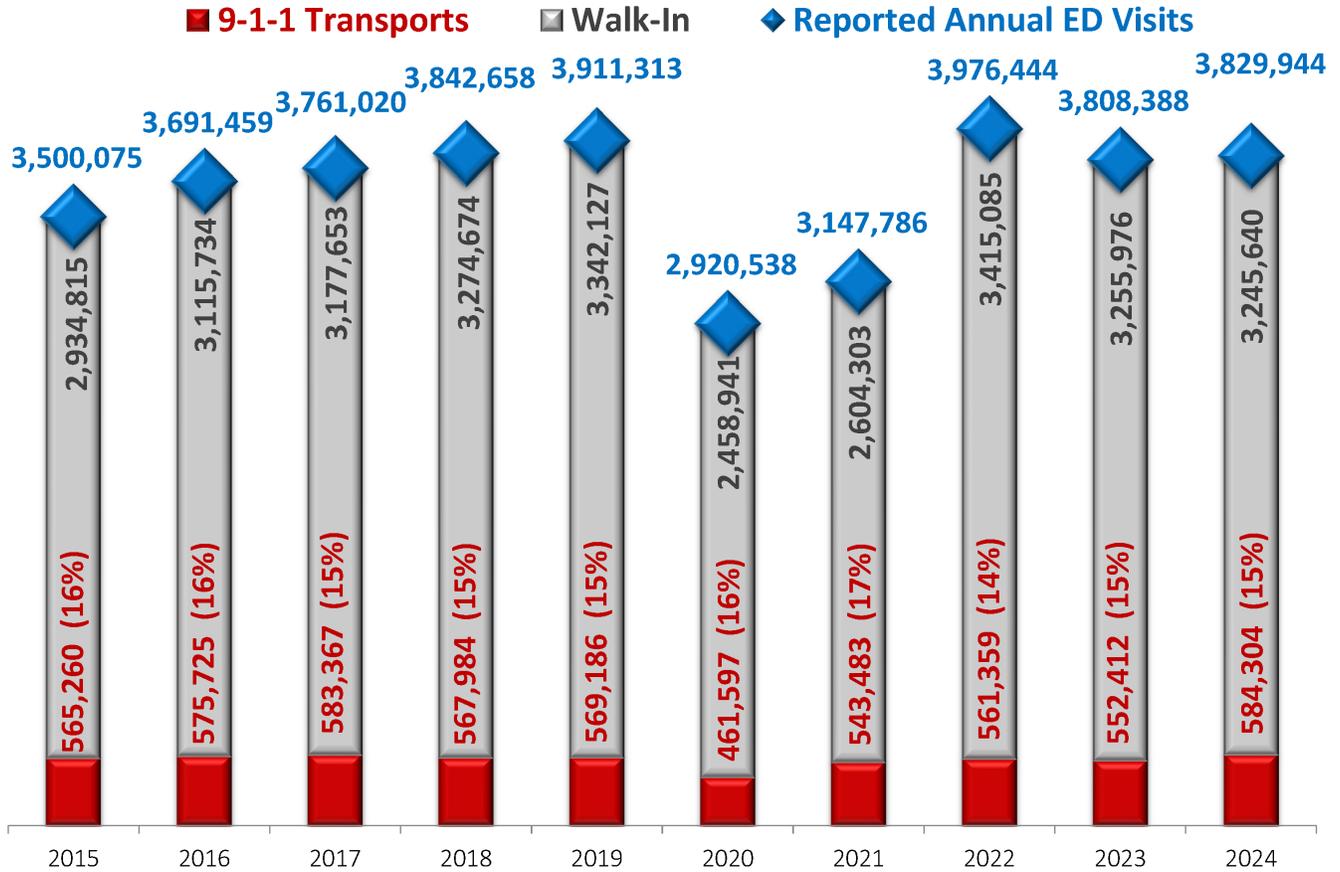
## 2024 EMS Times: Pediatric (90<sup>th</sup> Percentile)

- Transport Time (Time Left Scene to Time Arrived at Hospital)
- Scene Time (Time Arrived at Scene to Time Left Scene)
- Response Time (Time of Dispatch to Time Arrived at Scene)



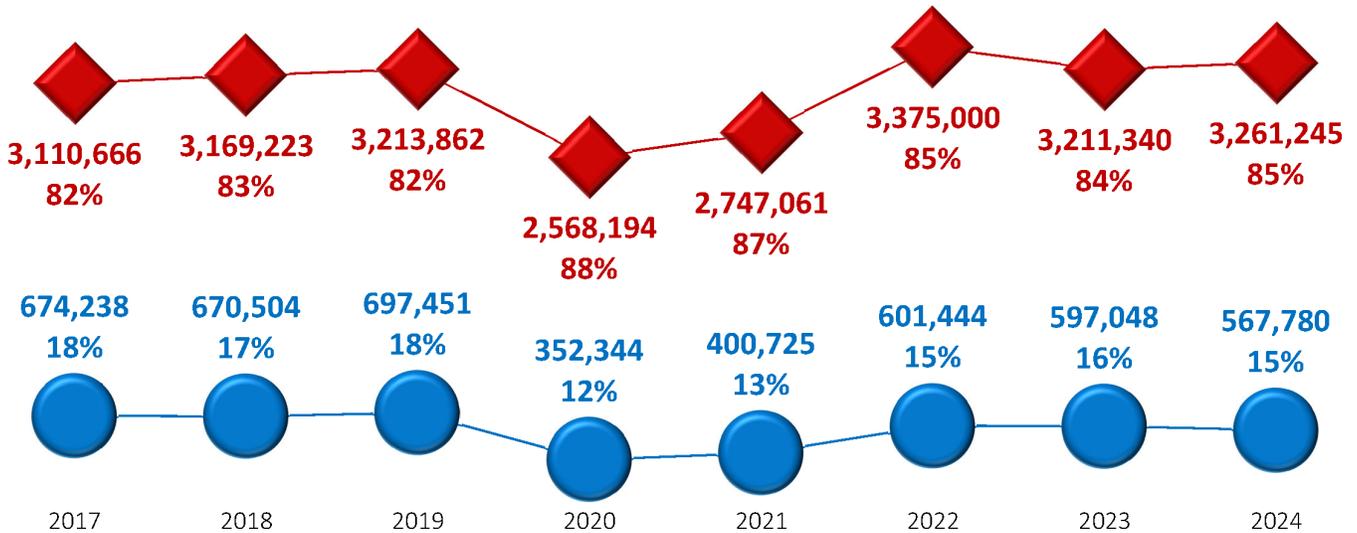


## Emergency Department Volume



### Adult: 15 years and older

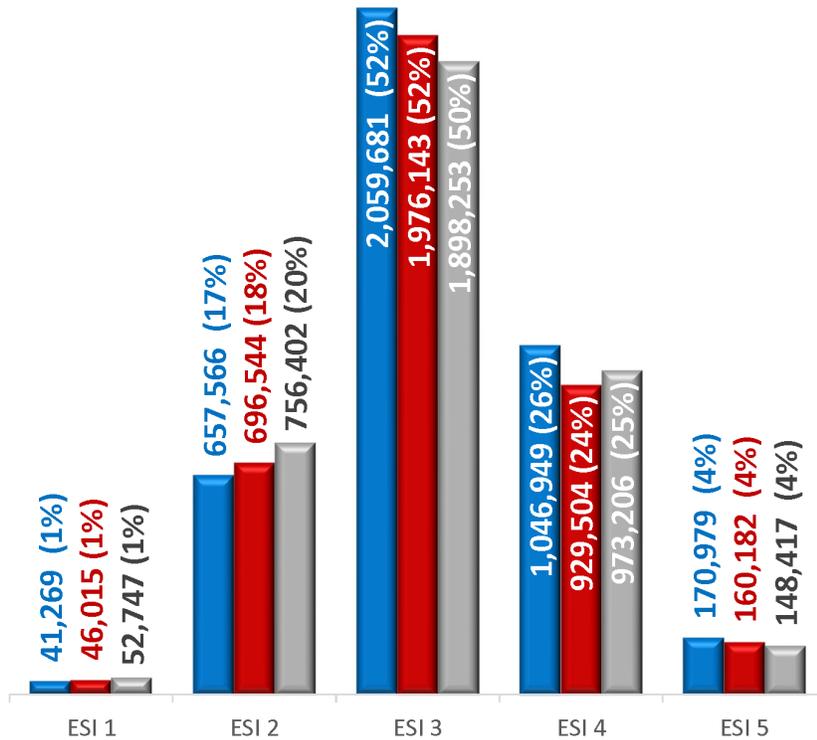
### Pediatric: 14 years and younger





## Emergency Severity Index (ESI)

■ 2022 ■ 2023 ■ 2024



**ESI 1**—Patient requiring immediate life-saving interventions: airway, emergency medications, or other hemodynamic; and/or any of the following conditions: intubated, apneic, pulseless, severe respiratory distress, SPO2 <90, acute mental status changes, or unresponsive (defined as nonverbal and not following commands (acutely)); or requires noxious stimulus

**ESI 2**—Patient with a high risk of deterioration or signs of a time critical problem; confused/lethargic/disoriented; or severe pain/distress. Pediatric fever is age 1 to 28 days; temperature >38.0 C.

**ESI 3**—Patient is currently stable but requires multiple different types of resources\* to diagnose or treat condition (e.g., diagnostic tests and procedures).

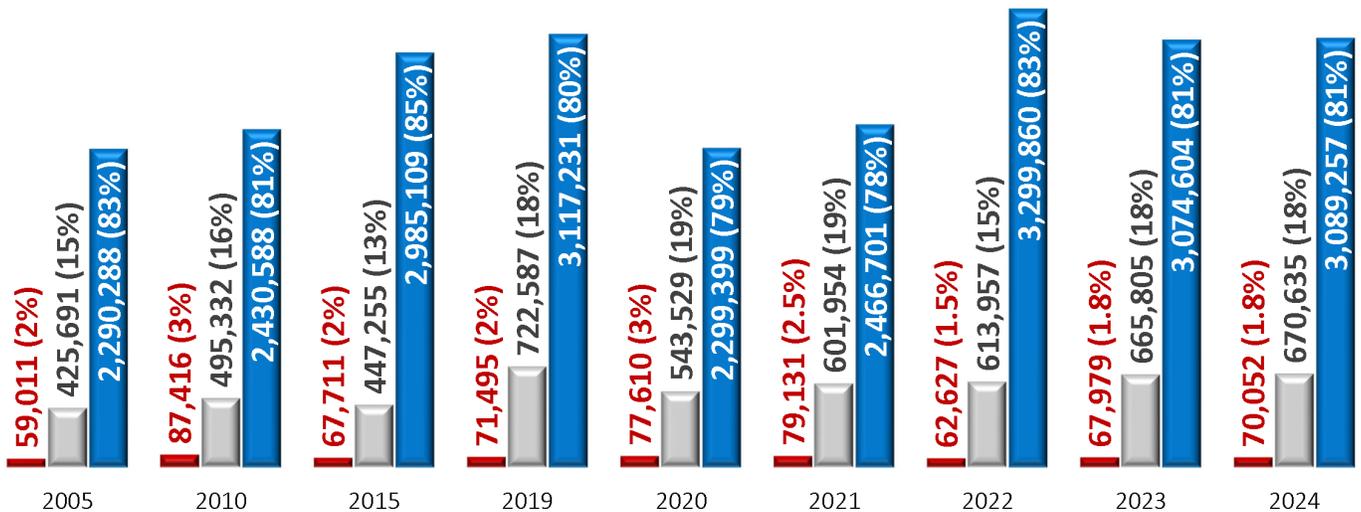
**ESI 4**—A patient requiring a single resource\* such as only an x-ray or sutures.

**ESI 5**—A patient not needing any resources\*.

\*The following are not considered resources: simple wound care-dressing/recheck; sling, PO medications, saline lock, history and physical-including a pelvic exam; point of care testing; tetanus immunization; prescription refills, crutches; splint

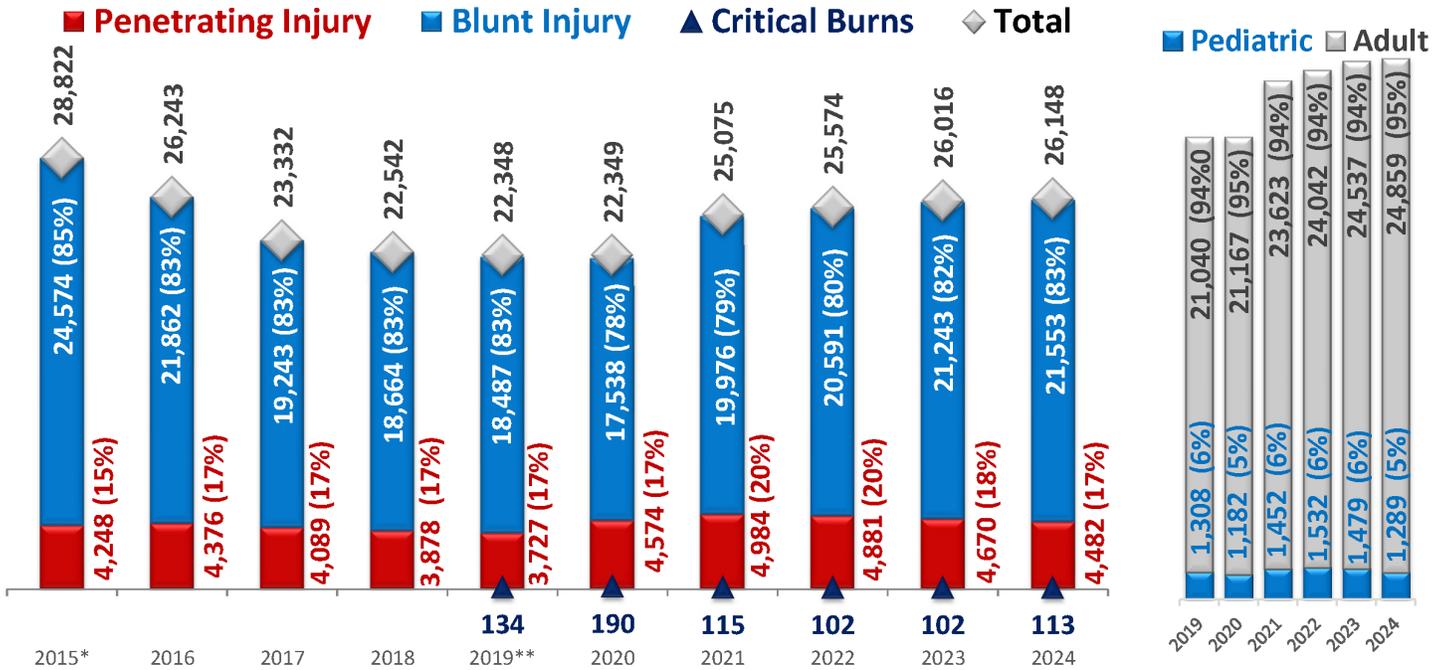
## ED Patient Disposition (walk-in and 9-1-1)

■ Admitted to Intensive Care Unit  
 ■ Admitted to Non-Intensive Care Unit Area  
 ■ Discharged from ED/24 hr Observation





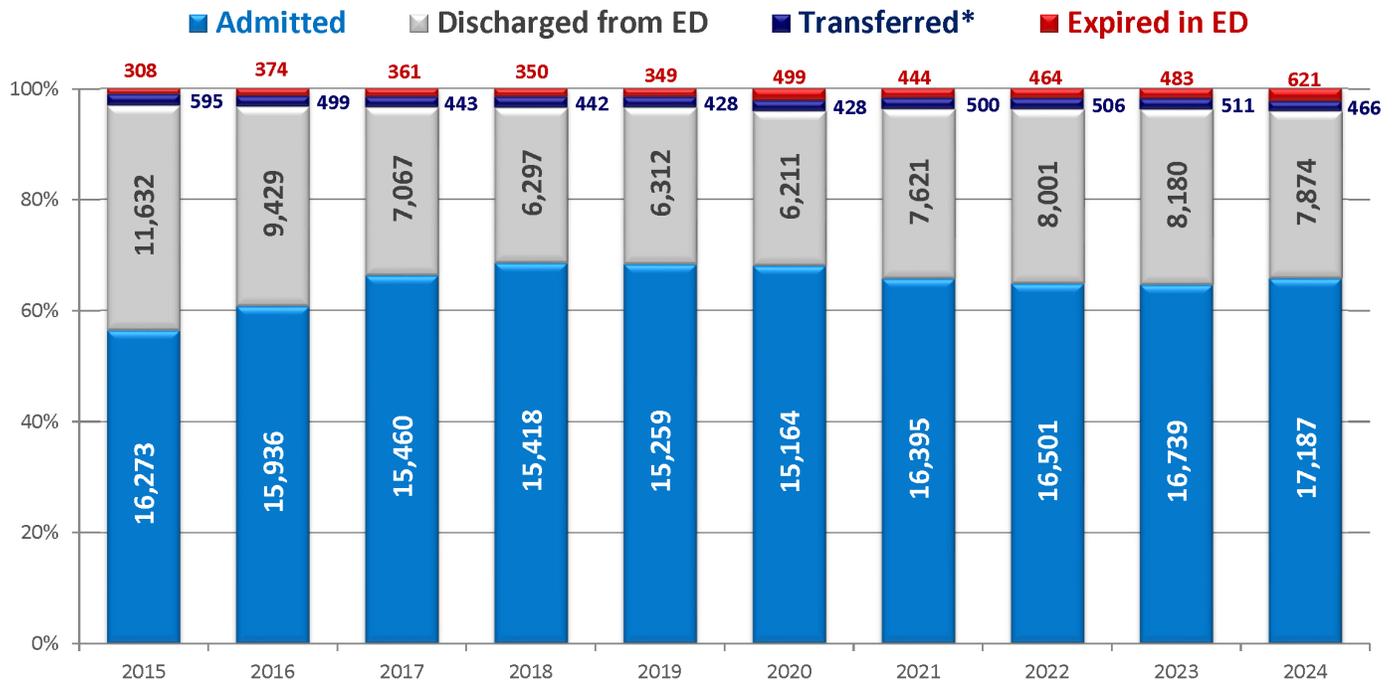
## Trauma Center Volume (Includes EMS transports and Walk-In patients who met trauma center criteria/guidelines)



\*2015: Trauma Center Registry inclusion criteria was revised.

\*\*2019: Critical Burns added as a Trauma Center Criteria

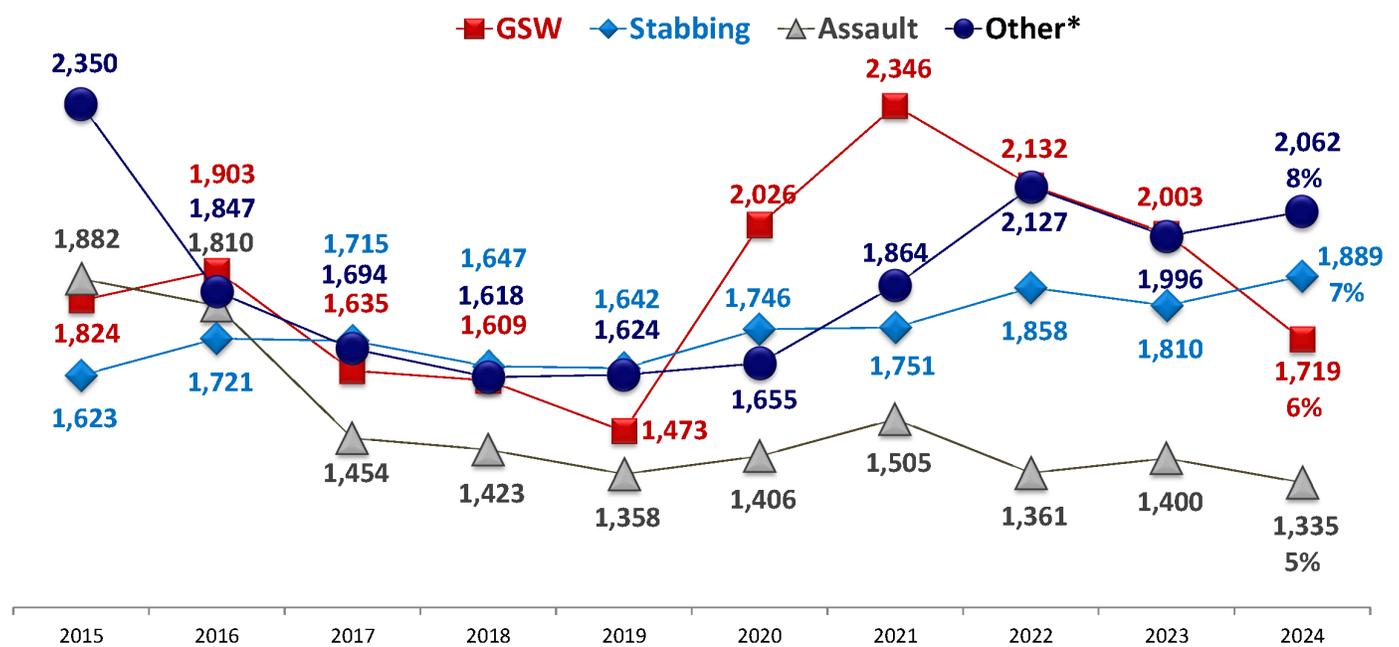
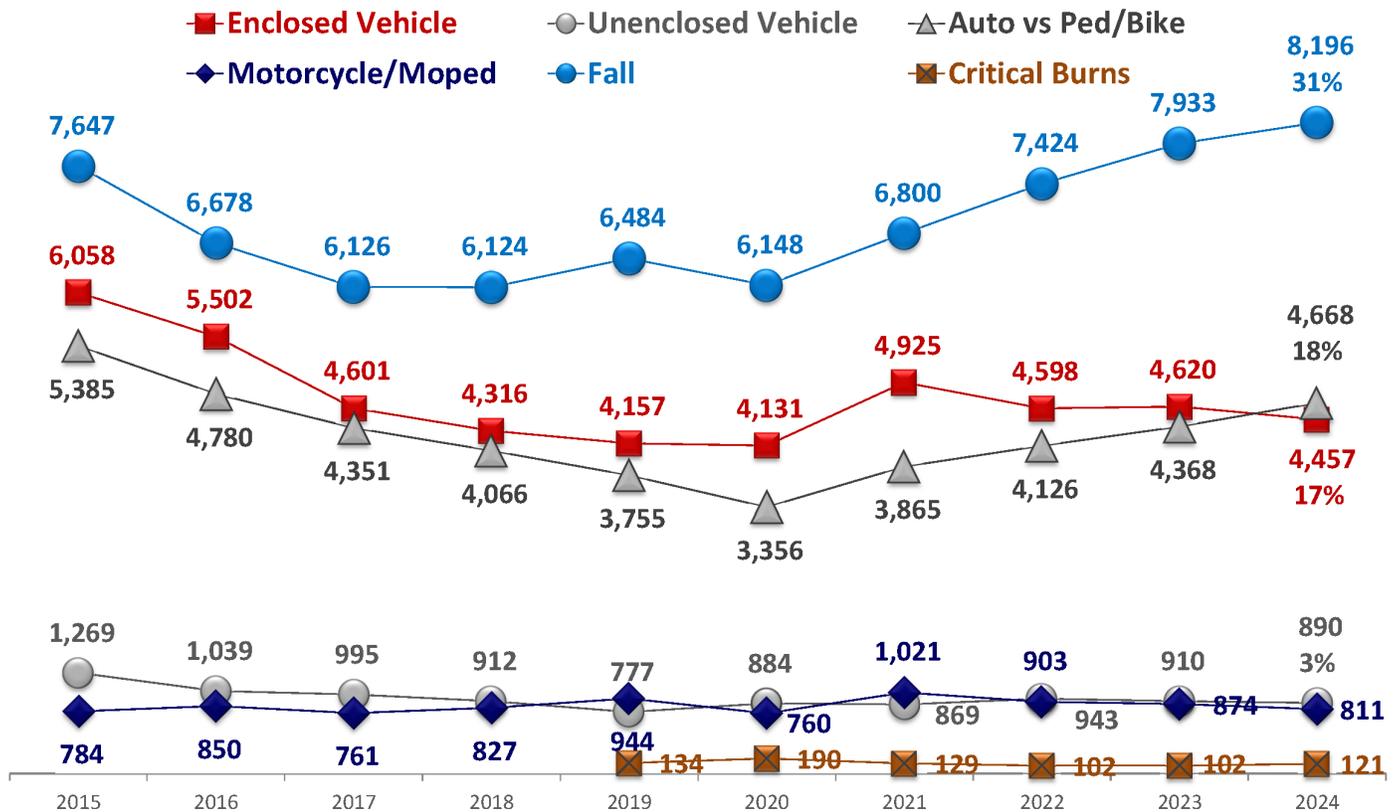
## Patient Disposition of Trauma Center Patients



\* Transferred to another health facility



## Mechanism of Injury: Patients Transported to Trauma Centers



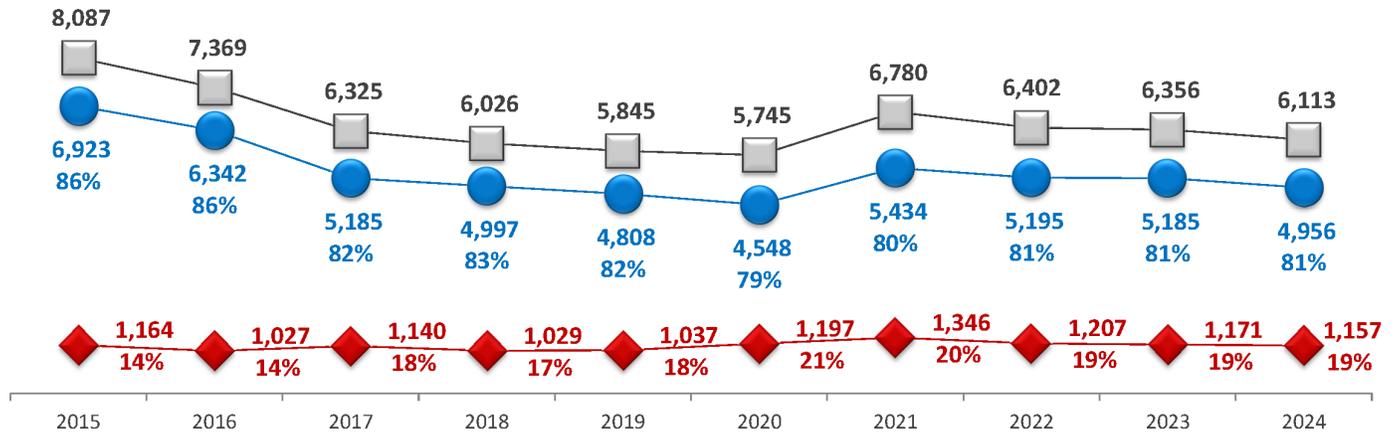
\* Other: includes Sports, Work Related, Self-Inflicted, Unknown



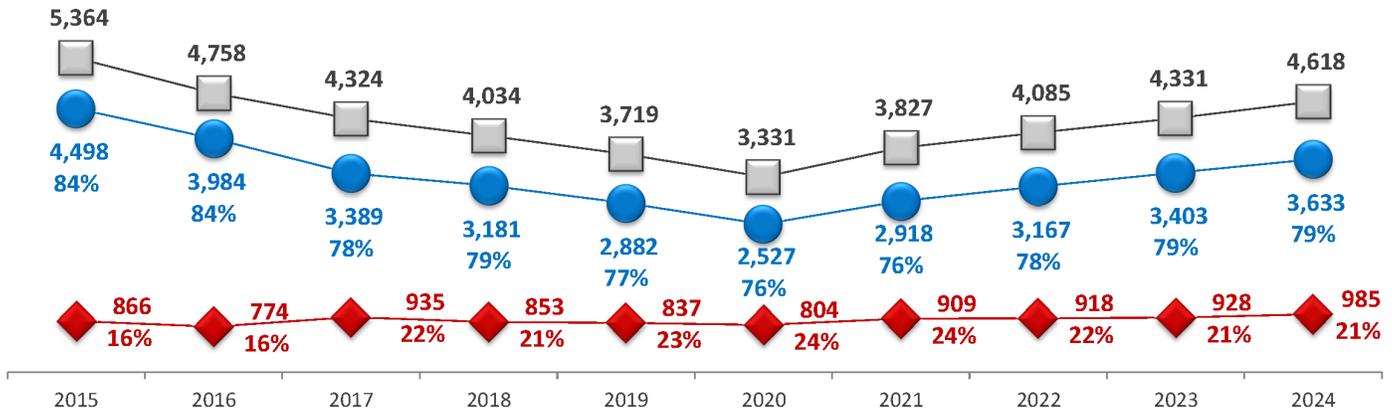
## Injury Severity Score by Mechanism of Injury

**Injury Severity Score (ISS):** Is an established medical score to assess trauma severity. It correlates with mortality, morbidity and hospitalization time after trauma. It is used to define the term major trauma. A major trauma (or polytrauma) is defined as the ISS being greater than 15.

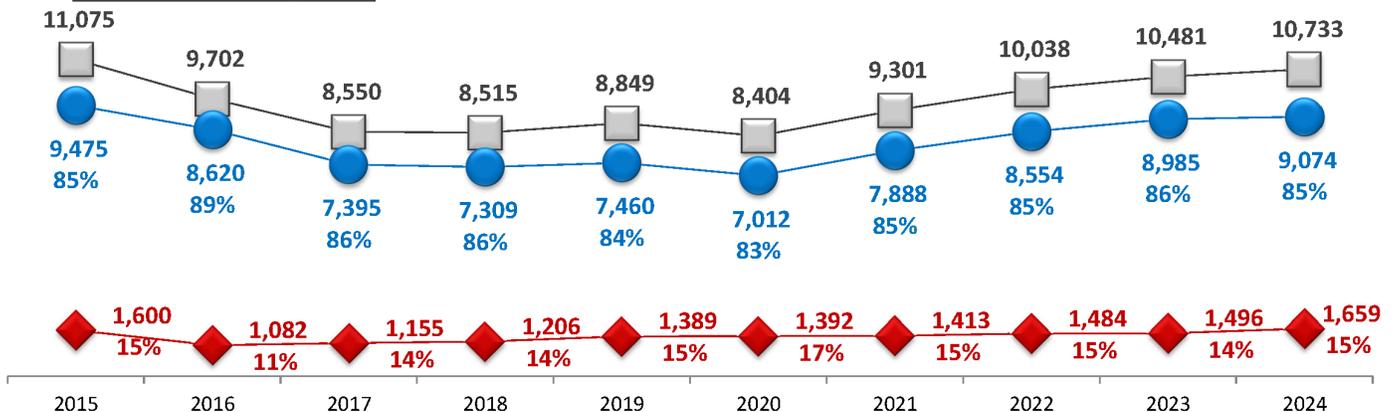
Motor Vehicle Accident ● 1 to 15 ◆ > 15



Automobile vs Pedestrian/Bicycle ● 1 to 15 ◆ > 15



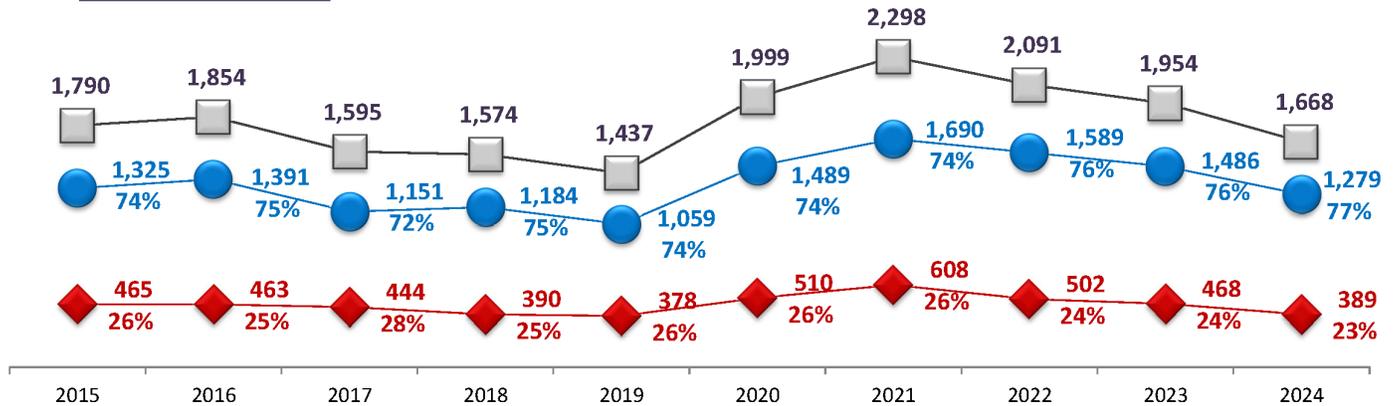
Other Blunt Injuries ● 1 to 15 ◆ > 15



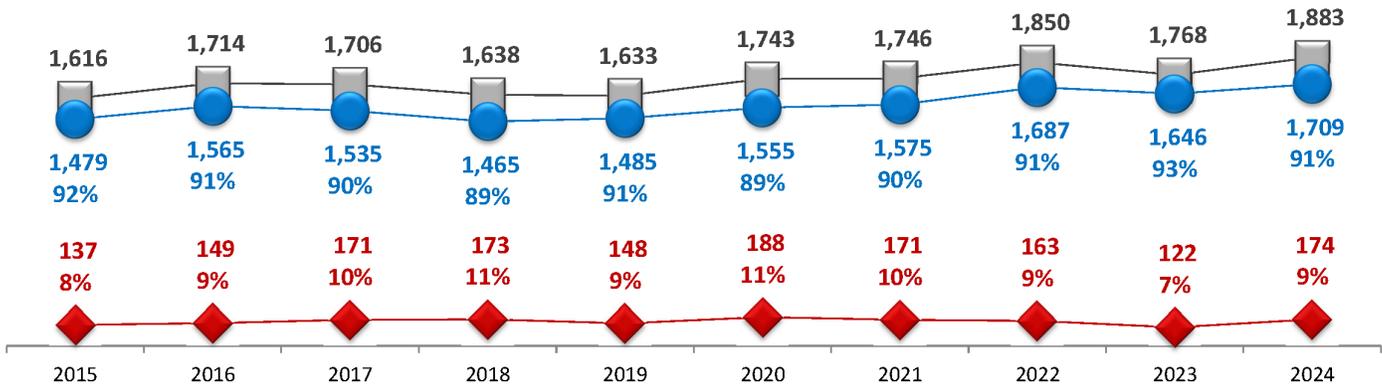


## Injury Severity Score by Mechanism of Injury

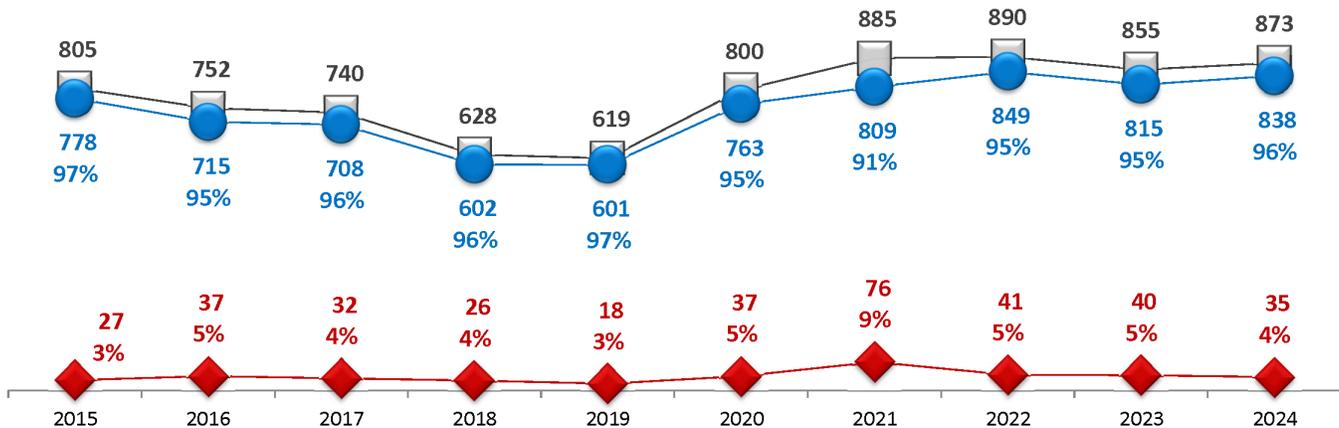
■ Gunshot Wound ● 1 to 15 ◆ > 15



■ Stab Wound ● 1 to 15 ◆ > 15



■ Other Penetrating Injury ● 1 to 15 ◆ > 15



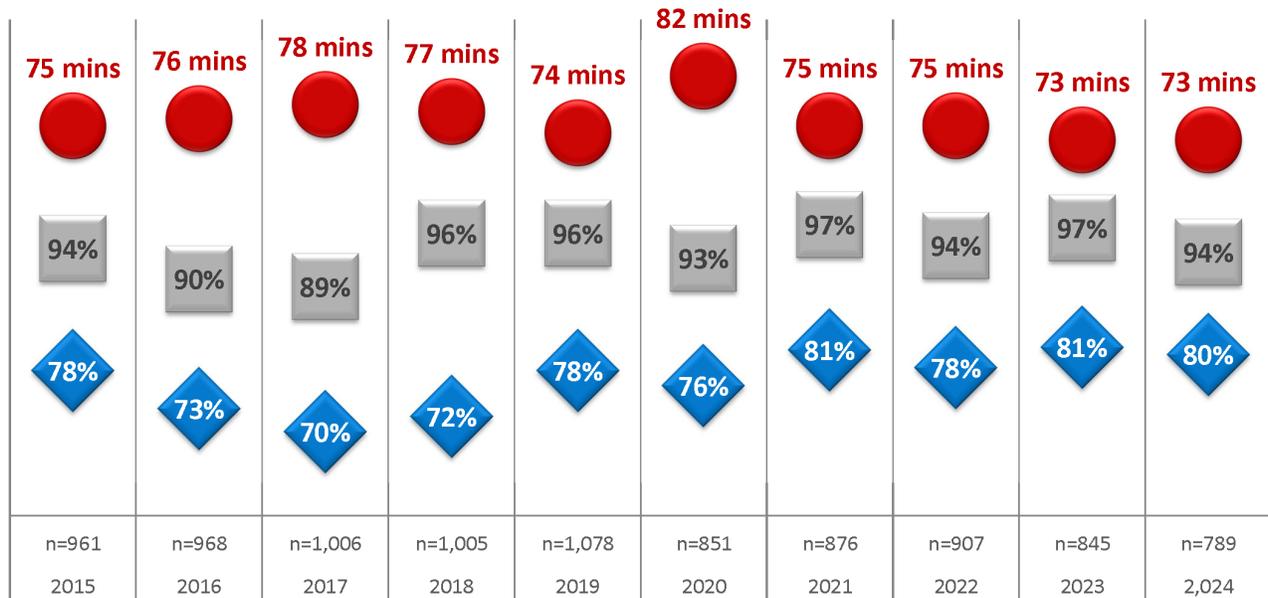


## ST-Elevation Myocardial Infarction (STEMI)

### STEMI Receiving Center: EMS Medical Contact-to-Device (E2B) Time

LA County Target: within 120 minutes 90% of the time

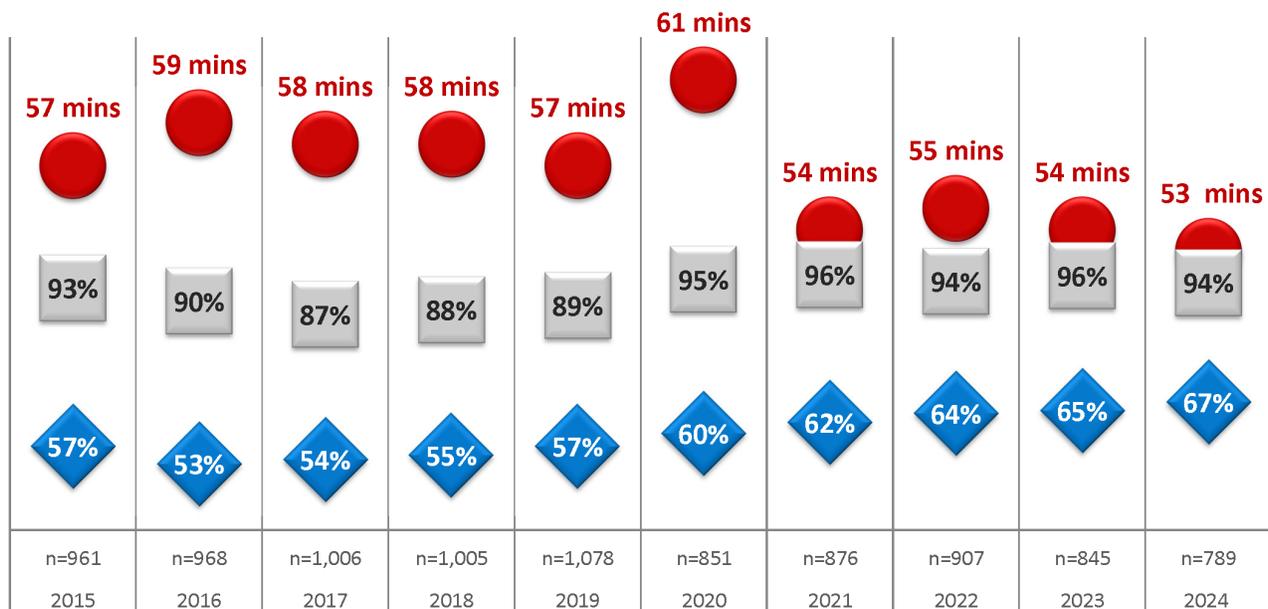
● Median E2B Time    ■ % with E2B < 120 mins    ◆ % with E2B < 90 mins



### STEMI Receiving Center: Door-to-Device (D2B) Time

LA County Target: within 90 minutes 90% of the time

● Median D2B Time    ■ % with D2B < 90 mins    ◆ % with D2B < 60 mins

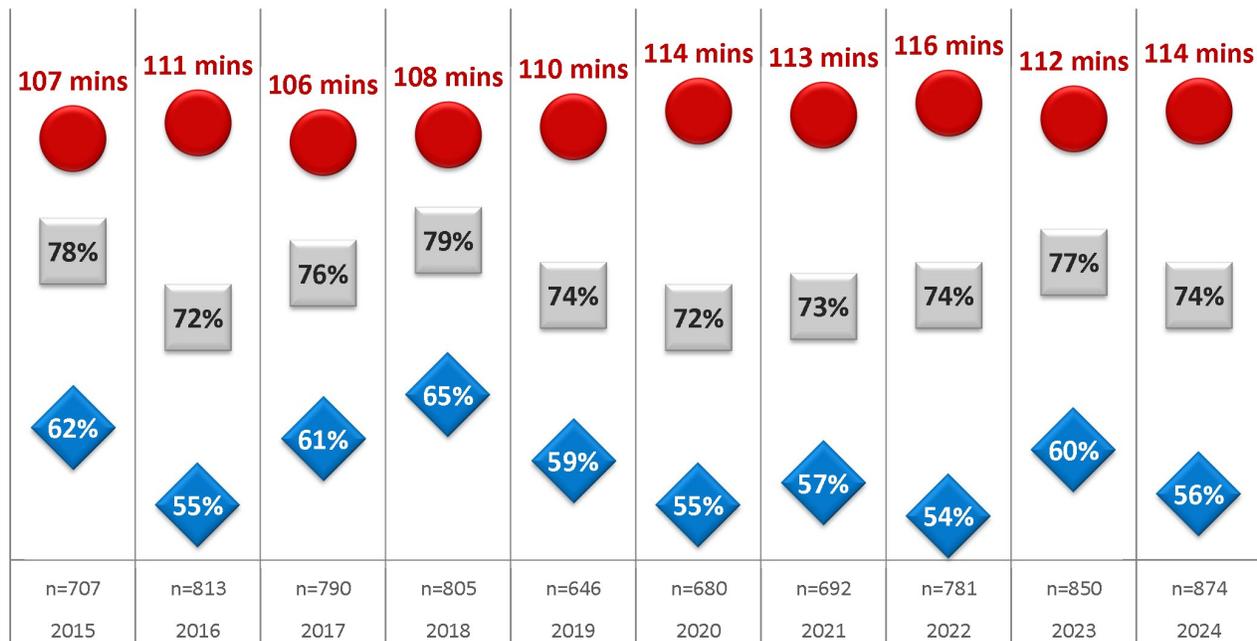




## STEMI Referral Facility: Door-to-Device (D2B) Time

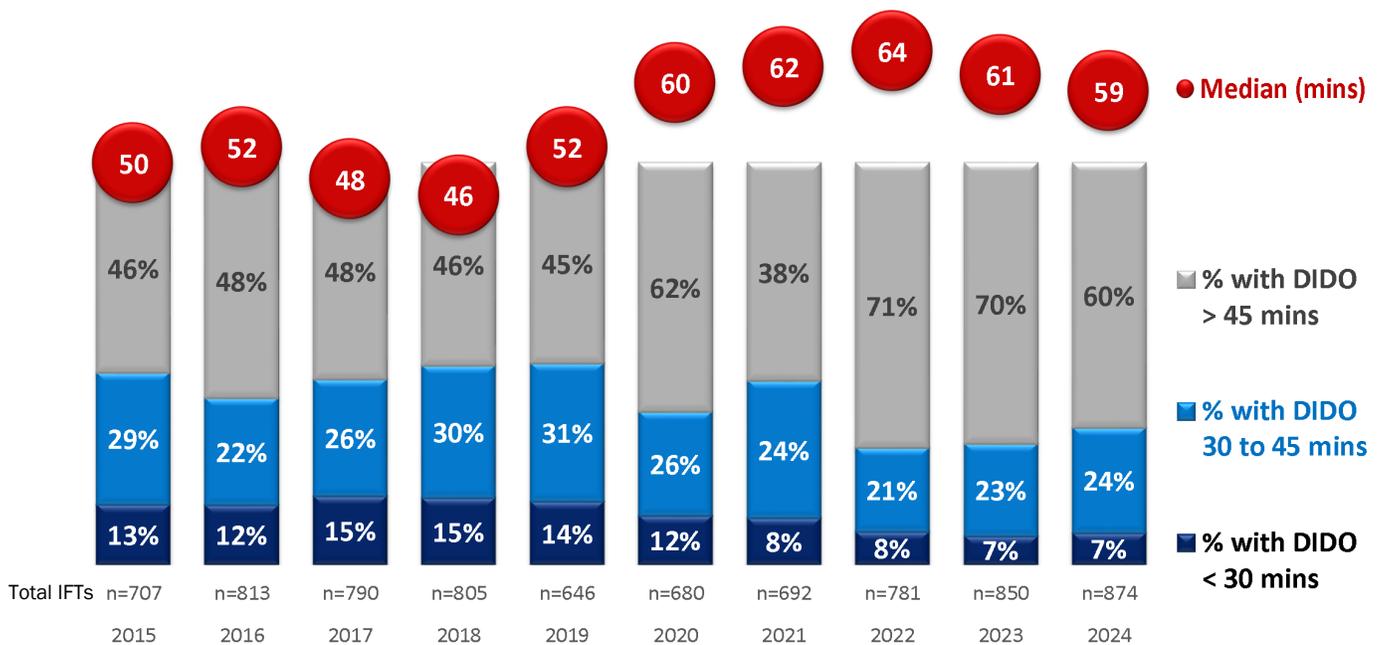
LA County Target: within 150 minutes 90% of the time

● Median SRF D2B Time    ■ % with SRF D2B < 150 mins    ◆ % with SRF D2B < 120 mins



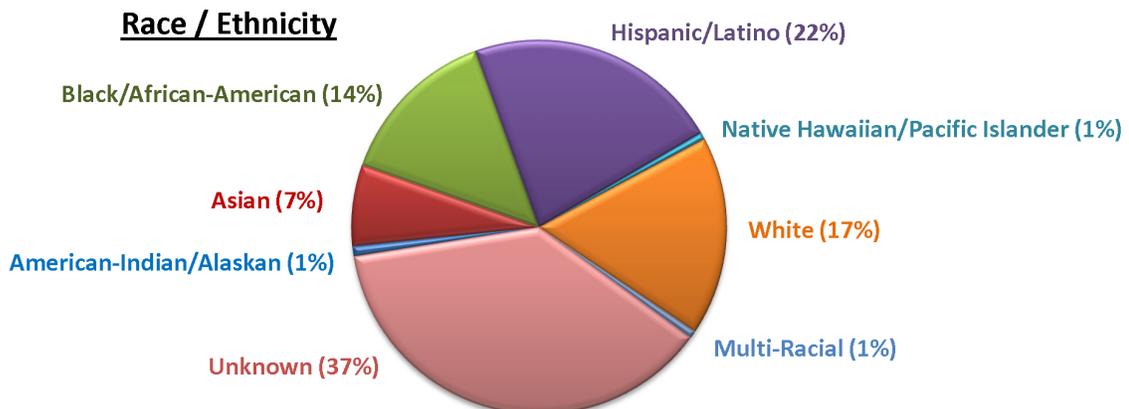
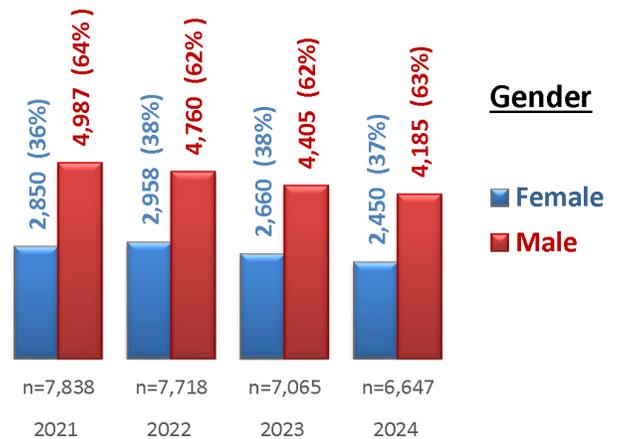
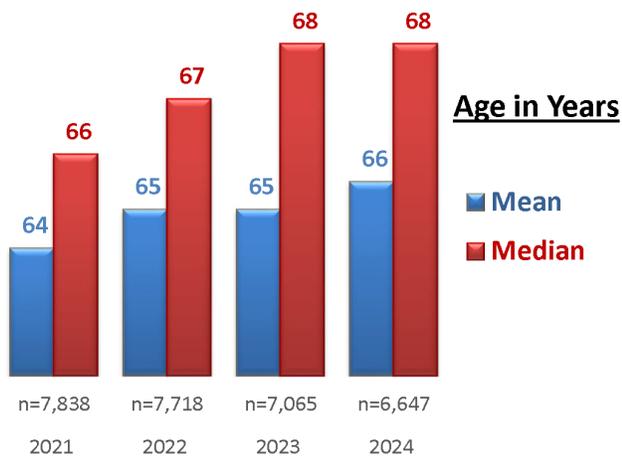
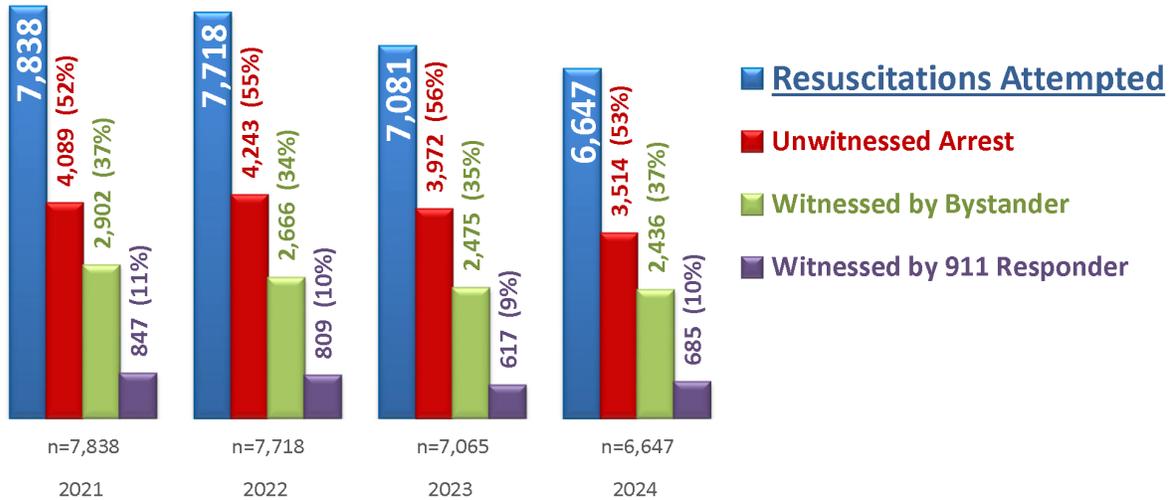
## STEMI Referral Facility: Door-in Door-out (DIDO) Time

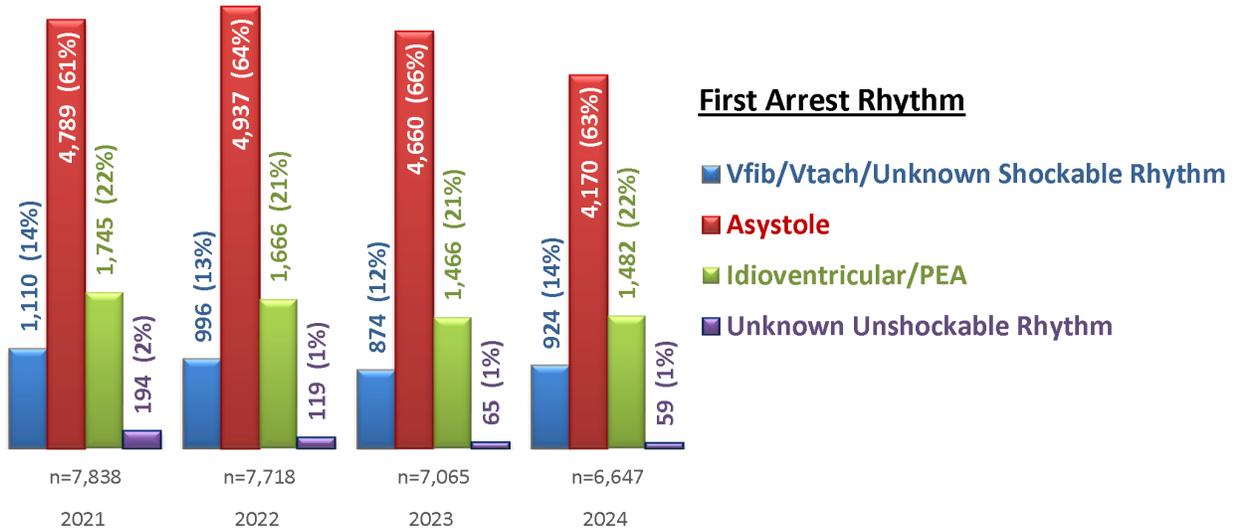
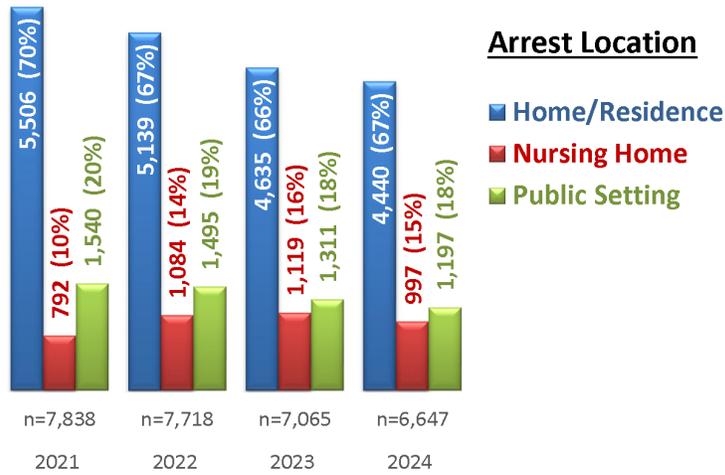
LA County Target: < 30 minutes



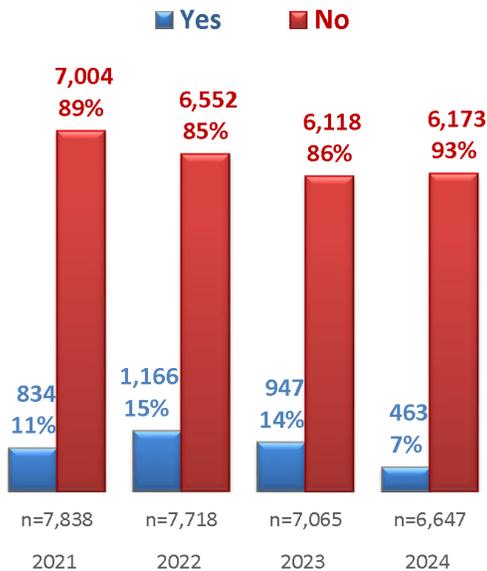


## Out of Hospital Cardiac Arrest (OHCA) Non-Traumatic Etiology

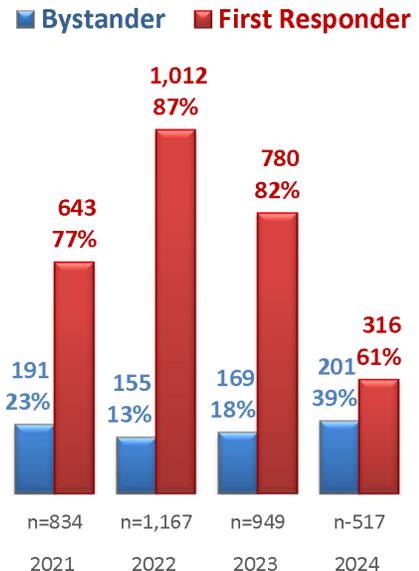




### Was an AED Applied prior to EMS Arrival?

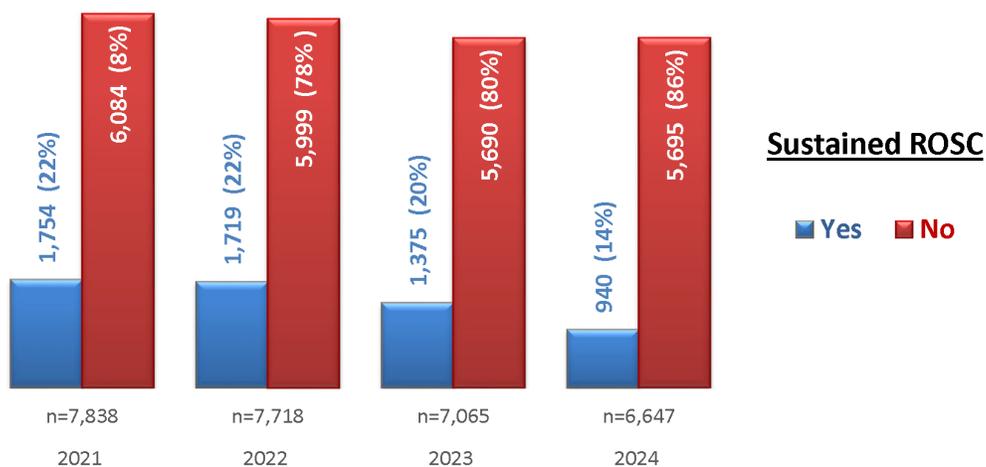
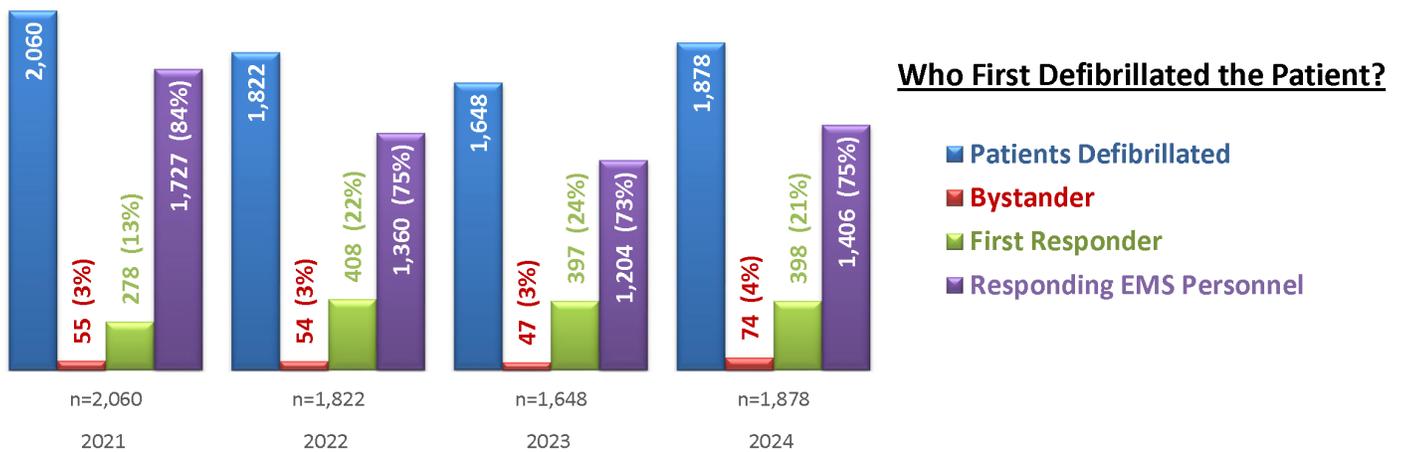
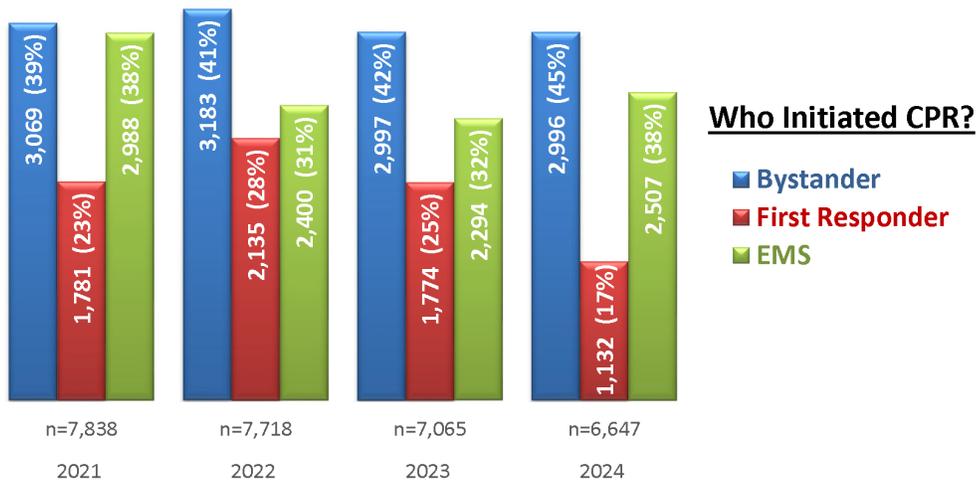


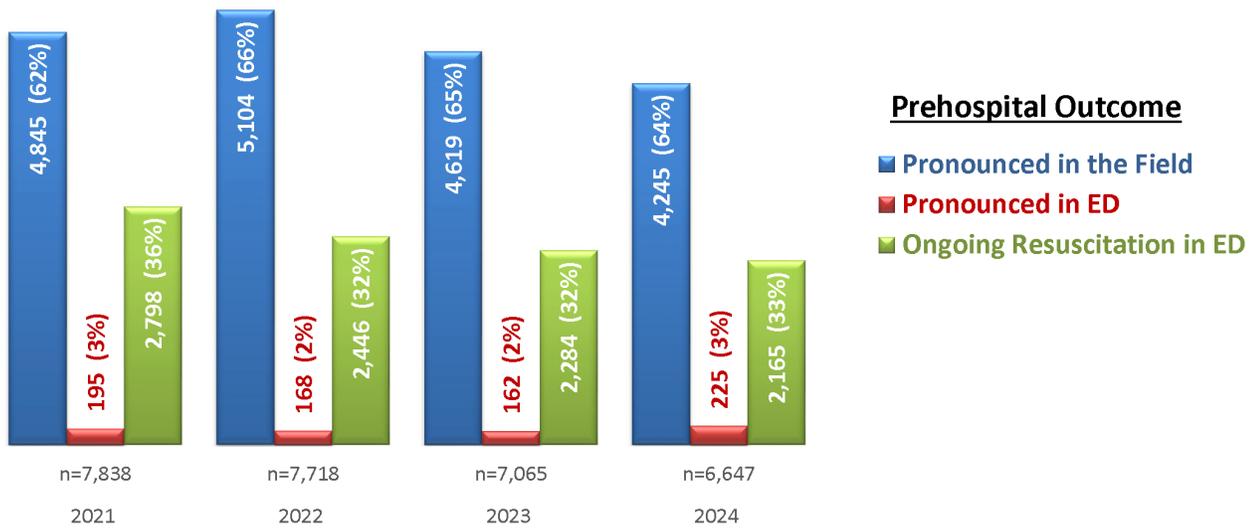
### Who First Applied AED?



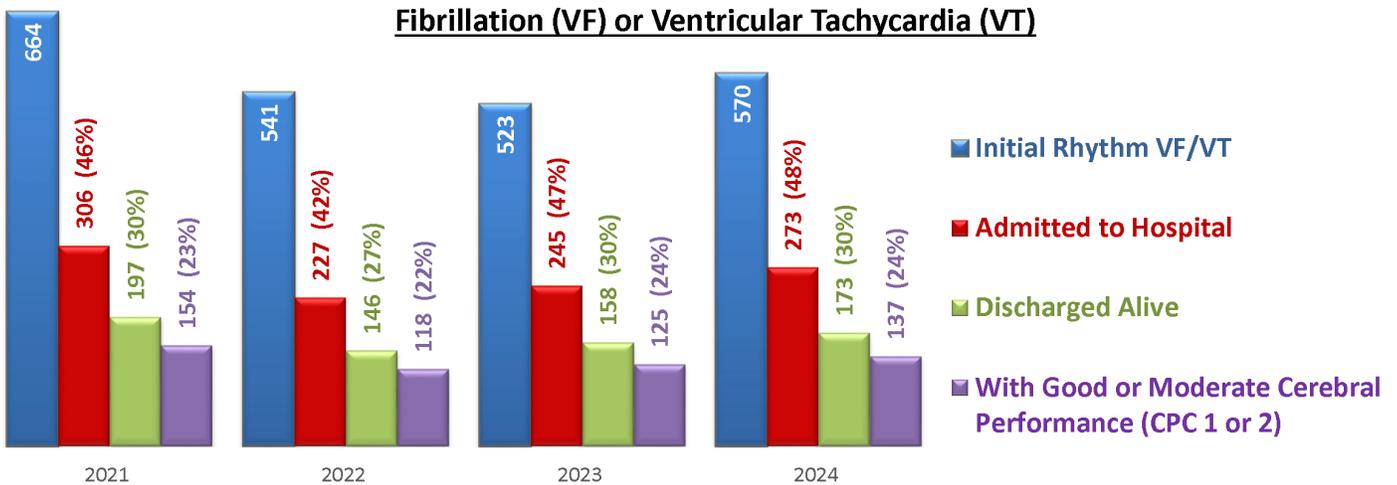


## Out of Hospital Cardiac Arrest (OHCA) Return of Spontaneous Circulation (ROSC)

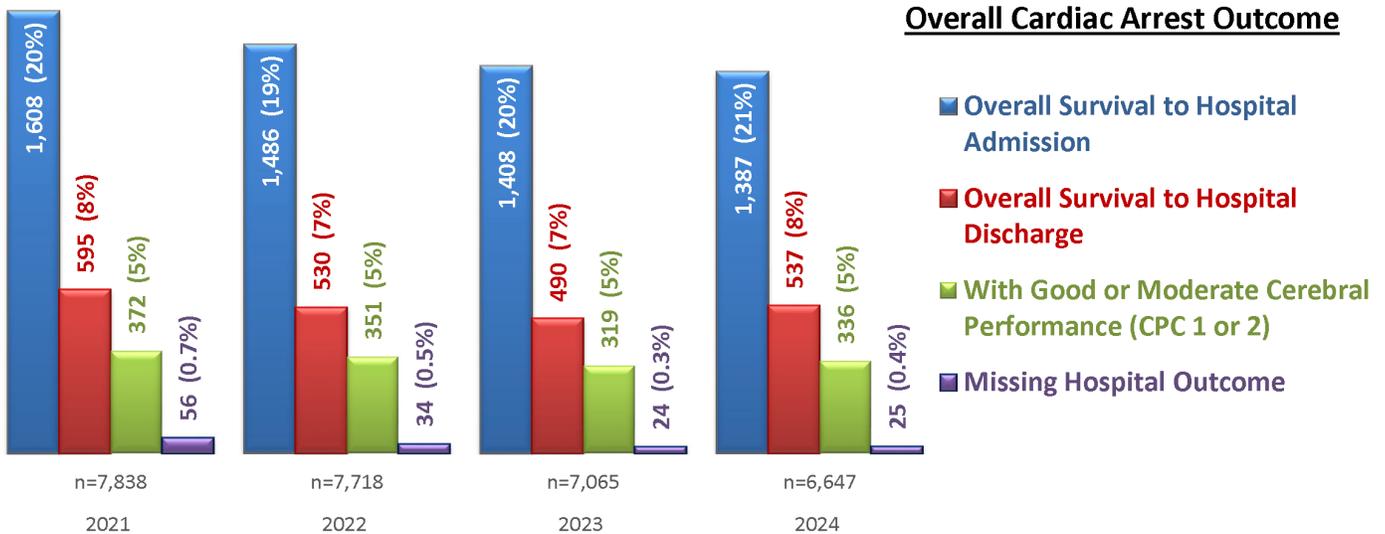




### Outcome of Witnessed Arrest with Initial Cardiac Rhythm of Ventricular Fibrillation (VF) or Ventricular Tachycardia (VT)



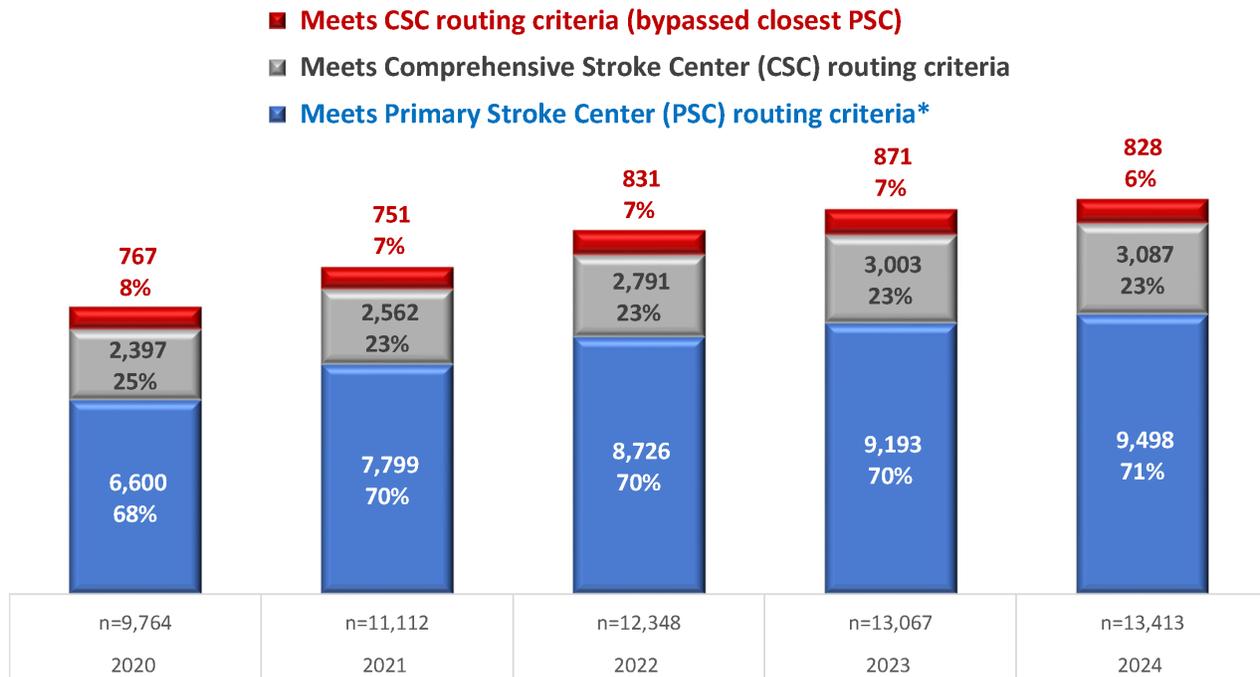
### Overall Cardiac Arrest Outcome



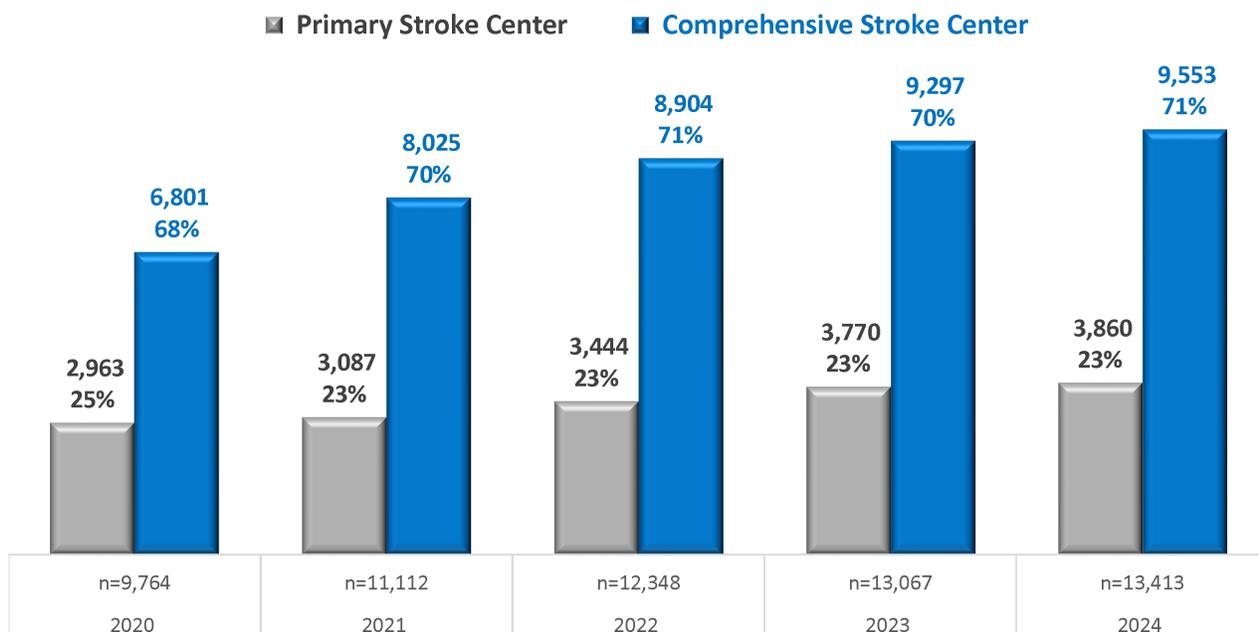


## Suspected Stroke Patient Destination

Suspected stroke patients with large vessel occlusions based on a Los Angeles Motor Scale (LAMS) score of 4 or 5 are routed to designated Comprehensive Stroke Centers.



This chart is based on routing criteria. \*Includes transports to CSC when CSC is the closest stroke center.



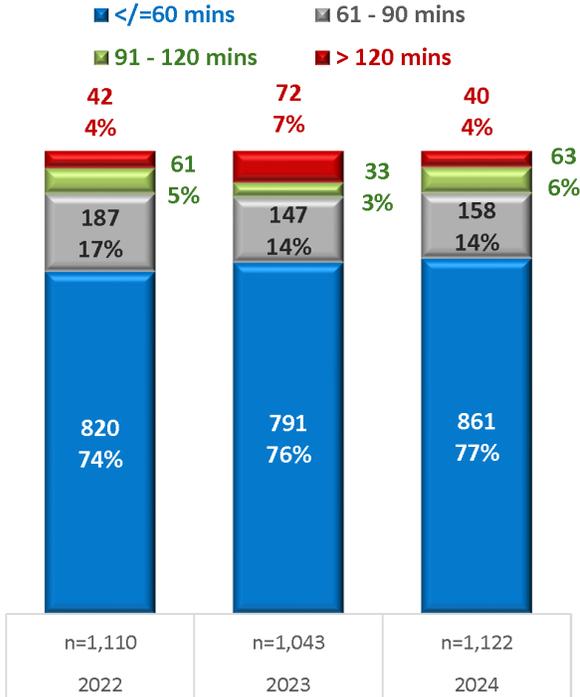
This chart is based on the Stroke Center Designation of the receiving facility, regardless of routing criteria.



## Final Diagnosis = Ischemic Stroke

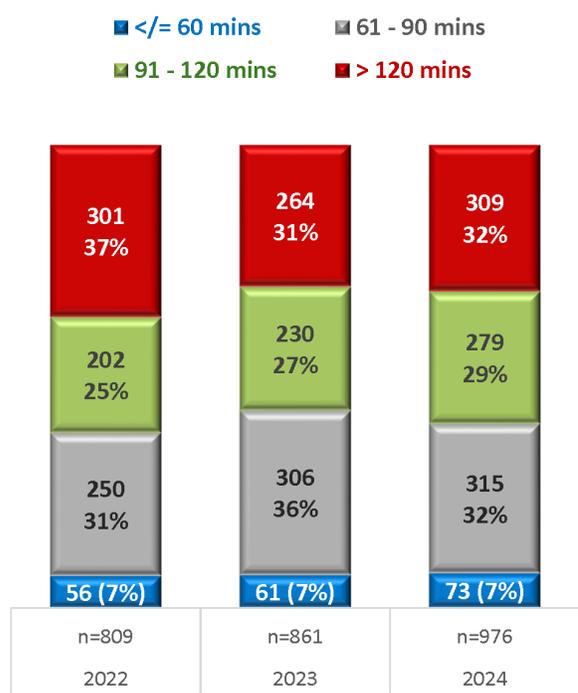
### Door-to-Needle (D2N) Times

LA County Target: within 60 mins 75% of the time



### Door-to-Device (D2D) Times

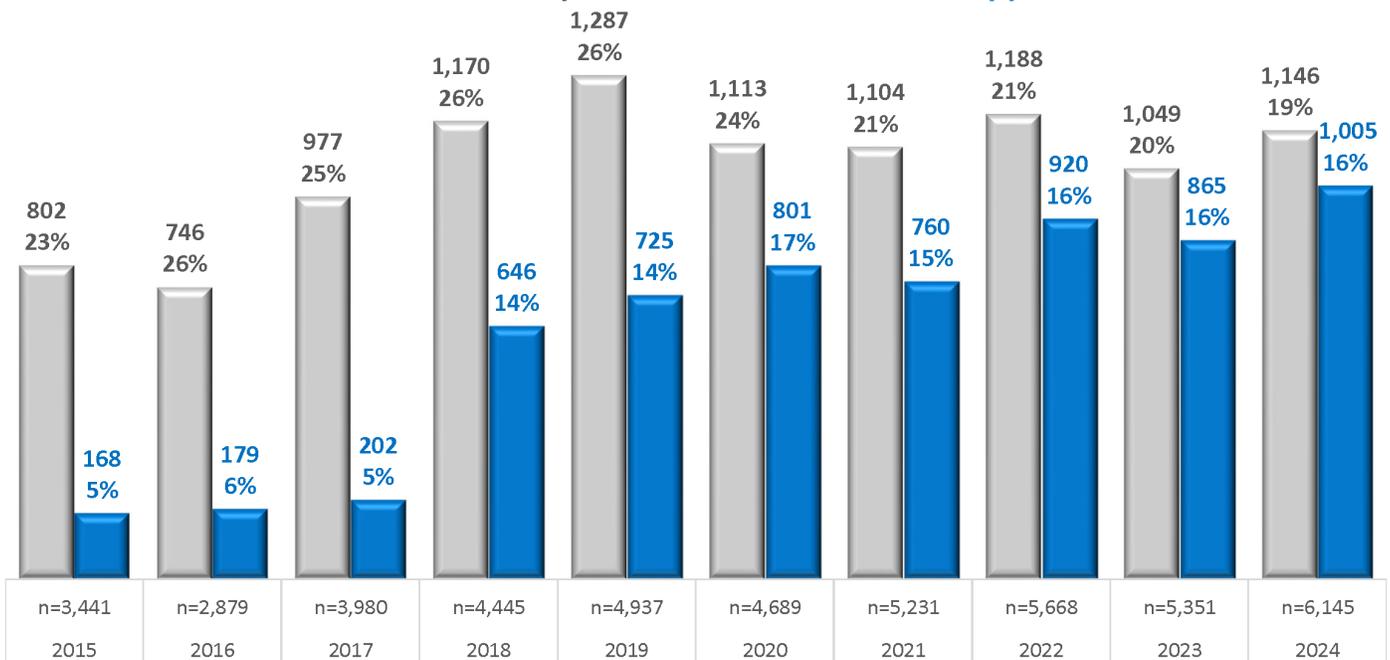
LA County Target: within 120 mins 50% of the time



## Treatment—All Ischemic Stroke

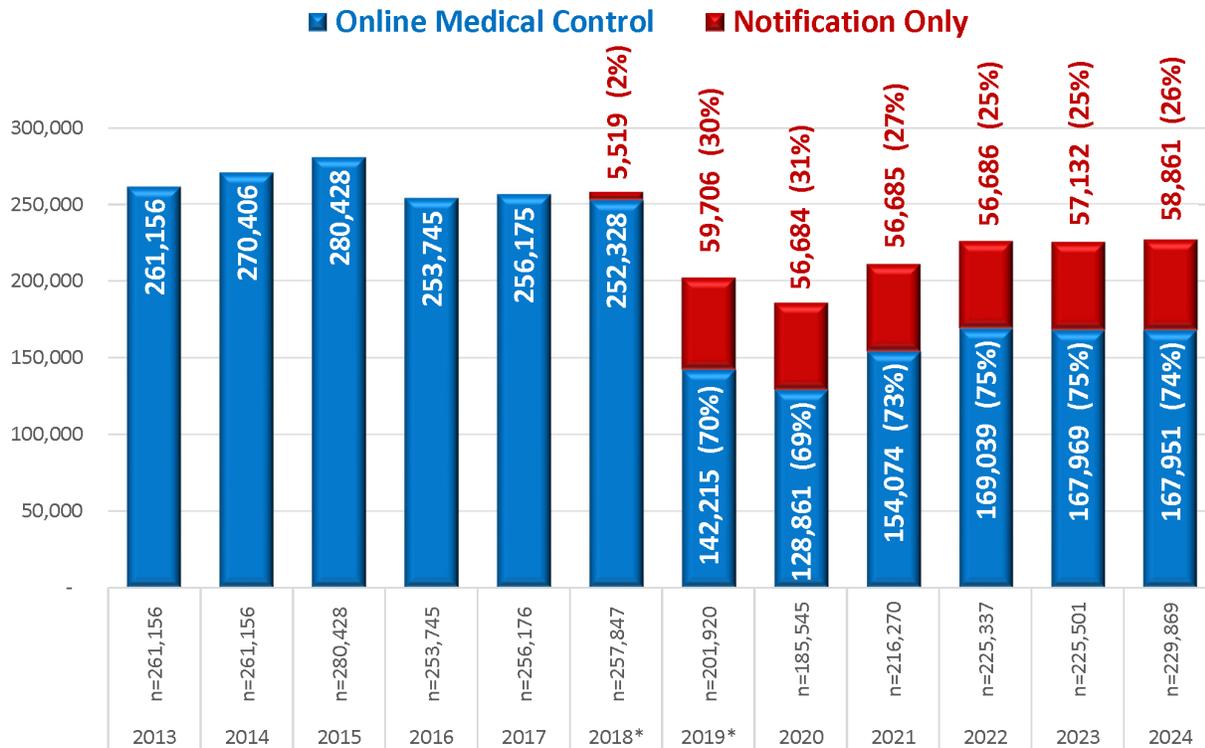
### Thrombolytics

### Endovascular Therapy





## Paramedic Base Hospital Contact



\* Phased-in implementation of New Treatment Protocols started in July 1, 2018 and was fully implemented in April 1, 2019. The New Treatment Protocols reduced the number of EMS responses requiring online medical control.



**EMERGENCY MEDICAL SERVICES**  
WE CARE FOR EVERYONE

### EMS AGENCY



*To ensure timely, compassionate, and quality emergency and disaster medical services.*

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