

EMS SYSTEM REPORT

OCTOBE 1, 2016

ISSUE 5

Message from the Director and Medical Director

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EMERGENCY DEPARTMENT

TRAUMA SYSTEM

INJURY SEVERITY Score

STEMI SYSTEM

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We are dedicating this annual data report to the source of our data, the emergency medical technicians, paramedics, nurses, and

registrars who begin the data collection process in the field and at the hospitals. In just the four years since our first report, we have seen significant improvements in the completeness and timeliness of the data submitted. This is primarily due to the in-



Cathy Chidester Director

creased number of 9-1-1 EMS provider agencies capturing and submitting their data through electronic patient care record (ePCR) software.

Publication of our data report has brought significant interest in EMS patient care from national and state entities, researchers and the Los Angeles County's Board of Supervisors (BOS). At the direction of the BOS, the EMS Agency has established a significant relationship with the Department of Public Health (DPH), who is using EMS system data

and is collaborating with the Trauma Centers on a DPH trauma prevention program. The trauma prevention program will be used to target resources to areas of Los Angeles with the greatest number of significant injuries.

Additionally, we are working with the fire department EMS programs to assist them in publishing data reports specific to their city's EMS program. We trust these reports demonstrate the value of



Dr. Marianne Gausche-Hill Medical Director

each fire department publishing their own reports and working with their city leadership to focus on targeted prevention and improving the health of their community.

As a system we are working with EMS provider agencies and ePCR vendors to systematically migrate our

data collection to be compliant with the most recent version of the National EMS Information System (NEMSIS). The EMS Agency is also working to be able to submit our data to the state as requested by the EMS Authority.

2016 System Demographics

74 9-1-1 Receiving Hospitals

- **39** EDAP (Emergency Department Approved for Pediatrics)
- 10 Pediatric Medical Centers
- 7 Pediatric Trauma Centers
- 14 Trauma Centers
- 21 Paramedic Base Hospitals
- 35 STEMI Receiving Centers
- 44 Approved Stroke Centers
- **64** Perinatal Centers
- **41** Hospitals with Neonatal Intensive Care Unit
- 9 SART (Sexual Assault Response Team) Centers
- 13 Disaster Resource Centers

EMS Provider Agencies

- 32 Public Safety EMS Provider Agency
- **33** Licensed Basic Life Support Ambulance Operators
- **15** Licensed Advanced Life Support Ambulance Operators
- **18** Licensed Critical Care Transport Ambulance Operators
- 10 Licensed Ambulette Operators

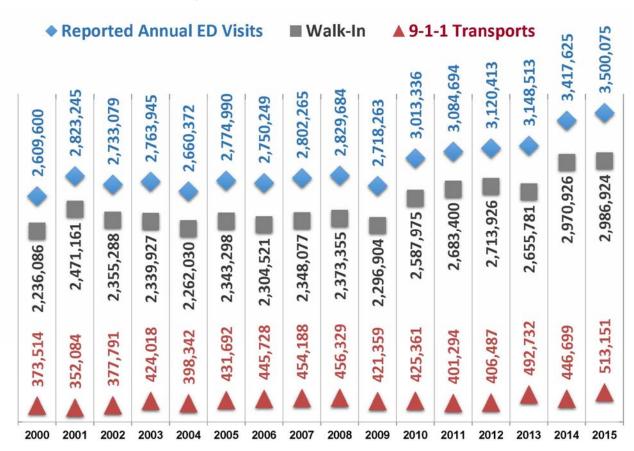
EMS Practitioners

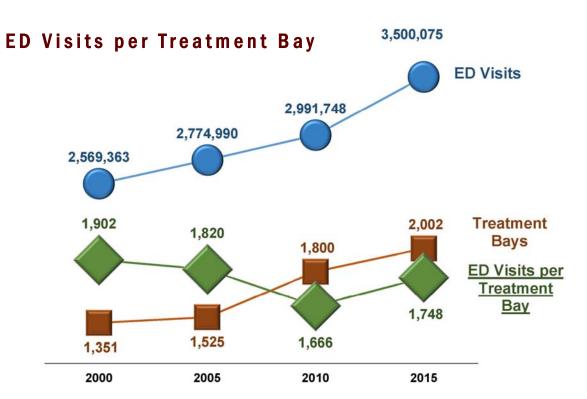
- **3.917** Accredited Paramedics
- 7,880 Certified EMTs by LA Co EMS Agency
 - 849 Certified Mobile Intensive Care Nurses

SPECIAL POINTS OF INTEREST:

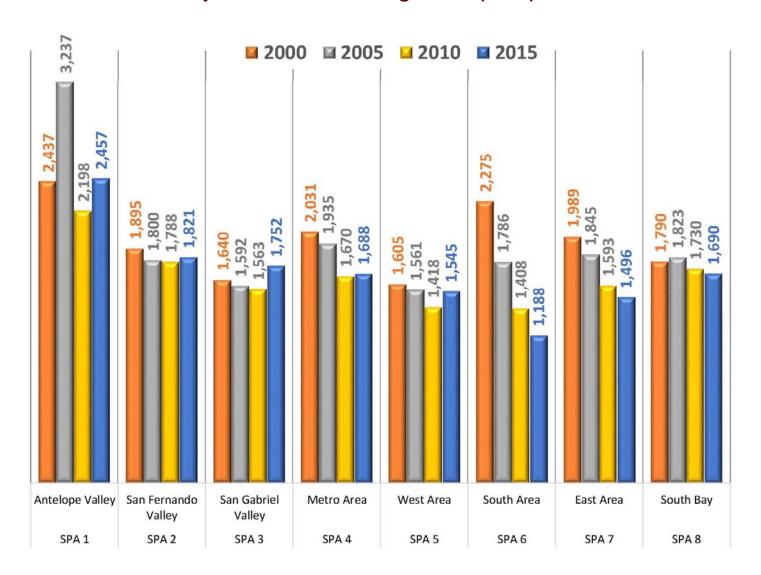
- Mechanisms of Injury are in page 5
- ISS Blunt vs Penetrating Trauma are in pages 6-7
- EMS Scene Times are in pages 18-19

Emergency Department Volume





ED Visits per Treatment Bay by Service Planning Area (SPA)



Canceled Helicopter EMS Trauma Transport (CY 2015)

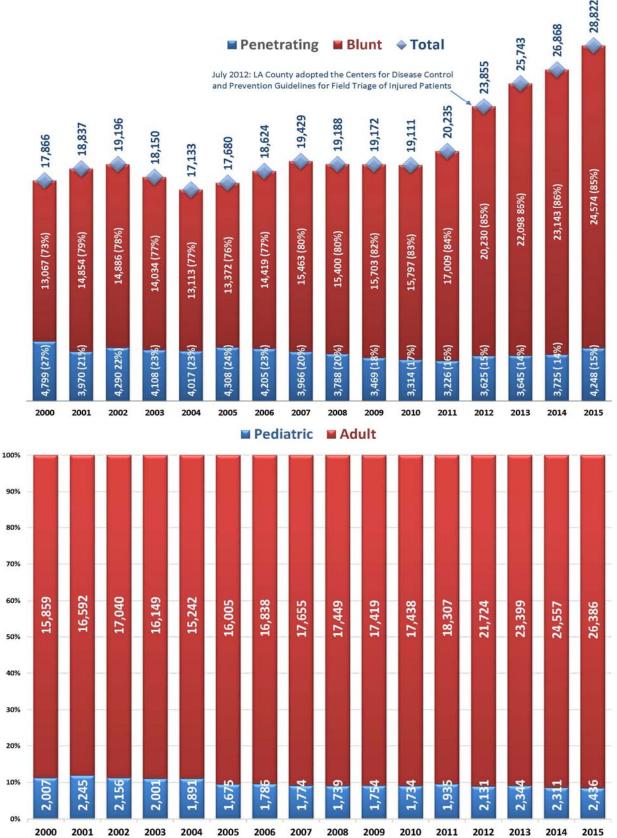
Rationale for Cancelation	No. of Patients	Outcome	Avg Ground Transport Time
Did not require transport	4	n/a	n/a
Only required Basic Life Support Level of Care	1	lived	60 mins
Change in patient condition requiring ground transport	21	20 survived 1 expired	36 mins
TOTAL	26	21 survived 1 expired	36 mins





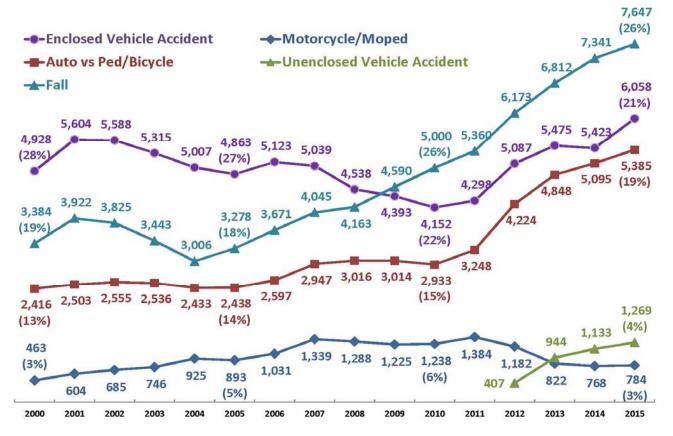


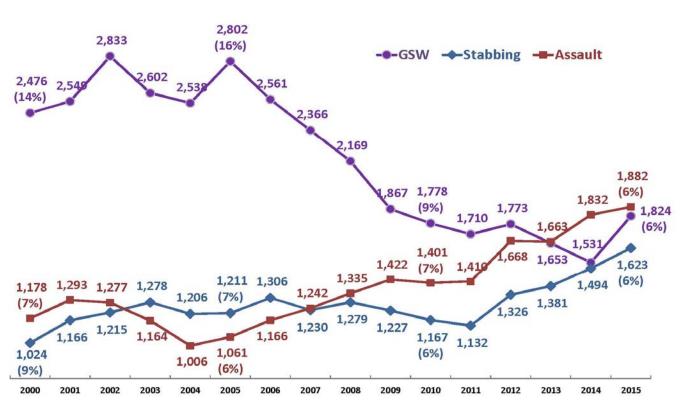
Trauma Center Volume



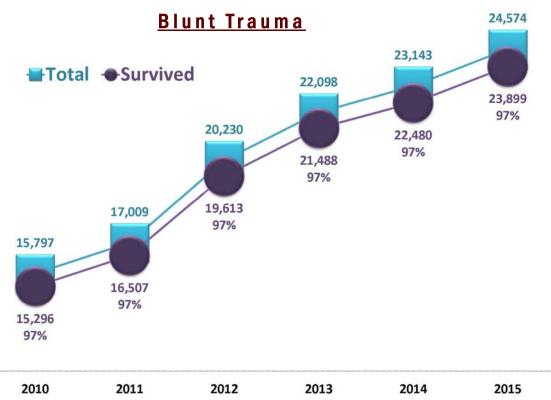


Mechanisms of Injury





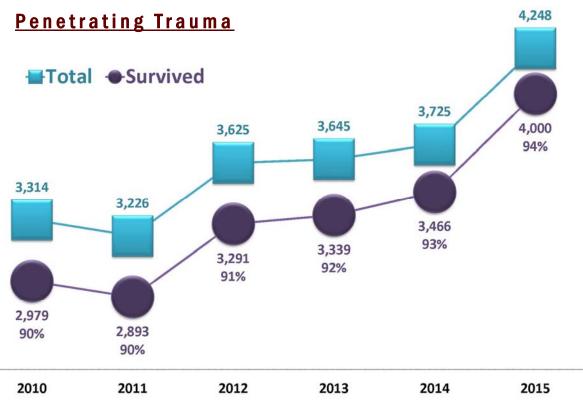




Injury Severity Score: Blunt Trauma





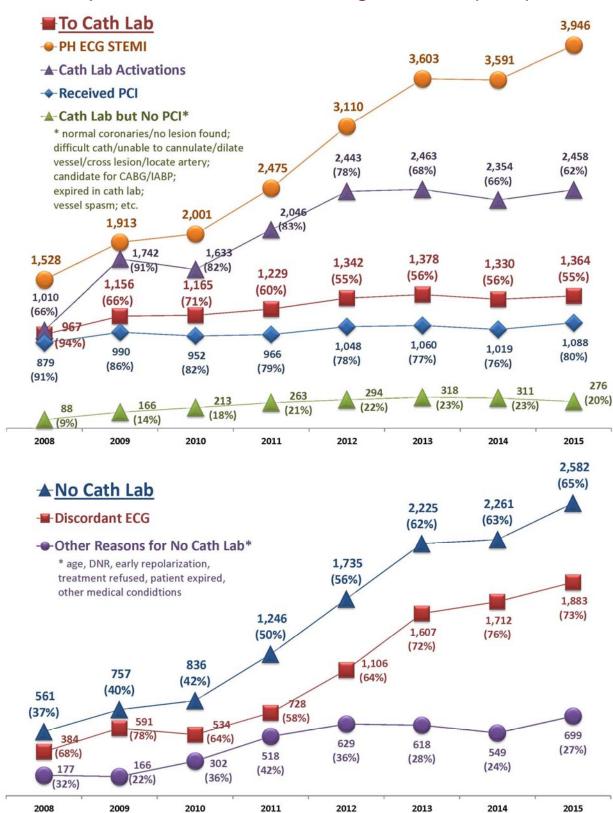


Injury Severity Score: Penetrating Trauma





ST-Elevation Myocardial Infarction (STEMI) 9-1-1 Transports to STEMI Receiving Centers (SRC)

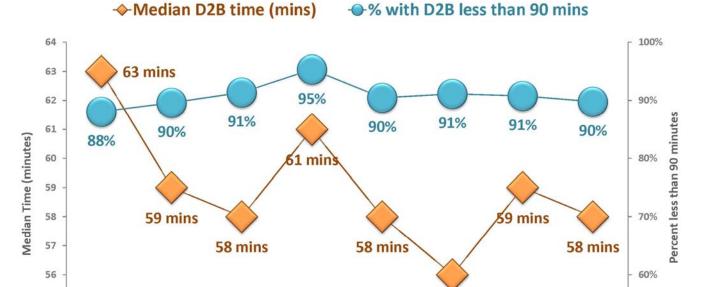






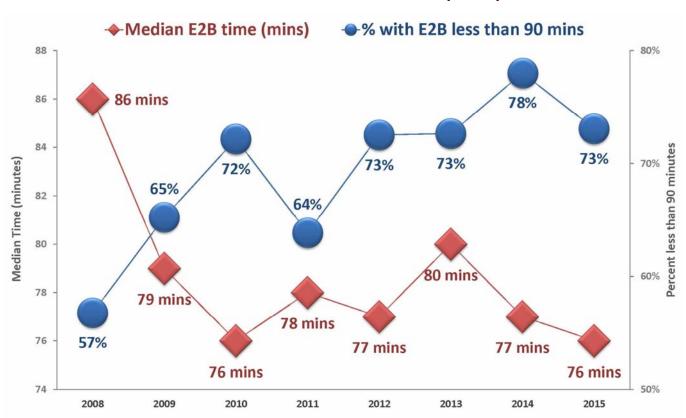
50%

SRC: Door-to-Balloon (D2B) Time



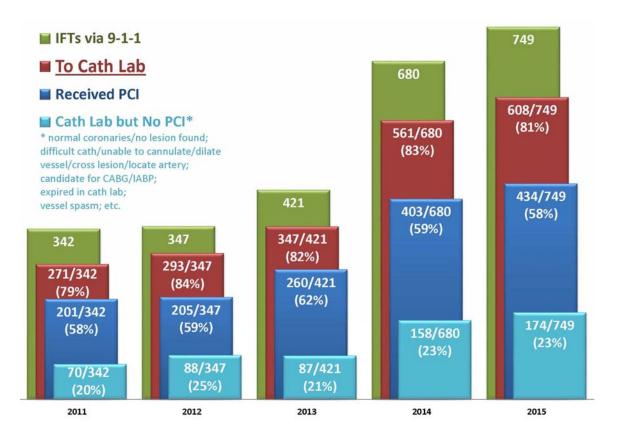
56 mins

SRC: EMS Medical Contact-to-Balloon (E2B) Time

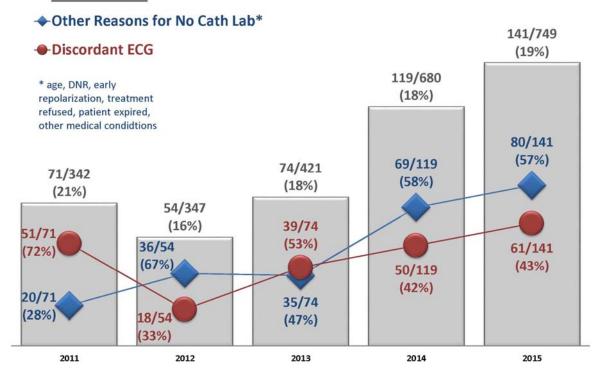




STEMI Referral Facility (SRF) Interfacility Transfers (IFT) via 9-1-1



■No Cath Lab



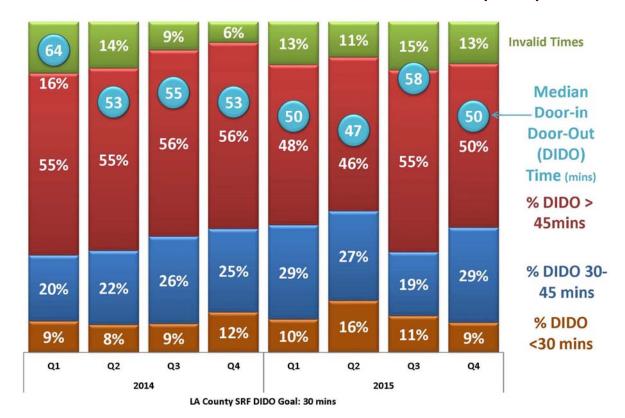


SRF: Door-to-Balloon (D2B) Time



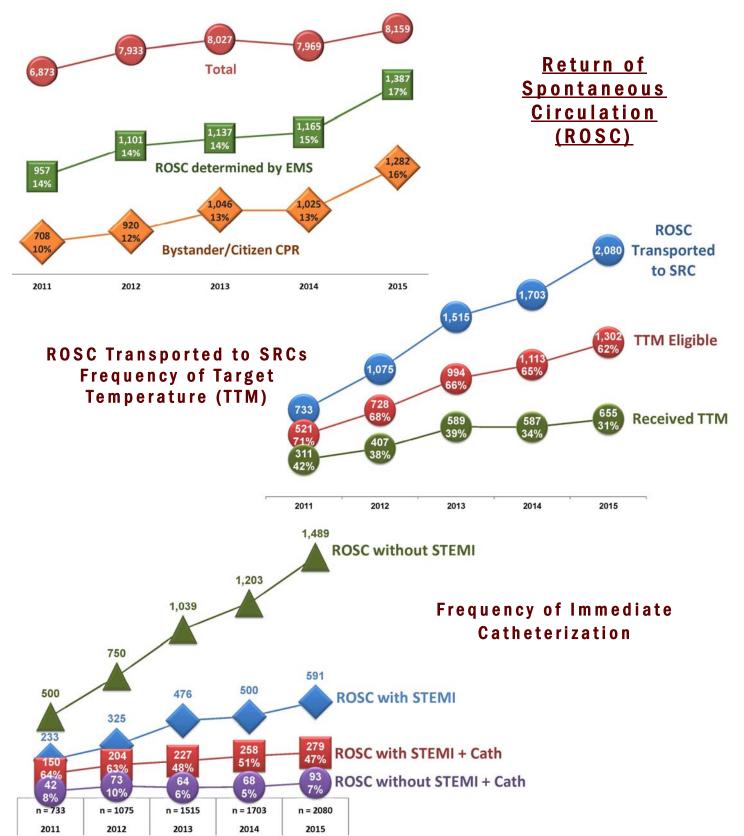
LA County SRF D2B Goal: 90% D2B within 90mins

SRF: Door-to-Balloon (D2B) Time

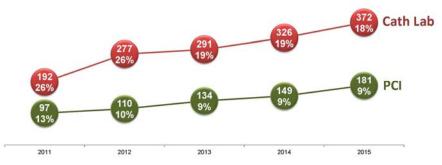




Out of Hospital Cardiac Arrest







Frequency of Cath Lab and Percutaneous **Coronary Intervention** (PCI)

ROSC Patient Outcome

Cerebral Performance Category (CPC) Scale

CPC 1-Good cerebral performance; conscious, alert, able to work, might have neurologic or psychologic deficit

CPC 2-Moderate cerebral disability: conscious, sufficient cerebral function for independent activities of daily life. Able to work in sheltered environment.

Contract to the Contract of th	Shockable Rhyt	thm Live	ed ▲ CPC 1	&2
73%	72%	69%	69%	67%
94/128	146/204	170/246	165/238	187/281
59%	62%	59%	54%	55%
128/216	204/331	246/414	238/439	281/509
29%	31%	27%	26%	24%
216/733	331/1,075	414/1,515	439/1,703	509/2,080
TOTAL ROSC: n = 733	n = 1075	n = 1515	n = 1703	n = 2080
	2012	2013	2014	2015

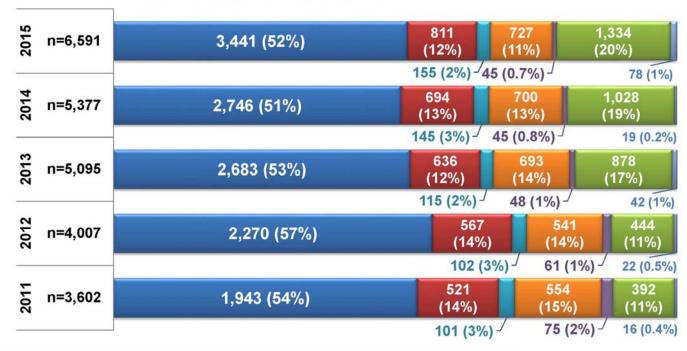
◆ No	on-Shockable I	Rhythm Liv	/ed ▲ CPC 18	&2
71%	69%	73%	74%	76%
517/733	744/1075	1101/1515	1264/1703	1571/2080
63%	51%	44%	45%	44%
95/152	114/222	135/304	160/358	173/393
29%	30%	28%	28%	25%
152/517	222/744	304/1101	358/1264	393/1571
OTAL ROSC: n = 733 2011	n = 1075	n = 1515	n = 1703	n = 2080
	2012	2013	2014	2015

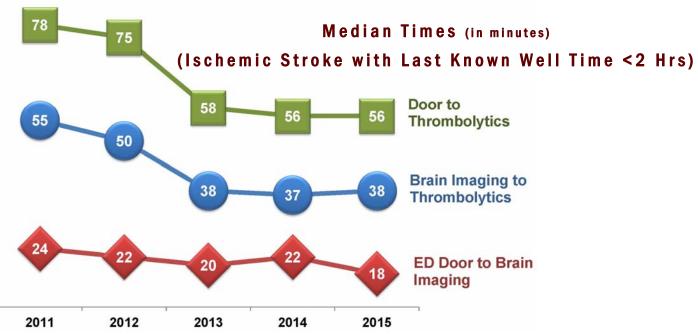


Approved Stroke Center Patients

Final Diagnosis of 9-1-1 Transports

- Ischemic Stroke
- Stroke Not Otherwise Specified
- Intracranial Hemorrhage
- No Stroke Related Diagnosis
- Subarachnoid Hemorrhage Unknown/Blank
- Transient Ischemic Attack

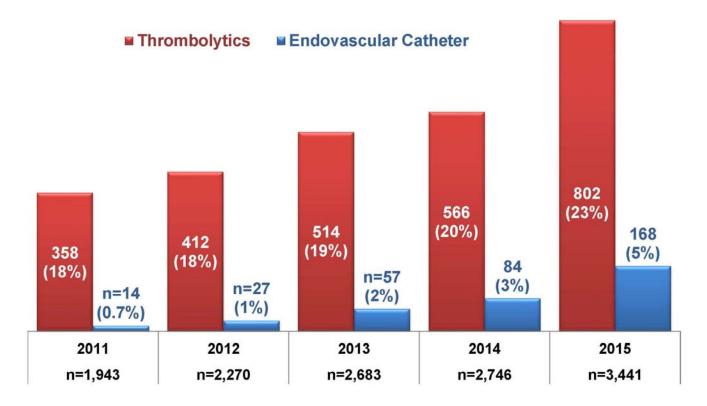




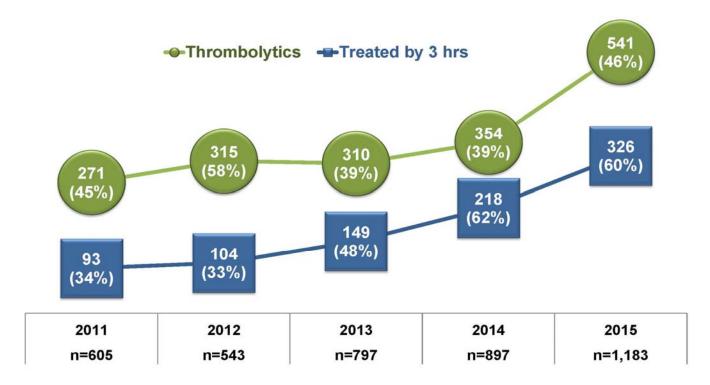




Treatment-All Ischemic Stroke

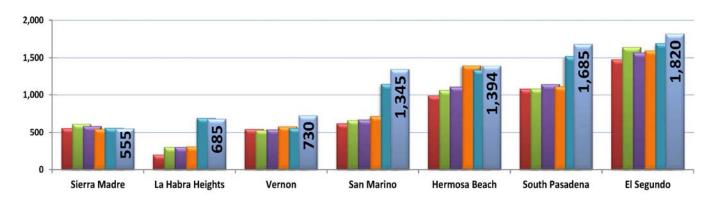


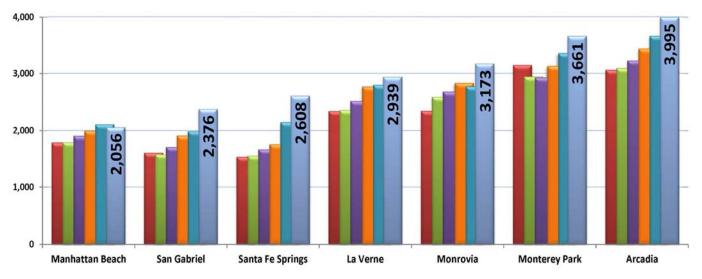
Ischemic Stroke Patients with Last Known Well Time <2 Hours

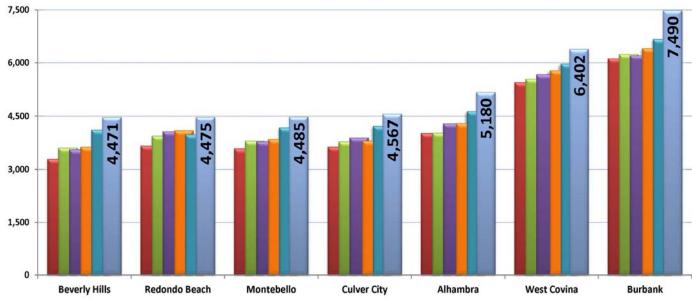


EMS Responses by 9-1-1 Jurisdictional Provider Agency

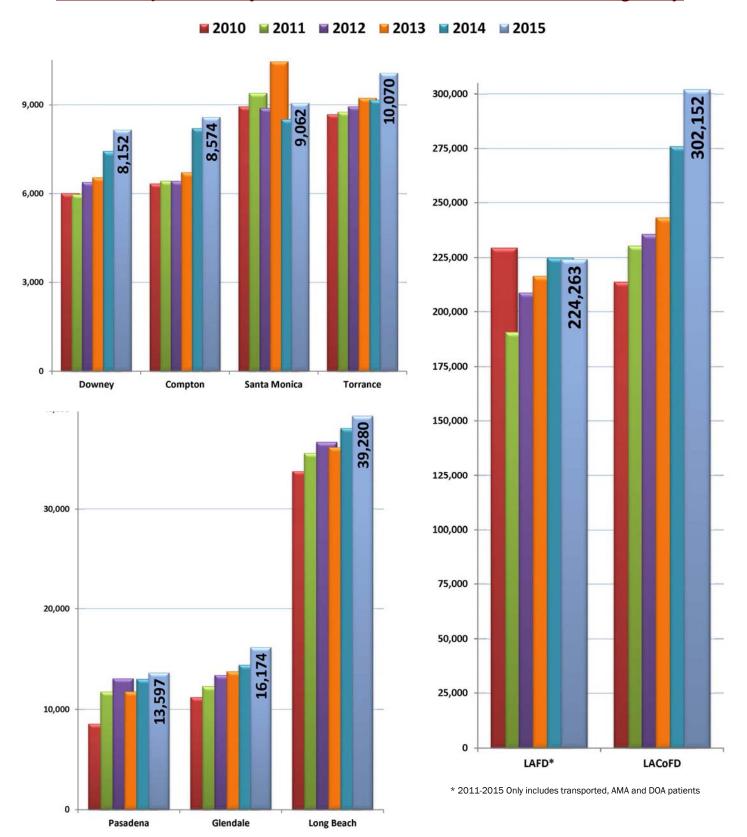








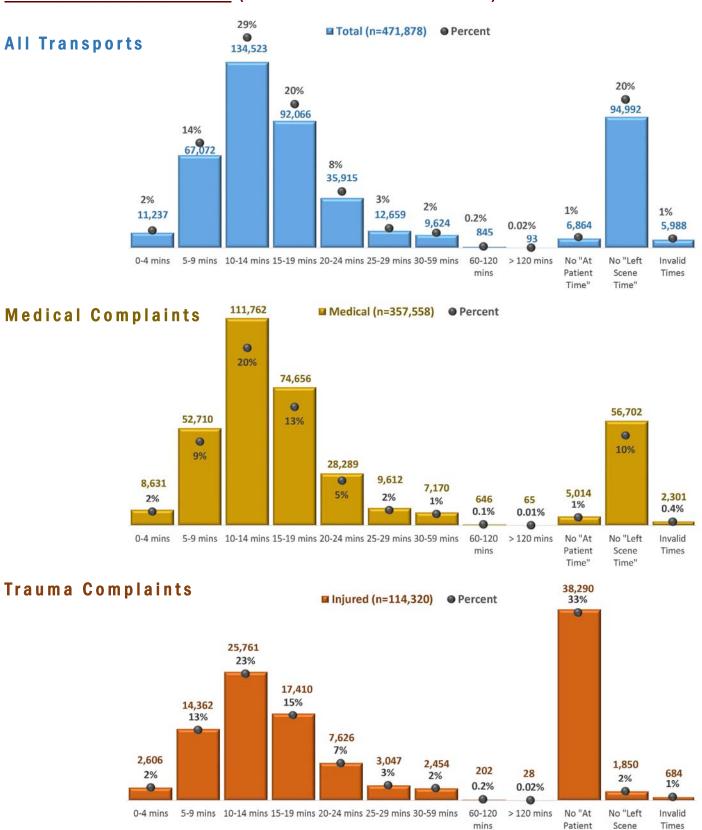
EMS Responses by 9-1-1 Jurisdictional Provider Agency



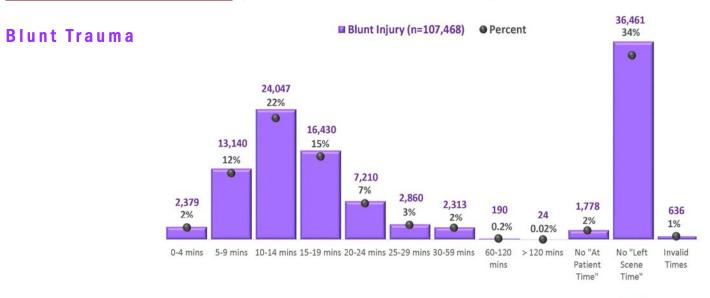
Time"

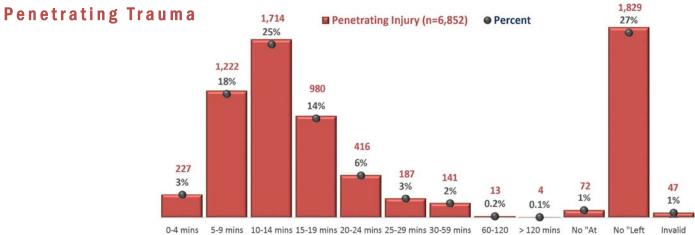
Time"

CY 2015 Scene Time (Time At Patient to Time Left Scene)

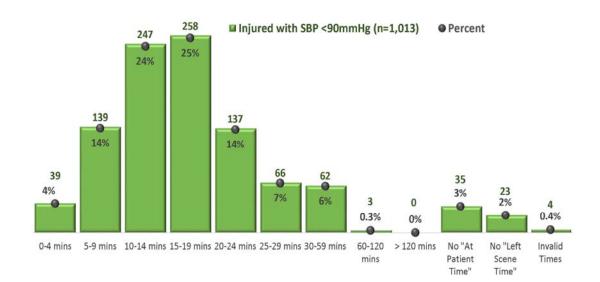


CY 2015 Scene Time (Time At Patient to Time Left Scene)





Trauma with
Systolic
Blood
Pressure
(SBP)
<90mmHg
(Excludes
Extrication)
CY 2015



mins

Patient

Time"

Scene

Time"

Times

EMS SYSTEM REPORT

