Message from the Director and Medical Director

The 2014 EMS System Data Report provides an excellent opportunity for you our readers to see first-hand the expansion of the EMS Agency’s data capabilities. Since last year’s report, the number of fire departments utilizing electronic patient care records increased from five to 11, resulting in more timely and accurate data submission from our provider agencies. The County’s Hospital Specialty Care Center programs continue to submit data that provides us the opportunity to measure outcomes and integrate our data to ensure that we measure the entire patient care continuum.

The EMS Agency strives to provide data that:

- Improves system transparency, public understanding of emergency medical incidents and the unique characteristics of emergency care delivery in specific areas of the County.
- Is useful to system planners and results in informed public policy.
- Identifies trends in injury and illness within Los Angeles County, identifying patient needs and opportunities for improving patient outcomes.
- Creates public awareness of the care our Specialty Care Centers provide, thus improving access and utilization of region-alized EMS care.

The EMS System Data Report is a resource to assist with answering system questions and serves as a catalyst for change to improve the health of our community. Please enjoy this year’s edition.

System Demographics

72 9-1-1 Receiving Hospitals

EMS Provider Agencies

32 Public Safety EMS Provider Agency
31 Licensed Basic Life Support Ambulance Operators
18 Licensed Advanced Life Support Ambulance Operators
18 Licensed Critical Care Transport Ambulance Operators
13 Licensed Ambulette Operators

EMS Practitioners

3,786 Accredited Paramedics
7,681 Certified EMTs by LA Co EMS Agency
805 Certified Mobile Intensive Care Nurses
Emergency Department Volume

72 EMS Receiving Hospitals

ED Visits (X1,000)

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Visits</td>
<td>2,569</td>
<td>2,775</td>
<td>2,999</td>
<td>3,183</td>
</tr>
<tr>
<td>Treatment Bays</td>
<td>1,351</td>
<td>1,525</td>
<td>1,800</td>
<td>1,975</td>
</tr>
<tr>
<td>Patients per Treatment Bay (X10)</td>
<td>190</td>
<td>182</td>
<td>167</td>
<td>161</td>
</tr>
</tbody>
</table>

Data Source: Self-Reported by Hospitals and TEMIS
Emergency Department Volume

- ED Visits (X1,000)
- Treatment Bays
- Patients per Treatment Bay (x10)

Data Source:
Self-Reported by Hospitals and TEMIS
Mechanism of Injury by Trauma Center Catchment Area (CY 2013)

Data Source: TEMIS-Trauma
**Mode of Transport / Mortality / Transport Time**

```
<table>
<thead>
<tr>
<th>Mode of Transport</th>
<th>Total Trauma Patients N=25,758</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interfacility Transfers 5% (N=1,397)</td>
<td></td>
</tr>
<tr>
<td>EMS TRANSPORTS 86.5% (N=22,286)</td>
<td></td>
</tr>
<tr>
<td>Police/Private Vehicle/Walk-In 8% (N=2,074)</td>
<td></td>
</tr>
</tbody>
</table>

Ground Ambulance 97% (N=21,352)  
Air Ambulance 3% (N=45)  

Air Ambulance 4% (N=934)  
Ground Ambulance 96% (N=21,352)  

Lived 98% (N=1,329)  
91% (N=41)  
96% (N=20,535)  
95% (N=890)  
99% (N=2,059)  

Died 2% (N=24)  
8% (N=4)  
4% (N=817)  
5% (N=44)  
1% (N=15)  

Median Transport Time*  
13 mins.  
20 mins.  
11 mins.  
16 mins.  

Data Source: TEMS-Trauma  
* Time Transport Unit Left Scene to Time Transport Unit Arrived at Hospital.
```

**Trauma Patient Emergency Department Disposition**

**Ground Ambulance Transport**

- N=21,352  
- Home 47% (N=9,947)  
- Ward 22% (N=4,716)  
- Intensive Care Unit 16% (N=3,507)  
- Stepdown Unit 5% (N=1,139)  
- Operating Room 8% (N=1,651)  
- Other 0.3% (N=67)  
- 23 Hr Observation 2% (N=340)

**Air Ambulance Transport**

- N=934  
- Home 31% (N=292)  
- Intensive Care Unit 20% (N=189)  
- Operating Room 12% (N=109)  
- Other 0.8% (N=10)  
- 23 Hr Observation 30% (N=286)  
- Stepdown Unit 5% (N=44)
Helicopter EMS Transports (CY 2013)

Data Source: Self-Reported by Helicopter EMS Providers

COUNTYWIDE (N = 1,279)
- Trauma 80% (n=1,017)
- Medical 20% (n=262)

Los Angeles County Fire Department 81% (n=1,035)
- Los Angeles City Fire Department 9% (n=118)
- Los Angeles County Sheriff’s Department 10% (n=126)

San Fernando Valley 12.9% (N = 166)
- 58% (n=96)
- 42% (n=70)

West County 13.4% (N = 171)
- 16% (n=28)
- 84% (n=143)

Antelope Valley 12.8% (N = 164)
- 22% (n=36)
- 78% (n=128)

Angeles National Forest 8.6% (N = 110)
- 13% (n=14)
- 87% (n=96)

Catalina Island 4.7% (N = 61)
- 41% (n=25)
- 59% (n=36)

West San Gabriel Valley 4.7% (N = 60)
- 23% (n=14)
- 77% (n=46)

East San Gabriel Valley 42.3% (N = 541)
- 9% (n=49)
- 91% (n=492)
Prehospital 12-Lead ECG is ST-Segment Elevation Myocardial Infarction (STEMI) and Transported to STEMI Receiving Centers CY 2013
DATA FACTS

STEMI Receiving Center Volume

STEMI Transfers: Arrival at Referral Facility to Artery Opening at STEMI Receiving Center

Data Source: LA SRC Database
Approved Stroke Center Patients (CY 2013)

Walk-In/Private Auto N=7,519
- Ischemic Stroke 63% (N=4,725)
- Other 37% (N=2,794)
- Intracerebral Hemorrhage 11% (N=788)
- Transient Ischemic Attack 15% (N=1,145)
- No Stroke Related Diagnosis 1% (N=94)
- Stroke Not Otherwise Specified 0.2% (N=10)
- Subarachnoid Hemorrhage 5% (N=386)
- Elective Carotid Intervention 5% (N=371)

EMS Transports N=4,506
- Ischemic Stroke 56% (N=2,499)
- Other 44% (N=2,007)
- Intracerebral Hemorrhage 13% (N=592)
- No Stroke Related Diagnosis 13% (N=603)
- Transient Ischemic Attack 14% (N=628)
- Stroke Not Otherwise Specified 1% (N=45)
- Subarachnoid Hemorrhage 2% (N=109)
- Diagnosis Not Documented 1% (N=30)

Data Source: GWTG & LA Stroke
**Final Diagnosis of EMS Transports to Approved Stroke Centers (CY 2013)**

**COUNTYWIDE (N=4,321)**

- **Ischemic Stroke**: 55% (N=2,375)
- **No Stroke**: 15% (N=632)
- **Transient Ischemic Attack**: 13% (N=586)
- **Intracranial Hemorrhage**: 13% (N=555)
- **Subarachnoid Hemorrhage**: 2% (N=99)
- **Stroke Not Otherwise Specified**: 1% (N=44)
- **Unknown Final Diagnosis**: 1% (N=30)

Note: 185 patients were transported to out of County hospitals.

**San Fernando Valley**
- 18% (N=791)

**Mid-City/West County**
- 8.9% (N=386)

**Metro Area**
- 8.5% (N=369)

**South Bay**
- 14% (N=616)

**South/Southeast**
- 13% (N=564)

**East County**
- 11% (N=477)

**Antelope Valley**
- 5.8% (N=247)

**Burbank/Glendale/Pasadena/San Gabriel/Montebello**
- 20% (N=871)

**List of Pie Charts and Numbers:**
- Ischemic Stroke: 55% (N=2,375)
- No Stroke: 15% (N=632)
- Transient Ischemic Attack: 13% (N=586)
- Intracranial Hemorrhage: 13% (N=555)
- Subarachnoid Hemorrhage: 2% (N=99)
- Stroke Not Otherwise Specified: 1% (N=44)
- Unknown Final Diagnosis: 1% (N=30)

**Note:** 185 patients were transported to out of County hospitals.
Ischemic Stroke: Median Times (CY 2013)

EMS Stroke Transport: Ischemic Strokes

EMS SYSTEM REPORT

Data Source: GWTG & LA Stroke

LKWT = Last Known Well Time
Chief Complaints of EMS Pediatric Transports: 14 years old and younger (CY 2013)
EMS Responses by 9-1-1 Jurisdictional Provider Agency (CY 2013)

Data Source: TEMIS-EMS
Citizen (Bystander) Cardiopulmonary Resuscitation (CPR)

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

Data Source: TEMIS-EMS & BASE

Paramedic Base Hospital Contact for Online Medical Control

N=206,930

CY 2013

Data Source: TEMIS-EMS & BASE

EMS AGENCY

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

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For data request please complete and submit the Data Request Form at http://ems.dhs.lacounty.gov/dhs/cms1_207416.pdf