

# COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES

## 2012 EMERGENCY MEDICAL SERVICES SYSTEM REPORT

### San Diego County Facts 2012

**Population** - 3,128,734

- Female - 50%
- Male - 50%

**Square Miles** - Over 4,200

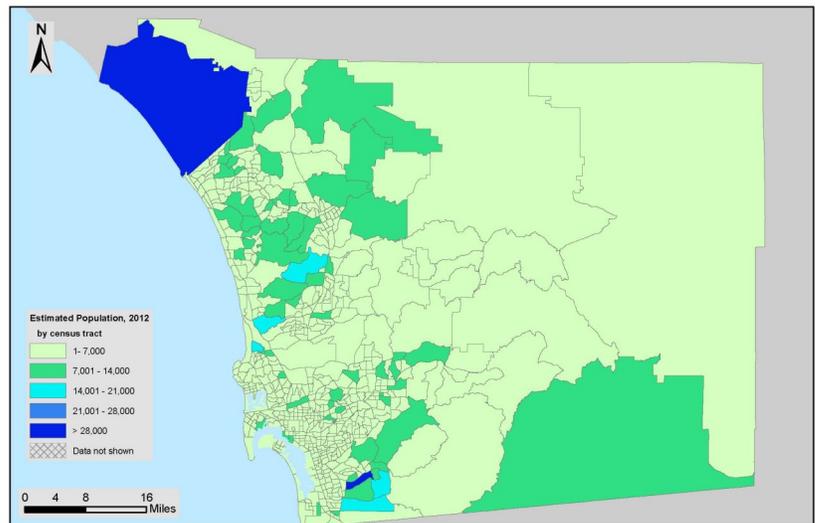
**Agencies** - 66 agencies

- Advanced Life Support (ALS) - 37
- Basic Life Support (BLS) - 28
- Air Ambulance - 1

### Hospitals

- Emergency Departments - 20
- Base Hospitals - 7
- Trauma Centers - 6
- STEMI Receiving Centers - 13
- Stroke Receiving Centers - 16

### 2012 San Diego County Population by Census Tract



Population estimates 2011-2013, San Diego Association of Governments (SANDAG).  
Map/Analysis by County of San Diego, Emergency Medical Services  
Contact Isabel Concos, Leslie Ray 619.255.6249. Map Date: August, 2014

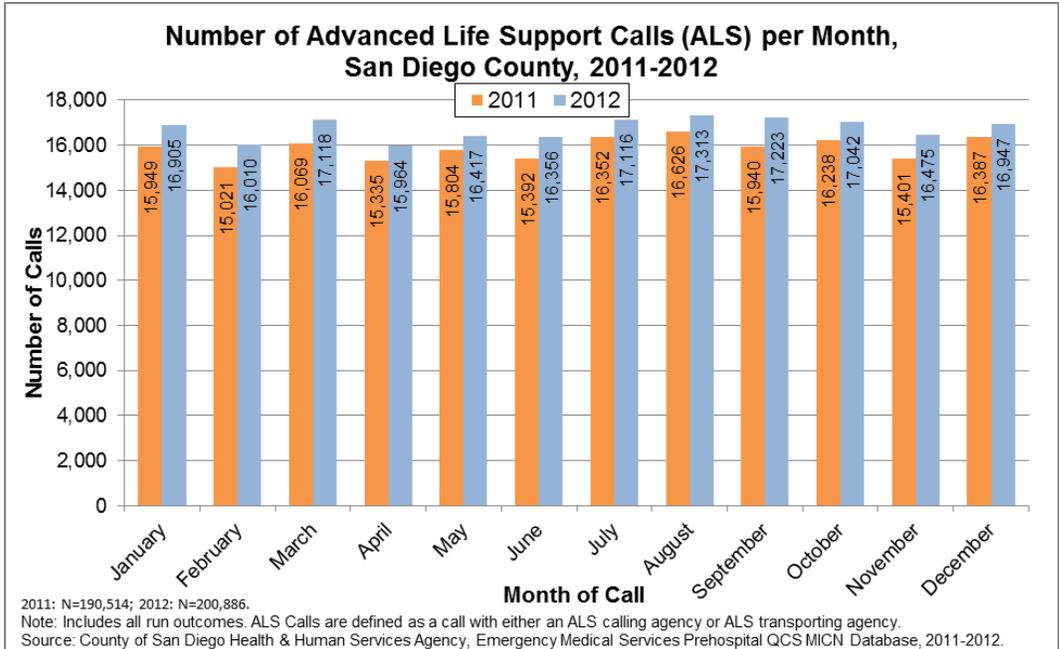


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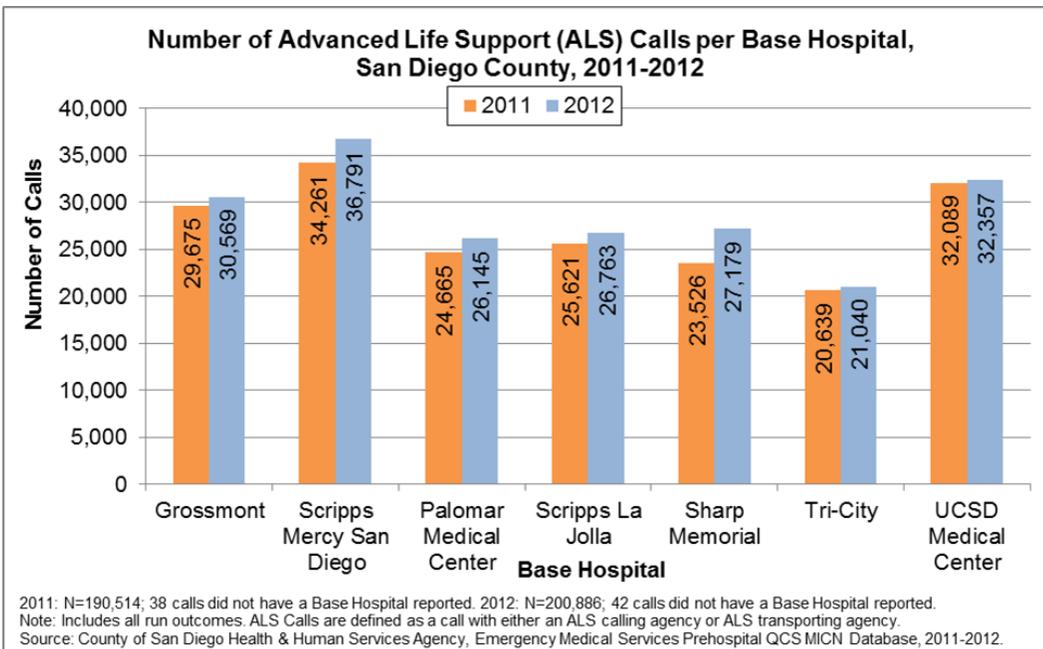
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## Prehospital System Overview - Advanced Life Support (ALS) Calls

In 2012, there were 200,886 ALS calls made in San Diego County; 10,372 more calls than occurred in 2011. This averages to 549 ALS calls per day.

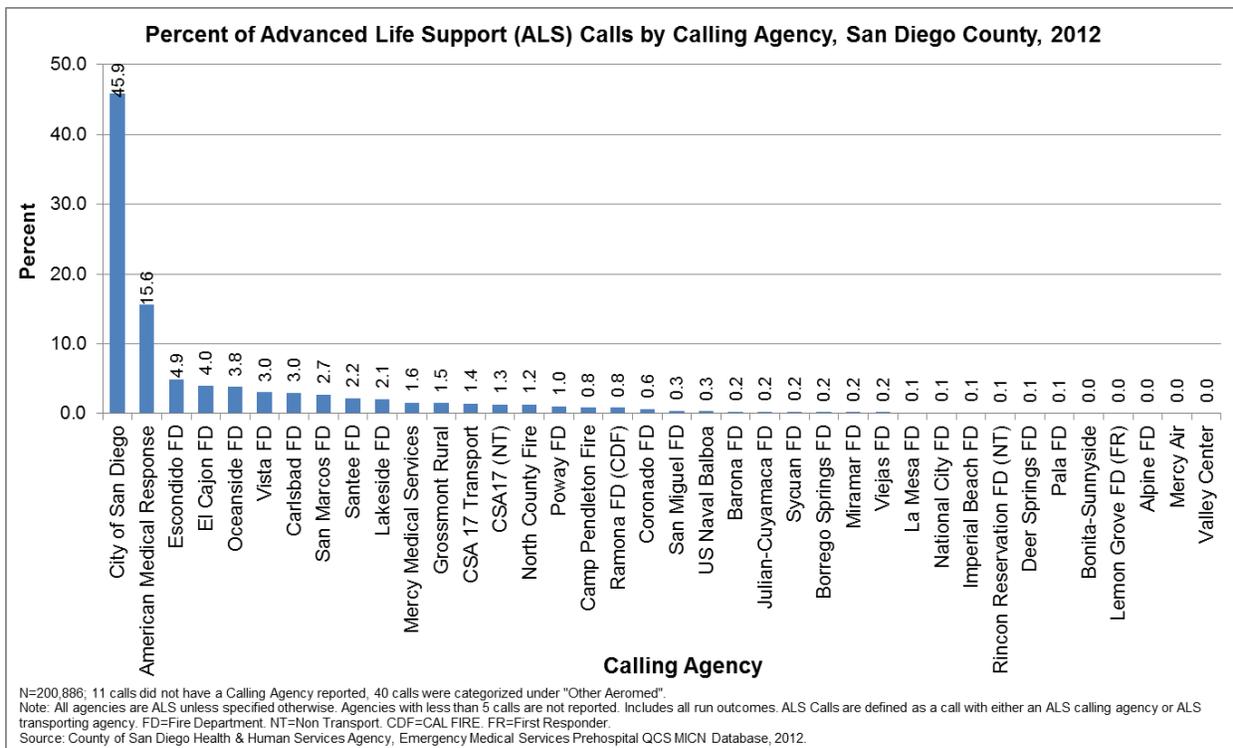


The largest call volume occurred in August 2011 and 2012, while September had the largest increase from 2011 to 2012 (1,283 more calls in 2012).

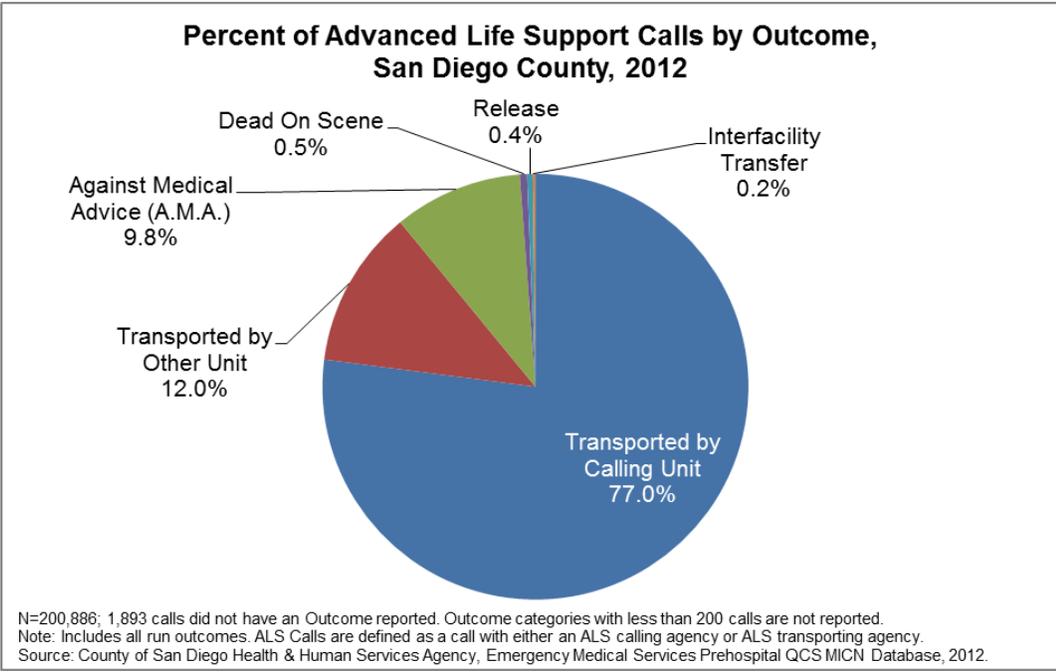


Every Base Hospital had more ALS calls in 2012 compared to 2011. The distribution of ALS calls among the San Diego County Base Hospitals ranged from 10.5% to 18.3% in 2012.

## Prehospital System Overview - Advanced Life Support (ALS) Calls



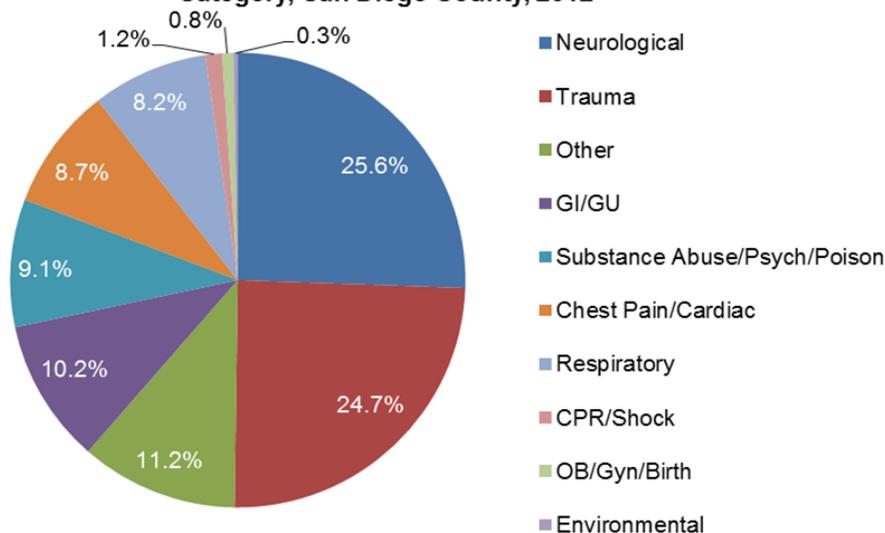
In 2012, the distribution of ALS calls among calling agencies ranged from 45.9% to less than 1.0%.



In 2012, 89% of ALS calls resulted in patient transport to an emergency department. Nearly 10% of ALS calls resulted in the patient refusing transport (A.M.A.). ALS call outcomes in 2012 were nearly identical to 2011.

## Prehospital System Overview - Advanced Life Support (ALS) Calls

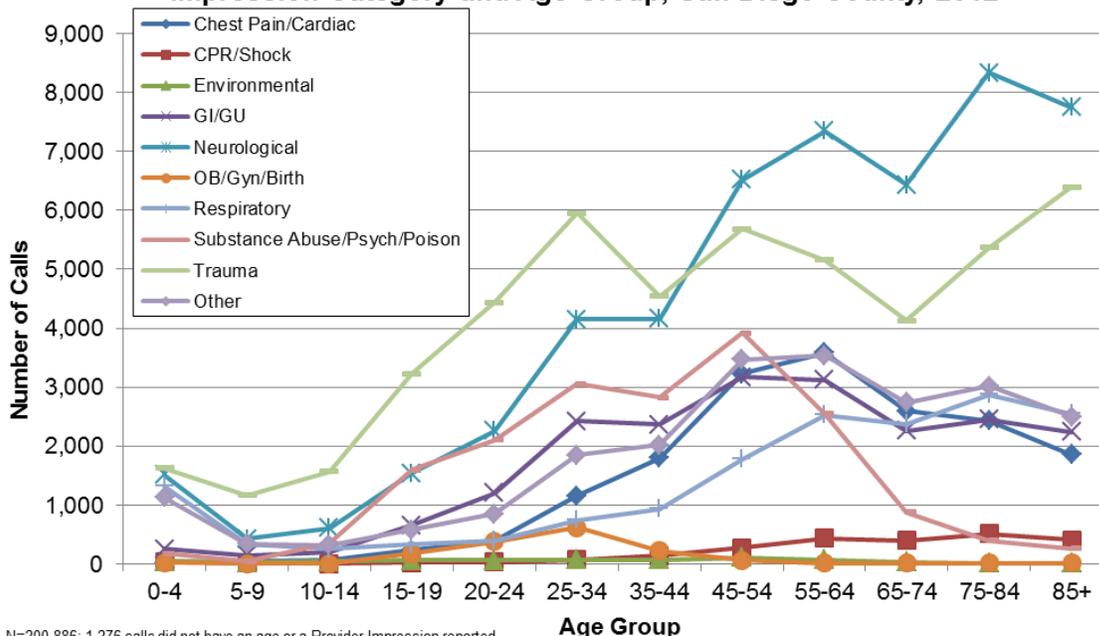
**Percent of Advanced Life Support (ALS) Calls by Provider Impression Category, San Diego County, 2012**



In 2012, one quarter of ALS calls were neurological related, and another 24.7% were trauma related.

N=200,886. 865 calls did not have a Provider Impression reported.  
 Note: Includes all run outcomes. ALS Calls are defined as a call with either an ALS calling agency or ALS transporting agency.  
 Source: County of San Diego Health & Human Services Agency, Emergency Medical Services Prehospital QCS MICN Database, 2012.

**Number of Advanced Life Support (ALS) Calls by Provider Impression Category and Age Group, San Diego County, 2012**



N=200,886; 1,276 calls did not have an age or a Provider Impression reported.  
 Note: ALS Calls are defined as a call with either an ALS calling agency or ALS transporting agency.  
 Source: County of San Diego Health & Human Services Agency, Emergency Medical Services Prehospital QCS MICN Database, 2012

In 2012, there were 898 more neurological related ALS calls among the 55-64 year old age group than in 2011. This was the largest increase among age group and Provider Impression categories between 2011 to 2012.

**Prehospital System Overview -  
Advanced Life Support (ALS) Calls**

Leading Provider Impression Categories by Age Group in San Diego County, 2012				
Age Group				
0-14	15-24	25-64	65+	Total
Trauma 4,361	Trauma 7,668	Neurological 22,169	Neurological 22,522	Neurological 51,046
Neurological 2,550	Neurological 3,805	Trauma 21,332	Trauma 15,890	Trauma 49,251
Respiratory 1,914	Substance Abuse/ Psych/Poison 3,705	Substance Abuse/ Psych/Poison 12,350	Other 8,266	Other 22,338
Other 1,784	GI/GU 1,851	GI/GU 11,069	Respiratory 7,803	GI/GU 20,461
GI/GU 596	Other 1,425	Other 10,863	GI/GU 6,945	Substance Abuse/ Psych/Poison 18,161
Substance Abuse/Psych/Poison 564	Respiratory 723	Chest Pain/Cardiac 9,775	Chest Pain/Cardiac 6,893	Chest Pain/Cardiac 17,427
Chest Pain/Cardiac 131	Chest Pain/Cardiac 628	Respiratory 5,975	Substance Abuse/ Psych/Poison 1,542	Respiratory 16,415
Environmental 109	OB/Gyn/Birth 550	CPR/Shock 927	CPR/Shock 1,326	CPR/Shock 2,375
CPR/Shock 63	Environmental 126	OB/Gyn/Birth 971	Environmental 54	OB/Gyn/Birth 1,523
OB/Gyn/Birth 26	CPR/Shock 59	Environmental 324	OB/Gyn/Birth 30	Environmental 613

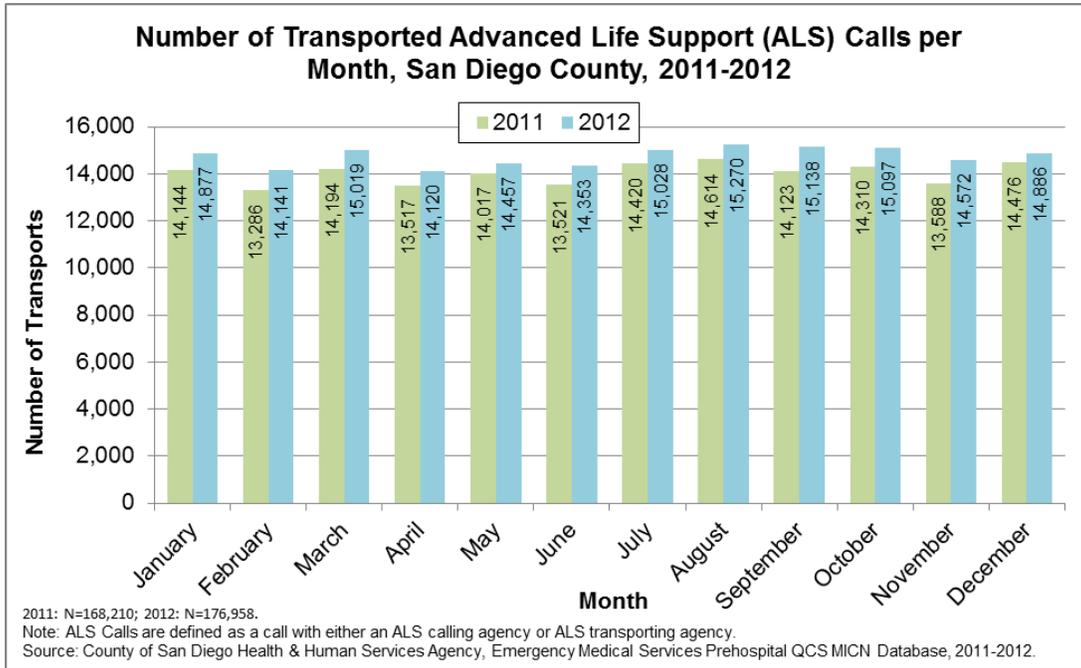
N=200,886; 1,276 calls did not have an age or a Provider Impression reported.

Note: ALS Calls are defined as a call with either an ALS calling agency or ALS transporting agency.

Source: County of San Diego Health & Human Services Agency, Emergency Medical Services Prehospital QCS MICN Database, 2012.

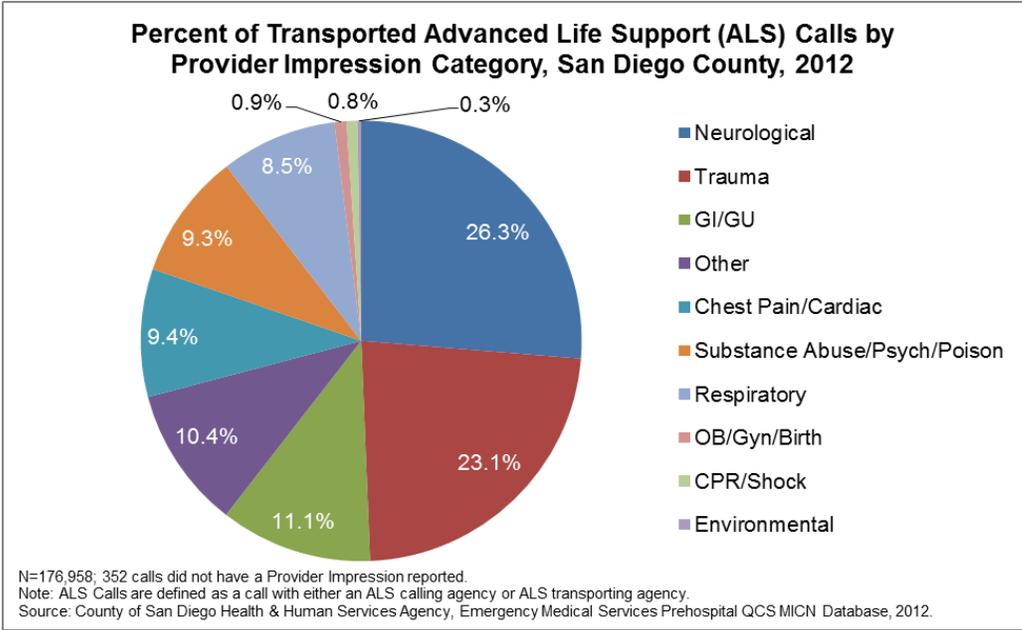
Overall in 2012, there were nearly 3,500 more neurological related ALS calls than in 2011, and it remained the leading Provider Impression (PI) Category for all age groups. The substance abuse/psych/poison related PI category moved from the 7th leading PI category in 2011 to the 5th in 2012.

## Prehospital System Overview - Advanced Life Support (ALS) Transports



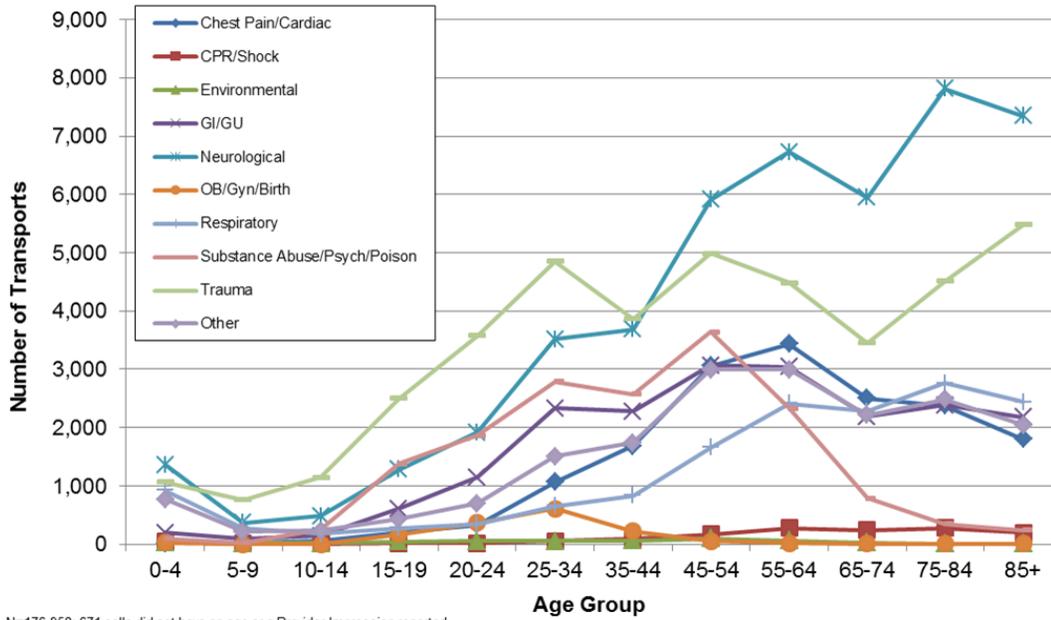
In 2012, there were 176,958 ALS calls that were transported in San Diego County. Nearly 8,750 more transports occurred in 2012 than in 2011. The average number of ALS transports per day was 483, which was an increase of 23 more transports per day than in 2011.

In 2012, neurological related ALS transports were the most common, followed closely by trauma related ALS transports. This was consistent with the transports in 2011.



## Prehospital System Overview - Advanced Life Support Transports

**Number of Transported Advanced Life Support (ALS) Calls by Provider Impression Category and Age Group, San Diego County, 2012**

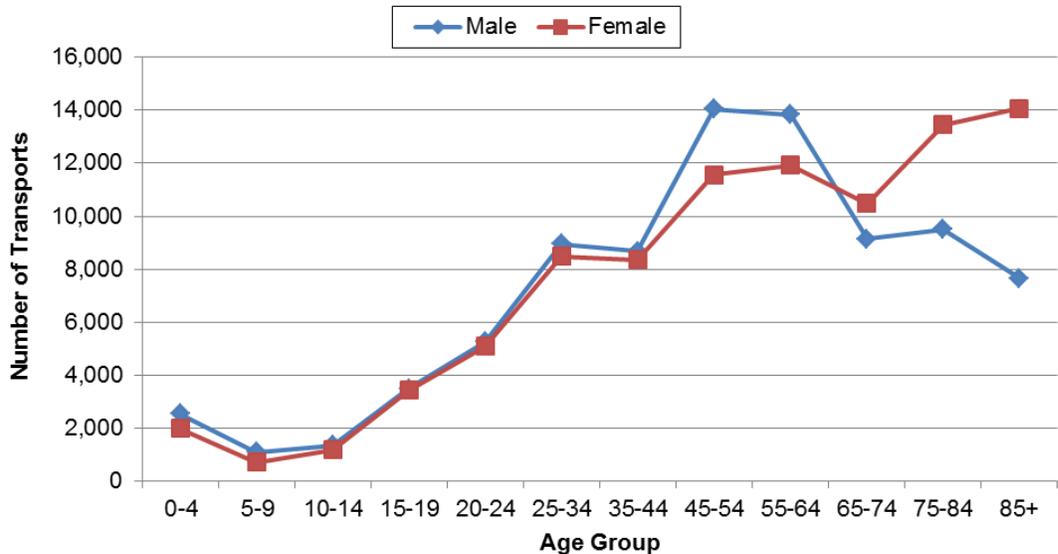


N=176,958; 671 calls did not have an age or a Provider Impression reported.  
 Note: ALS Calls are defined as a call with either an ALS calling agency or ALS transporting agency.  
 Source: County of San Diego Health & Human Services Agency, Emergency Medical Services Prehospital QCS MICN Database, 2012.

Similar to ALS calls, the largest increase in transports occurred among the neurological related transports for the 55-64 year old age group. There was an increase of 816 transports among this group from 2011 to 2012.

In 2012, there were 1,299 more ALS transports among 55-64 year old males and 1,217 more ALS transports among 55-64 year old females compared to 2011.

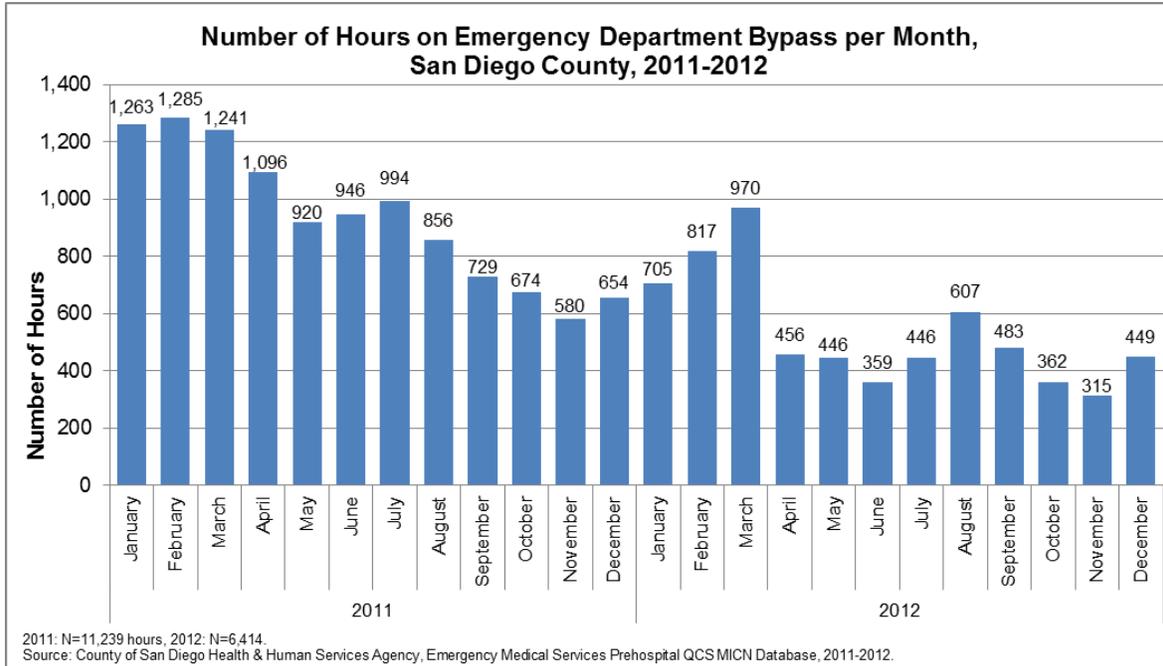
**Number of Transported Advanced Life Support (ALS) Calls by Gender and Age Group, San Diego County, 2012**



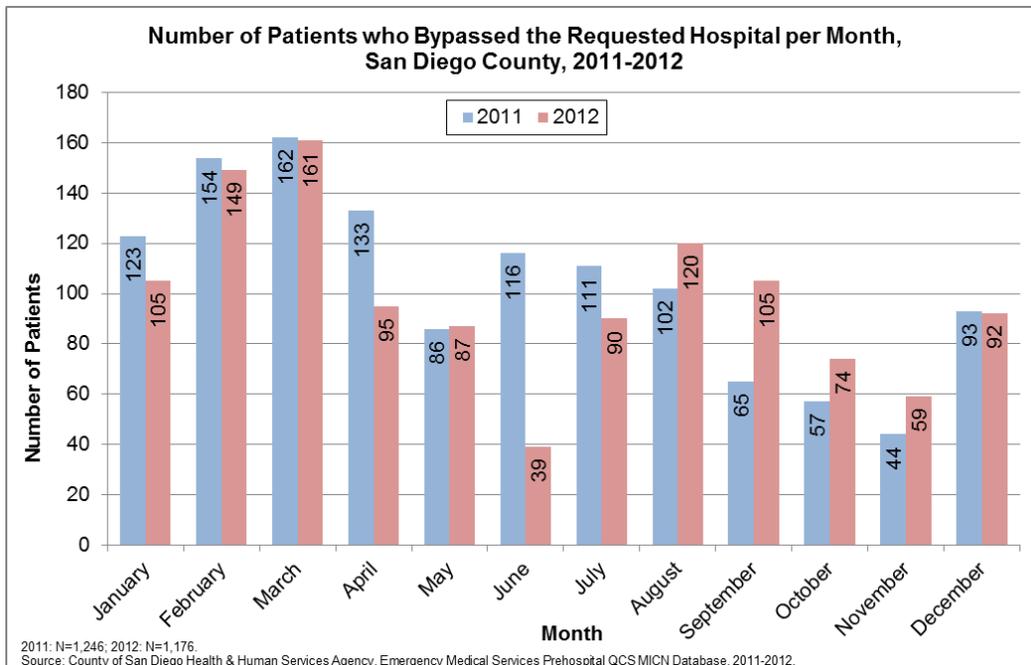
N=176,958; 773 calls did not have an age or gender reported.  
 Note: ALS Calls are defined as a call with either an ALS calling agency or ALS transporting agency.  
 Source: County of San Diego Health & Human Services Agency, Emergency Medical Services Prehospital QCS MICN Database, 2012.

In 2012, the female 85+ year old age group had the most ALS transports, followed closely by 45-54 year old males.

## Prehospital System Overview - Emergency Department (ED) Bypass

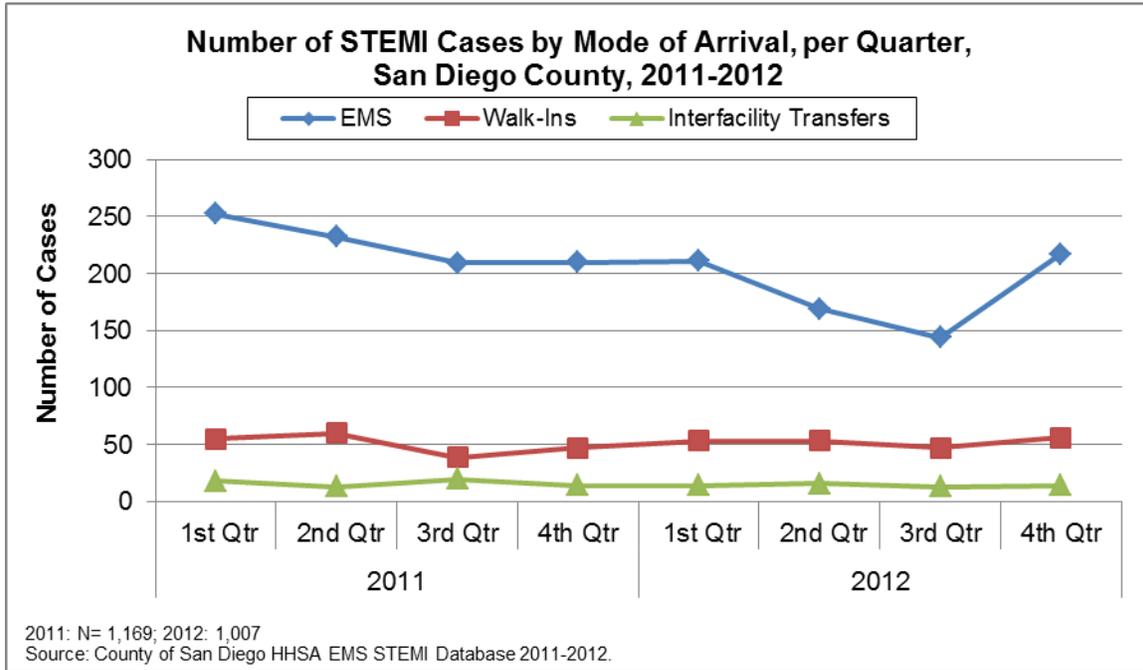


In 2012, the most number of hours spent on bypass occurred in March, while the least occurred in November. The average number of hours on ED Bypass per month in 2012 was 534.5, compared to 936.6 in 2011. The total number of hours on ED Bypass per year decreased by nearly 43% (4,825.5 hours) from 2011 to 2012.

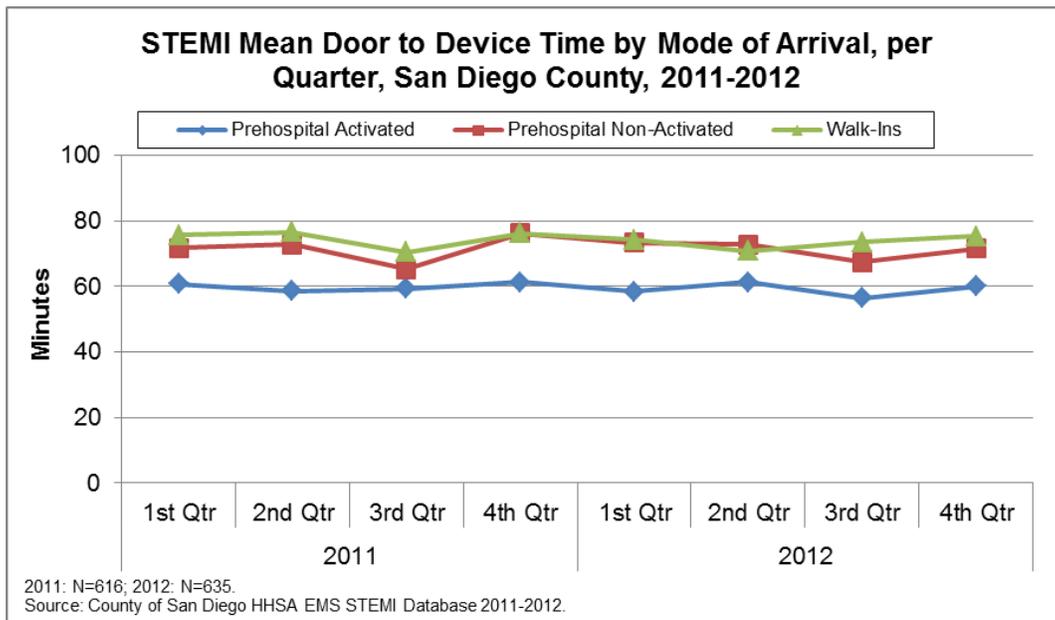


In 2012, 1,176 patients bypassed the requested hospital, which was slightly less than in 2011. On average, there were 98 patients bypassed each month.

Prehospital System Overview - STEMI



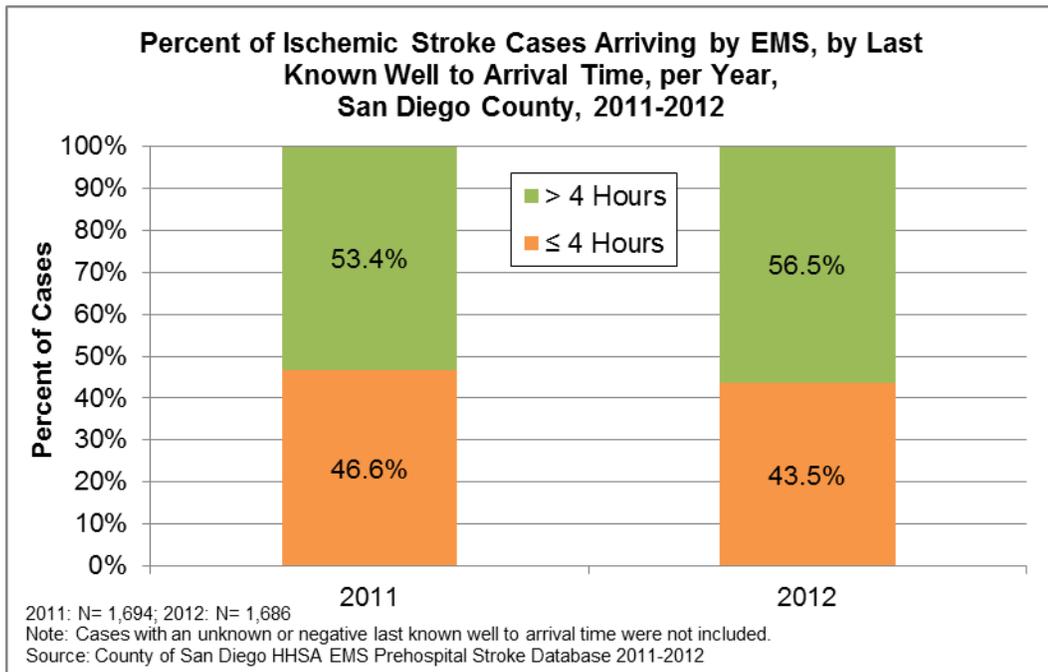
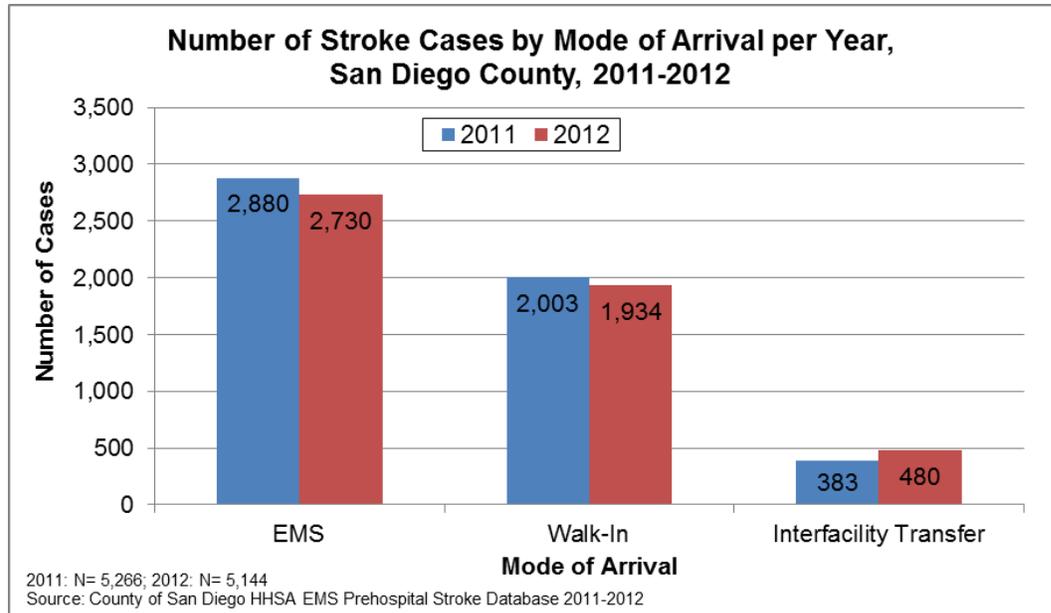
Overall, there were slightly fewer STEMI cases in 2012 than 2011. However, the percent of cases that arrived via Emergency Medical Services (EMS) was similar in both years (77.2% in 2011 and 73.6% in 2012).



The overall mean DTDT was 59.1 minutes for STEMI cases that were activated by the prehospital system, 71.3 minutes for cases that were not activated, and 73.5 minutes for walk-in cases in 2012. These times were all slightly less compared to 2011.

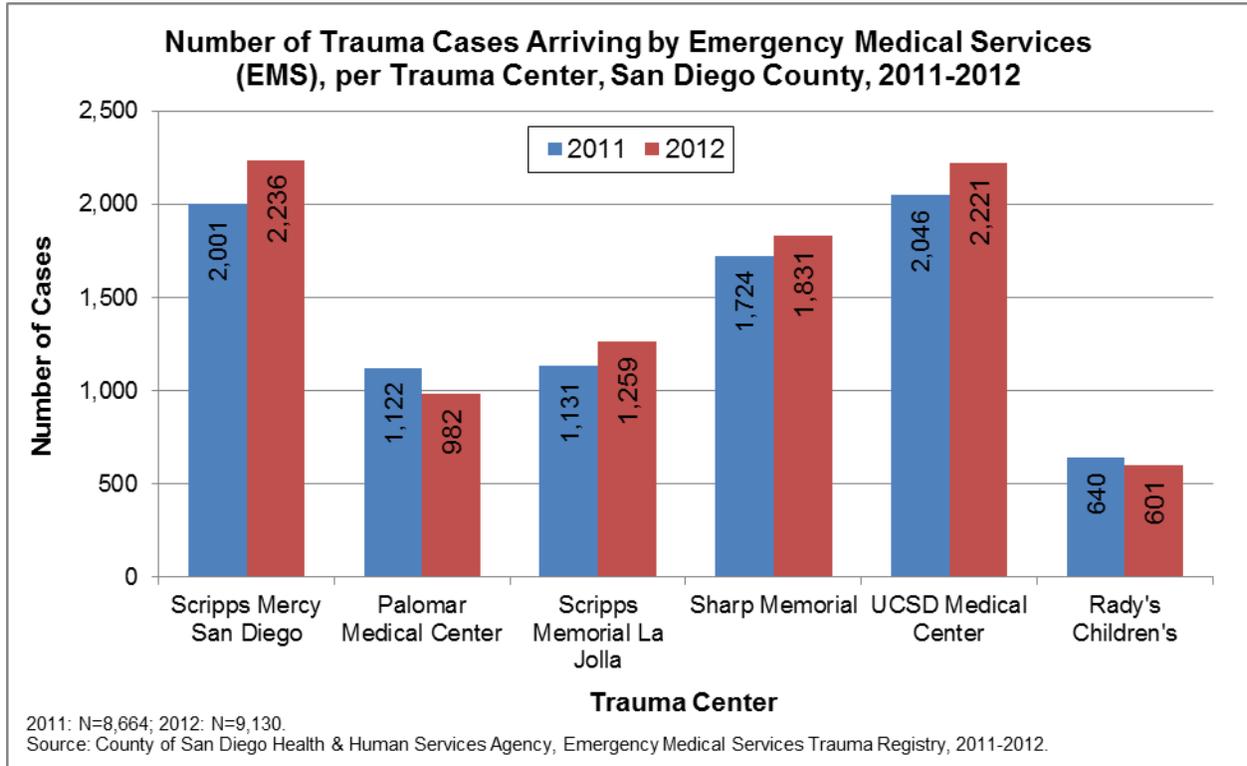
Prehospital System Overview - Stroke

In 2012, 5,144 stroke cases were treated at a designated Stroke Receiving Center. Of these, 53.1% arrived by Emergency Medical Services (EMS).

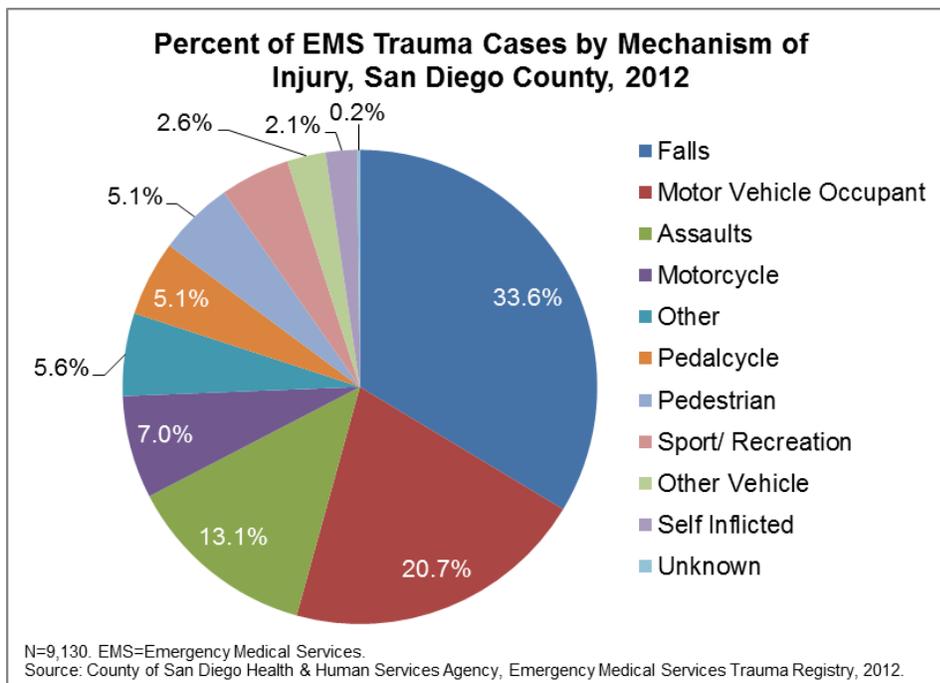


In 2012, 43.5% of the EMS transported Ischemic Stroke cases arrived at a Stroke Receiving Center within 4 hours of the last time the patient was known to be well; slightly less than in 2011.

Prehospital System Overview - Trauma



In 2012, there were 466 more trauma cases arriving at a Trauma Center via EMS than in 2011. The distribution of trauma patients transported by EMS among the Trauma Centers ranged from 6.6% to 24.5%.



In 2012, falls were the most common mechanism of injury among EMS trauma cases, followed by injury resulting from being a motor vehicle occupant.

## EMS SYSTEM REPORT

### COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES

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#### MISSION STATEMENT

Emergency Medical Services (EMS) ensures that emergency medical services, including 9-1-1 ambulance services, and trauma care services are of the highest quality. EMS also provides services in two ambulance districts and is involved in community education, prevention and research projects.

#### DID YOU KNOW?

A Branch of the County of San Diego Health and Human Services Agency, Emergency Medical Services (EMS) coordinates the activities of prehospital, trauma center and specialty service center providers for all residents and visitors of San Diego. The Branch has been designated as the County's "local EMS agency" (LEMSA) pursuant of the Health and Safety Code, and serves as the primary regulatory agency for the local EMS system. In addition, EMS has twelve different programs ranging from Disaster Medical Services to Automated External Defibrillators (AEDs).

##### EMS Programs

- County Service Area Administration
- Base Hospital and Specialty Care Systems
- Prehospital System Operations
- Prehospital System Emergency Medical Personnel
- Automated External Defibrillator (AED) Program
- Sexual Assault Response Team Program
- Epidemiology and Surveillance
- Community Health Statistics
- Information Communications, Systems and Technologies
- Disaster Medical Services
- Health Emergency Preparedness
- Community Health Preparedness