

KBEMS Report

CALENDAR YEAR 2016 – KEMSIS DATA



EMS Provider Information

User Primary License Level	Count of Attendants
AEMT	867
EMR	430
EMT	6,154
Paramedic	2,650
Total: 10,101	

As of April 6, 2017

EMS Provider Information

User Primary License Expiration Date: 12/31/2017	
AEMT	418
EMR	205
EMT	2,993
Paramedic	1,362
User Primary License Expiration Date: 12/31/2018	
AEMT	445
EMR	218
EMT	3,048
Paramedic	1,267
User Primary License Expiration Date: 12/31/2019	
AEMT	4
EMR	7
EMT	113
Paramedic	20

Education Information

Certification Level Name	Person Count
Instructor Coordinator	214
Training Officer 1	286
Training Officer 2	103
	Total: 603

	Count
Sponsoring Organizations	442
Program Providers	154

As of April 6, 2017



Kansas EMS Information System

KEMSIS

Hospital Hub Facilities					
Region 1	Region 2	Region 3	Region 4	Region 5	Region 6
Cheyenne County Hospital	Ashland Health Center	Anthony Medical Center	Clay County Medical Center	Anderson County Hospital	Allen County Regional Hospital
Citizens Medical Center	Bob Wilson Memorial - Grant County Hospital	Central KS Medical Center	Cloud County Health Center	Atchison Hospital	Coffeyville Regional Medical Center
Goodland Regional Medical Center	Greeley County Hospital	Clara Barton Hospital	Ellsworth County Medical Center	Children's Mercy Hospital - South	Fredonia Regional Hospital
Gove County Medical Center	Hamilton County Hospital	Comanche County Hospital	Herington Municipal Hospital	Coffey County Hospital	Greenwood County Hospital
Graham County Hospital	Hodgeman County Health Center	Edwards County Hospital	Jewell County Hospital	Community Health Care Onaga	Labette Health
Grisell Memorial Hospital Dist #1	Kearny County Hospital	Great Bend Regional Hospital LLC	Lincoln County Hospital	Community Memorial Healthcare	Mercy Health Center of Kansas
Hays Medical Center Inc	Lane County Hospital	Harper Hospital District #5	Memorial Hospital	Geary Community Hospital	Mercy Hospital - Columbus
Logan County Hospital	Meade District Hospital	Hillsboro Community Medical Center	Mitchell County Hospital Health Systems	Hiawatha Community Hospital	Neosho Memorial Regional Medical Center
Ness County Hospital District #2	Morton County Hospital	Hutchinson Regional Medical Center	Osborne County Memorial Hospital	Holton Community Hospital	Oswego Medical Center
Norton County Hospital	Satanta District Hospital	Kansas Medical Center	Ottawa County Health Center	Irwin Army Community Hospital	Wilson Medical Center - Reese Campus
Phillips County Hospital	Scott County Hospital	Kingman Community Hospital	Republic County Hospital	Lawrence Memorial Hospital	
Rawlins County Health Center	Southwest Medical Center	Kiowa County Memorial Hospital	Salina Regional Health Center	Menorah Medical Center	
Rooks County Health Center	St. Catherine Hospital	Kiowa District Hospital	Smith County Memorial Hospital	Miami County Medical Center	
Russell Regional Hospital	Western Plains Medical Complex	Lindsborg Community Hospital		Nemaha Valley Community Hospital	
Sheridan County Hospital	Wichita County Health Center	Medicine Lodge Memorial Hospital		Olathe Medical Center	
Trego County - Lemke Mem Hospital		Mercy Hospital - Moundridge		Overland Park Regional Medical Center	
		Newton Medical Center		Providence Medical Center	
		Pawnee Valley Community Hospital		Ransom Memorial Hospital	
		Pratt Regional Medical Center		Sabetha Community Hospital	
Missouri	Oklahoma	Rice County District Hospital		Shawnee Mission Medical Center	
Centerpoint Medical Center of Independence, LLC	Jane Phillips Medical Center	South Central Kansas Medical Center		St. Francis Hospital & Medical Center	
Children's Mercy Hospital		St. Luke Hospital		St. John Hospital	
Freeman Health System - East		Sumner County Hospital District #1		St. Luke's South Hospital	
Freeman Health System - West		Susan B. Allen		St. Marys Clinic	
Lafayette Regional Health Center		Via Christi St. Francis		Stormont-Vail Healthcare Inc	
Lee's Summit Hospital		Via Christi St. Joseph		University of Kansas Hospital	
Mercy Hospital - Joplin, MO		Via Christi St. Theresa		Via Christi Hospital - Manhattan	
Research Belton Hospital		Wesley Medical Center - Main Campus		Wamego City Hospital	
Research Medical Center		Wesley Medical Center - Woodlawn Campus		Washington County Hospital	
Saint Luke's Hospital of Kansas City		William Newton Memorial Hospital			

Services not submitting to KEMSIS

Decatur County Amb. Serv.

Graham County EMS

Logan County EMS

Ness County Ambulance

Rush County EMS

Critical Care Transfer

Stanton County Amb. Serv.

Stevens County EMS

City of Burdett EMS

Lifewatch

Medicine Lodge Mem. Hosp
Ambulance

Mt Hope Community Amb Serv

Newton Fire/EMS

Sedgwick County EMS

Via Christi Critical Care
Transport

Life Touch EMS

Chase County EMS

Hanover Hospital Amb. Serv.

Leavenworth County EMS

Morris County EMS

Waterville Amb. Serv.

Coffeyville Reg Med Ctr EMS

Elk County EMS

Transcare of KS LLC

Air Evac Lifeteam

APS Ambulance

Lifeflight Eagle

Miller EMS

Nine Line EMS

LifeNet Air Medical Service

Children's Mercy Hospital



KEMISIS Data

CALENDAR YEAR 2016

Annual Service Survey - Response

	# of Potential Patients	Percent of Total
All 911 Responses	170,753	83.4%
911 Responses (Medical)	124,760	73.1% of all 911 Responses
911 Responses (Trauma)	45,993	26.9% of all 911 Responses
All Interfacility Responses	25,078	12.2%
Interfacility (Medical)	22,184	88.5% of all Interfacility
Interfacility (Trauma)	2,894	11.5% of all Interfacility
Intercept	149	0.1%
Medical Transport	4,004	2.0%
Mutual Aid	196	0.1%
Standby	4,201	2.1%
Public Assistance	178	0.1%
Other / Not Listed	171	0.1%
Total	204,730	

Annual Service Survey - Transports

	# of Responses	Percent of Total
All 911 Transports	103,309	78.5%
911 Transports (Medical)	75,449	73.0% of all 911 Transports
911 Transports (Trauma)	27,860	27.0% of all 911 Transports
All Interfacility Transports	24,379	18.5%
Interfacility (Medical)	21,525	88.3% of all Interfacility
Interfacility (Trauma)	2,854	11.7% of all Interfacility
Medical Transport	3,910	3.0%
Total	131,598	

Annual Service Survey

- ▶ 64.3% of all responses resulted in a transport.
- ▶ 60.5% of all 911 responses resulted in a transport.
 - ▶ 60.5% of all medical
 - ▶ 60.6% of all trauma
- ▶ *It is important to note that some of the 911 Responses noted above are reflecting interfacility transfers that were paged out via a 911 system (incident location and destination location are both hospitals). Education will be provided during 2017 to help adhere to the definitions provided above for a more accurate picture.*

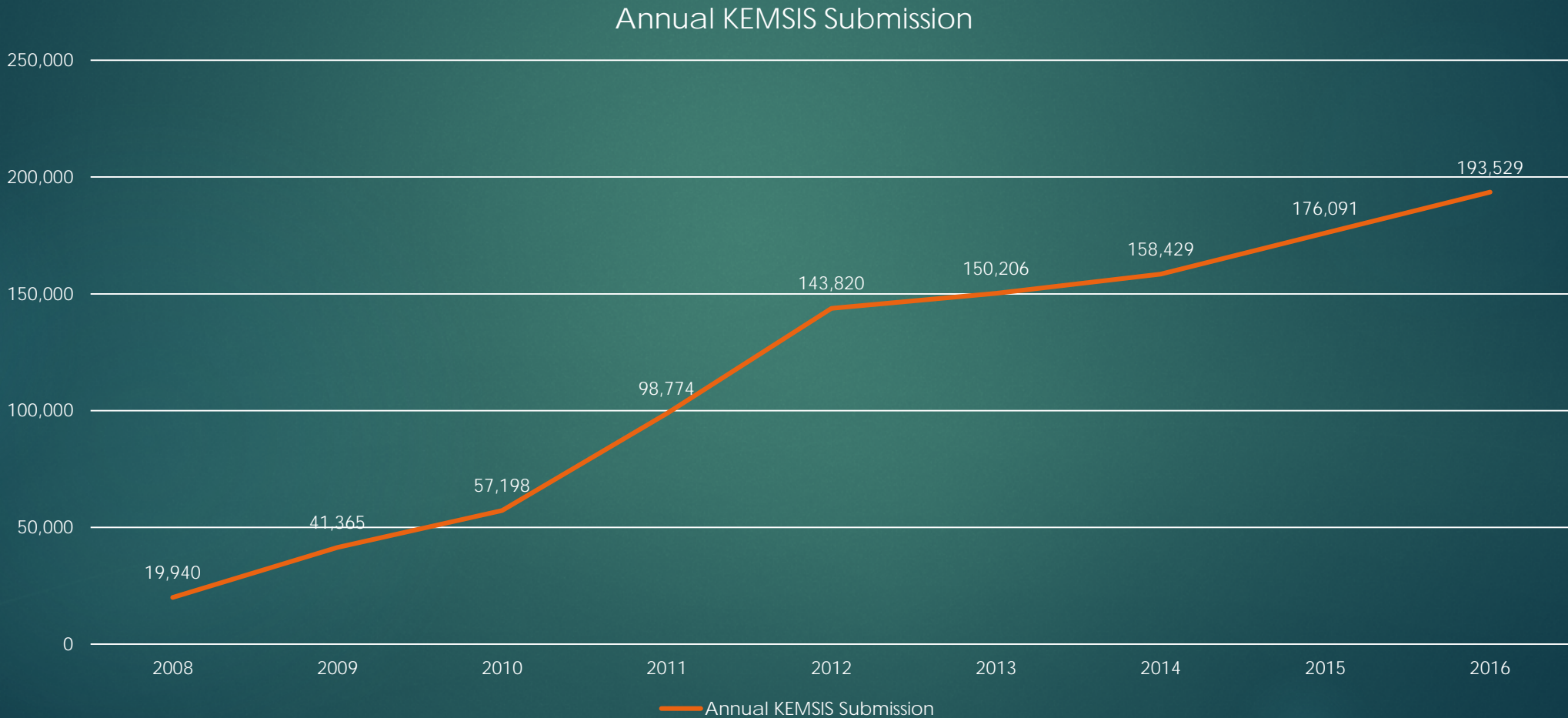
General – Daily Run Volume

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	472	459	493	516	403	521	588	469	561	479	481	504	5,946
2	445	481	484	480	541	525	525	429	556	408	473	519	5,866
3	469	475	518	506	538	609	484	468	459	550	478	462	6,016
4	507	496	544	486	548	1,124	578	434	467	487	462	433	6,566
5	516	503	522	775	606	559	661	464	440	461	479	581	6,567
6	512	433	449	524	628	574	482	455	511	528	478	505	6,079
7	524	459	535	556	624	569	532	413	501	575	503	497	6,288
8	536	517	537	532	715	575	535	414	563	511	439	474	6,348
9	424	500	528	529	571	839	529	480	627	394	460	546	6,427
10	436	498	489	1,020	586	604	519	475	512	530	469	476	6,614
11	515	503	559	768	520	889	519	492	425	460	496	453	6,599
12	510	474	482	744	825	776	471	457	516	445	499	494	6,693
13	512	462	437	520	635	555	441	443	457	471	436	495	5,864
14	539	714	562	571	499	592	448	426	444	602	531	482	6,410
15	511	508	486	805	485	570	478	452	574	570	482	490	6,411
16	437	446	513	504	502	585	465	457	552	498	525	643	6,127
17	407	503	535	736	524	616	419	464	514	551	463	498	6,230
18	483	548	501	565	549	552	460	474	439	459	505	461	5,996
19	618	582	438	713	548	531	418	490	589	442	425	538	6,332
20	541	498	473	1,276	495	594	504	436	491	480	412	469	6,669
21	535	481	544	1,518	816	539	495	448	458	627	476	503	7,440
22	478	507	489	814	788	593	522	463	562	459	518	482	6,675
23	481	451	558	988	558	562	508	442	627	425	427	509	6,536
24	432	485	766	744	626	560	419	439	494	444	387	460	6,256
25	527	488	538	521	583	872	465	467	395	478	419	390	6,143
26	486	512	454	470	595	535	461	509	464	468	462	477	5,893
27	488	500	724	525	573	588	441	472	472	544	353	506	6,186
28	492	495	774	1,256	801	575	475	467	433	608	469	473	7,318
29	551	511	547	782	480	510	436	469	553	514	555	465	6,373
30	464		508	464	485	580	446	490	621	404	462	501	5,425
31	433		499		552		411	429		471		441	3,236
Total	15,281	14,489	16,486	21,208	18,199	18,673	15,135	14,187	15,277	15,343	14,024	15,227	193,529

- Highest volume date – April 21st (1,518) - 3rd Thursday of April.
- Lowest volume date – November 27th (353) – Sunday after Thanksgiving.
- Highest volume month – April (21,208)
- Lowest volume month – November (14,024)

General – Volume Trend

n = 1,039,352





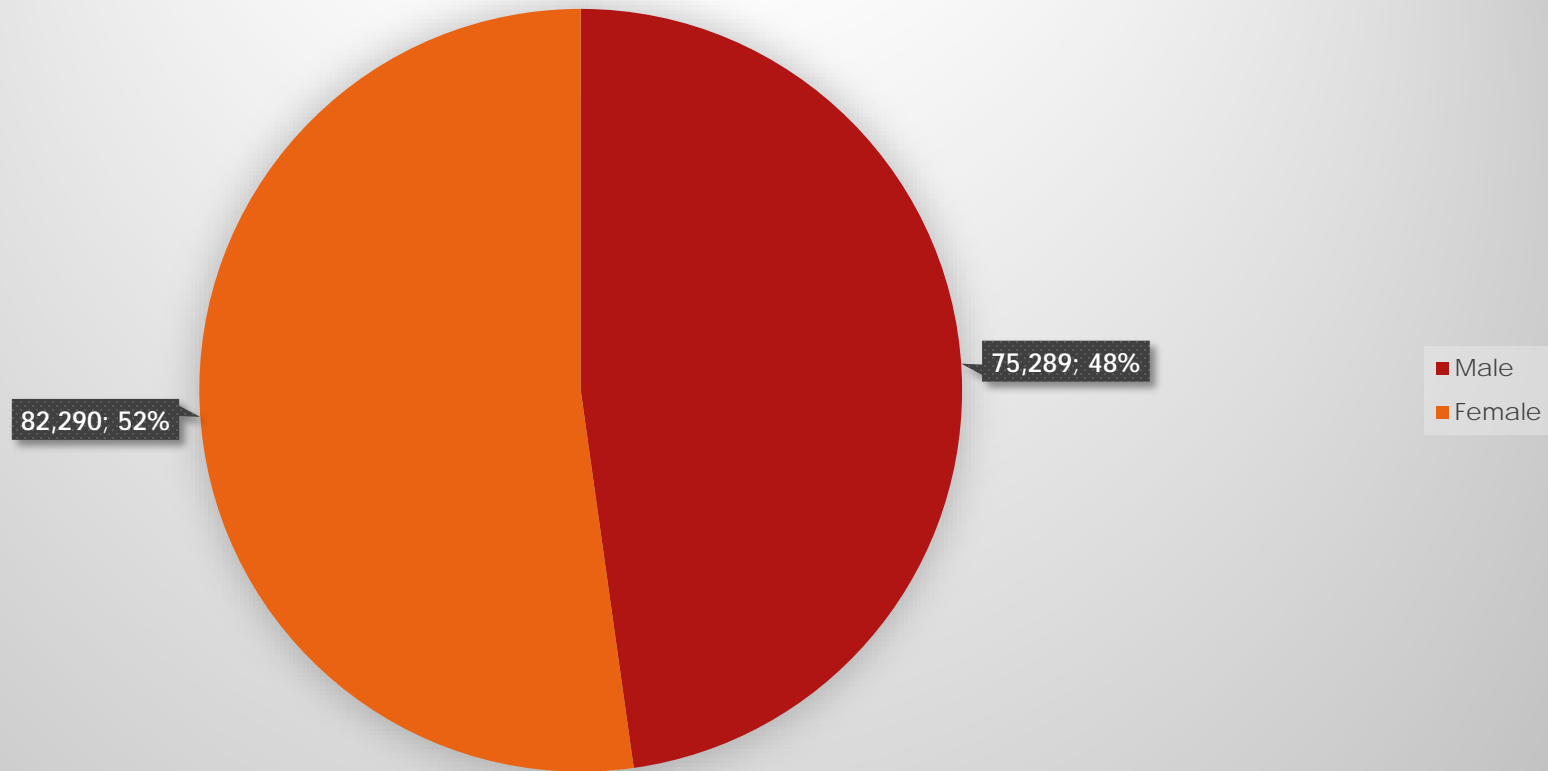
INCIDENT INFORMATION

CALENDAR YEAR 2016

Incident – Patient Gender

n = 157,579

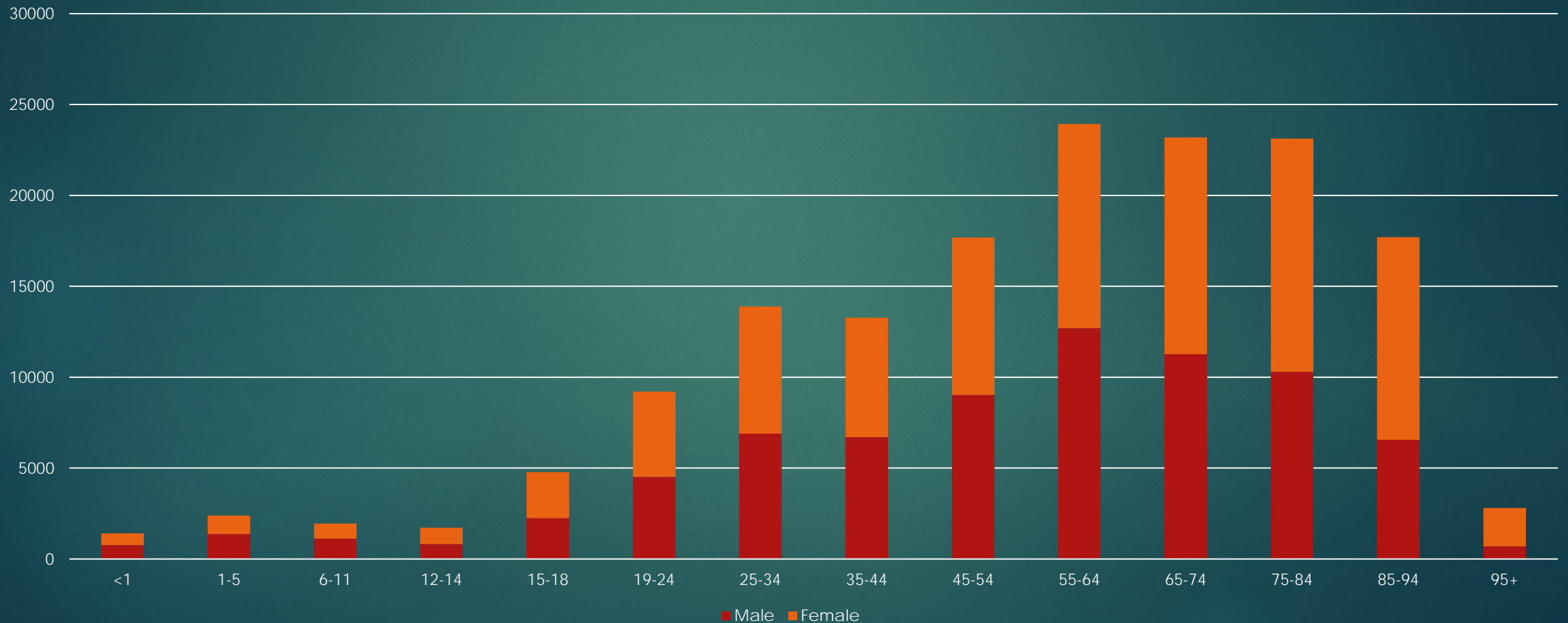
Gender



Incident – Patient Age / Gender

n = 157,060

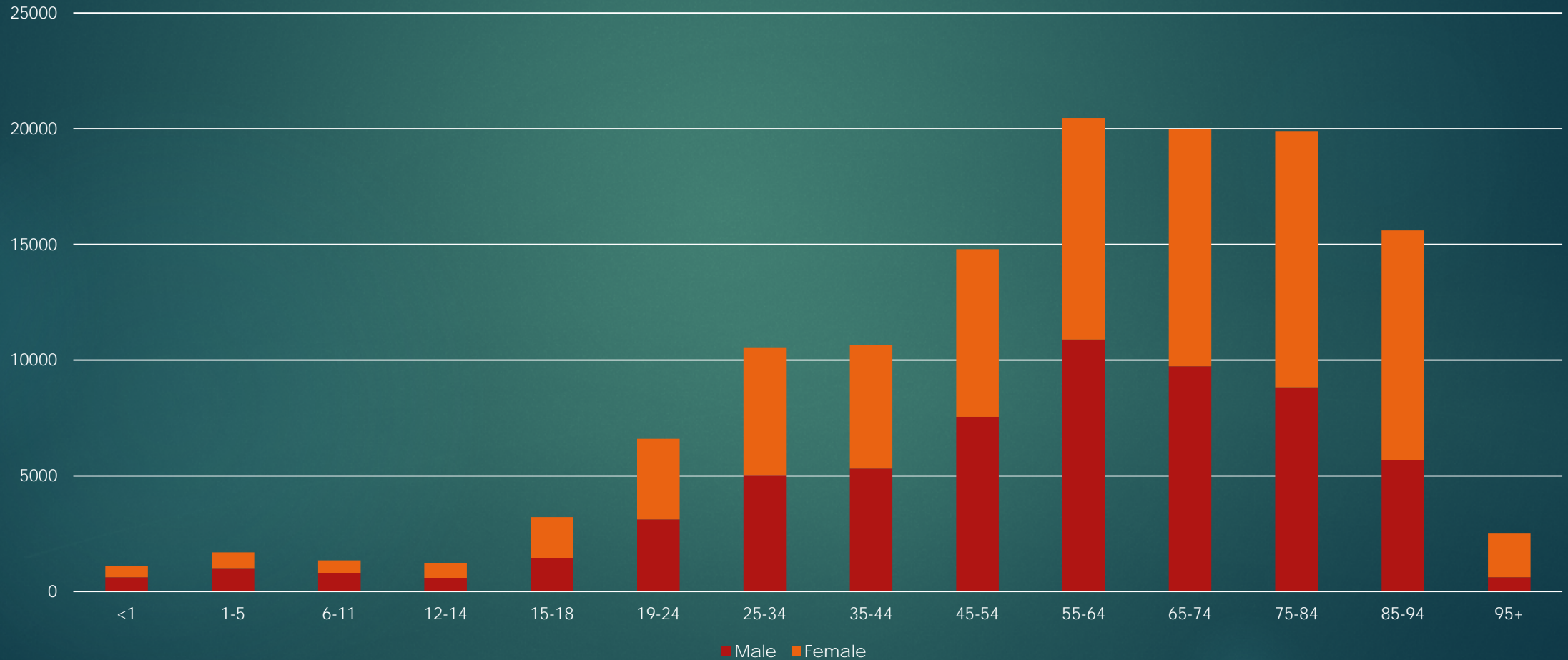
Gender by Age Group



Incident – Transported Patient Age/Gender

n = 129,621

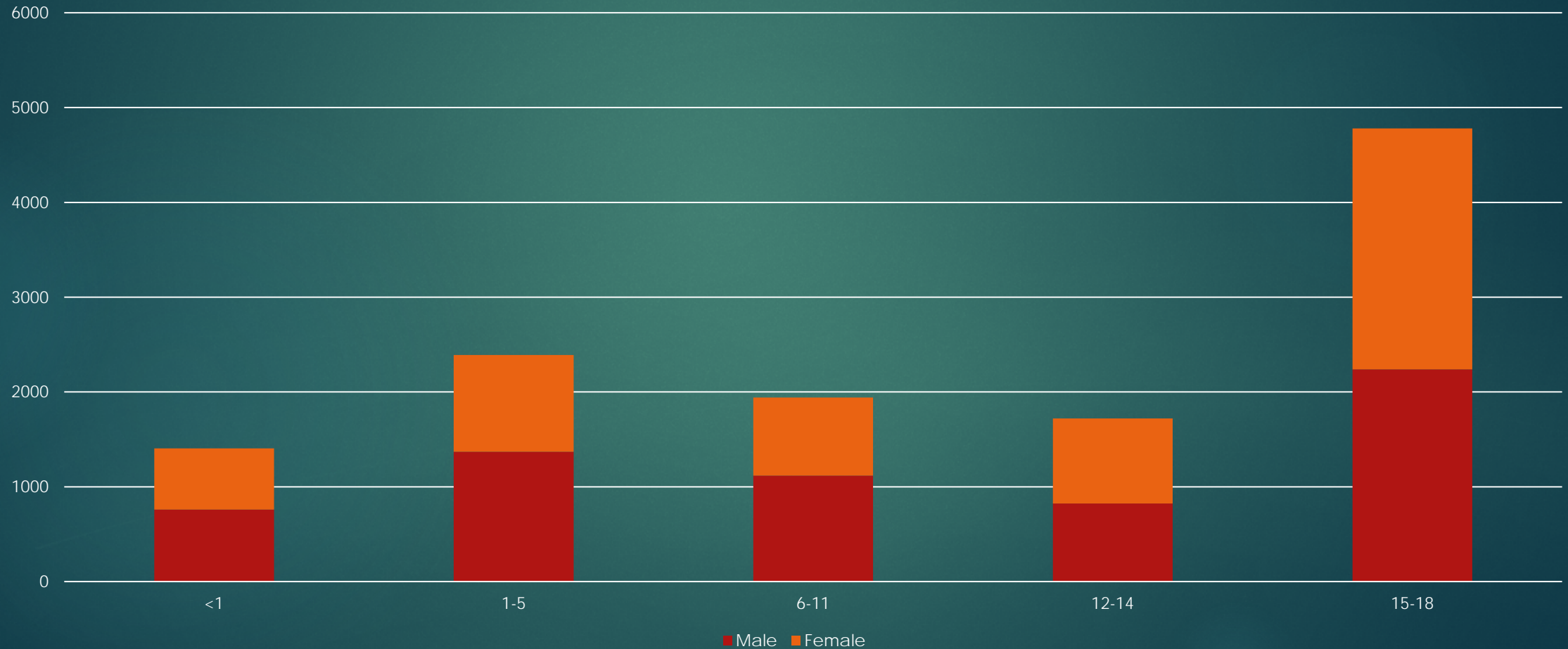
Gender of Transported Patients by Age Group



Incident – Patient Age/Gender (0-18 years)

n = 12,239

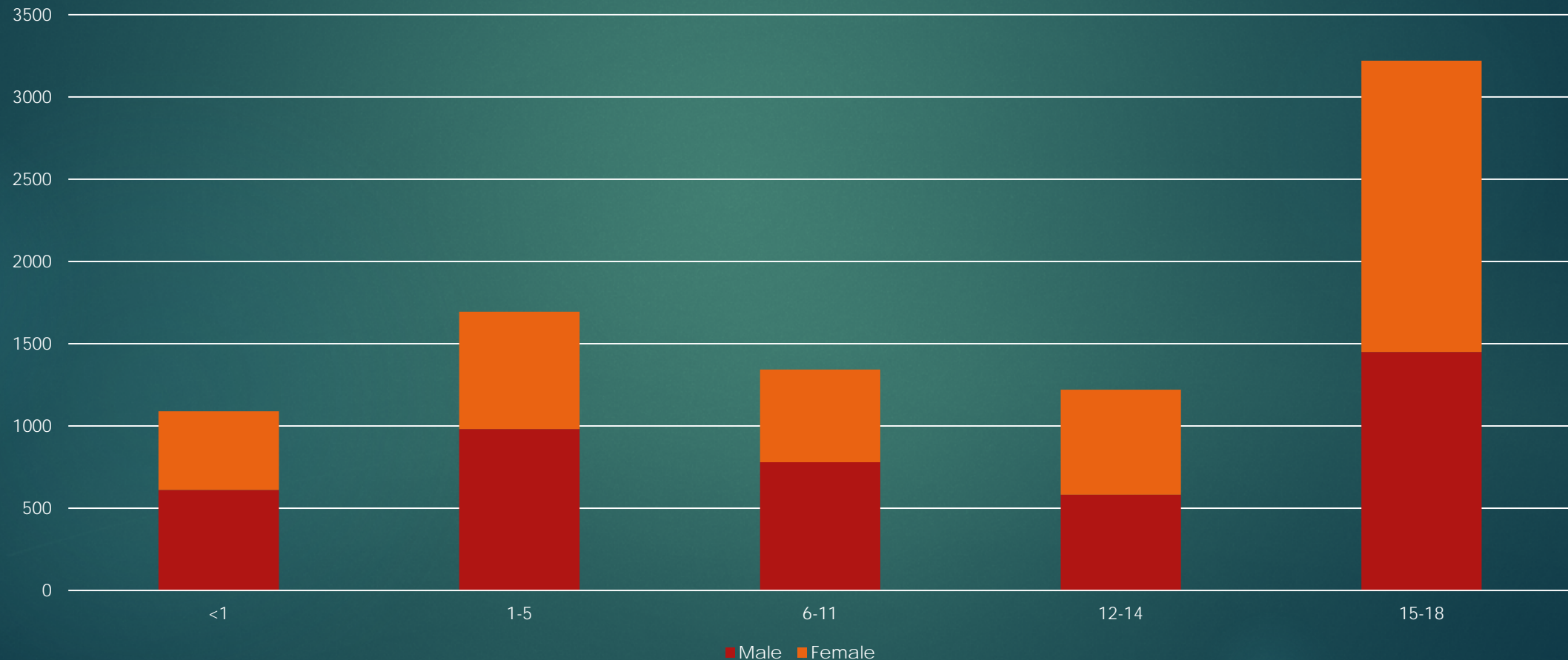
Gender by Age Group (0-18 years)



Incident – Transported Patient Age/Gender (0-18 years)

n = 8,567

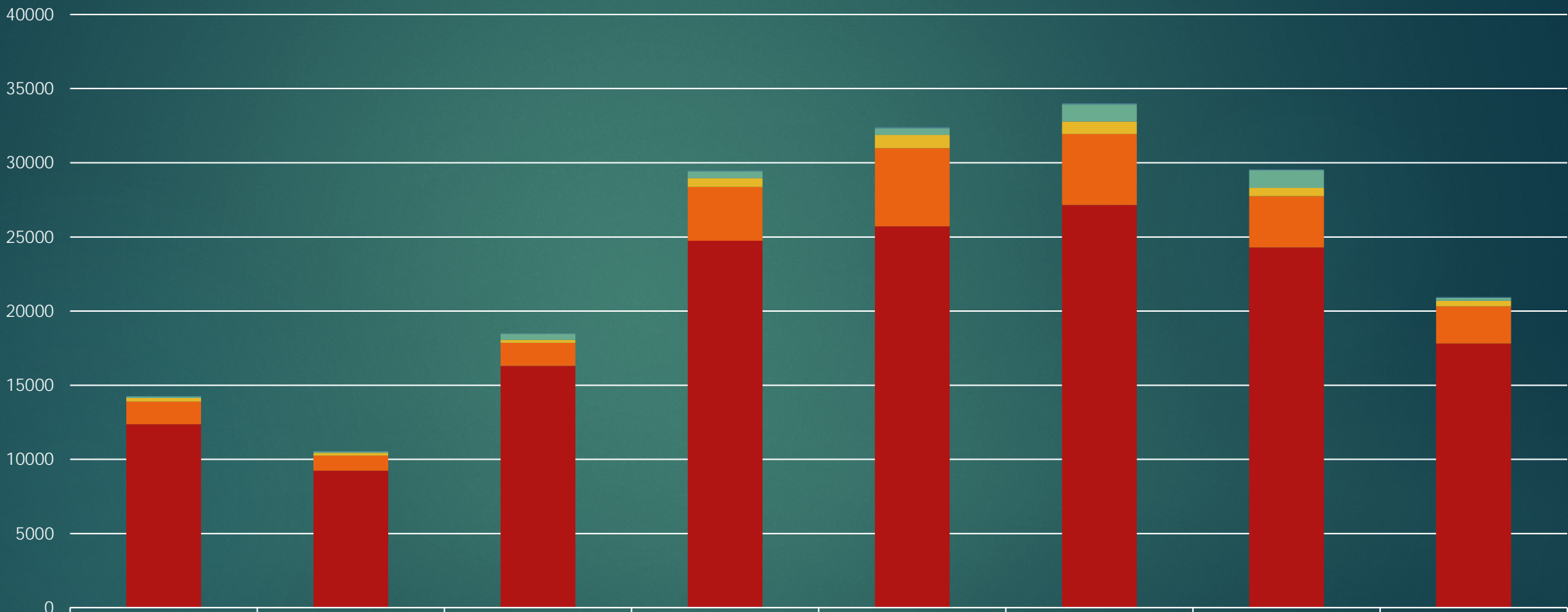
Gender of Transported Patients by Age Group (0-18 years)



Incident – Time of Day (3 hr)

n = 189,660

Time of Day



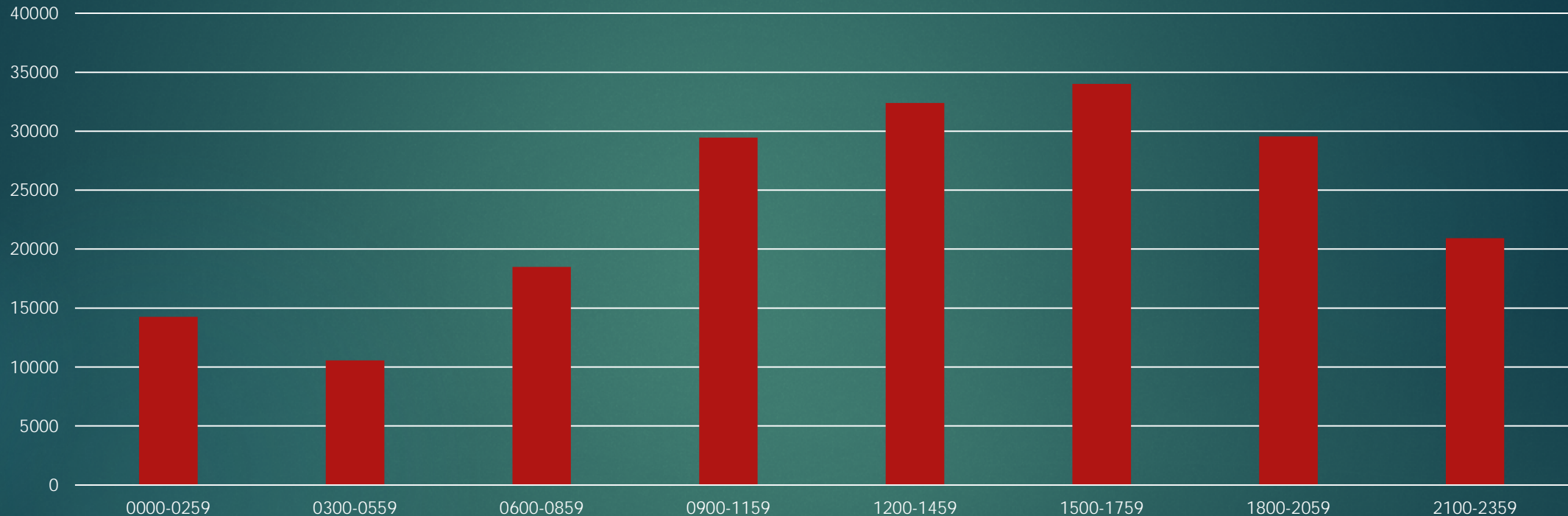
■ Other
■ Standby
■ Medical Transport
■ Interfacility
■ 911 Response

	0000-0259	0300-0559	0600-0859	0900-1159	1200-1459	1500-1759	1800-2059	2100-2359
Other	31	29	38	49	64	82	69	43
Standby	99	84	400	445	449	1137	1172	199
Medical Transport	241	187	208	594	891	842	570	372
Interfacility	1535	1009	1540	3629	5267	4796	3452	2514
911 Response	12360	9244	16315	24747	25717	27146	24288	17806

Incident – Time of Day (3 hr)

n = 189,660

Total Call Volume by 3 hour time block



- 66.1% of all calls occur between the hours of 9am and 9pm.
 - 64.6% of all 911 calls occur between 9am and 9pm.
 - 72.2% of all Interfacility calls occur between 9am and 9pm.
- 57.9% of standby calls occur between the hours of 3pm and 9pm.

Incident – Day of Week

n = 193,529

2016 - Types of Service Requested

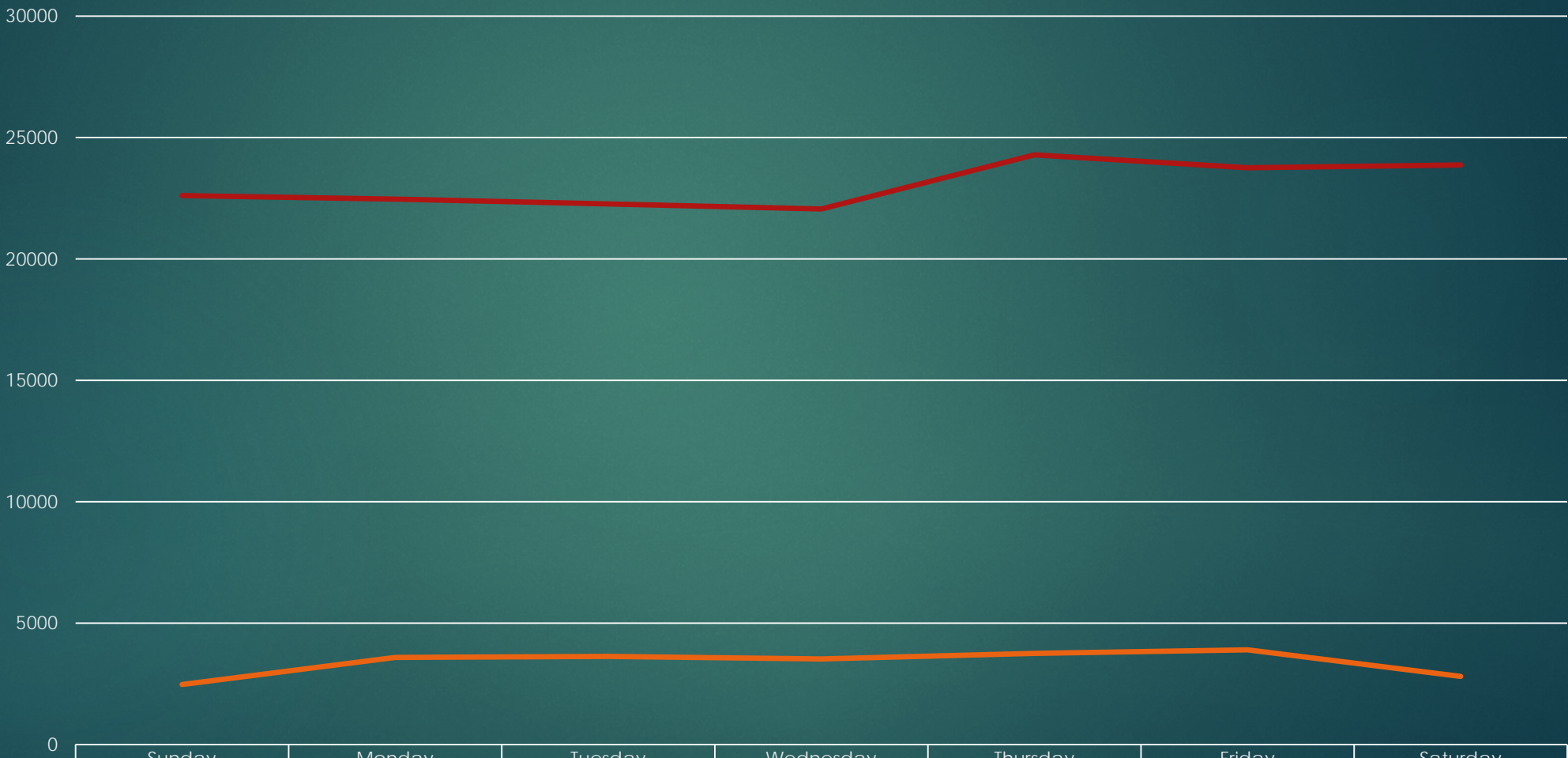


Incident – Day of Week

n = 193,529

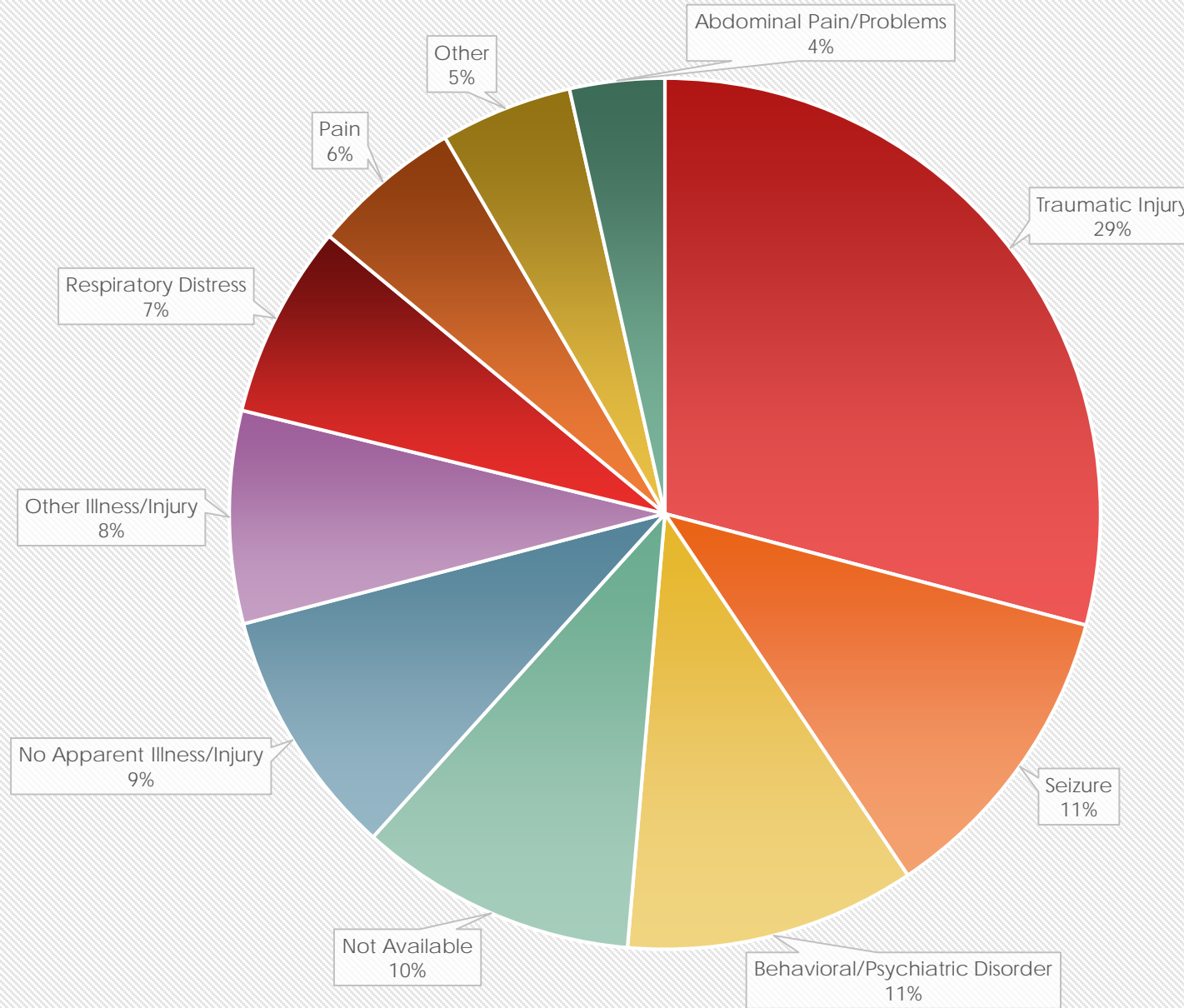


2016 - Types of Service Requested (911 and Interfacility Only)



	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
911 Response	22613	22464	22273	22058	24291	23762	23868
Interfacility	2475	3593	3632	3528	3760	3897	2810

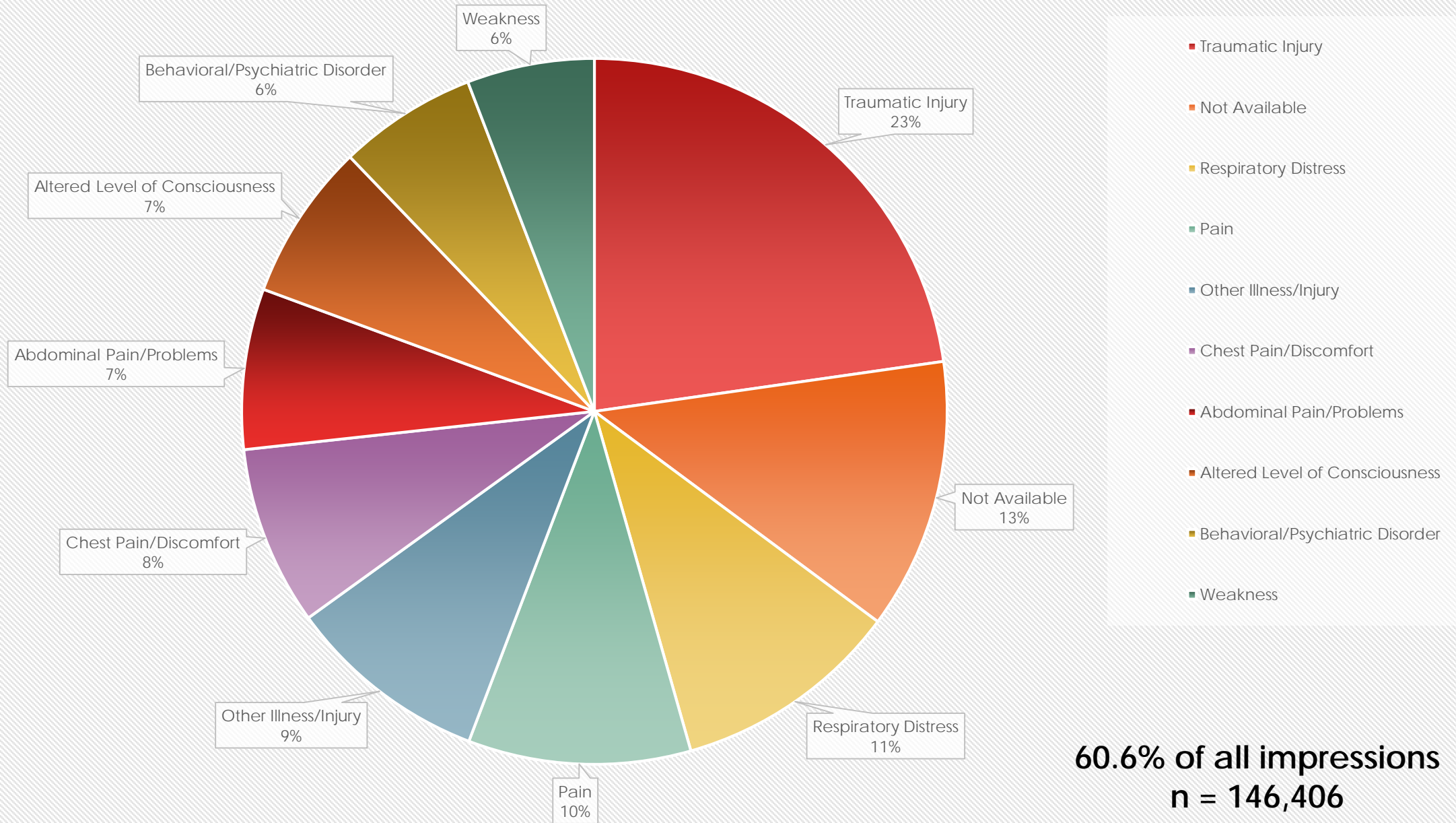
Top 10 Pediatric Primary Impressions (0-17 years)



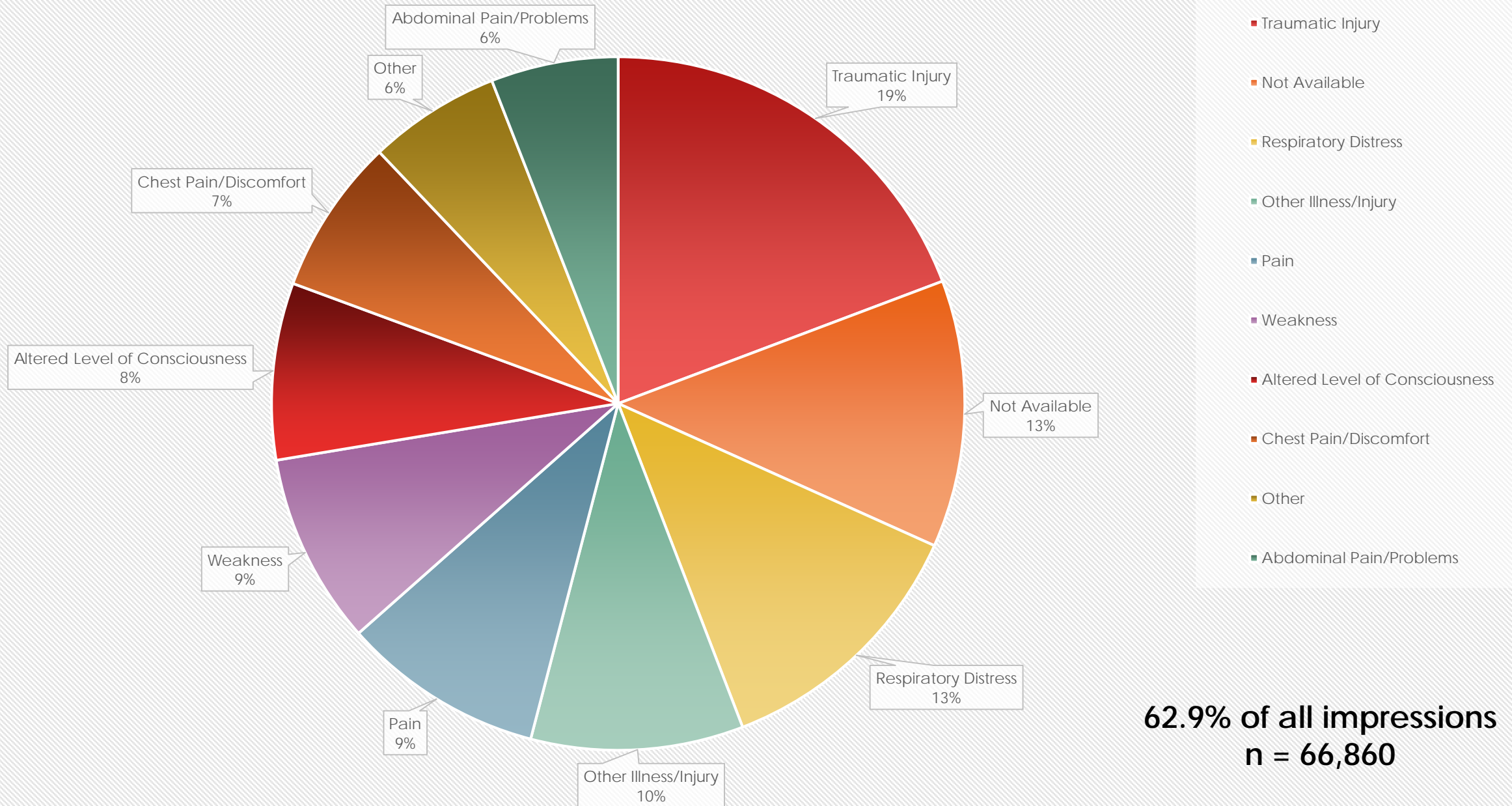
- Traumatic Injury
- Seizure
- Behavioral/Psychiatric Disorder
- Not Available
- No Apparent Illness/Injury
- Other Illness/Injury
- Respiratory Distress
- Pain
- Other
- Abdominal Pain/Problems

76.7% of all impressions
n = 10,741

Top 10 Adult Primary Impressions (18+ years)



Top 10 Older Adult Primary Impressions (65+ years)





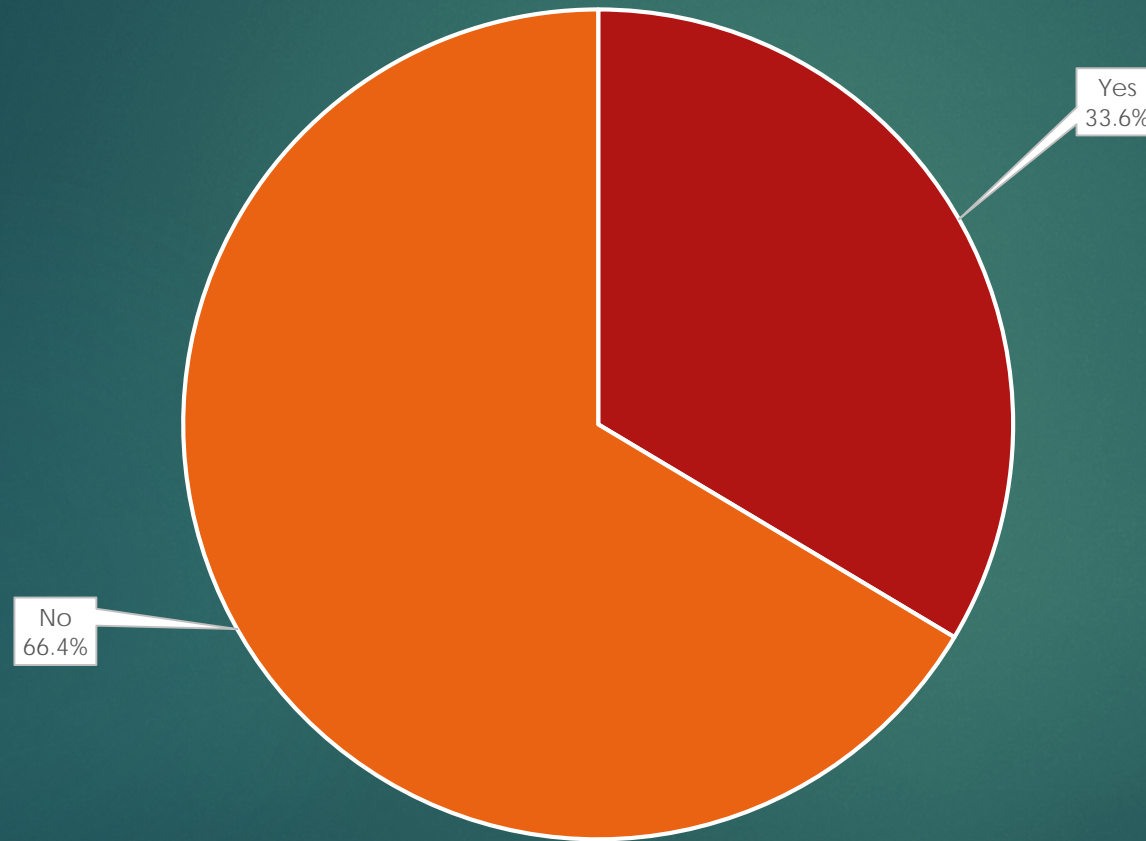
CLINICAL CARE

CALENDAR YEAR 2016

Cardiac Chest Pain – 12 lead ECG

n = 10,321

Was a 12-lead ECG obtained for suspected cardiac chest pain?



Patient is greater than or equal to 35 y/o.

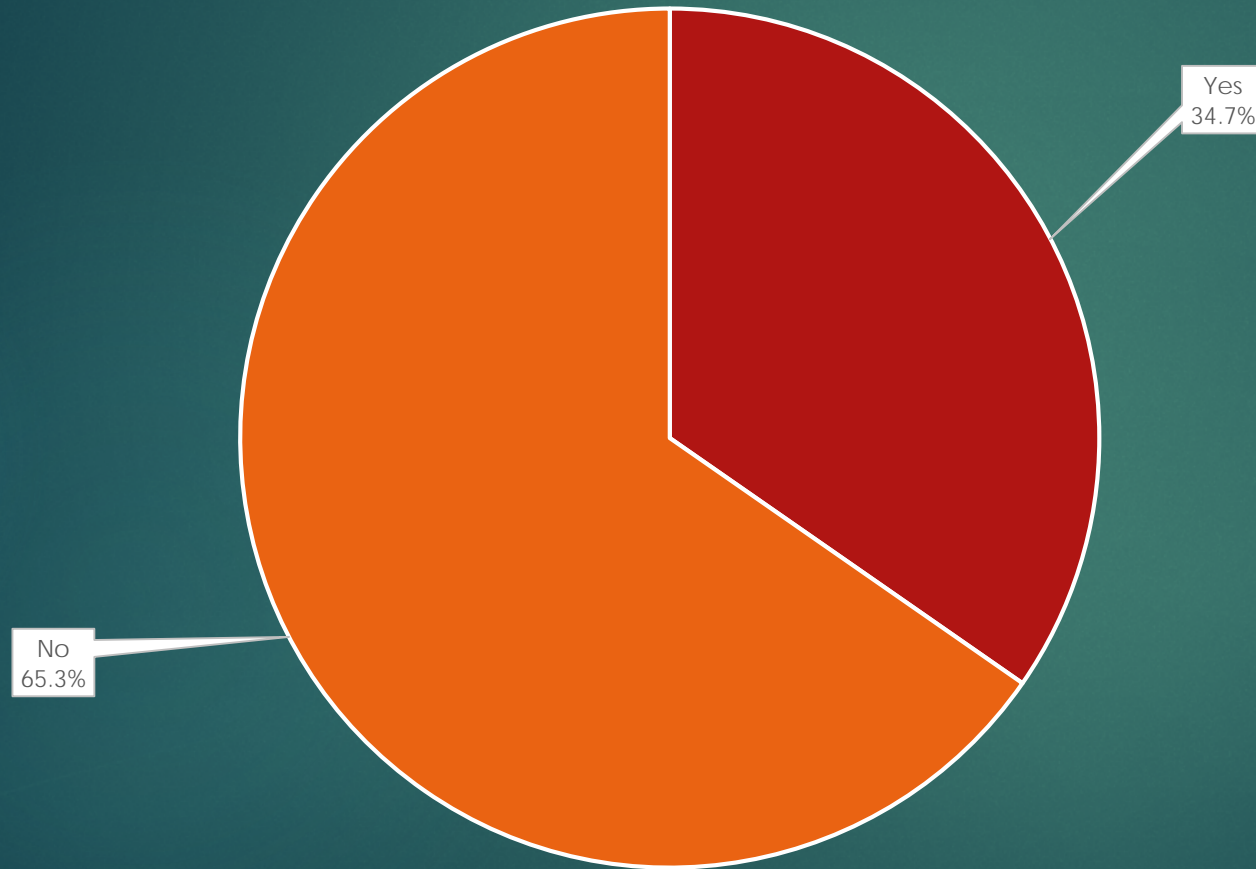
Presented with chest pain of non-traumatic origin.

Documented attempt of 12-lead ECG

Cardiac Chest Pain – Aspirin

n = 10,321

Was Aspirin administered for suspected cardiac chest pain?



Patient is greater than or equal to 35 y/o.

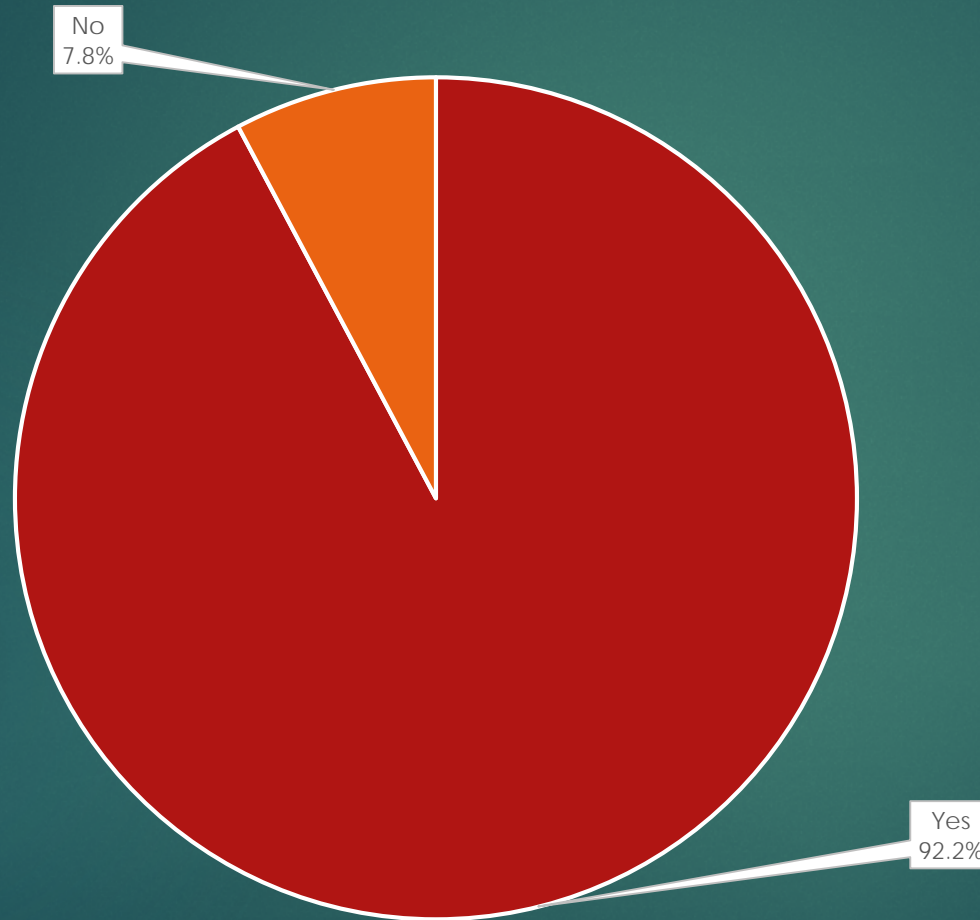
Presented with chest pain of non-traumatic origin.

Documented aspirin administered by patient, by provider, or prior to arrival.

Suspected Stroke – Complete GCS

n = 3,135

Was a complete GCS obtained for a suspected stroke?



Primary impression of cerebral infarction, stroke, or TIA.

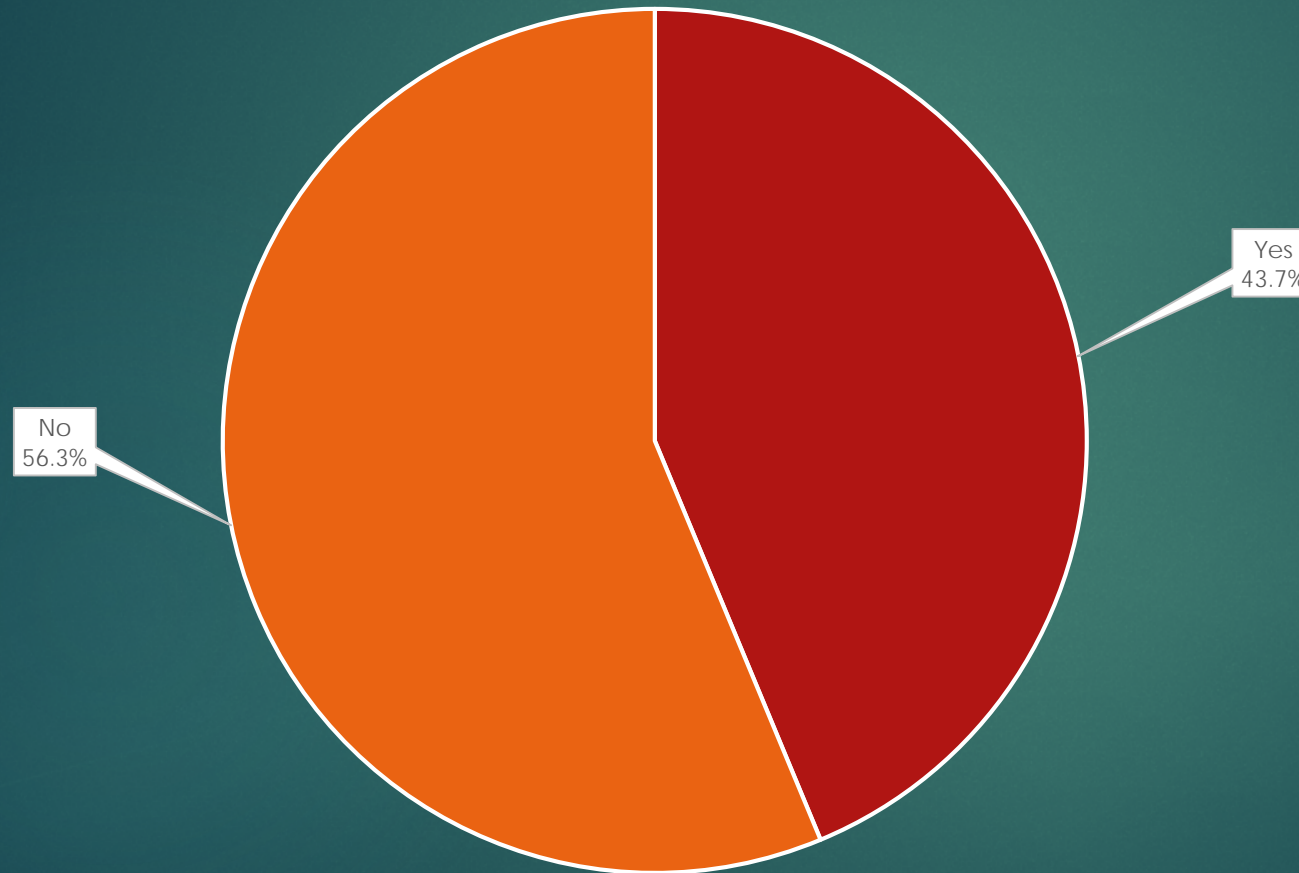
Eye, Verbal, or Motor not blank.

GCS = 3 to 15

Suspected Stroke – Blood Glucose

n = 3,135

Was a blood glucose obtained for a suspected stroke?



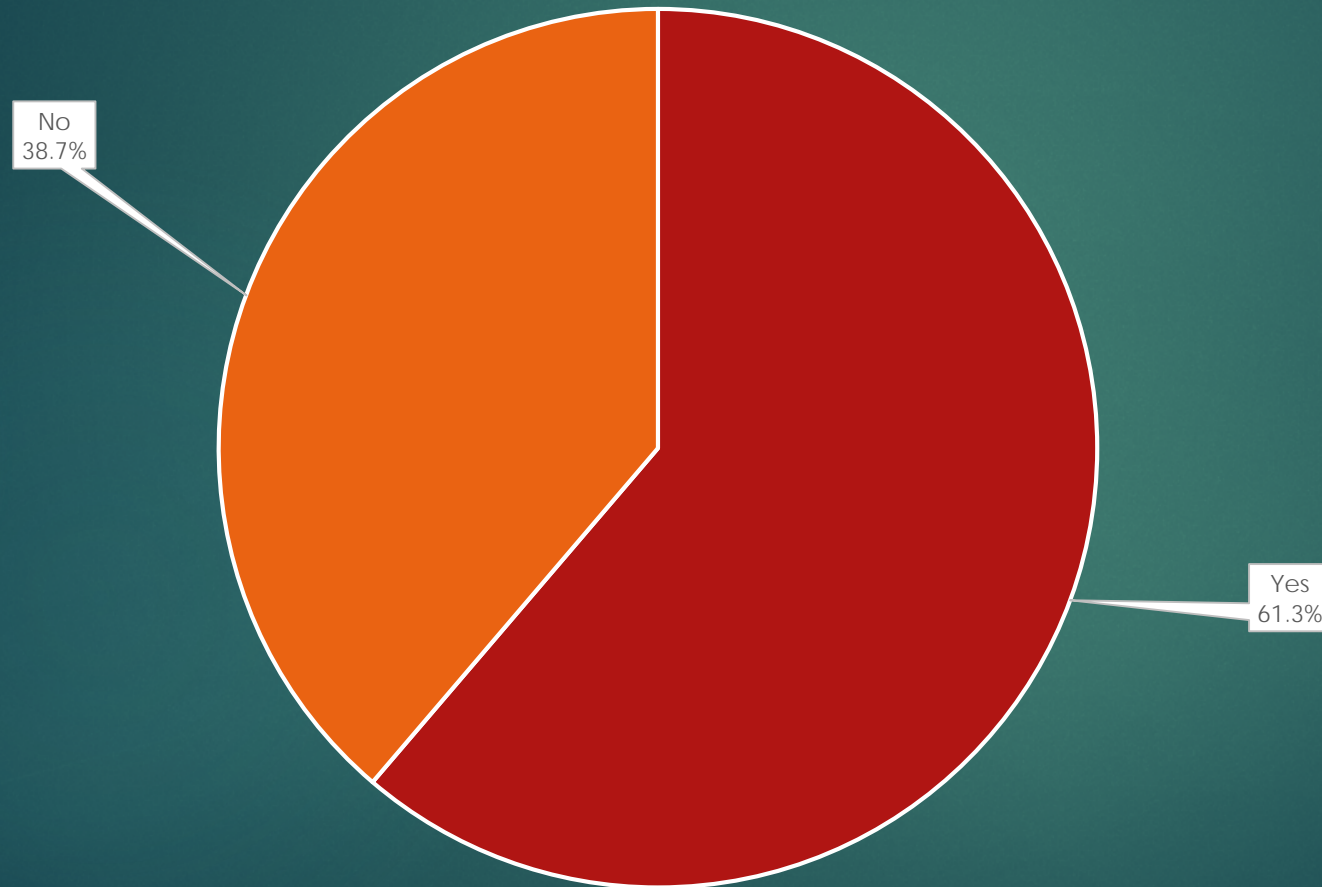
Primary impression of cerebral infarction, stroke, or TIA.

Procedure performed contains Glucometer
OR
Blood glucose count > 0
OR
Blood glucose is listed as "High" or "Low"

Diabetic Emergency – Blood Glucose

n = 4,065

Was a blood glucose obtained for a suspected diabetic emergency?



Primary impression of hyperglycemia or hypoglycemia

Procedure performed contains Glucometer
OR

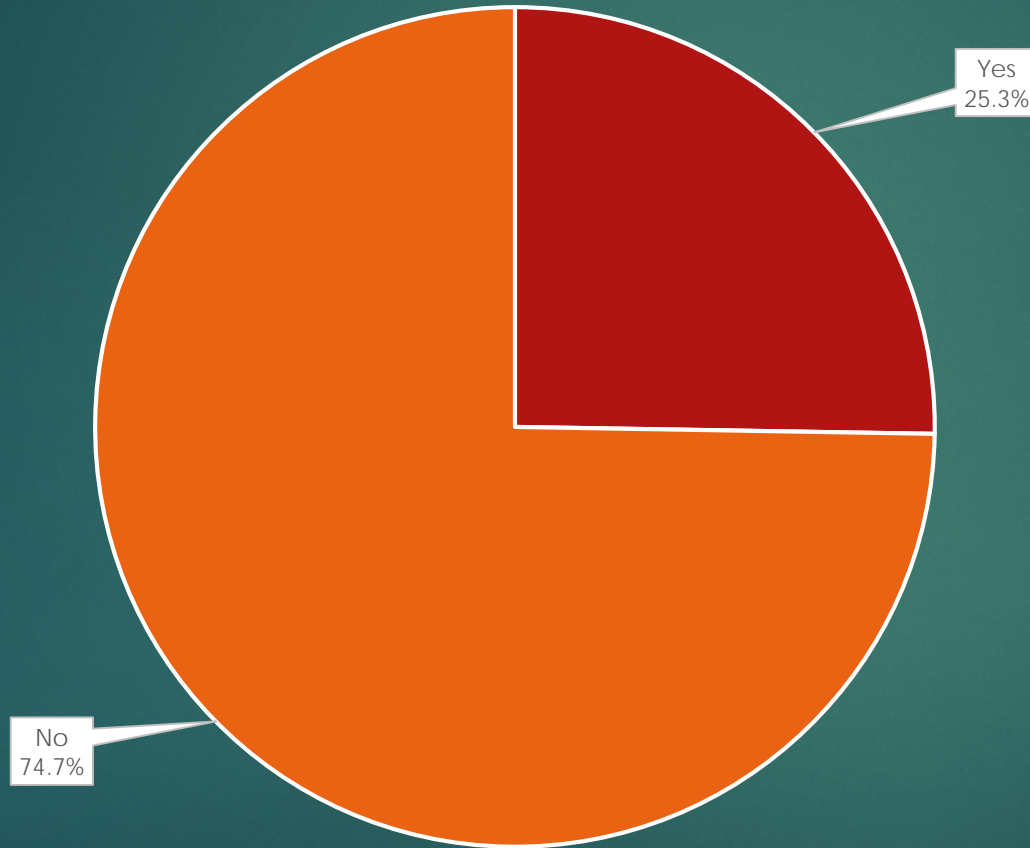
Blood glucose count > 0
OR

Blood glucose is listed as "High" or "Low"

Burns – Pain Management

n = 285

Was pain medication administered to a burn patient?

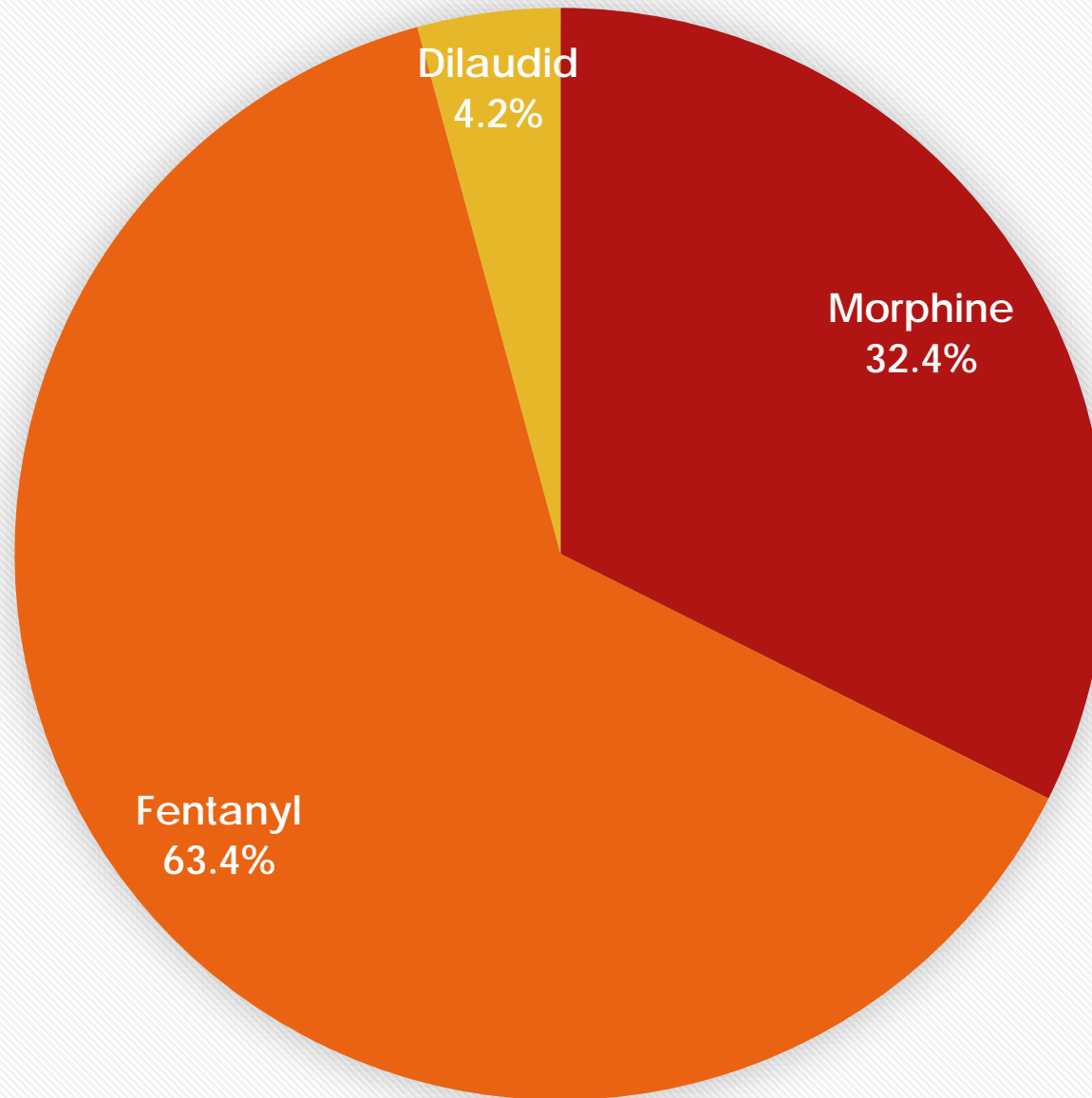


Mechanism of Injury =
Burn

Cause of injury = Burn

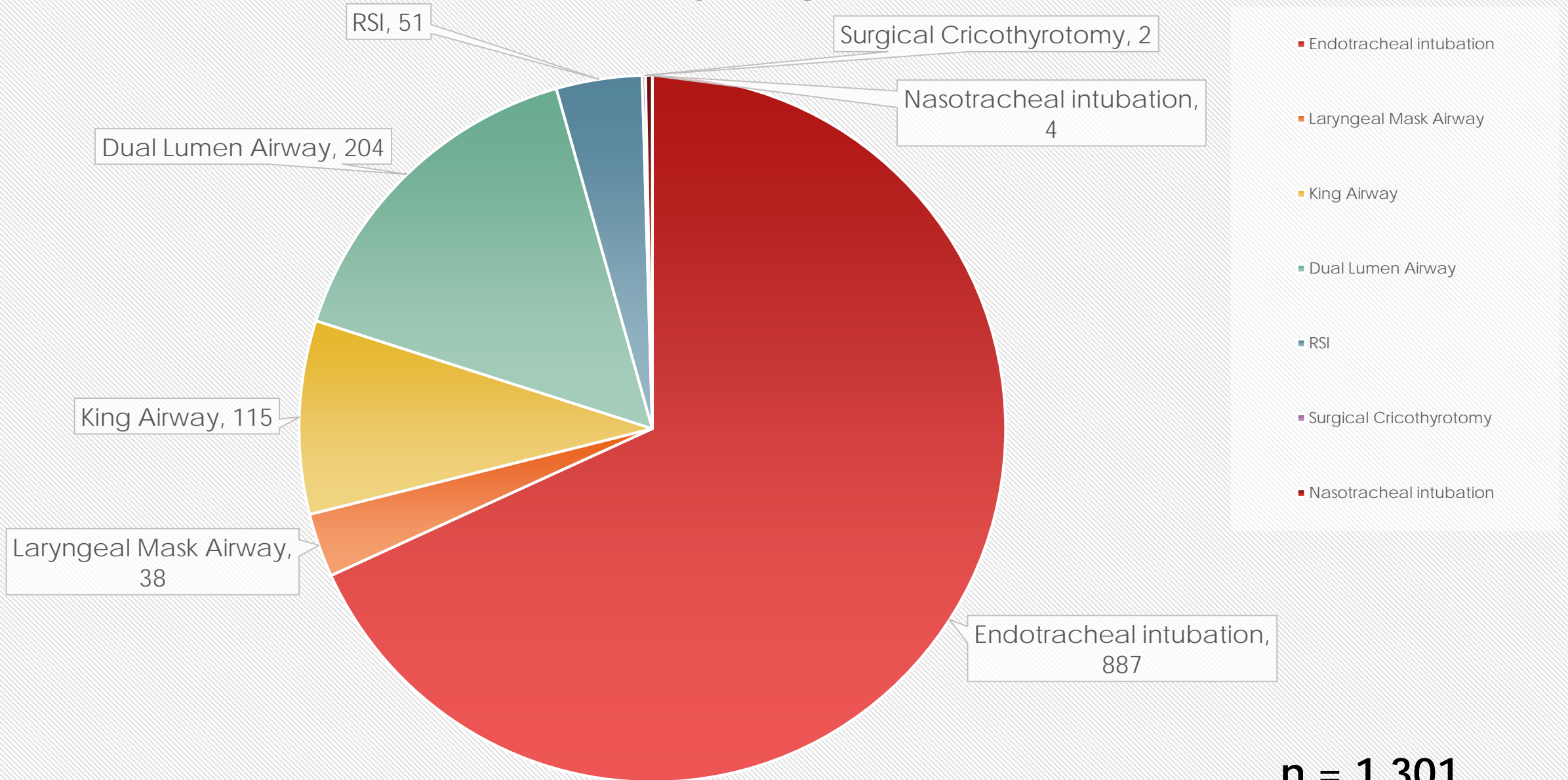
Exam indicated a burn
that was blistering or
charred

Controlled Substances used in Pain Management for Burn Patients



n = 71

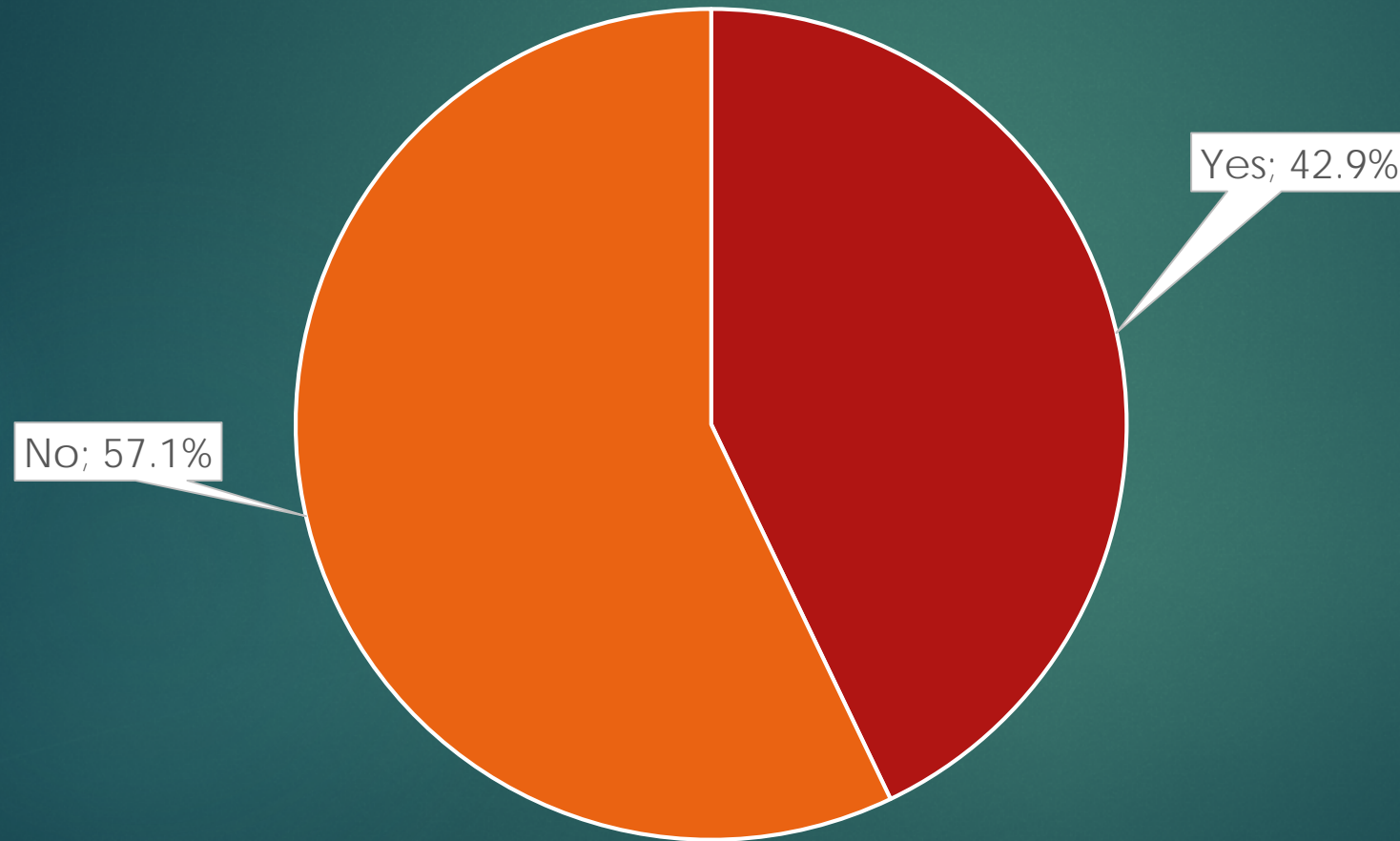
Invasive Airway Management Methods



ALS Intervention Performed (v2 data only)

n = 105,567

When the patient was treated, was an ALS Intervention Performed?

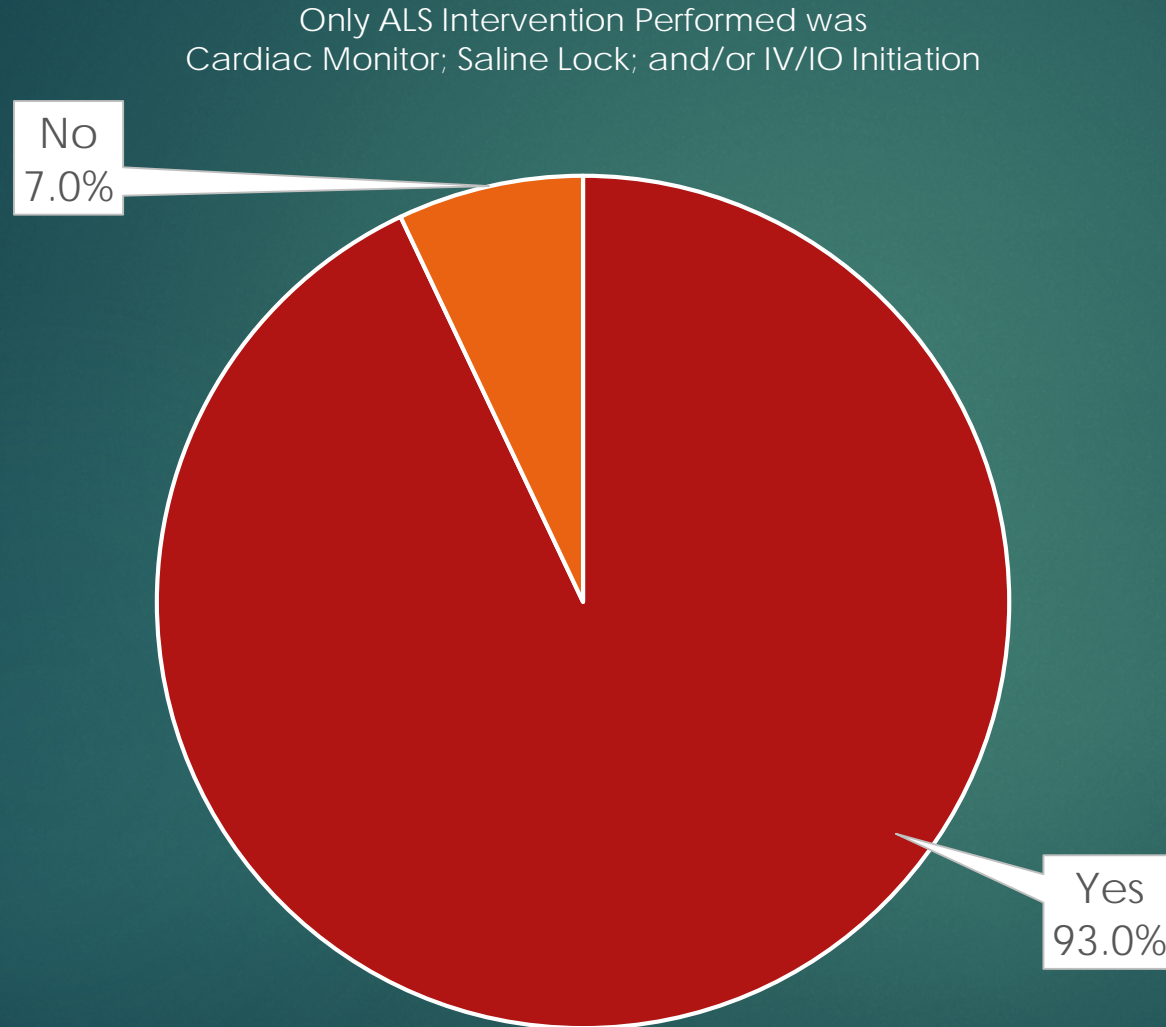


911 scene responses only

ALS Intervention defined as procedure outside the authorized activities of an EMT and EMR.

ALS Intervention Performed (v2 data only)

n = 45,283



911 scene responses
only

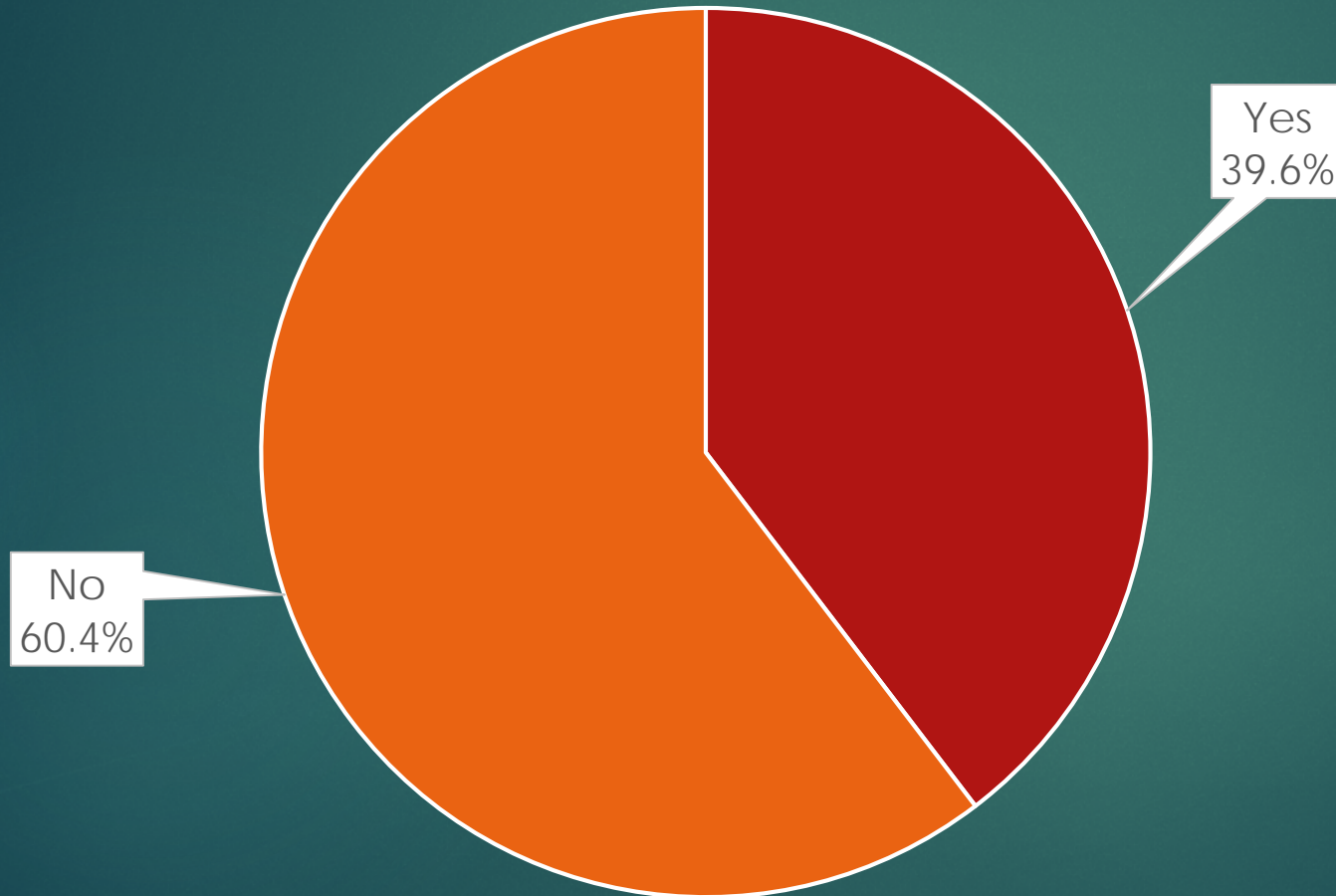
ALS Intervention defined
as procedure outside
the authorized activities
of an EMT and EMR.

The only listed
procedure performed
was Cardiac Monitoring,
Saline Lock, or IV/IO
initiation or only a
combination of one or
more of these three.

Intravenous / Intraosseous access

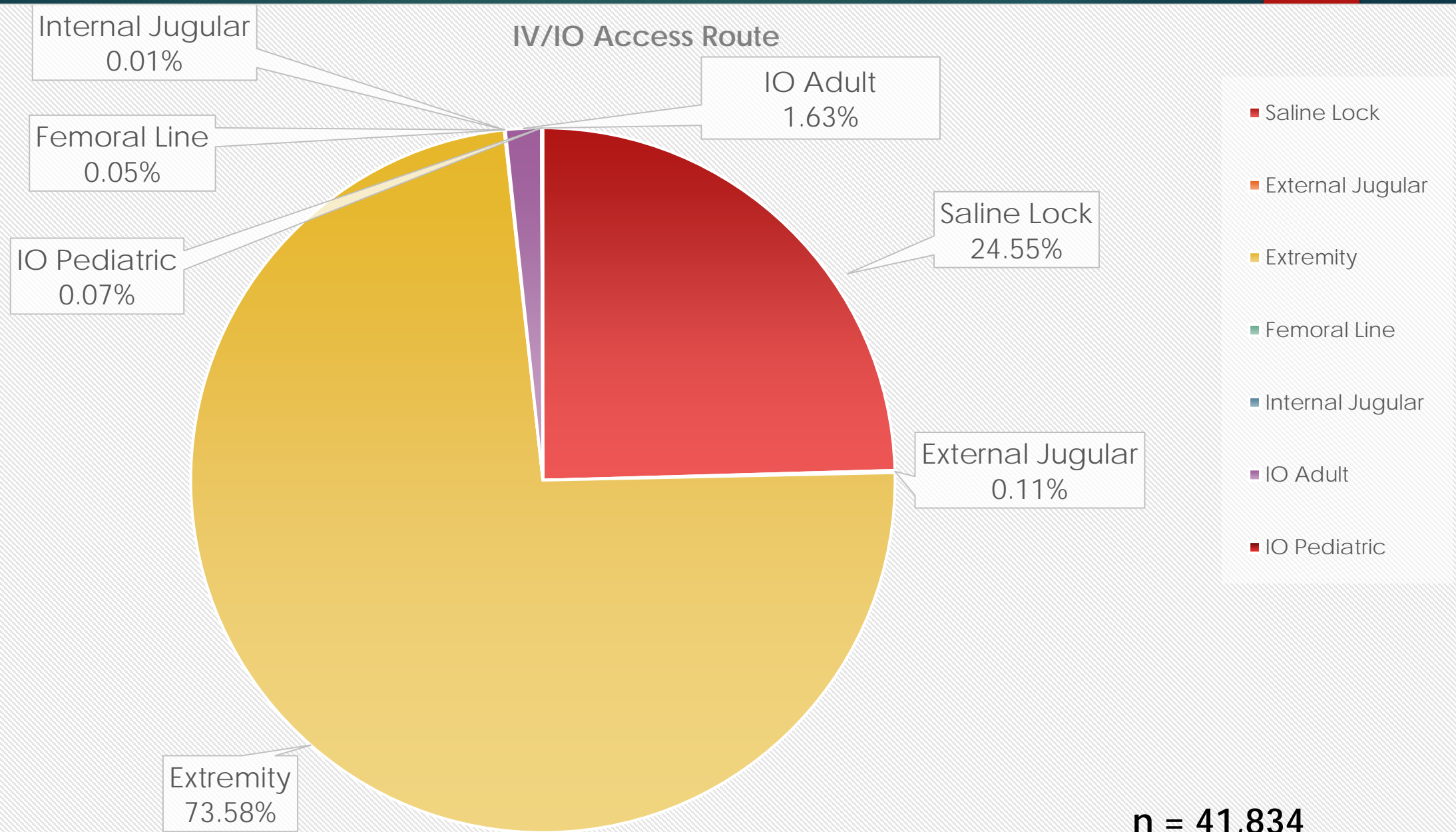
n = 105,567

When the patient was treated, was an IV and/or IO Initiated?



911 scene responses
only

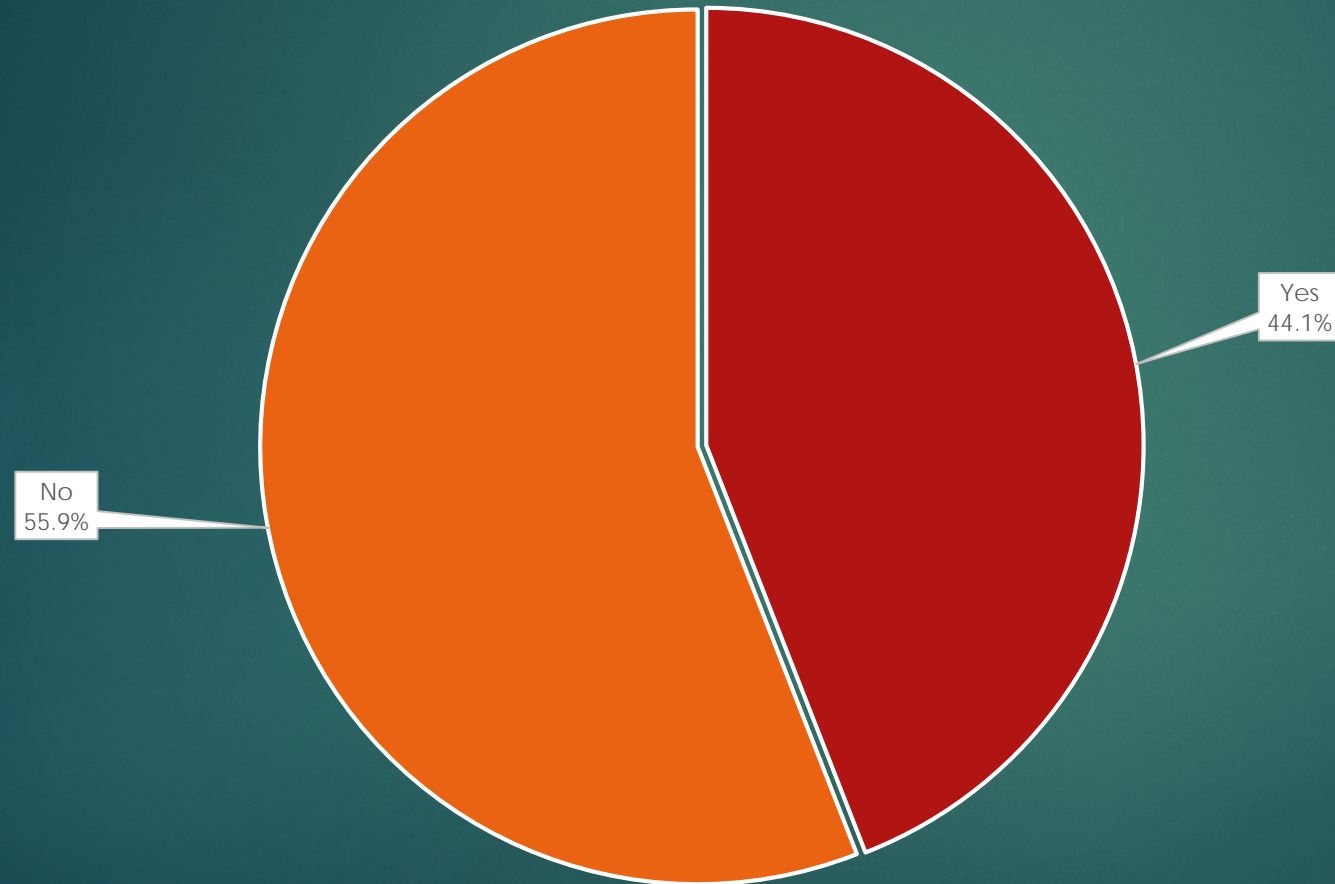
Procedure performed
included intravenous or
intraosseous access



Medication Administration

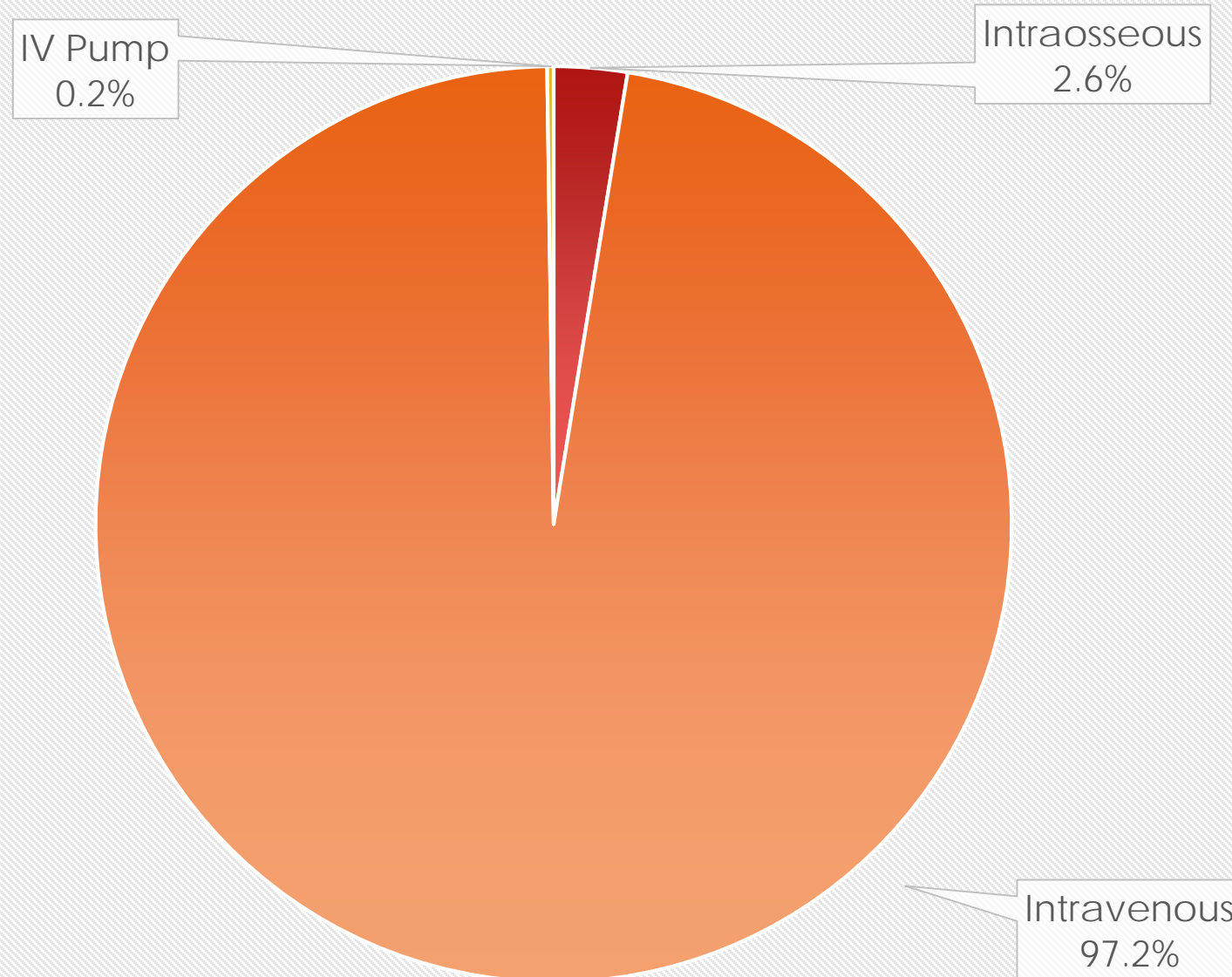
n = 41,834

Was a medication given when an IV/IO was initiated?



911 scene responses
only

Medication Route



n = 18,436



2017 Goals

- 100% Kansas Hospital participation in Hospital Hub
- 90% of all services submitting data to KEMSIS
- 25% of hospitals providing outcome data upon Trauma patients through Hospital Hub.

Where do we go from here

- Continue to work with services and vendors for importing data into KEMSIS
- Education to better address documentation issues
 - Baseline has been established, now we can trend to see the impact of education
- Education to assist service directors and their staff to generate reports to “call out” the anomalies.
- What other information should we be trending