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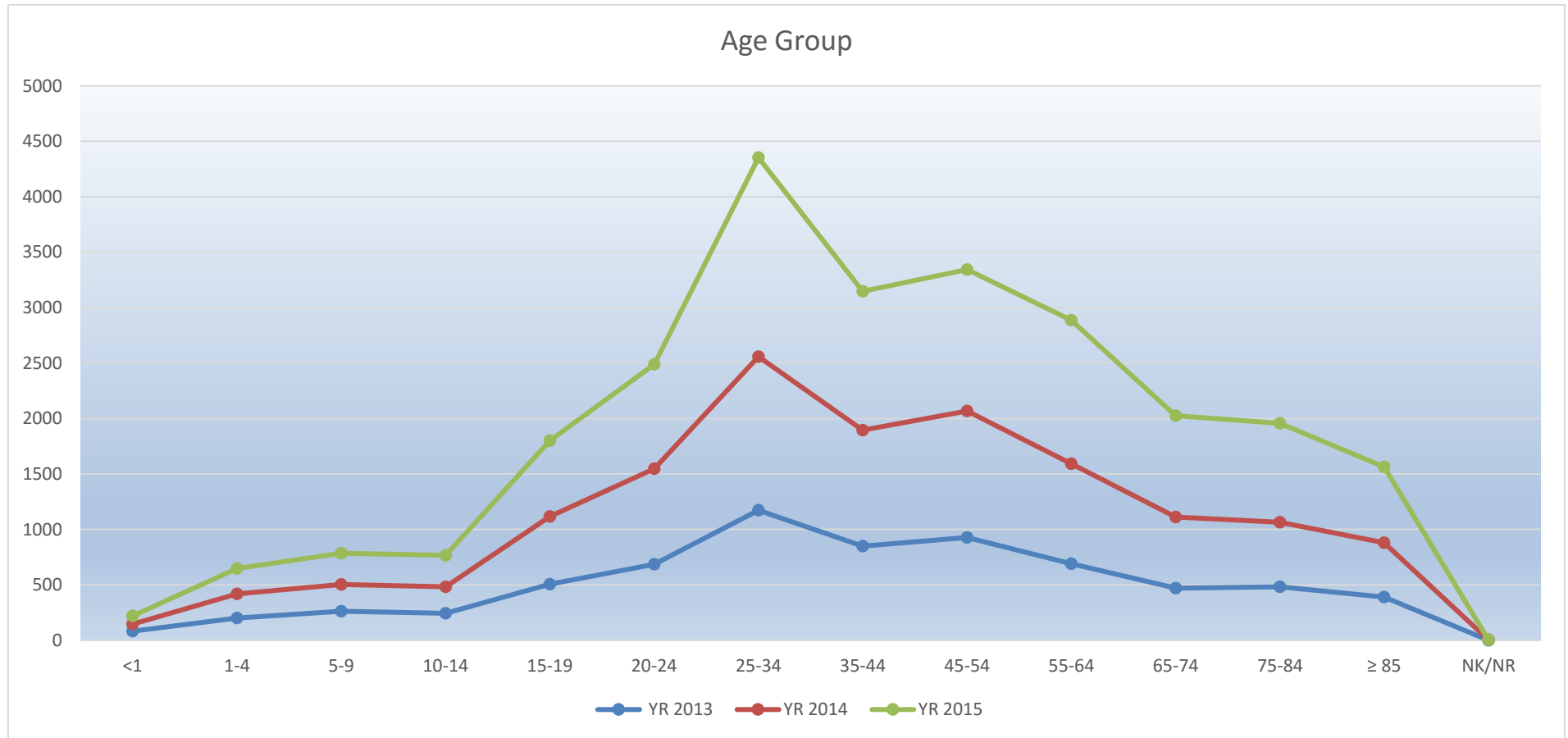
# State Trauma Registry Reports

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2015 Data compiled from current patient records reported from seven facilities to LERN State Trauma Registry. Includes standard dataset established by National Trauma Data Bank (NTDB)

## Figure 1: Age Distribution

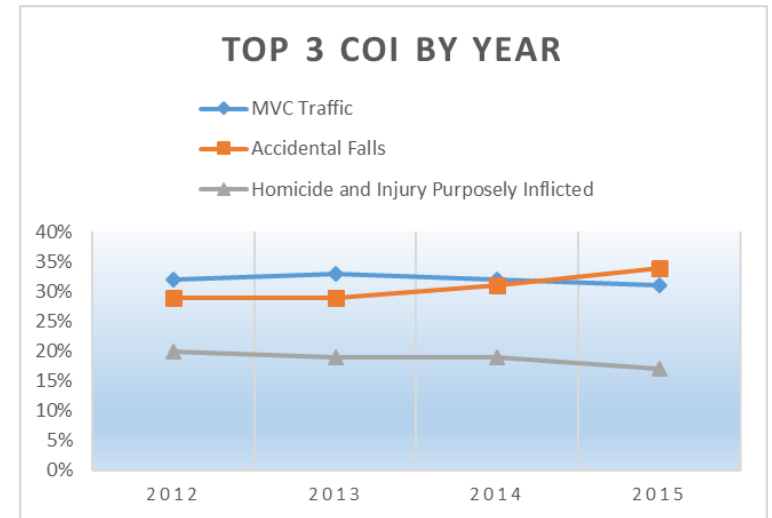
Patients reported by age group. Highest patient population lies in the age range 25 – 34 years old. This is also the highest patient population on a national level.



## Figure 2: Cause of Injury

Patients grouped in categories by the primary cause of injury. Other accidents refer to any cause of injury not able to be classified by listed categories (strenuous movement, animal bites, struck by objects, poisoning).

Cause of Injury	Total	Percent
Accidental falls	3603	34.00%
Motor vehicle traffic accidents	3285	31.00%
Homicide and injury purposely inflicted by other persons	1768	16.69%
Other accidents	945	8.92%
Motor vehicle non-traffic accidents	417	3.94%
Suicide and self-inflicted injury	175	1.65%
Other road vehicle accidents	122	1.15%
Accidents due to natural and environmental factors	85	0.80%
Injury undetermined whether accidentally or purposely inflicted	47	0.44%
Water transport accidents	34	0.32%
Legal intervention	27	0.25%
Accidents caused by fire and flames	26	0.25%
Pedestrian	23	0.22%
Accidents caused by submersion, suffocation, and foreign bodies	17	0.16%
Railway accidents	6	0.06%
Surgical and medical procedures as the cause of abnormal reaction	5	0.05%
Air and space transport accidents	4	0.04%
Vehicle accidents not elsewhere classifiable	2	0.02%
Misadventures to patients during surgical and medical care	1	0.01%
Late effects of accidental injury	1	0.01%
Accidental poisoning by other solid and liquid substances, gases,	1	0.01%
Accidental poisoning by drugs, medicinal substances, and biologic	1	0.01%
Injury resulting from operations of war	1	0.01%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>



## Figure 3: Cause of Injury by Survivability

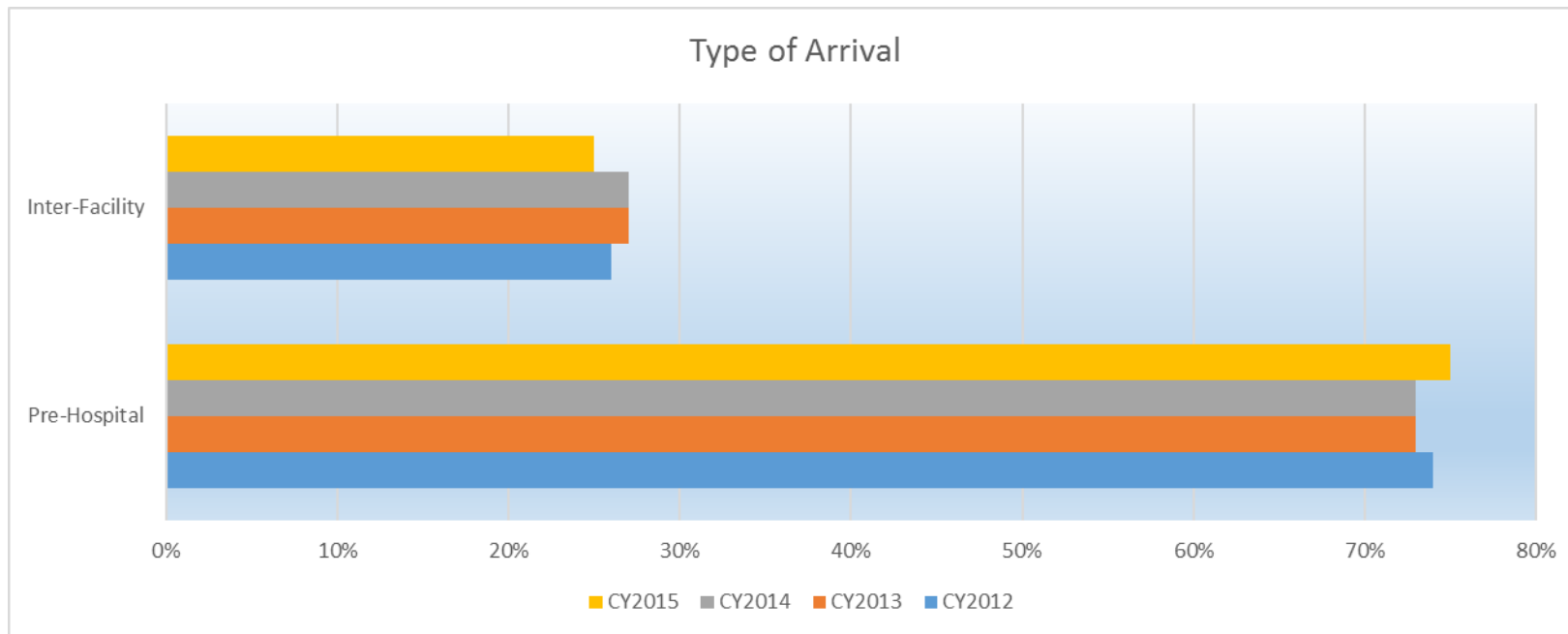
A total of 5.33% (5.66% in 2014) of all trauma registry patients expired with 94.67% (94.34% in 2014) surviving.

Cause of Injury	Death	Lived	Total
Accidental falls	147	3456	3603
Motor vehicle traffic accidents	187	3098	3285
Homicide and injury purposely inflicted by other persons	136	1632	1768
Other accidents	12	933	945
Motor vehicle non-traffic accidents	14	403	417
Suicide and self-inflicted injury	49	126	175
Other road vehicle accidents	4	118	122
Accidents due to natural and environmental factors		85	85
Injury undetermined whether accidentally or purposely inflicted	5	42	47
Water transport accidents		34	34
Legal intervention	5	22	27
Accidents caused by fire and flames	2	24	26
Pedestrian	1	22	23
Accidents caused by submersion, suffocation, and foreign bodies	3	14	17
Railway accidents		6	6
Surgical and medical procedures as the cause of abnormal reaction		5	5
Air and space transport accidents		4	4
Vehicle accidents not elsewhere classifiable		2	2
Misadventures to patients during surgical and medical care		1	1
Late effects of accidental injury		1	1
Accidental poisoning by other solid and liquid substances, gases,		1	1
Accidental poisoning by drugs, medicinal substances, and biologic		1	1
Injury resulting from operations of war		1	1
<b>Total</b>	<b>565</b>	<b>10031</b>	<b>10596</b>

## Figure 4: Received Pre-Hospital/Transfer

Patients reported as received pre-hospital or transferred from another acute care facility by trauma type. Patients transferred from a private physician office, stand-alone ambulatory surgery center, or delivered to hospital by a non-EMS transport are not considered an inter-facility transfer. Outlying facilities that provide emergency services or that are utilized to stabilize a patient are considered acute care facilities.

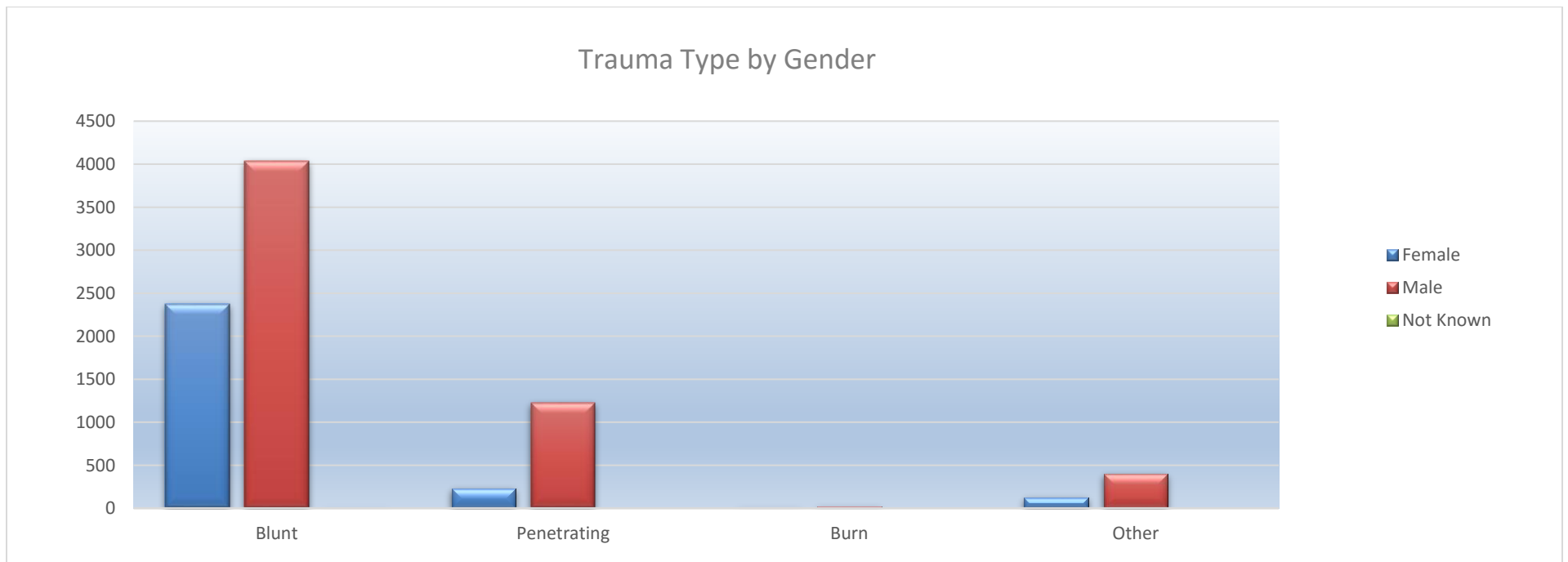
Received	CY2012	CY2013	CY2014	CY2015
Pre-Hospital	4986	5110	6170	7971
Inter-Facility	1722	1858	2256	2625
<b>Total</b>	<b>6708</b>	<b>6968</b>	<b>8426</b>	<b>10596</b>



## Figure 5: Trauma Type by Gender

Patients reported by gender and grouped by specific trauma type.

Trauma Type	Female	Male	Total
Blunt	3017	4880	7897
Penetrating	222	1328	1550
Other	148	451	599
Not Specified	153	354	507
Burn	9	34	43
<b>Total</b>	<b>3549</b>	<b>7047</b>	<b>10596</b>



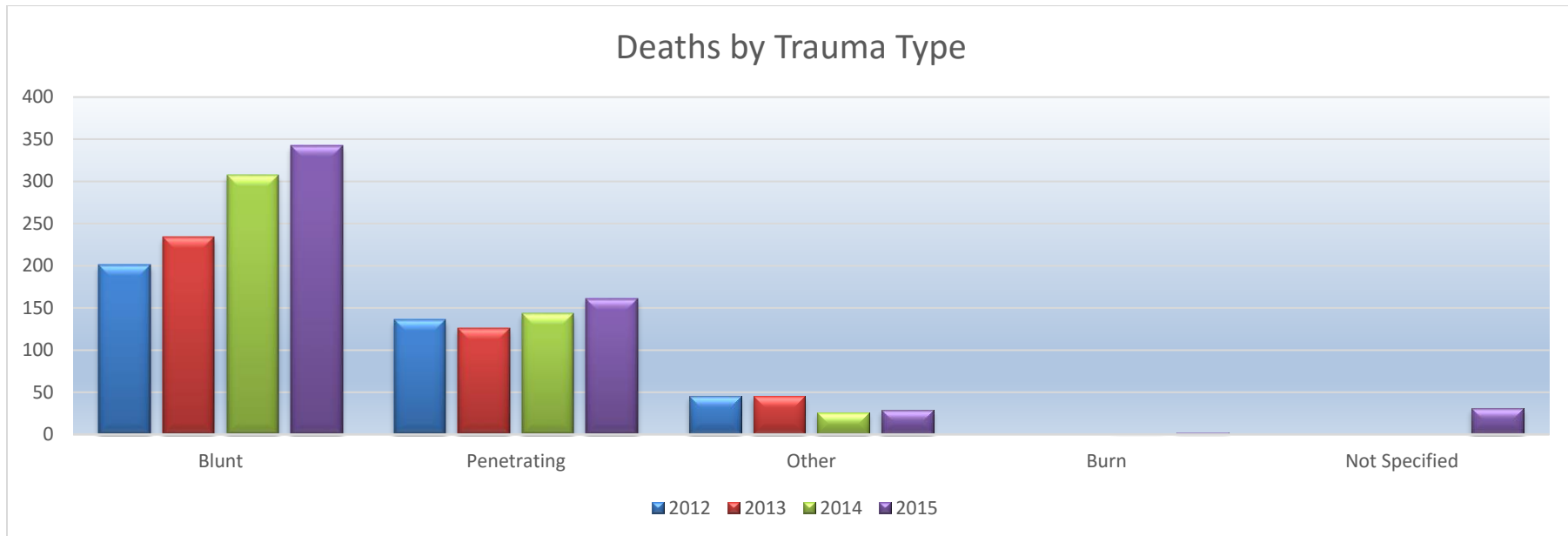
\***Other** includes cases where Injury E-Code is suicide, undetermined, unspecified falls, strenuous movement, animal bites

## \*Figure 6: Facility Traumatic Deaths by Trauma Type

Patients deaths reported by specific trauma type and grouped by expired in ED or hospital inpatient.

Trauma Type	Expired in ED	Expired in Hospital	Total	Percent
Blunt	57	285	342	60.53%
Penetrating	68	93	161	28.50%
Not Specified	10	21	31	5.49%
Other	13	16	29	5.13%
Burn	1	1	2	0.35%
<b>Total</b>	<b>149</b>	<b>416</b>	<b>565</b>	<b>100.00%</b>

Year	Deaths	Total Patients	Death Percent
2012	382	6708	5.69%
2013	405	6968	5.81%
2014	477	8426	5.66%
2015	565	10596	5.33%
<b>Total</b>	<b>1829</b>	<b>32698</b>	<b>5.59%</b>



\***Other** includes cases where Injury E-Code is suicide, undetermined, unspecified falls, strenuous movement, animal bites

## Figure 7: Blood Alcohol Testing

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Patients reported by based on blood alcohol testing.

Alcohol Test Results	Total	Percent
No(confirmed by test)	1730	16.33%
No(not tested)	5120	48.32%
Not Applicable	829	7.82%
Not Known	55	0.52%
Yes(confirmed by test [beyond legal limits])	1081	10.20%
Yes(confirmed by test [trace levels])	1781	16.81%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>

## Figure 8: Drug Screening

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Patients reported by based on drug screening.

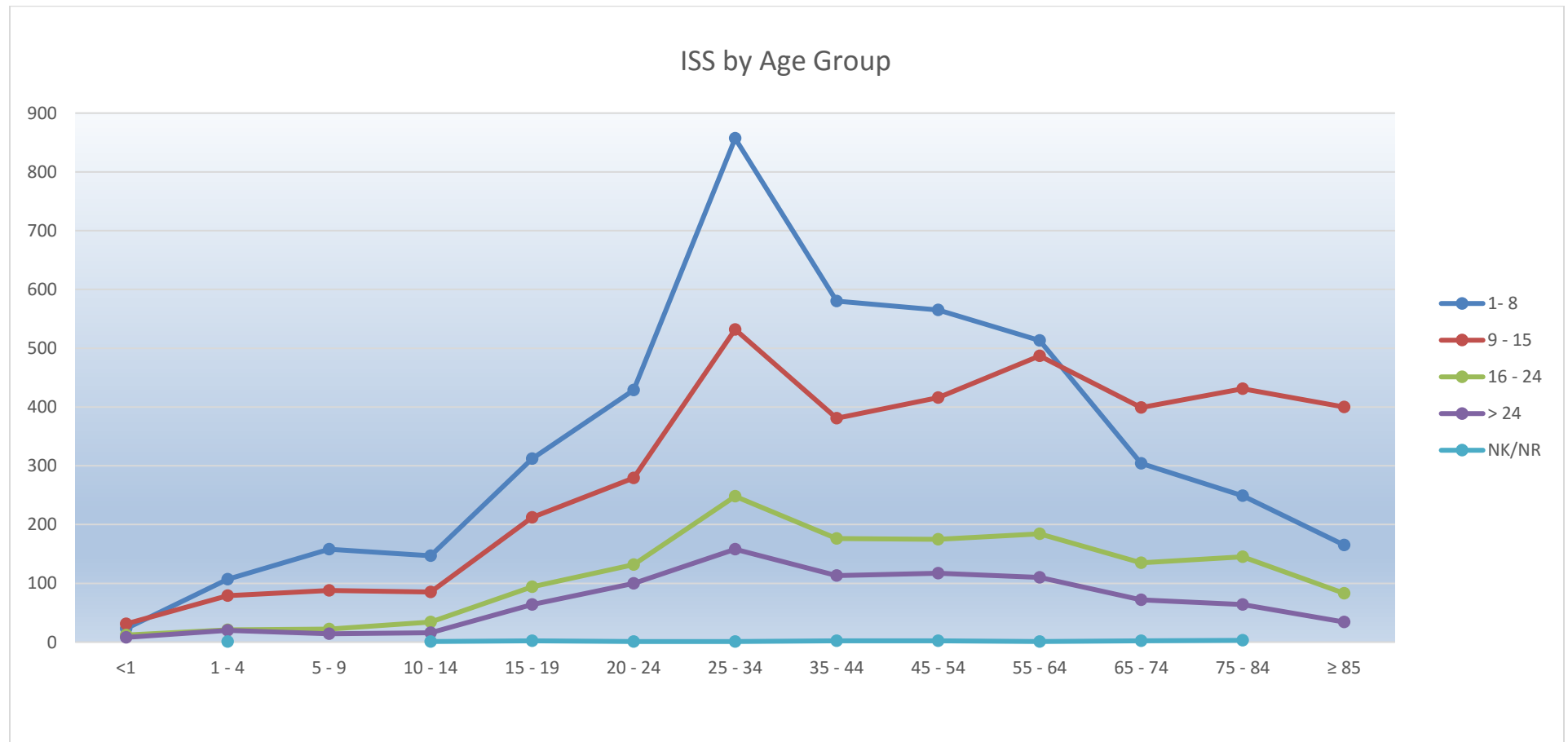
Drug Screen Results	Total	Percent
No (confirmed by test)	1303	12.30%
Not Applicable	843	7.96%
Not Known	2560	24.16%
Not Performed	4036	38.09%
Yes (confirmed by test [illegal use drug])	1307	12.33%
Yes (confirmed by test [prescription drug])	547	5.16%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>

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## Figure 9: ISS by Age

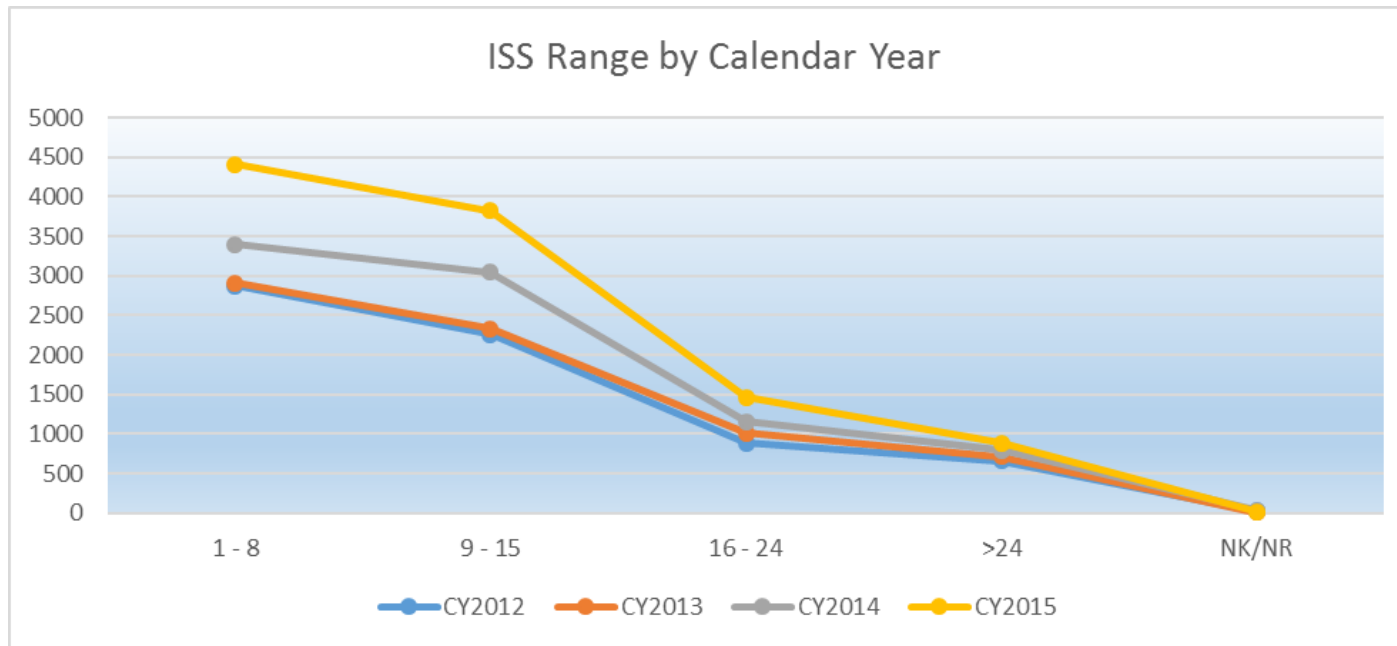
Patients reported by age group and ISS score. The Injury Severity Score (ISS) is a system for numerically stratifying injury severity. The ISS system has a range of 1-75 and risk of death increases with a higher score. NTDB categorizes ISS 1-8 as Minor; 9-15 as Moderate; 16-24 as Severe; and greater than 24 as Very Severe.



## Figure 10: ISS Range

### ISS range reported by calendar year

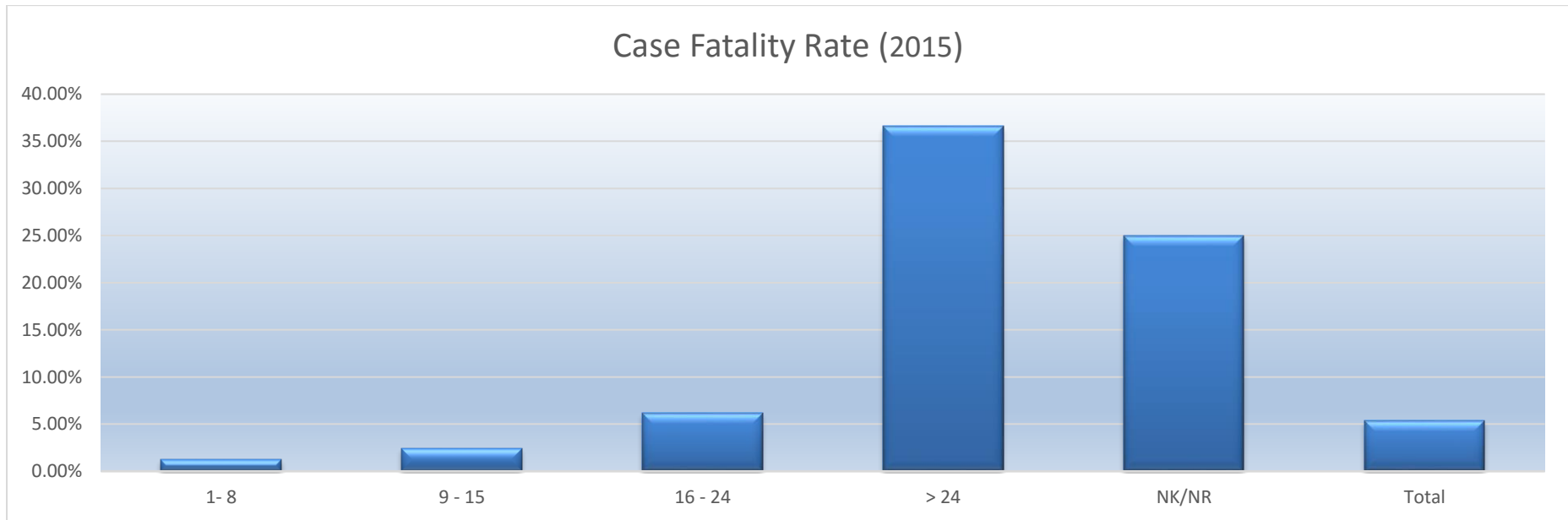
Year	1 - 8	9 - 15	16 - 24	>24	NK/NR	Total
CY2012	2876	2261	883	660	28	6708
CY2013	2905	2333	1014	710	6	6968
CY2014	3399	3045	1153	791	38	8426
CY2015	4409	3820	1461	890	16	10596



## Figure 11: Fatalities by ISS Score

Patient fatalities reported by ISS score. Most common cause in ISS range 1-8 was Homicide/Injury Inflicted by Others.

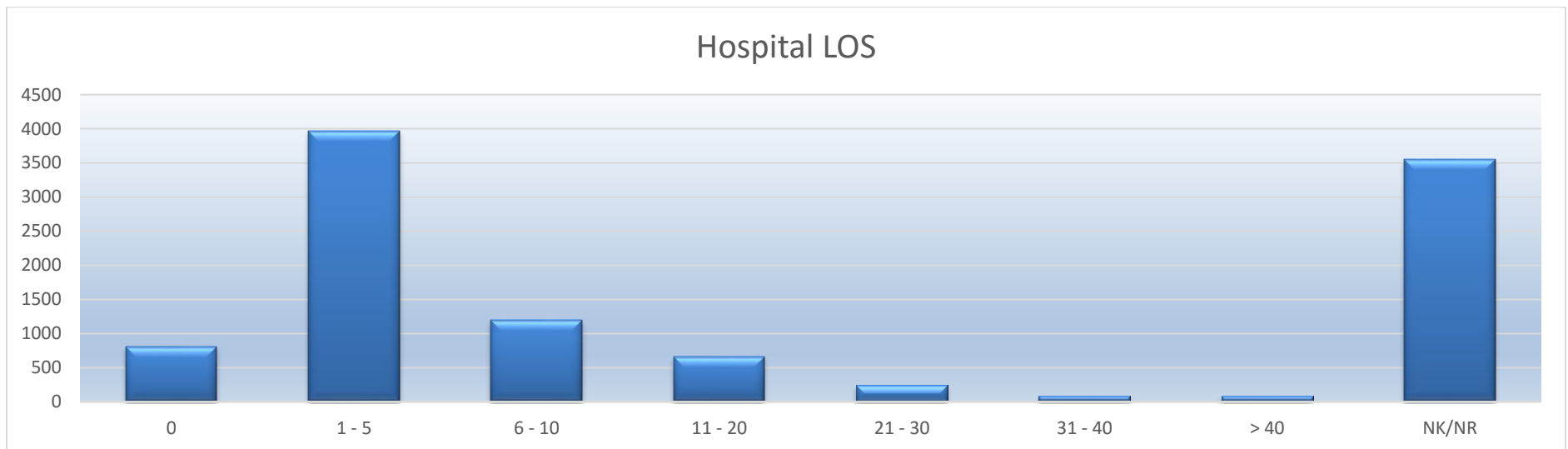
ISS Range	Total	Percent	Deaths	Case Fatality Rate(2015)	Case Fatality Rate(2014)
1- 8	4409	41.61%	53	1.20%	0.91%
9 - 15	3820	36.05%	92	2.41%	2.17%
16 - 24	1461	13.79%	90	6.16%	4.94%
> 24	890	8.40%	326	36.63%	40.20%
NK/NR	16	0.15%	4	25.00%	13.16%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>	<b>565</b>	<b>5.33%</b>	<b>5.66%</b>



## Figure 12: Hospital Length of Stay

The hospital length of stay (LOS) is calculated by using the admit time/date and the discharged time/date. For the purpose of this report days were adjusted based on each partial or full day is measured as one calendar day. Patients admitted and discharged on same day count as 0.

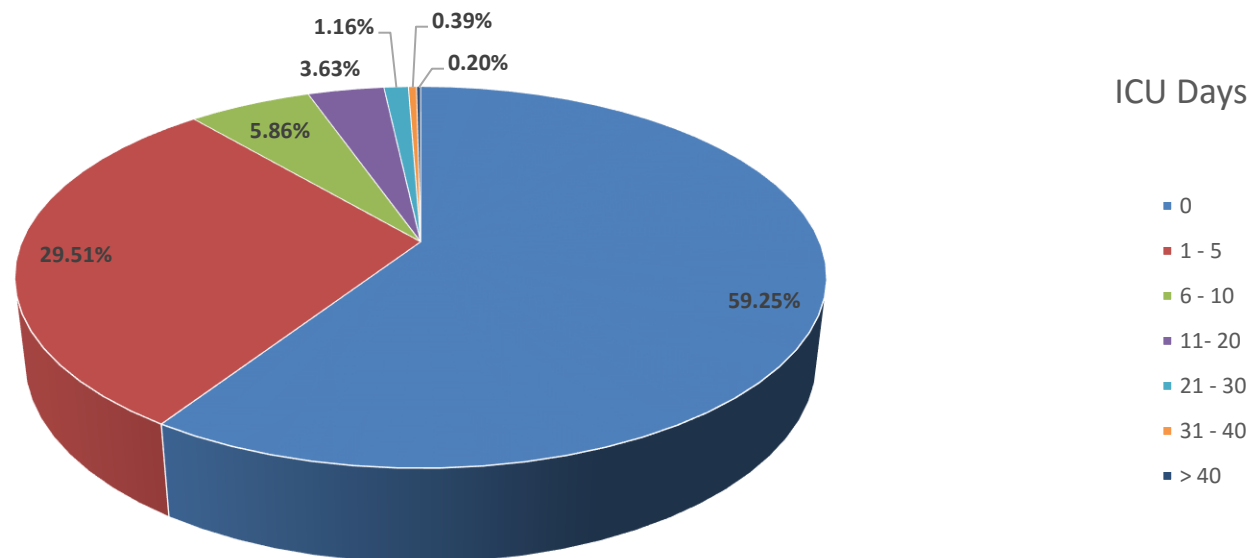
Hospital LOS	Total	Percent
0	810	7.64%
1 - 5	3972	37.49%
6 - 10	1192	11.25%
11 - 20	665	6.28%
21 - 30	243	2.29%
31 - 40	81	0.76%
> 40	82	0.77%
NK/NR	3551	33.51%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>



## Figure 13: Intensive Care Unit (ICU) Length of Stay

The intensive care unit (ICU) length of stay (LOS) is the cumulative amount of time spent in the ICU. Each partial or full day is measured as one calendar day.

ICU LOS	Total	Percent
0	6278	59.25%
1 - 5	3127	29.51%
6 - 10	621	5.86%
11- 20	385	3.63%
21 - 30	123	1.16%
31 - 40	41	0.39%
> 40	21	0.20%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>



## Figure 14: ED/Acute Care Dispositions

The ED/Acute Care Disposition is the location of the patient after treatment in the emergency department. Over 41% of trauma patients were admitted to the floor after leaving the ED, over 27% admitted to ICU and over 12% went direct to OR.

ED Disposition	Total	Percent
Floor bed (general admission, non specialty unit bed)	4380	41.34%
Intensive Care Unit	2943	27.77%
Operating room	1323	12.49%
Home without services	723	6.82%
Observation unit (unit that provides < 24 hour stays)	586	5.53%
Transferred to another hospital	187	1.76%
Telemetry/step-down unit (less acuity than ICU)	181	1.71%
Deceased/Expired	149	1.41%
Not Applicable	108	1.02%
AMA	10	0.09%
NK/NR	3	0.03%
Other (jail, institution, etc)	3	0.03%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>

## Figure 15: Hospital Discharge Disposition

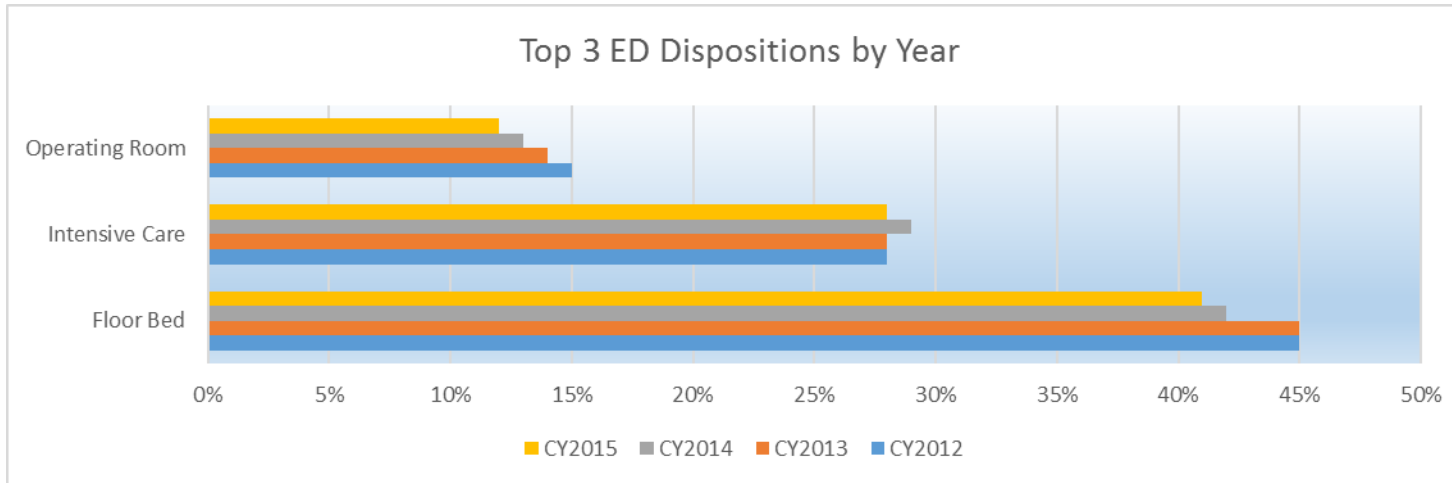
Patients reported by disposition upon discharge from the hospital. \*

Hospital Disposition	Total	Percent
Discharged to home or self-care (routine discharge)	6121	57.77%
Not Applicable	1072	10.12%
inpatient rehab or designated unit	907	8.56%
Skilled Nursing Facility	791	7.47%
Home with Home Health Services	485	4.58%
Deceased/Expired	416	3.93%
Intermediate Care Facility	301	2.84%
AMA	108	1.02%
Long Term Care Hospital (LTCH)	101	0.95%
Correctional Facility or in Law Enforcement Custody	88	0.83%
Acute care hospital	74	0.70%
Hospice care	54	0.51%
Psych Visit	40	0.38%
Another type of institution not defined elsewhere	36	0.34%
Not Known	2	0.02%
<b>Total</b>	<b>10596</b>	<b>100.00%</b>

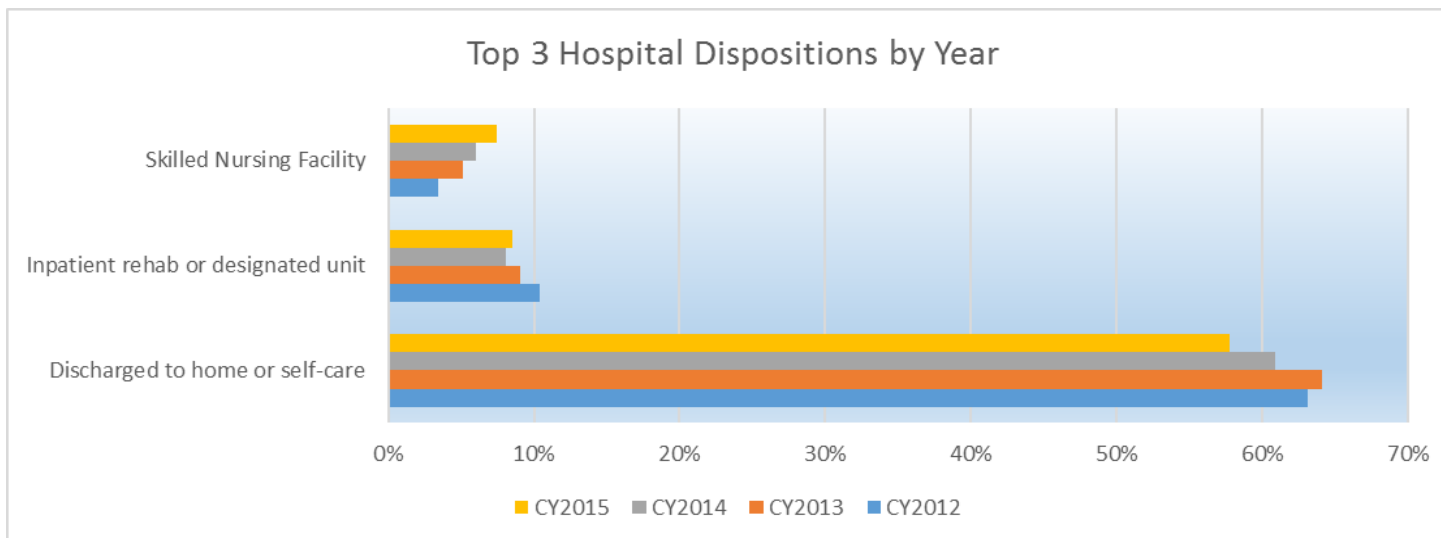
\*Data of patient dispositions upon discharge from hospital. **Not Applicable** refers to patients who expired in ED, discharged from the ED, discharged to jail/institution, or transferred to other hospital

## Figure 16: Top Dispositions

### Top ED Dispositions



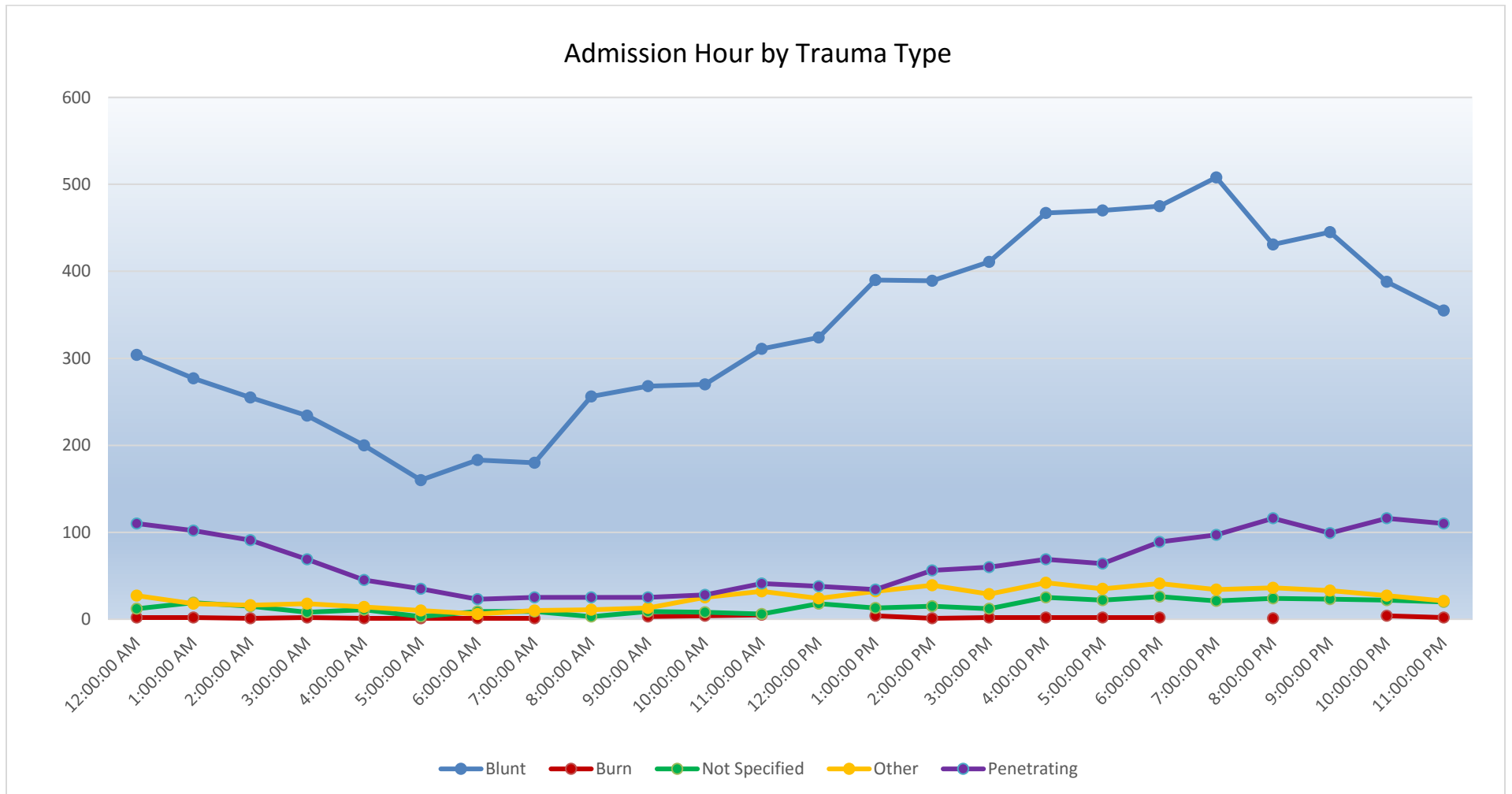
### Top Hospital Dispositions





## Figure 17: Hospital Admissions by Trauma Type

Patients reported by hour of admission grouped by the trauma type. Blunt trauma peaks at 7:00 PM while penetrating peaks at 8:00 and 10:00 PM.



## Figure 18: Paid / Not Paid Annual Comparison

**Paid compared to not paid for years 2011 - 2015. Not paid is inclusive of patient's primary payment listed as Other, Not Known, Self-Pay, or Not Billed. Self-Pay is pay that is not otherwise paid by insurance/Medicaid/Medicare etc. Other is just a catch-all for anything that does not fit in the other categories.**

Paid/Not Paid	2011	Percent	2012	Percent	2013	Percent	2014	Percent	2015	Percent
Paid	3841	56%	4173	62%	4489	64%	5402	64%	7381	70%
Not Paid	3074	44%	2535	38%	2479	36%	3026	36%	3215	30%
<b>Total</b>	<b>6915</b>	<b>100%</b>	<b>6708</b>	<b>100%</b>	<b>6968</b>	<b>100%</b>	<b>8428</b>	<b>100%</b>	<b>10596</b>	<b>100%</b>

