



State Trauma Registry Report

2024 Data compiled from current patient records reported from thirteen 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. The total number of patients increased by 701 from 2023 to 2024.

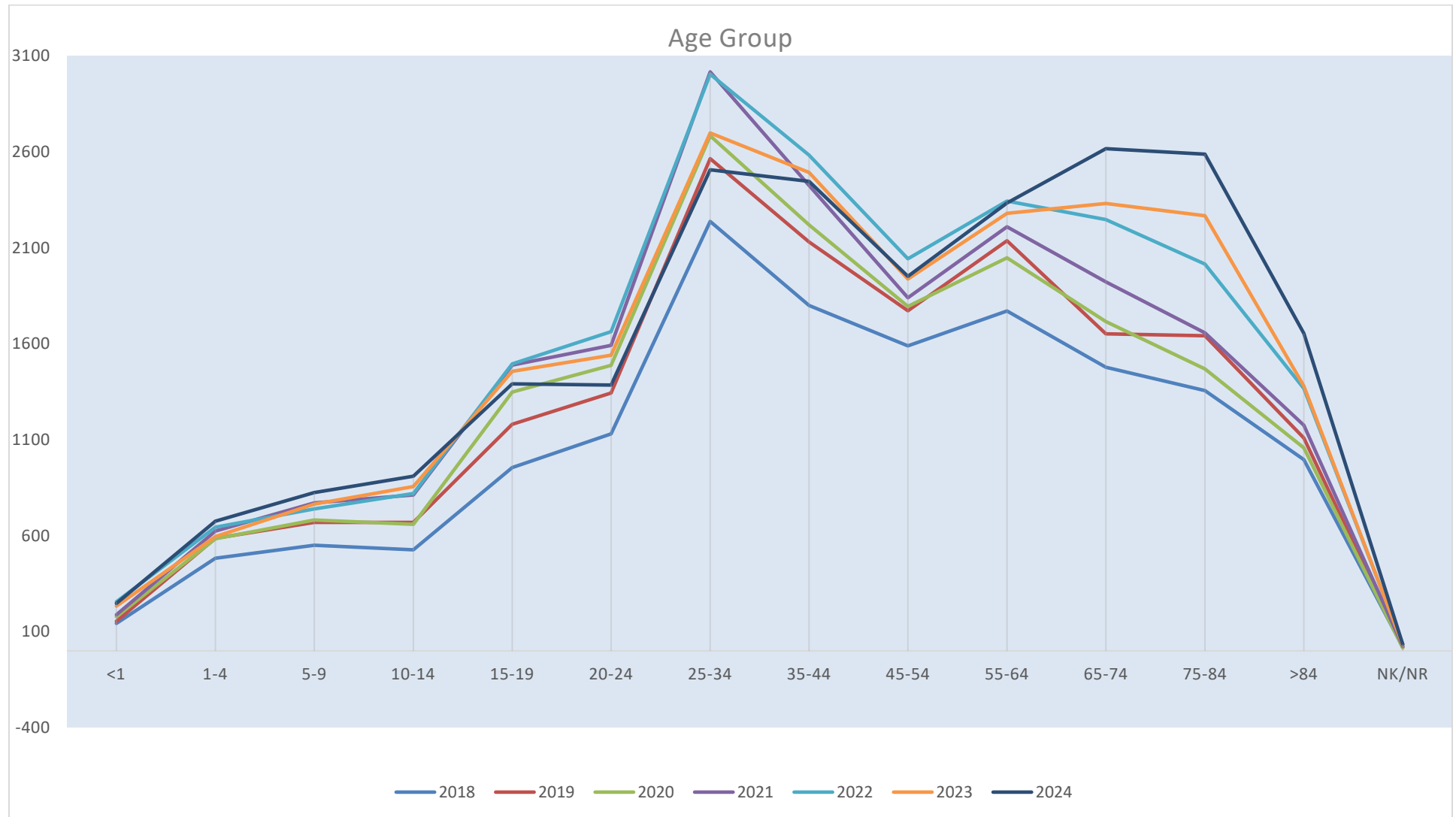


Figure 2: Cause of Injury

Cause of Injury	Total
Fall	8990
Motor Vehicle Accident	4058
Assault	1556
Firearm Discharge	1255
Motorcycle Accident	837
Pedestrian	829
ATV Accident	657
Struck by or Against Object	500
Pedal Cycle Accident	488
Machinery/Equipment Accident	347
Animal Bite/Contact/Rider	340
Transport Accident	303
Contact by Sharp Object	268
Caught, Crushed, Pinched	234
Suicide or Self-inflicted Injury	205
Acc Struck by Person	178
Abuse or Neglect	132
Other	101
Burns, Fire, Flame, Explosion, Smoke	63
Overexertion	58
Foreign Body	36
Slipping, Tripping, and Stumbling without Falling	28
Watercraft Accident	24
Legal Intervention	20
Sport/Activity Accident	18
Diving, Drowning, or Submersion	15
Electrical Accident	9
Contact Hot Food or Object	6
Weather Accident	3
Aircraft Accident	3
Grand Total	21561

Fall by Age	Total	Percentage
Geriatric (>64)	5545	61.68%
Adult (15-64)	2506	27.88%
Pediatric (0-14)	924	10.28%
Unknown	15	0.17%
Grand Total	8990	100.00%

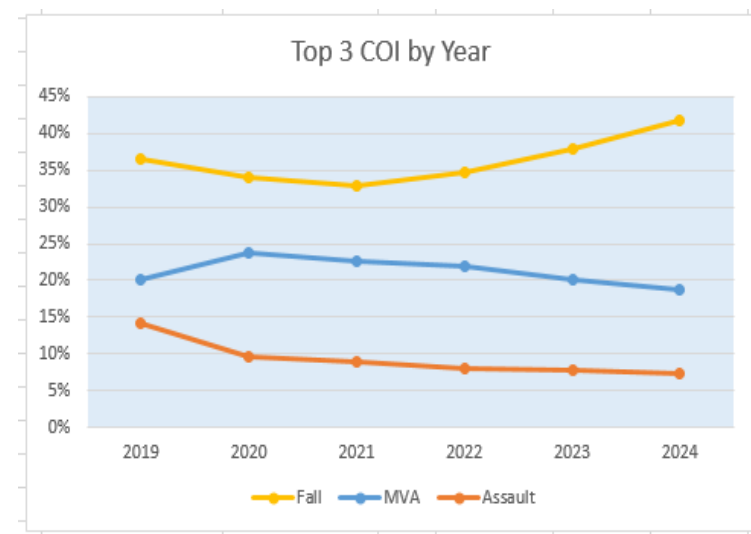
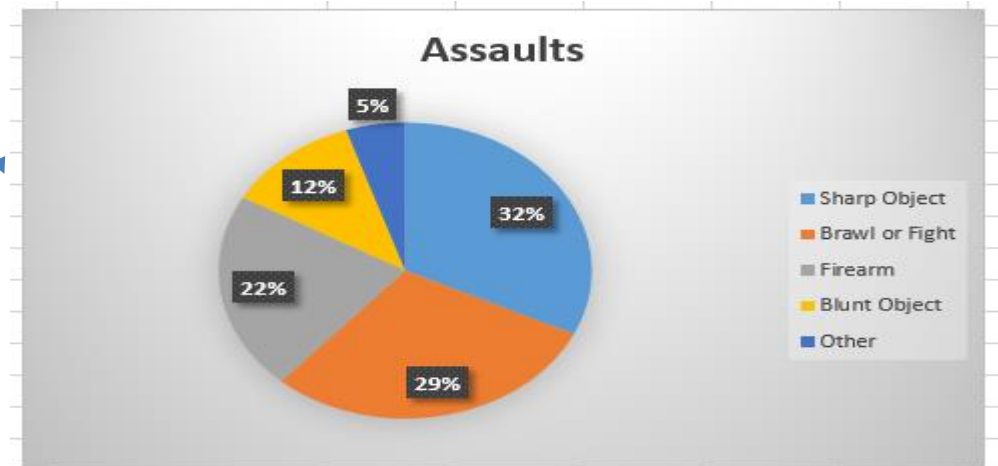
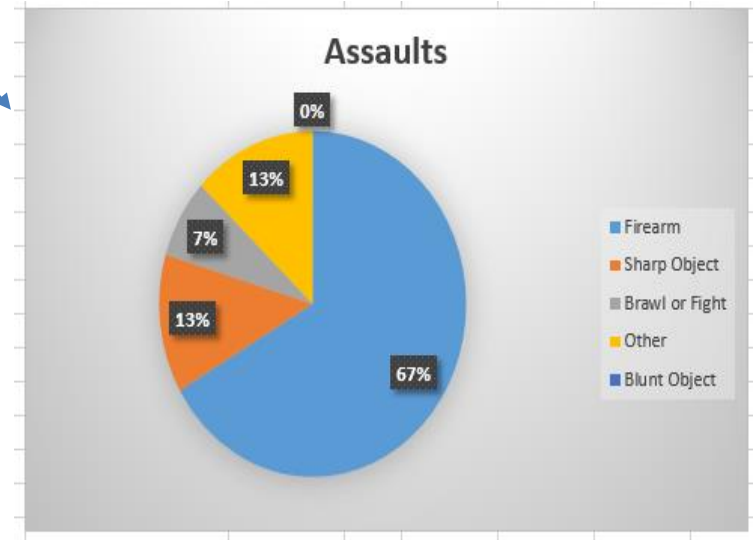


Figure 3: Cause of Injury by Mortality

Cause of Injury	2019	2020	2021	2022	2023	2024
Fall	190	196	222	211	205	228
Firearm Discharge	14	14	216	176	215	154
Motor Vehicle Accident	164	166	170	163	159	127
Pedestrian	51	60	65	68	63	60
Assault	151	225	79	68	59	54
Suicide or Self-inflicted Injury	58	67	66	58	58	54
Motorcycle Accident	39	35	36	33	34	24
Pedal Cycle Accident	8	12	19	13	11	21
Transport Accident	2	6	15	24	14	16
ATV Accident	11	18	12	10	16	12
Other	13	11	3	5	10	8
Struck by or Against Object	6	6	9	9	8	7
Abuse or Neglect	4	3	6	9	4	7
Diving, Drowning, or Submersion	6	4	1	3	3	6
Caught, Crushed, Pinched	0	2	2	0	3	5
Machinery/Equipment Accident	3	1	3	1	4	4
Electrical Accident	0	2	1	1	0	2
Burns, Fire, Flame, Explosion, Smoke	8	3	2	5	3	1
Contact by Sharp Object	0	2	0	1	1	1
Legal Intervention	4	4	0	0	0	1
Acc. Struck by Person	0	0	0	0	0	1
Foreign Body	0	0	0	0	0	1
Animal Bite/Contact/Rider	2	5	4	3	4	0
Watercraft Accident	0	1	2	1	2	0
Weather Accident	0	1	0	1	0	0
Aircraft Accident	1	0	1	0	0	0
Overexertion	1	0	0	0	0	0
Total	736	844	934	863	876	794

	ISS Score Range					
Fall by Age	0	1-8	9-15	16-24	>24	Total
Geriatric (>64)	4	24	64	17	69	178
Adult (15-64)	3	7	9	3	28	50
Pediatric (0-14)	0	0	0	0	0	0
Total	7	31	73	20	97	228



*Reporting of firearm discharges changed after CY 2020.

Figure 4: Received Pre-Hospital or by Transfer

Patients reported as received pre-hospital or transferred from another acute care facility. 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 by	2018	2019	2020	2021	2022	2023	2024
Inter-Facility Transfer	3722	4499	4455	4723	5084	5569	5688
Pre-Hospital	11312	13505	13488	15011	16169	15287	15860
Unknown	1	5	0	10	1	4	13
Total	15035	18009	17943	19744	21254	20860	21561

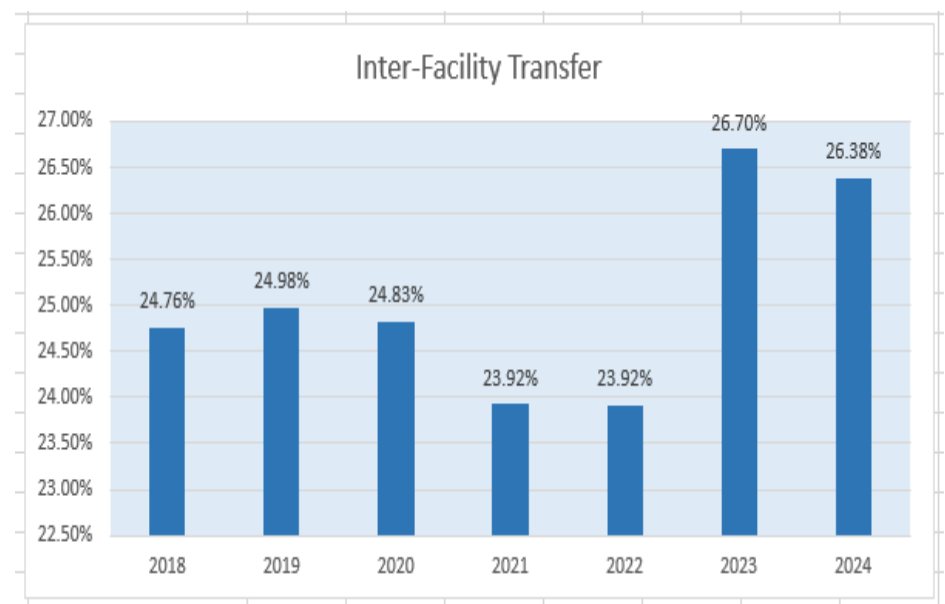
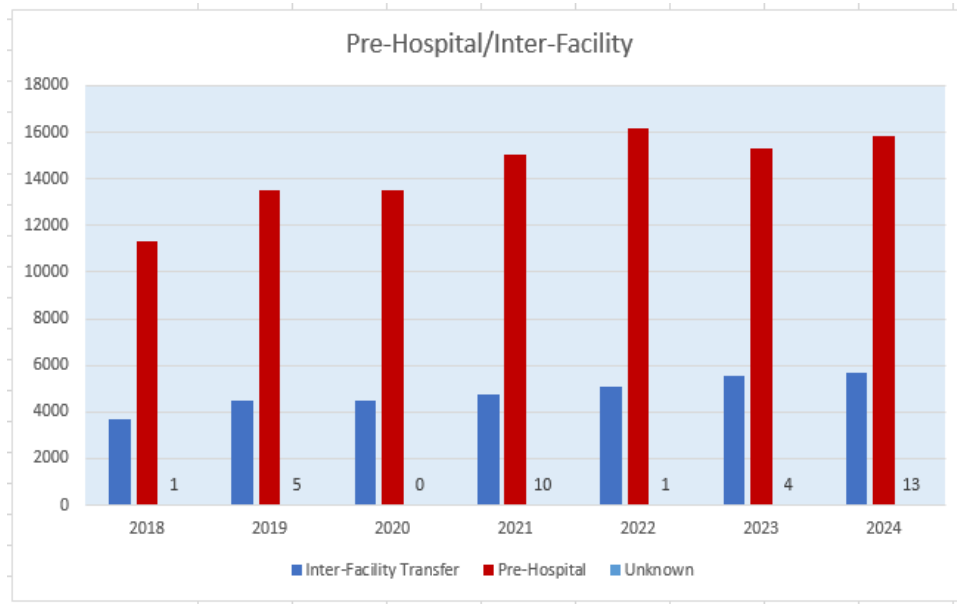


Figure 5: Payor Mix

Not Paid is inclusive of Primary Payment listed as Other, Not Known, Self-Pay, or Not Billed.

Status	2018	2019	2020	2021	2022	2023	2024
Not Paid	2797	2996	2628	2917	3025	3280	3401
Paid	12238	15013	15315	16827	18229	17580	18160
Total	15035	18009	17943	19744	21254	20860	21561

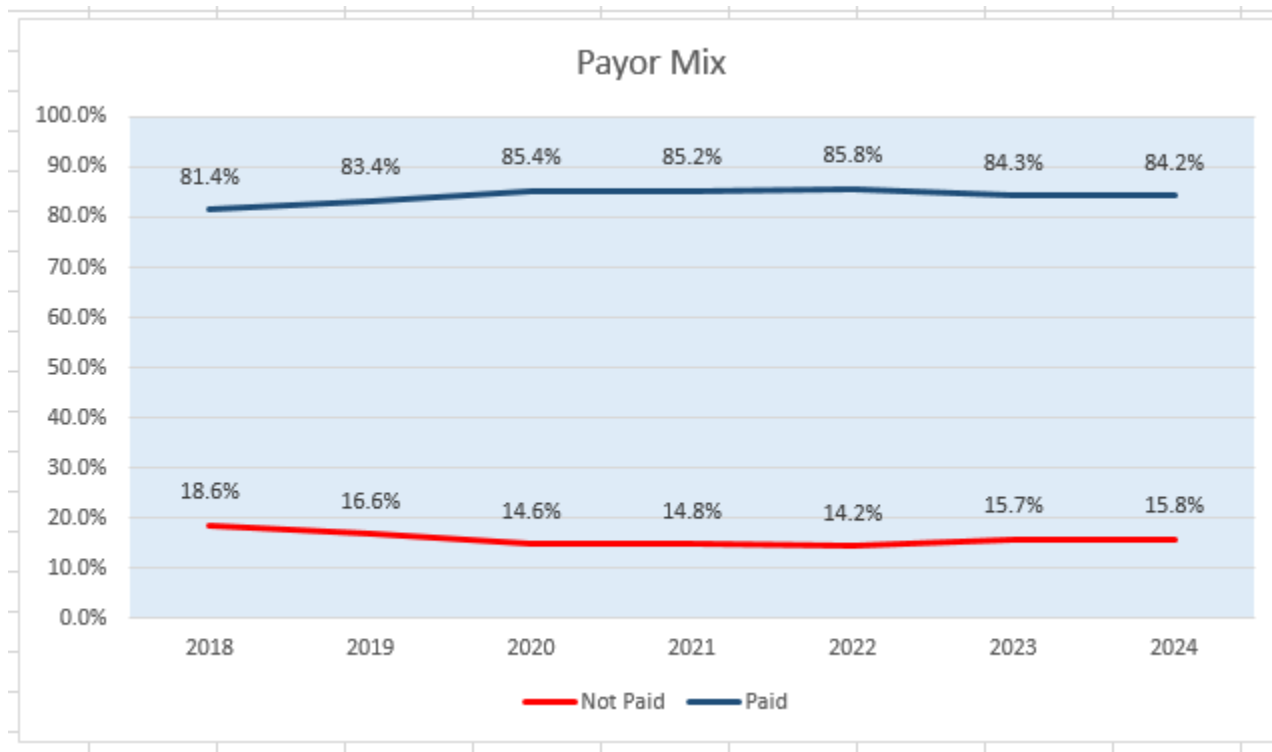


Figure 6: Payor Type

Payor type for paid patients.

Paid Method	2018	2019	2020	2021	2022	2023	2024
Medicaid	4964	6158	7269	7787	7855	7505	6672
Medicare	3830	4494	4173	4798	5456	5690	6614
Other Government	219	272	236	273	376	345	372
Private/Commercial Insurance	3225	4089	3637	3969	4542	4040	4502
Total	12238	15013	15315	16827	18229	17580	18160

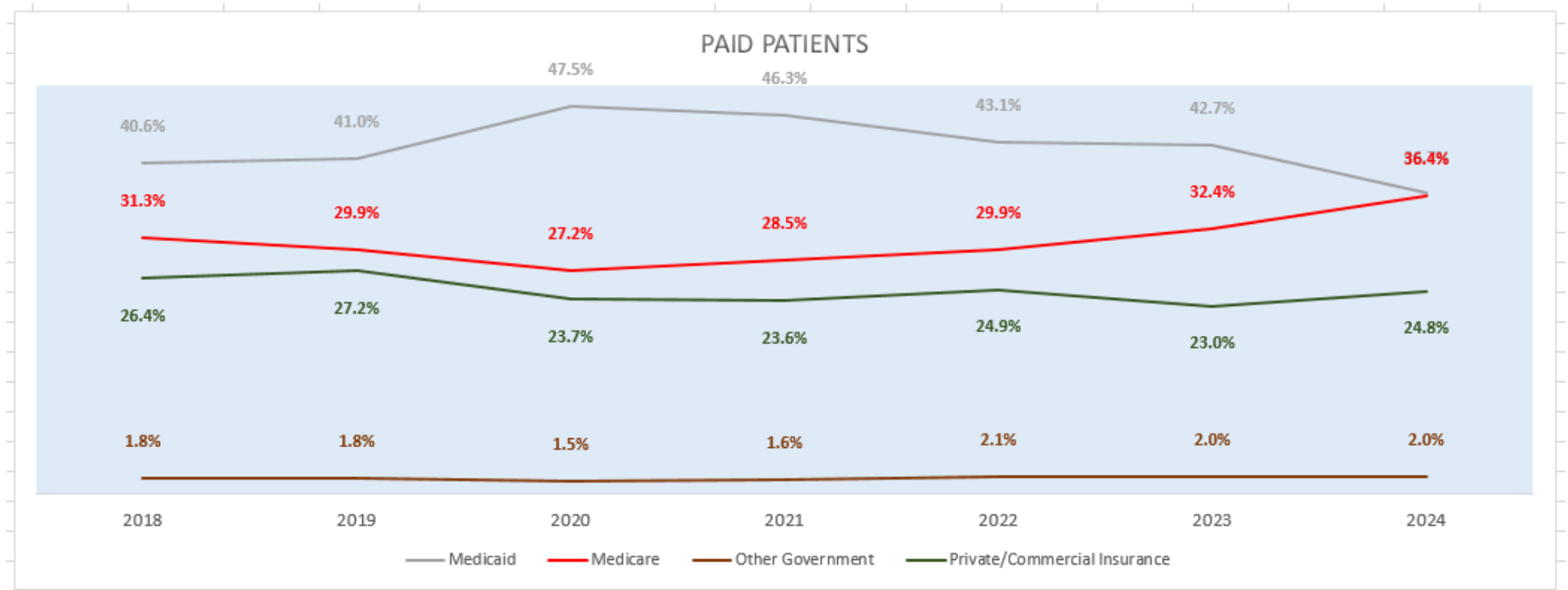


Figure 7: Hospital Average/Median Length of Stay

The hospital length of stay (LOS) is calculated by the 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.

Year	Mean	Median
2018	5.33	3
2019	4.90	2
2020	4.75	2
2021	5.14	3
2022	5.39	3
2023	5.29	3
2024	5.18	3

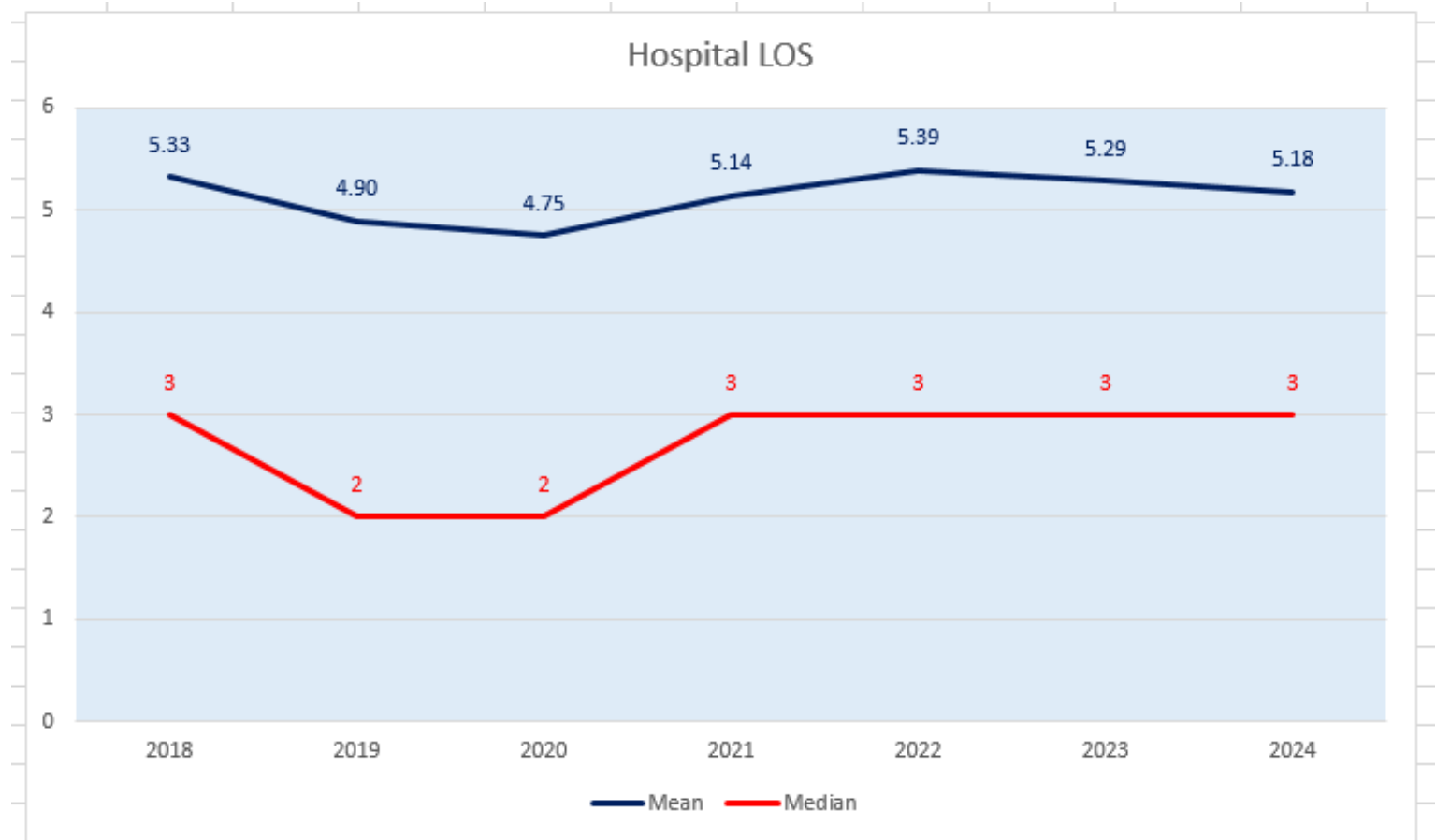


Figure 8: ICU Days

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

ICU DAYS	TOTAL	PERCENT
0	16367	75.91%
1-5	3887	18.03%
6-10	774	3.59%
11-15	234	1.09%
16-20	138	0.64%
21-25	76	0.35%
26-30	38	0.18%
31-35	22	0.10%
36-40	6	0.03%
41-45	9	0.04%
46-50	4	0.02%
51-55	3	0.01%
56-60	0	0.00%
61-65	2	0.01%
66-70	1	0.00%
TOTAL	21561	100%

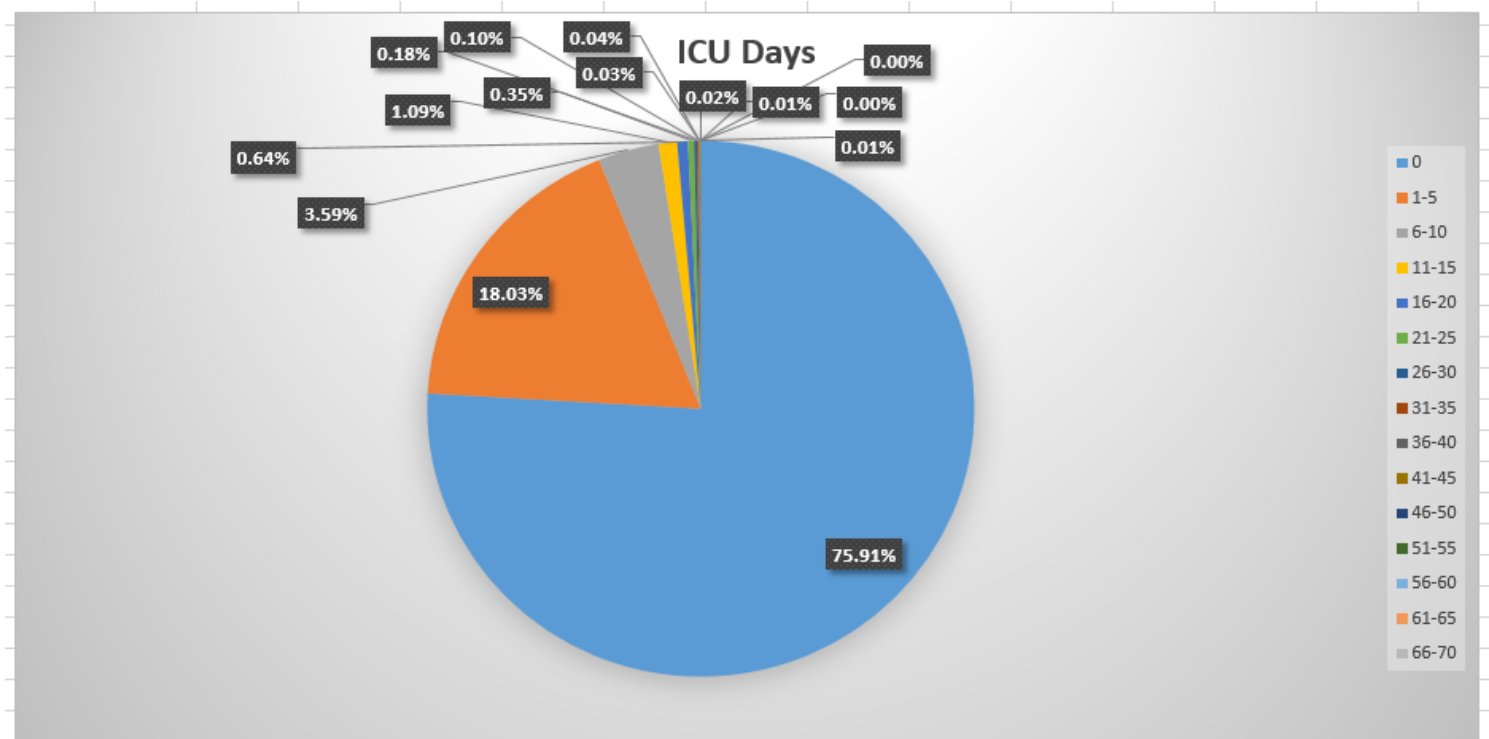


Figure 9: Blood Alcohol Testing

Of the 21,561 patients in the 2024 data, 51.4% were tested, 43.2% were not tested. Of the patients tested, 2,064 had a BAC $\geq$ 0.08% (above legal limit). For patients involved in a MVC, 632 MVC had a BAC $\geq$ 0.08%.

Tested	Total	Percent
Yes	11089	51.4%
No	9315	43.2%
Unknown	1157	5.4%
Total	21561	100%

Tested Patients	
BAC Level	Total
0	6177
0.01-0.07	2848
0.08-0.15	780
0.16-0.30	1101
0.31-0.45	174
> 0.45	9
Total	11089

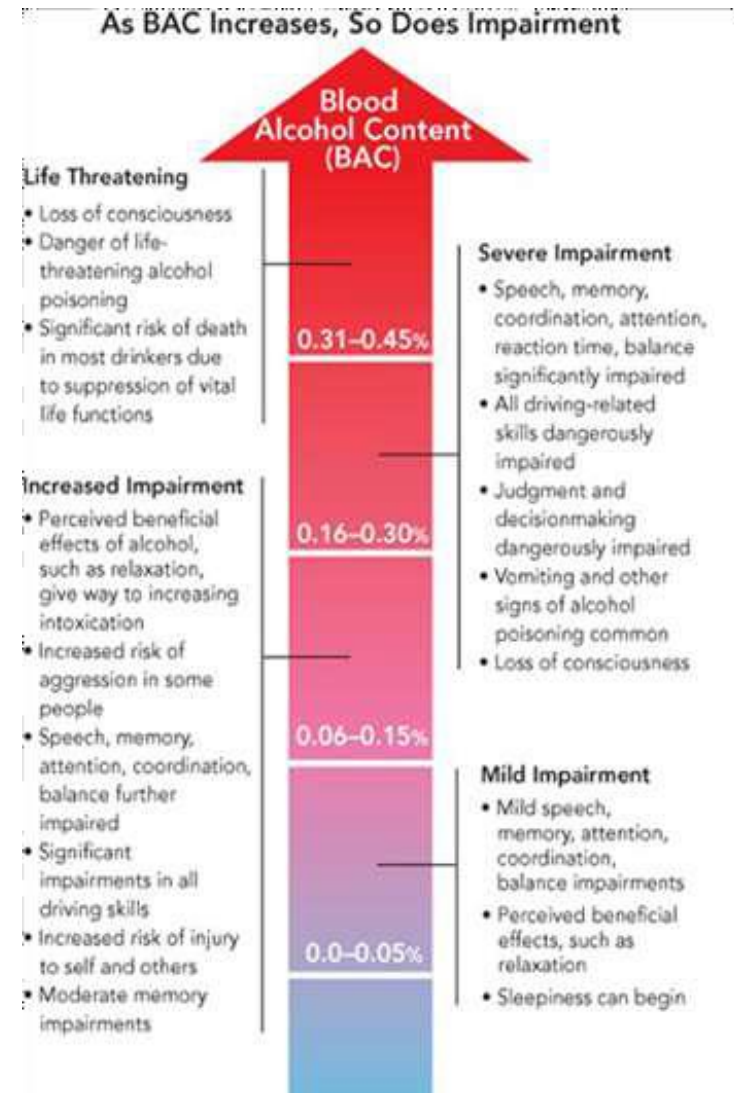
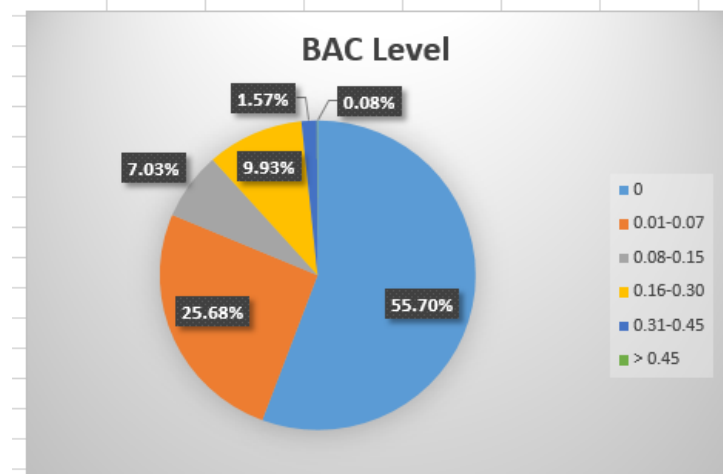
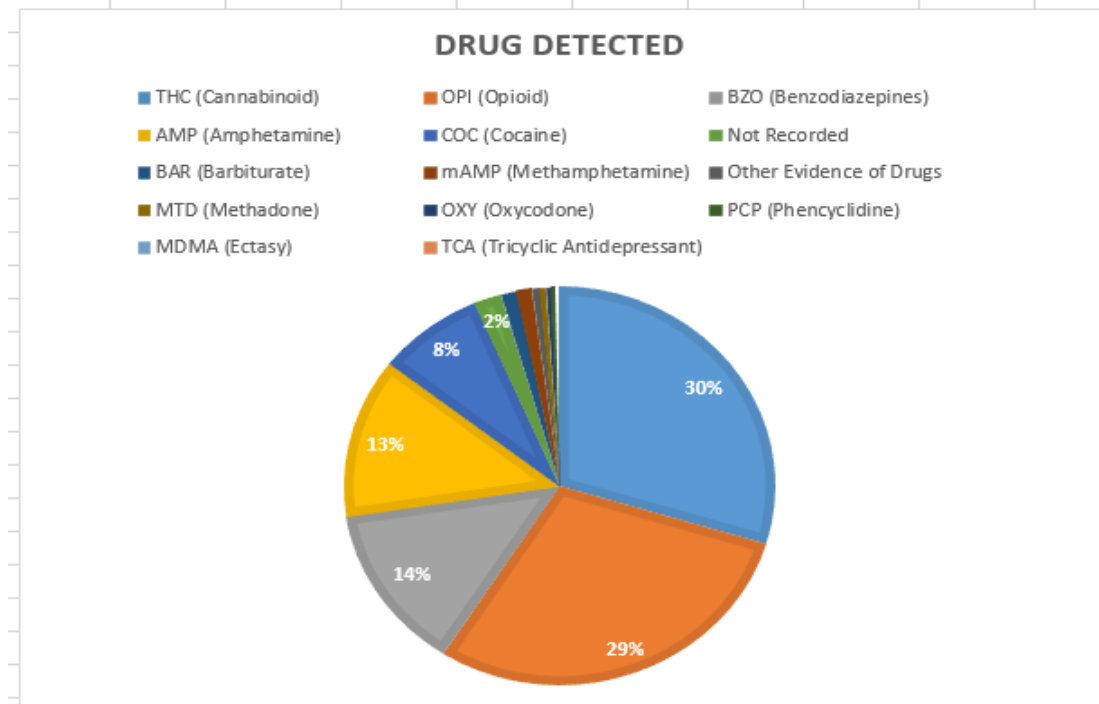


Figure 10: Drug Screening

Patients reported by based on drug screening. Of the 21,561 patients in the 2024 data, 59.46% were not tested, 15.22% tested negative, and the remaining 25.32% tested positive for drugs. For patients involved in an MVC, 858 tested positive for one drug and 602 tested positive for multiple drugs.

Drug Screening	Total	Percent
Not Tested	12821	59.46%
None	3281	15.22%
Positive for Single Drug	3199	14.84%
Positive for Multiple Drugs	2260	10.48%
Unknown	0	0.00%
Total	21561	100%

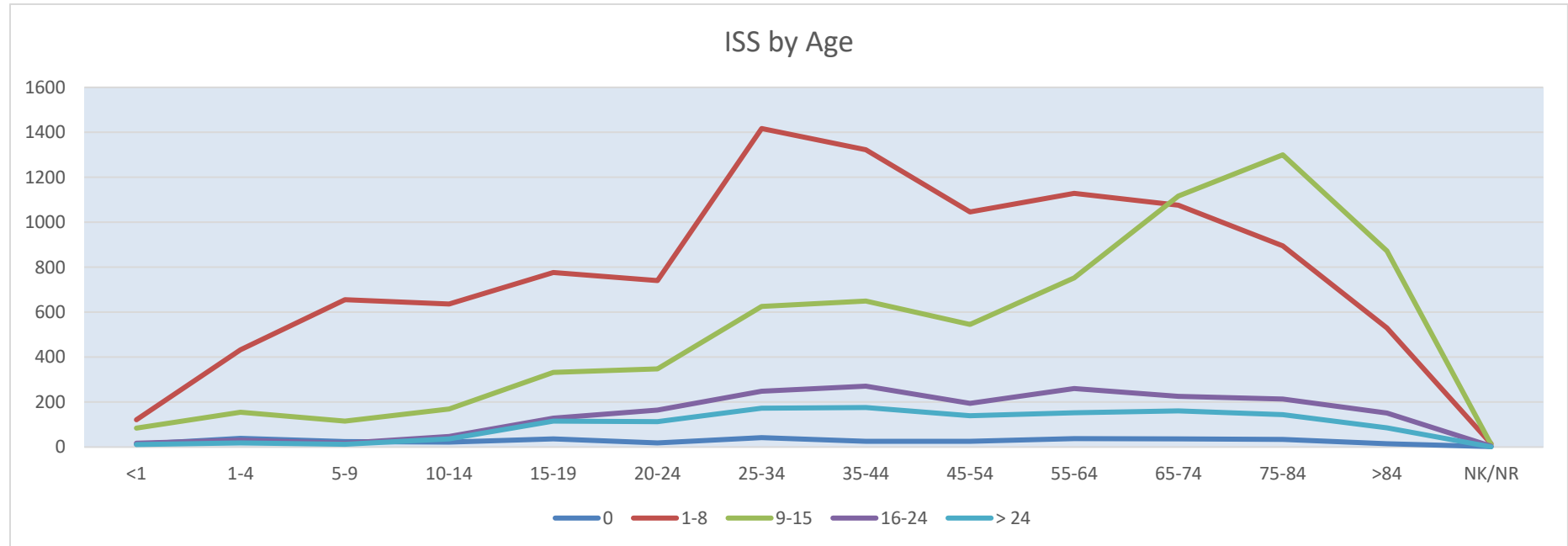
Drug	Total	Percent
THC (Cannabinoid)	2565	29.70%
OPI (Opioid)	2535	29.36%
BZO (Benzodiazepines)	1165	13.49%
AMP (Amphetamine)	1124	13.02%
COC (Cocaine)	691	8.00%
Not Recorded	177	2.05%
BAR (Barbiturate)	105	1.22%
mAMP (Methamphetamine)	98	1.13%
Other Evidence of Drugs	52	0.60%
MTD (Methadone)	38	0.44%
OXY (Oxycodone)	32	0.37%
PCP (Phencyclidine)	26	0.30%
MDMA (Ecstasy)	21	0.24%
TCA (Tricyclic Antidepressant)	6	0.07%
Total	8635	100%



Drug	Avg. ISS
THC (Cannabinoid)	10
OPI (Opioid)	9
AMP (Amphetamine)	11
BZO (Benzodiazepines)	12
COC (Cocaine)	9

Figure 11: 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.



Year	Mean ISS Score		
	All Facilities	I & II	III
2018	8.75	8.82	8.11
2019	8.43	8.71	6.75
2020	8.89	9.21	7.29
2021	8.88	9.02	7.87
2022	8.58	8.75	7.71
2023	8.93	9	8.56
2024	8.62	8.7	8.19

Figure 12: Total Patients in Registry by Year / Deaths Percent by Year

In 2016, there were 9 facilities reporting. In 2017, the number of facilities reporting increased to 10. In 2020, the number of facilities reporting increased to 11. In 2022, 13 facilities were reporting. Death percentage includes patient that arrived to ED without signs of life.

