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NTDB®
NATIONAL TRAUMA DATA BANK

National Trauma Data Bank 2014

Annual Report

NTDB Annual Report 2014

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EDITOR'S NOTE

The Annual Report of the National Trauma Data Bank (NTDB) is an updated analysis of the largest aggregation of U.S./Canadian trauma registry data ever assembled. In total, the NTDB now contains more than 6 million records. The 2014 Annual Report is based on 814,663 2013 admission year records from 758 facilities.

In the interest of capturing a better picture of deaths in the NTDB, any patients that have been recorded as "Discharged to Hospice" have now been counted as deaths.

The mission of the American College of Surgeons (ACS) Committee on Trauma (COT) is to develop and implement meaningful programs for trauma care. In keeping with this mission, the NTDB is committed to being the principal national repository for trauma center registry data. The purpose of this report is to inform the medical community, the public, and decision makers about a wide variety of issues that characterize the current state of care for injured persons. It has implications in many areas, including epidemiology, injury control, research, education, acute care, and resource allocation.

The NTDB Committee would like to thank all of the trauma centers that contributed data and hopes that this report will attract new participants. The National Trauma Data Bank Annual Report is available on the ACS website as a PowerPoint PDF at *www.ntdb.org*. In addition, information is available on our website about how to obtain NTDB data for more detailed study.

Many dedicated individuals on the ACS COT, as well as at trauma centers, have contributed to the early development of the NTDB and its rapid growth in recent years. Building on these achievements, our goals in the coming years include improving data quality, updating analytic methods, and enabling more useful inter-hospital comparisons. These efforts will be reflected in future NTDB reports to participating hospitals as well as in the Annual Reports.

To cite figures used from the NTDB Annual Report, please specify the title of the report, the year, and the name of the figure used in the following format of the following:

Name of Figure, Committee on Trauma, American College of Surgeons. NTDB Annual/Pediatric Report 20XX. Chicago, IL. The content reproduced from the NTDB remains the full and exclusive copyrighted property of the American College of Surgeons. The American College of Surgeons is not responsible for any claims arising from works based on the original data, text, tables, or figures.

Executive Summary

The National Trauma Data Bank is the largest aggregation of U.S. trauma registry data ever assembled.

It contains more than 6 million records. The 2014 Annual Report reviews 2013 admissions submitted in the 2014 Call for Data, totaling 814,663 records with valid trauma diagnoses. The goal of the NTDB is to inform the medical community, the public, and decision makers about a wide variety of issues that characterize the current state of care for injured persons in our country. It has implications in many areas, including epidemiology, injury control, research, education, acute care, and resource allocation.

This endeavor is in keeping with the mission of the American College of Surgeons Committee on Trauma, which is "To improve the care of the injured through systematic efforts in prevention, care, and rehabilitation."

Injury Severity 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. This report categorizes ISS 1-8 as minor; 9-15 as moderate; 16-24 as severe; and greater than 24 as very severe. ISS used in the report analysis is calculated by using the AIS submitted by hospitals and then crosswalked to AIS98. If the hospital does not submit AIS, then ISS is based on AIS derived from ICDMAP-90.

- Almost half (46.76%) of patients suffer minor injuries and just under one-third (31.00%) have moderate injuries.
- Case fatality rates increase with injury severity, with the most severe group experiencing a case fatality rate of almost 30.
- Case fatality for all severity levels is higher for patients age 75 and over.
- Median length of stay (LOS) increases for each consecutive severity grouping.

Payment

- Medicare insurance is the single largest payment source at 24.26%.
- Private/commercial insurance is second at 19.37%.
- Self-pay is the third largest payment category at 14.40%.

Mortality

- The overall mortality rate is 4.47%.
- The largest number of deaths is caused by fall-related injuries, followed by Motor vehicle traffic and firearm.
- Firearm, suffocation, and drowning/submersion have the highest case fatality rates.
- Case fatality rates are highest in patients age 75 and over.
- Firearm injuries have the highest case fatality rates in every age group among the selected mechanisms shown in the report.

Executive Summary (cont'd)

NTDB Hospitals

- 758 hospitals submitted data to the NTDB in 2013.
- 230 are Level I centers.
- 265 are Level II centers.
- 205 are Level III or Level IV centers.
- 32 are Level I or Level II pediatric-only centers.
- 56.86% of participating centers reported including all hip fractures (in accordance with NTDB inclusion criteria).
- 89.84% reported including DOAs in their registries.

Age

- Injuries initially peak in ages 14 to 29 , primarily from MVT-related incidents, and peak again between the ages of 40 and 50, when falls begin to increase.
- Fall-related injuries spike in children under 7 and adults over the age of 75.
- Males account for 70% of all incidents up to age 70, after age 71, most patients are female.

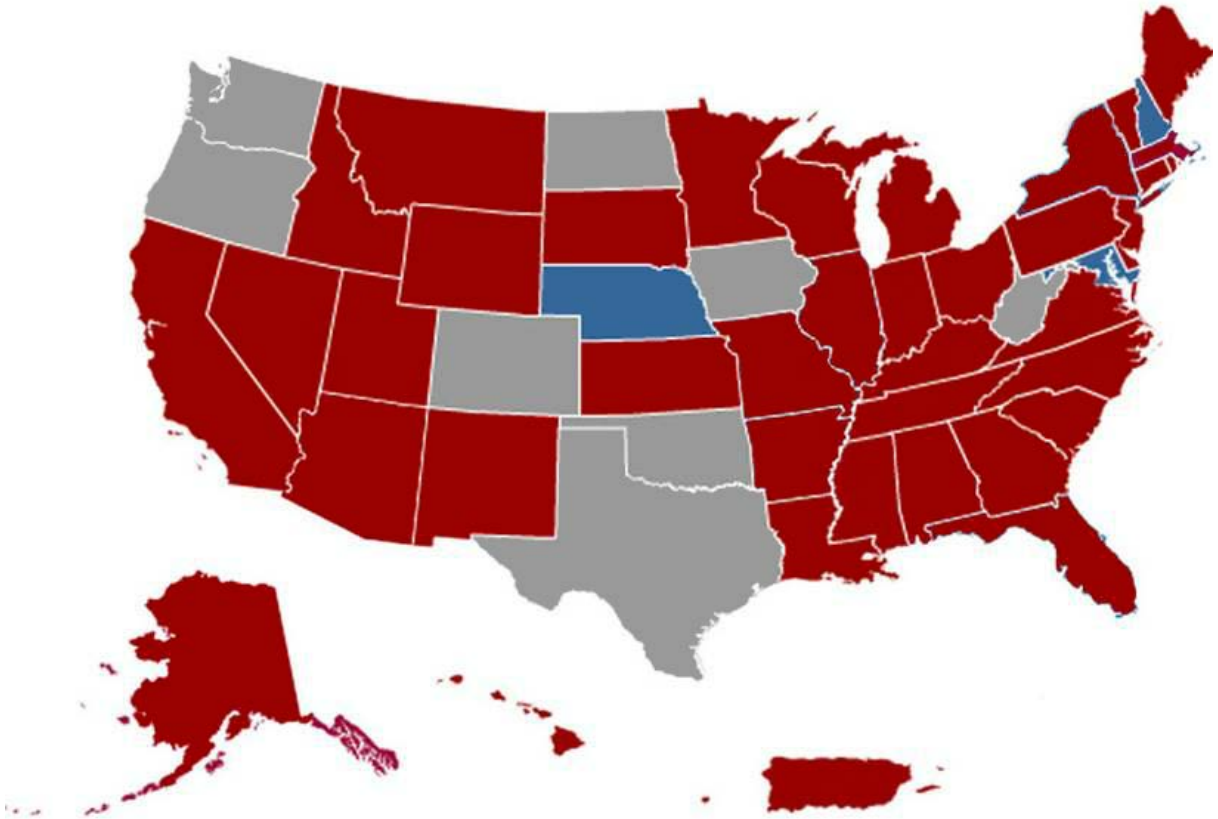
Mechanism of Injury

- Falls account for 42% of cases in the NTDB, with injuries increasing in children under age 7 and adults over the age of 75.
- Motor vehicle traffic-related injuries account for 27% of cases in the NTDB, with a dramatic rise between ages 15 and 33, peaking around age 19.
- Firearm injuries steadily increase from 15 to 34 and decrease afterwards.
- Suffocation, drowning/submersion injuries, and firearm injuries have the highest case fatality rates, with suffocation at 30.15%, drowning/submersion at 19.62%, and firearm at 15.71%.

FACILITY INFORMATION

Figure 1

Percent of Hospitals Submitting Data to NTDB by State and U.S. Territory



Percent of hospitals=Number of hospitals in the state that have submitted to the NTDB divided by the number of hospitals identified by the Trauma Exchange Information Program (TIEP) as trauma centers designated by a state of local authority and/or verified by the American College of Surgeons.

- 67% or greater
- 34% to 66%
- 0% to 33%

Table 2

Facilities by Bed Size

BED SIZE	NUMBER	PERCENT
≤200	201	26.52
201 - 400	270	35.62
401 - 600	159	20.98
≥600	128	16.89
Total	758	100

Figure 2

Facilities by Bed Size

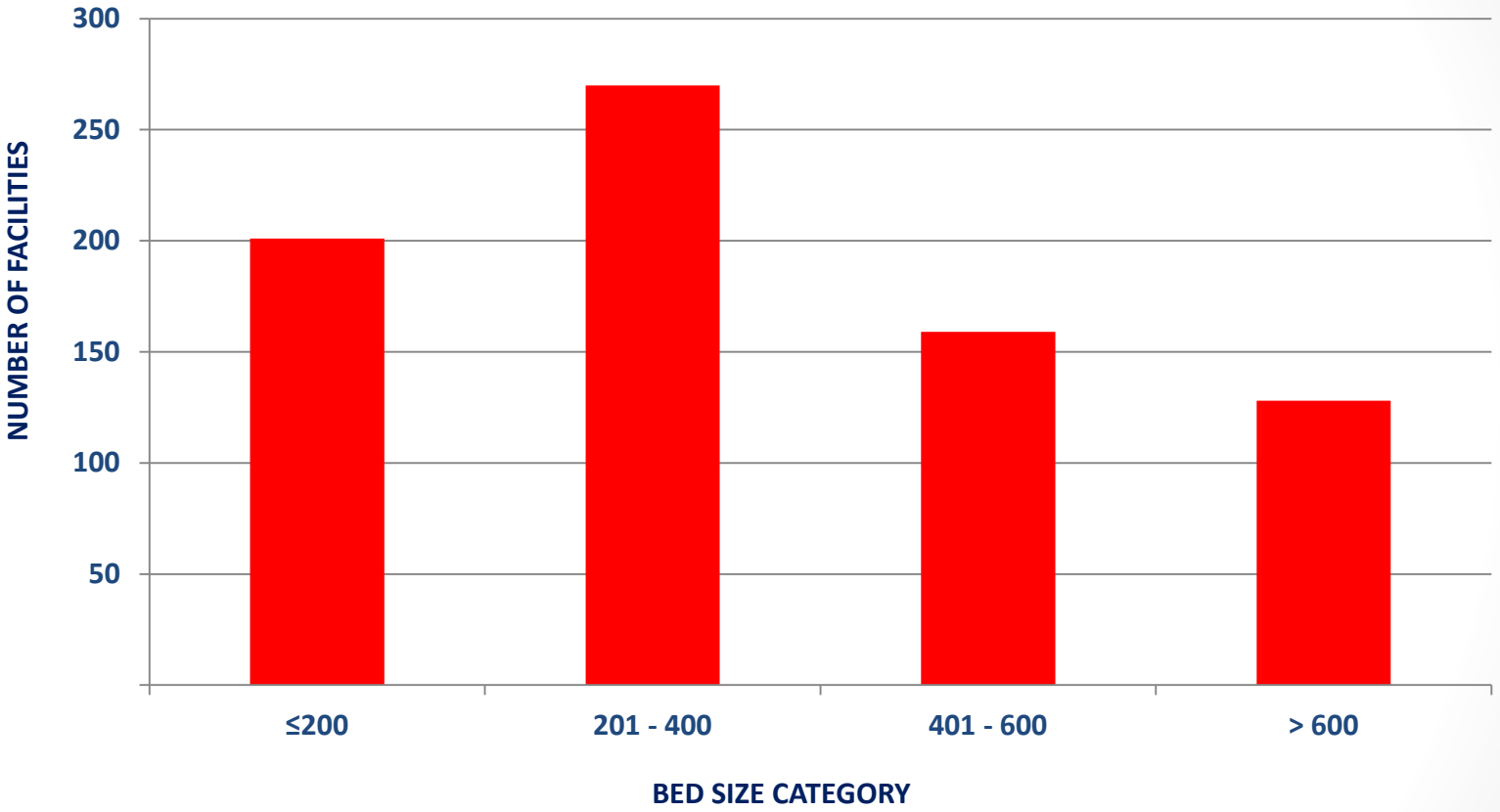


Table 3

Facilities by Trauma Level

LEVEL	NUMBER	PERCENT
I	230	30.34
II	265	34.96
III	132	17.41
IV	73	9.63
NA	30	3.96
NK/NR	24	3.17
Other	4	0.53
Total	758	100

This table includes 32 pediatric-only centers.
Both ACS-verified and state-designated centers are included.
NK/NR denotes “Not Known/Not Recorded” on all slides.

Figure 3

Facilities by Trauma Level

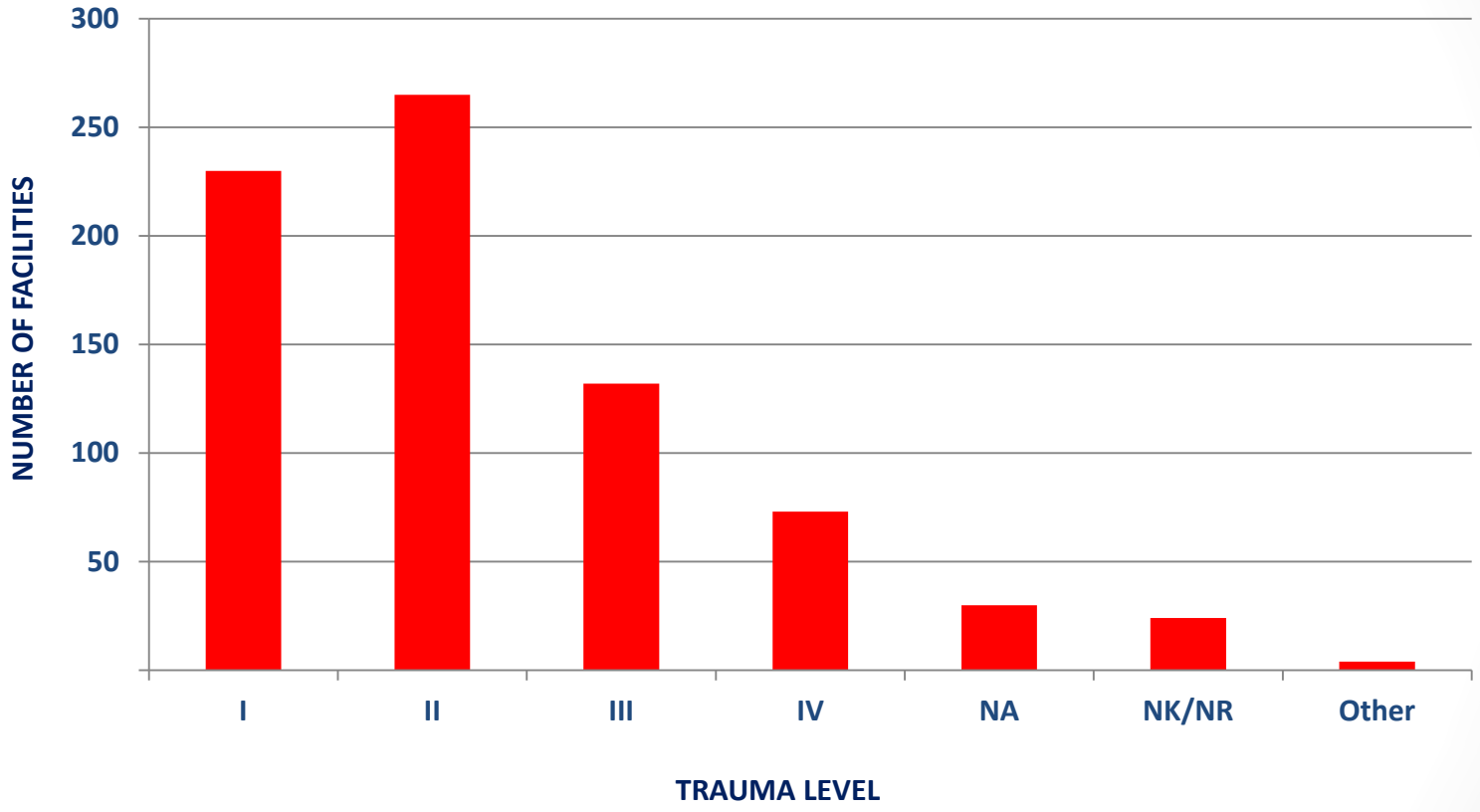


Table 4

Facilities by Region

REGION	NUMBER	PERCENT
South	254	33.51
Midwest	234	30.87
West	155	20.45
Northeast	112	14.78
Non-U.S.	3	0.40
Total	758	100

Figure 4

Facilities by Region

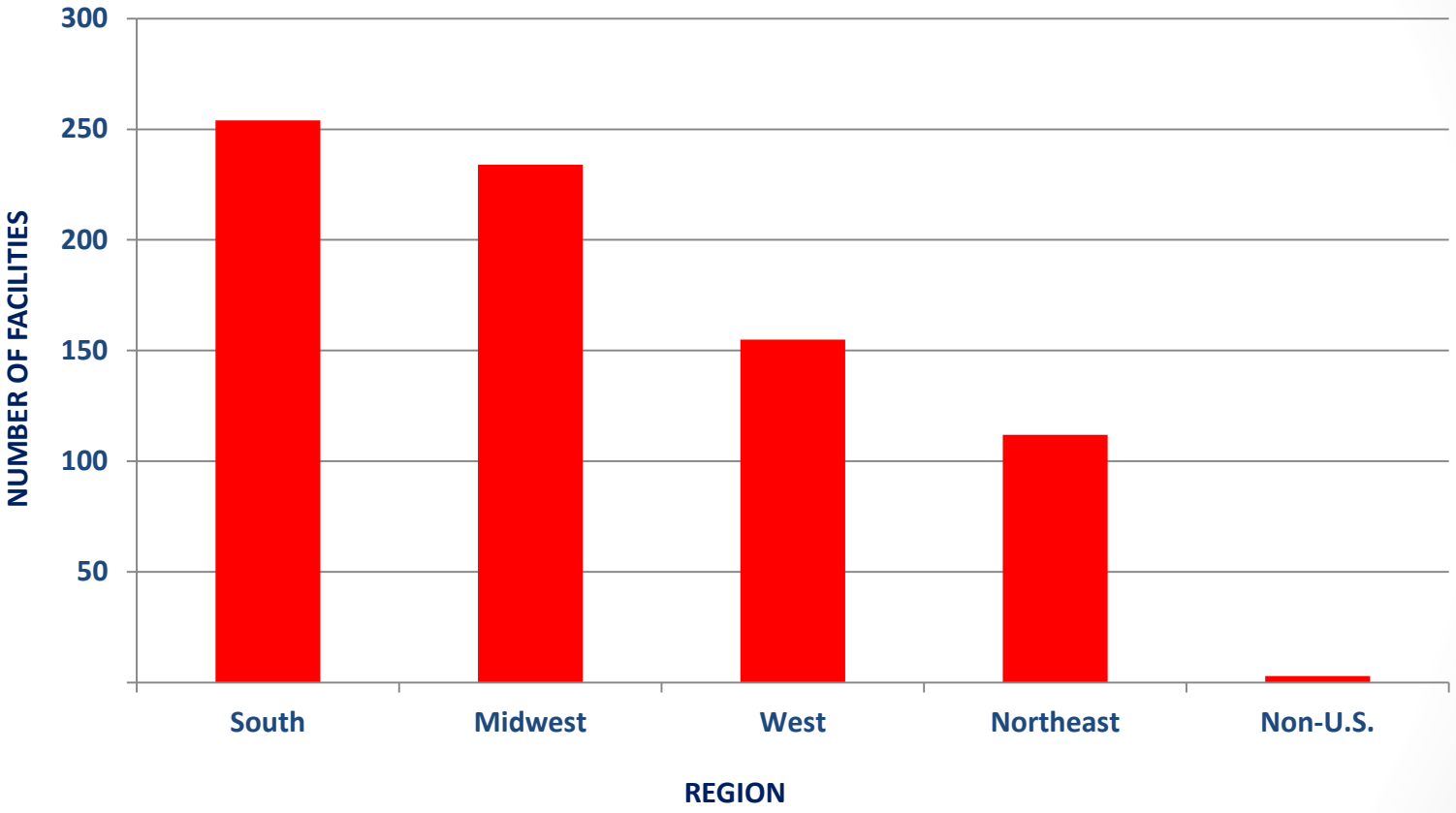


Table 5

Facilities by Length of Stay (LOS) Inclusion Criteria

LOS	NUMBER	PERCENT
All admissions	551	72.69
23 hour holds	61	8.05
≥ 24 hours	70	9.23
≥ 48 hours	46	6.07
≥ 72 hours	30	3.96
Total	758	100

Figure 5

Facilities by Length of Stay (LOS) Inclusion Criteria

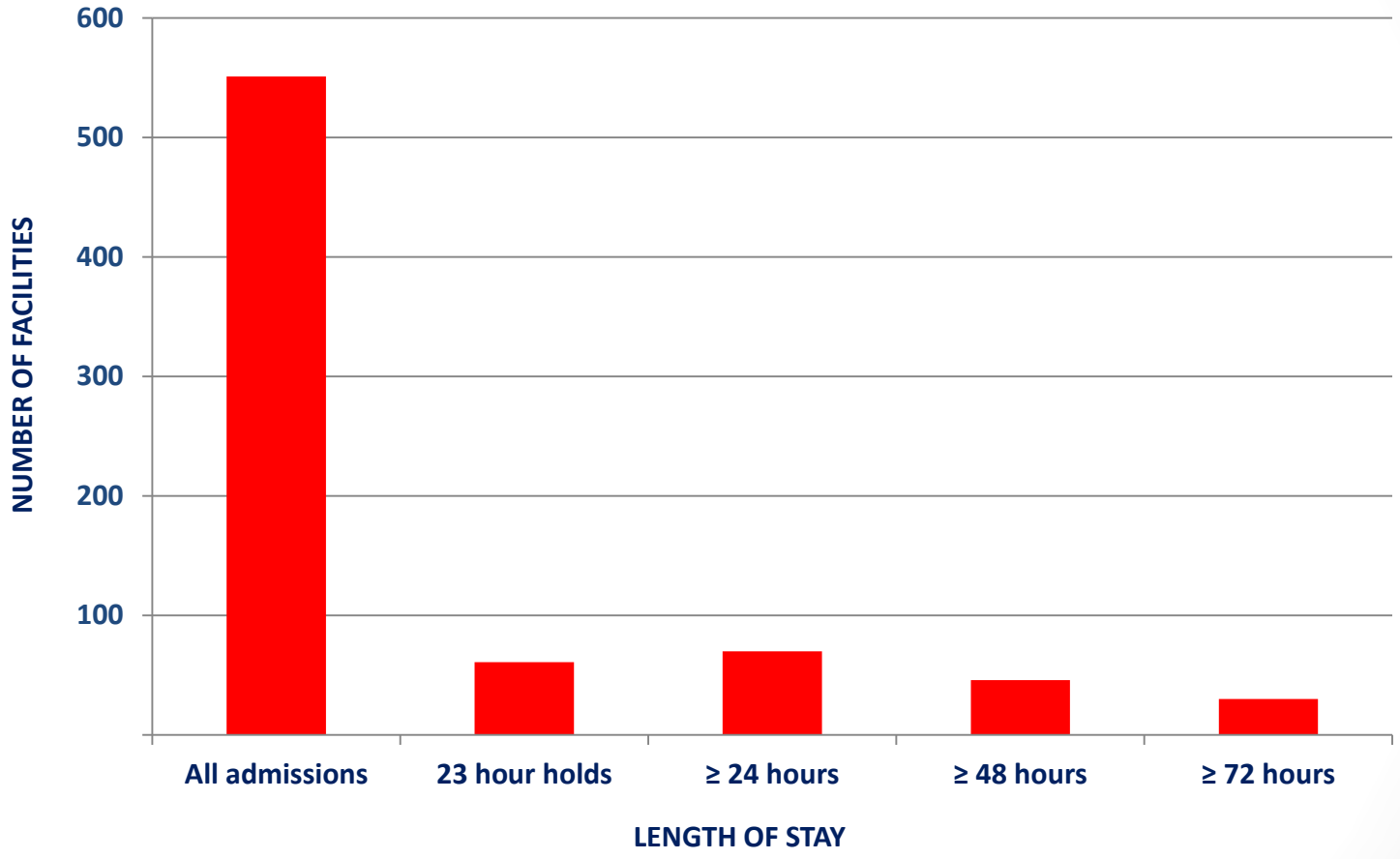


Table 6

Facilities by Isolated Hip Fracture Inclusion Criteria by Age

IHF INCLUSION	NUMBER	PERCENT
All	431	56.86
Patients ≤18 years	28	3.69
Patients ≤50 years	4	0.53
Patients ≤55 years	10	1.32
Patients ≤60 years	4	0.53
Patients ≤65 years	113	14.91
Patients ≤70 years	26	3.43
None	142	18.73
Total	758	100

Denotes whether a facility includes isolated hip fractures in its registry.

Figure 6

Facilities by Isolated Hip Fracture Inclusion Criteria by Age

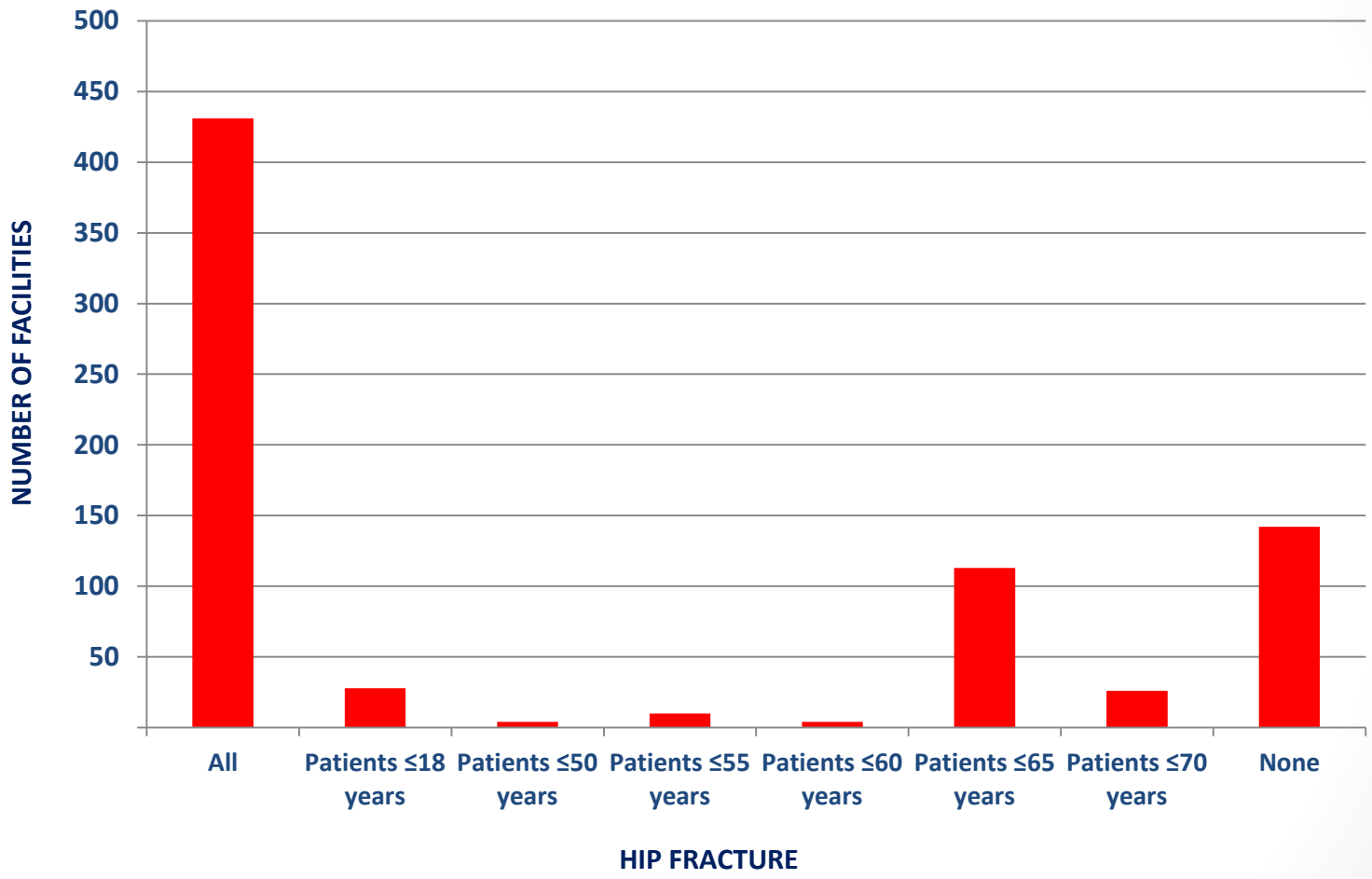


Table 7

Facilities by Death on Arrival (DOA) Inclusion Criteria

DOA INCLUDED	NUMBER	PERCENT
No	77	10.16
Yes	681	89.84
Total	758	100

Figure 7

Facilities by Death on Arrival (DOA) Inclusion Criteria

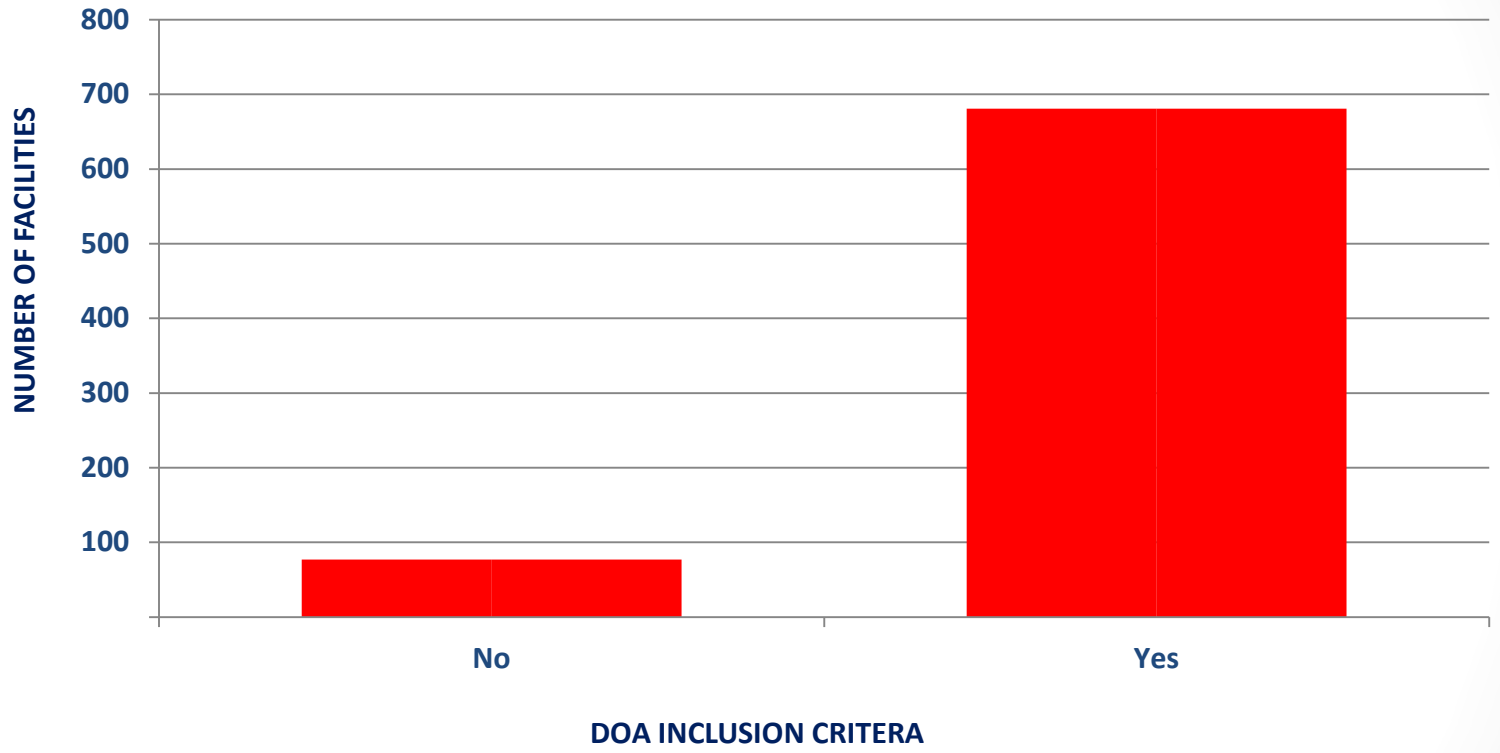


Table 8

Facilities by Transfer-In Criteria

TRANSFERS IN	NUMBER	PERCENT
All transfers	705	93.01
Within 4 hours	1	0.13
Within 8 hours	3	0.40
Within 24 hours	4	0.53
Within 48 hours	9	1.19
Within 72 hours	3	0.40
None	33	4.35
Total	758	100

Figure 8

Facilities by Transfer-In Criteria

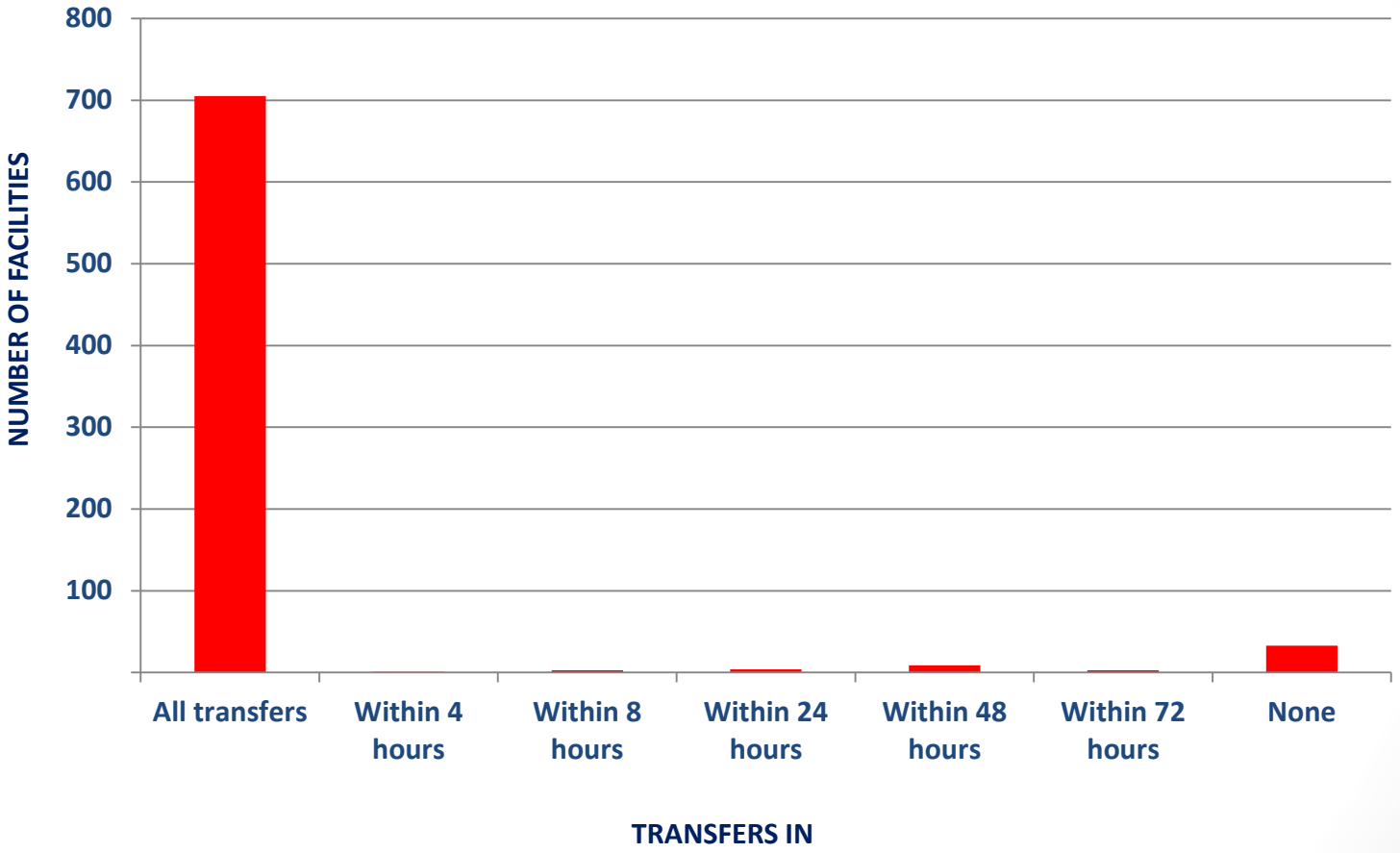


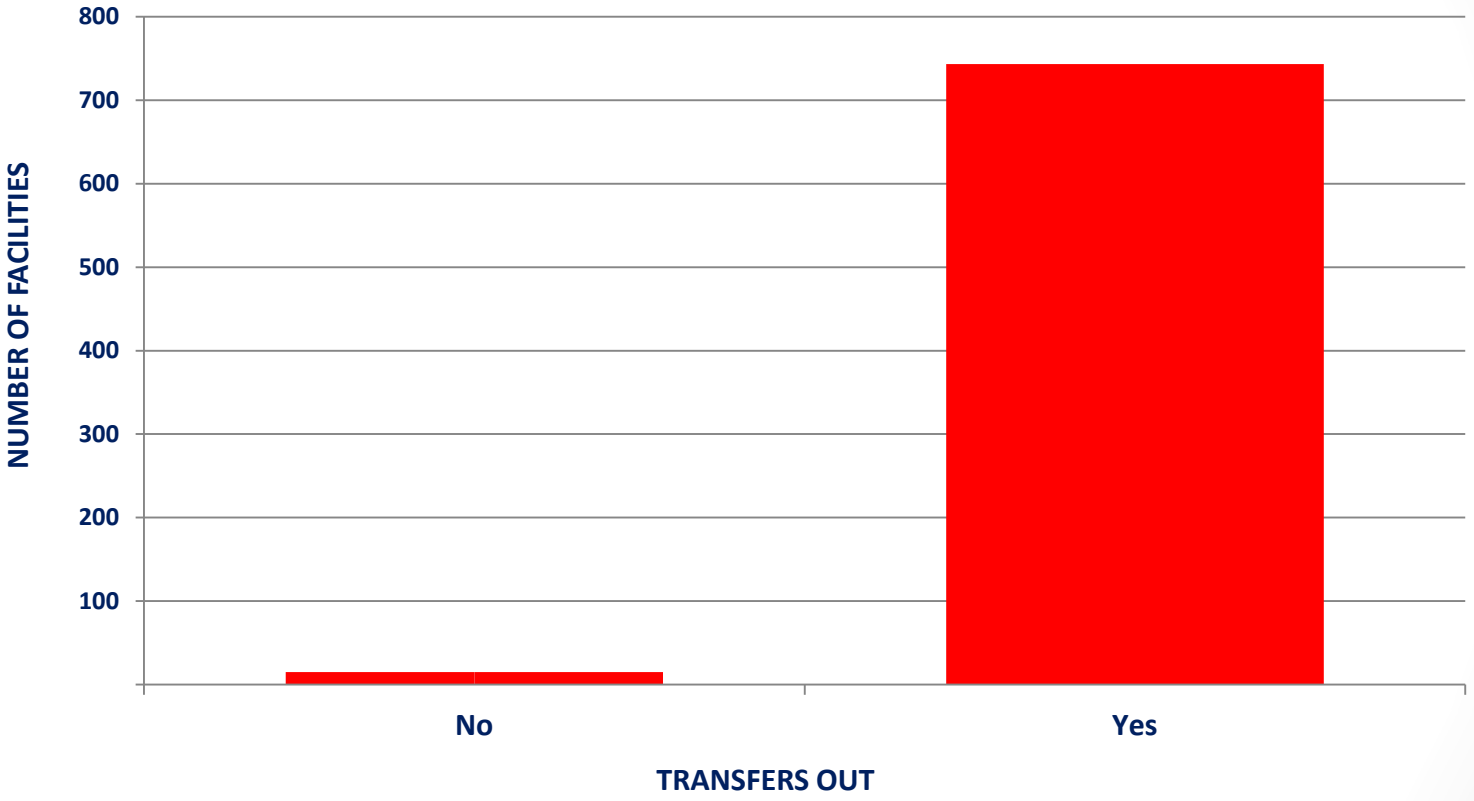
Table 9

Facilities by Transfer-Out Criteria

TRANSFERS OUT	NUMBER	PERCENT
No	15	1.98
Yes	743	98.02
Total	758	100

Figure 9

Facilities by Transfer-Out Criteria



DEMOGRAPHIC INFORMATION

Table 10

Incidents by Age

AGE	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
<1 year	9,191	1.13	237	2.58
1-4	25,151	3.09	496	1.97
5-9	27,202	3.34	346	1.27
10-14	27,604	3.39	458	1.66
15-19	51,919	6.37	1,651	3.18
20-24	68,321	8.39	2,746	4.02
25-34	104,180	12.79	3,919	3.76
35-44	81,831	10.04	2,904	3.55
45-54	98,097	12.04	3,706	3.78
55-64	92,872	11.40	3,977	4.28
65-74	73,504	9.02	3,814	5.19
75-84	80,889	9.93	5,689	7.03
>84	73,825	9.06	6,412	8.69
NK/NR	77	0.01	52	67.53
Total	814,663	100	36,407	4.47

Figure 10A

Incidents by Age

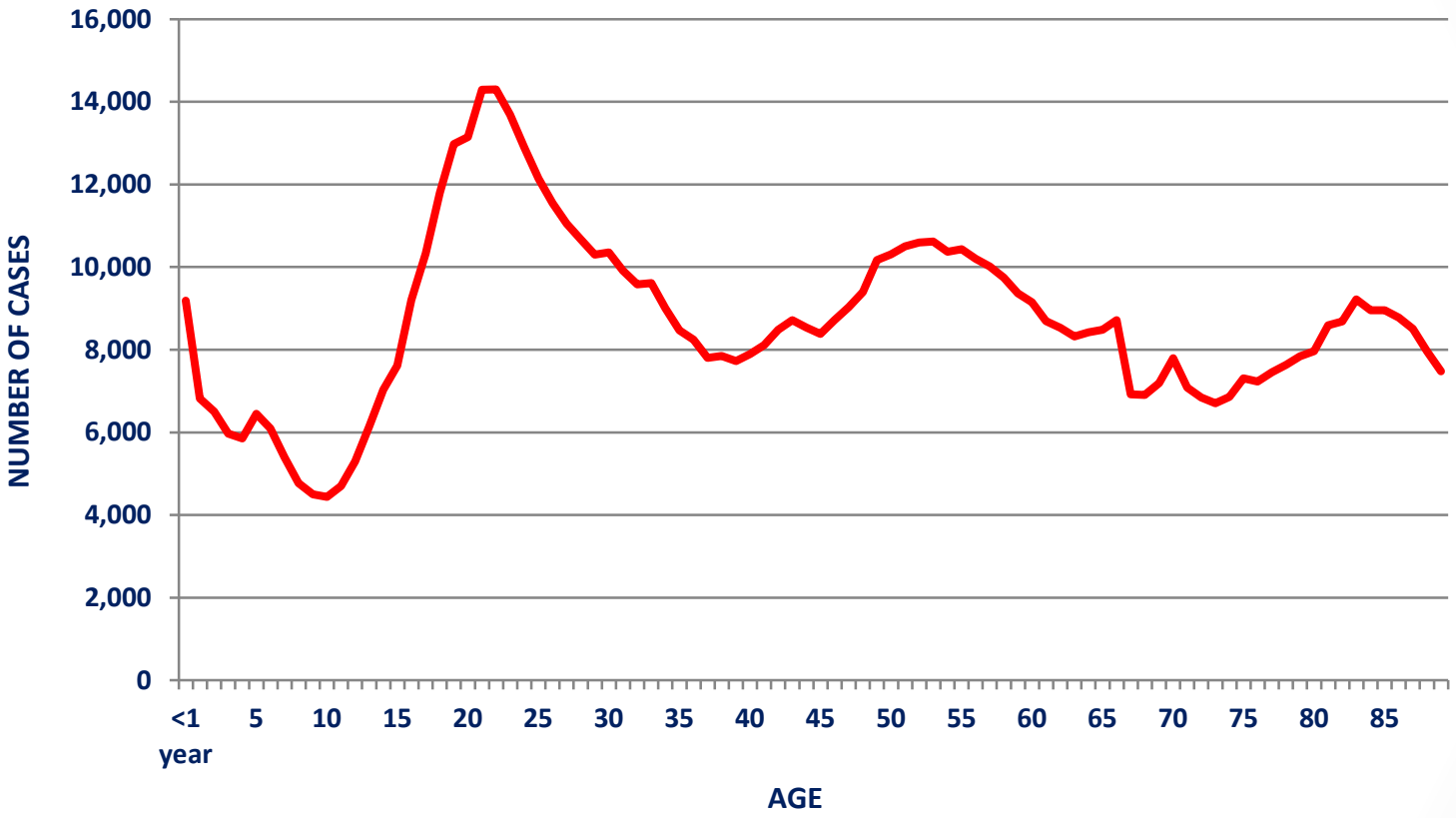


Figure 10B

Case Fatality Rate by Age

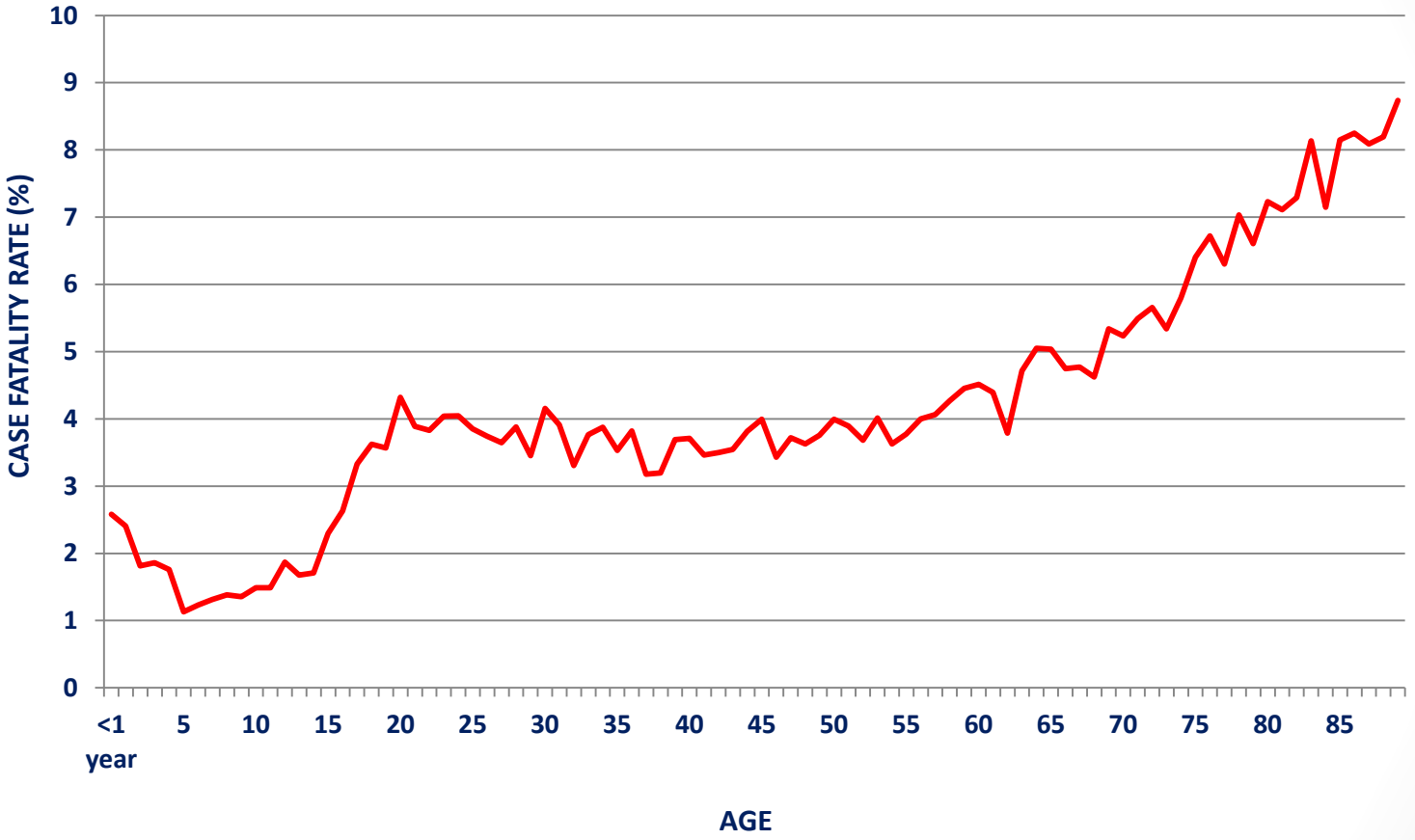


Table 11

Incidents and Case Fatality Rate by Age and Gender

AGE CATEGORY	NUMBER (FEMALE)	NUMBER (MALE)	DEATHS (FEMALE)	DEATHS (MALE)	CASE FATALITY RATE (FEMALE)	CASE FATALITY RATE (MALE)
<1 year	3,943	5,238	93	144	2.36	2.75
1-4	10,339	14,798	207	289	2.00	1.95
5-9	10,802	16,379	143	203	1.32	1.24
10-14	8,236	19,356	152	305	1.85	1.58
15-19	14,723	37,167	364	1,287	2.47	3.46
20-24	17,556	50,719	506	2,239	2.88	4.41
25-34	25,922	78,200	690	3,226	2.66	4.13
35-44	21,649	60,122	636	2,267	2.94	3.77
45-54	29,074	68,953	944	2,759	3.25	4.00
55-64	34,606	58,210	1,124	2,851	3.25	4.90
65-74	35,478	37,968	1,342	2,468	3.78	6.50
75-84	48,404	32,417	2,508	3,177	5.18	9.80
>84	51,092	22,681	3,533	2,872	6.91	12.66
NK/NR	4	71	3	49	75.00	69.01
Total	311,828	502,279	12,245	24,136	3.93	4.81

Figure 11A

Incidents by Age and Gender

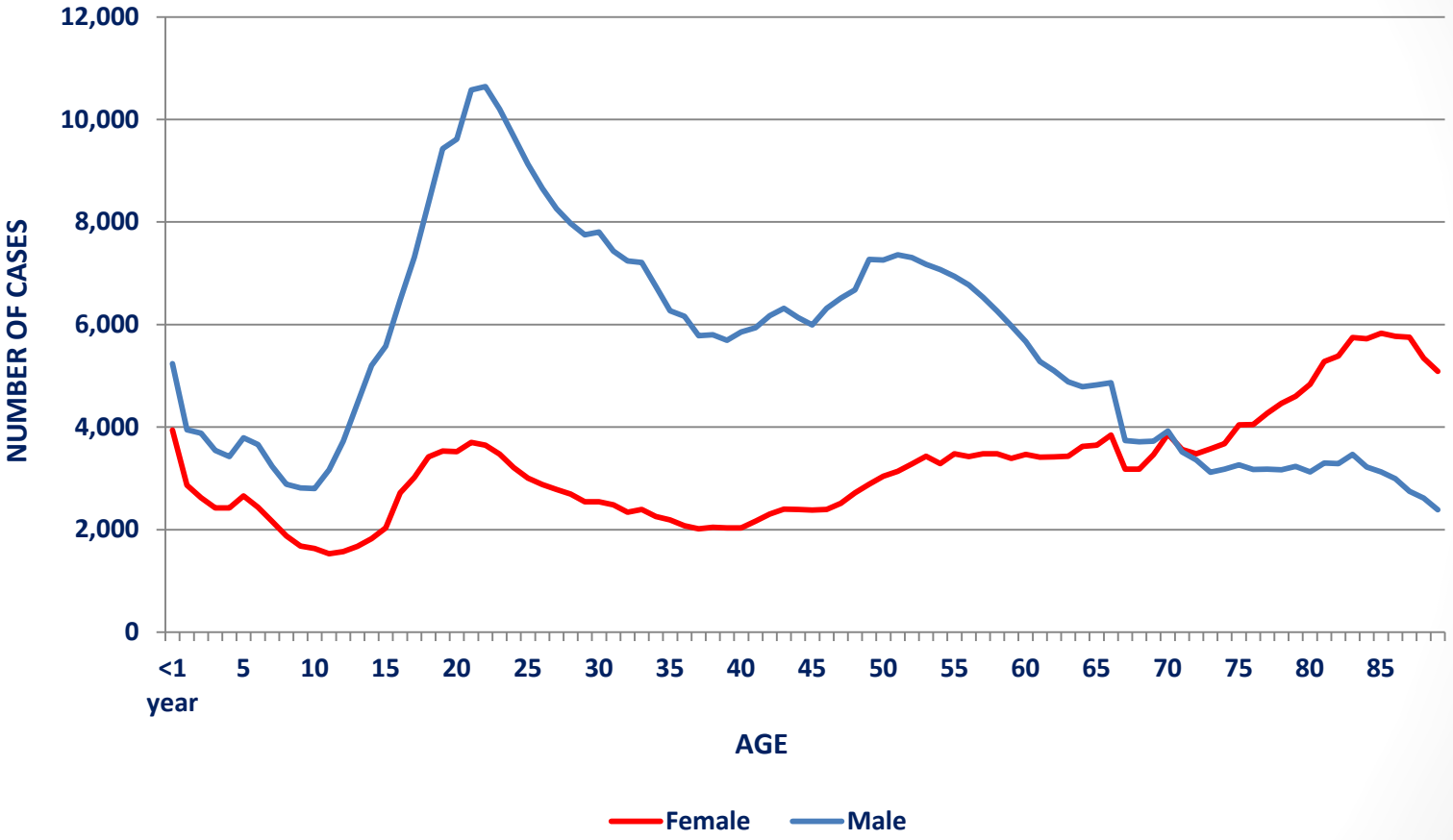


Figure 11B

Case Fatality Rate by Age and Gender

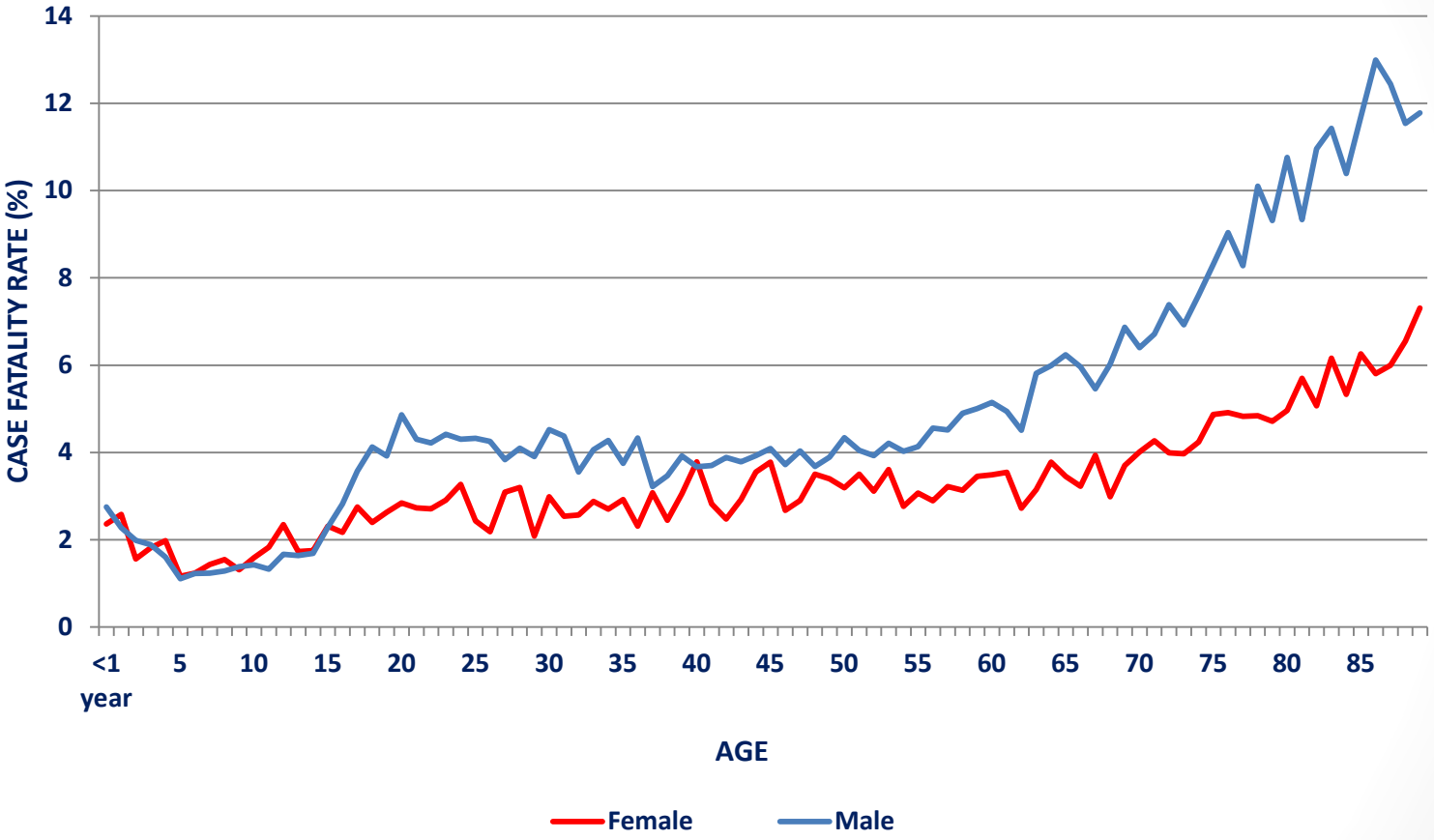


Table 12

Alcohol Use

ALCOHOL USE	NUMBER	PERCENT
No (confirmed by test)	198,724	24.39
No (not tested)	424,865	52.15
Yes (confirmed by test, beyond legal limit)	79,959	9.81
Yes (confirmed by test, trace levels)	30,653	3.76
Not applicable	24,315	2.98
NK/NR	56,147	6.89
Total	814,663	100

Figure 12

Alcohol Use

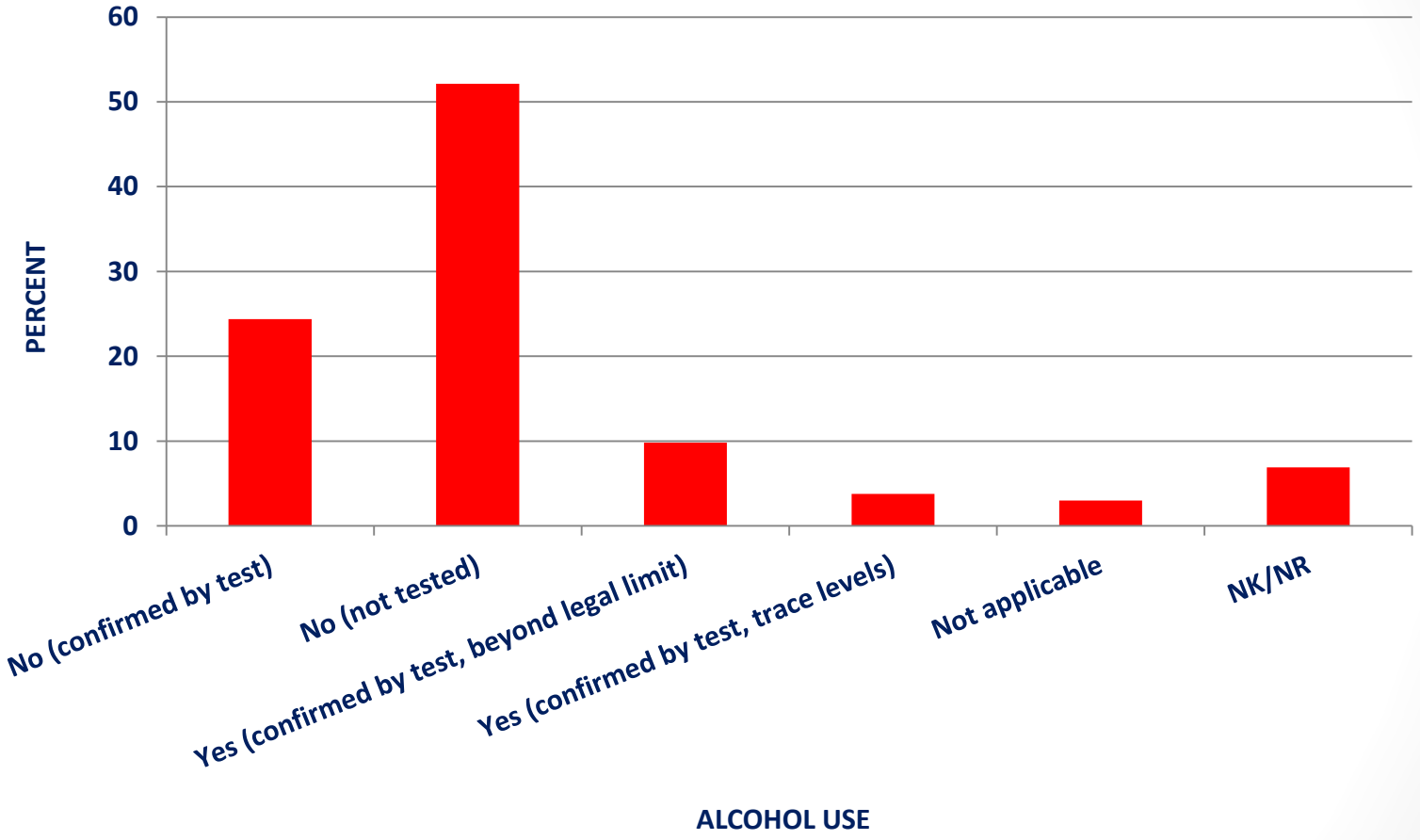


Table 13

Drug Use

DRUG USE	NUMBER	PERCENT
No (confirmed by test)	89,751	11.02
No (not tested)	509,475	62.54
Yes (confirmed by test, illegal use drug)	60,534	7.43
Yes (confirmed by test, prescription drug)	31,183	3.83
Not applicable	40,937	5.03
NK/NR	82,783	10.16
Total	814,663	100

Figure 13

Drug Use

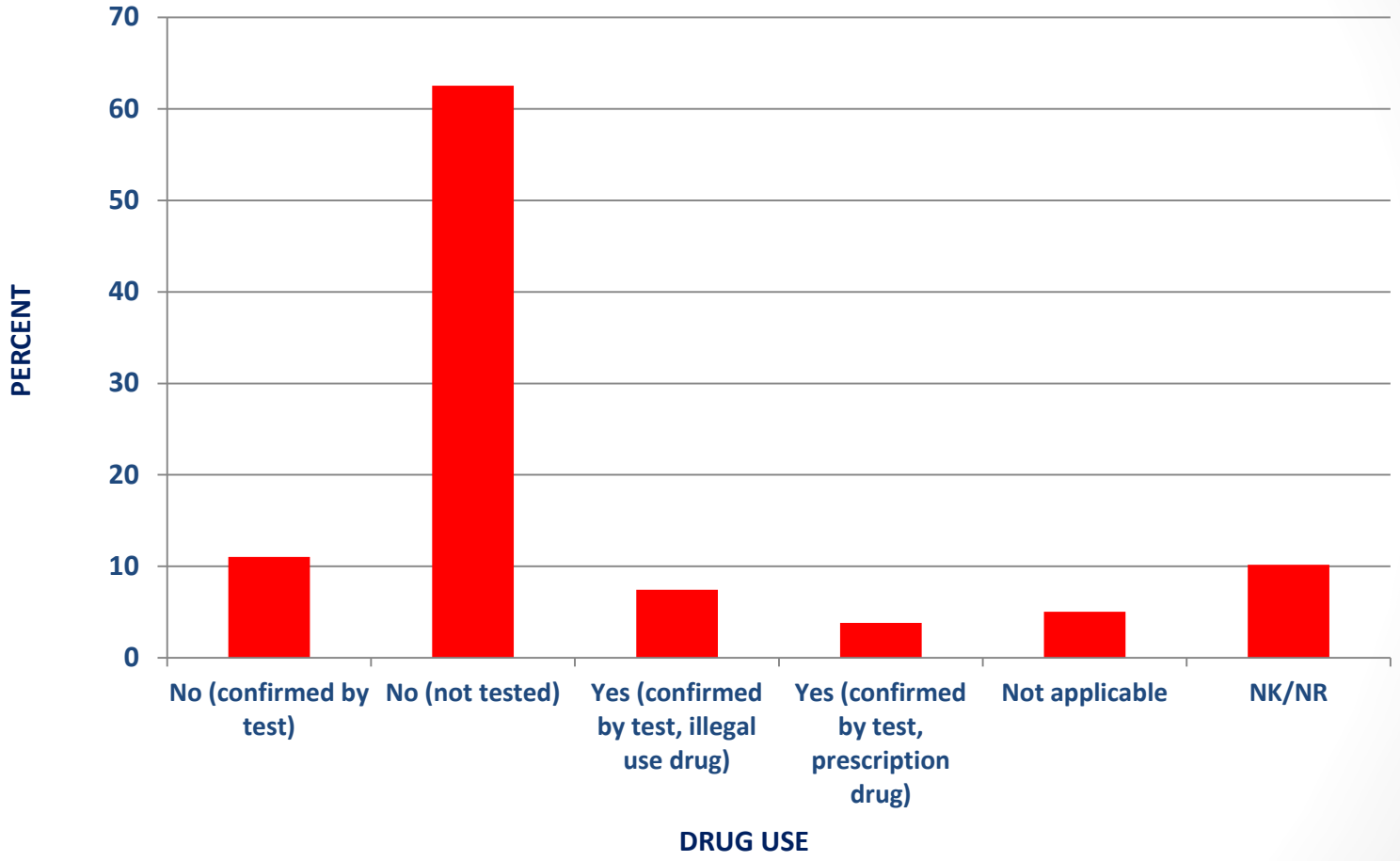


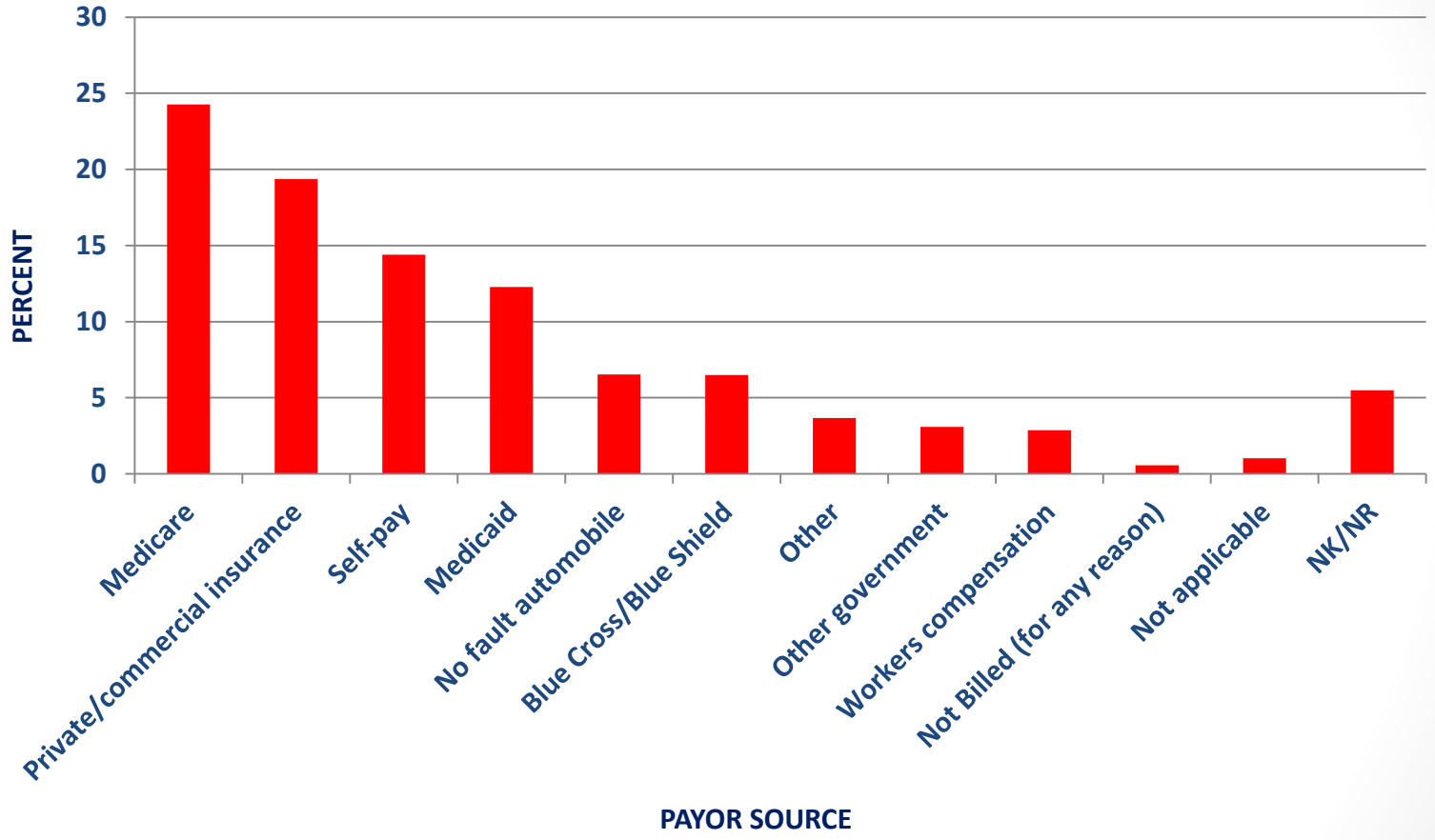
Table 14

Primary Payment Source

PRIMARY PAYMENT SOURCE	NUMBER	PERCENT
Medicare	197,633	24.26
Private/commercial insurance	157,798	19.37
Self-Pay	117,273	14.40
Medicaid	100,048	12.28
No fault automobile	53,154	6.52
Blue Cross/Blue Shield	52,902	6.49
Other	29,786	3.66
Other government	25,110	3.08
Workers compensation	23,272	2.86
Not billed (for any reason)	4,590	0.56
Not applicable	8,361	1.03
NK/NR	44,736	5.49
Total	814,663	100

Figure 14

Primary Payment Source



INJURY CHARACTERISTICS

Table 15

Incidents by Mechanism of Injury

MECHANISM	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
Fall	344,592	42.30	15,069	4.37
Motor vehicle traffic	220,923	27.12	10,515	4.76
Struck by, against	57,937	7.11	874	1.51
Transport, other	37,986	4.66	976	2.57
Cut/pierce	35,258	4.33	744	2.11
Firearm	34,338	4.21	5,393	15.71
Pedal cyclist, other	14,755	1.81	210	1.42
Other specified and classifiable	13,425	1.65	498	3.71
Hot object/substance	8,510	1.04	30	0.35
Fire/flame	8,428	1.03	467	5.54
Machinery	8,239	1.01	144	1.75
Unspecified	8,187	1.00	459	5.61
Natural/environmental, bites and stings	5,324	0.65	36	0.68
Other specified, not elsewhere classifiable	4,030	0.49	102	2.53
Overexertion	2,784	0.34	30	1.08
Pedestrian, other	2,627	0.32	148	5.63
Natural/environmental, other	2,332	0.29	50	2.14
Suffocation	849	0.10	256	30.15
Poisoning	475	0.06	12	2.53
Drowning/submersion	372	0.05	73	19.62
Adverse effects, medical care	257	0.03	14	5.45
Adverse effects, drugs	206	0.03	11	5.34
NK/NR	2,829	0.35	296	10.46
Total	814,663	100	36,407	4.47

Figure 15A

Incidents by Selected Mechanism of Injury

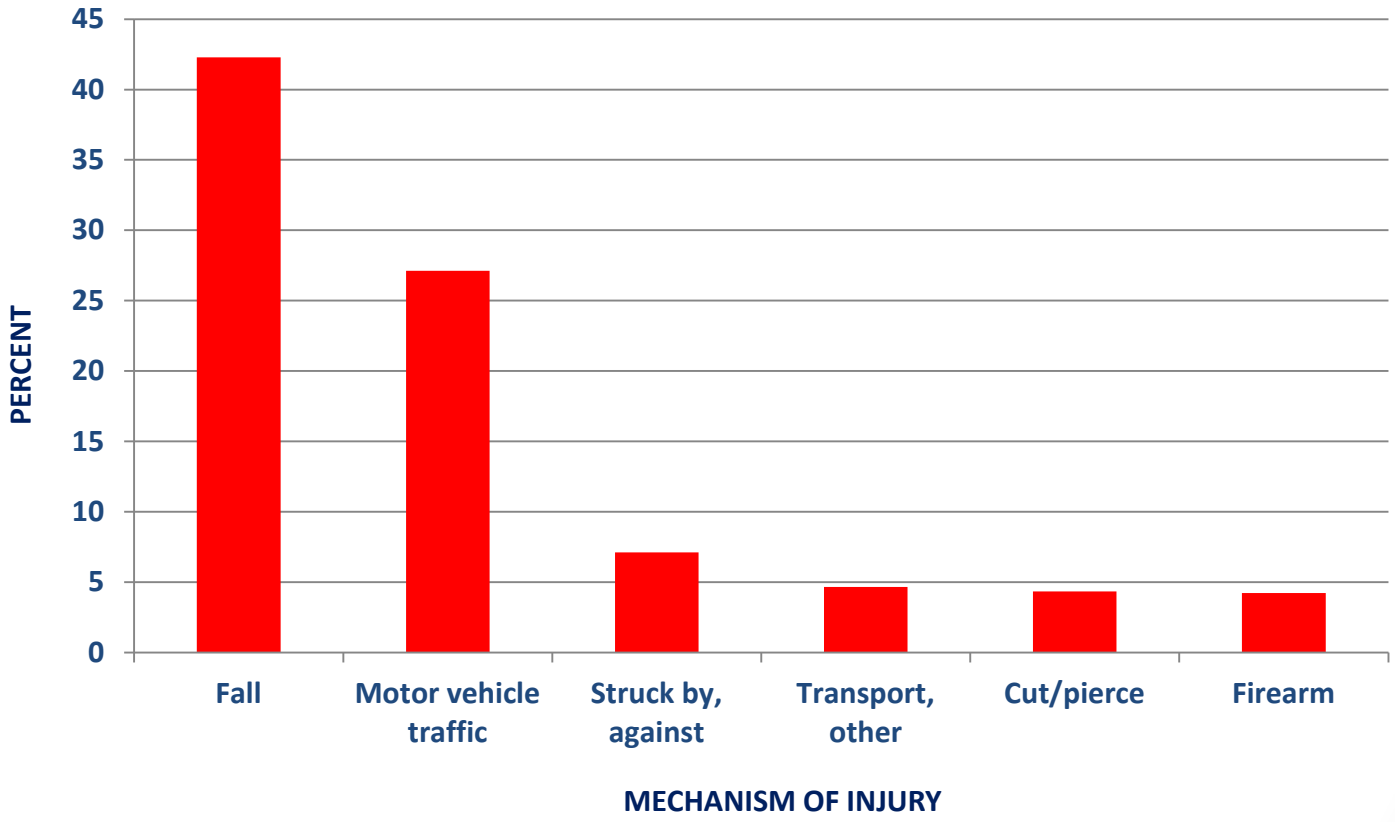


Figure 15B

Case Fatality Rate by Selected Mechanism of Injury

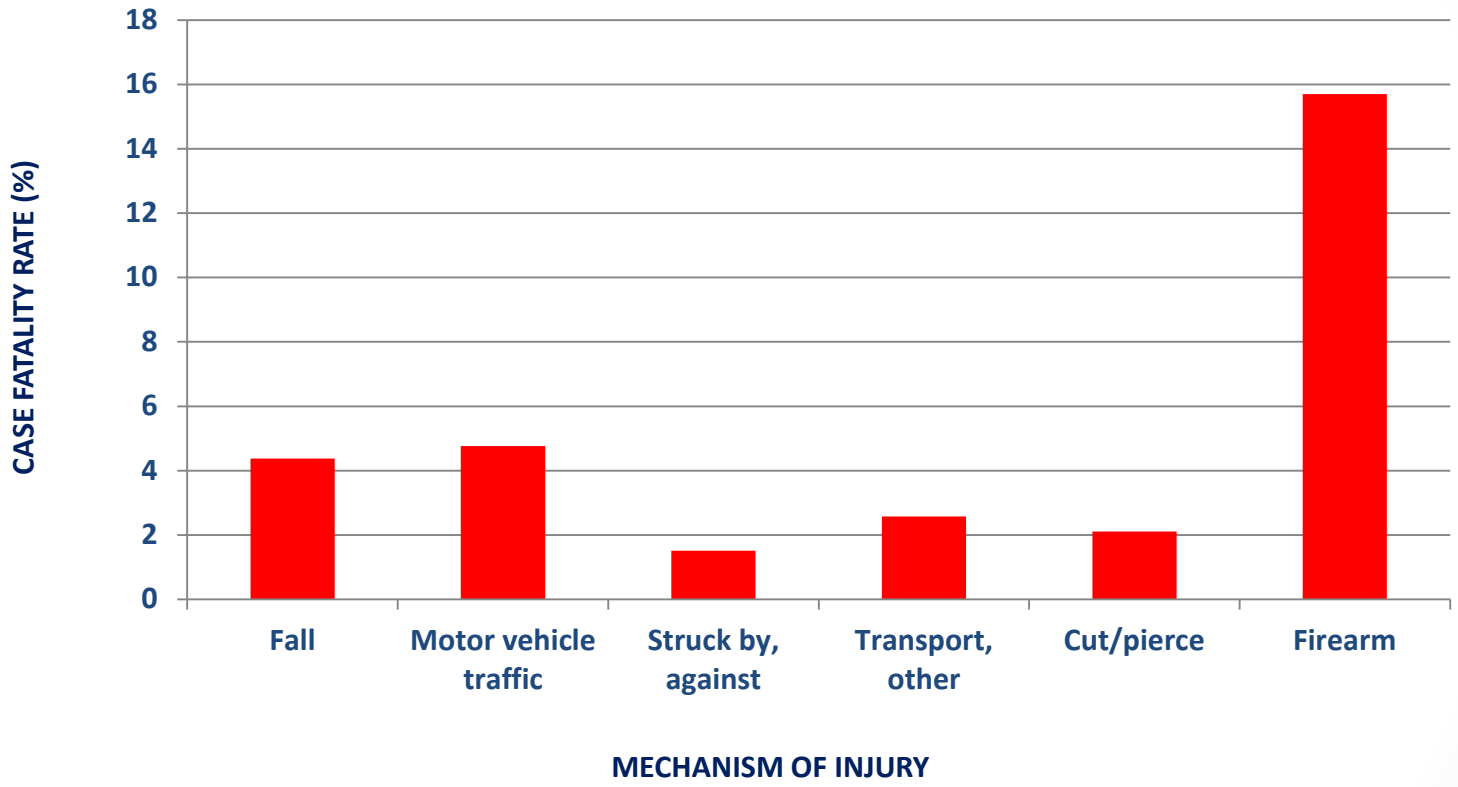


Table 16

Incidents by Selected Mechanism of Injury and Age

AGE	FALL	MOTOR VEHICLE TRAFFIC	STRUCK BY, AGAINST	TRANSPORT, other	FIREARM	CUT/PIERCE
<1 year	4,984	456	332	49	31	36
1-4	12,736	2,957	1,879	506	176	492
5-9	13,810	4,460	2,117	1,506	181	509
10-14	8,791	5,455	4,144	3,352	560	675
15-19	7,555	20,755	6,533	4,461	4,944	2,937
20-24	7,711	29,613	6,800	4,152	8,073	5,688
25-34	15,492	40,275	11,324	6,078	9,752	9,557
35-44	17,884	29,533	8,279	5,027	4,768	6,198
45-54	31,354	32,469	8,368	5,294	3,100	5,172
55-64	43,922	26,166	4,836	3,915	1,574	2,637
65-74	47,509	15,252	1,850	2,120	670	909
75-84	65,855	9,557	896	1,067	331	321
>84	66,979	3,936	574	459	167	125
NK/NR	10	39	5	0	11	2
Total	344,592	220,923	57,937	37,986	34,338	35,258

Figure 16

Incidents by Selected Mechanism of Injury and Age

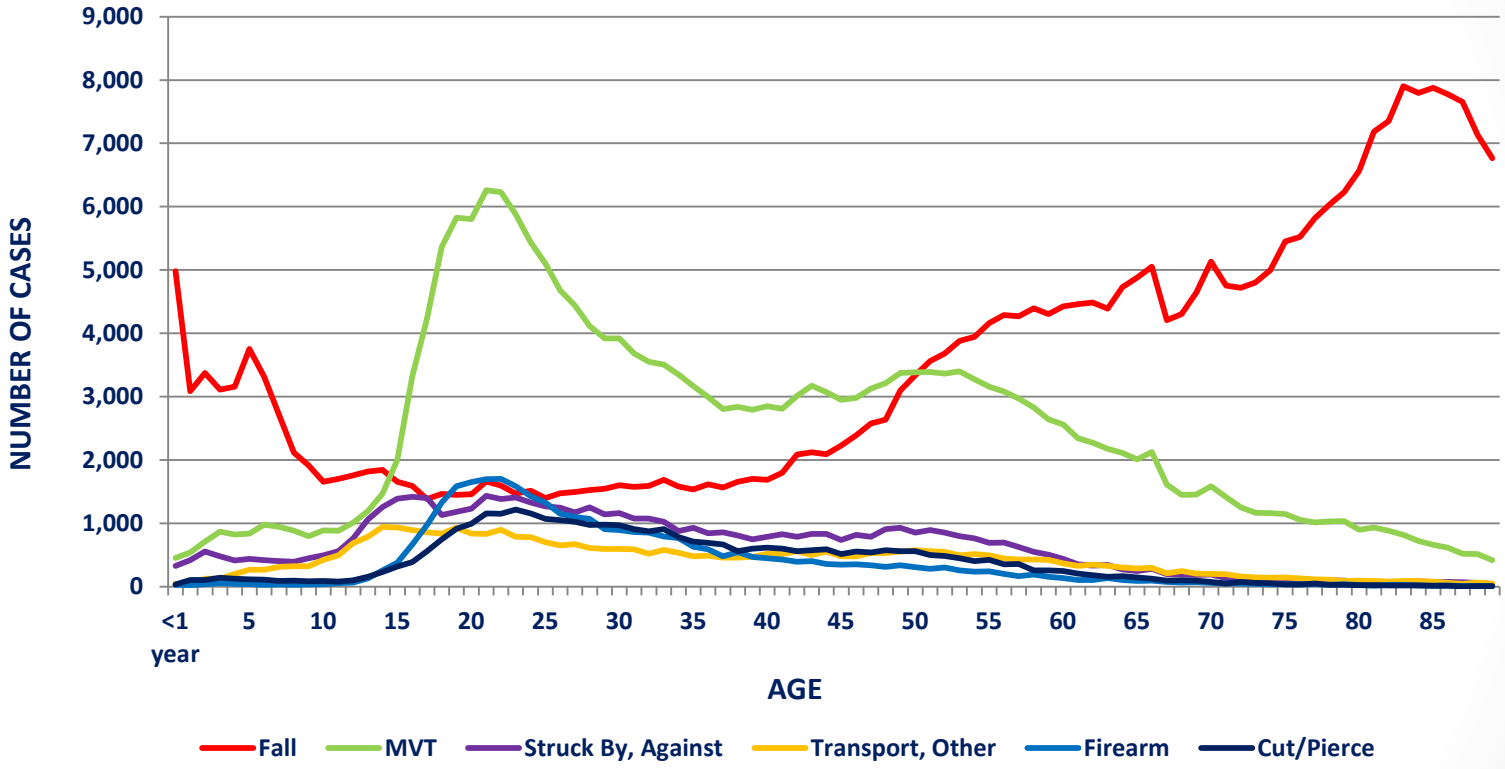


Table 17

Case Fatality Rate by Selected Mechanism of Injury and Age

AGE	FALL	MOTOR VEHICLE TRANSPORT	STRUCK BY, AGAINST	TRANSPORT, OTHER	FIREARM	CUT/PIERCE
<1 year	0.64	9.65	1.20	6.12	35.48	2.78
1-4	0.74	4.97	2.08	1.58	11.93	1.22
5-9	0.66	3.07	0.94	1.13	11.60	0.59
10-14	0.76	3.01	0.58	1.31	14.11	1.04
15-19	1.01	3.31	0.73	1.68	11.87	2.04
20-24	1.82	3.65	1.12	2.38	13.35	1.86
25-34	1.65	3.73	1.18	2.35	14.26	2.00
35-44	1.94	3.87	1.40	2.43	16.55	1.82
45-54	2.66	4.57	1.77	2.66	18.29	2.53
55-64	3.18	5.76	2.63	2.68	23.76	2.31
65-74	4.53	6.71	2.76	3.92	31.04	3.19
75-84	6.40	9.79	5.92	7.31	46.22	4.67
>84	8.02	15.93	5.75	12.64	62.87	15.20
NK/NR	40	76.92	20	0	81.82	100

Figure 17

Case Fatality Rate by Selected Mechanism of Injury and Age

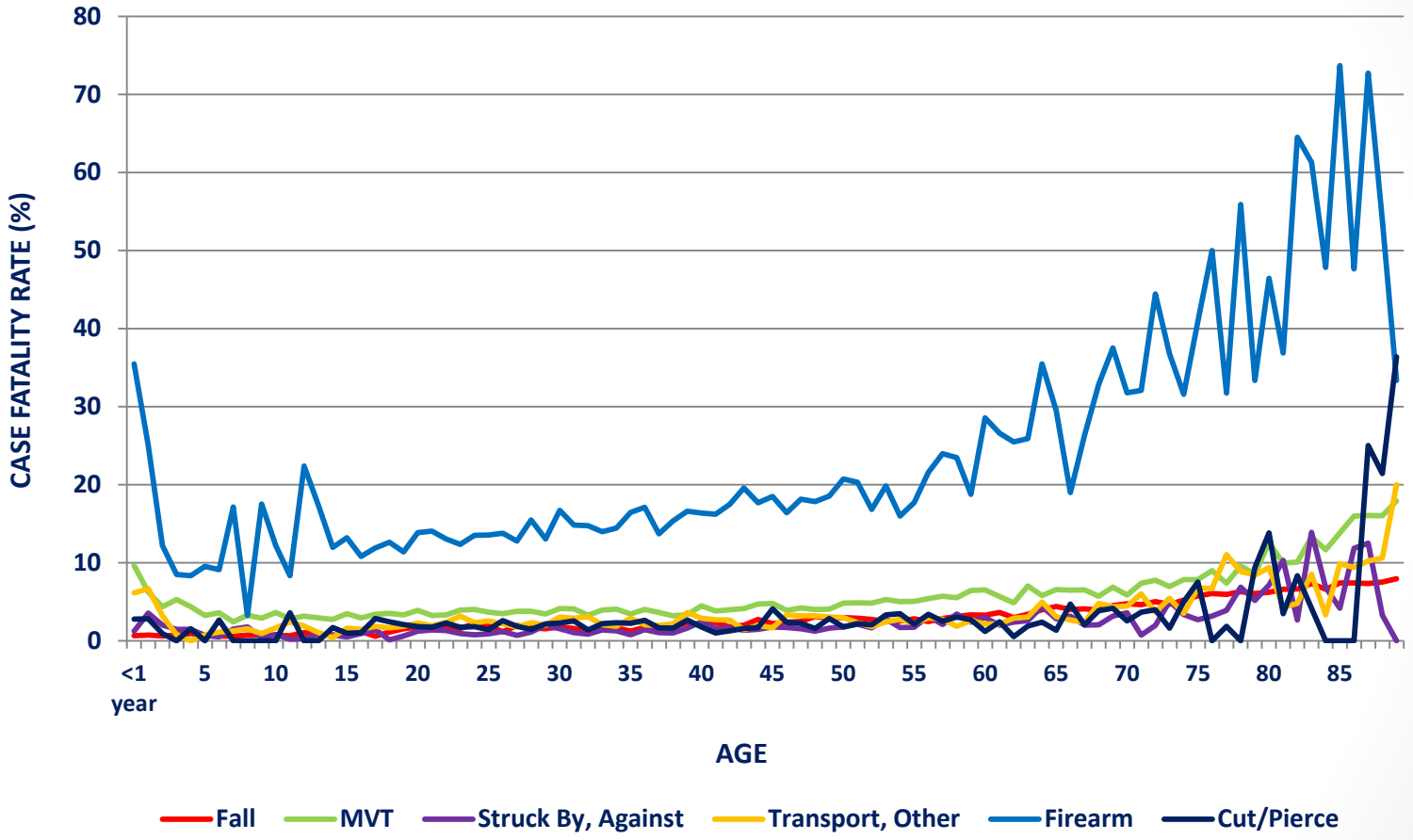


Table 18

Incidents and Case Fatality Rate by Mechanism of Injury and Gender

MECHANISM	PERCENT (FEMALE)	PERCENT (MALE)	CASE FATALITY RATE (FEMALE)	CASE FATALITY RATE (MALE)
Fall	56.31	33.59	3.98	4.78
Motor vehicle traffic	26.17	27.71	4.06	5.17
Struck by, against	3.25	9.51	1.41	1.53
Transport, other	3.70	5.26	2.24	2.71
Cut/pierce	1.76	5.92	2.26	2.08
Firearm	1.26	6.05	16.02	15.66
Pedal cyclist, other	1.05	2.28	0.79	1.61
Other specified and classifiable	1.16	1.95	3.50	3.79
Hot object/substance	1.09	1.02	0.50	0.25
Fire/flame	0.74	1.22	7.68	4.75
Machinery	0.20	1.52	1.30	1.79
Unspecified	0.61	1.25	6.90	5.22
Natural/environmental, bites and stings	0.78	0.57	0.53	0.80
Other specified, not elsewhere classifiable	0.36	0.58	2.29	2.63
Overexertion	0.37	0.32	0.94	1.17
Pedestrian, other	0.30	0.34	3.77	6.66
Natural/environmental, other	0.31	0.27	1.78	2.39
Suffocation	0.07	0.12	32.03	29.45
Poisoning	0.07	0.05	0.45	4.31
Drowning/submersion	0.03	0.06	13.98	21.51
Adverse effects, medical care	0.04	0.03	4.20	6.52
Adverse effects, drugs	0.03	0.02	3.00	7.55
NK/NR	0.32	0.36	10.79	10.31
Total	100	100		

Figure 18A

Incidents by Selected Mechanism of Injury and Gender

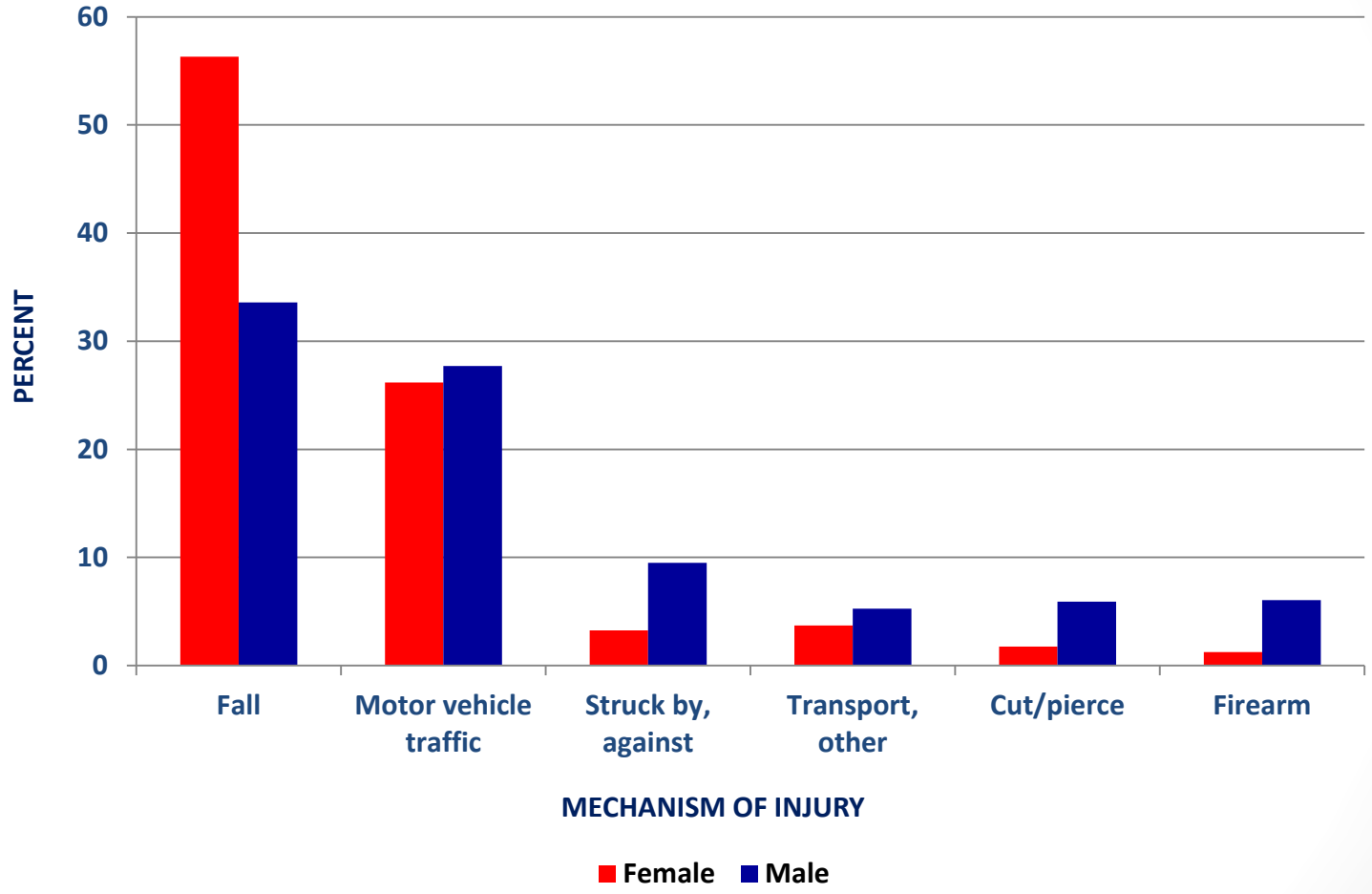


Figure 18B

Case Fatality Rate by Selected Mechanism of Injury and Gender

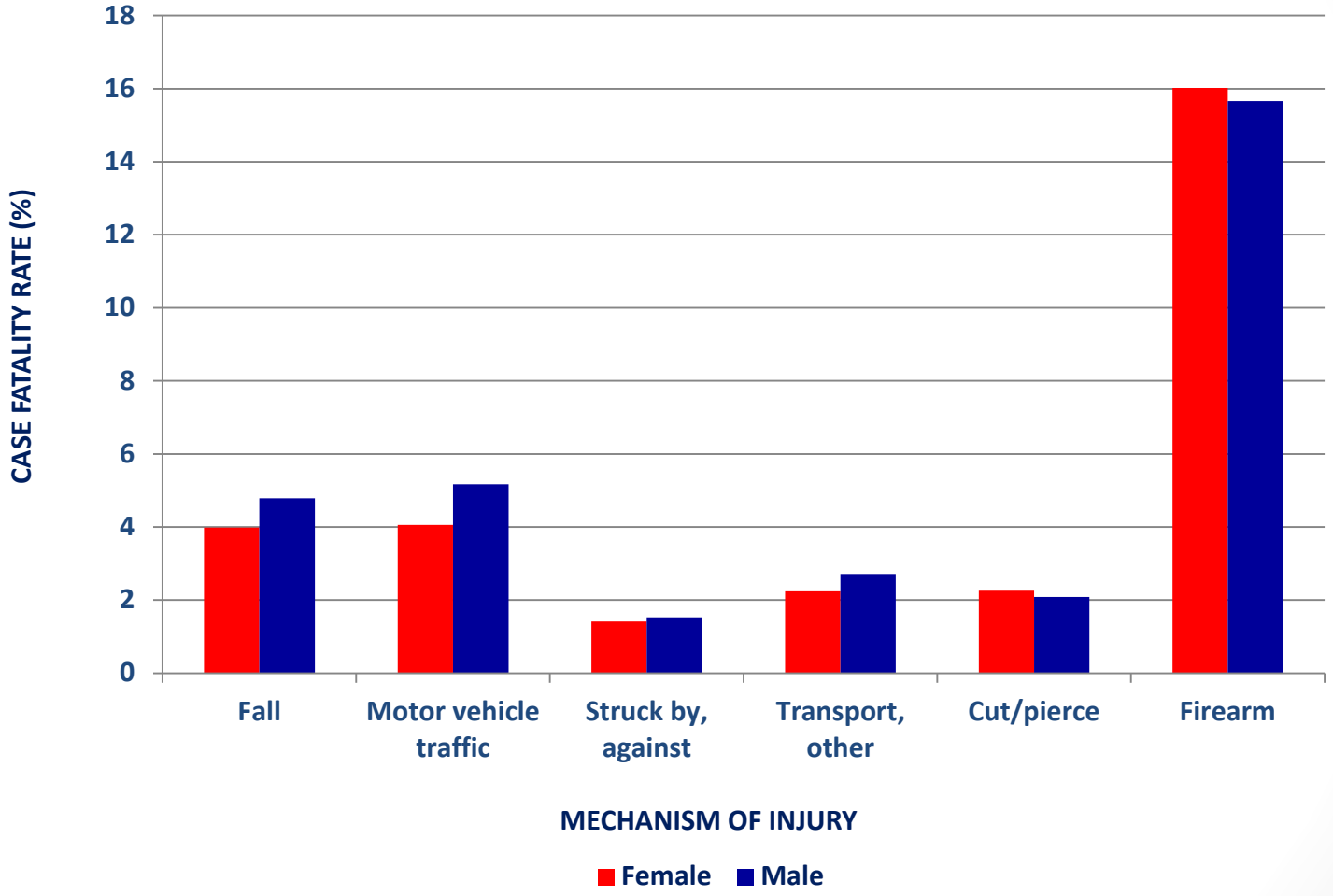


Table 19

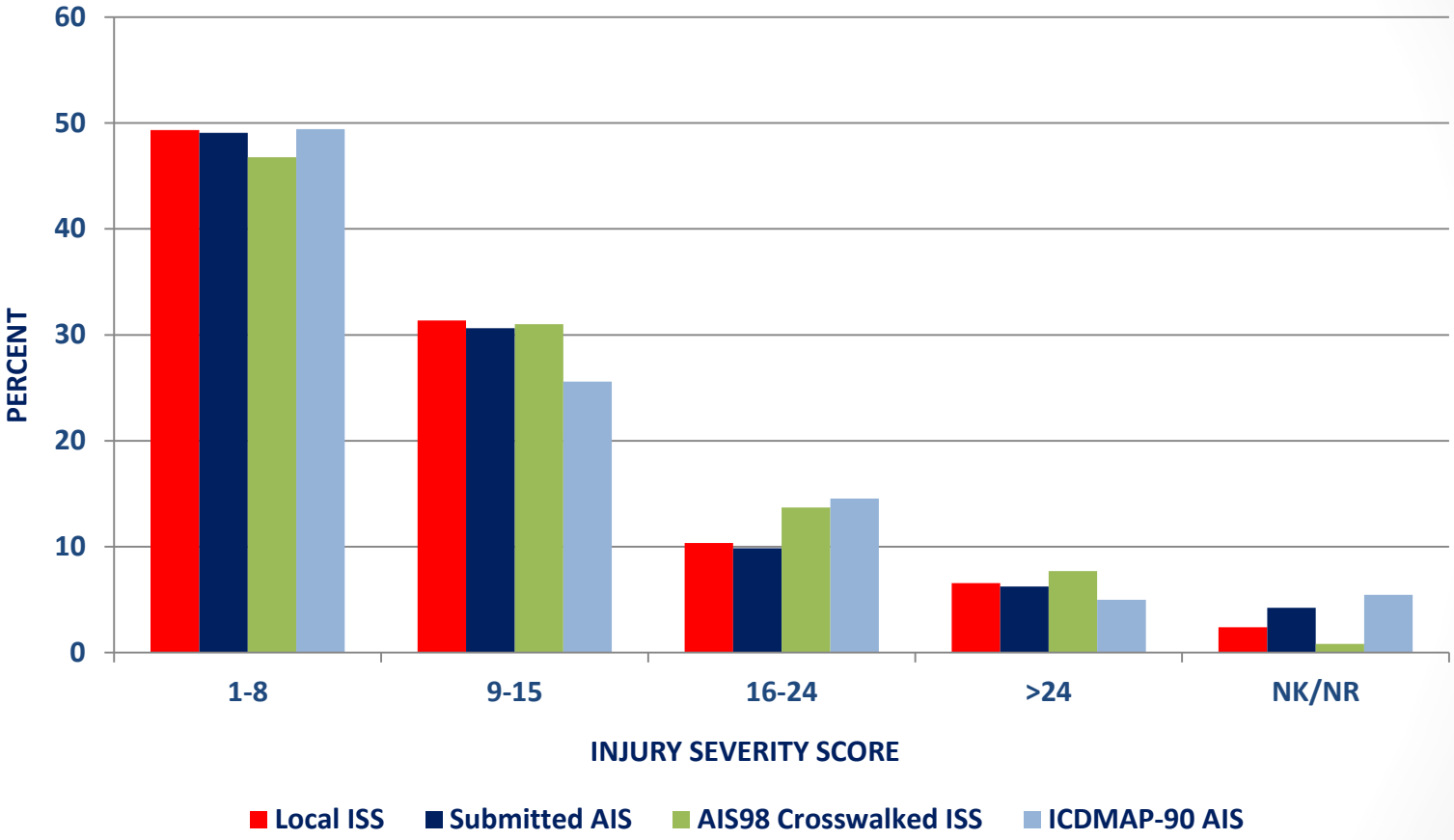
Incidents by Comparative Injury Severity Scores (ISS)

ISS	LOCAL ISS	SUBMITTED AIS	AIS98 CROSSWALKED AIS	ICDMAP-90 AIS
1-8	49.32	49.05	46.76	49.41
9-15	31.37	30.62	31.00	25.59
16-24	10.34	9.86	13.71	14.56
>24	6.58	6.24	7.69	4.99
NK/NR	2.39	4.23	0.84	5.45

Injury Severity Score definitions can be found in Appendix B.

Figure 19

Incidents by Comparative Injury Severity Scores (ISS)



Injury Severity Score definitions can be found in Appendix B.

Table 20

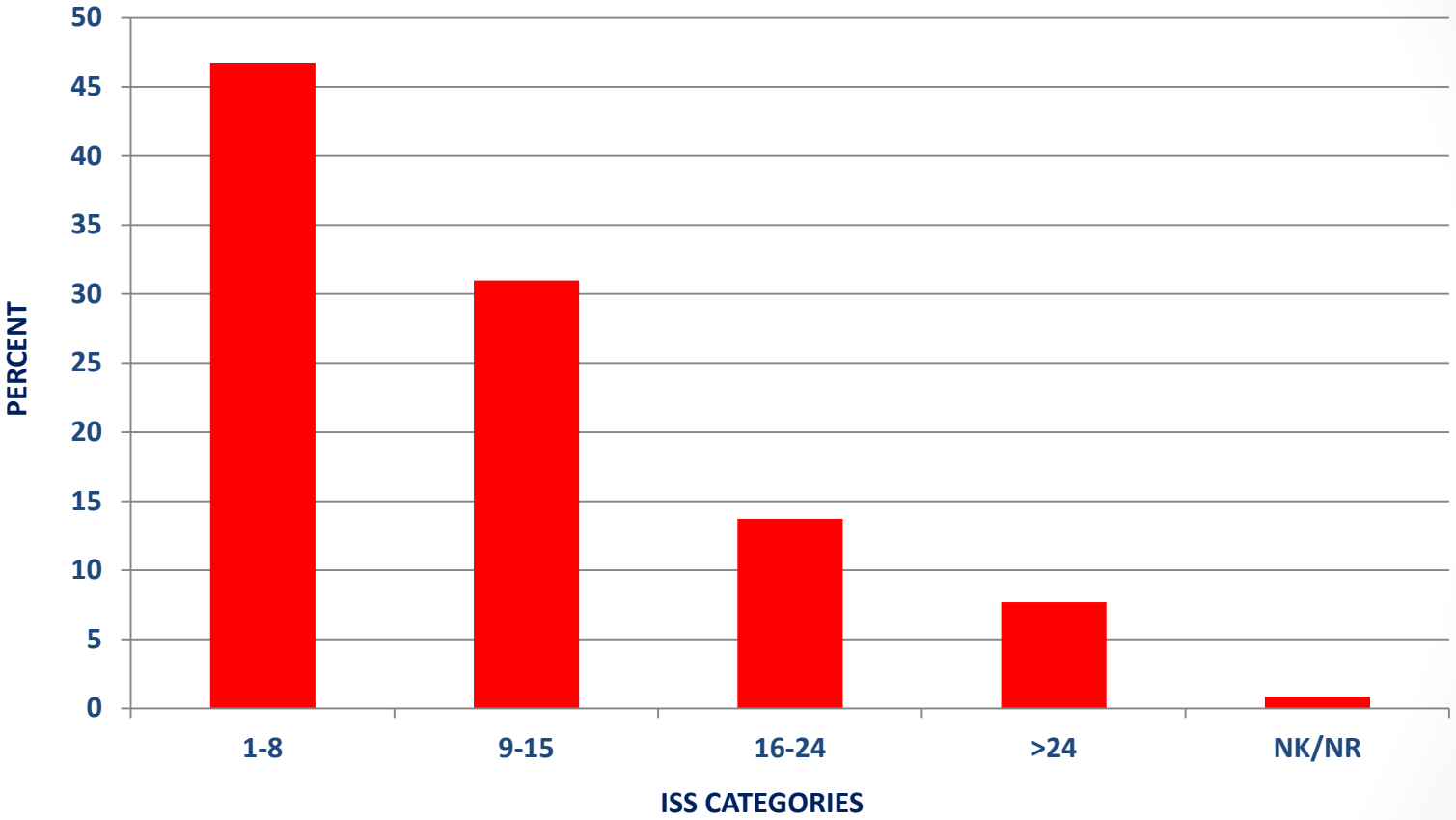
Incidents and Case Fatality Rate by Injury Severity Score (ISS)

ISS	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
1-8	380,943	46.76	5,070	1.33
9-15	252,542	31.00	7,096	2.81
16-24	111,671	13.71	6,061	5.43
>24	62,680	7.69	17,664	28.18
NK/NR	6,827	0.84	516	7.56
Total	814,663	100	36,407	4.47

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 20A

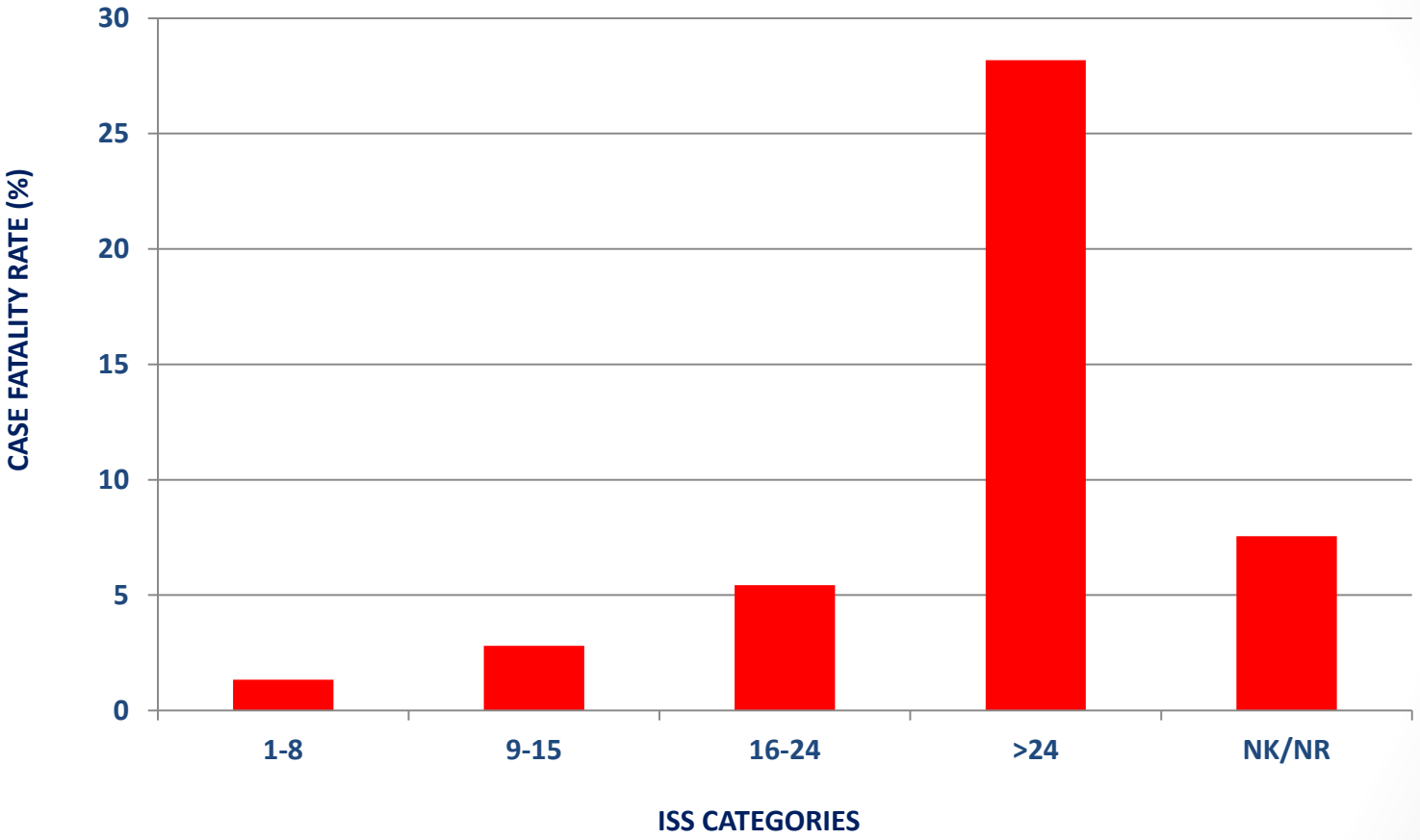
Incidents by Injury Severity Score (ISS)



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 20B

Case Fatality Rate by Injury Severity Score (ISS)



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 21

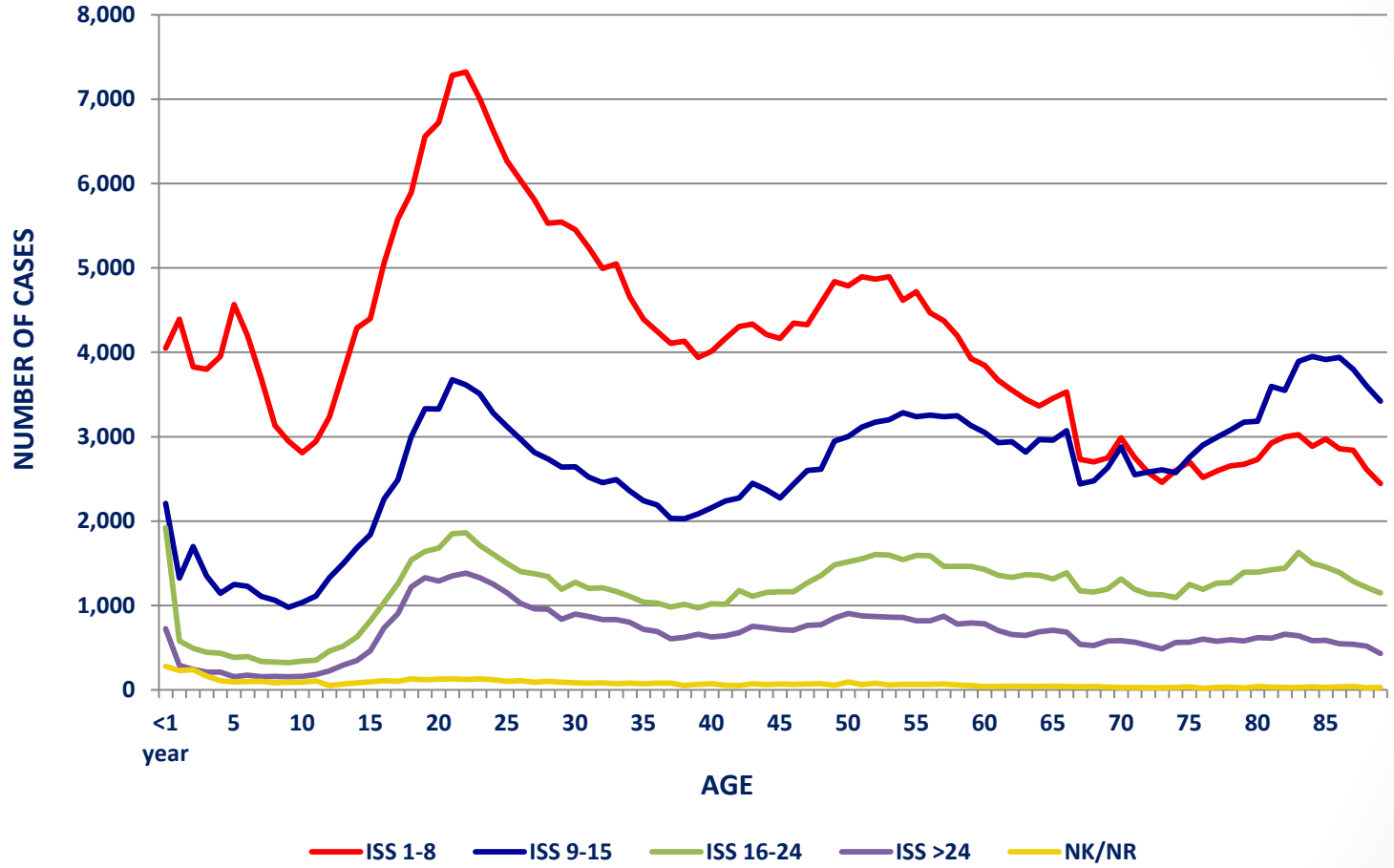
Injury Severity Score (ISS) by Age

AGE	ISS 1-8 NUMBER	ISS 9-15 NUMBER	ISS 16-24 NUMBER	ISS >24 NUMBER	ISS NK/NR NUMBER
<1 year	4,050	2,211	1,925	725	280
1-4	15,971	5,521	1,956	959	744
5-9	18,529	5,629	1,771	801	472
10-14	17,033	6,662	2,300	1,207	402
15-19	27,491	12,928	6,291	4,654	555
20-24	34,962	17,407	8,711	6,609	632
25-34	54,580	26,752	12,779	9,165	904
35-44	41,842	22,069	10,514	6,734	672
45-54	46,314	28,658	14,246	8,180	699
55-64	39,552	30,817	14,424	7,556	523
65-74	28,541	26,772	12,097	5,760	334
75-84	27,704	33,073	13,759	6,033	320
>84	24,349	34,030	10,891	4,271	284
NK/NR	25	13	7	26	6
Total	380,943	252,542	111,671	62,680	6,827

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 21

Injury Severity Score (ISS) by Age



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 22

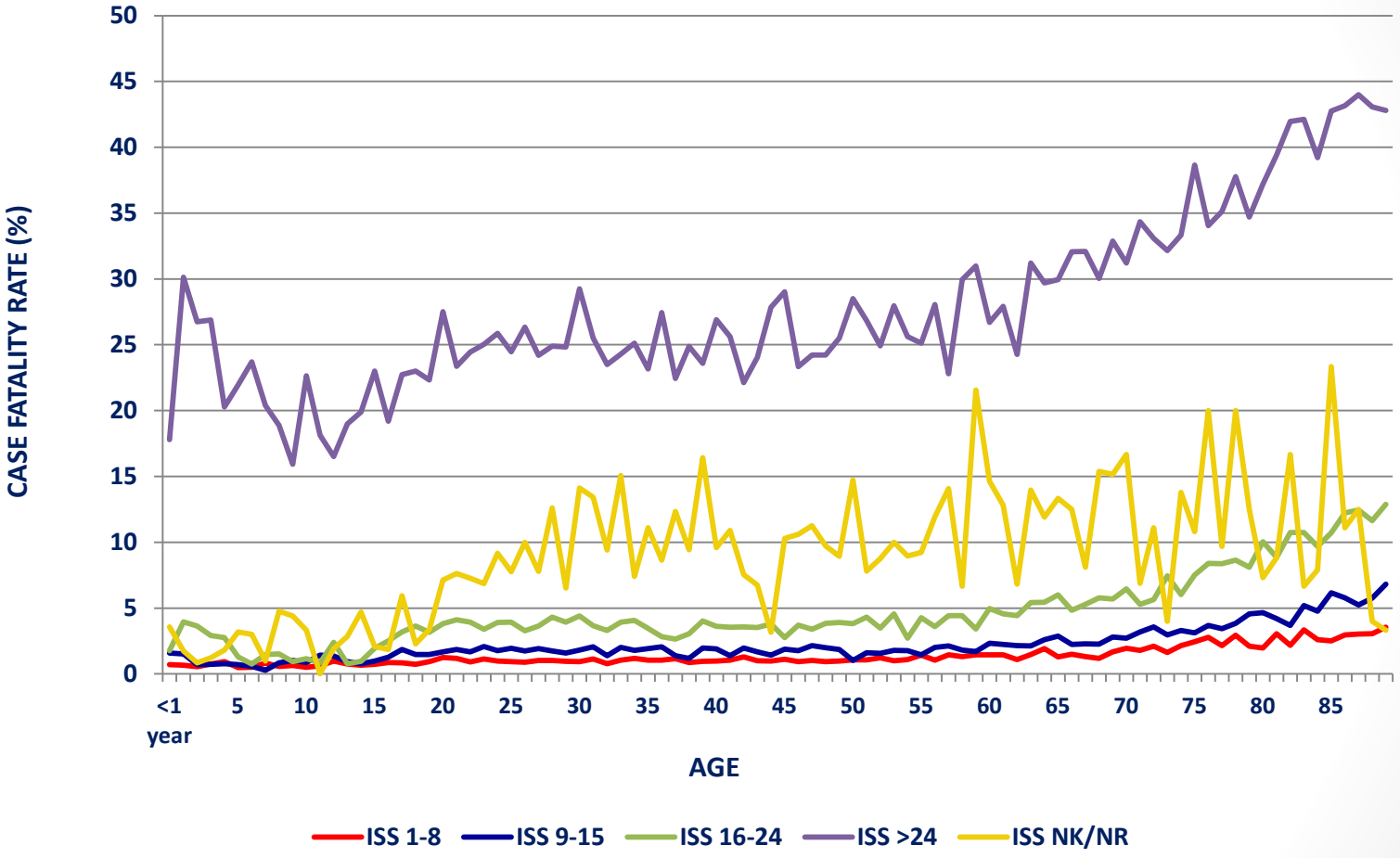
Case Fatality Rate by Injury Severity Score (ISS) and Age

AGE	ISS 1-8 CASE FATALITY RATE	ISS 9-15 CASE FATALITY RATE	ISS 16-24 CASE FATALITY RATE	ISS >24 CASE FATALITY RATE	ISS NK/NR CASE FATALITY RATE
<1 year	0.72	1.58	1.77	17.79	3.57
1-4	0.73	0.92	3.37	26.38	1.34
5-9	0.59	0.68	1.19	20.22	3.18
10-14	0.70	1.05	1.22	19.14	2.49
15-19	0.83	1.44	3.02	22.15	3.06
20-24	1.09	1.82	3.83	25.21	7.59
25-34	0.99	1.81	3.84	25.25	10.29
35-44	1.04	1.69	3.41	24.83	9.67
45-54	1.04	1.73	3.68	26.06	10.30
55-64	1.40	2.05	4.47	27.57	12.24
65-74	1.64	2.81	5.83	32.07	11.98
75-84	2.56	4.17	9.19	38.11	11.56
>84	3.65	6.69	12.80	42.66	10.21
NK/NR	36.00	61.54	85.71	88.46	100

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 22

Case Fatality Rate by Injury Severity Score (ISS) and Age



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 23

Incidents by Work-Related Injuries

WORK-RELATED INJURY	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
No	717,699	88.10	32,852	4.58
Yes	33,357	4.09	856	2.57
Not applicable	35,714	4.38	1,422	3.98
NK/NR	27,893	3.42	1,277	4.58
Total	814,663	100	36,407	4.47

Figure 23A

Incidents by Work-Related Injuries

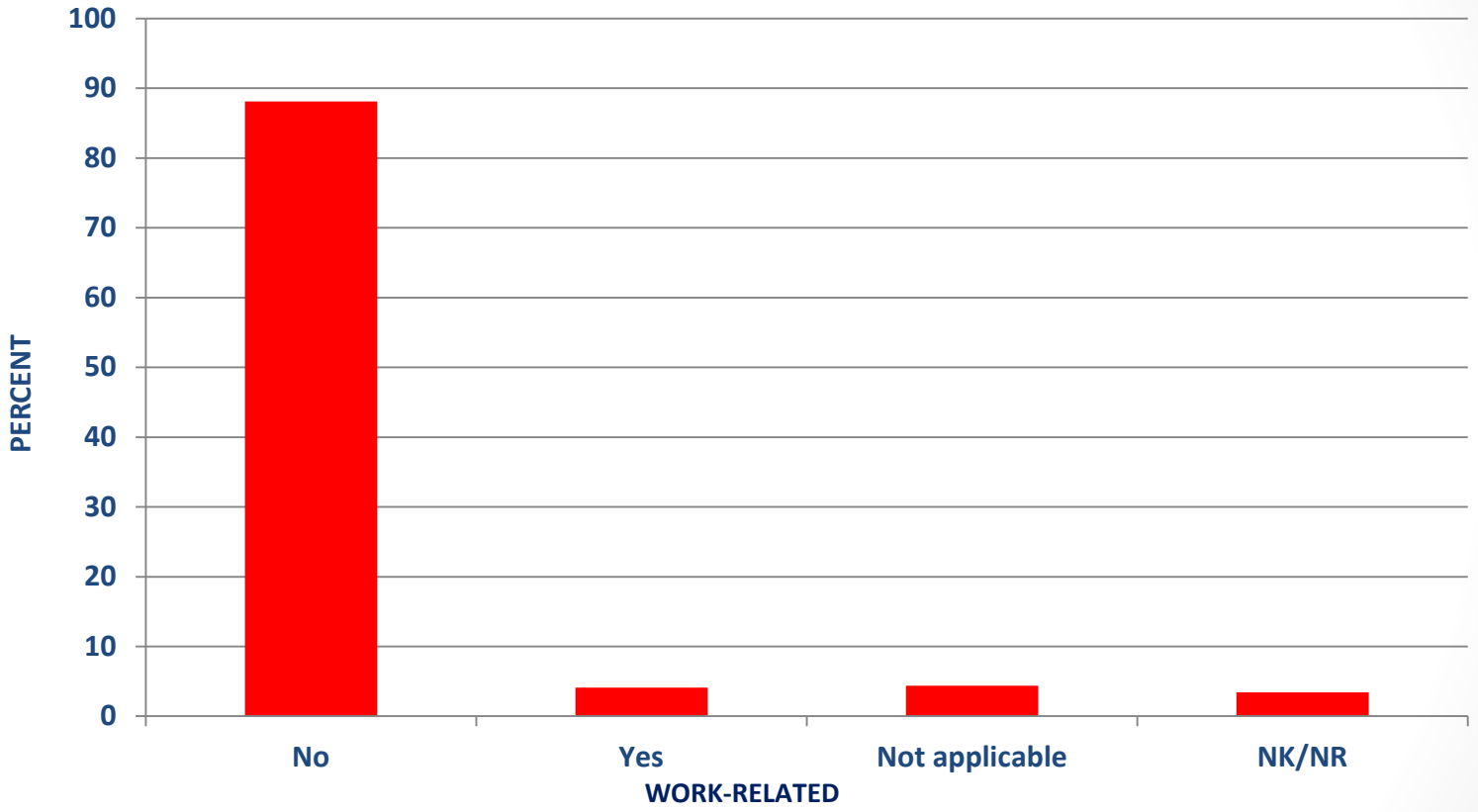


Figure 23B

Case Fatality Rate by Work-Related Injuries

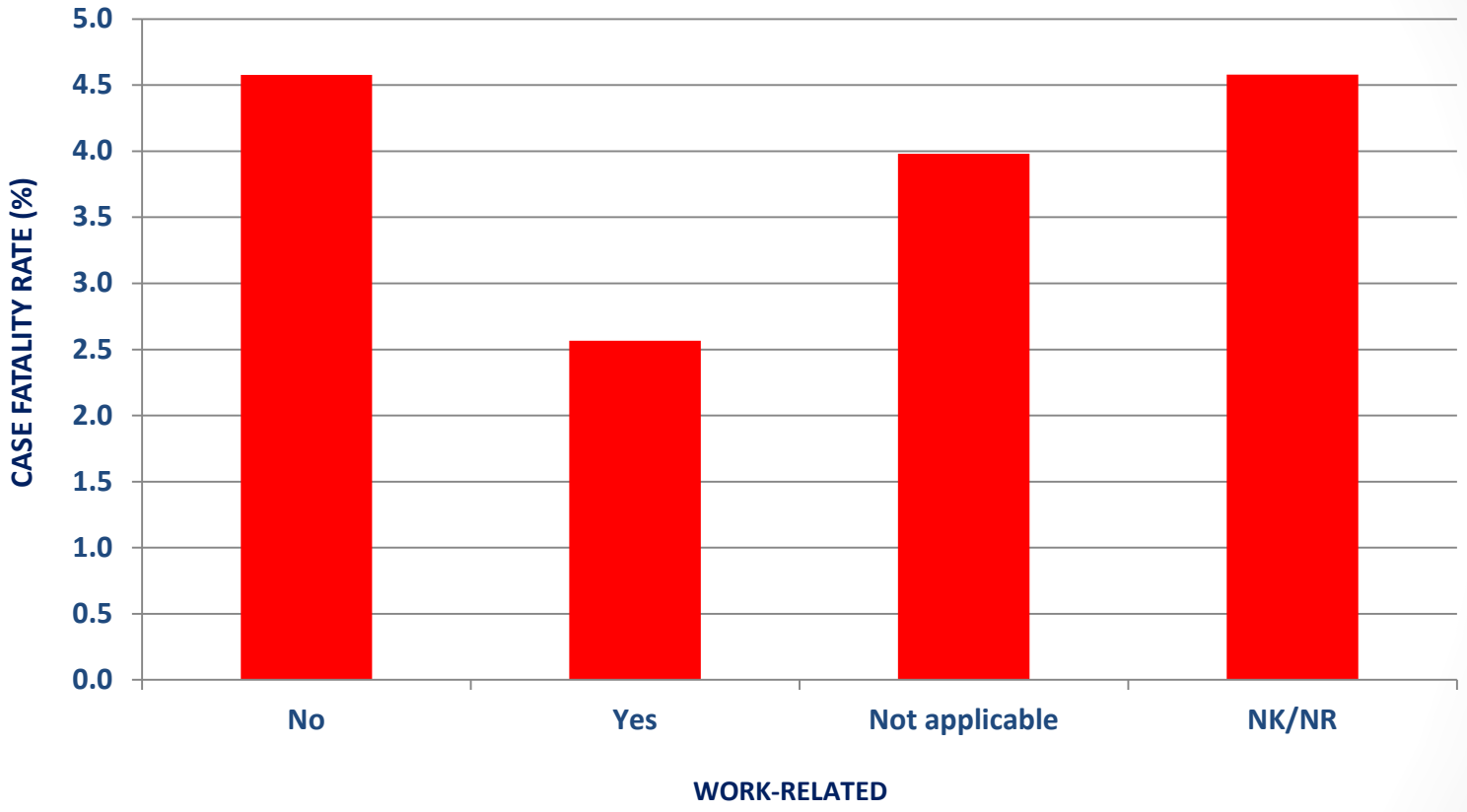


Table 24

Incidents and Case Fatality Rate by Intent

INTENT	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
Unintentional	708,599	86.98	28,645	4.04
Assault	85,014	10.44	4,476	5.27
Self-inflicted	12,745	1.56	2,409	18.90
Undetermined	3,629	0.45	388	10.69
Other	1,847	0.23	193	10.45
NK/NR	2,829	0.35	296	10.46
Total	814,663	100	36,407	4.47

Figure 24A

Incidents by Intent

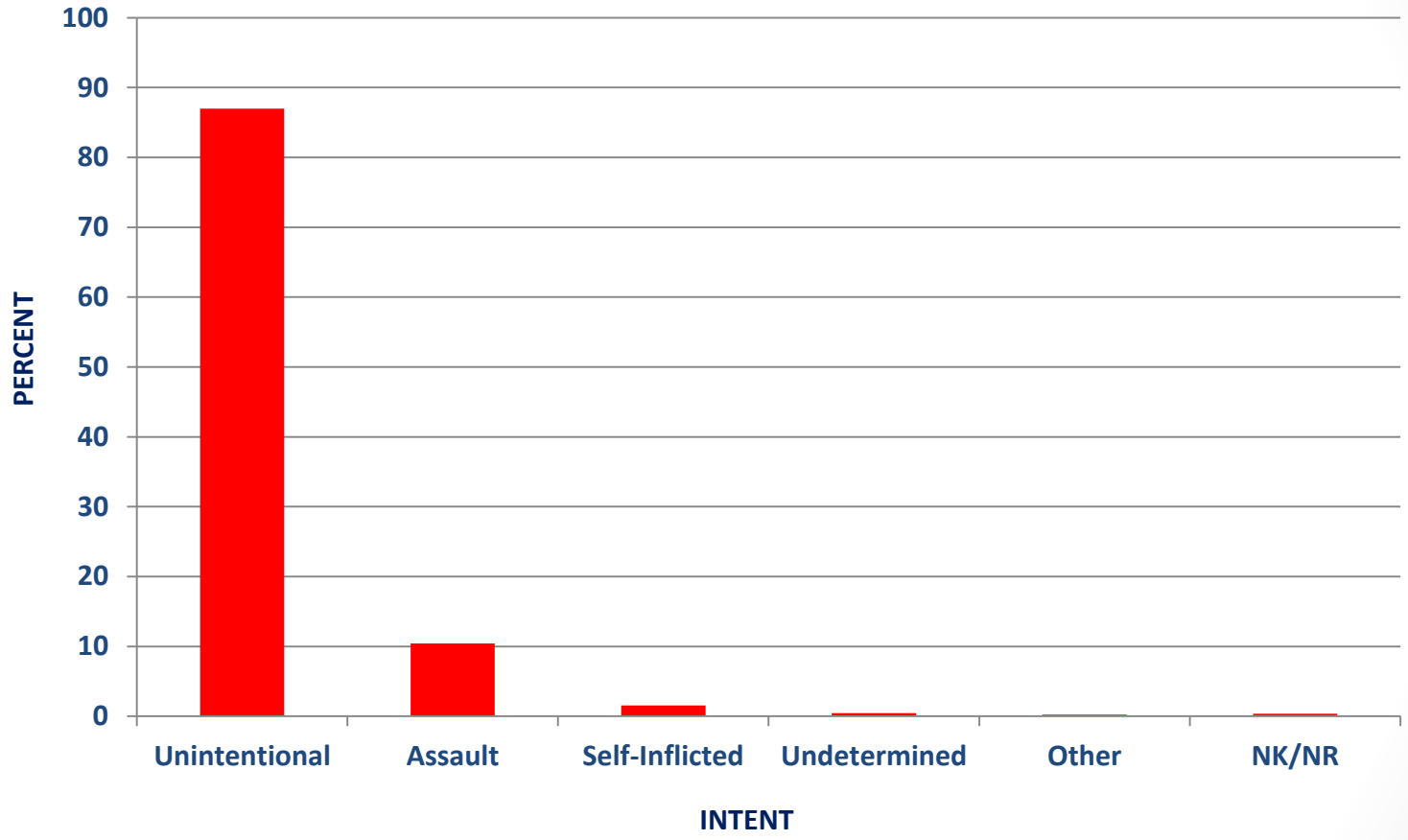


Figure 24B

Case Fatality Rate by Intent

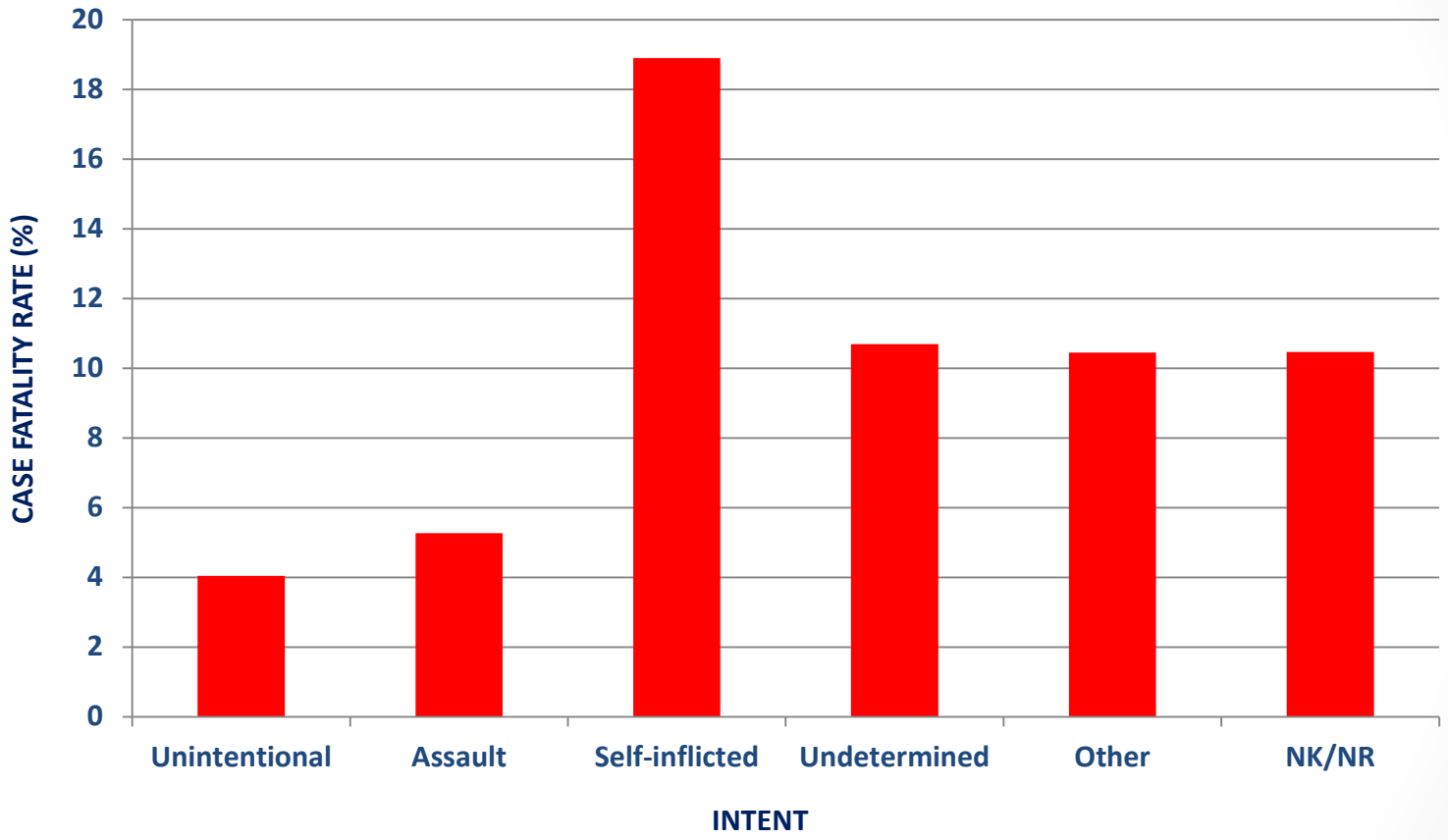


Table 25

Incidents and Case Fatality Rate by Location E-Code

LOCATION OF INJURY	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
Home	291,451	35.78	14,407	4.94
Street	271,170	33.29	13,032	4.81
Unspecified	57,375	7.04	1,864	3.25
Recreation	45,059	5.53	626	1.39
Public building	41,876	5.14	1,459	3.48
Other	35,244	4.33	1,449	4.11
Residential institution	30,698	3.77	2,253	7.34
Industry	19,336	2.37	442	2.29
Farm	5,322	0.65	159	2.99
Mine	331	0.04	6	1.81
Not applicable	555	0.07	26	4.68
NK/NR	16,246	1.99	684	4.21
Total	814,663	100	36,407	4.47

Figure 25A

Incidents by Location E-Code

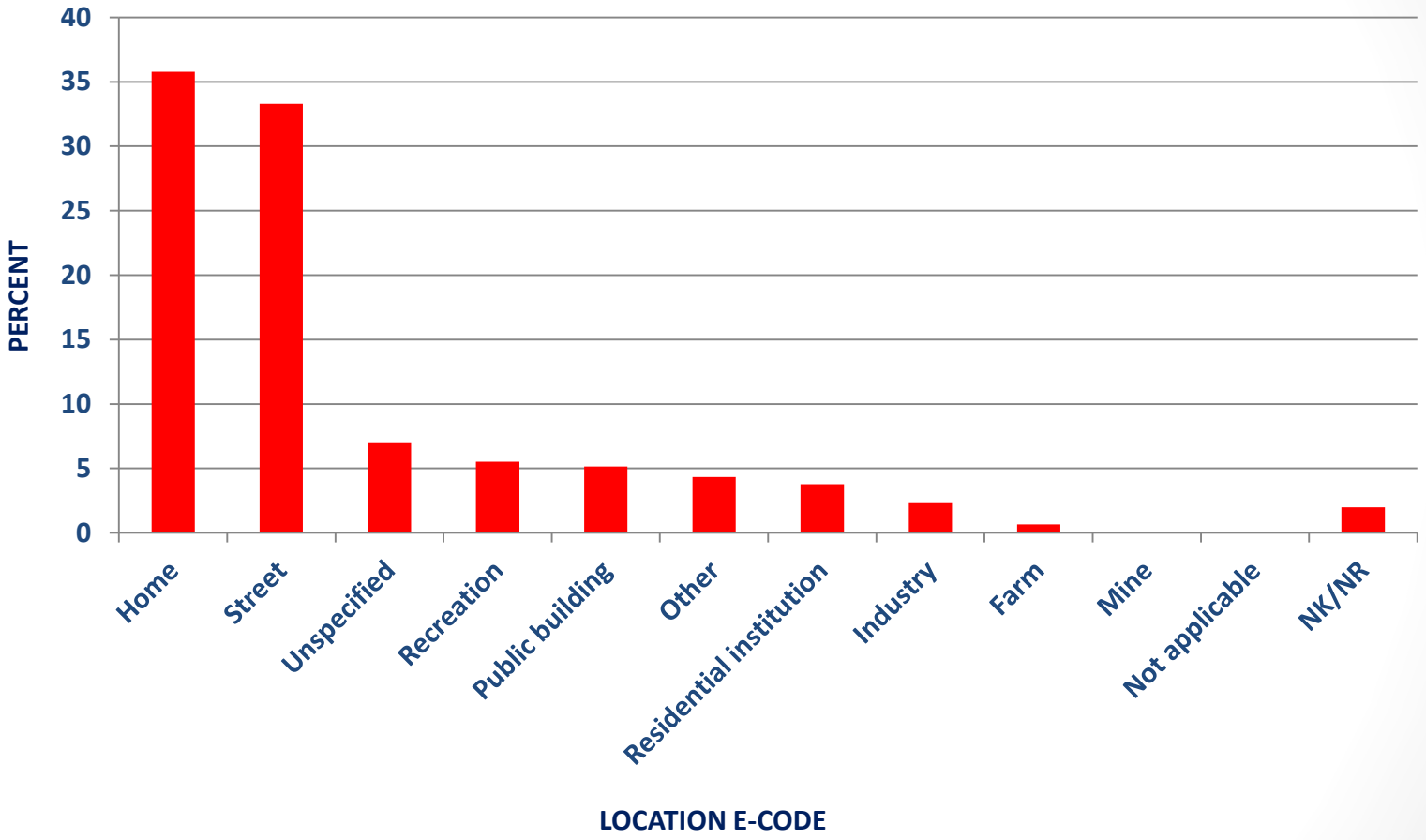


Figure 25B

Case Fatality Rate by Location E-Code

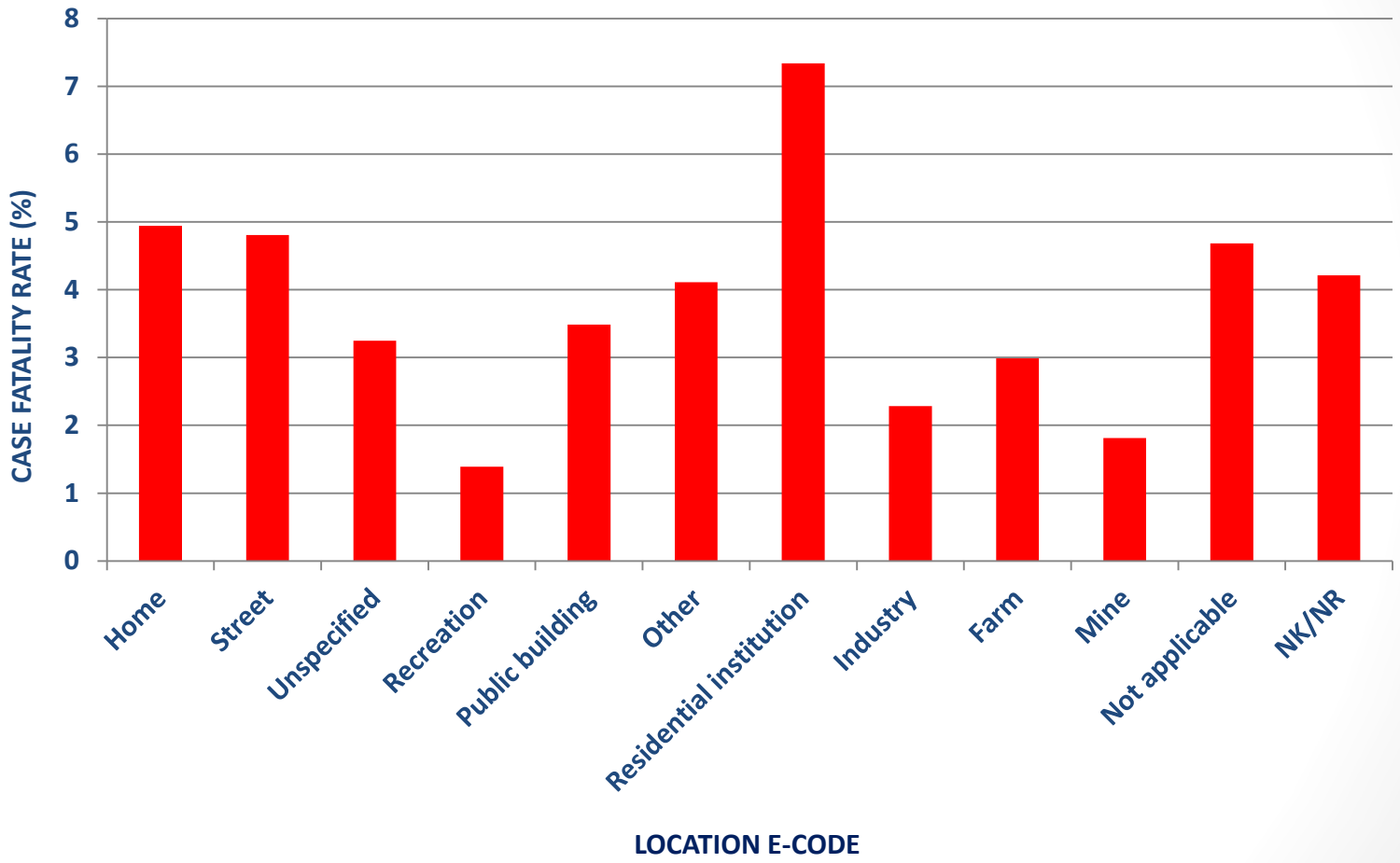


Table 26

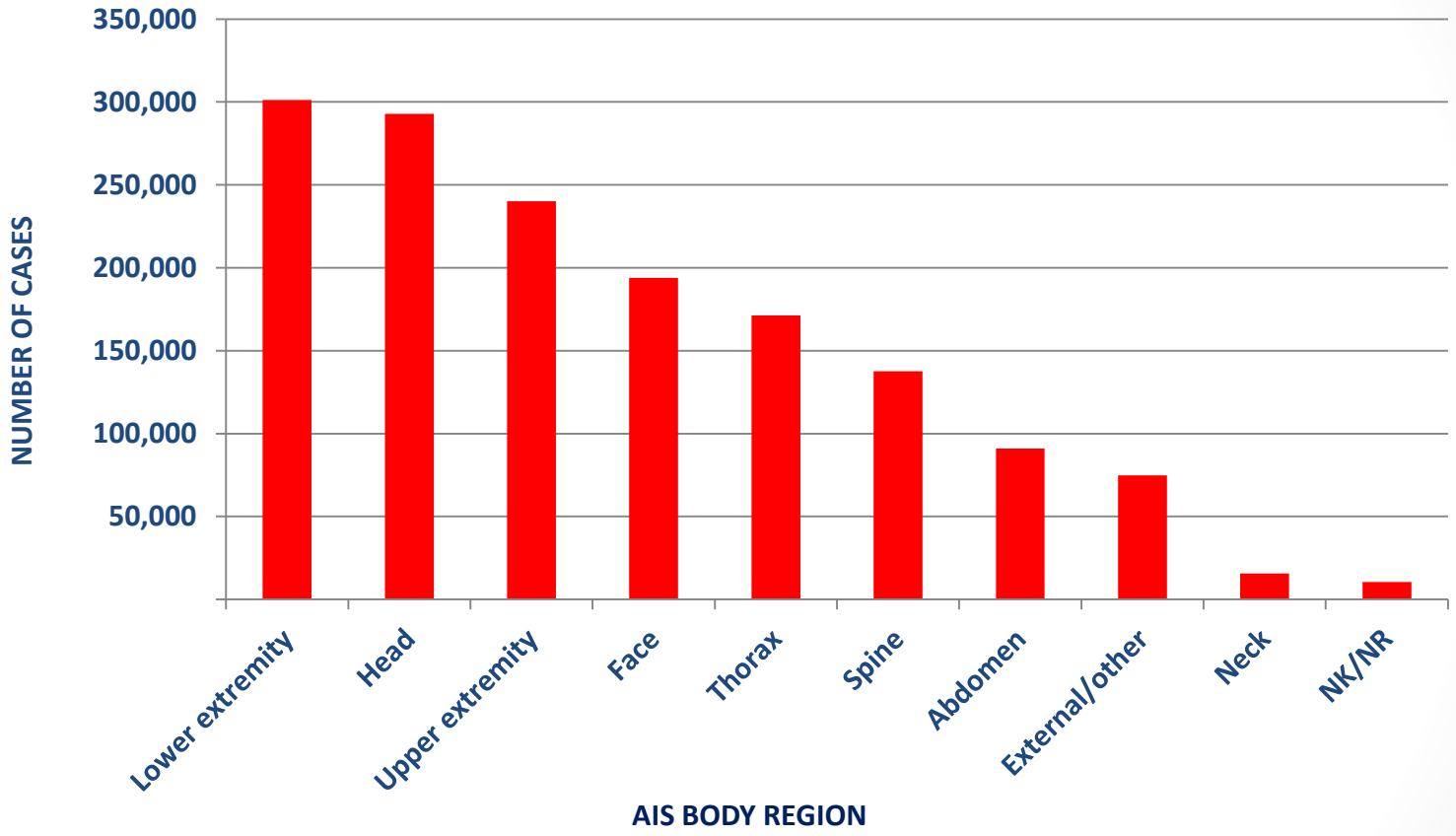
Incidents by AIS Body Region

AIS BODY REGION	NUMBER	PERCENT
Lower extremity	301,317	36.99
Head	292,864	35.95
Upper extremity	240,172	29.48
Face	193,897	23.80
Thorax	171,215	21.02
Spine	137,632	16.89
Abdomen	91,064	11.18
External/other	74,842	9.19
Neck	15,650	1.92
NK/NR	10,457	1.28

A patient can have injuries in multiple body regions.

Figure 26

Incidents by AIS Body Region



An incident may involve multiple organ systems, and a patient will then be counted for each of the organ systems in which there is an injury.

Table 27

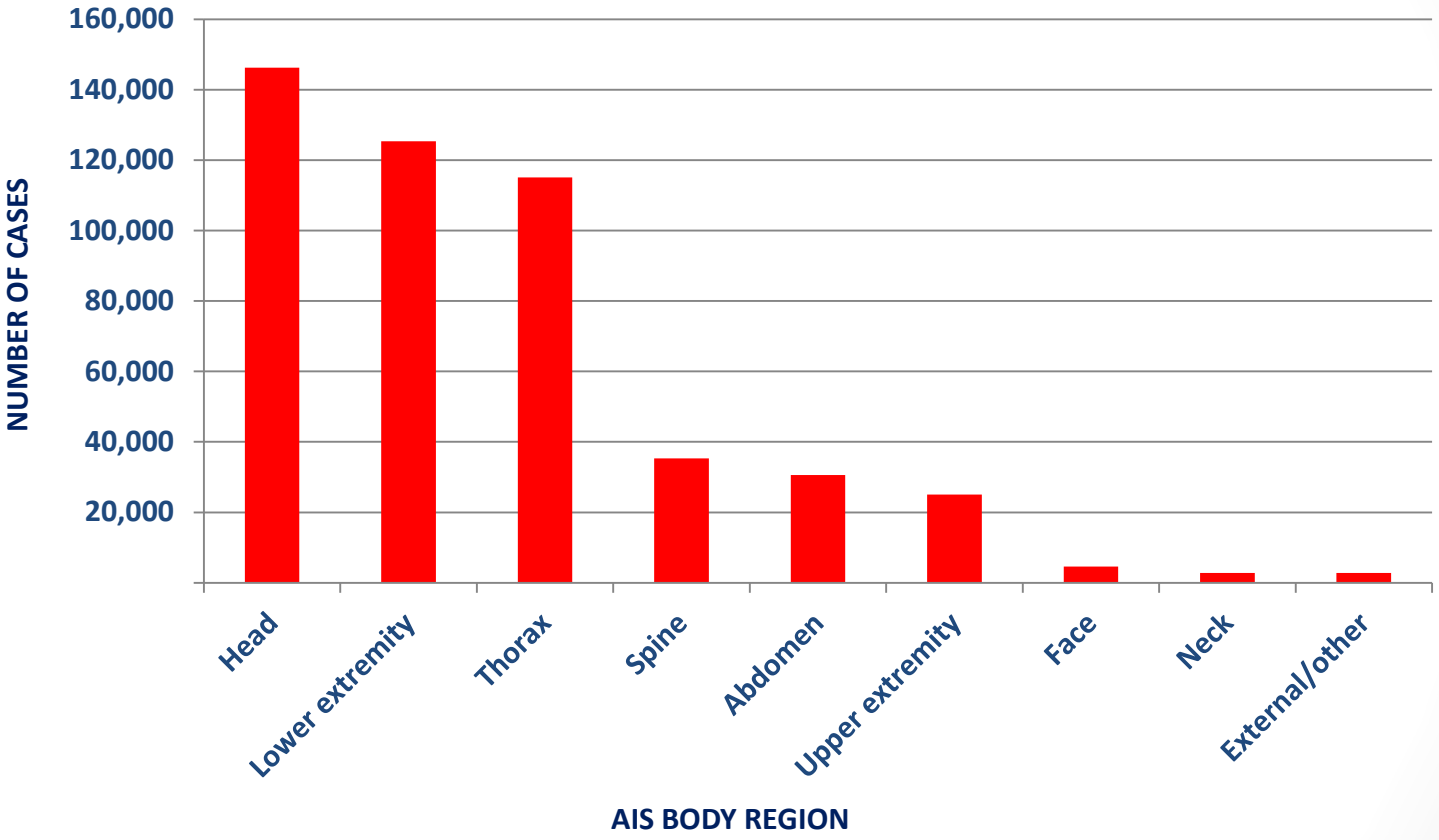
Incidents and Case Fatality Rate with AIS ≥ 3 by AIS Body Region

AIS BODY REGION	NUMBER	PERCENT	CASE FATALITY RATE
Head	146,207	17.95	12.89
Lower extremity	125,375	15.39	5.00
Thorax	115,039	14.12	9.90
Spine	35,289	4.33	8.07
Abdomen	30,543	3.75	12.82
Upper extremity	25,090	3.08	3.77
Face	4,623	0.57	12.46
Neck	2,824	0.35	20.01
External/other	2,817	0.35	14.87

An incident may involve multiple organ systems, and a patient will then be counted for each of the organ systems in which there is an injury.

Figure 27A

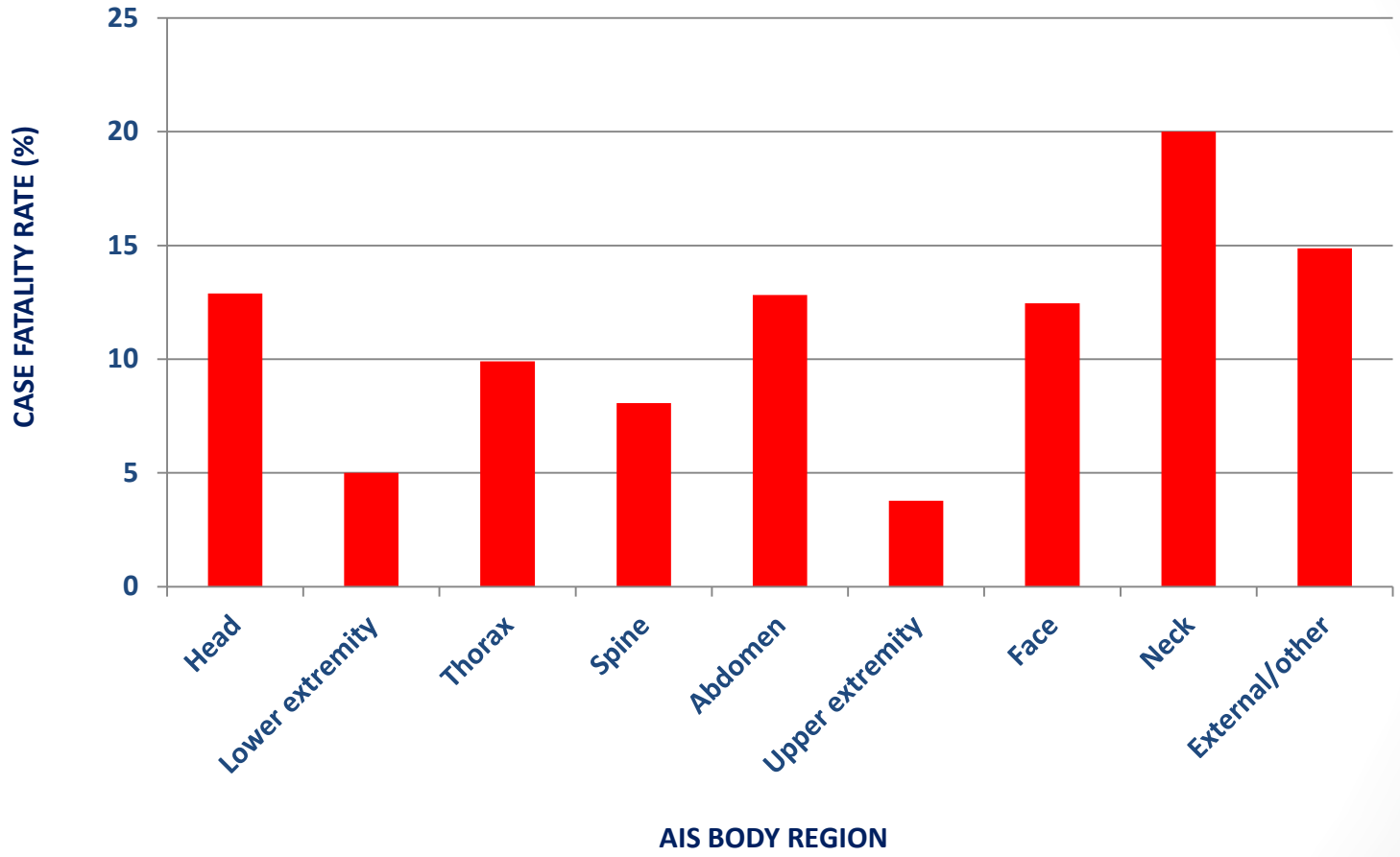
Incidents with AIS ≥ 3 by AIS Body Region



An incident may involve multiple organ systems, and a patient will then be counted for each of the organ systems in which there is an injury.

Figure 27B

Case Fatality Rate for AIS ≥ 3 AIS Body Region



An incident may involve multiple organ systems, and a patient will then be counted for each of the organ systems in which there is an injury.

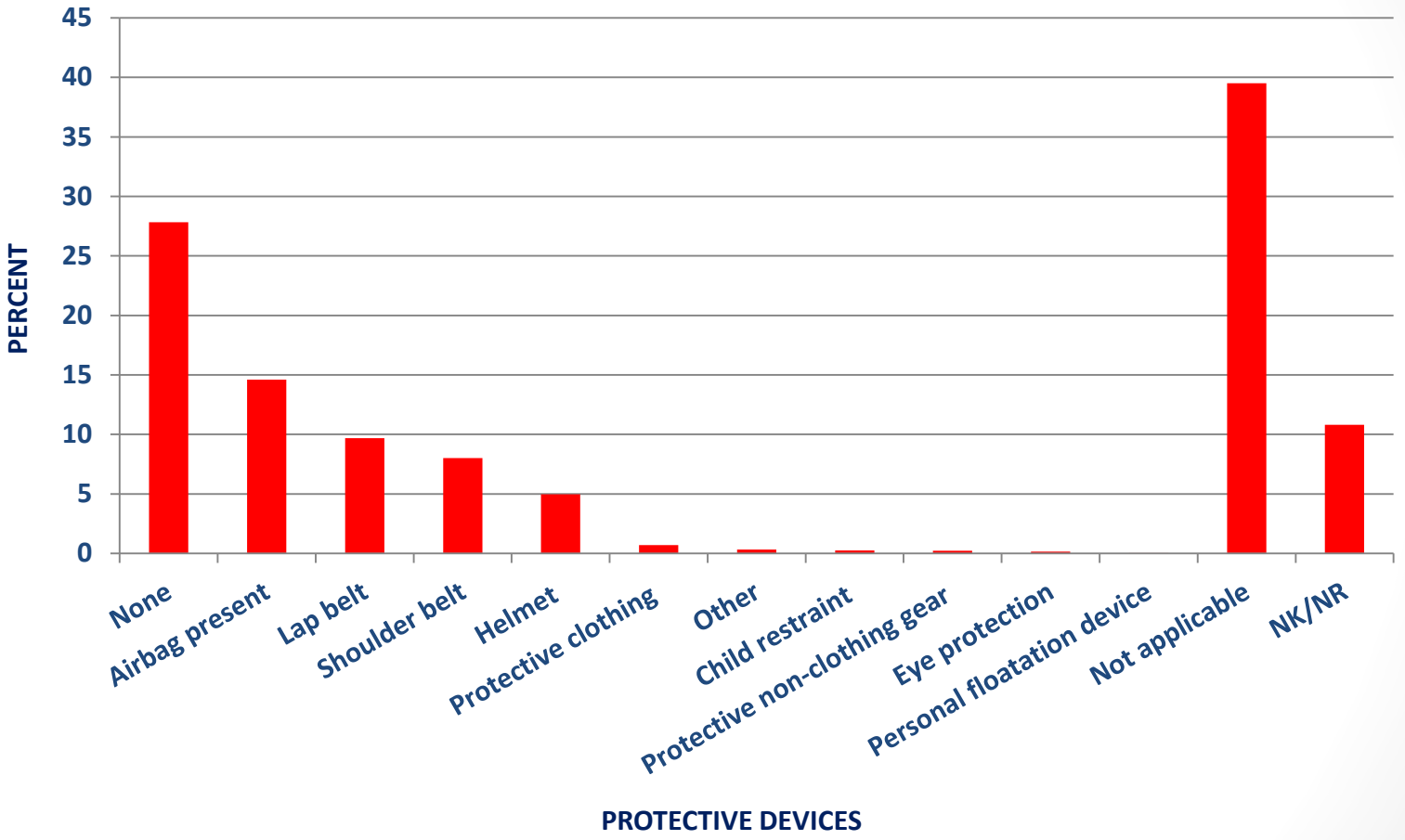
Table 28

Incidents by Protective Devices

PROTECTIVE DEVICES	NUMBER	PERCENT
None	226,598	27.81
Airbag Present	118,875	14.59
Lap Belt	78,985	9.70
Shoulder Belt	65,252	8.01
Helmet (e.g. bicycle, skiing, motorcycle)	40,583	4.98
Protective clothing (e.g., padded leather)	5,698	0.70
Other	2,746	0.34
Child restraint (booster seat or child car seat)	1,995	0.24
Protective non-clothing gear (e.g., shin guard)	1,802	0.22
Eye protection	1,298	0.16
Personal floatation device	312	0.04
Not applicable	321,734	39.49
NK/NR	88,142	10.82

Figure 28

Incidents by Protective Devices



OUTCOMES INFORMATION

Table 29

Median Total Prehospital Time (in Minutes) by Mechanism of Injury

MECHANISM	NUMBER	MEDIAN
Fall	227,005	58
Motor vehicle traffic	179,544	53
Struck by, against	34,636	57
Transport, other	25,922	75
Firearm	24,793	37
Cut/pierce	23,002	42
Pedal cyclist, other	9,564	52
Other specified and classifiable	7,489	74
Unspecified	5,248	50
Machinery	4,850	72
Fire/flame	4,808	86
Hot object/substance	3,655	102
Natural/environmental, bites and stings	2,483	73
Other specified, not elsewhere classifiable	2,348	56
NK/NR	2,077	419
Pedestrian, other	2,016	48
Natural/environmental, other	1,386	86
Overexertion	1,358	61
Suffocation	678	49
Poisoning	320	64
Drowning/submersion	294	72
Adverse effects, medical care	150	68
Adverse effects, drugs	137	64

Figure 29

Median Total Prehospital Time (in Minutes) by Selected Mechanism of Injury

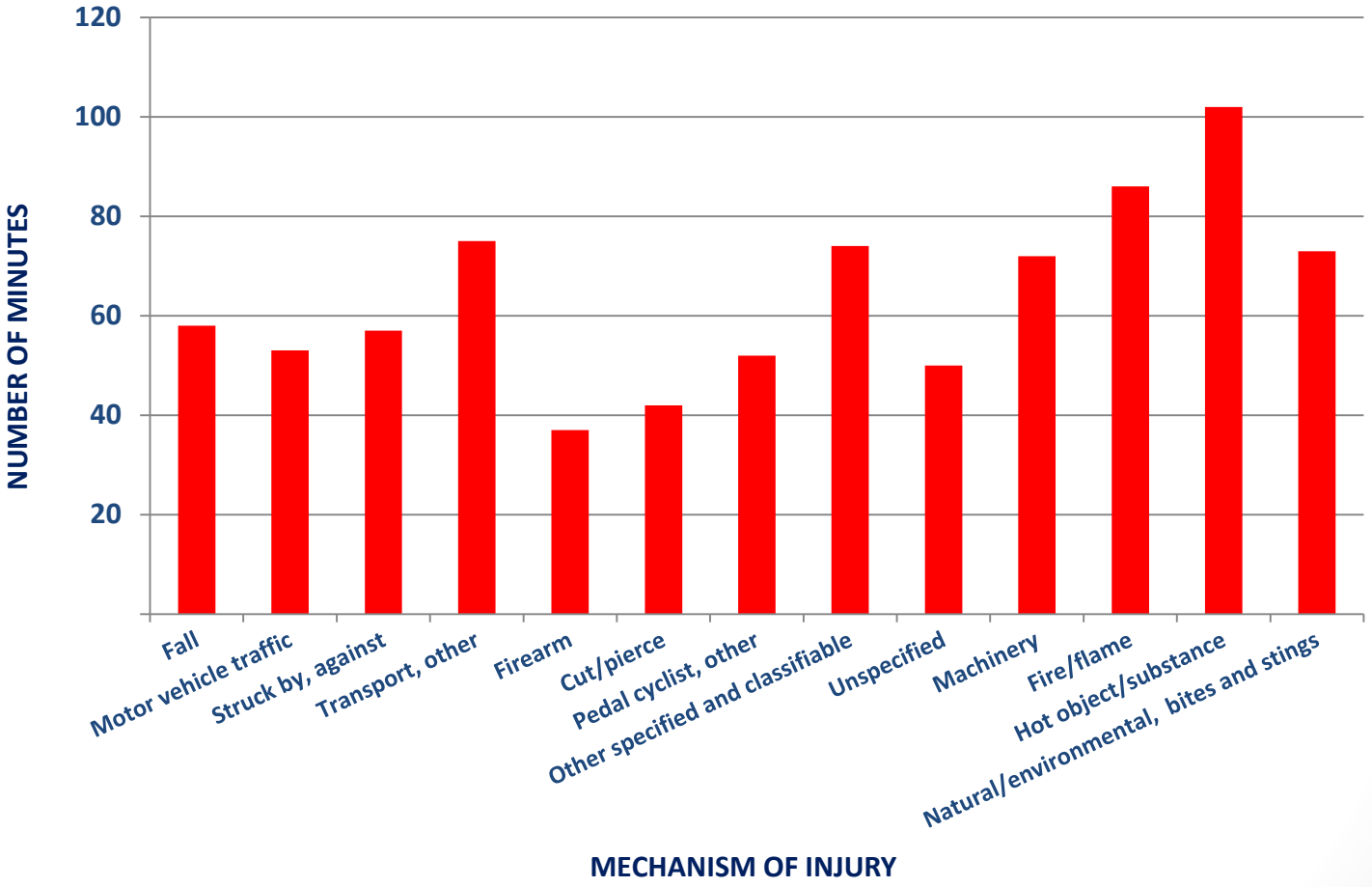


Table 30

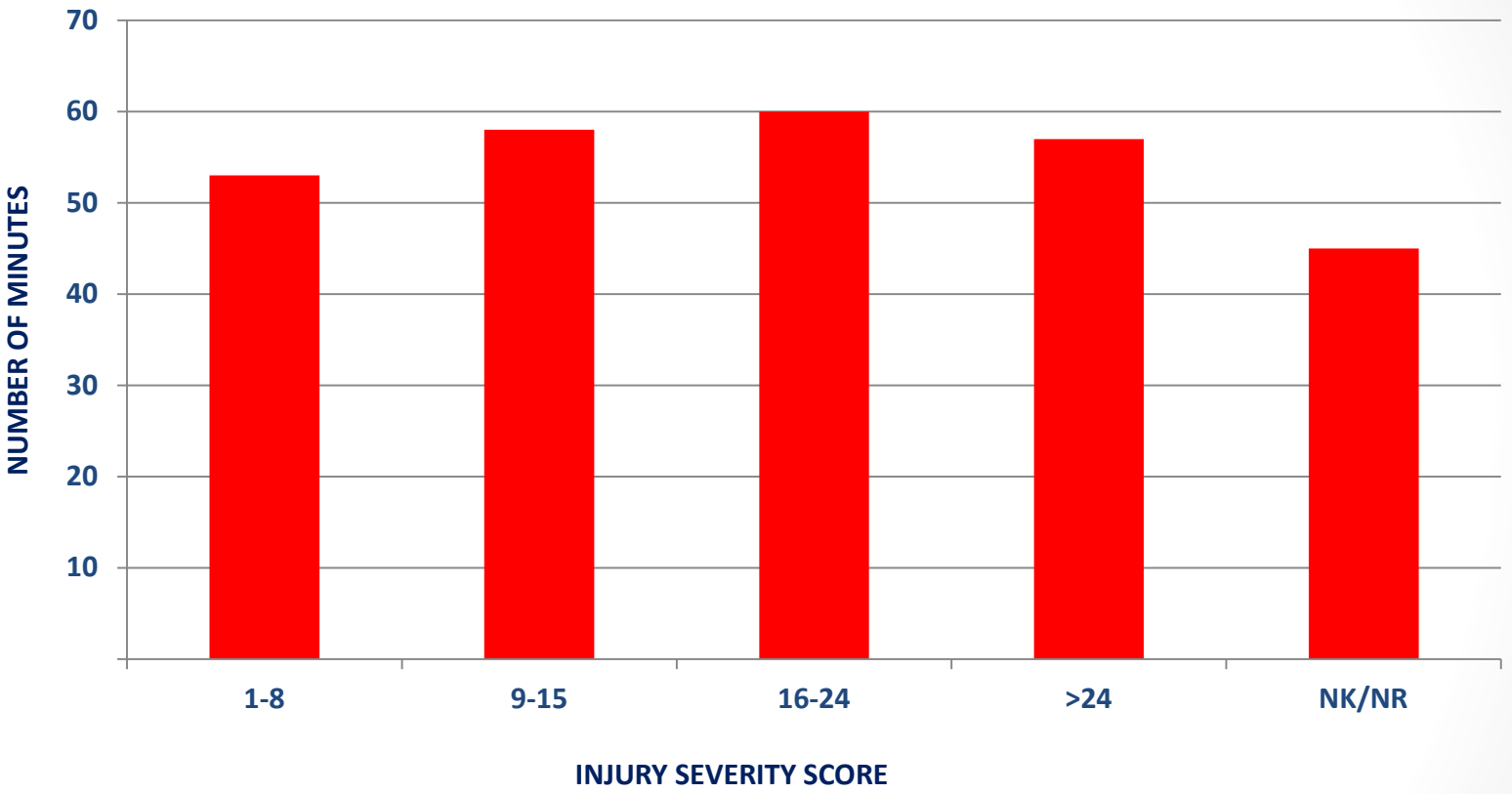
Median Total Prehospital Time (in Minutes) by Injury Severity Score (ISS)

ISS	NUMBER	MEDIAN
1-8	238,872	53
9-15	184,154	58
16-24	84,937	60
>24	51,349	57
NK/NR	4,451	45

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 30

Median Total Prehospital Time (in Minutes) by Injury Severity Score (ISS)



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 31

Median Length of Stay (LOS) in Days by Mechanism of Injury

MECHANISM	NUMBER	MEDIAN
Fall	343,069	4
Motor vehicle traffic	220,599	3
Struck by, against	57,850	2
Transport, other	37,890	3
Cut/pierce	35,183	2
Firearm	34,271	3
Pedal cyclist, other	14,724	3
Other specified and classifiable	13,400	3
Hot object/substance	8,500	2
Fire/flame	8,418	2
Machinery	8,225	2
Unspecified	8,171	3
Natural/environmental, bites and stings	5,306	2
Other specified, not elsewhere classifiable	4,020	3
NK/NR	2,804	4
Overexertion	2,775	3
Pedestrian, other	2,620	4
Natural/environmental, other	2,329	3
Suffocation	848	3
Poisoning	474	2
Drowning/submersion	371	3

Figure 31

Median Length of Stay (LOS) in Days by Selected Mechanism of Injury

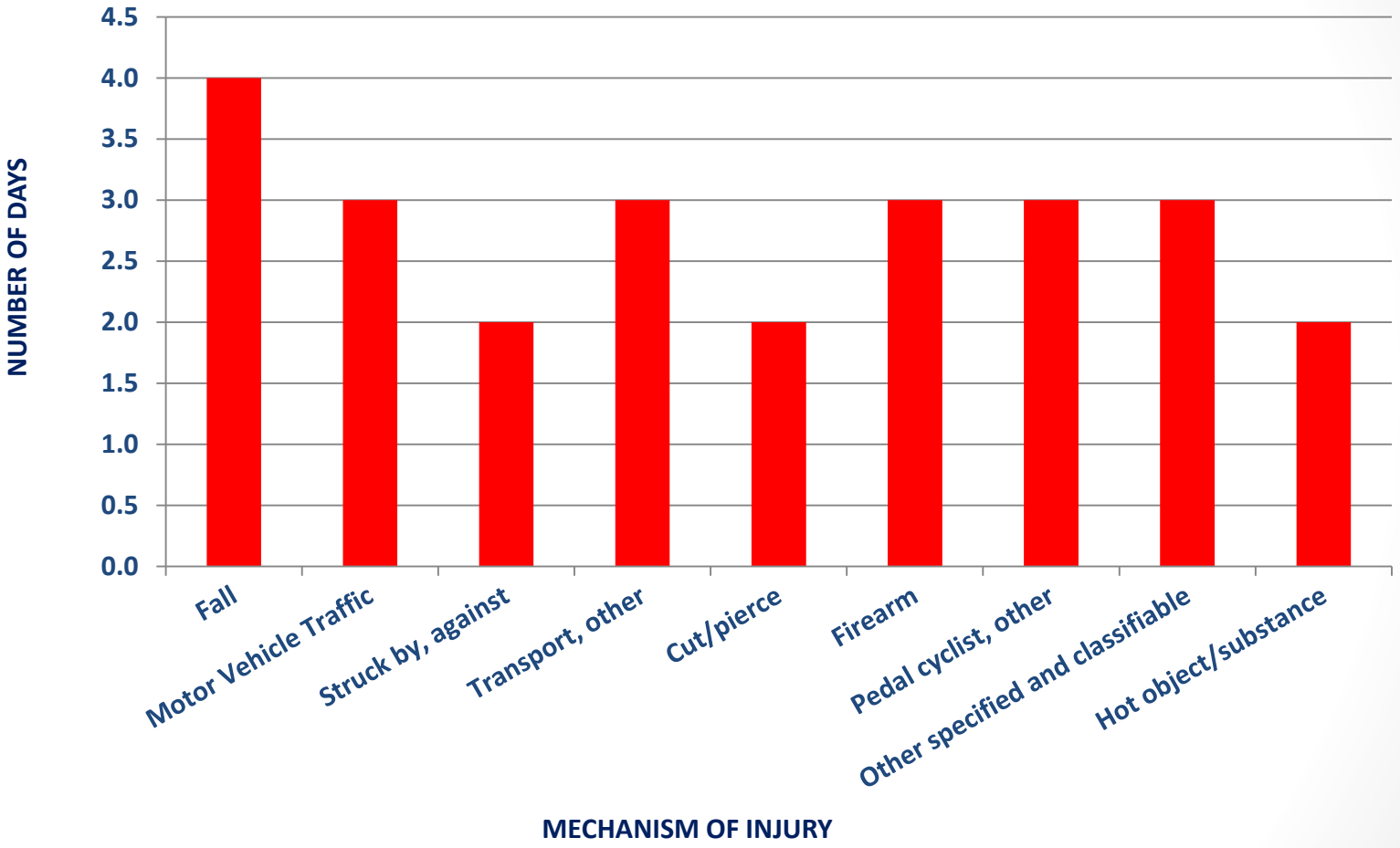


Table 32

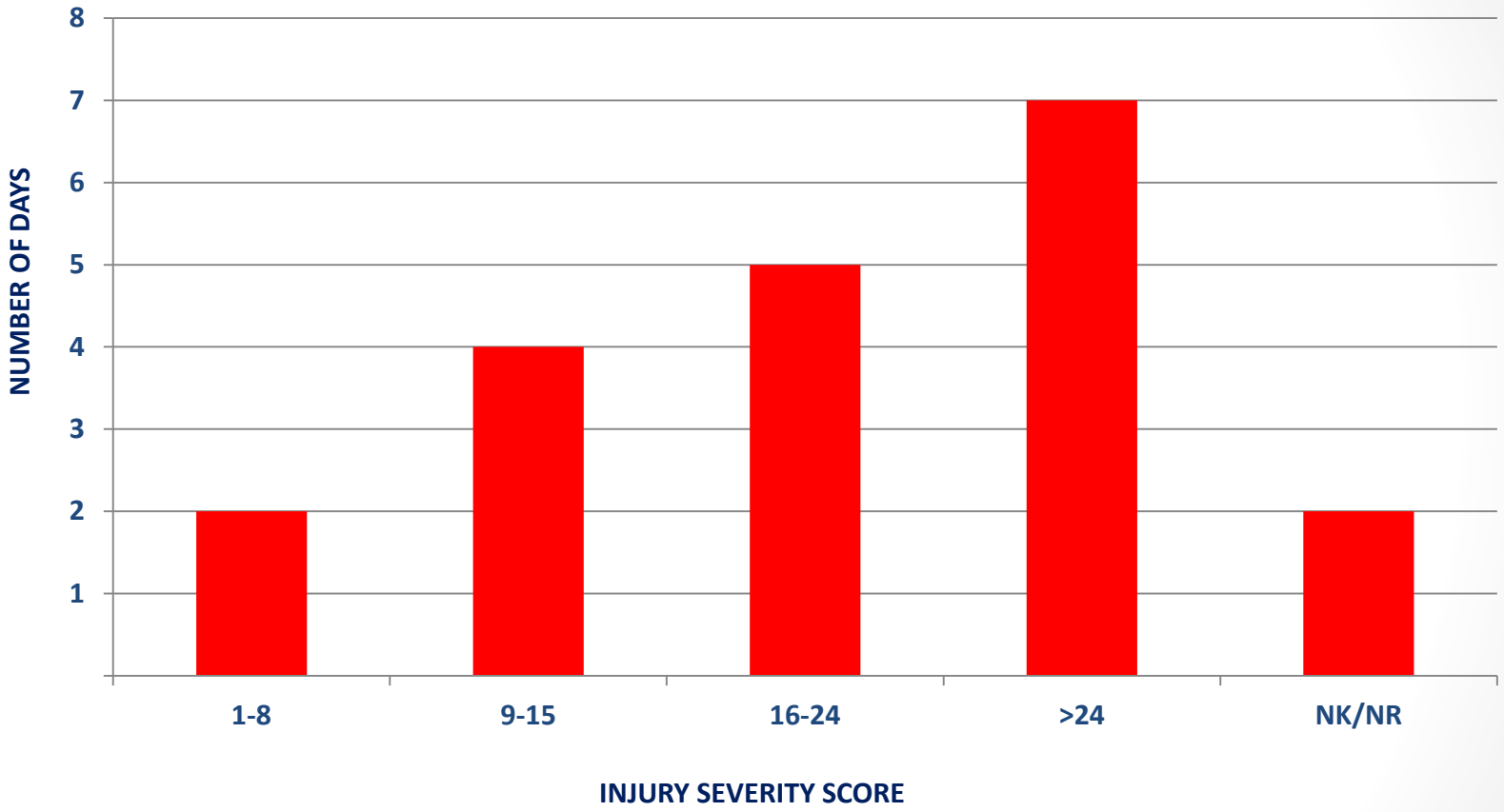
Median Length of Stay (in Days) by Injury Severity Score (ISS)

ISS	NUMBER	MEDIAN
1-8	379,802	2
9-15	251,675	4
16-24	111,463	5
>24	62,575	7
NK/NR	6,795	2

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 32

Median Length of Stay (in Days) by Injury Severity Score (ISS)



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 33

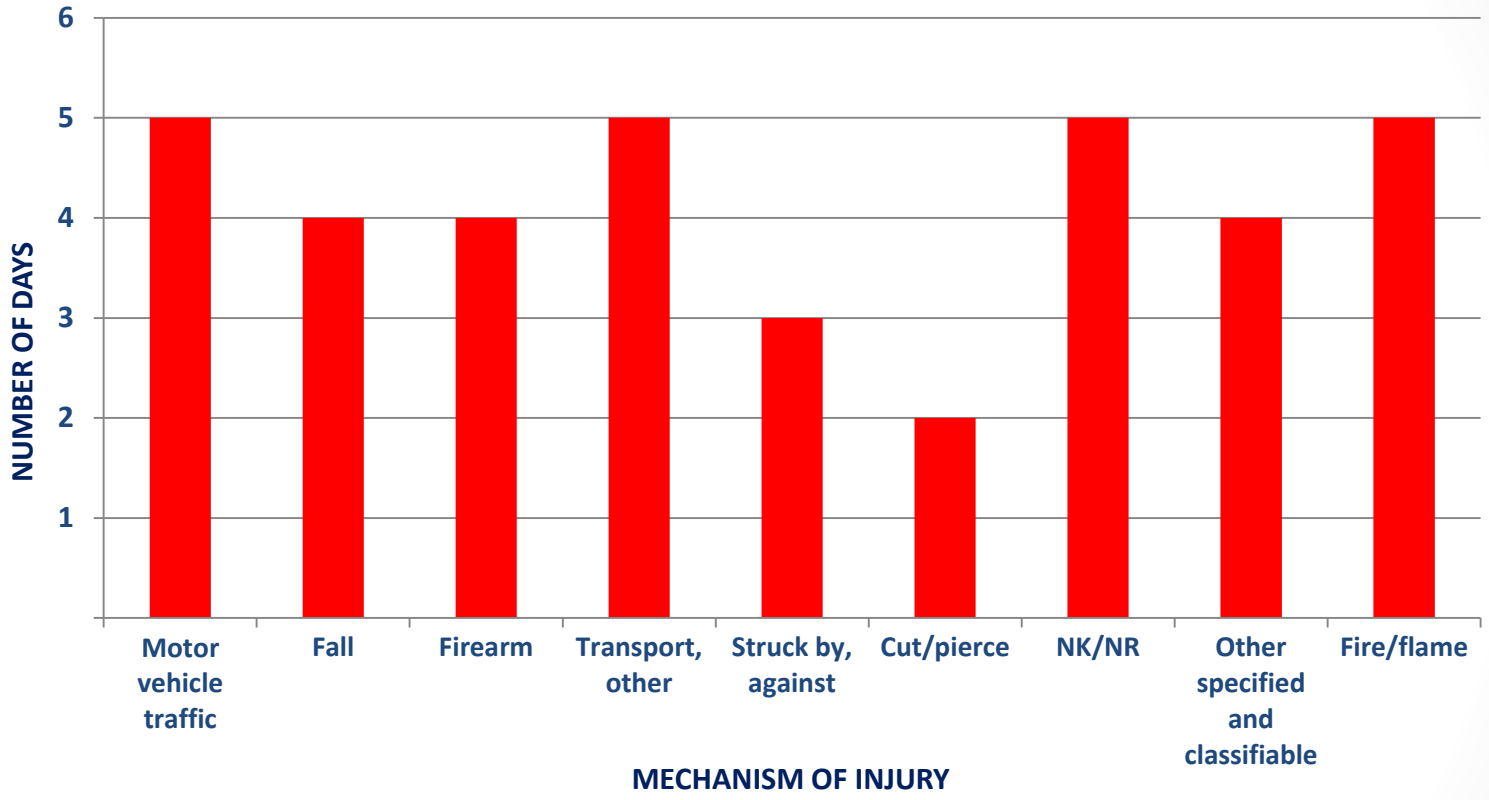
Median Ventilator Days by Mechanism of Injury

MECHANISM	NUMBER	MEDIAN
Motor vehicle traffic	23,654	5
Fall	15,647	4
Firearm	5,063	4
Transport, other	2,572	5
Struck by, against	2,449	3
Cut/pierce	1,606	2
NK/NR	1,204	5
Other specified and classifiable	1,155	4
Fire/flame	1,140	5
Unspecified	1,014	4
Pedal cyclist, other	501	4
Machinery	308	4
Suffocation	289	4
Pedestrian, other	258	6
Other specified, not elsewhere classifiable	225	4
Natural/environmental, other	143	4
Drowning/submersion	91	5
Hot object/substance	89	4
Natural/environmental, bites and stings	84	3
Poisoning	47	4
Overexertion	23	5

In patients with ventilator days > 0.

Figure 33

Median Ventilator Days by Selected Mechanism of Injury



In patients with ventilator days > 0.

Table 34

Median Ventilator Days by Injury Severity Score (ISS)

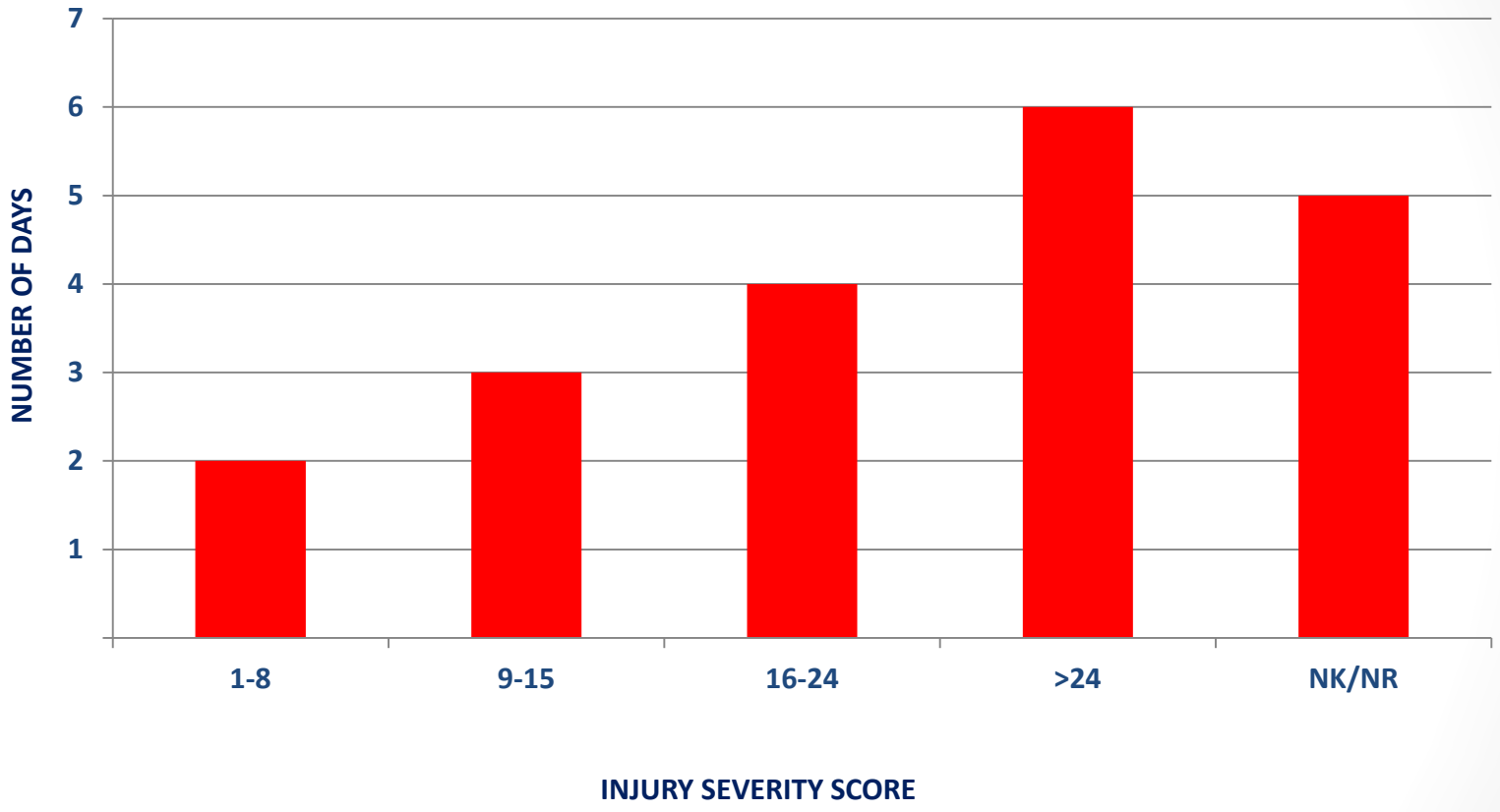
ISS	NUMBER	MEDIAN
1-8	5,969	2
9-15	10,631	3
16-24	15,544	4
>24	25,185	6
NK/NR	328	5

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

In patients with ventilator days > 0.

Figure 34

Median Ventilator Days by Injury Severity Score (ISS)



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

In patients with ventilator days > 0.

Table 35

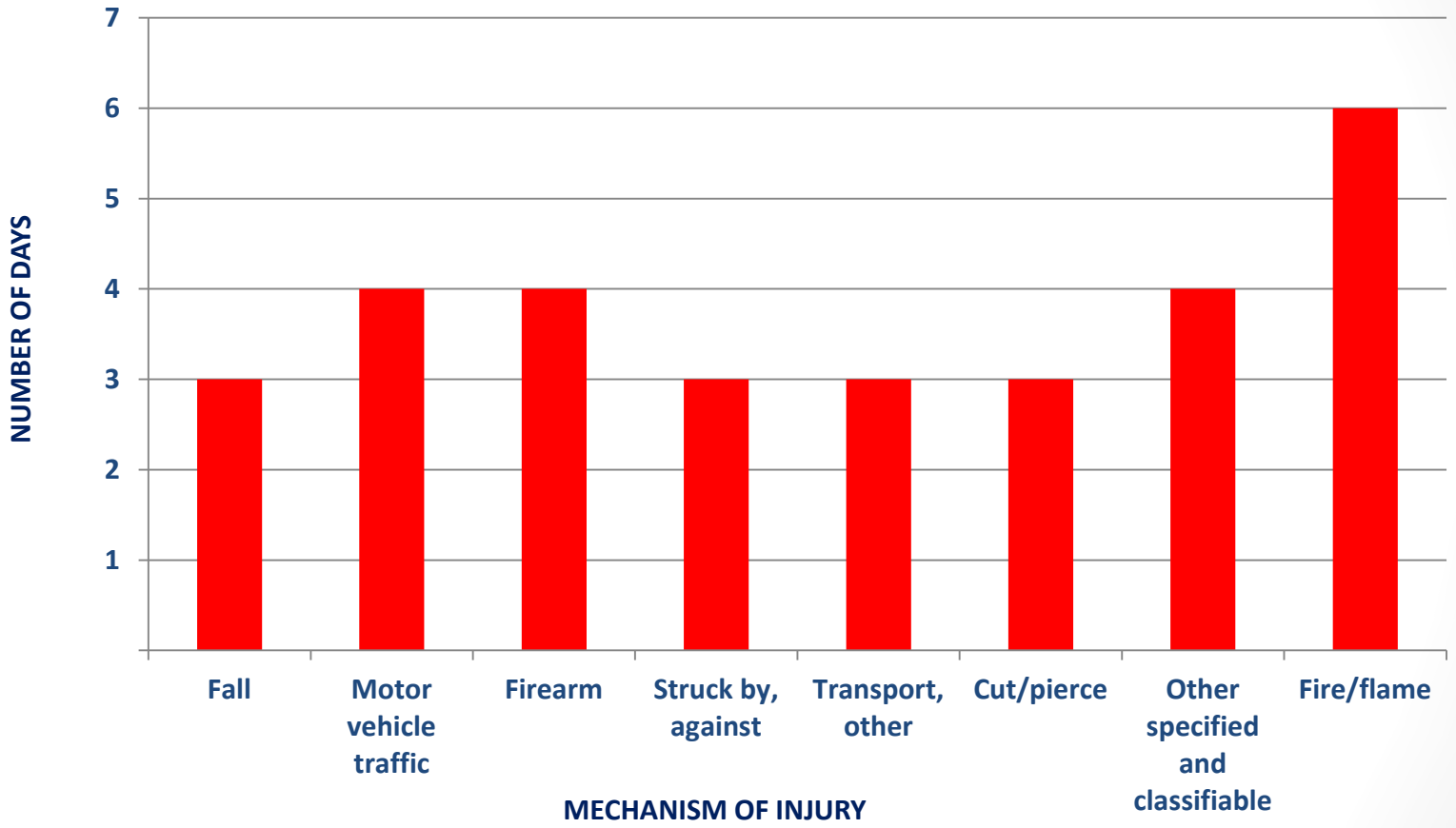
Median ICU Days by Mechanism of Injury

MECHANISM	NUMBER	MEDIAN
Fall	60,012	3
Motor vehicle traffic	55,395	4
Firearm	9,108	4
Struck by, against	8,007	3
Transport, other	7,568	3
Cut/pierce	4,386	3
Other specified and classifiable	2,596	4
Fire/flame	2,254	6
Pedal cyclist, other	2,155	3
Unspecified	2,116	4
Hot object/substance	1,095	4
Machinery	941	4
Pedestrian, other	662	4
Other specified, not elsewhere classifiable	605	3
NK/NR	586	4
Natural/environmental, other	451	3
Suffocation	385	4
Natural/environmental, bites and stings	376	3
Drowning/submersion	136	5
Overexertion	106	3
Poisoning	88	4

In patients with ICU days > 0.

Figure 35

Median ICU Days by Selected Mechanism of Injury



In patients with ICU days > 0.

Table 36

Median ICU Days by Injury Severity Score (ISS)

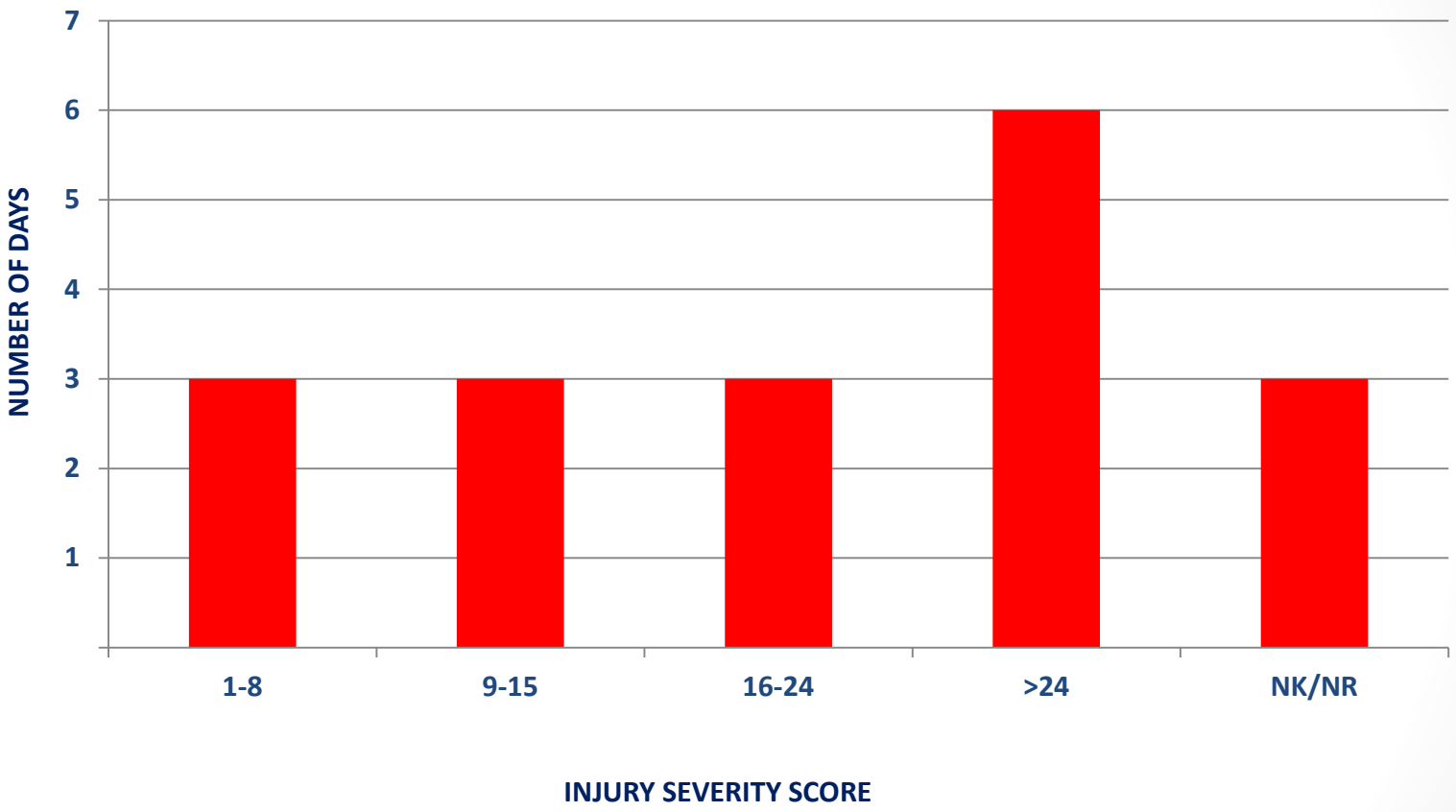
ISS	NUMBER	MEDIAN
1-8	23,551	3
9-15	42,893	3
16-24	50,972	3
>24	41,137	6
NK/NR	620	3

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

In patients with ICU days > 0.

Figure 36

Median ICU Days by Injury Severity Score (ISS)



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

In patients with ICU days > 0.

Table 37

Incidents by ED Discharge Disposition

ED DISCHARGE DISPOSITION	NUMBER	PERCENT
Floor bed (general admission, non-specialty unit bed)	349,871	42.95
Intensive care unit (ICU)	153,445	18.84
Operating Room	90,636	11.13
Home without services	68,423	8.40
Telemetry/step-down unit (less acuity than ICU)	52,825	6.48
Transferred to another hospital	32,518	3.99
Observation unit (unit that provides < 24 hour stays)	21,963	2.70
Died	10,232	1.26
Other (jail, institutional care facility, mental health, etc.)	2,684	0.33
Left against medical advice	1,795	0.22
Home with services	900	0.11
Not applicable	17,935	2.20
NK/NR	11,436	1.40
Total	814,663	100

Figure 37

Incidents by ED Discharge Disposition

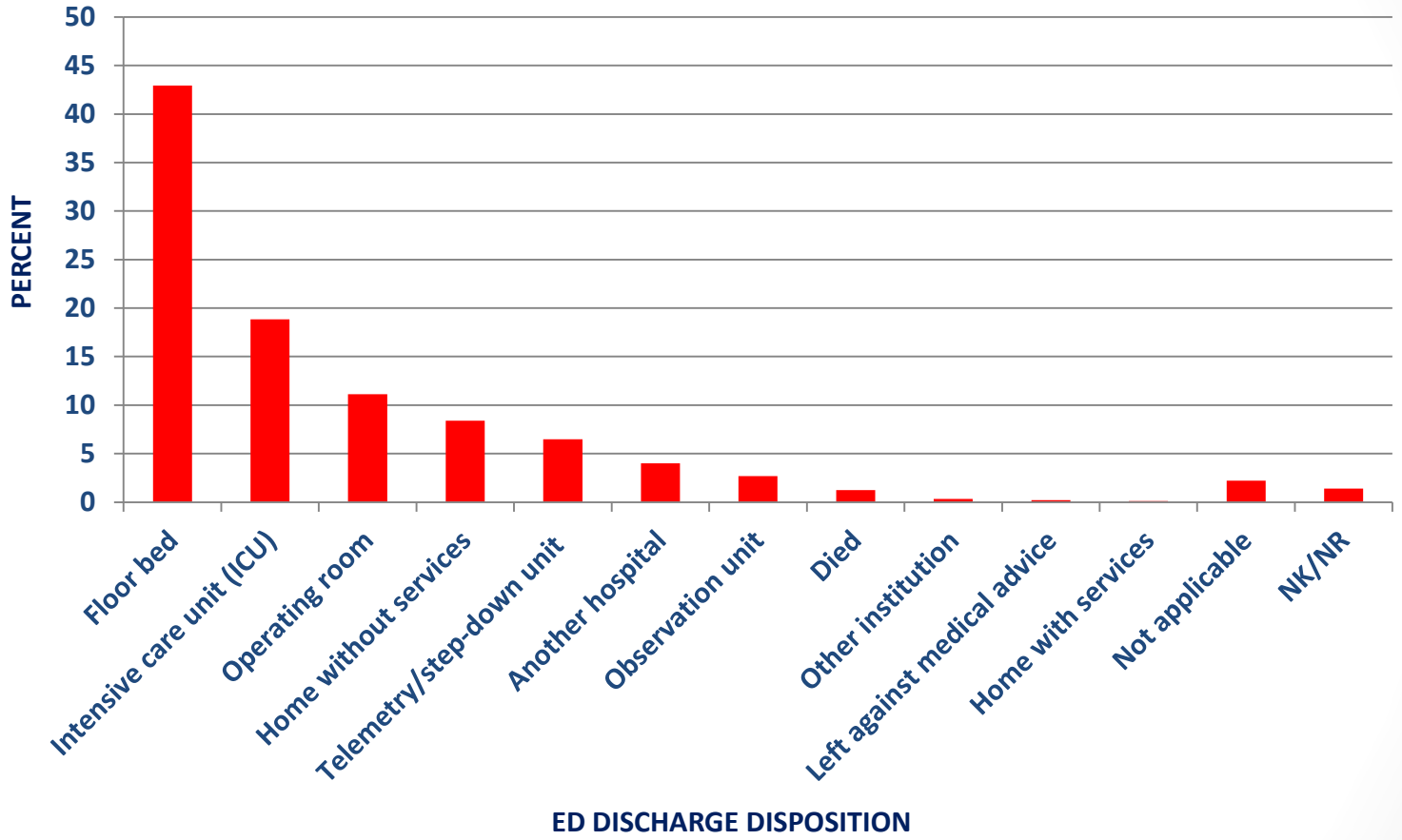


Table 38

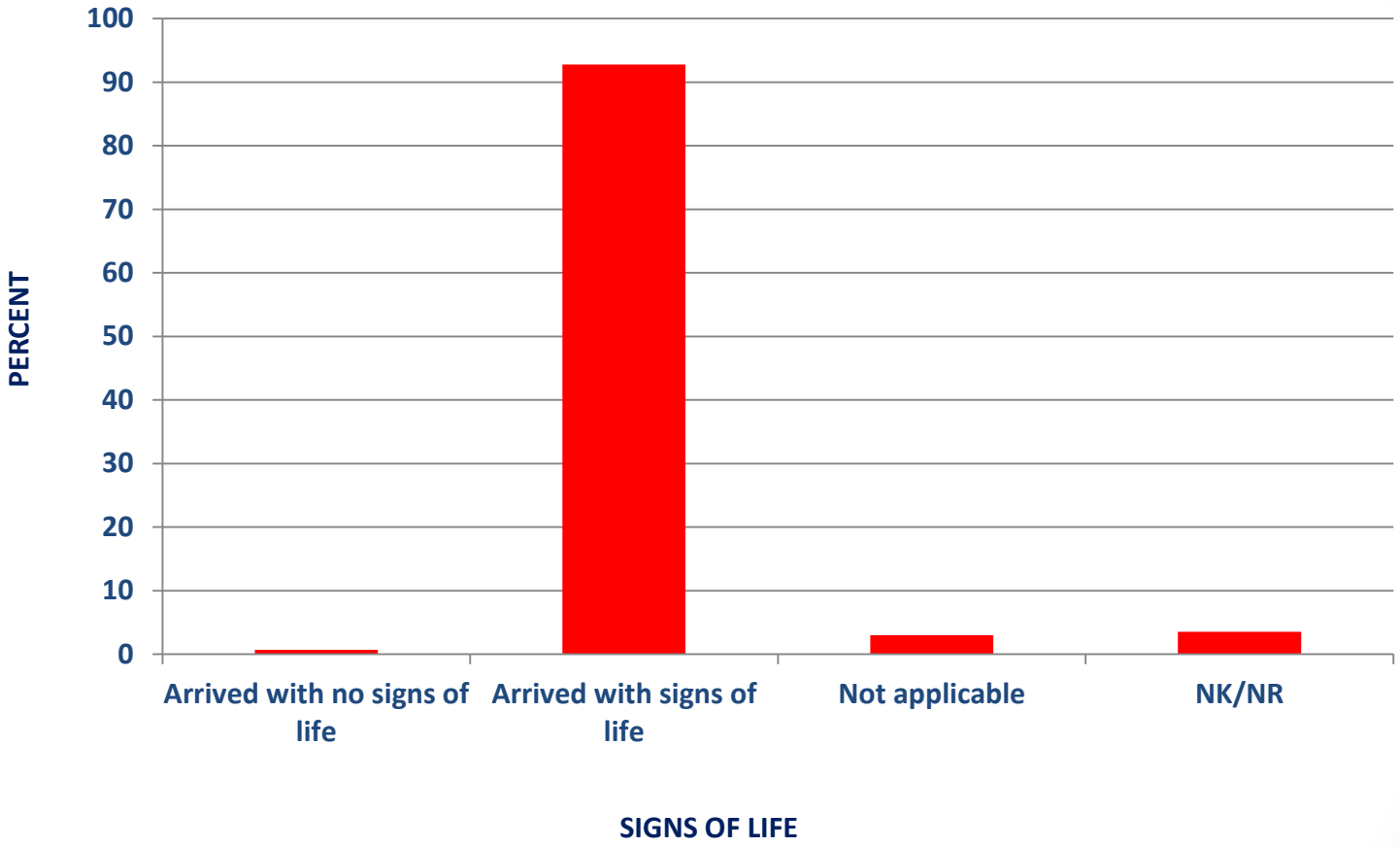
Signs of Life

SIGNS OF LIFE	NUMBER	PERCENT
Arrived with no signs of life	5,655	0.69
Arrived with signs of life	755,903	92.79
Not applicable	24,360	2.99
NK/NR	28,745	3.53
Total	814,663	100

Indication of whether patient arrived at ED/hospital with signs of life.

Figure 38

Signs of Life



Indication of whether patient arrived at ED/Hospital with signs of life.

Table 39

Incidents by Hospital Discharge Disposition

HOSPITAL DISCHARGE DISPOSITION	NUMBER	PERCENT
Discharged home with no home services	441,420	54.18
Discharged/transferred to skilled nursing facility (SNF)	92,619	11.37
Discharged/transferred to another type of rehabilitation or long-term care	71,009	8.72
Discharge/transferred to home under care of organized home health service	40,897	5.02
Expired	21,887	2.69
Discharged/transferred to a short-term general hospital for inpatient care	12,212	1.50
Discharged/transferred to an intermediate care facility (ICF)	7,521	0.92
Left against medical advice or discontinued care	6,144	0.75
Discharged/transferred to hospice care	4,288	0.53
Not applicable	116,552	14.31
NK/NR	114	0.01
Total	814,663	100

Figure 39

Incidents by Hospital Discharge Disposition

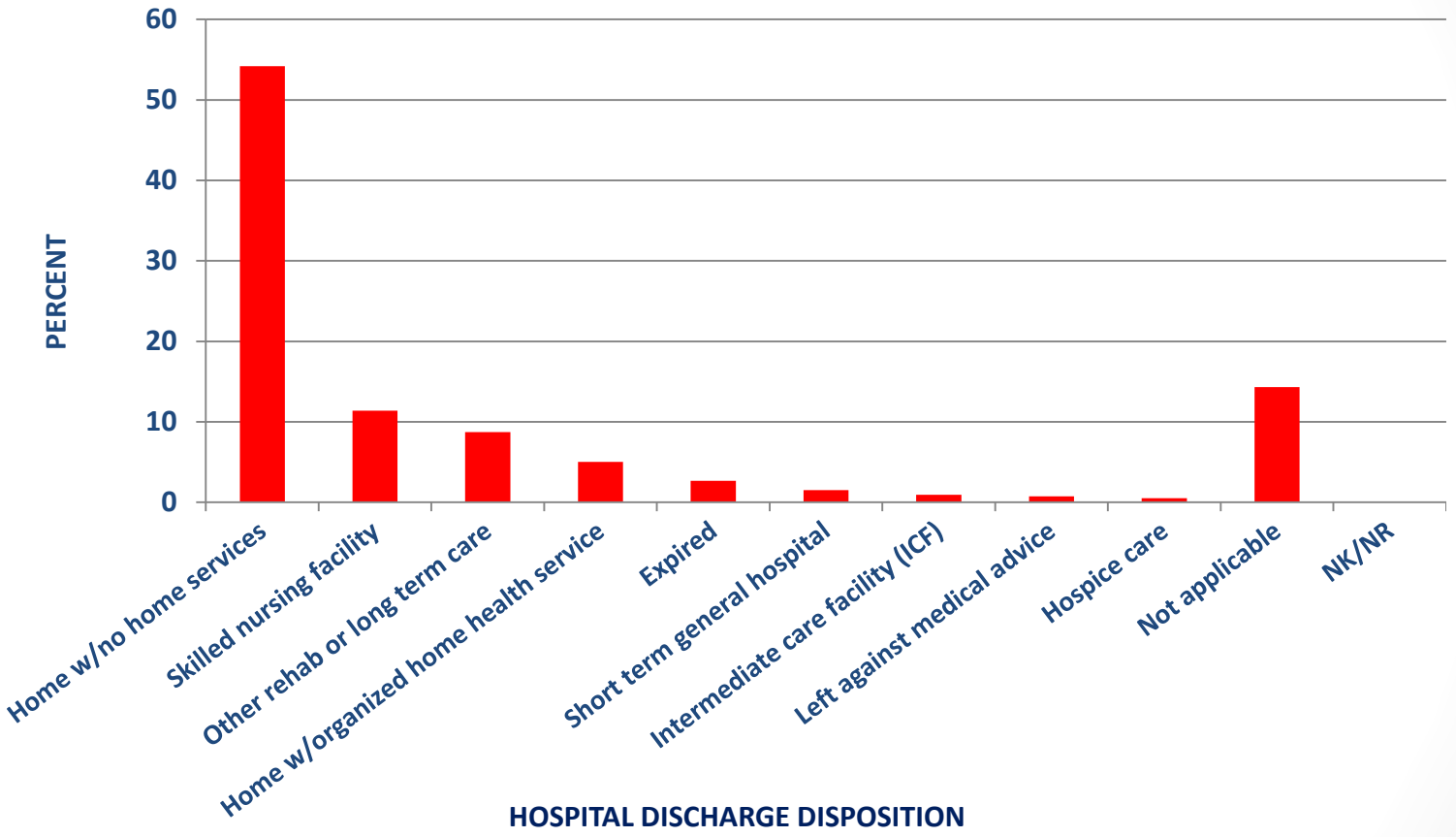


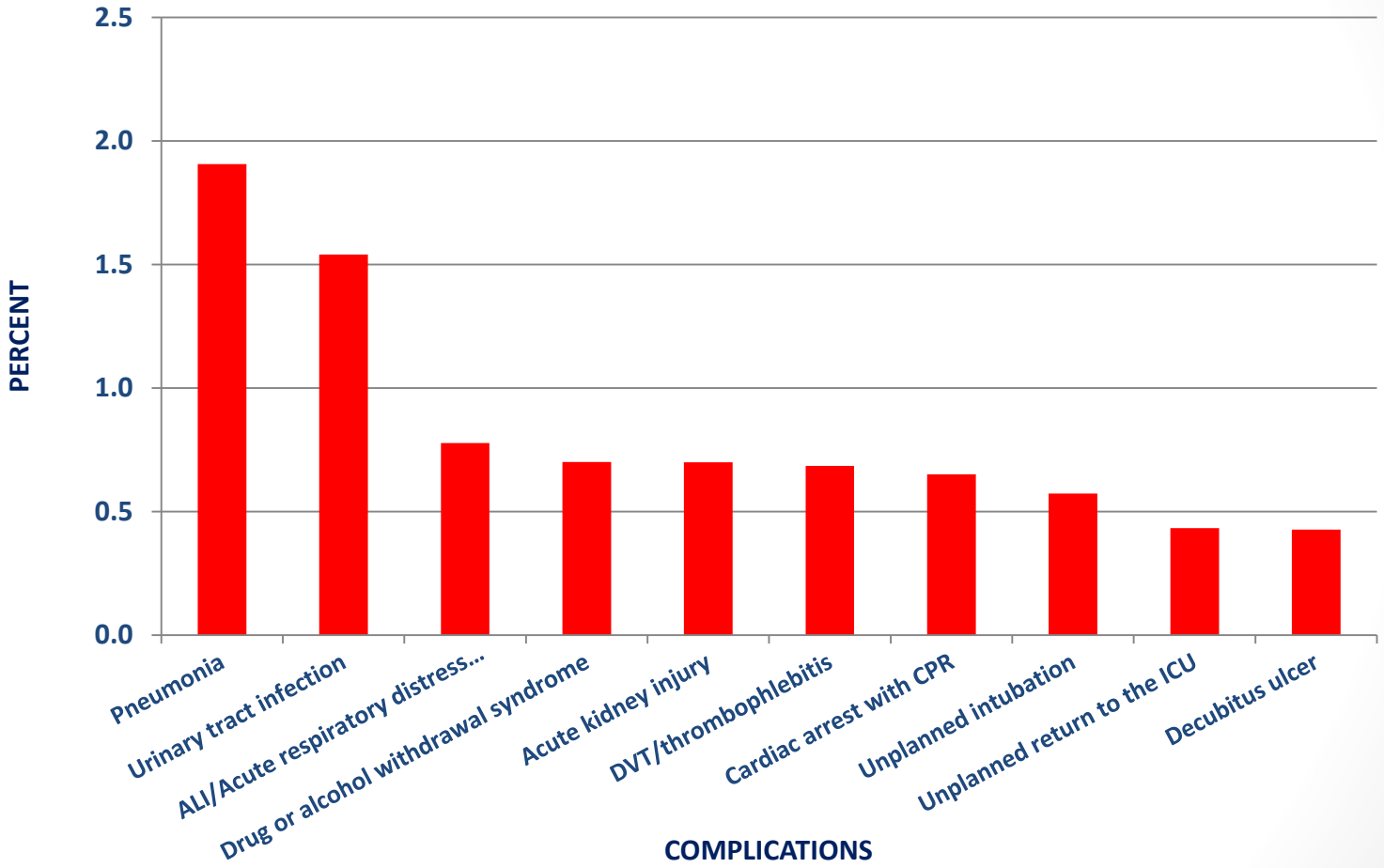
Table 40

Hospital Complications

COMPLICATIONS	NUMBER	PERCENT
Pneumonia	15,530	1.91
Urinary tract infection	12,546	1.54
Acute lung injury/Acute respiratory distress syndrome (ARDS)	6,330	0.78
Drug or alcohol withdrawal syndrome	5,708	0.70
Acute kidney injury	5,700	0.70
Deep vein thrombosis (DVT) / thrombophlebitis	5,578	0.68
Cardiac arrest with resuscitative efforts by health care provider	5,302	0.65
Unplanned intubation	4,673	0.57
Unplanned return to the ICU	3,534	0.43
Decubitus ulcer	3,476	0.43
Severe sepsis	2,578	0.32
Extremity compartment syndrome	2,445	0.30
Pulmonary embolism	2,285	0.28
Stroke / CVA	2,019	0.25
Myocardial infarction	1,999	0.25
Unplanned return to the OR	1,972	0.24
Organ/space surgical site infection	1,233	0.15
Superficial surgical site infection	1,191	0.15
Catheter-related blood stream infection	980	0.12
Deep surgical site infection	771	0.09
Graft/prosthesis/flap failure	297	0.04
Osteomyelitis	189	0.02

Figure 40

Top 10 Complications



REGIONAL ANALYSIS

Table 41

Incidents by Region

REGION	NUMBER	PERCENT
South	291,469	35.78
Midwest	218,664	26.84
West	161,092	19.77
Northeast	139,706	17.15
Non-U.S.	3,732	0.46
Total	814,663	100

Figure 41

Incidents by Region

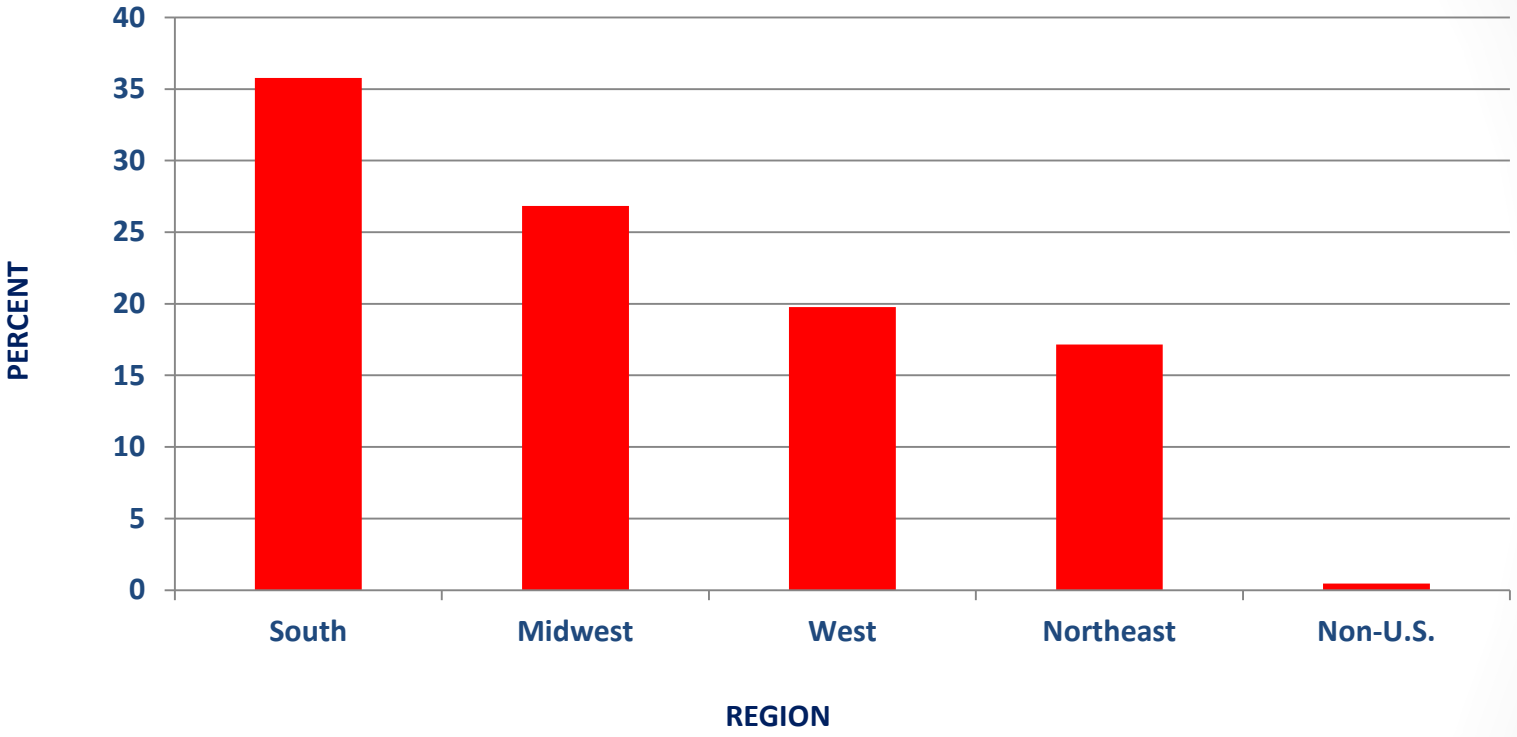


Table 42

Case Fatality Rate by Region

REGION	NUMBER	DEATHS	CASE FATALITY RATE
South	291,469	12,437	4.27
Midwest	218,664	8,991	4.11
West	161,092	6,540	4.06
Northeast	139,706	8,100	5.80
Non-U.S.	3,732	339	9.08
Total	814,663	36,407	4.47

Figure 42

Case Fatality Rate by Region

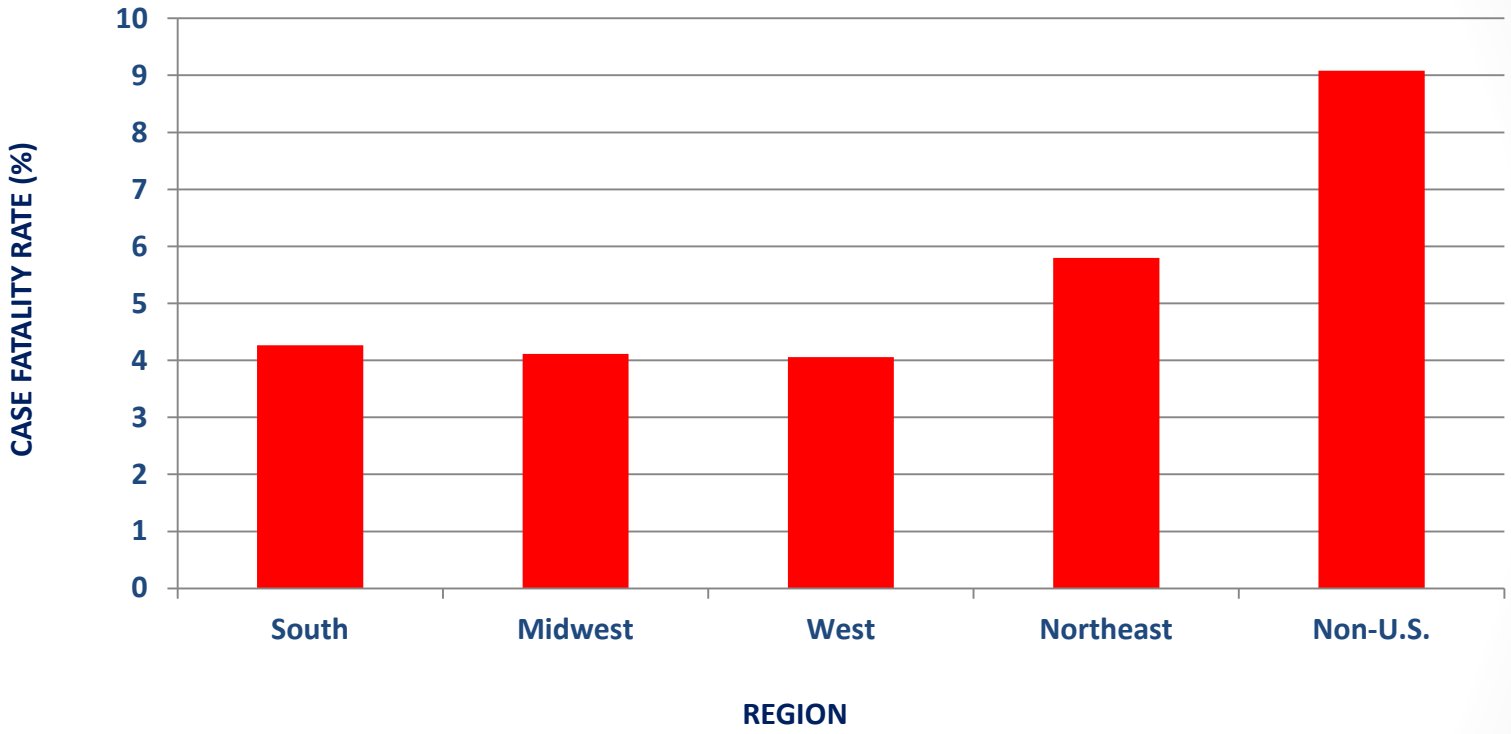


Table 43

Mechanism of Injury by Region

MECHANISM	NUMBER	PERCENT (MIDWEST)	PERCENT (NORTHEAST)	PERCENT (SOUTH)	PERCENT (WEST)	PERCENT (NON-U.S.)
Fall	344,592	48.73	48.94	37.70	36.32	34.41
Motor vehicle traffic	220,923	22.98	23.06	29.69	31.34	38.96
Struck by, against	57,937	6.98	6.47	7.31	7.50	6.62
Transport, other	37,986	4.27	3.48	5.07	5.47	4.74
Cut/pierce	35,258	3.34	3.93	4.70	5.28	6.94
Firearm	34,338	3.87	3.30	5.03	4.07	1.55
Pedal cyclist, other	14,755	1.59	1.61	1.33	3.17	1.15
Other specified and classifiable	13,425	1.59	1.35	1.99	1.38	1.05
Hot object/substance	8,510	0.99	1.21	1.26	0.60	0.03
Fire/flame	8,428	1.12	1.00	1.24	0.60	0.46
Machinery	8,239	1.20	0.88	1.10	0.72	0.72
Unspecified	8,187	0.84	1.25	0.88	1.24	0.96
Natural/environmental, bites and stings	5,324	0.64	0.43	0.88	0.47	0.05
Other specified, not elsewhere classifiable	4,030	0.41	0.62	0.50	0.48	0.88
NK/NR	2,829	0.16	1.32	0.07	0.25	0.43
Overexertion	2,784	0.36	0.41	0.38	0.20	0.00
Pedestrian, other	2,627	0.27	0.31	0.34	0.37	0.40
Natural/environmental, other	2,332	0.32	0.16	0.32	0.28	0.21
Suffocation	849	0.12	0.07	0.10	0.12	0.27
Poisoning	475	0.11	0.03	0.04	0.05	0.05
Drowning/submersion	372	0.05	0.03	0.05	0.05	0.11
Adverse effects, medical care	257	0.02	0.08	0.02	0.01	0.00
Adverse effects, drugs	206	0.03	0.04	0.01	0.02	0.00
Total	814,663	100	100	100	100	100

Figure 43

Selected Mechanism of Injury by Region

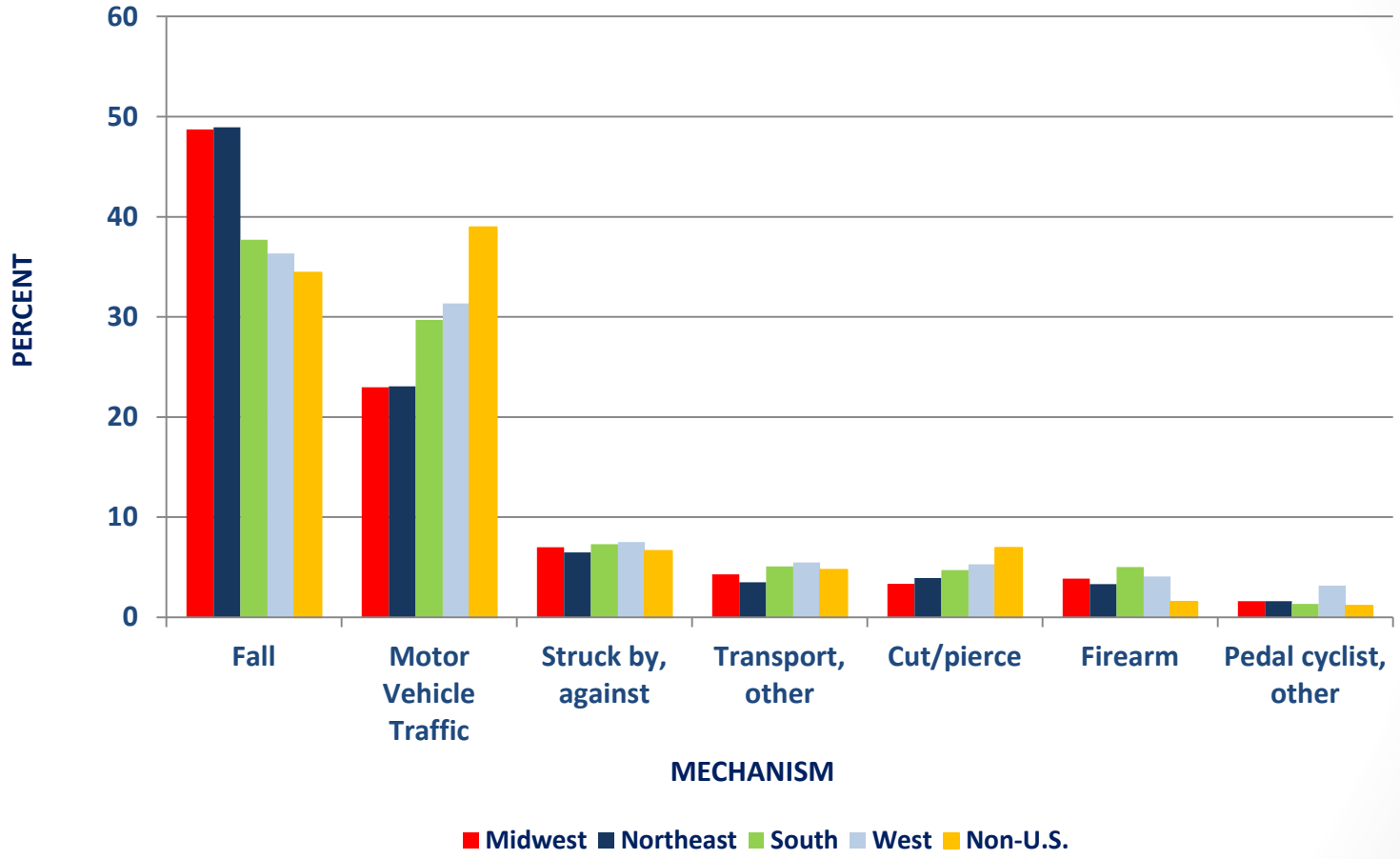


Table 44

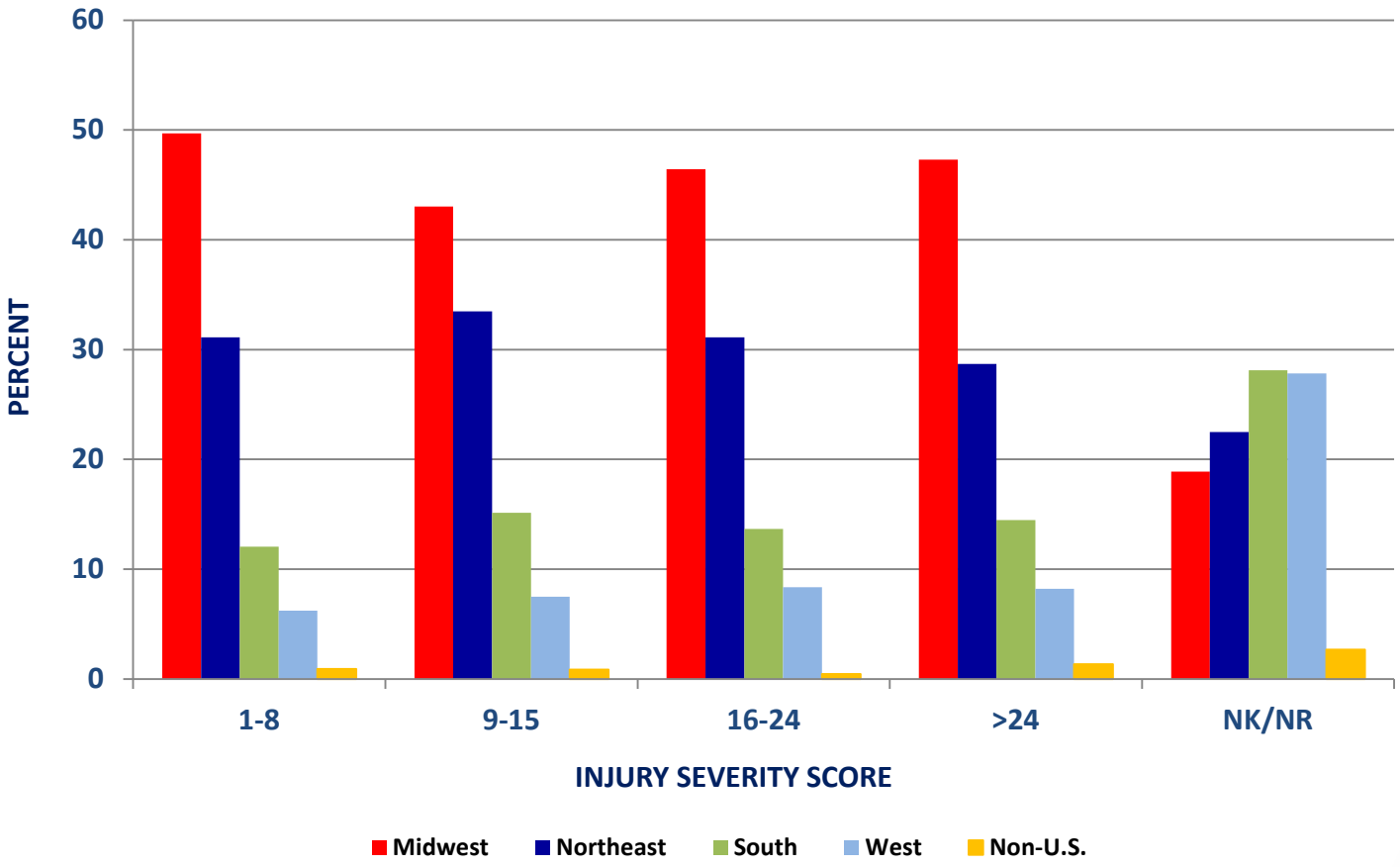
Injury Severity Score (ISS) by Region

ISS	NUMBER	MIDWEST	NORTHEAST	SOUTH	WEST	NON-U.S.
1-8	380,943	49.68	43.04	46.42	47.29	18.89
9-15	252,542	31.12	33.49	31.11	28.68	22.48
16-24	111,671	12.06	15.14	13.66	14.47	28.11
>24	62,680	6.22	7.49	8.35	8.21	27.84
NK/NR	6,827	0.93	0.85	0.46	1.35	2.68
Total	814,663	100	100	100	100	100

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 44

Injury Severity Score (ISS) by Region



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Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 45

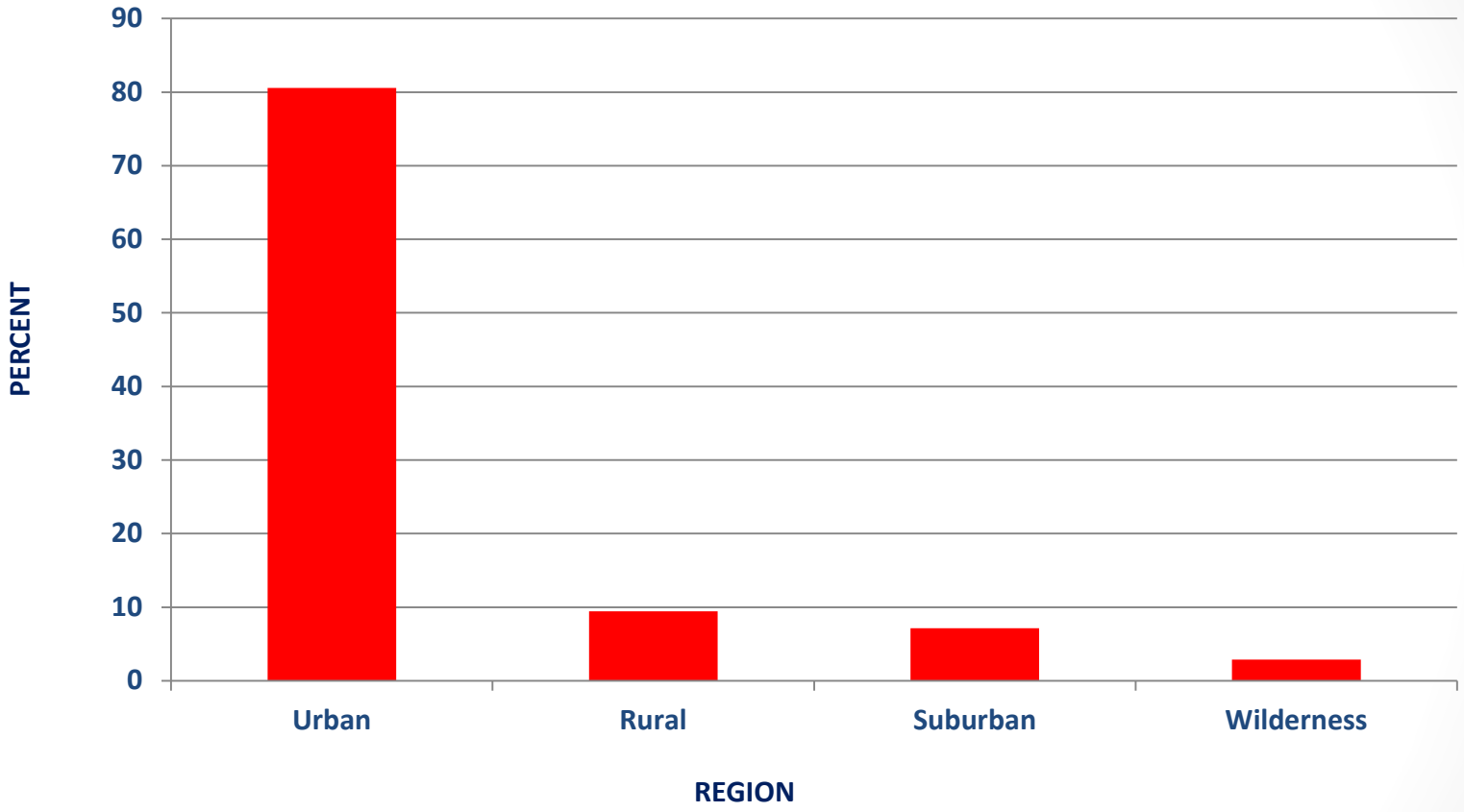
Incidents by Rurality

REGION	NUMBER	PERCENT
Urban	375,733	80.55
Rural	43,995	9.43
Suburban	33,319	7.14
Wilderness	13,384	2.87
Total	466,431	100

All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Figure 45

Incidents by Rurality



All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Table 46

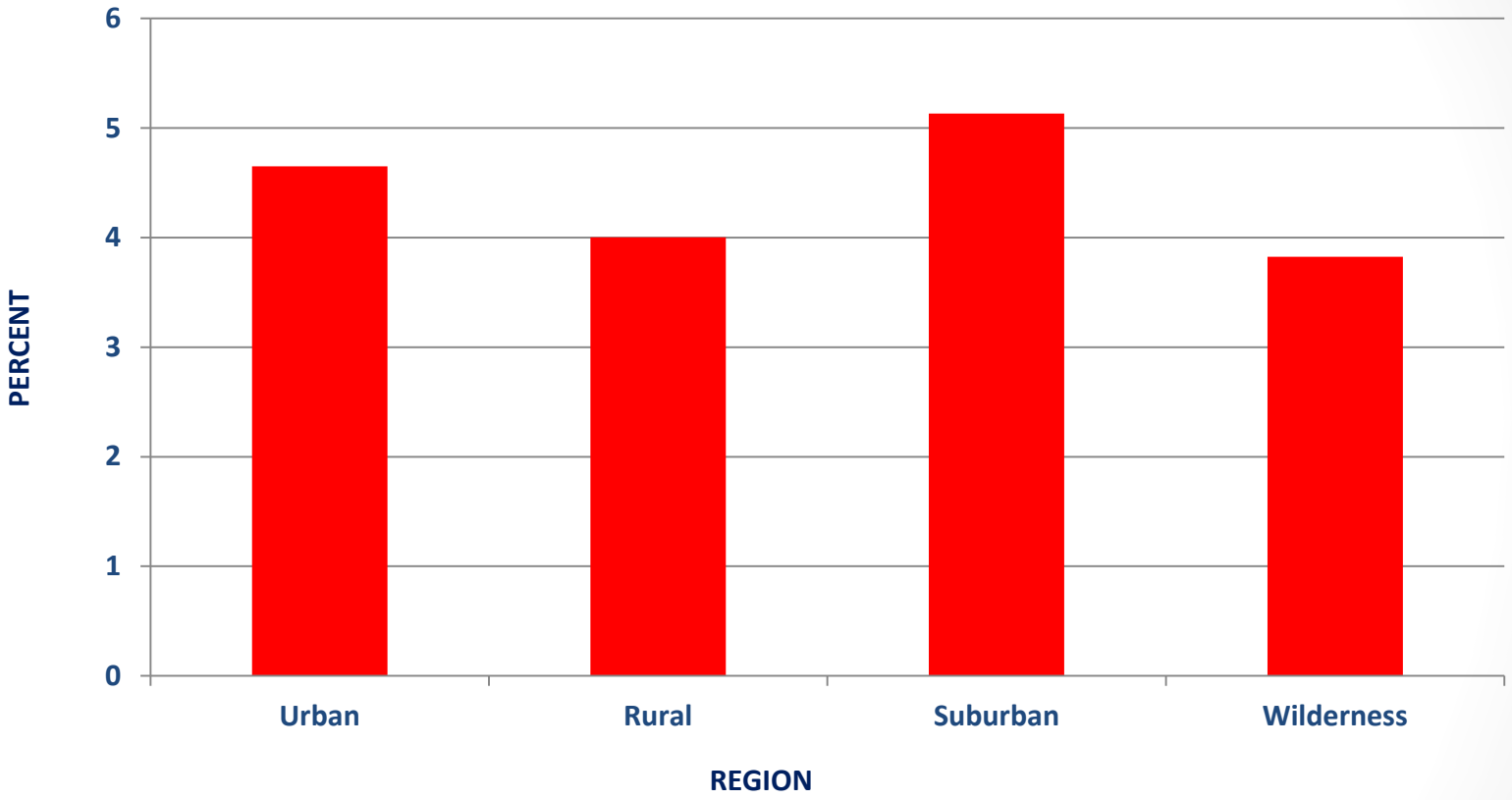
Case Fatality Rate by Rurality

REGION	NUMBER	DEATHS	CASE FATALITY RATE
Urban	375,733	17,468	4.65
Rural	43,995	1,761	4.00
Suburban	33,319	1,710	5.13
Wilderness	13,384	512	3.83
Total	466,431	36,407	7.81

All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Figure 46

Case Fatality Rate by Rurality



All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Figure 47

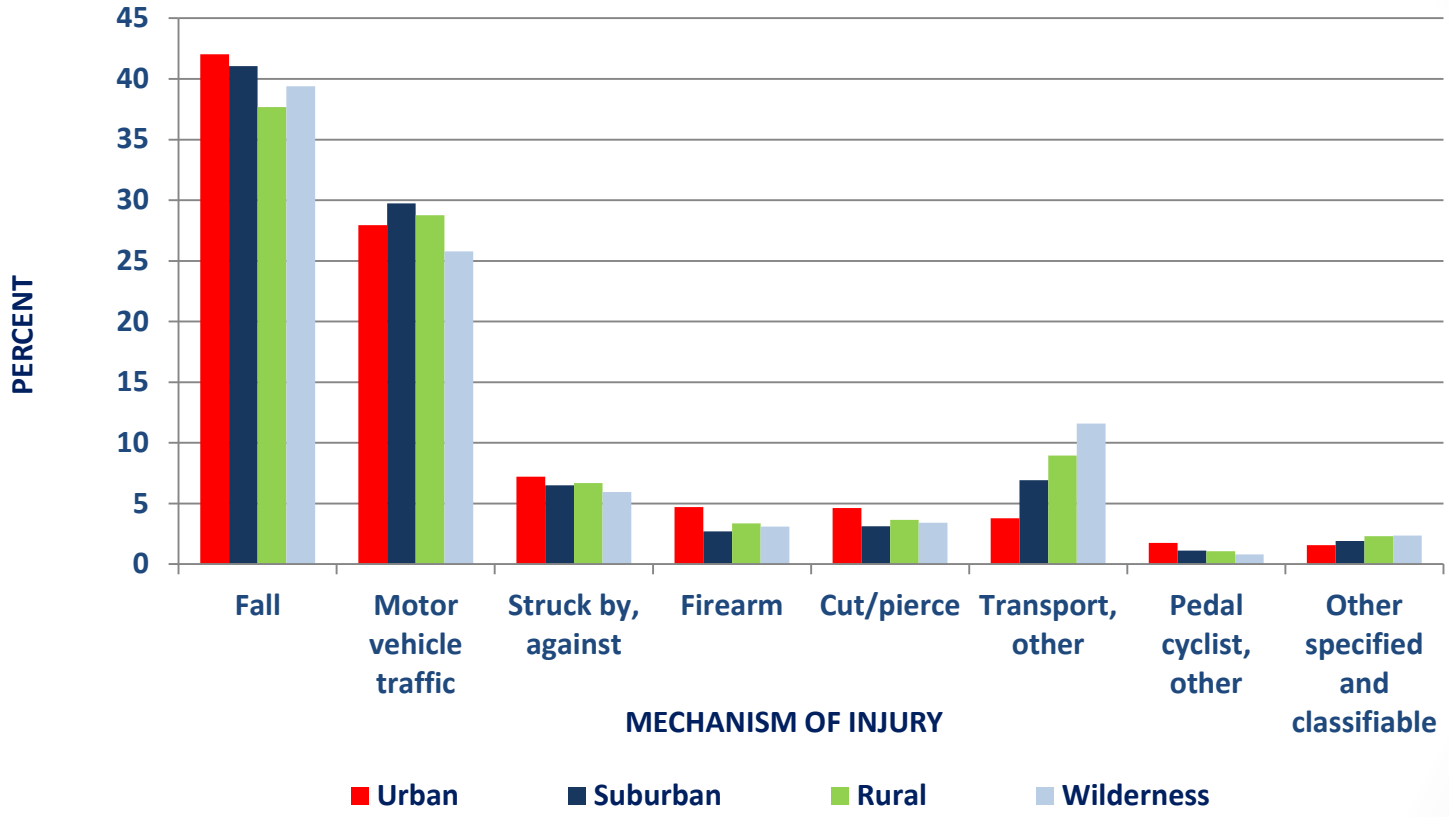
Mechanism of Injury by Rurality

MECHANISM	NUMBER (URBAN)	PERCENT (URBAN)	NUMBER (SUBURBAN)	PERCENT (SUBURBAN)	NUMBER (RURAL)	PERCENT (RURAL)	NUMBER (WILDERNESS)	PERCENT (WILDERNESS)
Fall	157,968	42.04	13,678	41.05	16,571	37.67	5,274	39.41
Motor vehicle traffic	104,991	27.94	9,910	29.74	12,649	28.75	3,450	25.78
Struck by, against	27,116	7.22	2,170	6.51	2,935	6.67	795	5.94
Firearm	17,713	4.71	902	2.71	1,480	3.36	414	3.09
Cut/pierce	17,407	4.63	1,040	3.12	1,608	3.65	456	3.41
Transport, other	14,219	3.78	2,303	6.91	3,940	8.96	1,553	11.60
Pedal cyclist, other	6,598	1.76	377	1.13	469	1.07	107	0.80
Other specified and classifiable	5,861	1.56	632	1.90	1,019	2.32	314	2.35
Hot object/substance	3,941	1.05	340	1.02	421	0.96	113	0.84
Unspecified	3,914	1.04	233	0.70	300	0.68	86	0.64
Fire/flame	3,648	0.97	428	1.28	655	1.49	167	1.25
Machinery	3,070	0.82	480	1.44	705	1.60	255	1.91
Natural/environmental, bites and stings	2,383	0.63	210	0.63	317	0.72	106	0.79
Other specified, not elsewhere classifiable	1,932	0.51	137	0.41	169	0.38	60	0.45
Pedestrian, other	1,348	0.36	103	0.31	176	0.40	45	0.34
Overexertion	1,224	0.33	112	0.34	116	0.26	29	0.22
Natural/environmental, other	776	0.21	160	0.48	283	0.64	112	0.84
NK/NR	614	0.16	29	0.09	45	0.10	16	0.12
Suffocation	412	0.11	39	0.12	56	0.13	14	0.10
Poisoning	233	0.06	13	0.04	26	0.06	5	0.04
Drowning/submersion	154	0.04	13	0.04	45	0.10	8	0.06
Adverse effects, medical care	126	0.03	7	0.02	6	0.01	4	0.03
Adverse effects, drugs	85	0.02	3	0.01	4	0.01	1	0.01
Total	375,733	100	33,319	100	43,995	100	13,384	100

All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Figure 47

Selected Mechanism of Injury by Rurality



All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Table 48

Injury Severity Score (ISS) by Rurality

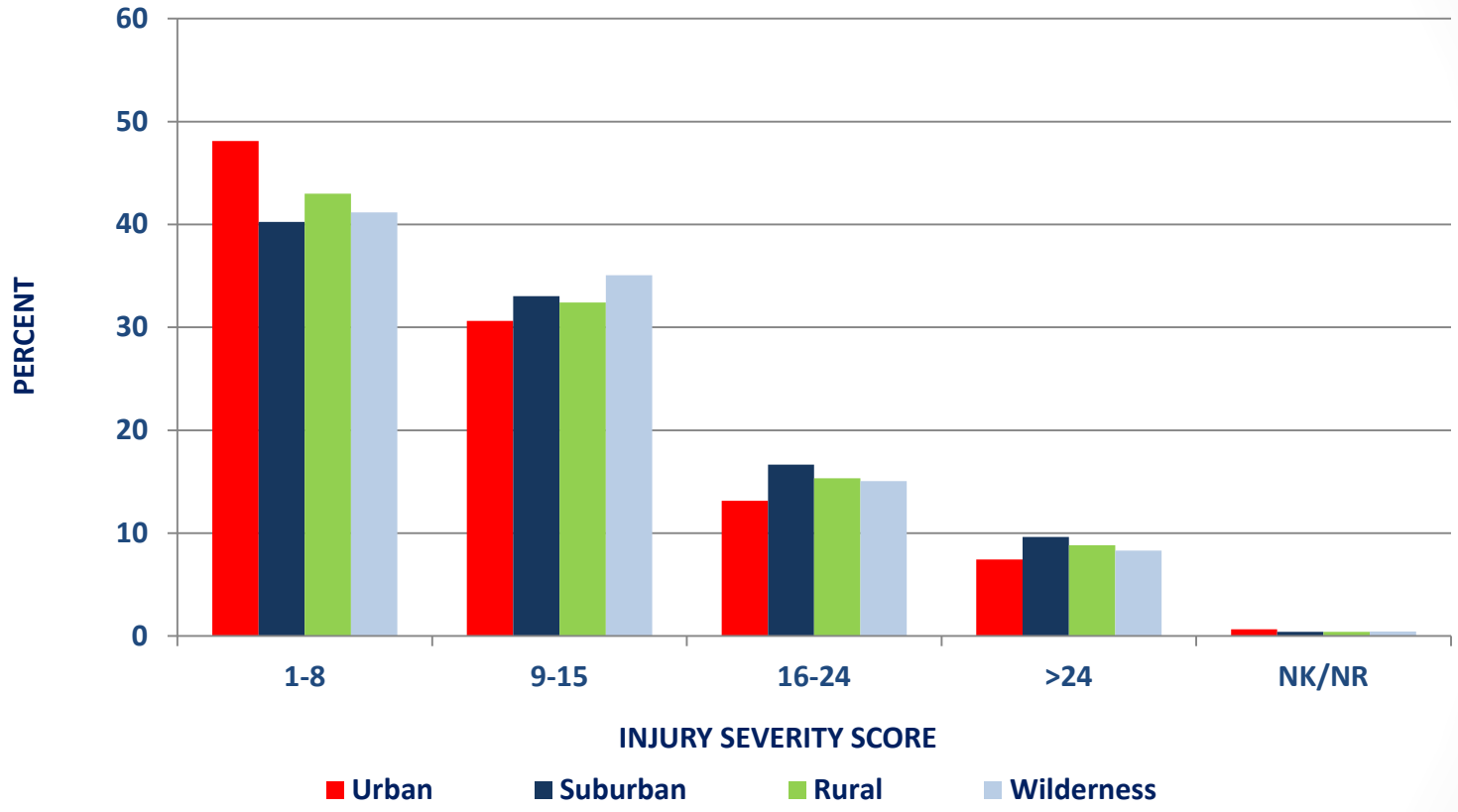
ISS	NUMBER (URBAN)	PERCENT (URBAN)	NUMBER (SUBURBAN)	PERCENT (SUBURBAN)	NUMBER (RURAL)	PERCENT (RURAL)	NUMBER (WILDERNESS)	PERCENT (WILDERNESS)
1-8	180,771	48.11	13,408	40.24	18,915	42.99	5,509	41.16
9-15	115,042	30.62	11,007	33.04	14,265	32.42	4,692	35.06
16-24	49,378	13.14	5,555	16.67	6,741	15.32	2,015	15.06
>24	28,011	7.46	3,213	9.64	3,887	8.84	1,110	8.29
NK/NR	2,531	0.67	136	0.41	187	0.43	58	0.43
Total	375,733	100	33,319	100	43,995	100	13,384	100

Injury Severity Score tables are generated using AIS98 Crosswalked ISS. Injury Severity Score definitions can be found in Appendix B.

All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

Figure 48

Injury Severity Score (ISS) by Rurality



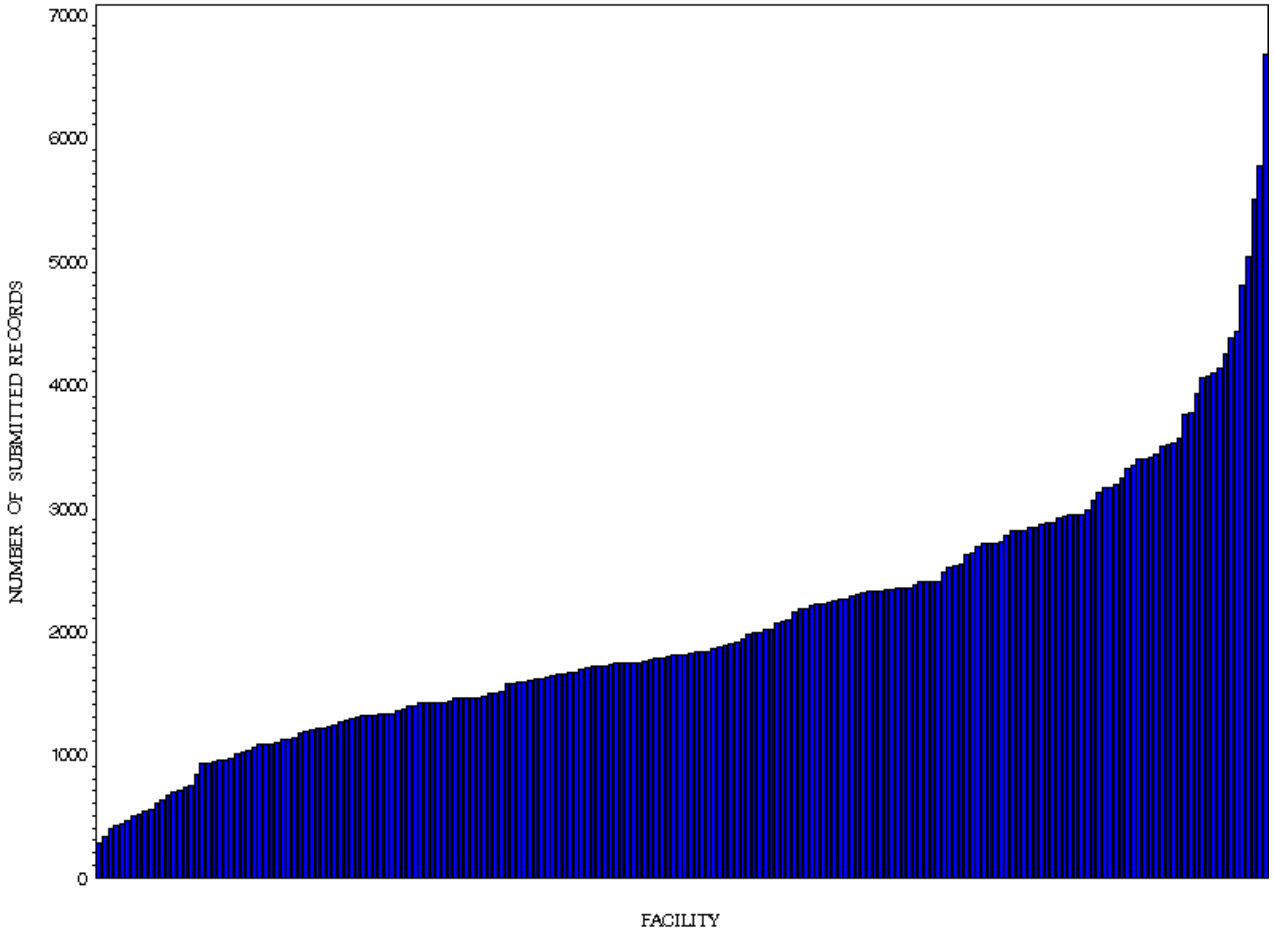
Injury Severity Score tables are generated using AIS98 Crosswalked ISS. Injury Severity Score definitions can be found in Appendix B.

All rurality tables are determined by Urban Influence Codes that are developed by the Office of Management and Budget. Urban Influence Codes only apply to incidents and are not available for every record in the NTDB.

COMPARATIVE ANALYSIS

Figure 49

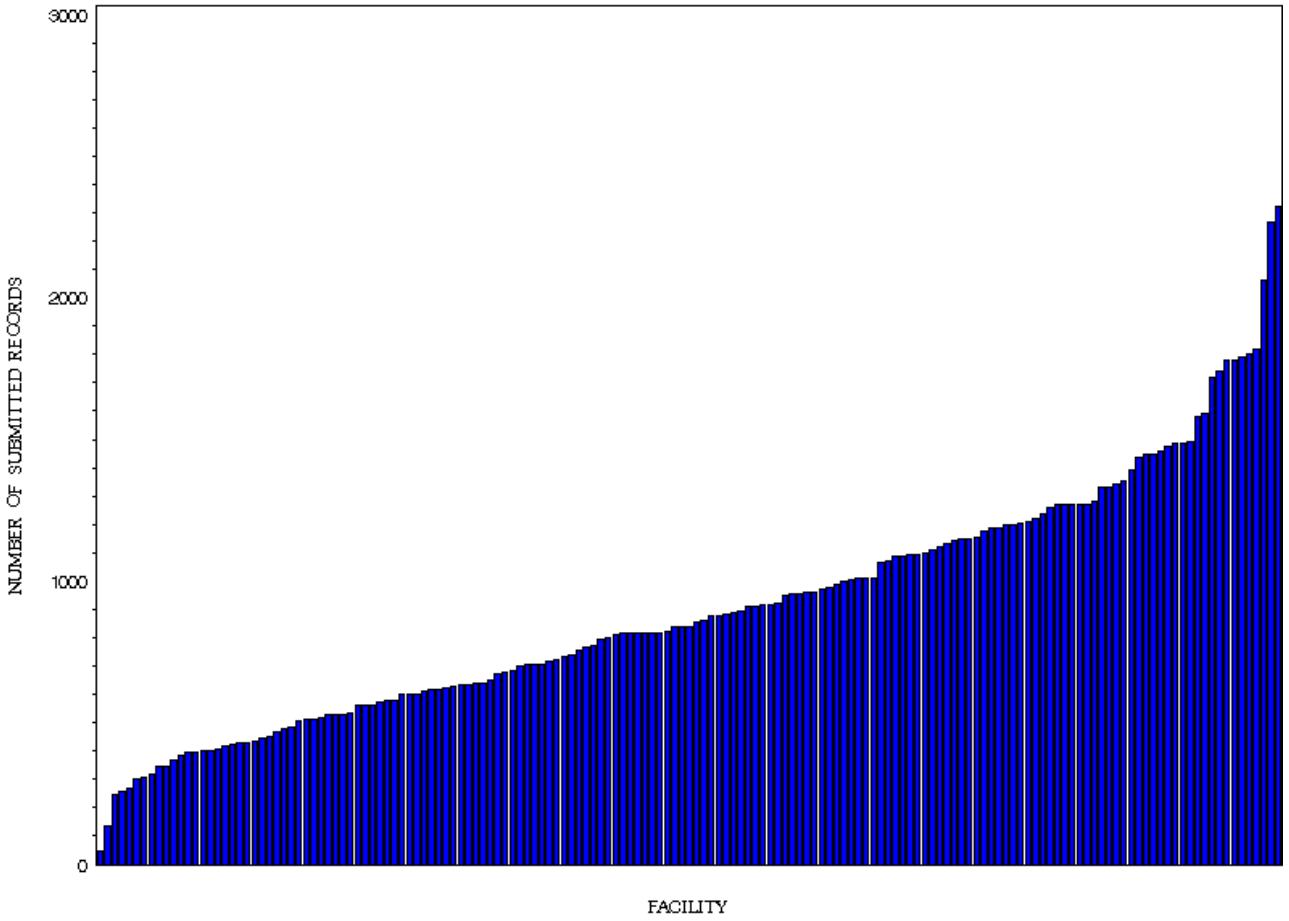
Number of Cases Submitted per Facility for Level I Facilities



Only cases with valid trauma diagnosis code per the NTDB criteria are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 50

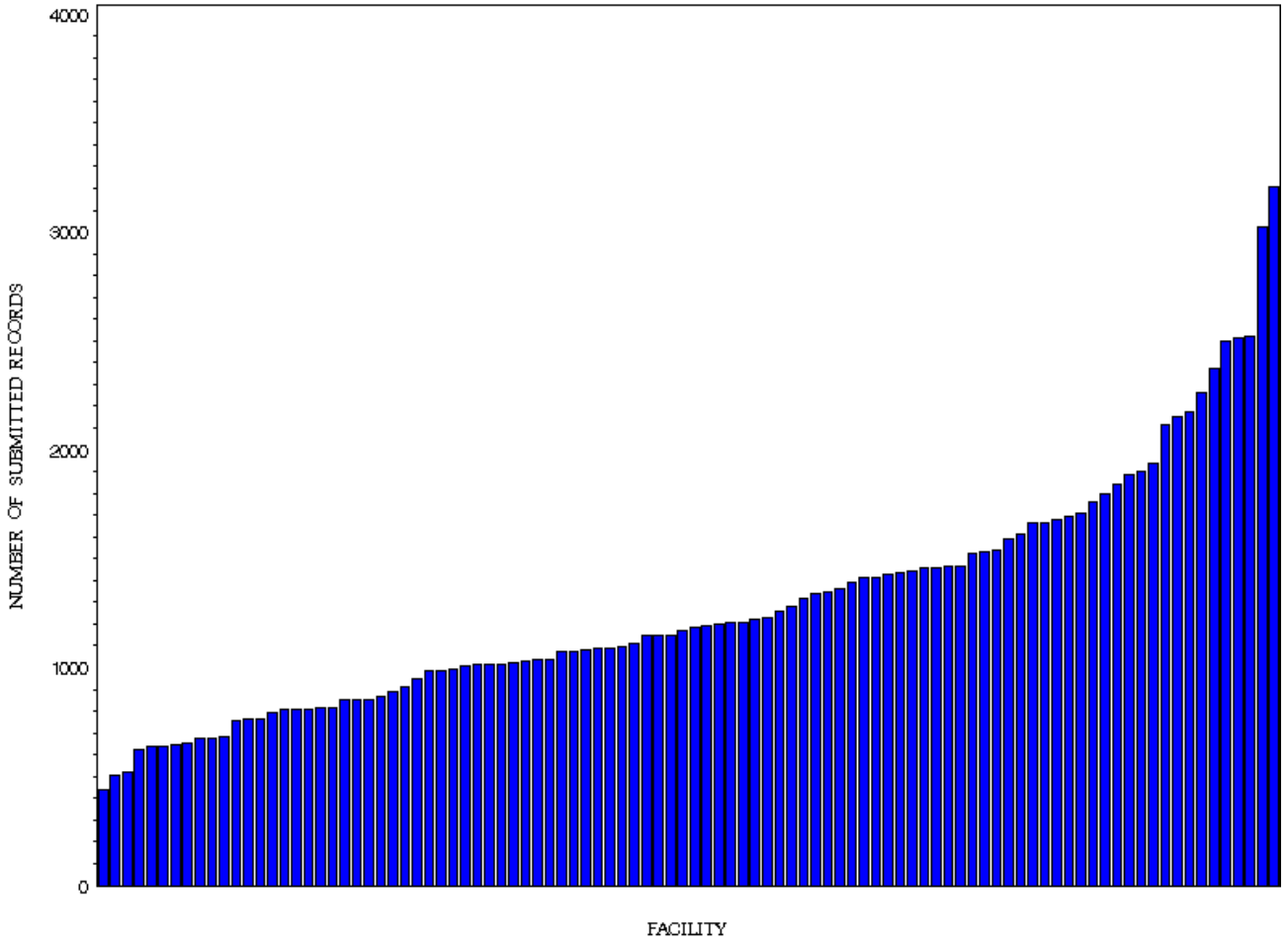
Number of Cases Submitted per Facility for Level II Facilities with Bed Size ≤ 400 Beds



Only cases with valid trauma diagnosis code per the NTDB criteria are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 51

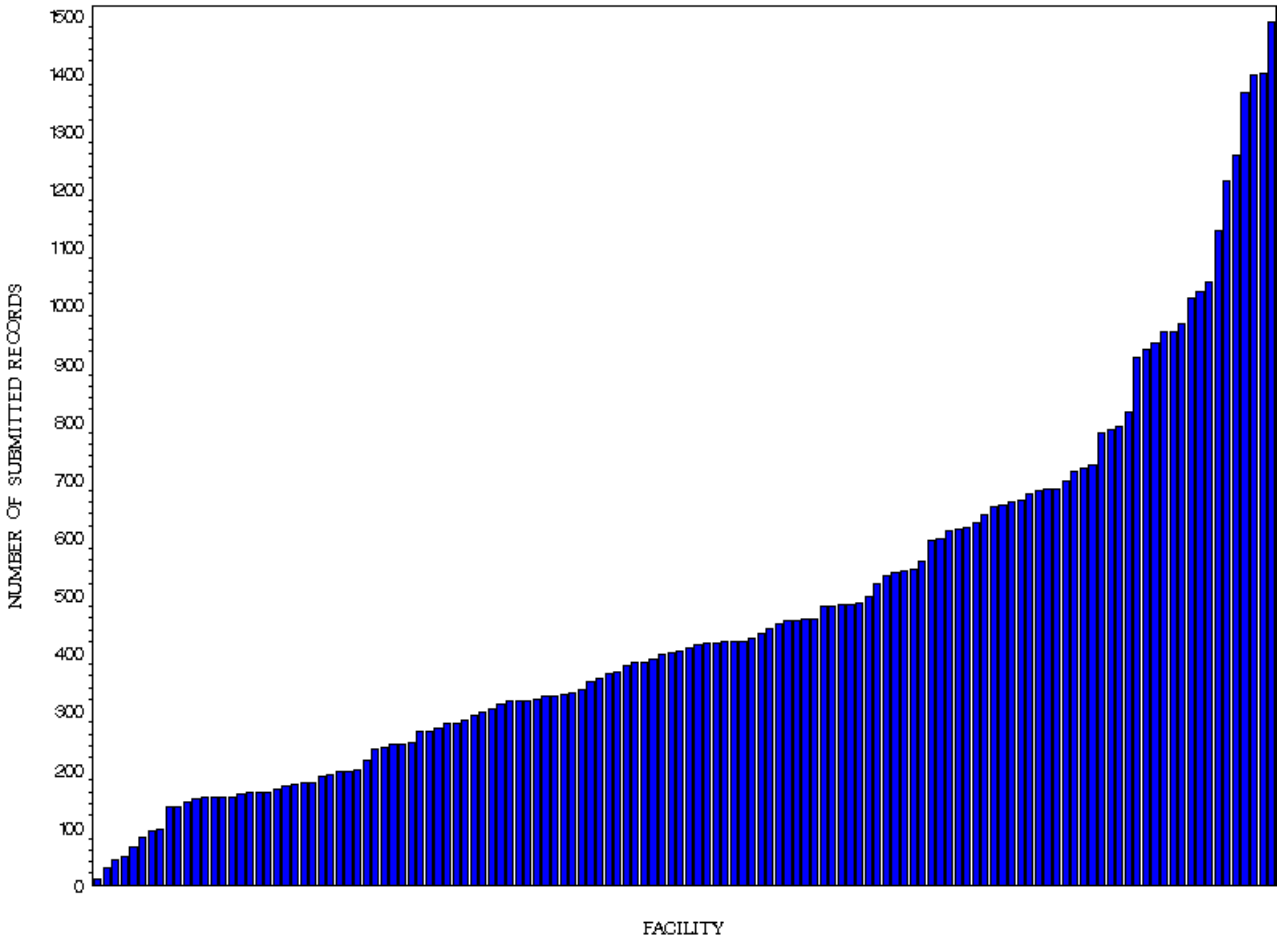
Number of Cases Submitted per Facility for Level II Facilities with Bed Size > 400 Beds



Only cases with valid trauma diagnosis code per the NTDB criteria are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 52

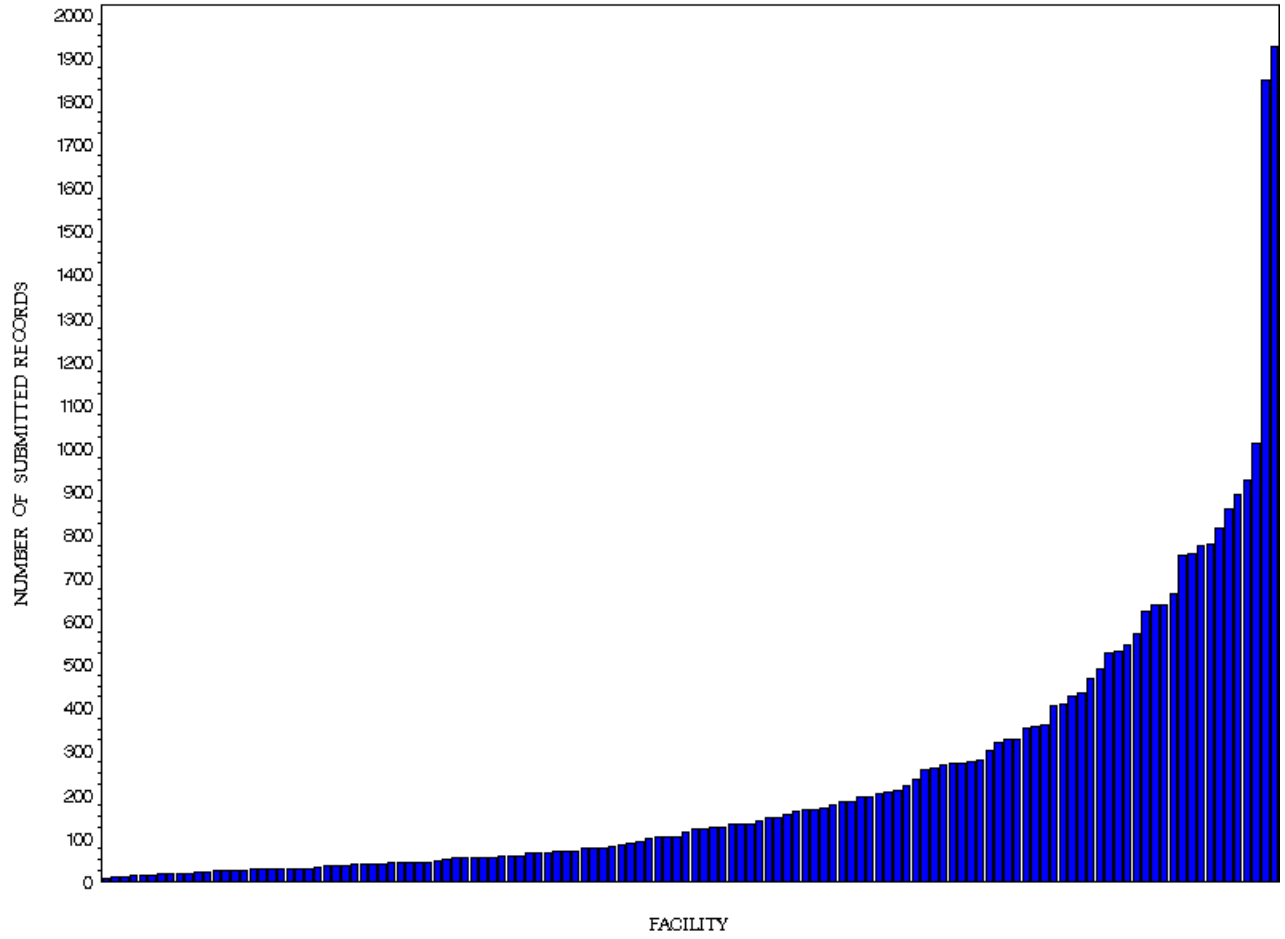
Number of Cases Submitted per Facility for Level III Facilities



Only cases with valid trauma diagnosis code per the NTDB criteria are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 53

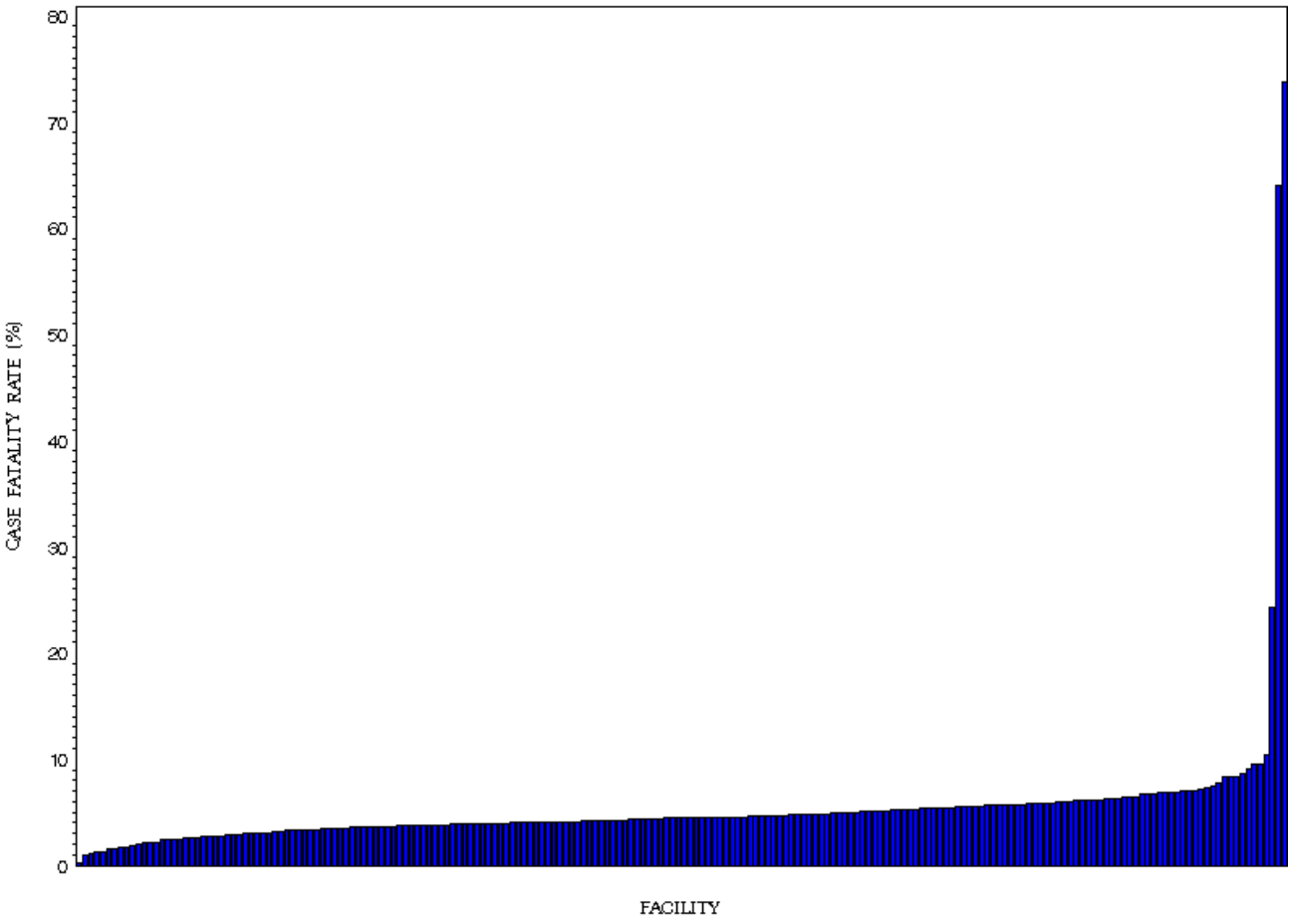
Number of Cases Submitted per Facility for Level IV Facilities and Facilities with Designation Other or Not Applicable



Only cases with valid trauma diagnosis code per the NTDB criteria are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 54

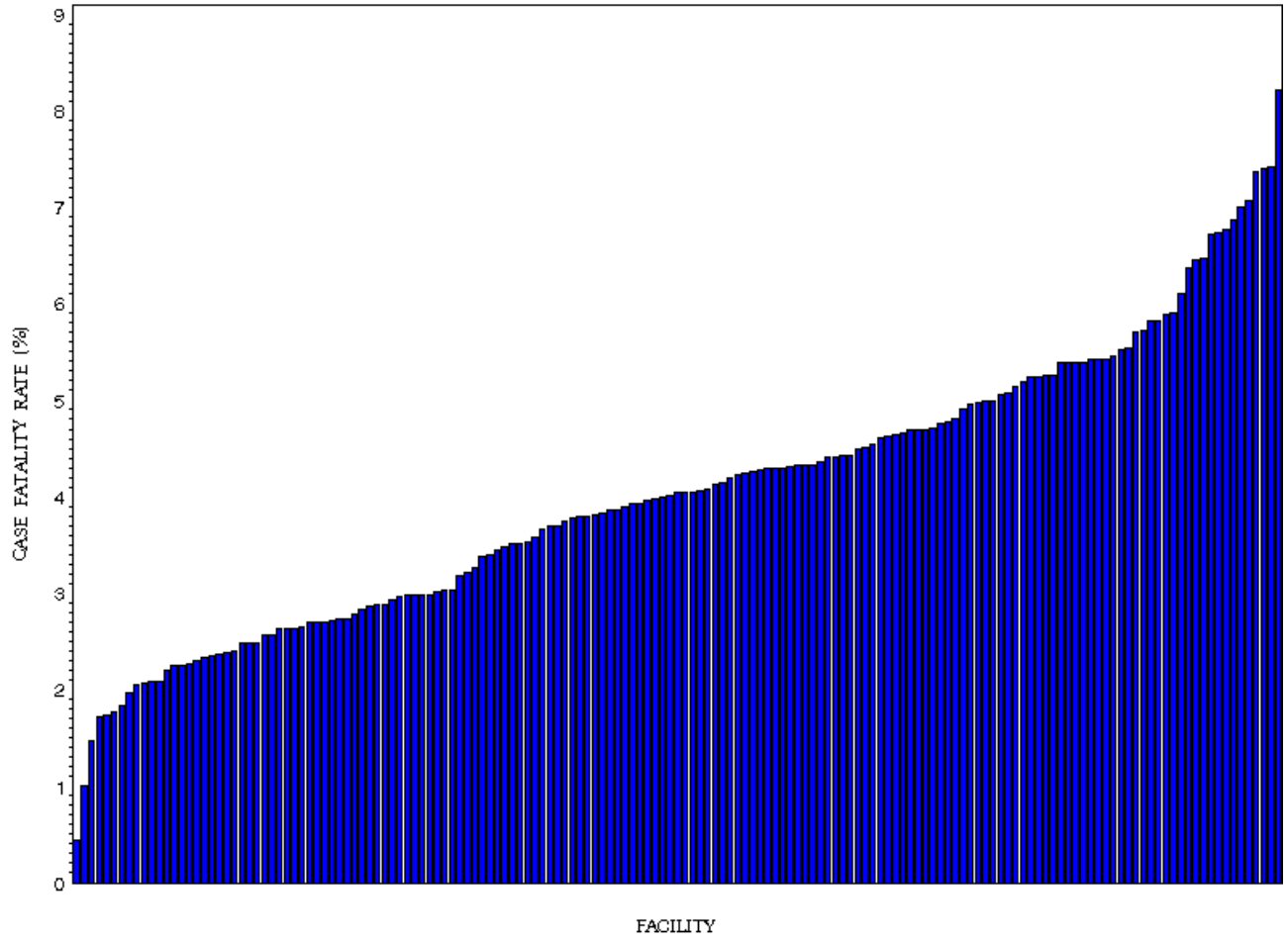
Case Fatality Rate per Facility for Level I Facilities



All deaths, including dead on arrival, are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 55

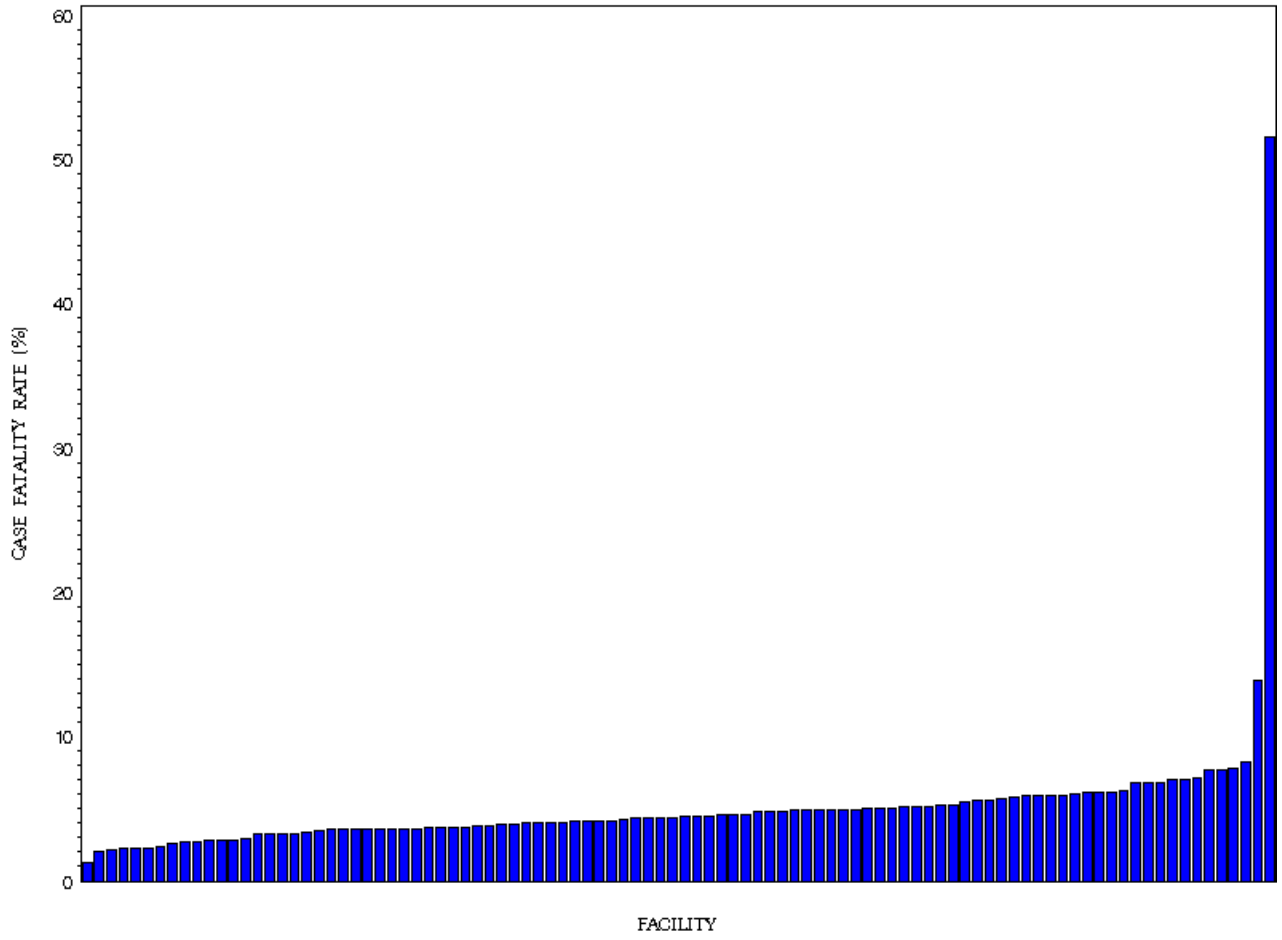
Case Fatality Rate per Facility for Level II Facilities with Bed Size ≤ 400 Beds



All deaths, including dead on arrival, are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 56

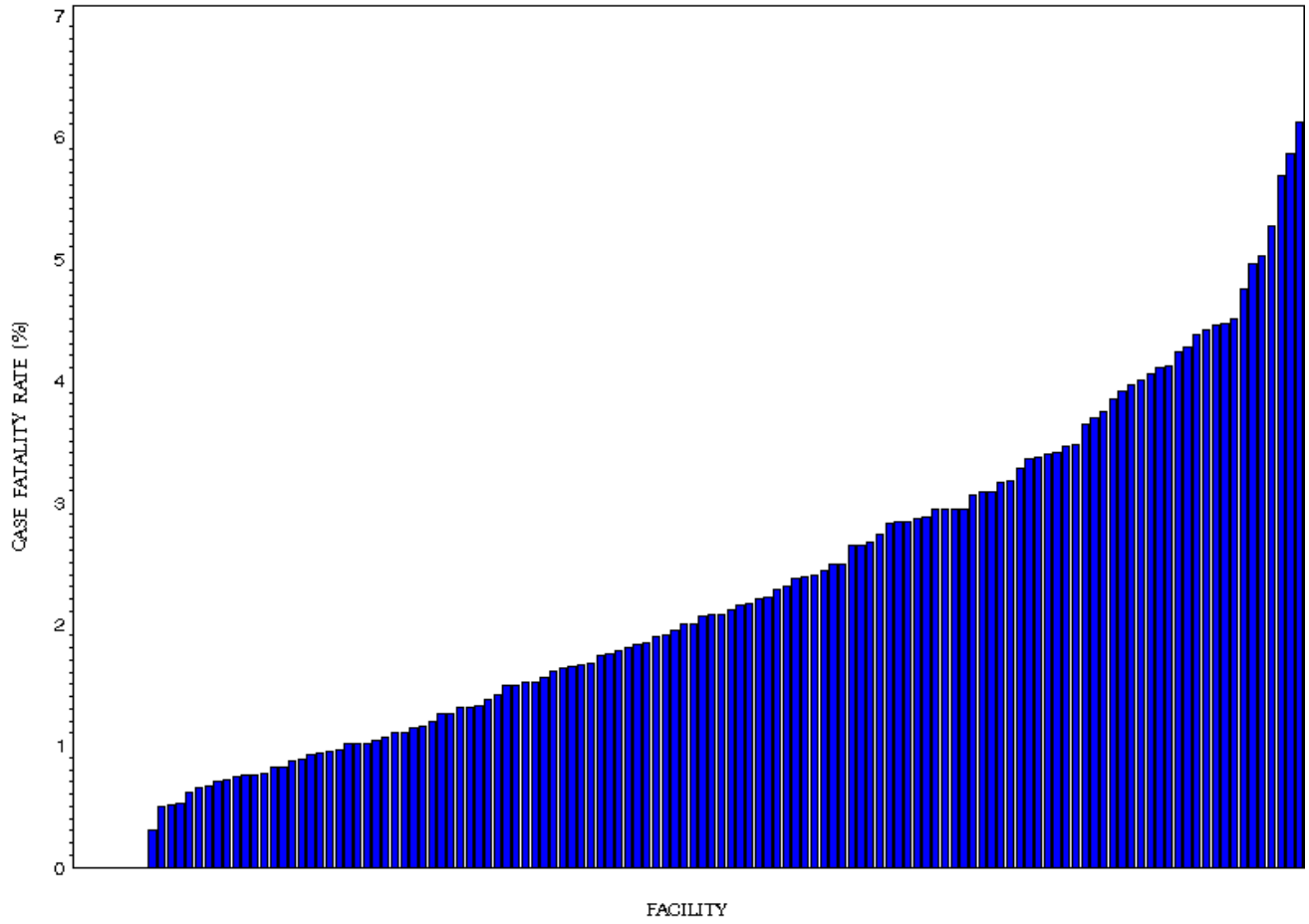
Case Fatality Rate per Facility for Level II Facilities with Bed Size > 400 Beds



All deaths, including dead on arrival are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 57

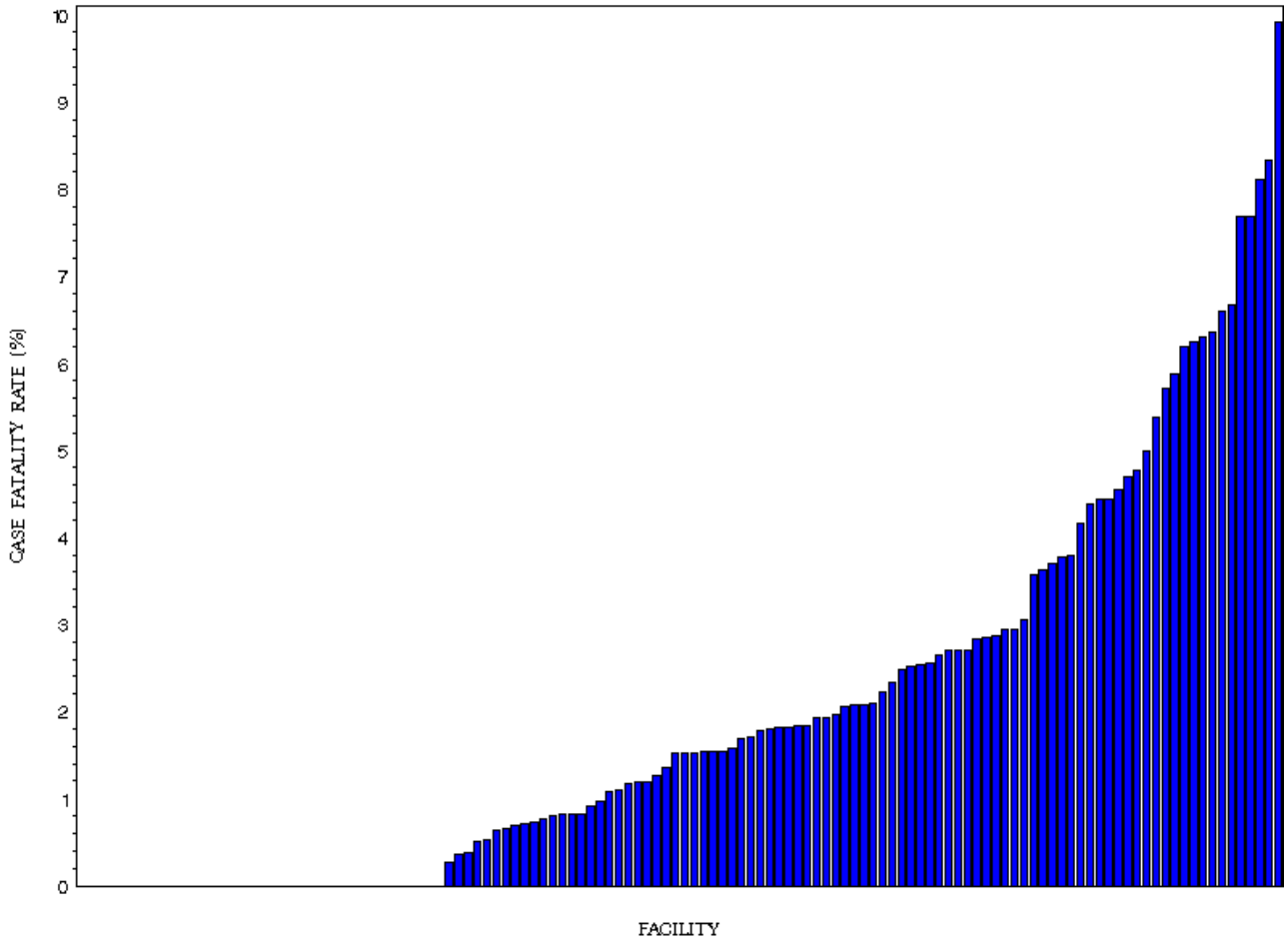
Case Fatality Rate per Facility for Level III Facilities



Eight facilities out of the 132 Level III facilities had a case fatality rate of 0% reported and are therefore not visible on the graph. All deaths, including dead on arrival, are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 58

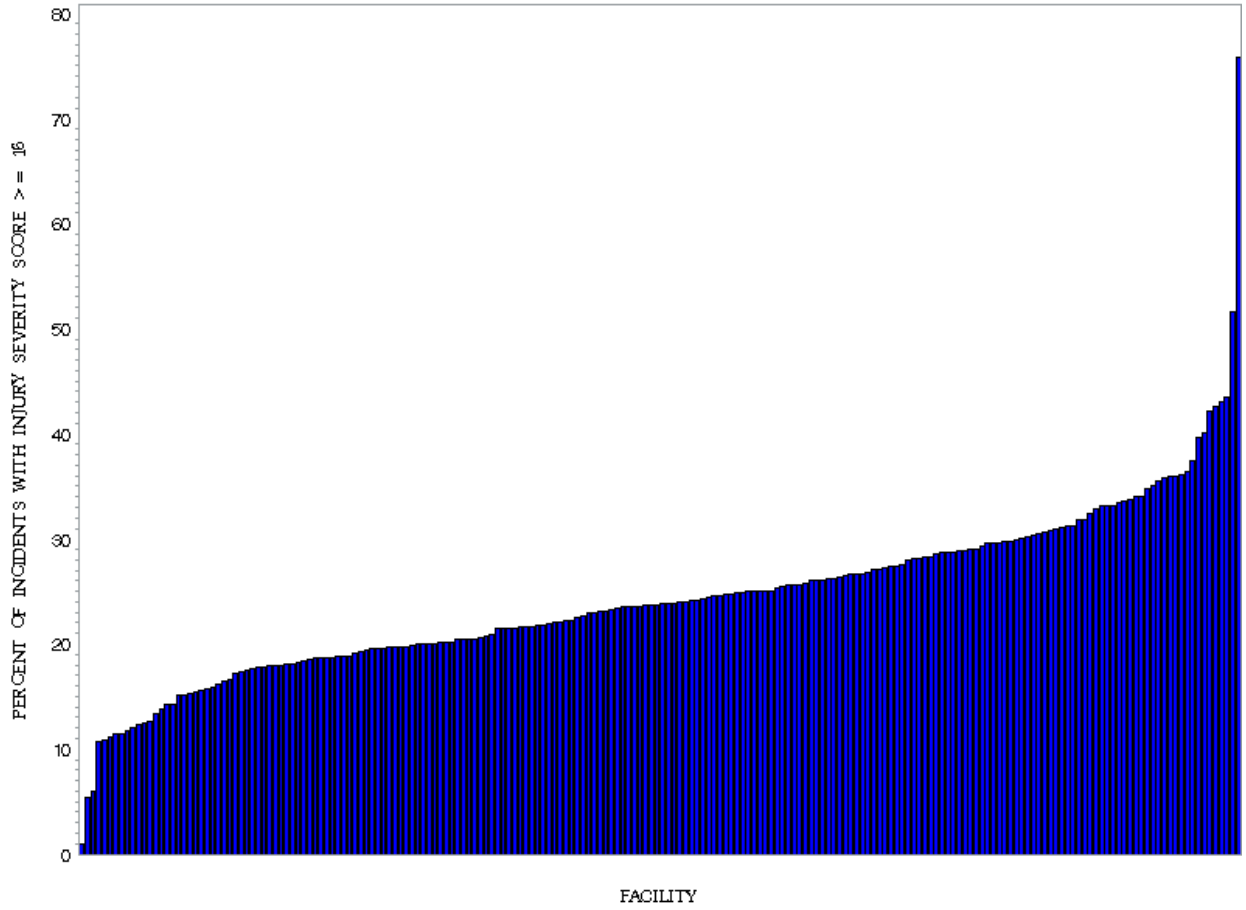
Case Fatality Rate per Facility for Level IV Facilities and Facilities with Designation Other or Not Applicable



Thirty-nine facilities out of the 128 facilities had a case fatality rate of 0% reported and are therefore not visible on the graph. All deaths, including dead on arrival, are included in the analysis. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 59

Percentage of Cases with ISS ≥ 16 per Facility for Level I Facilities

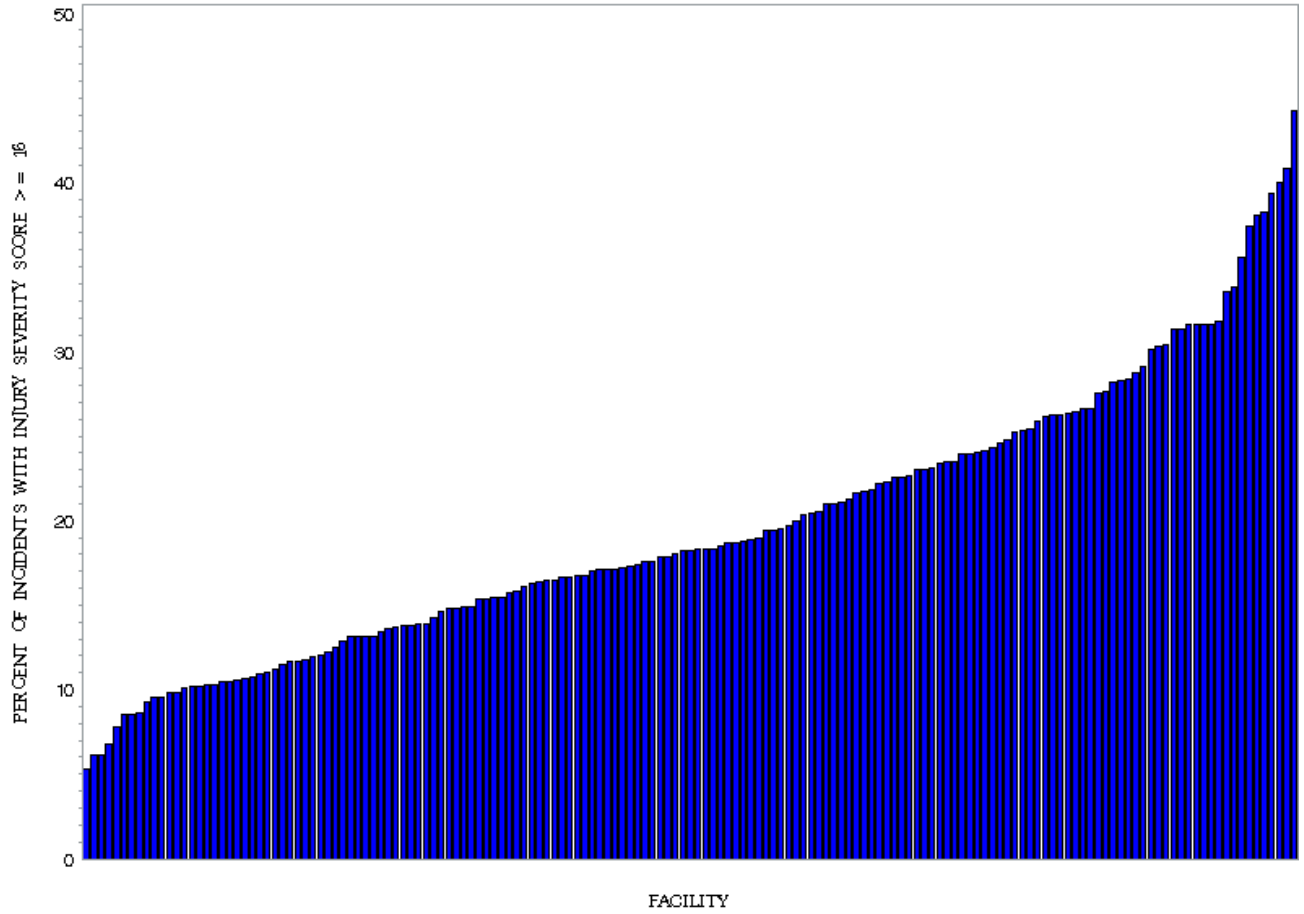


The ISS score calculated for all records is based on the AIS98 Crosswalk. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Injury Severity Score tables are generated using AIS98 Crosswalked ISS. Injury Severity Score definitions can be found in Appendix B.

Figure 60

Percentage of Cases with ISS ≥ 16 per Facility for Level II Facilities with Bed Size ≤ 400 Beds

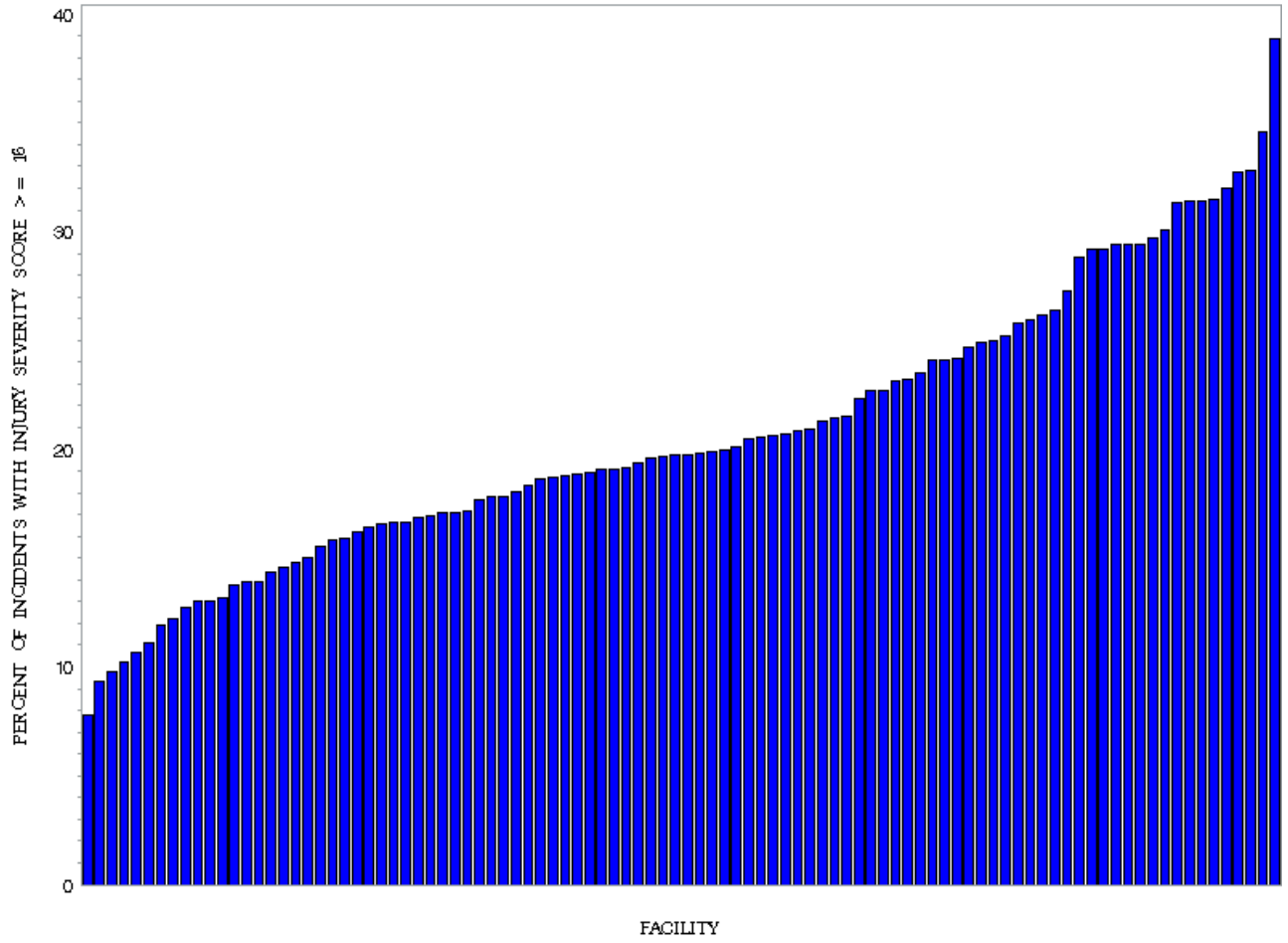


Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Injury Severity Score tables are generated using AIS98 Crosswalked ISS. Injury Severity Score definitions can be found in Appendix B.

Figure 61

Percentage of Cases with ISS ≥ 16 per Facility for Level II Facilities with Bed Size > 400 Beds

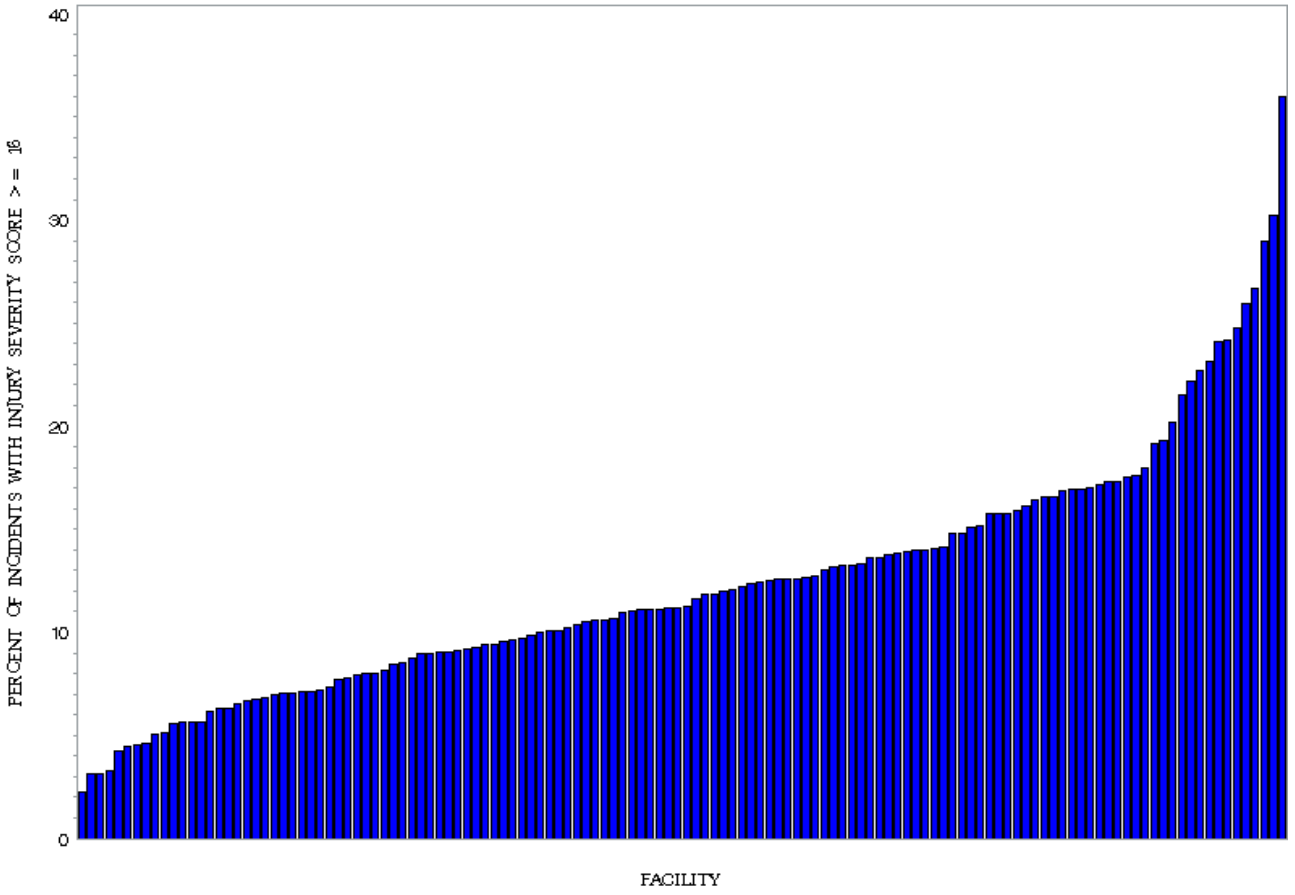


Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Injury Severity Score tables are generated using AIS98 Crosswalked ISS. Injury Severity Score definitions can be found in Appendix B.

Figure 62

Percentage of Cases with ISS ≥ 16 per Facility for Level III Facilities

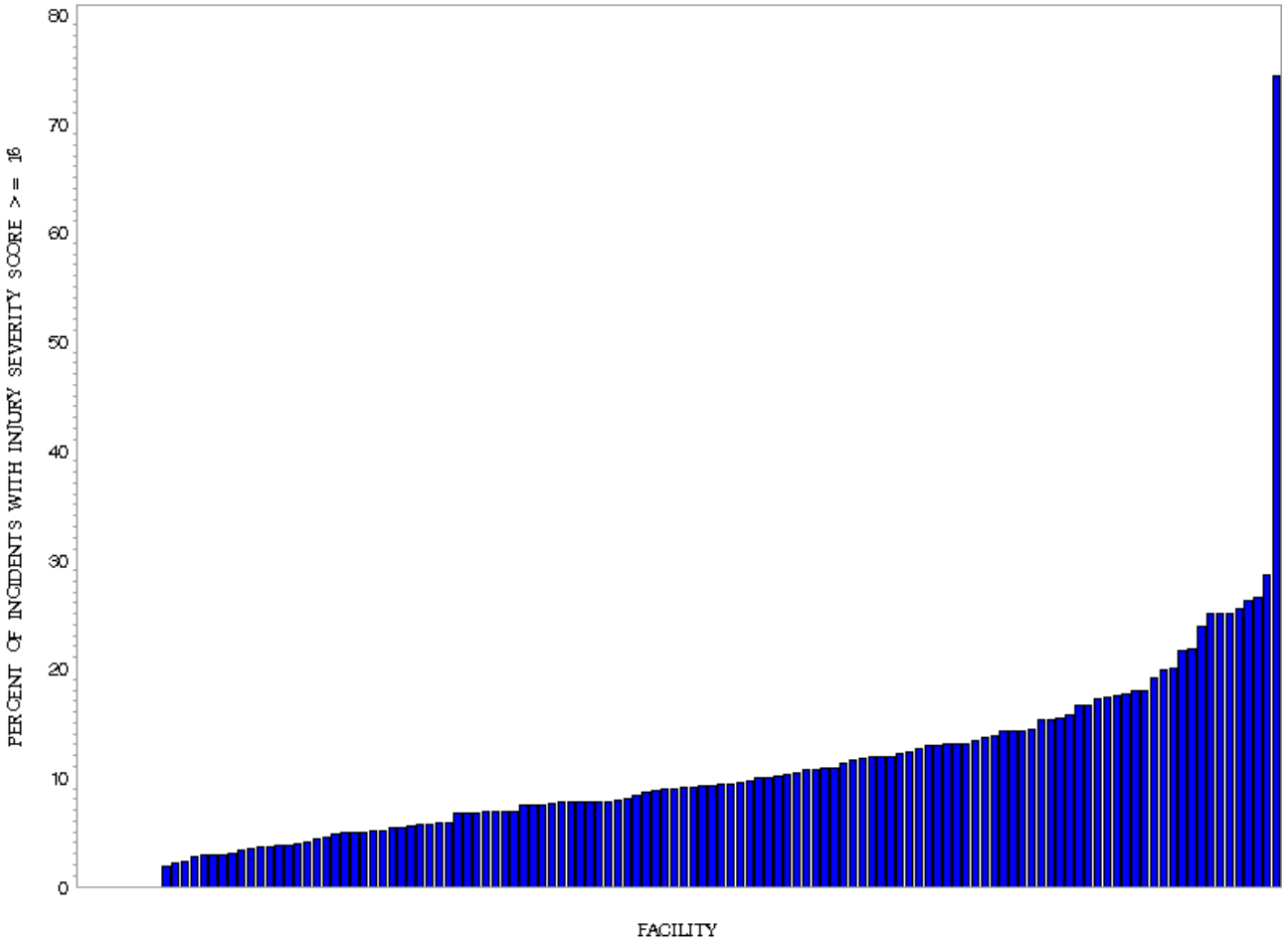


Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 63

Percentage of Cases with ISS ≥ 16 per Facility for Level IV Facilities and Facilities with Designation Other or Not Applicable

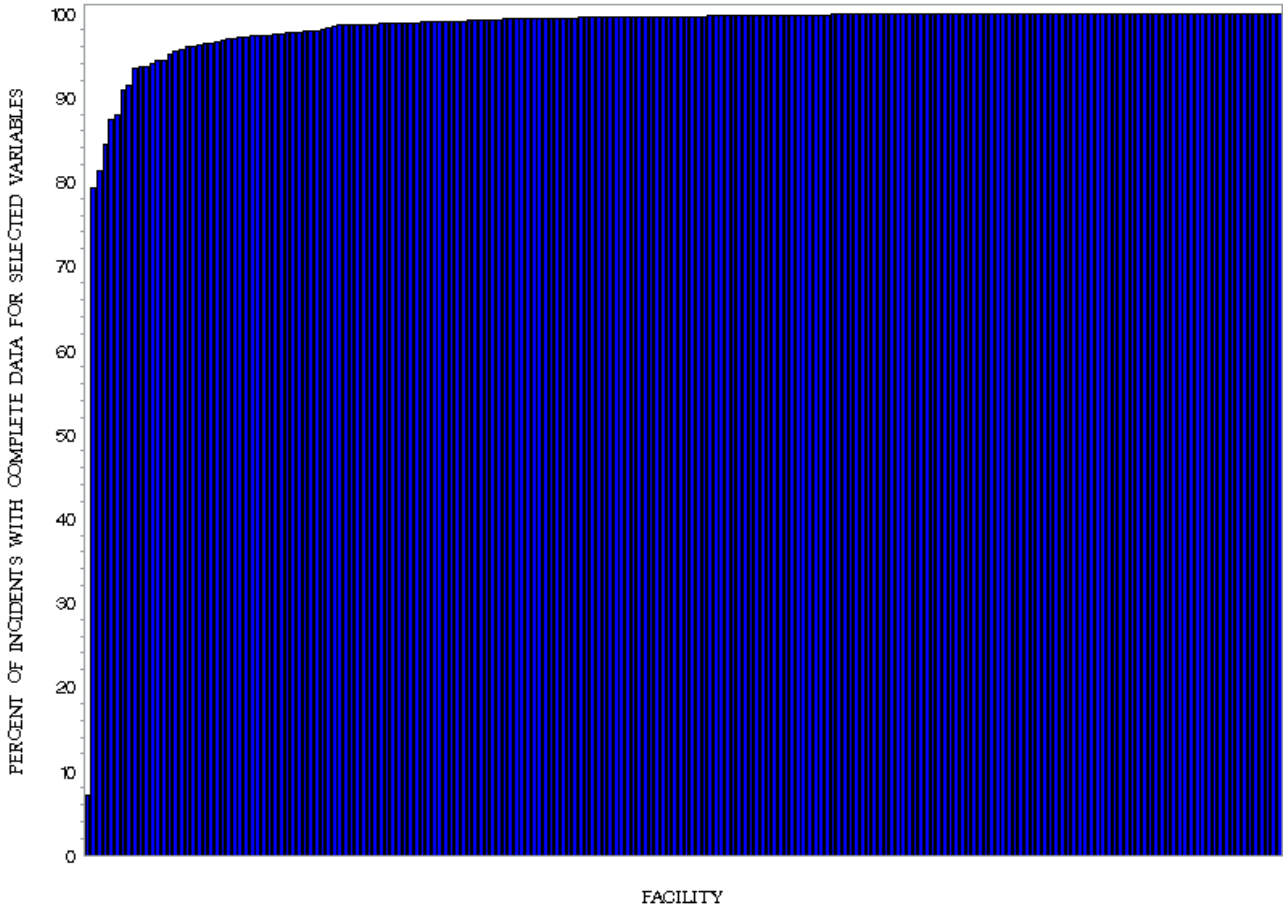


Nine out of 128 facilities had no incidents with ISS ≥16 and are therefore not visible on the graph.
Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 64

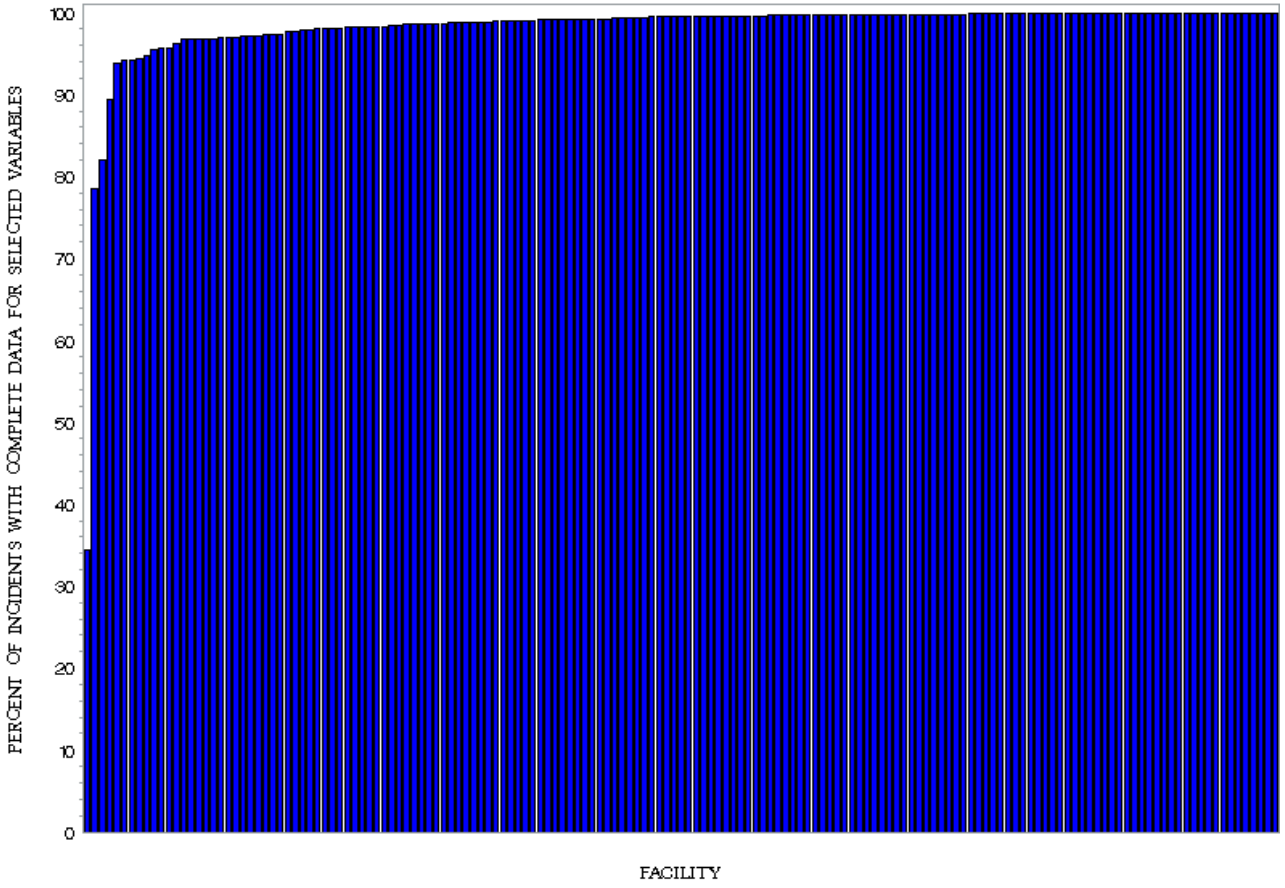
Data Completeness per Facility for Level I Facilities



An incident was classified as not complete if any of the following key variables were not known/not documented: Age, Gender, Primary E-Code, Locally Submitted Injury Severity Score, ED/Hospital Discharge Disposition, and Length of Stay. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 65

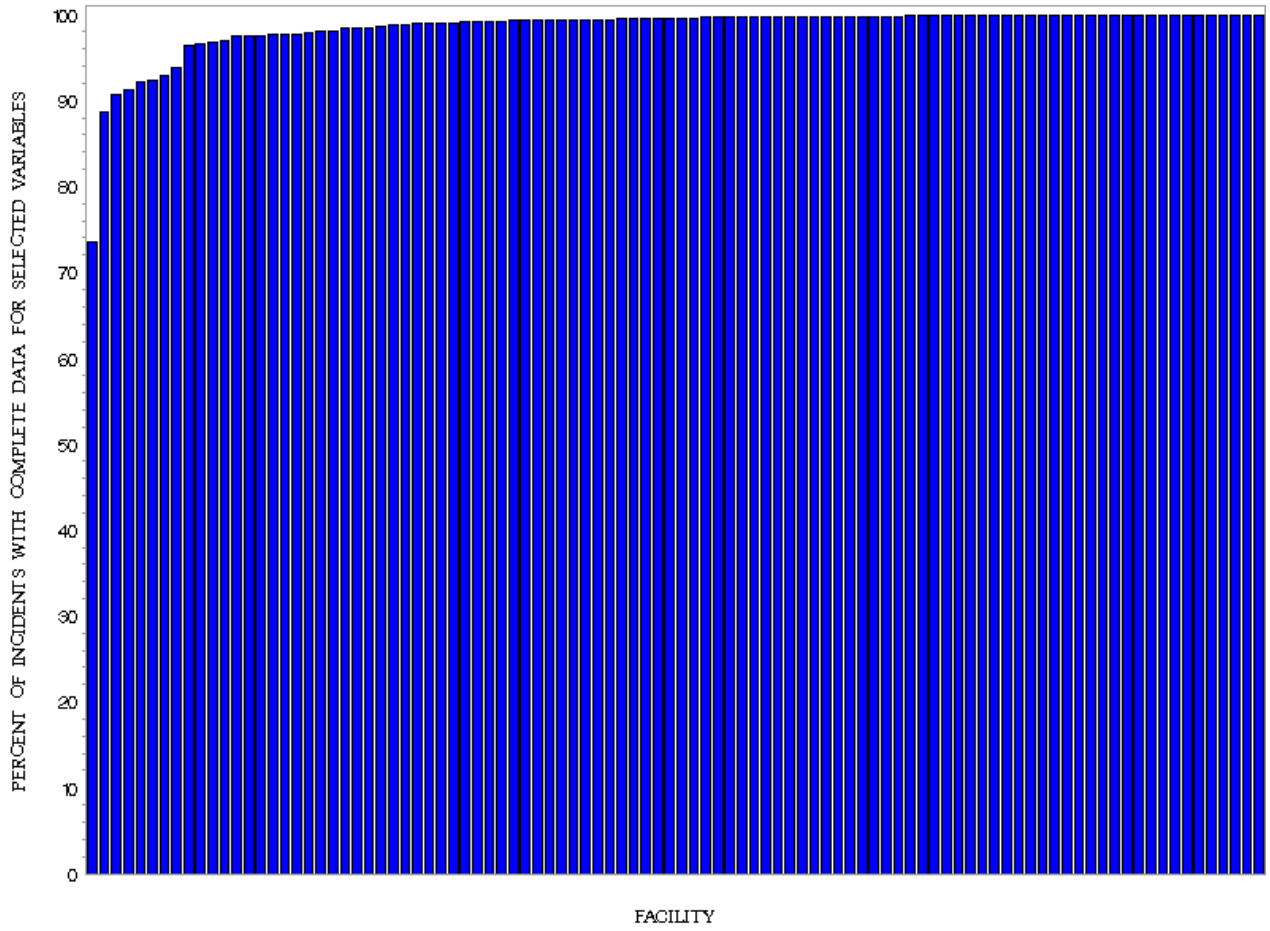
Data Completeness per Facility for Level II Facilities with Bed Size ≤ 400 Beds



An incident was classified as not complete if any of the following key variables were not known/not documented: Age, Gender, Primary E-Code, Locally Submitted Injury Severity Score, ED/Hospital Discharge Disposition, and Length of Stay. Trauma level is based on ACS verification and state designation, however, pediatric hospitals are not included in the analysis.

Figure 66

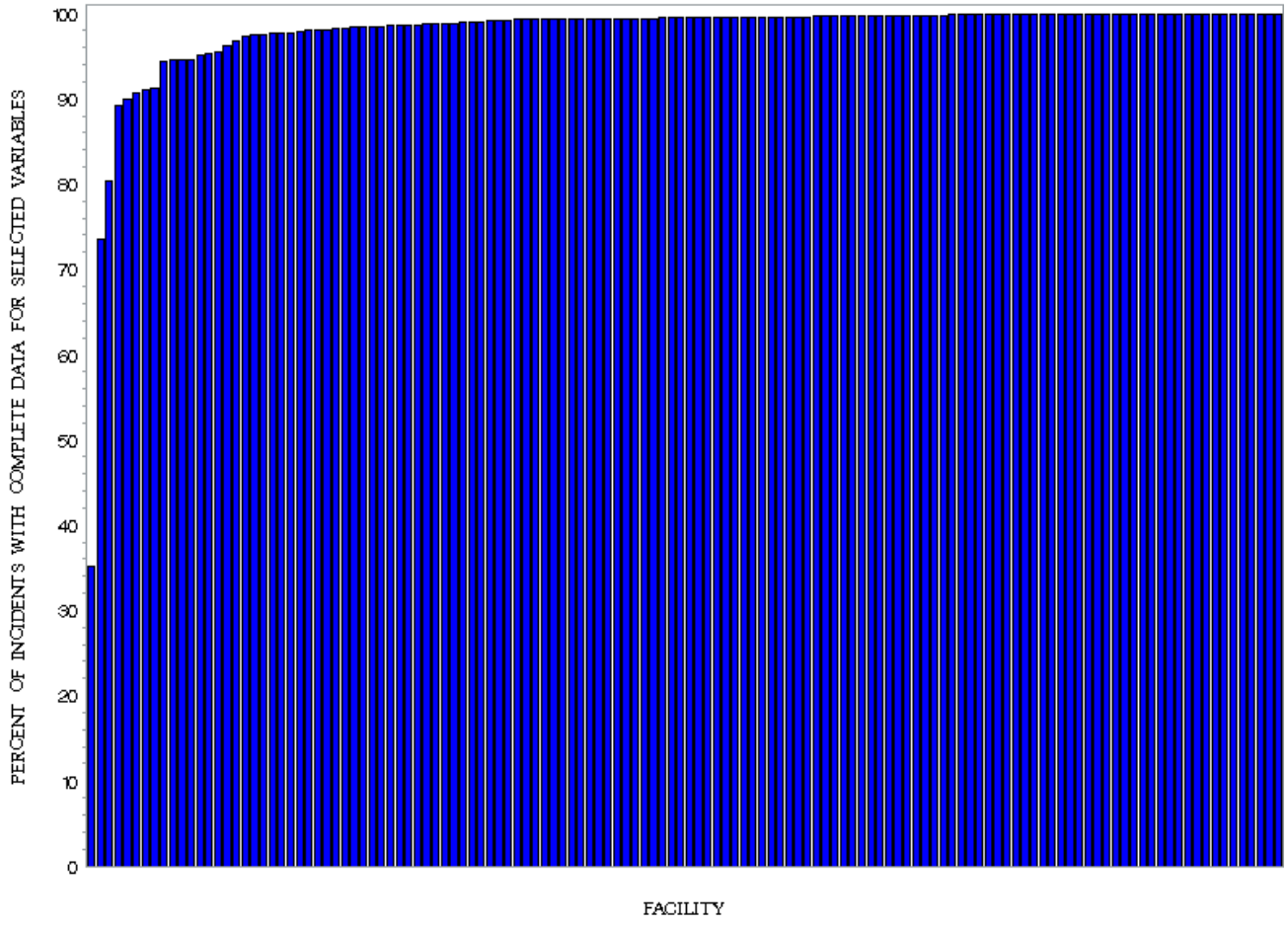
Data Completeness per Facility for Level II Facilities with Bed Size > 400 Beds



An incident was classified as not complete if any of the following key variables were not known/not documented: Age, Gender, Primary E-Code, Locally Submitted Injury Severity Score, ED/Hospital Discharge Disposition, and Length of Stay. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 67

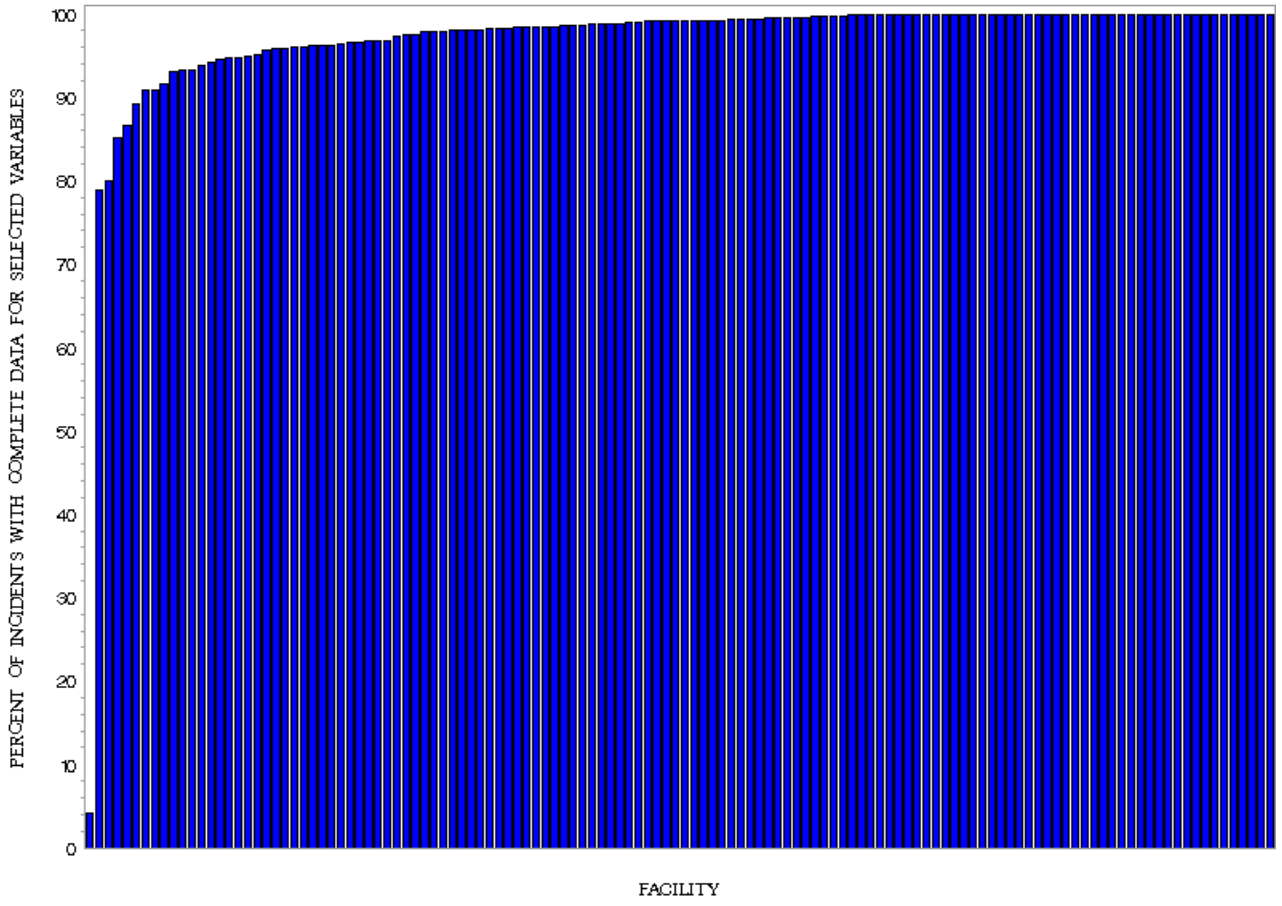
Data Completeness per Facility for Level III Facilities



An incident was classified as not complete if any of the following key variables were not known/not documented: Age, Gender, Primary E-Code, Locally Submitted Injury Severity Score, ED/Hospital Discharge Disposition, and Length of Stay. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 68

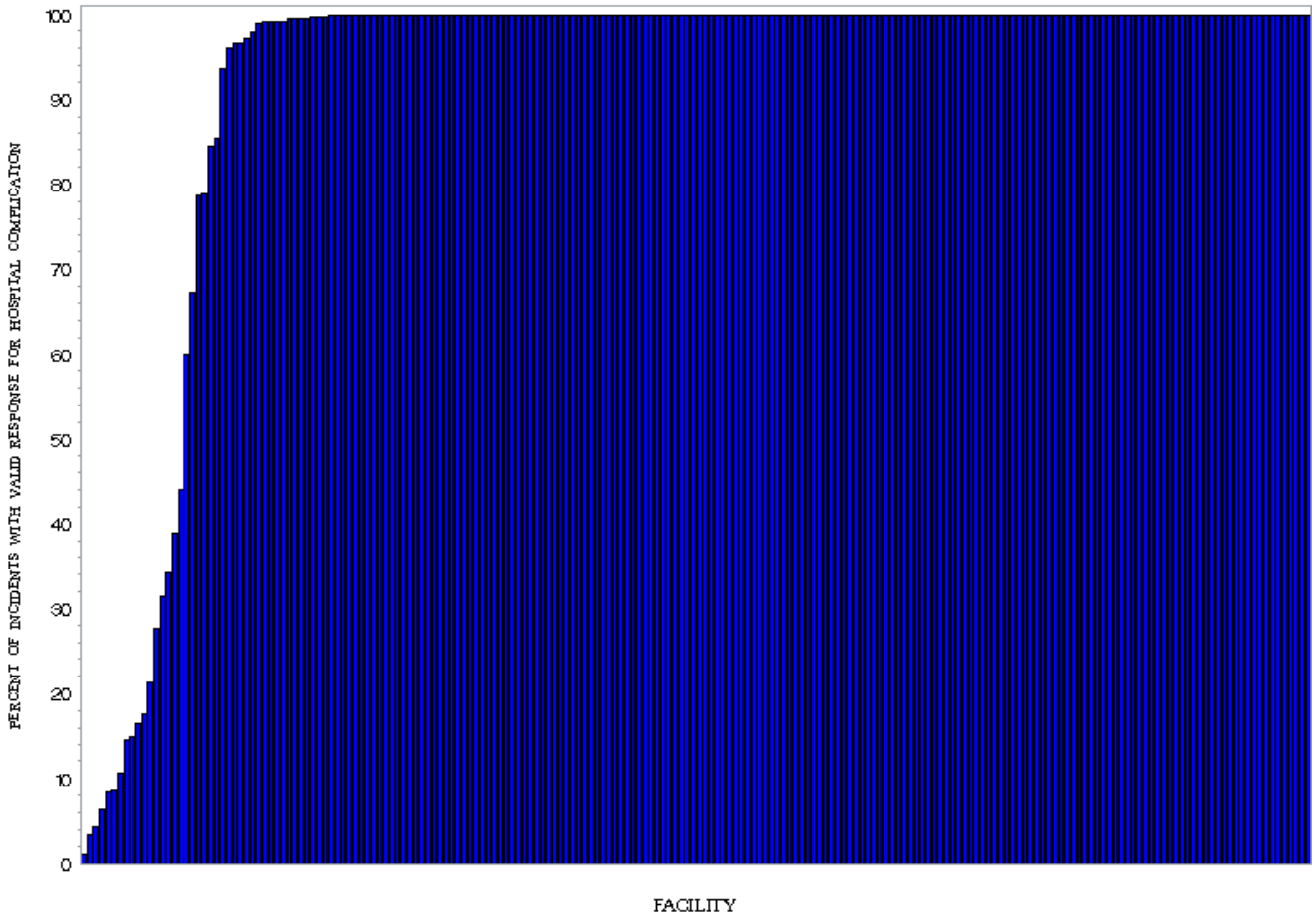
Data Completeness per Facility for Level IV Facilities and Facilities with Designation Other or Not Applicable



An incident was classified as not complete if any of the following key variables were not known/not documented: Age, Gender, Primary E-Code, Locally Submitted Injury Severity Score, ED/Hospital Discharge Disposition, and Length of Stay. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 69

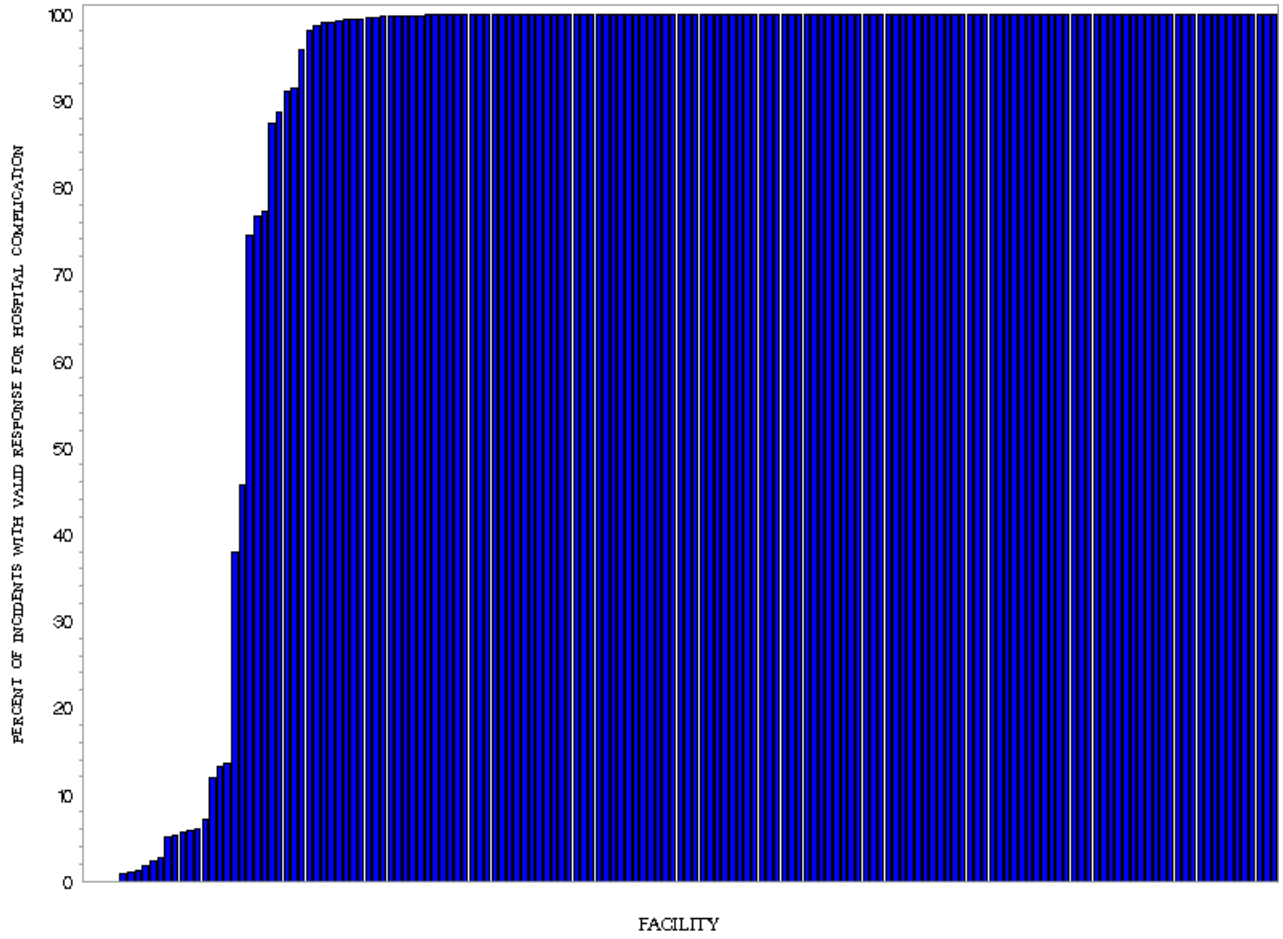
Complications Reported per Facility for Level I Facilities



Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 70

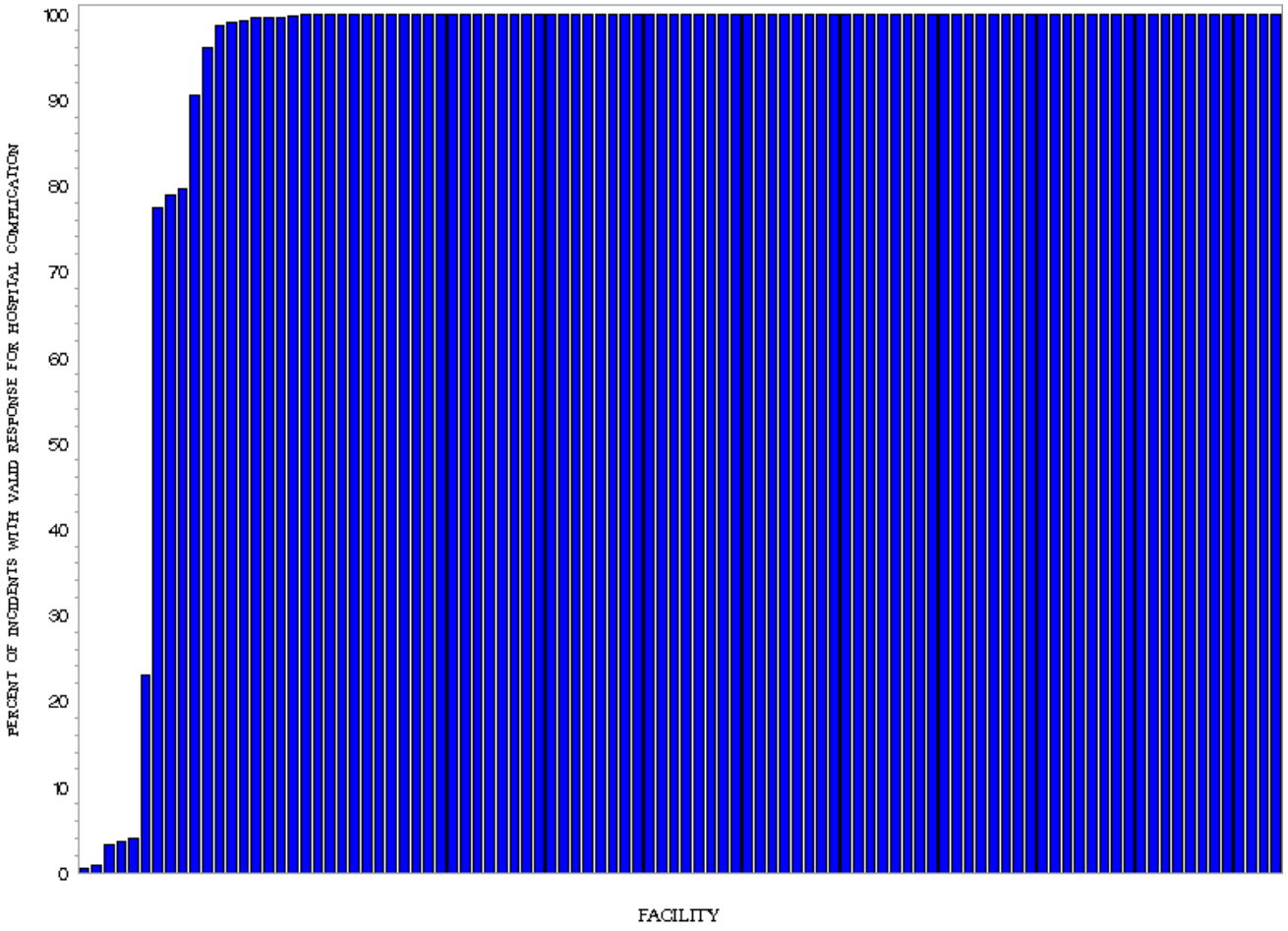
Complications Reported per Facility for Level II Facilities with Bed Size ≤ 400 Beds



Five out of 161 facilities had 0% of the incidents with valid response for hospital complications, including Not applicable, and are therefore not visible on the graph. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 71

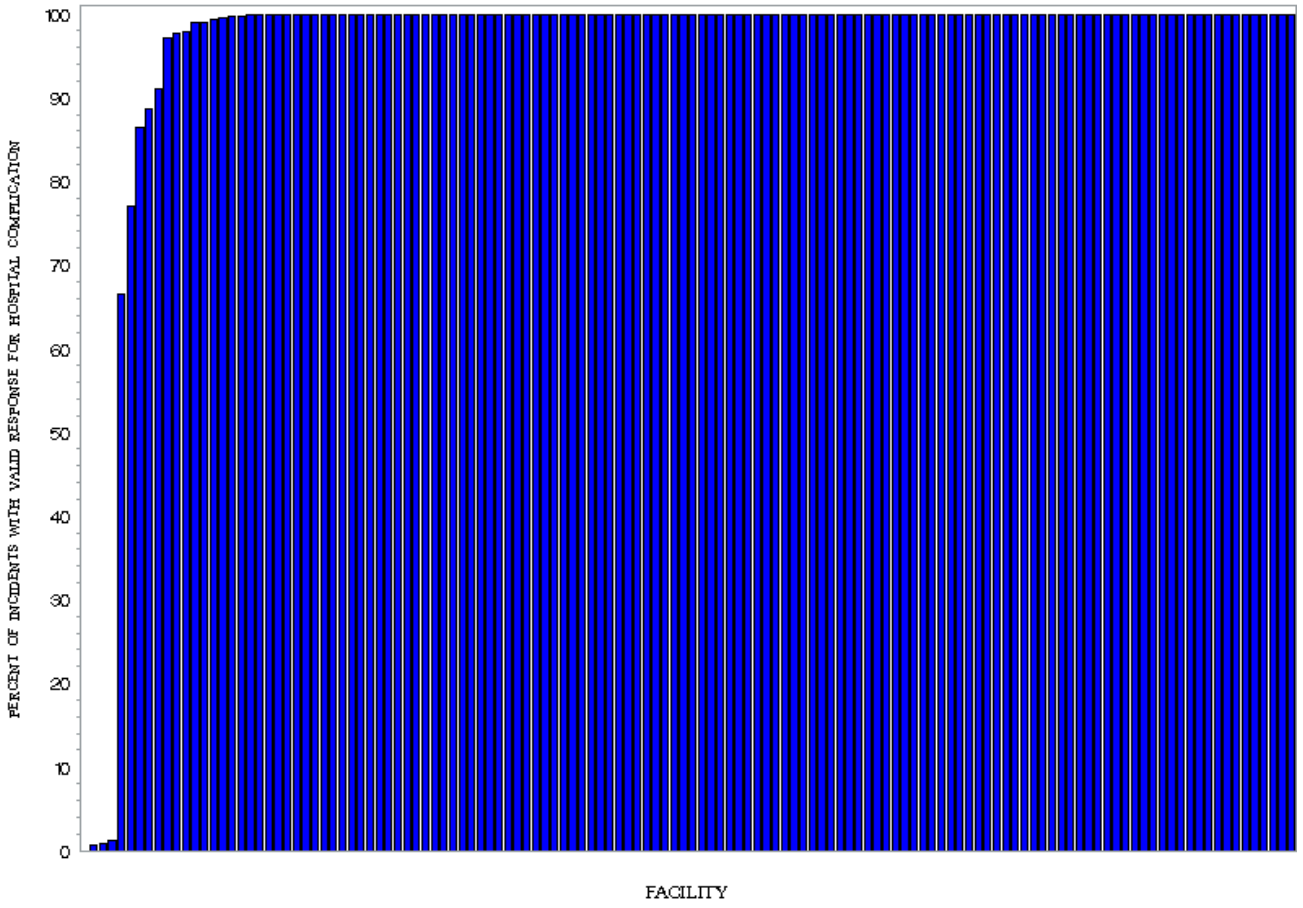
Complications Reported per Facility for Level II Facilities with Bed Size > 400 Beds



Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 72

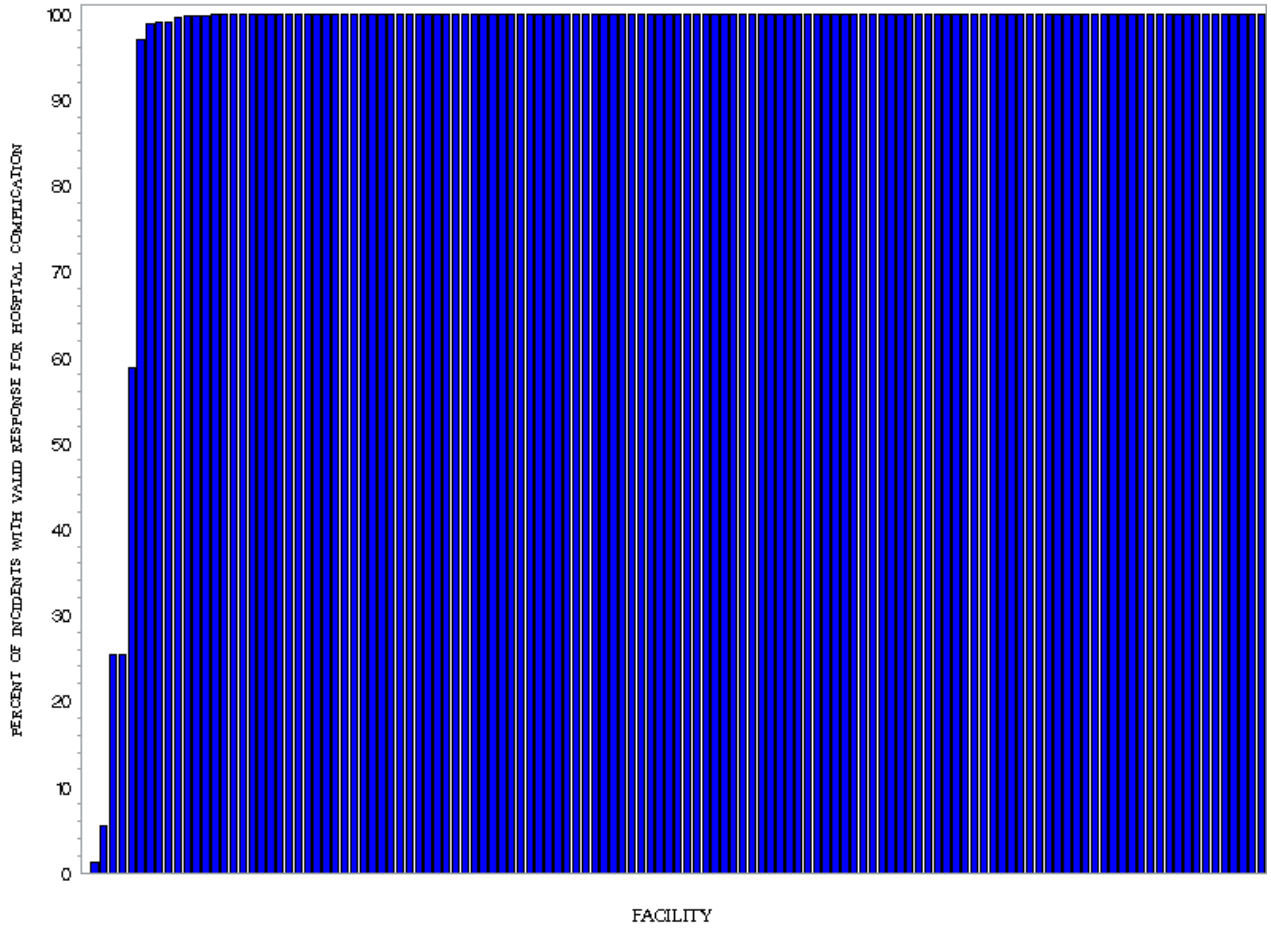
Complications Reported per Facility for Level III Facilities



One out of 132 facilities had 0% of the incidents with valid response for hospital complications, including Not applicable, and is therefore not visible on the graph. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

Figure 73

Complications Reported per Facility for Level IV Facilities and Facilities with Designation Other or Not Applicable



One out of 128 facilities had 0% of the incidents with valid response for hospital complications, including Not applicable, and are therefore not visible on the graph. Trauma level is based on ACS verification and state designation; however, pediatric hospitals are not included in the analysis.

APPENDICES

Definition of a Trauma Patient

Definition of a Trauma Patient Adopted by National Trauma Data Bank®

At least one of the following injury diagnostic codes defined in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM): 800-959.9

Excluding the following isolated injuries:

- 905-909.9 (late effects of injury)
- 910-924.9 (superficial injuries, including blisters, contusions, abrasions, and insect bites)
- 930-939.9 (foreign bodies)

AND MUST INCLUDE ONE OF THE FOLLOWING IN ADDITION TO (ICD-9-CM 800-959.9):

- Hospital admission as defined by your trauma registry inclusion criteria; **OR**
- Patient transfer via EMS transport (including air ambulance) from one hospital to another hospital; **OR**
- Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status)

APPENDIX B

Comparative Injury Severity Score (ISS) Definitions

Local ISS: Injury Severity Scores as submitted by the facility.

AIS Submitted: Injury Severity Scores as calculated by the NTDB from AIS codes submitted by the facility.

AIS98 Crosswalked: Injury Severity Scores as calculated using AIS submitted by hospitals and then crosswalked to AIS98. If hospital does not submit AIS98, then ISS is based on AIS derived from ICDMAP-90.

AIS ICDMAP-90: Injury Severity Scores as calculated by the NTDB using ICD-9-CM diagnosis codes that are mapped to AIS90 codes using ICDMAP-90 software.

APPENDIX C

E-Code Grouping: Recommended Framework for E-Code Groupings for Presenting Injury Mortality and Morbidity Data

Mechanism/Cause	Manner/Intent				
	Unintentional	Self-Inflicted	Assault	Undetermined	Other
Cut/pierce	E920.0-.9	E956	E966	E986	E974
Drowning/ submersion	E830.0-.9, E832.0-.9, E910.0-.9	E954	E964	E984	
Fall	E880.0-E886.9, E888	E957.0-.9	E968.1	E987.0-.9	
Fire/burn[3]	E890.0-E899, E924.0-.9	E958.1,.2,.7	E961, E968.0,.3, E979.3	E988.1,.2,.7	
Fire/flame[3]	E890.0-E899	E958.1	E968.0, E979.3	E988.1	
Hot object/ substance	E924.0-.9	E958.2,.7	E961,E968.3	E988.2,37	
Firearm[3]	E922.0-.3,.8,.9	E955.0-.4	E965.0-4, E979.4	E985.0-.4	E970
Machinery	E919 (.0-.9)				
Motor vehicle traffic[2,3]	E810-E819 (.0-.9)	E958.5	E968.5	E988.5	
Occupant	E810.-E819 (.0,.1)				
Motorcyclist	E810-E819 (.2,.3)				
Pedal cyclist	E810-E819 (.6)				
Pedestrian	E810-E819 (.7)				
Unspecified	E810-E819 (.9)				
Pedal cyclist, other	E800-E807 (.3) E820-E825 (.6), E826.1,.9 E827-E829(.1)				
Pedestrian, other	E800-E807(.2) E820-E825(.7) E826-E829(.0)				

APPENDIX C

E-Code Grouping: Recommended Framework for E-Code Groupings for Presenting Injury Mortality and Morbidity Data

Mechanism/Cause	Manner/Intent				
	Unintentional	Self-Inflicted	Assault	Undetermined	Other
Transport, other	E800-E807 (.0,.1,.8,.9) E820-E825 (.0-.5,.8,.9) E826.2-.8 E827-E829 (.2-.9) E831.0-.9, E833.0-E845.9	E958.6		E988.6	
Natural/environmental	E900.00-E909, E928.0-.2	E958.3		E958.3	
Bites/stings[3]	E905.0-.6,.9 E906.0-.4,.5,.9				
Overexertion	E927				
Poisoning	E850.0-E869.9	E950.0-E952.9	E962.0-.9, E979.6,.7	E980.0-E982.9	E972
Struck by, against	E916-E917.9		E960.0; E968.2		E973, E975
Suffocation	E911-E913.9	E953.0-.9	E963	E983.0-.9	
Other specified and classifiable[3,4]	E846-E848, E914-E915 E918, E921.0-39, E922.4,.5 E923.0-.9, E925.0-E926.9 E928(.3-.5), E929.0-.5	E9555,.6,.7,.9 E958.0,.4	E960.1,E965.5-.9 E967.0-.9, E968.4,.6,.7 E979 (.0-.2,.5,.8,.9)	E985.5,.6,.7 E988.0,.4	E971, E978 E990-E994, E996 E997.0-.2
Unspecified	E887. E928.9, E929.9	E958.9	E968.9	E988.9	E976, E997.9
All Injury[3]	E800-E869, E880-E929	E950-E959	E960-E969, E979, E999.1	E980-E989	E970-E978, E990-E999.0
Adverse effects					E870-E879 E930.0-E949.9
Medical care					E870-E879
Drugs					E930.0-E949.9
All external causes					E800-E999

E-Code Grouping: Table Notes

[1]Includes legal intervention (E970-E978) and operations of war (E990-E999).
[2]Three 4th-digit codes (.4 [occupant of streetcar], .5 [rider of animal], .8 [other specified person]) are not presented separately because of small numbers. However, because they are included in the overall Motor vehicle traffic category, the sum of these categories can be derived by subtraction.
[3]Codes in bold are for morbidity coding only. For details see Table 2.
[4]E849 (place of occurrence) has been excluded from the matrix. For mortality coding, an *ICD-9* E849 code does not exist. For morbidity coding, an *ICD-9-CM* E849 code should never be first-listed E-code and should only appear as an additional code to specify the place of occurrence of the injury incident.
Note: ICD-9 E-codes for coding underlying cause of death apply to injury-related death data from 1979 through 1998. Then there is a new ICD-10 external cause of injury matrix that applies to death data from 1999 and after. This can be found on the National Center for Health Statistics website at http://www.cdc.gov/nchs/about/otheract/ice/projects.htm.

Reference MM WR 1997;46:1-30. Updated last time in 2009.

Yearly Comparisons Based on the NTDB National Sample Program

The National Trauma Data Bank® (NTDB), managed by the American College of Surgeons Committee on Trauma (ACS COT), is the largest aggregation of trauma data in the U. S. The NTDB contains more than 3 million patient records from trauma registries. Of the 453 U.S. hospitals initially identified by the Trauma Information Exchange Program (MacKenzie et al, 2003) as Level I or II centers, well over half have submitted data to the NTDB for at least one of the last 10 years the National Sample Program has been in existence. Since the NTDB is not population-based, but instead consists of centers that participate voluntarily, it is likely that their data will produce biased estimates and thus the inferences based on NTDB may not be valid at the national level.

Nationally representative administrative data on hospitalized patients are available in the National Hospital Discharge Survey (NHDS) or Nationwide Inpatient Sample (NIS). However, these lack the richness of trauma registry data, which contain detailed information on injury mechanisms, anatomic diagnoses, physiologic status, associated conditions, and hospital treatment.

The ACS was awarded a contract from the National Center for Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention (CDC) to develop the National Sample Program (NSP) to obtain a nationally representative sample of trauma patients treated in U.S. Level I and II trauma centers. The NSP is intended to enhance the NTDB by providing data from a probabilistic sample of trauma center hospitals nationwide to meet the broad range of trauma care assessment, clinical outcomes research, and injury surveillance needs. That is, the objective of the NSP is to provide annual estimates of patients treated at a Level I or II trauma centers in the U.S. In addition, the NSP can be used to develop yearly comparisons of trauma data, which is something that has been problematic to do with the NTDB.

The NSP is a stratified statistical sample based on NTDB data of 100 Level I and II trauma centers. Stratification was based on U.S. Census region (Northeast, Midwest, South, and West), level of trauma care designation (Level I and II), and NTDB participation status as of 2003 (NTDB and non-NTDB). Thus, there were 16 total strata: 8 NTDB strata and 8 non-NTDB strata. Of the 100 sample hospitals, 90 are NTDB-contributing hospitals and 10 are non-NTDB hospitals. The sample size of 100 hospitals was chosen on the basis of recent NTDB data that suggest that a sample of 100 hospitals would provide estimates having sufficient precision for most analyses at the national level. A probability-proportional- to-size method was used to randomly select the hospitals in the sample and calculate the weights, where the size measure was the annual number of emergency room visits. The final weights for each hospital were adjusted for non-response and for changes in ED admissions.

Weighted estimates from admission year 2003-2012 were computed based on the NSP data. The yearly comparison of number of incidents, gender, ISS scores and mechanism of injury, and percent deaths are displayed in this Appendix. The admission year 2013 data for NSP will be available later this year. For further information on the NSP please visit the NTDB website.

Table 74

Weighted Estimates of Incidents by Admission Year

ADMISSION YEAR	WEIGHTED NUMBER OF INCIDENTS (95% CI)	PERCENT (95% CI)
2003	577,421 (445,693, 709,149)	8.86 (7.22, 10.50)
2004	524,267 (406,983, 641,550)	8.04 (6.24, 9.85)
2005	608,524 (499,450, 717,598)	9.34 (7.87, 10.80)
2006	673,991 (543,427, 804,555)	10.34 (8.86, 11.83)
2007	630,645 (543,521, 717,768)	9.68 (8.39, 10.97)
2008	640,116 (568,229, 712,004)	9.83 (8.82, 10.83)
2009	630,134 (502,953, 757,316)	9.67 (8.76, 10.55)
2010	697,023 (536,310, 857,735)	10.70 (9.45, 11.95)
2011	762,464 (642,158, 882,771)	11.70 (10.54, 12.86)
2012	770,354 (609,757, 930,950)	11.82 (10.68, 12.97)
Total	6,514,938 (5,653,123, 7,376,754)	100

Figure 74

Weighted Estimates of Incidents by Admission Year

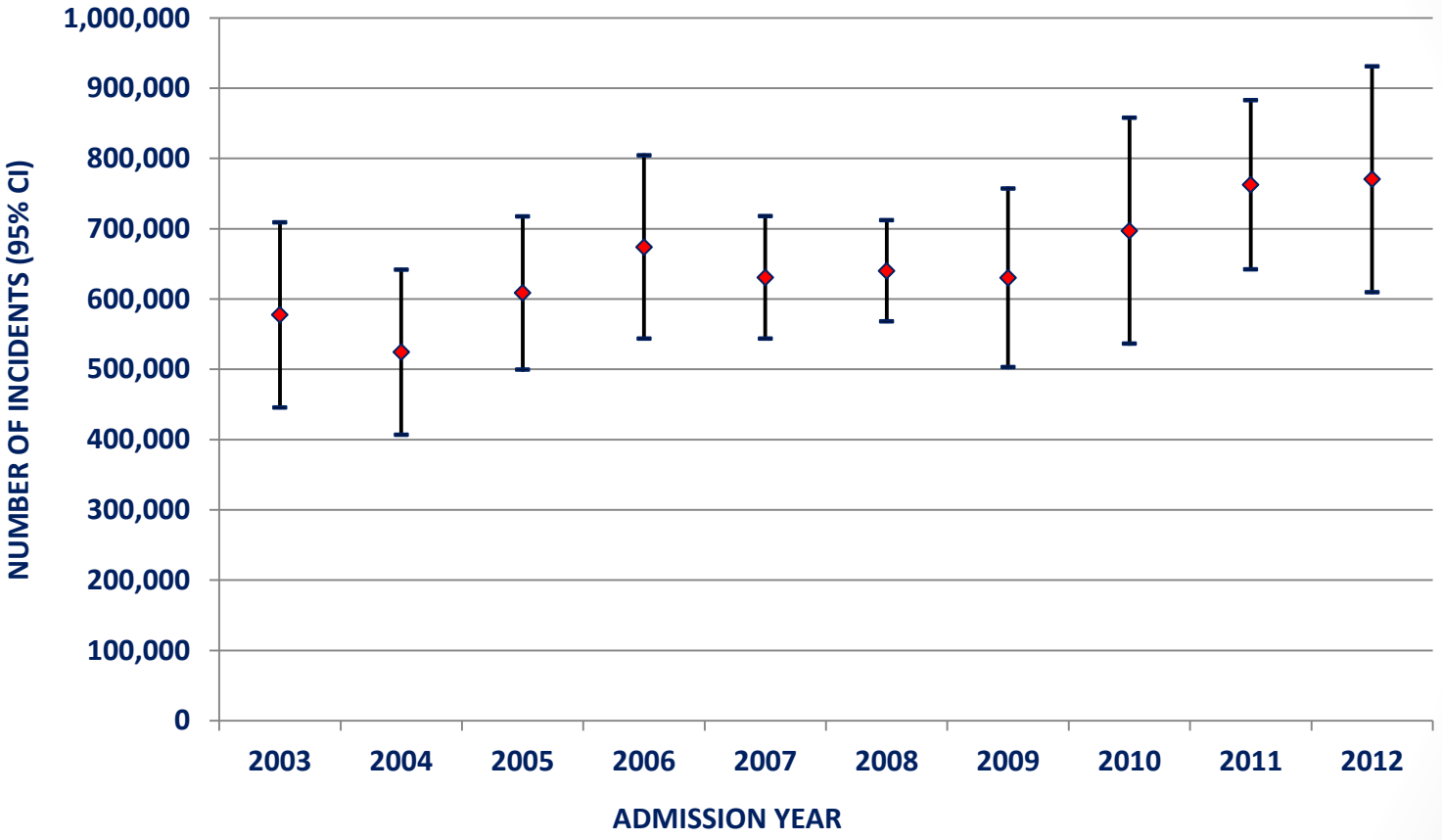


Table 75

Weighted Estimates of Incidents by Gender and Admission Year

ADMISSION YEAR	WEIGHTED NUMBER OF FEMALES	WEIGHTED NUMBER OF MALES	PERCENT FEMALES (95% CI)	PERCENT MALES (95% CI)
2003	189,654	384,843	33.01 (32.13, 33.89)	66.99 (66.11, 67.87)
2004	176,884	344,637	33.92 (31.90, 35.93)	66.08 (64.07, 68.09)
2005	206,469	399,889	33.98 (32.79, 35.16)	65.81 (64.62, 67.00)
2006	228,207	427,144	34.63 (33.26, 36.00)	64.81 (63.34, 66.29)
2007	209,939	410,662	33.29 (31.96, 34.62)	65.12 (63.52, 66.71)
2008	223,360	413,054	34.89 (33.67, 36.11)	64.53 (63.29, 65.77)
2009	221,877	408,069	35.21 (34.45, 35.97)	64.76 (64.00, 65.52)
2010	249,011	447,895	35.72 (34.99, 36.46)	64.26 (63.53, 64.99)
2011	284,412	477,880	37.30 (35.79, 38.81)	62.68 (61.17, 64.18)
2012	285,418	484,706	37.05 (35.79, 38.31)	62.92 (61.66, 64.18)

Figure 75

Weighted Estimates of Incidents by Gender and Admission Year

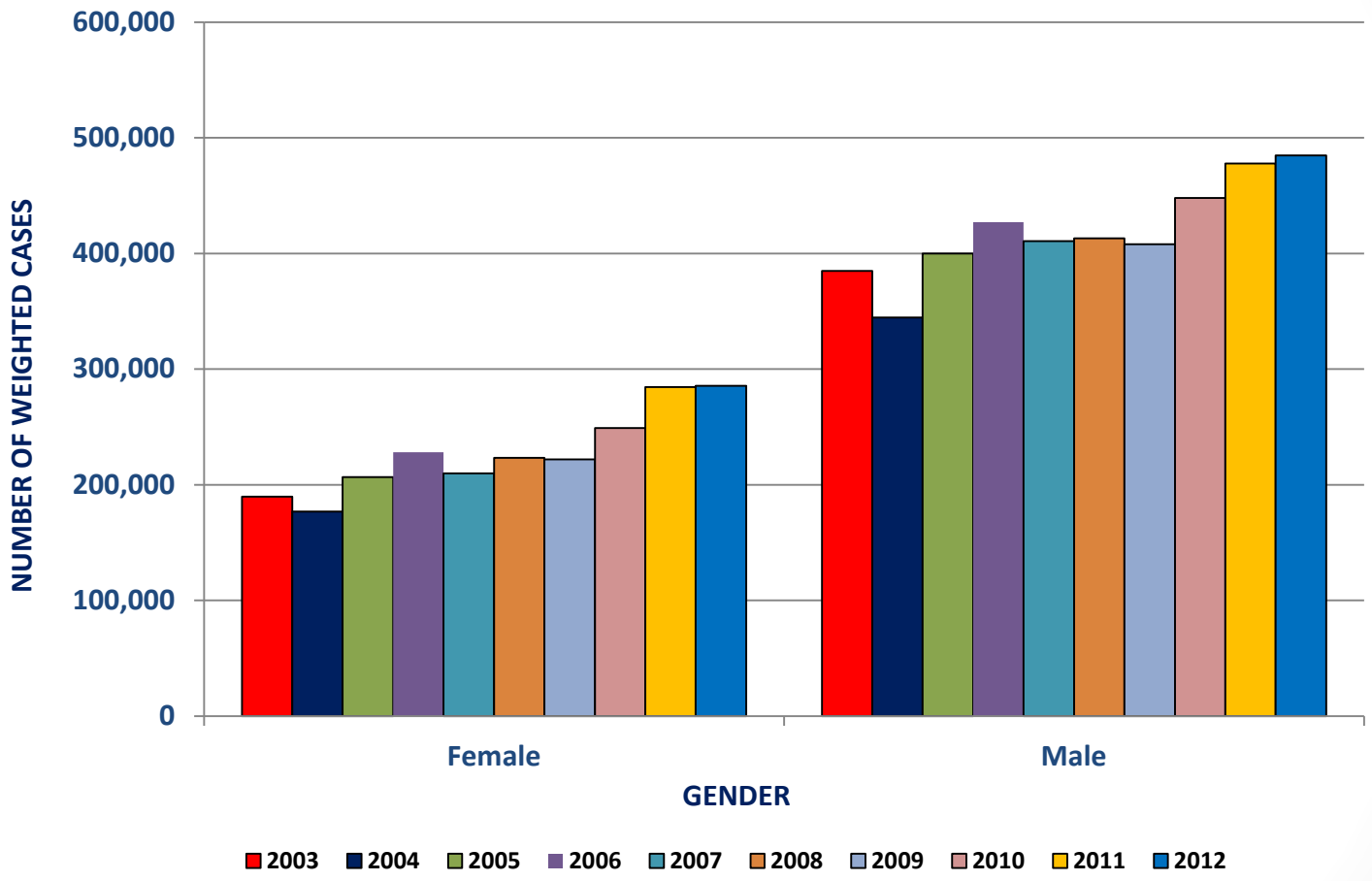


Table 76

Weighted Estimates of Incidents by Age and Admission Year

AGE	2003 (95% CI)	2004 (95% CI)	2005 (95% CI)	2006 (95% CI)	2007 (95% CI)	2008 (95% CI)	2009 (95% CI)	2010 (95% CI)	2011 (95% CI)	2012 (95% CI)
≤14	8.63 (7.55, 9.72)	8.40 (7.05, 9.76)	7.56 (6.39, 8.74)	7.58 (6.49, 8.66)	7.45 (6.35, 8.56)	7.01 (5.90, 8.12)	6.55 (5.41, 7.69)	6.38 (5.40, 7.36)	6.36 (5.06, 7.67)	6.15 (5.13, 7.18)
15-19	10.32 (10.01, 10.63)	10.27 (9.78, 10.76)	10.50 (10.07, 10.92)	10.65 (10.11, 11.19)	9.37 (9.04, 9.70)	8.64 (8.32, 8.95)	8.39 (8.13, 8.64)	7.87 (7.62, 8.13)	7.33 (6.85, 7.80)	6.73 (6.43, 7.03)
20-24	12.54 (12.06, 13.01)	12.28 (11.52, 13.03)	12.39 (11.91, 12.87)	12.00 (11.49, 12.51)	11.05 (10.60, 11.49)	10.32 (9.92, 10.72)	10.34 (9.89, 10.78)	10.35 (9.86, 10.84)	9.78 (9.41, 10.15)	9.83 (9.46, 10.20)
25-34	17.08 (16.53, 17.63)	16.14 (14.98, 17.29)	16.31 (15.52, 17.11)	15.82 (15.02, 16.61)	15.81 (15.23, 16.39)	14.82 (14.16, 15.48)	15.03 (14.53, 15.54)	14.96 (14.41, 15.51)	14.41 (13.75, 15.07)	14.52 (13.98, 15.05)
35-44	16.39 (15.71, 17.03)	15.63 (14.84, 16.42)	15.41 (14.74, 16.08)	14.38 (13.84, 14.93)	14.00 (13.59, 14.41)	13.32 (12.83, 13.80)	12.89 (12.57, 13.21)	12.36 (11.98, 12.74)	12.01 (11.57, 12.44)	11.69 (11.25, 12.13)
45-54	12.61 (12.17, 13.07)	13.40 (12.82, 13.97)	13.33 (12.91, 13.75)	13.37 (13.02, 13.72)	14.27 (13.99, 14.55)	14.49 (14.17, 14.81)	14.69 (14.35, 15.02)	14.62 (14.35, 14.88)	14.02 (13.67, 14.38	14.14 (13.82, 14.46)
55-64	7.73 (7.48, 7.98)	8.16 (7.69, 8.62)	8.65 (8.36, 8.93)	8.50 (8.22, 8.79)	9.56 (9.27, 9.85)	10.15 (9.84, 10.47)	10.79 (10.51, 11.07)	11.31 (11.00, 11.61)	12.04 (11.82, 12.26)	12.20 (11.93, 12.46)
65-74	5.75 (5.42, 6.07)	5.95 (5.29, 6.62)	5.78 (5.37, 6.19)	6.30 (5.81, 6.79)	6.69 (6.33, 7.05)	7.60 (7.22, 7.99)	7.67 (7.37, 7.97)	8.04 (7.79, 8.30)	8.78 (8.24, 9.31)	9.36 (8.95, 9.77)
75-84	6.57 (5.97, 7.17)	6.97 (5.80, 8.13)	7.19 (6.40, 7.99)	7.98 (7.01, 8.96)	8.32 (7.65, 8.99)	9.22 (8.44, 10.00)	9.39 (8.58, 10.21)	9.43 (8.89, 9.96)	10.09 (8.89, 11.28)	10.28 (9.13, 11.43)
≥85	2.39 (2.08, 2.69)	2.82 (2.19, 3.44)	2.88 (2.38, 3.38)	3.41 (2.84, 3.98)	3.47 (3.06, 3.88)	4.43 (3.91, 4.96)	4.26 (3.95, 4.57)	4.69 (4.31, 5.07)	5.19 (4.37, 6.00)	5.10 (4.51, 5.69)

Figure 76

Weighted Estimates of Incidents by Age and Admission Year

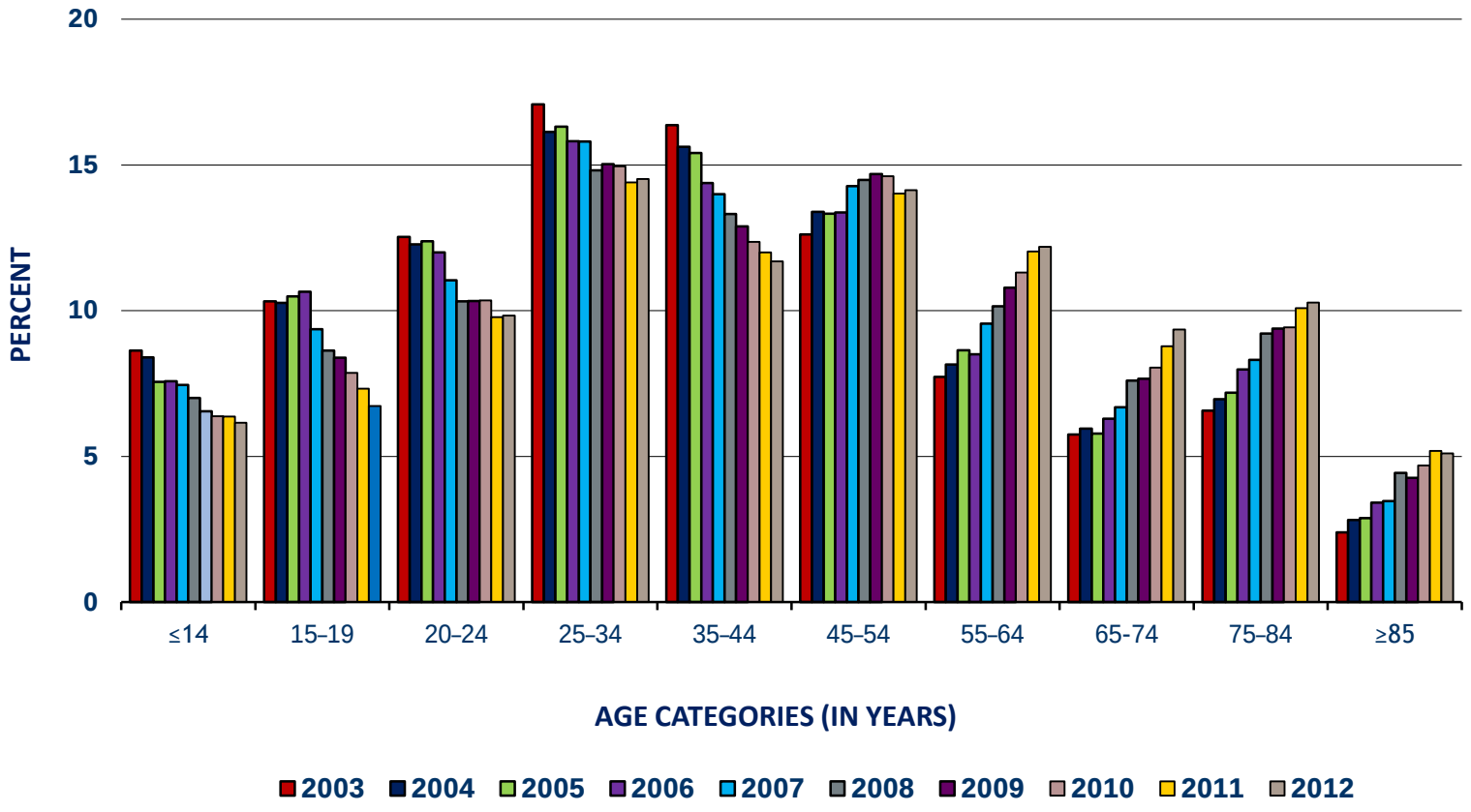


Table 77

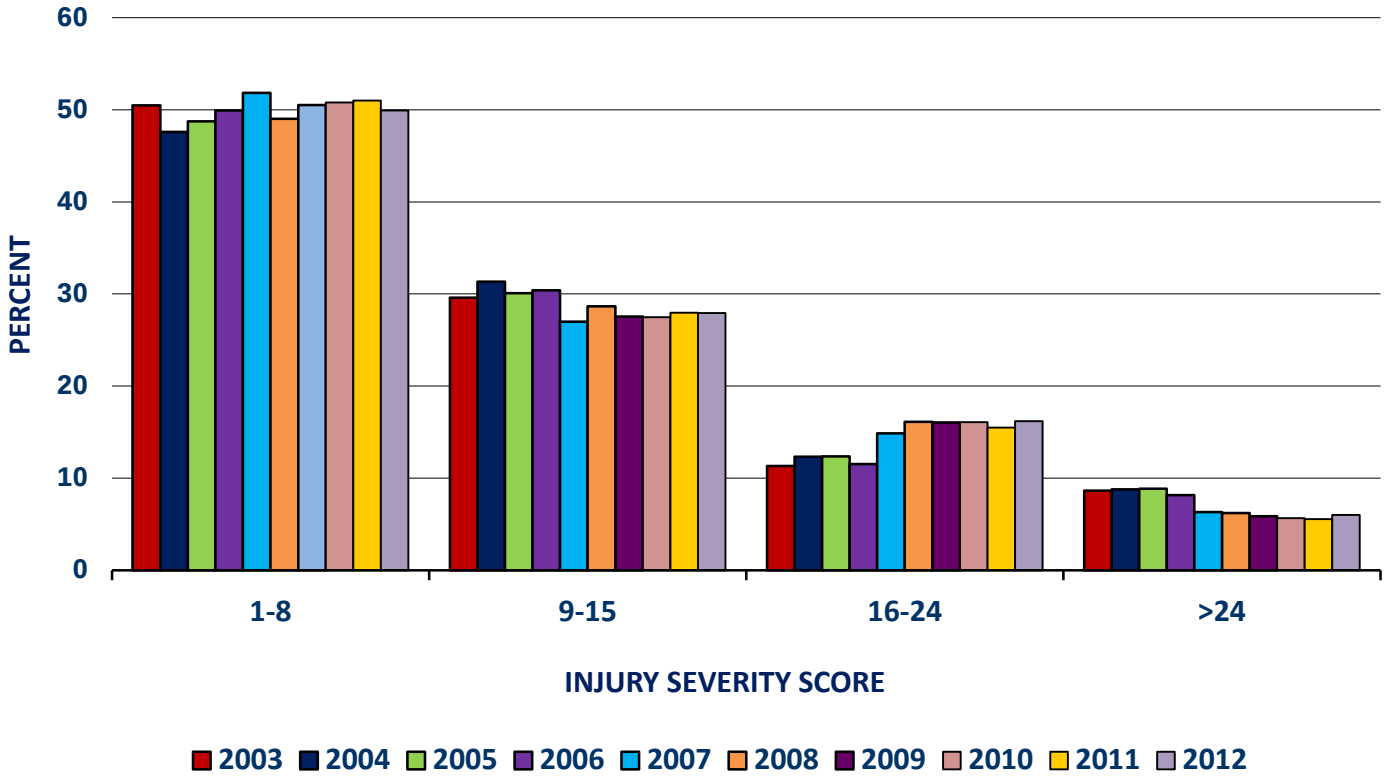
Weighted Estimates of Incidents by Injury Severity Score (ISS) Category and Admission Year

ADMISSION YEAR	ISS 1-8 (95% CI)	ISS 9-15 (95% CI)	ISS 16-24 (95% CI)	ISS >24 (95% CI)
2003	50.47 (47.81, 53.14)	29.58 (28.16, 31.00)	11.30 (10.59, 12.01)	8.65 (7.60, 9.70)
2004	47.61 (44.00, 51.22)	31.32 (29.70, 32.95)	12.31 (11.01, 13.61)	8.76 (7.46, 10.06)
2005	48.75 (46.13, 51.37)	30.07 (28.79, 31.35)	12.35 (11.58, 13.12)	8.83 (7.79, 9.87)
2006	49.91 (46.34, 53.47)	30.41 (27.97, 32.85)	11.54 (10.59, 12.50)	8.14 (6.98, 9.31)
2007	51.83 (49.85, 53.80)	26.98 (25.93, 28.03)	14.87 (14.01, 15.72)	6.32 (5.86, 6.80)
2008	49.02 (47.32, 50.72)	28.67 (27.69, 29.64)	16.11 (15.33, 16.89)	6.20 (5.73, 6.67)
2009	50.53 (48.23, 52.83)	27.56 (26.44, 28.68)	16.06 (15.00, 17.12)	5.85 (5.28, 6.42)
2010	50.79 (49.18, 52.39)	27.47 (26.68, 28.27)	16.09 (15.24, 16.95)	5.65 (5.17, 6.13)
2011	51.01 (49.43, 52.58)	27.97 (26.82, 29.11)	15.47 (14.83, 16.11)	5.56 (5.18, 5.93)
2012	49.93 (48.68, 51.17)	27.91 (26.90, 28.93)	16.17 (15.39, 16.95)	5.99 (5.58, 6.40)

Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Figure 77

Weighted Estimates of Incidents by Injury Severity Score (ISS) Category and Admission Year



Injury Severity Score tables are generated using AIS98 Crosswalked ISS.
Injury Severity Score definitions can be found in Appendix B.

Table 78

Weighted Estimates of Incidents by Selected Mechanism of Injury and Admission Year

ADMISSION YEAR	MOTOR VEHICLE TRAFFIC (95% CI)	FALL (95% CI)	CUT/PIERCE (95% CI)	STRUCK BY, AGAINST (95% CI)
2003	40.59 (38.37,42.82)	24.14 (23.91, 28.36)	6.91 (6.41, 7.41)	5.89 (5.54, 6.25)
2004	38.81 (35.23, 42.39)	28.29 (25.05, 33.52)	7.13 (6.30, 7.96)	5.33 (4.77, 5.89)
2005	37.78 (35.34, 40.23)	29.19 (26.74, 31.64)	6.90 (6.51, 7.30)	5.05 (4.56, 5.53)
2006	35.39 (32.34, 38.41)	30.60 (27.55, 33.64)	6.83 (6.29, 7.38)	4.82 (4.09, 5.56)
2007	34.31 (32.57, 36.04)	32.78 (30.57, 35.00)	7.30 (6.61, 7.98)	5.38 (5.01, 5.73)
2008	31.51 (29.99, 33.03)	35.67 (33.58, 37.77)	7.53 (6.97, 8.07)	5.31 (4.92, 5.71)
2009	31.24 (29.95, 32.54)	35.84 (34.15, 37.54)	7.93 (7.42, 8.44)	5.24 (4.82, 5.67)
2010	30.45 (29.27, 31.64)	36.90 (35.42, 38.39)	7.70 (7.29, 8.11)	5.40 (5.14, 5.66)
2011	28.63 (27.19, 30.07)	39.67 (36.42, 42.93)	7.34 (6.94, 7.74)	4.74 (4.33, 5.15)
2012	28.64 (27.22, 30.07)	40.01 (37.41, 42.60)	7.58 (7.25, 7.90)	4.99 (4.74, 5.25)

Figure 78

Weighted Estimates of Incidents by Selected Mechanism of Injury and Admission Year

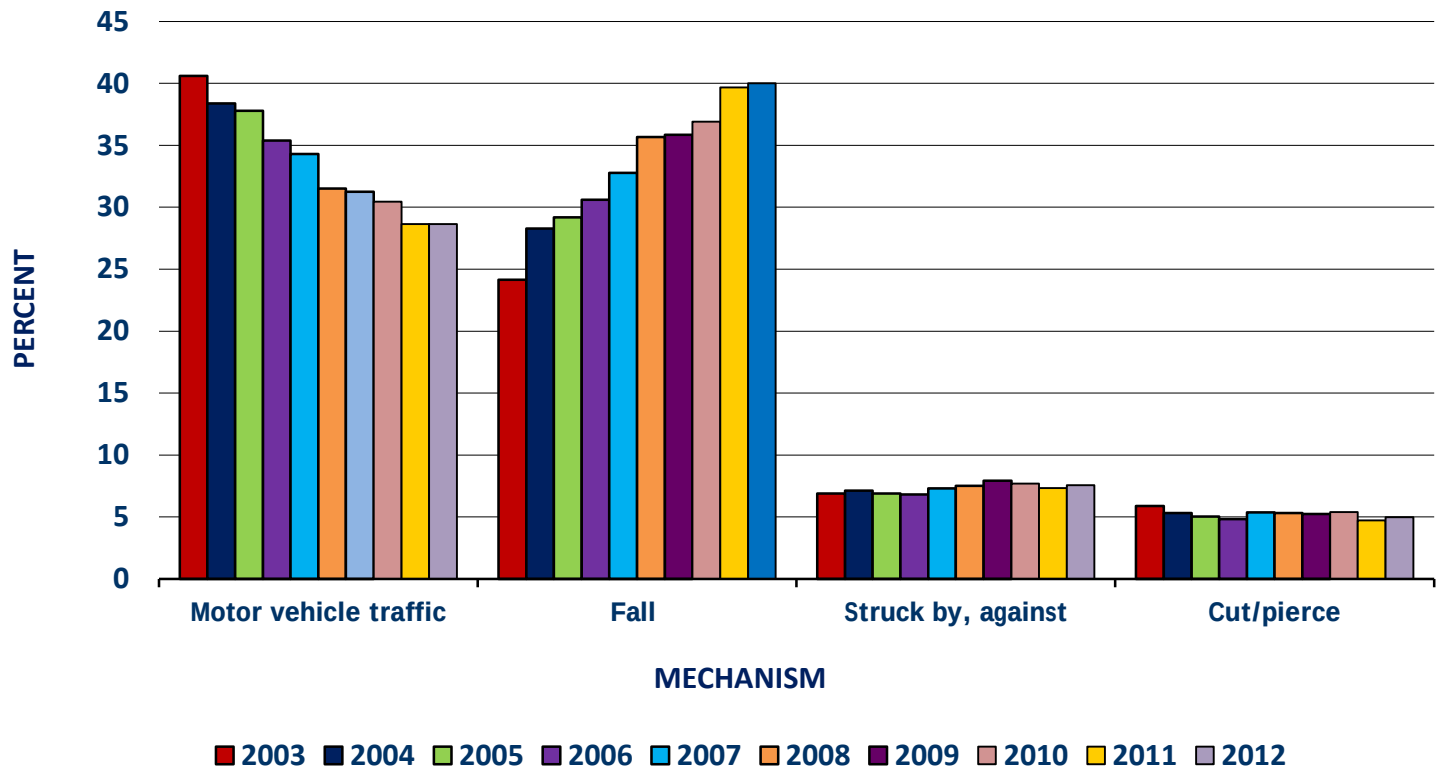


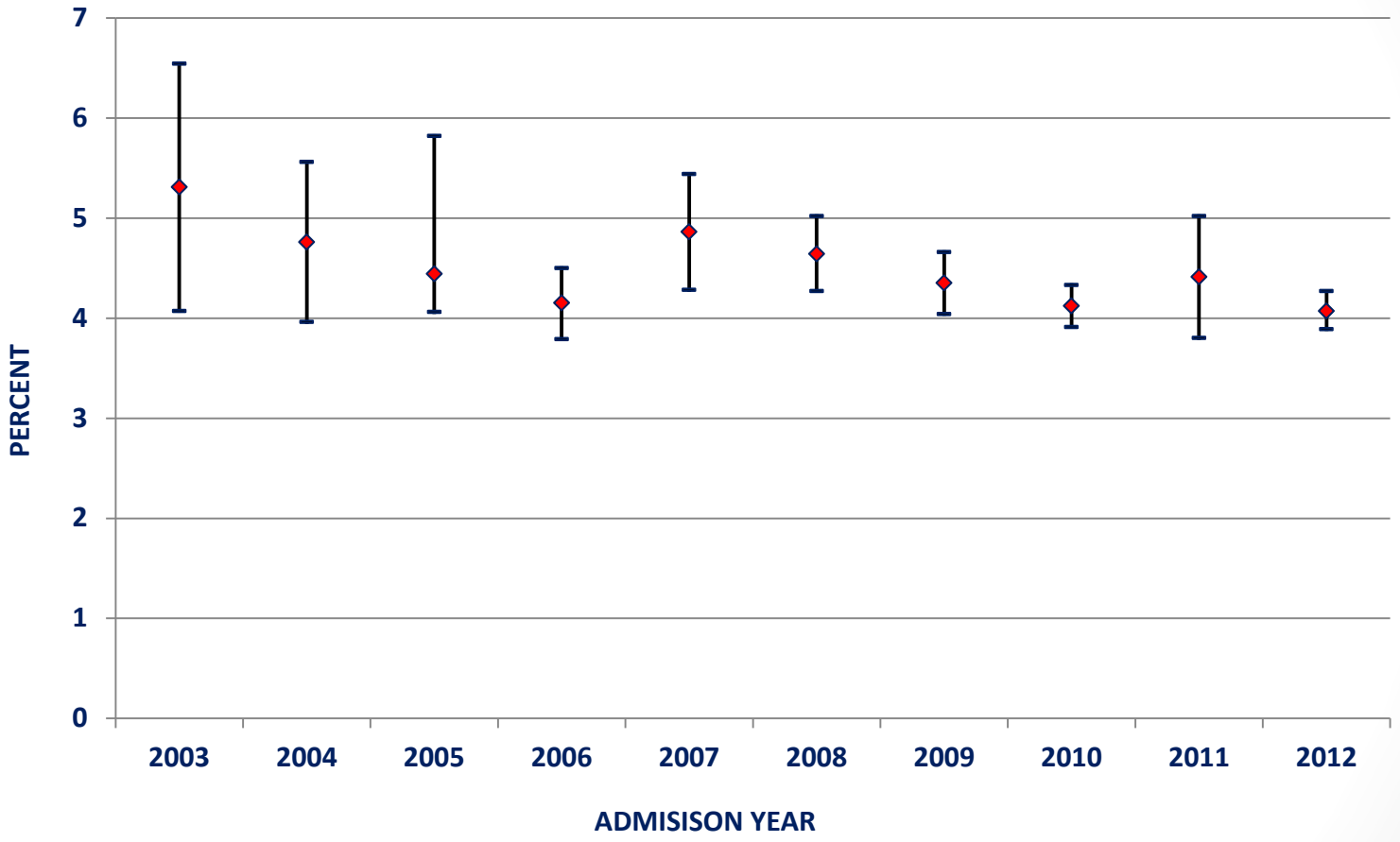
Table 79

Weighted Estimates of Deaths by Admission Year

ADMISSION YEAR	WEIGHTED NUMBER OF DEATHS	PERCENT DEATHS (95% CI)
2003	30,642	5.31 (4.07, 6.54)
2004	24,958	4.76 (3.96, 5.56)
2005	25,780	4.44 (4.06, 4.82)
2006	27,603	4.15 (3.79, 4.50)
2007	29,842	4.86 (4.28, 5.44)
2008	29,611	4.64 (4.27, 5.02)
2009	27,410	4.35 (4.04, 4.66)
2010	28,727	4.12 (3.91, 4.33)
2011	33,628	4.41 (3.80, 5.02)
2012	31,417	4.07 (3.89, 4.27)
Total	289,618	4.48 (4.17, 4.79)

Figure 79

Weighted Estimates of Deaths by Admission Year



Resources

- *www.ntdb.org* for more information about NTDB
- *www.ntdbdatacenter.com* to submit data to NTDB
- *www.ntdsdictionary.org* for information on the data standard