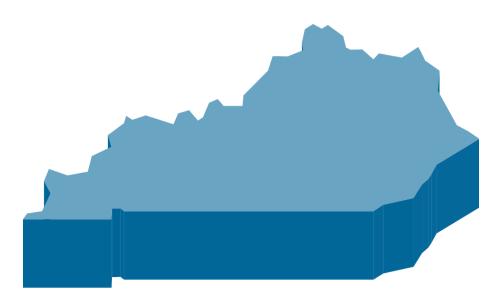
KENTUCKY INJURY INDICATORS



2018

KENTUCKY VIOLENCE AND INJURY PREVENTION PROJECT (KVIPP)

COOPERATIVE AGREEMENT NO. 5NU17CE924846

KENTUCKY INJURY PREVENTION AND RESEARCH CENTER

FEBRUARY 2021









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Abbreviations

CDC	Centers for Disease Control and Prevention
CSTE	Council of State and Territorial Epidemiologists
ED	emergency department
ICD	International Classification of Diseases
ICD-CM	International Classification of Diseases, Clinical Modifications
KIPRC	Kentucky Injury Prevention and Research Center
MV	motor vehicle
ATV	all-terrain vehicle
PCR	police collision report
ТВІ	traumatic brain injury

Executive Summary

Kentucky's overall age-adjusted injury mortality rate was 84.4 per 100,000 Kentucky resident population in 2018. The male and female age-adjusted rates were 118.9 and 51.5, respectively.

The age-adjusted rate for injury-related inpatient hospitalizations per 100,000 population was 475.5 per 100,000 Kentucky resident population in 2018. The male and female age-adjusted rates were 466.6 and 469.0, respectively.

The age-adjusted rate for injury-related emergency department visit discharges per 100,000 Kentucky resident population was 10,850 in 2018. The male and female age-adjusted rates were 11,028.4 and 10,614.1, respectively.

Fatalities

There were 3,841 injury fatalities among Kentucky residents in 2018. The leading mechanisms of injury fatality for Kentucky residents in 2018 were *poisonings* (1,319), *firearms* (719), and *motor vehicle traffic crashes* (626). Ninety five percent of the poisonings were drug poisonings. Among the drug poisonings (1,250), 95% were unintentional drug overdoses involving prescription medications and/or illicit drugs. The leading injury mechanisms among intentional deaths (suicides and homicides) were *firearms* (68%) and *suffocation/hanging* (19%).

There were 962 fatalities from traumatic brain injuries (TBI), where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions. TBI-related fatalities were either intentional (50%) or unintentional (50%).

Inpatient Hospitalizations

There were 23,379 injury-related inpatient hospitalization encounters among Kentucky residents in 2018. The leading mechanisms of injury-related inpatient hospitalizations were *falls* (11,991), *drug poisonings* (3,609), and *motor vehicle traffic crashes* (2,474). The majority of unintentional fall-related hospitalizations occurred among Kentucky residents age 55 years and older (88%). Of the 3,609 drug poisonings, 2,007 (56%) were unintentional and 1,483 (41%) were self-directed/inflicted. The leading mechanism of intentional injury-related inpatient hospitalizations was *drug poisoning* (61%).

TBI (either TBI alone or in combination with other injuries) accounted for 2,854 hospitalizations. The majority of the TBI-related inpatient hospitalizations were unintentional (87%). *Falls* (54%) and *motor vehicle traffic crashes* (24%) were the leading mechanisms of TBI-related hospitalizations.

Emergency Department Visits

There were 472,787 injury-related emergency department (ED) visits among Kentucky residents in 2018. The leading mechanisms of injury-related ED visits were *falls* (144,972), being *struck by or against an object or person* (60,920), and *motor vehicle traffic crashes* (52,999). The leading mechanism of intentional injury-related ED visits was *struck by/against* (53%).

TBI (either TBI alone or in combination with other injuries) accounted for 11,608 ED visits. The majority of the TBI-related ED visits were unintentional (85%). *Falls* (41%) and *struck by/against* (25%) were the leading mechanisms of TBI-related ED visits.

Data Sources and Methods

Data Sources

All data are provisional and subject to change.

Population Data

U.S. Census, Population Division. "Annual Estimates of the Resident Population by Single Year of Age and Sex for the U.S., States, and Puerto Rico Commonwealth: 2018 Population Estimates". Population is limited to Kentucky residents.

Mortality Data

Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services, Frankfort, KY.

Inpatient Hospitalization Discharge Data

Kentucky Inpatient Hospitalization Claims Files, Office of Health Data and Analytics, Cabinet for Health and Family Services, Frankfort, KY. Note: Counts represent encounters of care and could be greater than the number of individual patients treated at an acute care facility.

Emergency Department Visit Discharge Data

Kentucky Outpatient Services Database, Office of Health Data and Analytics, Cabinet for Health and Family Services, Frankfort, KY. Note: Counts represent encounters of care and could be greater than the number of individual patients treated.

Methods

All data were limited to Kentucky residents.

Injury Fatalities

The definitions for fatal injuries used in this report correspond to the Centers for Disease Control and Prevention (CDC)'s "State injury indicators report: Instructions for preparing 2017 data." The underlying cause of death field was used to identify the mechanism and manner of fatal injuries.

PLEASE NOTE: Death counts in this report are based on state death certificate files and thus cannot be expected to match counts based on other sources. In particular, numbers of motor vehicle traffic deaths will not match those based on police collision reports (PCRs) because the two systems do not report on identical underlying populations. Death certificates capture deaths of Kentucky residents regardless of where they occur; PCRs capture deaths that occur on Kentucky roads only, regardless of state of residence. Similarly, counts of homicides and assaults in this report will not match counts based on police crime reports. These data sources should be viewed as complementary. There also exist specialized, death certificate-based surveillance systems for injury fatalities at both the state (e.g., the Kentucky Violent Death Reporting System and Child Fatality Reviews) and national levels (e.g., CDC's Web-Based Injury Statistics Query and Reporting System/WISQARSTM and Wide-ranging Online Data for Epidemiologic Research/WONDER). Counts from those systems may not exactly match counts in this report due to differences in inclusion criteria, case definitions, the use of ancillary data sources for case identification, or other factors.

Injury Inpatient Hospitalizations

The definitions for injury hospitalizations used in this report correspond to the Council for State and Territorial Epidemiologists (CSTE) Injury Surveillance Toolkit. Hospitalizations were limited to discharges from nonfederal, acute care, or inpatient facilities. Note inpatient hospitalizations resulting in death were not excluded from the total inpatient injury hospitalization counts. CDC's proposed surveillance definitions for injury hospitalizations were used; only initial encounters were included (indicated by a seventh character of "A" or missing in the International Classification of Diseases, Tenth Revision, Clinical Modification [ICD-10-CM] code). The injury subset for hospitalizations was created by selecting discharges having a principal diagnosis code. The CDC's ICD-10-CM Poisoning and Non-Poisoning Matrices were used to categorize the injuries by mechanism and intent. The external causes of morbidity, which were used to provide injury details (e.g., intent, mechanism), are not required for discharge billing purposes; therefore, every injury hospitalization may not have this level of detail.

PLEASE NOTE: In October 2015, healthcare discharge data (injury hospitalization encounters) coding systems transitioned from ICD-9-CM to ICD-10-CM. The coding system transition should be considered when interpreting the data, and trend analysis using ICD-9-CM coded data for some years and ICD-10-CM coded data for other years is not recommended due to substantial differences and a lack of one-to-one correspondence between ICD-9-CM and ICD-10-CM.

Injury Emergency Department Visits

The definitions for injury emergency department (ED) visits used in this report correspond to the CSTE Injury Surveillance Toolkit. Note ED visits resulting in inpatient hospitalization or death were not excluded from the total ED injury counts. The CDC's proposed surveillance definitions for injury ED visits were used; only initial encounters were included (seventh character of "A" or missing) in the ED dataset using diagnosis codes or external cause codes. The CDC's ICD-10-CM Poisoning and Non-Poisoning Matrices were used to categorize the injuries by mechanism and intent. The external causes of morbidity, which were used to provide injury details (e.g., intent, mechanism) are not required for discharge billing purposes; therefore, every injury ED visit may not have this level of detail.

PLEASE NOTE: In October 2015, healthcare discharge data (emergency department visit encounters) coding systems transitioned from ICD-9-CM to ICD-10-CM. The coding system transition should be considered when interpreting the data, and trend analysis using ICD-9-CM coded data for some years and ICD-10-CM coded data for other years is not recommended due to substantial differences and a lack of one-to-one correspondence between ICD-9-CM and ICD-10-CM.

Calculation of Rates and Data Presentation

Two types of rates are reported. Age-specific ("crude") rates were calculated by dividing the number of injury events occurring in a particular age group by the estimated number of Kentucky residents in that age group in 2018 and multiplying by 100,000. Age-adjusted rates were adjusted to the year 2000 standard population. Rates based on counts of 20 or fewer may be unstable.

Data are presented as aggregated counts. Certain counts have been suppressed because either the observed number of injury events is very small (a count of at least one but fewer than five) and not appropriate for publication or the count can be used to calculate the number in a count that has been suppressed.

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Definitions for "Leading Cause" by Age Group and Intent Injury Mortality and Discharge Data Matrices

Motor vehicle non-traffic (MV non-traffic)—Includes motor vehicle crashes that occurred somewhere other than on a public roadway.

Motor vehicle traffic (MV traffic)—This includes crashes that occurred on a public roadway and involved at least one motor vehicle. All persons injured in MV traffic incidents are counted here. Pedal cyclists and pedestrians who were struck by a motor vehicle would be counted here, but those who crashed on a public roadway without involvement of a motor vehicle would be counted elsewhere (see "Pedal Cyclist, Other" definition).

Natural/Environmental—Natural or environmental causes (insect bites and stings, animal bites, extreme weather, excessive heat or cold, etc.).

Other Land Transport—Other land transportation. Includes motor vehicle crashes that occurred somewhere other than on a public roadway, rail injuries, etc. Does not include air or water injuries.

Other Specified—Other specified cause of injury. Includes a variety of relatively low-incidence causes of injury grouped together. Includes causes not elsewhere classified; an external cause of injury code that is intended for use when no other code exists to adequately describe the mechanism and manner of injury.

Pedal Cyclist, Other—Includes pedal cyclists who crashed on a public roadway without involvement of a motor vehicle.

Poisoning—Includes drug and non-drug poisonings, unless otherwise noted.

Tie—Indicates a tied count for a leading cause of injury-related mortality or morbidity.

Unspecified—Injuries for which an external code of injury either (a) was not specified or (b) was specified but did not indicate the mechanism or manner of injury.

10 Leading Causes of Injury-Related Fatality by Age Group and Intent, 2018 Kentucky Residents

65 years and older	Fall 265	Unspecified 166	Motor Vehicle Traffic 135	Firearm 130	Suffocation 59	Poisoning 36	Natural/ Environmental 17	Fire/Flame 15	Firearm 13	Tie* 11	
55-64 years old	Poisoning 189	Motor Vehicle Traffic 99	Firearm 81	Suffocation 22	Unspecified 21	Fall 19	Fire/Flame 13	Tie*	Other Land Transport 8	Natural/ Environmental 7	
45–54 years old	Poisoning 282	Motor Vehicle Traffic 95	Firearm 94	Suffocation 34	Firearm 20	Poisoning 13	Other Land Transport 12	Tie∗ 11	Tie*	Fire/Flame 7	
35-44 years old	Poisoning 333	Motor Vehicle Traffic 96	Firearm 72	Firearm 49	Suffocation 35	Poisoning 10	Fire/Flame 9	Tie* 7	Fall 6	Cut/Pierce 5	
25–34 years old	Poisoning 317	Motor Vehicle Traffic 90	Firearm 59	Firearm 48	Suffocation 43	Tie* 9	Drowning 6	Tie* 5			:
18–24 years old	Motor Vehicle Traffic 80	Poisoning 73	Firearm 47	Firearm 36	Suffocation 28	Firearm 7					
12–17 years old	Motor Vehicle Traffic 20	Suffocation 10	Firearm 9	Firearm 8							
Under 12 years old	Motor Vehicle Traffic 11	Suffocation 10	Drowning 9	Fire/Flame 7							
Rank	-	8	ဧ	4	5	9	7	8	6	10	

Counts less than five are not included in this matrix. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. February 2021. This product was supported by grants numbers 5NU17CE924846 (Centers for Disease Control and Prevention) and 3048114413. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data are provisional and subject to change. Undetermined Homicide Injury Intent Suicide Unintentional







10 Leading Causes of Injury-Related Inpatient Hospitalizations by Age Group and Intent, 2018 Kentucky Residents

<u></u>	Under 12 years old	12–17 years old	18-24 years old	25-34 years old	35-44 years old	45–54 years old	55-64 years old	65 years and older
12 2	Fall 129	Drug Poisoning 164	Motor Vehicle Traffic 315	Motor Vehicle Traffic 389	Drug Poisoning 411	Fall 668	Fall 1,573	Fall 8,999
do the	Child/ Adult Abuse 65	Motor Vehicle Traffic 92	Drug Poisoning 237	Drug Poisoning 365	Motor Vehicle Traffic 404	Drug Poisoning 358	Motor Vehicle Traffic 380	Motor Vehicle Traffic 484
otor	Motor Vehicle Traffic 56	Fall 61	Drug Poisoning 116	Drug Poisoning 265	Fall 317	Motor Vehicle Traffic 348	Drug Poisoning 369	Drug Poisoning 350
] }ct/;	Hot Object/Substance 28	Motor Vehicle Non-Traffic 39	Fall 65	Fall 169	Drug Poisoning 282	Drug Poisoning 282	Drug Poisoning 163	Tie* 159
- Br	Drug Poisoning 23	Struck By/Against 21	Firearm 60	Firearm 54	Tie∗ 48	Motor Vehicle Non-Traffic 48	Unspecified 64	Drug Poisoning 85
<u>Bi</u>	Bite/Sting 16	Firearm 17	Motor Vehicle Non-Traffic 50	Motor Vehicle Non-Traffic 51	Unspecified 43	Struck By/Against 46	Struck By/Against 54	Overexertion 51
중	Struck By/Against 15	Drug Poisoning 15	Firearm 47	Struck By/Against 37	Tie* 33	Unspecified 43	Motor Vehicle Non-Traffic 49	Motor Vehicle Non-Traffic 49
) jc	Foreign Body 14	Firearm 11	Struck By/Against 18	Cut/Pierce 35	Tie* 31	Struck By/Against 37	Natural/ Environmental 34	Natural/ Environmental 47
	Tie* 12	Other Land Transport 10	Cut/Pierce 16	Tie* 26	Firearm 30	Non-Drug Poisoning 32	Other Land Transport 30	Foreign Body 45
N.	Other Specified 11	Tie* 7	Tie*	Firearm 25	Other Land Transport 28	Drug Poisoning 27	Non-Drug Poisoning 28	Suffocation 34

Unintentional Self-Harm Assault Undetermined			Injury Intent			
	Unintentional	Self-Harm		Assault	Undetermi	pau

^{*}Indicates a tied count for leading injury-related inpatient hospitalizations.

Counts represent encounters of care and could be greater than the number of individual patients treated at an acute care facility. Counts less than five are not included in this matrix. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. February 2021. This product was supported by grants numbers 5NU17CE924846 (Centers for Disease Control and Prevention) and 3048114413. Data source: Kentucky Inpatient Hospitalization Claims Files, Office of Health Data and Analytics. Data are provisional and subject to change.







10 Leading Causes of Injury-Related Emergency Department Visits by Age Group and Intent, 2018 Kentucky Residents

65 years and older	Fall 43,325	Unspecified 4,348	Motor Vehicle Traffic 4,322	Struck By/Against 4,099	Cut/Pierce 2,346	Overexertion 2,291	Bite/Sting 1,616	Foreign Body 826	Drug Poisoning 593	Other Specified 565
55-64 years old	Fall 18,283	Motor Vehicle Traffic 5,287	Unspecified 3,809	Struck By/Against 3,444	Overexertion 2,872	Cut/Pierce 2,752	Bite/Sting 1,668	Struck By/Against 825	Drug Poisoning 676	Other Specified 620
45-54 years old	Fall 16,138	Motor Vehicle Traffic 7,008	Unspecified 5,189	Struck By/Against 4,701	Overexertion 4,588	Cut/Pierce 3,625	Bite/Sting 2,178	Struck By/Against 1,490	Drug Poisoning 1,060	Other Specified 1,004
35-44 years old	Fall 13,299	Motor Vehicle Traffic 8,403	Unspecified 5,814	Struck By/Against 5,793	Overexertion 5,506	Cut/Pierce 4,453	Struck By/Against 2,294	Bite/Sting 2,262	Drug Poisoning 1,772	Other Specified 1,213
25-34 years old	Fall 11,715	Motor Vehicle Traffic 10,575	Struck By/Against 6,937	Unspecified 6,120	Overexertion 5,693	Cut/Pierce 5,511	Struck By/Against 2,906	Drug Poisoning 2,606	Bite/Sting 2,502	Other Specified 1,508
18–24 years old	Motor Vehicle Traffic 9,487	Fall 7,501	Struck By/Against 5,890	Cut/Pierce 4,164	Overexertion 4,015	Unspecified 3,787	Struck By/Against 2,134	Bite/Sting 1,823	Other Specified 1,224	Motor Vehicle Non-Traffic 1,079
12–17 years old	Fall 8,582	Struck By/Against 7,745	Motor Vehicle Traffic 4,104	Overexertion 3,980	Unspecified 3,321	Cut/Pierce 2,259	Bite/Sting 1,209	Struck By/Against 1,143	Other Specified 847	Motor Vehicle Non-Traffic 693
Under 12 years old	Fall 26,089	Struck By/Against 10,706	Unspecified 5,930	Bite/Sting 5,148	Motor Vehicle Traffic 3,744	Cut/Pierce 3,739	Overexertion 2,369	Other Specified 2,081	Foreign Body 2,011	Hot Object/Substance 949
Rank	-	2	3	4	5	9	2	8	6	10

Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. February 2021. This product was supported by grants numbers 5NU17CE924846 (Centers for Disease Control and Prevention) and 3048114413. Data source: Kentucky Outpatient Services Database, Office of Health Data and Analytics. Data are provisional and subject to change. Counts represent encounters of care and could be greater than the number of individual patients treated. Counts less than five are not included in this matrix. Produced by the Kentucky

Undetermined

Assault

Self-Harm

Unintentional

Injury Intent







All Injuries by Age and Sex

Fatalities

Total: 3,841 (84.4*)

Crude rate per 100,000 population

Males
Females

Total: 3,841 (84.4*)

,,,,,,		,
Age	Males	Females
<1	11	##
1–4	23	7
5–9	8	#
10-14	15	8
15-19	88	33
20-24	179	50
25-34	463	175
35-44	458	204
45-54	436	204
55-64	388	156
65-74	227	96
75-84	183	113
95⊥	125	193

Inpatient Hospitalizations

Total: 23,379 (475.5*)

Males: 10,384 (466.6*) Fem

Males: 2,604 (118.9*)

Females: 12,995 (469.0*)

Females: 1,237 (51.5*)

	Crude rate per 100,000 population
5,500	1 / 1 1
5,000	
4,500	■ Males
4,000	■ Females
3,500	
3,000	
2,500	_
2,000	
1,500	Fig. 1
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	1 1- 4 5-9 17-14 15-19 17 15-34 15-54 15-54 15-54 65-74 15-84 85*

Age	Males	Females
<1	66	38
1–4	107	76
5–9	83	51
10-14	139	108
15-19	372	291
20-24	523	284
25-34	1,144	644
35-44	1,301	825
45-54	1,323	1,072
55-64	1,544	1,745
65-74	1,486	2,302
75-84	1,365	2,829
85+	931	2,730

Emergency Department Visits Total: 472,787 (10,850.0*) Males: 235,533 (11,028.4*) Females: 237,254 (10,614.1*)

	Crude rate per 100,000 population
20,000	_
18,000	Ĭ
16,000	■ Males
14,000	■ Females
12,000	
10,000	
8,000	
6,000	
4,000	
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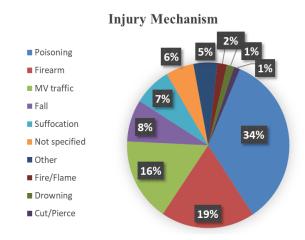
Age	Males	Females
<1	2,271	2,043
1-4	16,502	12,955
5–9	14,763	11,747
10-14	17,500	14,246
15–19	19,914	17,494
20-24	18,408	17,062
25-34	36,304	33,180
35-44	32,367	30,257
45-54	28,541	28,368
55-64	22,193	25,202
65–74	13,801	19,327
75–84	8,823	15,175
85+	4,146	10,198

##Suppressed to prevent indirect disclosure

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

All Injuries by Injury Mechanism

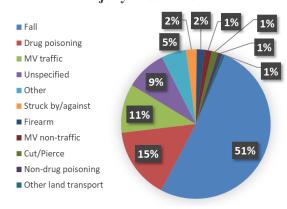
Fatalities



Injury Mechanism	Count
Poisoning	1,319
Firearm	719
MV traffic	626
Fall	316
Suffocation	288
Not specified	215
Other	182
Fire/Flame	74
Drowning	56
Cut/Pierce	46

Inpatient Hospitalizations

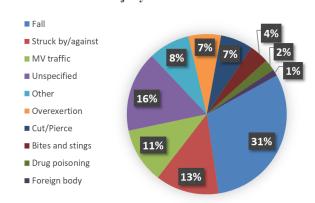
Injury Mechanism



Injury Mechanism	Count
Fall	11,991
Drug poisoning	3,609
MV traffic	2,474
Unspecified	2,057
Other	1,253
Struck by/against	550
Firearm	407
MV non-traffic	346
Cut/Pierce	328
Non-drug poisoning	216
Other land transport	148

Emergency Department Visits

Injury Mechanism



Injury Mechanism	Count
Fall	144,972
Struck by/against	60,920
MV traffic	52,999
Unspecified	76,738
Other	39,378
Overexertion	31,314
Cut/Pierce	30,943
Bites and stings	18,473
Drug poisoning	11,076
Foreign body	5,974

Unintentional Falls by Age and Sex

` '		`
Age	Males	Females
Age <1	0	0
1–4	0	0
5–9	0	0
10-14	0	0
15-19	0	0
20-24	#	0
25-34	#	0
35-44	##	0
45-54	11	0
55-64	17	#
65-74	33	##
75-84	46	40
85+	45	84

Females: 143 (4.4*)

Inpatient Hospitalization

Total: 11,979 (226.6*)

Males: 4,036 (178.0*)

Males: 160 (7.3*)

Females 7,943 (259.6*)

4,500	Crude rate per 100,000 population
•	ĭ
4,000	
3,500	■ Males
3,000	■ Females
2,500	
2,000	
1,500	
1,000	m III
500	
0	,
	1 1- A 5-9 17-14 15-19 20 2 15-3 35- 4 15-5 65-5 65-7 15-8 85*

Age	Males	Females
<1	19	9
1–4	24	18
5–9	30	17
10-14	36	8
15-19	40	10
20-24	32	12
25-34	103	66
35-44	190	127
45-54	324	344
55-64	622	951
65-74	893	1,618
75-84	956	2,352
85+	767	2,411

Emergency Department Visits Total: 144,925 (3,158.2*) Males: 60,315 (2,778.8*) Females: 84,610 (3,487.3*)

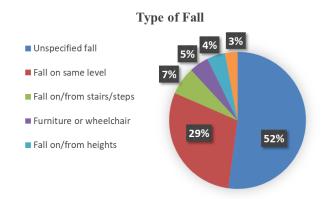
	Crude rate per 100,000 population
15,000	· · · · · · · · · · · · · · · · · · ·
13,500	■ Males
12,000	■ Females
10,500	- 1 chares
9,000	
7,500	
6,000	
4,500	
3,000	
1,500	
0	,
	1 1 2 5 9 10 1 4 5 1 9 7 1 25 3 35 A 15 5 5 5 6 65 7 1 5 8 A 85 x

Age	Males	Females
<1	1,124	1,009
1–4	6,466	4,859
5–9	4,706	4,238
10-14	4,617	3,879
15-19	2,992	3,091
20-24	2,140	3,050
25-34	4,887	6,828
35-44	5,570	7,728
45-54	6,746	9,392
55-64	6,989	11,291
65-74	5,975	10,893
75-84	5,120	10,377
85+	2,983	7,975

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

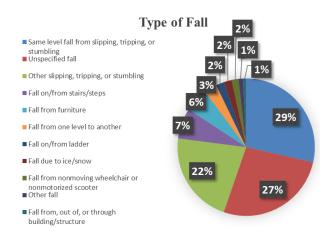
Unintentional Falls by Type of Fall

Fatalities



Type of Fall	Count
Unspecified fall	158
Fall on same level	89
Fall on/from stairs/steps	20
Furniture or wheelchair	14
Fall on/from heights	13
Other fall from one level to	
another	9

Inpatient Hospitalizations



Emergency Department Visits



Type of Fall	Count
Type of Fall Same level fall from slipping,	Count
tripping, or stumbling	3,420
Unspecified fall	3,204
Other slipping, tripping, or stumbling	2,604
Fall on/from stairs/steps	866
Fall from furniture	670
Fall from one level to another	356
Fall on/from ladder	231
Fall due to ice/snow	221
Fall from nonmoving wheelchair or	
nonmotorized scooter	194
Other fall	123
Fall from, out of, or through	
building/structure	90
Type of Fall	Count
Unspecified fall	41,132
Same level fall from slipping,	
tripping, or stumbling	40,675
Other slipping, tripping, or stumbling	19,187
Fall on/from stairs/steps	13,214
Fall from furniture	9,791
Fall from one level to another	8,498
Other fall	4,901
Fall due to ice/snow	3,276
Fall on/from ladder	2,553
Fall on/from playground equipment	1,698

Unintentional Fire-Related Injuries by Age and Sex

Fatalities Total: 64 (1.4*) Crude rate per 100,000 population 5 ■ Males ■ Females 4 3 2

· /	`	,
Age	Males	Females
Age <1	#	0
1–4	#	0
5–9	#	#
10-14	0	#
15-19	0	0
20-24	#	#
25-34	6	#
35-44	#	5
45-54	6	#
55-64	#	9
65-74	5	#
75-84	#	#
85+	#	0

Females: 28 (1.1*)

Inpatient Hospitalizations

Total: 106 (2.2*)

Males: 77 (3.4*)

Males: 36 (1.6*)

Females: 29 (1.2*)

Crude rate per 100,000 population		
7		■ Males
6		■ Females
5		
4	1 1	
3		
2		
1		
0		
1 2ª 5° 10°	14 15 19 20 24 34 35 AA 65 5	55 65 14 84 85*

Age <1	Males	Females
<1	0	0
1–4	0	#
5–9	#	#
10-14	6	#
15-19	#	0
20-24	#	0
25-34	12	#
35-44	6	#
45-54	19	6
55-64	15	8
65-74	7	6
75-84	5	0
85+	#	0

Emergency Department Visits Total: 1,465 (34.0*)

Males: 967 (44.8*)

Females: 498 (23.2*)

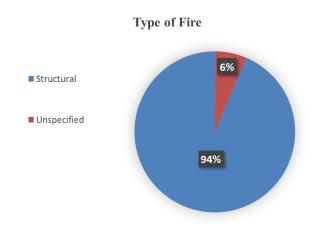
	Cruc	le rate	per 10	0,000	populatio	on
70						
60	Ĭ		Ĭ		■ Male	
50					Fema	
40						
30						
20						
10						1 1
0		, III , III,				
1 1- 5-9 10-1 5-19 20-2 15-3 35-4 45-5 45-6 65-7 15-8 85 x						

Age	Males	Females
<1	##	#
1–4	71	49
5–9	28	24
10-14	33	16
15-19	60	34
20-24	96	31
25-34	175	92
35-44	154	78
45-54	148	74
55-64	119	51
65-74	41	29
75-84	25	12
85+	#	#

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

Unintentional Fire-Related Injuries by Type of Fire

Fatalities



Type of Fire	Count
Structural	##
Unspecified	#

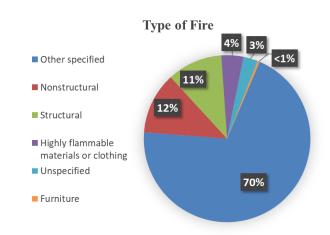
Inpatient Hospitalizations

Type of Fire

Other specified
Highly flammable materials or clothing
Structural
Nonstructural
Furniture

Type of Fire	Count
Other specified	49
Highly flammable materials or	
clothing	21
Structural	18
Nonstructural	##
Furniture	#

Emergency Department Visits



Type of Fire	Count
Other specified	1,023
Nonstructural	175
Structural	157
Highly flammable materials or	
clothing	63
Unspecified	41
Furniture	6

#At least one but fewer than five

Firearm-Related Injuries by Age and Sex

Total: 719 (15.9*) **Fatalities** Males: 606 (27.4*)

	Crude rate per 100,000 population
70	
60	Males
50	■ Females
40	
30	.
20	
10	
0	
	2 2 4 5 9 20 2 4 5 2 20 2 4 5 3 3 5 4 4 5 5 4 5 5 6 6 5 7 4 5 8 4 85 x

Age	Males	Females
<1	0	0
1–4	#	0
5–9	#	0
10-14	#	#
15-19	38	6
20-24	59	6
25-34	103	15
35-44	100	25
45-54	91	28
55-64	81	12
65–74	66	17
75-84	45	#
85+	17	#

Inpatient Hospitalizations Total: 407 (9.6*) Males: 351 (16.4*) Females: 56 (2.6*)

Females: 113 (5.1*)

Crude rate per 100,000 population		
50	_	
45		
40	■ Males	
35	■ Females	
30		
25	w _	
20		
15		
10		
5		
0		
2 2 2 5 9,00 2 55 2 20 2 25 3 35 2 4 65 5 4 55 6 65 7 15 8 4 85 8		

Age	Males	Females
<1	0	0
1–4	#	0
5–9	#	0
10-14	#	#
15-19	53	8
20-24	74	9
25-34	74	13
35-44	62	11
45-54	41	#
55-64	25	6
65-74	11	#
75-84	#	#
85+	#	0

Emergency Department Visits Total: 1,034 (24.3*) Males: 908 (42.6*) Females: 126 (5.9*)

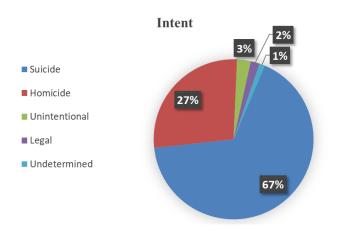
Crude rate per 100,000 population		
110		
100		■ Males
90		■ Females
80		
70		
60		
50		
40		
30		
20		
10	Y	
0		
2 1 4 5 9 10 14 5 12 10 12 33 35 da 55 55 65 1 15 84 85*		

Age	Males	Females
<1	#	0
1–4	#	#
5–9	5	0
10-14	8	#
15-19	122	20
20-24	170	20
25-34	235	31
35-44	159	19
45-54	91	10
55-64	57	12
65-74	35	8
75-84	16	0
85+	5	0

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

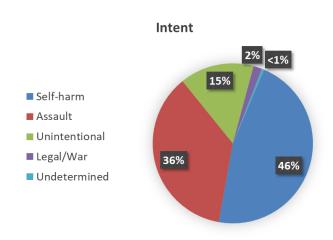
Firearm-Related Injuries by Intent

Fatalities



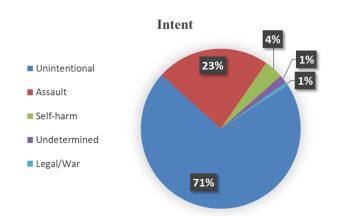
Intent	Count
Suicide	481
Homicide	197
Unintentional	20
Undetermined	13
Legal	8

Inpatient Hospitalizations



Intent	Count
Self-harm	189
Assault	148
Unintentional	61
Legal/War	##
Undetermined	#

Emergency Department Visits



Intent	Count
Unintentional	733
Assault	237
Self-harm	40
Undetermined	17
Legal/War	7

#At least one but fewer than five

Homicide and Assault by Age and Sex

Fatalities Total: 245 (5.8*) Males: 184 (8.7*) Females: 61 (2.8*)

	Crude rate per 1	00,000 popi	ulation
20			
18		M	
16	*		
14			■ Males
12			
10			■ Females
8			
6			_
4			
2			
0	, , , , , , , , , , , , , , , , , , ,		
	1 1 5 5 20 1 15 1 20 2 A	5-3 ^A 35-A ^A 45-5 ^A	64 14 85 8A 85*

Age	Males	Females
Age <1	#	0
1–4	#	#
5–9	#	0
10-14	0	#
15-19	14	5
20-24	26	#
25-34	53	14
35-44	44	14
45-54	16	10
55-64	16	6
65-74	5	7
75-84	#	#
85+	#	0

Inpatient Hospitalizations

Total: 655 (15.6*)

Males: 501 (24.0*) Females: 154 (7.1*)

	Crude rate per 100,000 population				
100					
	■ Males				
75	■ Females				
50	_ * *				
25					

Age	Males	Females
<1	24	21
1–4	28	9
5–9	#	#
10-14	#	#
15-19	41	5
20-24	56	7
25-34	112	29
35-44	106	26
45-54	75	21
55-64	33	22
65-74	14	6
75-84	6	#
85+	#	#

Emergency Department Visits

Total: 17,074 (410.9*) Males: 8,643 (411.4*)

Females: 8,431 (411.7*)

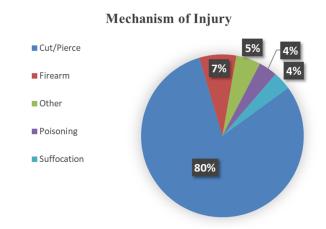
Crude rate per 100,000 population			
900			
800		■ Males	
700	T I	■ Females	
600		Females	
500			
400			
300			
200			
100			
0		<u> </u>	
	1 1 2 5 9 0 1 15 19 0 1 A	1534 45 54 65 14 95x	

Age	Males	Females
<1	65	53
1–4	242	277
5–9	177	200
10-14	461	347
15-19	926	971
20-24	1,011	1,220
25-34	1,977	2,126
35-44	1,684	1,652
45-54	1,207	929
55-64	681	460
65-74	174	126
75–84	29	54
85+	9	16

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

Homicide and Assault by Mechanism of Injury

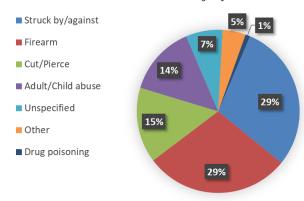
Fatalities



Mechanism of Injury	Count
Firearm	197
Cut/Pierce	18
Unspecified	12
Other	9
Suffocation	9

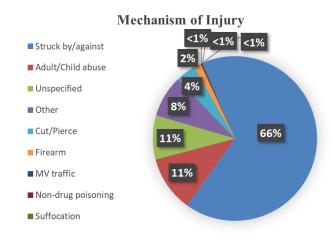
Inpatient Hospitalizations





Mechanism of Injury	Count
Struck by/against	193
Firearm	189
Cut/Pierce	98
Adult/Child abuse	91
Unspecified	48
Other	30
Drug poisoning	6

Emergency Department Visits



Mechanism of Injury	Count
Struck by/against	11,319
Adult/Child abuse	1,873
Unspecified	1,480
Other	1,408
Cut/Pierce	673
Firearm	237
MV traffic	44
Non-drug poisoning	21
Suffocation	19

Unintentional MV Traffic Crashes by Age and Sex

Fatalities Total: 626 (13.7*)

Crude rate per 100,000 population 75 ■ Males 60 ■ Females 45 30 15

Males: 436	(19.6*)	Females:	190	$(8.1)^{*}$	k)
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Age <1	Males	Females
<1	#	#
1–4	5	#
5–9	#	#
10-14	#	#
15-19	22	17
20-24	38	18
25-34	64	26
35-44	69	27
45-54	72	23
55-64	75	24
65-74	37	21
75-84	31	17
85+	17	12

Inpatient Hospitalizations

Total: 2,468 (54.2*)

Males: 1,488 (67.3*)

Females: 980 (41.4*)

	Crude rate per 100,000 population
120	■ Moles
100	■ Males ■ Females
80	Inlan II
60	
40	
20	
0	
	1 2 2 5 30 2 4 5 20 24 5 24 45 54 45 55 65 14 58 86 85*

	Age	Males	Females
	<1	#	0
	1–4	##	8
	5–9	12	11
1	0-14	17	17
1	5-19	100	57
2	0-24	152	76
2	5-34	241	148
3	5-44	261	143
4	5-54	223	125
5	5-64	223	157
6	5-74	136	121
7	5-84	81	82
	85+	29	35

Emergency Department Visits

Total: 52,927 (1,228.2*) Males: 24,415 (1,134.2*) Females: 28,512 (1,326.8*)

	F		I - I
2,500	*	ı	■ Males
2,000			■ Females
1,500			
1,000			
500			
0			
	2 2 5 5 20 2 45 29	24 34 A	558568578588 85x

Crude rate per 100,000 population

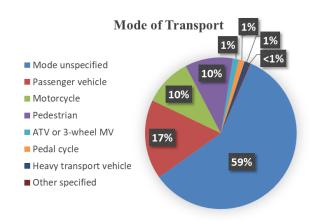
Age	e Males	Females
<		132
1-	4 518	532
5-9	851	830
10–1	4 951	969
15-19	2,546	3,410
20–24		3,623
25-34	4,823	5,752
35-44		4,456
45-54		3,636
55-64		2,789
65-74		1,544
75–84		681
85-		158

##Suppressed to prevent indirect disclosure

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

Unintentional MV Traffic Crashes by Mode of Transport

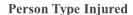
Fatalities

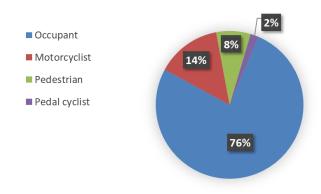


Mode of Transport	Count
Mode unspecified	368
Passenger vehicle	106
Motorcycle	64
Pedestrian	64
ATV or 3-wheel MV	8
Pedal cycle	8
Heavy transport vehicle	##
Other specified	#

Note: "Other specified" includes persons whose mode of transport was an animal, animal-drawn vehicle, railway train, railway vehicle, streetcar, special vehicle mainly used on industrial premises, or special construction vehicle.

Inpatient Hospitalizations

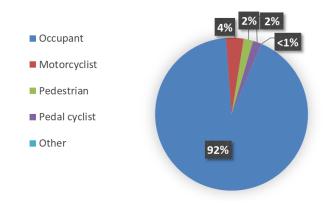




Person Type Injured	Count
Occupant	1,888
Motorcyclist	350
Pedestrian	186
Pedal cyclist	44

Emergency Department Visits

Person Type Injured



Person Type Injured	Count
Occupant	48,926
Motorcyclist	1,971
Pedestrian	1,067
Pedal cyclist	956
Other	7

Note: "Other" includes ED visits due to injuries related to persons boarding and alighting and unspecified occupants of a motor vehicle.

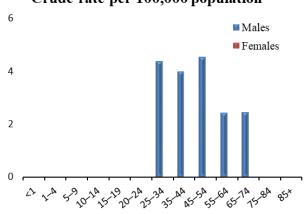
#At least one but fewer than five

Fatalities

Non-Drug Poisoning by Age and Sex

Total: 69 (1.6*)

Crude rate per 100,000 population



Males: 53 (2.4*) Females: 16 (0.7*)

Age <1	Males	Females
<1	0	0
1–4	#	0
5–9	0	#
10-14	0	0
15-19	0	0
20-24	#	0
25-34	13	#
35-44	11	#
45-54	13	#
55-64	7	#
65-74	5	#
75-84	#	#
85+	0	0

Inpatient Hospitalizations

Total: 216 (4.7*)

Males: 116 (5.1*)

Females: 100 (4.4*)

	Crude rate per 100,000 population
12	■ Males
10	Females
8	l I
6	r III I. II r .
4	11.00000
2	1111111
0	
	22 24 5-3024 3523 3024 3534 ASTS 5506 5574 3584 854

Age <1	Males	Females
<1	0	0
1–4	#	0
5–9	#	0
10-14	0	#
15-19	#	#
20-24	#	7
25-34	18	11
35-44	19	26
45-54	29	16
55-64	23	20
65-74	12	11
75-84	5	#
85+	0	#

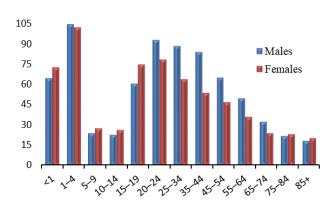
Emergency Department Visits

Total: 2,441 (56.8*)

Males: 1,347 (62.7*)

Females: 1,094 (50.9*)

Crude	rate	per	100.	000	popul	lation

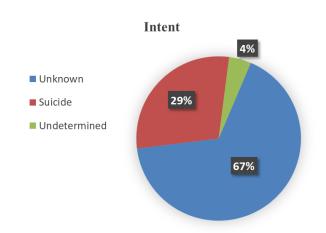


Age	Males	Females
Age <1	18	19
1–4	118	110
5–9	34	37
10-14	33	37
15-19	89	104
20-24	144	113
25-34	262	183
35-44	230	148
45-54	185	137
55-64	143	112
65-74	66	55
75-84	20	28
85+	5	11

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

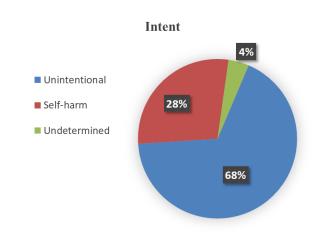
Non-Drug Poisoning by Intent

Fatalities



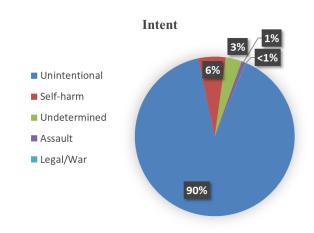
Intent	Count
Unknown	46
Suicide	##
Undetermined	#

Inpatient Hospitalizations



Intent	Count
Unintentional	146
Self-harm	61
Undetermined	9

Emergency Department Visits



Intent	Count
Unintentional	2,204
Self-harm	135
Undetermined	80
Assault	##
Legal/War	#

#At least one but fewer than five

Drug Poisoning by Age and Sex

Fatalities Total: 1,250 (29.2*) Males: 779 (36.5*) Females: 471 (21.9*)

Crude rate per 10	0,000 population
80	
70	■ Males
60	■ Females
50	
40	
30	
20	
10	
0	
1 2 4 59 10 14 15 19 20 24	34 15 14 55 65 14 15 84 85 x

Age	Males	Females
Age <1	0	0
1–4	0	0
5–9	0	0
10-14	0	0
15-19	6	#
20-24	49	20
25-34	203	111
35-44	206	129
45-54	171	117
55-64	116	78
65-74	21	10
75-84	##	#
85+	#	#

Inpatient Hospitalizations Total: 3,609 (81.4*) Males: 1,613 (74.3*) Females: 1,996 (88.4*)

	Crude rate per 100,000 population
140	
120	■ Males
100	■ Females
80	
60	
40	
20	
0	
	1 1 1 5 5 10 1 1 15 1 20 1 25 3 35 M 15 5 85 85 7 15 8 8 85 8

Age	Males	Females
<1	#	#
1–4	6	##
5–9	#	0
10-14	13	52
15-19	71	164
20-24	113	135
25-34	362	292
35-44	361	361
45-54	282	386
55-64	238	312
65-74	105	187
75-84	42	69
85+	15	25

Emergency Department Visits	Total: 11,076 (263.3*)	Males: 5,755 (274.1*)	Females: 5,321 (252.6*)
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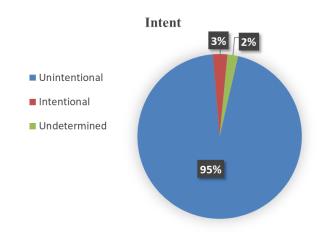
Crude rate per 100,000 population		
675		
600	Ĭ	■ Males
525		■ Females
450		
375		
300	70- II III III	
225	_ ,	lin .
150		
75		
0	,	
	2 2 2 5 9 20 2 15 29 20 25 3 35 AB	555 65 14 84 85*

Age	Males	Females
<1	18	26
1–4	332	304
5–9	47	35
10-14	83	278
15-19	314	600
20-24	518	499
25-34	1,872	1,231
35-44	1,236	911
45-54	664	652
55-64	419	377
65-74	152	220
75–84	78	133
85+	22	55

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

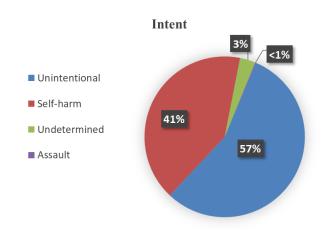
Drug Poisoning by Intent

Fatalities



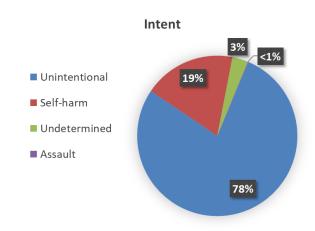
Intent	Count
Unintentional	1,188
Intentional	36
Undetermined	26

Inpatient Hospitalizations



Intent	Count
Unintentional	2,007
Self-harm	1,483
Undetermined	113
Assault	6

Emergency Department Visits



Intent	Count
Unintentional	8,645
Self-harm	2,061
Undetermined	354
Assault	16

Suicide and Self-Injury by Age and Sex

Fatalities Total: 757 (16.5*) Males: 621 (27.6*) Females: 136 (6.1*)

	Crude rate per 100,000 population
70	■ Males
60	■ Females
50	- 1
40	
30	1 1 1 1 1 1 1
20	
10	111,6611,11
0	
	2 2 2 59,002 15 20 2 15 3 35 1 1 55 6 65 1 1 58 8 85x

Age	Males	Females
<1	0	0
1–4	0	0
5–9	0	0
10-14	6	#
15-19	31	#
20-24	50	8
25-34	90	22
35-44	94	29
45-54	111	36
55-64	100	17
65-74	75	16
75-84	47	#
85+	17	#

Inpatient Hospitalizations

Total: 1,798 (42.0*)

Males: 761 (35.3*)

Females: 1,037 (48.9*)

	Crude rate per 100,000 population
130	_
110	■ Males
90	■ Females
70	la a
50	
30	
10	
-10	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

Age	Males	Females
<1	0	0
1–4	0	0
5–9	#	0
10-14	11	54
15-19	52	170
20-24	81	104
25-34	169	161
35-44	155	197
45-54	154	181
55-64	97	102
65-74	27	54
75-84	9	##
85+	#	#

Emergency Department Visits

Total: 4,318 (104.5*) Males: 1,721 (81.9*)

Females: 2,597 (128.4*)

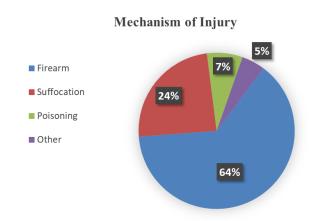
Crude rate per 100,000 population		
550		
500		
450		
400		_,,,
350		■ Males
300	W	■ Females
250		
200		
150		III III
100		
50		
0		
	1 1 4 5 9 10 14 15 19	02 ¹ 25 ²³ 35 ⁴⁴ 45 ⁵⁴ 55 ⁶ 65 ⁷ ¹ 15 ⁸⁴ 85 ^x

	Age	Males	Females
	<1	0	0
	1–4	#	#
	5–9	6	5
	10-14	76	408
	15-19	340	754
	20-24	242	353
	25-34	453	425
	35-44	287	310
	45-54	178	192
	55-64	91	103
	65-74	35	36
	75-84	8	7
	85+	#	#
,		•	

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

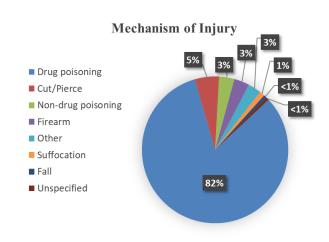
Suicide and Self-Injury by Mechanism of Injury

Fatalities



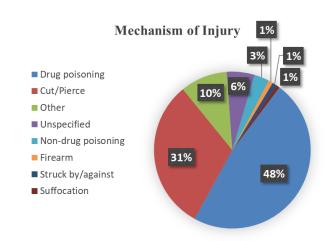
Mechanism of Injury	Count
Firearm	481
Suffocation	183
Poisoning	56
Other	37

Inpatient Hospitalizations



Mechanism of Injury	Count
Drug poisoning	1,483
Cut/Pierce	96
Non-drug poisoning	61
Firearm	61
Other	52
Suffocation	21
Fall	12
Unspecified	12

Emergency Department Visits



Mechanism of Injury	Count
Drug poisoning	2,061
Cut/Pierce	1,344
Other	419
Unspecified	248
Non-drug poisoning	135
Firearm	40
Struck by/against	39
Suffocation	32

Traumatic Brain Injury by Age and Sex

Fatalities Total: 962 (20.5*)

	Crude rate per 100,000 population
140	■ Males
120	■ Females
100	
80	1 1
60	
40	
20	1 1 1 1 1 1 1 1 1 1
0	
	12 1-4 5-9 10-14 15-12 10-14 15-34 55-44 15-54 55-665-71 15-84 85*

Males: 739 (33.2*) Females: 223	(0.0)
17 ares: 757 (55.2)	(0.0)

Age	Males	Females
<1	#	0
1–4	#	#
5–9	#	#
10-14	#	#
15-19	41	9
20-24	54	12
25-34	96	19
35-44	97	23
45-54	101	30
55-64	107	17
65-74	96	28
75-84	82	34
85+	52	47

Inpatient Hospitalizations

Total: 2,854 (58.8*)

Males: 1,681 (76.2*)

Females: 1,173 (42.3*)

	Crude rate per 100,000 population
675	-361
600	■ Males
525	■ Females
450	
375	
300	
225	
150	_
75	
0	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	1 2 2 59 20 2 55 20 22 55 28 55 28 55 65 1 25 28 85*

	19
1–4 25	10
- · ·	10
5–9 17	1
10–14 28	2
15–19 73	28
20–24 89	35
25–34 152 5	50
35–44 177 5	56
45–54 195	54
55–64 203 13	32
65–74 252 17	77
75–84 264 29	98
85+ 172 28	31

Emergency Department Visits

Total: 11,608 (265.3*) Males: 6,311 (294.8*)

Females: 5,297 (234.7*)

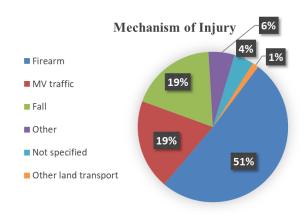
Crude rate per 100,000 population		
650		
585		
520	■ Males	
455	■ Females	
390		
325		
260		
195		
130		
65		
0		
1 2 5 9 10 1A 551	202 ^A 252 ^A 354 ^A 455 ^A 556 ^A 557 ^A 158 ^A 85*	

Age	Males	Females
<1	107	104
1–4	220	183
5–9	275	178
10-14	644	355
15-19	903	576
20-24	538	480
25-34	836	662
35-44	741	604
45-54	626	458
55-64	529	510
65-74	447	467
75-84	304	412
85+	141	308

^{*}Age-adjusted rate per 100,000 population #At least one but fewer than five

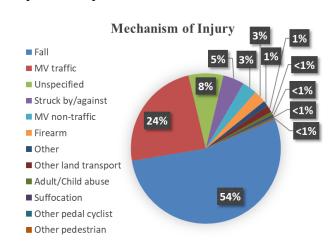
Traumatic Brain Injury by Mechanism of Injury

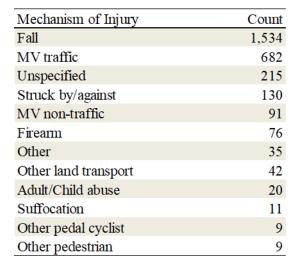
Fatalities



Mechanism of Injury	Count
Firearm	490
MV traffic	186
Fall	178
Other	54
Not specified	41
Other land transport	13

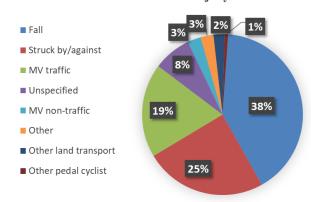
Inpatient Hospitalizations





Emergency Department Visits

Mechanism of Injury



Mechanism of Injury	Count
Fall	4,732
Struck by/against	2,847
MV traffic	2,193
Unspecified	885
MV non-traffic	312
Other	300
Other land transport	258
Other pedal cyclist	81