

Injury-related Emergency Dept. Visits among MA Residents

2016

Injuries¹ are a leading cause of emergency department (ED) visits among Massachusetts residents. In fiscal year 2016, there were 636,002 injury-related ED visits. The leading injury mechanisms contributing to ED visits were unintentional falls, struck-by or against an object, and motor vehicle traffic-related crashes.

Key Indicators	INJURY INTENT					Missing ³	Totals
	Unintentional	Self-Inflicted	Assault	Undetermined	Legal/Terrorism ²		
Total Counts by Intent	565,356	6,559	23,561	2,047	699	37,780	636,002
Percent by Intent	88.9%	1.0%	3.7%	0.3%	0.1%	5.9%	100.0%
Rate per 100,000 population ⁴	8,223.8	95.4	342.7	29.8	10.2	549.6	9,251.4

Injury Mechanism	INJURY INTENT					Subtotal Counts	Percent of Total Count ⁵	Rate per 100,000 ⁴
	Unintentional	Self-Inflicted	Assault	Undetermined	Legal/Terrorism ²			
Cut/pierce	47,439	2,603	1,435	--	--	51,849	8.2%	754.2
Drowning/Submersion	142	--	--	19	--	163	0.0%	2.4
Fall	172,018	33	24	29	--	172,104	27.1%	2,503.5
Fire/burn	6,919	65	26	72	0	7,082	1.1%	103.0
<i>Fire/flame</i>	1,287	21	--	--	0	1,330	0.2%	19.3
<i>Burns/hot objects & substances</i>	5,632	44	16	60	--	5,752	0.9%	83.7
Firearm	191	--	176	15	--	404	0.1%	5.9
Machinery	3,660	--	--	--	--	3,660	0.6%	53.2
Natural/Environmental ⁶	23,729	--	--	80	--	23,821	3.7%	346.5
<i>Bites and stings, nonvenomous</i>	18,488	--	--	--	--	18,488	2.9%	268.9
<i>Bites and stings, venomous</i>	2,193	--	--	80	--	2,284	0.4%	33.2
<i>Natural/environmental, other</i>	3,048	--	--	0	--	3,049	0.5%	44.4
Overexertion	3,213	--	--	--	--	3,213	0.5%	46.7
Poisoning	15,320	2,505	--	1,141	--	19,021	3.0%	276.7
<i>Poisoning, Drug</i>	12,670	2,376	24	995	--	16,065	2.5%	233.7
<i>Poisoning, Non-Drug</i>	2,650	129	--	146	--	2,956	0.5%	43.0
Struck by or against object	79,977	79	16,575	81	348	97,060	15.3%	1,411.9
Suffocation ⁷	207	24	--	--	0	236	0.0%	3.4
Transport Injuries:	82,684	31	26	12	--	82,753	13.0%	1,203.7
<i>Motor vehicle traffic-related</i>	70,344	27	26	12	--	70,409	11.1%	1,024.2
<i>MV Occupant⁸</i>	63,493	--	--	--	--	63,514	10.0%	923.9
<i>Motorcyclist</i>	2,238	--	--	--	--	2,238	0.4%	32.6
<i>Pedal cyclist</i>	2,191	--	--	--	--	2,191	0.3%	31.9
<i>Pedestrian</i>	2,416	--	--	--	--	2,435	0.4%	35.4
<i>Other person</i>	--	--	--	--	--	19	0.0%	0.3
<i>Unspecified</i>	--	--	--	--	--	12	0.0%	0.2
<i>Non-traffic-related</i>	9,734	--	--	--	--	9,734	1.5%	141.6
<i>MV-Motorcycle Occupant⁹</i>	3,914	--	--	--	--	3,914	0.6%	56.9
<i>Pedal cyclist</i>	4,684	--	--	--	--	4,684	0.7%	68.1
<i>Pedestrian</i>	1,136	--	--	--	--	1,136	0.2%	16.5
<i>Other land transport</i>	2,129	--	--	--	--	2,132	0.3%	31.0
<i>Other transport</i>	477	--	--	--	0	478	0.1%	7.0
Other-specified & classifiable	15,035	--	1,461	13	--	16,522	2.6%	240.3
<i>Child and adult abuse</i>	--	--	938	--	--	938	0.1%	13.6
<i>Foreign bodies</i>	4,332	--	--	--	--	4,332	0.7%	63.0
<i>Other specified & classifiable</i>	10,703	--	523	13	--	11,252	1.8%	163.7
Other specified, not classifiable	--	914	2,136	221	230	3,501	0.6%	50.9
Unspecified	114,822	280	1,640	--	--	116,833	18.4%	1,699.5

Data Source: Massachusetts Outpatient Emergency Department Discharge Database, Center for Health Information and Analysis (CHIA). Data are collected and reported by fiscal year (Oct. 1, 2015 - Sept. 30, 2016). Due to the implementation of ICD-10-CM in October 2015, counts and rates presented here should not be compared to data that were based on ICD-9-CM codes.

General Notes: The injury case definition is based on the Council for State and Territorial Epidemiologists (CSTE) document: *Nonfatal Emergency Department Visits for All Injuries* and includes selected ICD-10-CM codes from diagnosis and external cause code (E-Code) fields. Only visits for active treatment of injuries are included in the total. Injury mechanism and intent categories are based on the CDC's *The International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) External Cause-of-Injury Framework for Categorizing Mechanism and Intent of Injury* and are categorized based on the first external cause code or diagnosis code providing mechanism and intent. The search order is principal E-code field, primary diagnosis field, then associated diagnosis fields. This search order may underestimate the number of injuries in some categories as some cases are assigned more than one ICD-10-CM injury code. Gray cells indicate that there are no ICD-10-CM codes assigned to the category. All injury subcategories are shown in italics. For example, poisoning includes two subcategories – drug poisoning and non-drug poisoning.

Footnotes: 1) Includes MA residents treated at a MA acute care hospital in FY2016 (Oct. 1, 2015 - Sept. 30, 2016); deaths are excluded. Counts represent the number of injury-related emergency department visits rather than the number of individuals treated. Per data confidentiality guidelines, counts less than 11, and complementary cells that allow calculation of totals are suppressed (indicated by "--"). 2) Includes injuries resulting from police actions, terrorism and war. 3) Includes injuries with no external cause code provided. 4) Crude rates per 100,000 MA residents are based on 2016 population estimates (6,874,645) developed by the University of Massachusetts Donahue Institute (UMDI) in partnership with the Massachusetts Department of Public Health, Bureau of Environmental Health. 5) Totals may not sum to 100% due to rounding. 6) Natural/Environmental (N/E) injuries includes bites and stings from animals and insects, grouped into nonvenomous and venomous categories. The other N/E category includes injuries from forces of nature (e.g., flood, storm, cold weather), animal injuries other than bites, harmful algae and other plant toxins, etc. 7) Includes asphyxiation and hanging. 8) Includes motor vehicle drivers, passengers and unspecified persons. 9) Includes car/truck or motorcycle drivers and passengers, and unspecified persons injured in a crash that does not occur on a public roadway (e.g. driveway, parking lot, private road, etc.).