

# Injury-related Emergency Dept. Visits among MA Residents

# 2018

Injuries<sup>1</sup> are a leading cause of emergency department (ED) visits among Massachusetts residents. In fiscal year 2018, there were 596,098 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						Totals
	Unintentional	Self-Inflicted	Assault	Undetermined	Legal/Terrorism <sup>2</sup>	Missing <sup>3</sup>	
<b>Total Counts by Intent</b>	<b>543,625</b>	<b>5,945</b>	<b>21,231</b>	<b>1,491</b>	<b>577</b>	<b>23,229</b>	<b>596,098</b>
Percent by Intent	91.2%	1.0%	3.6%	0.3%	0.1%	3.9%	100.0%
Rate per 100,000 population <sup>4</sup>	7,825.1	85.6	305.6	21.5	8.3	334.4	8,580.4

Injury Mechanism	INJURY INTENT					Subtotal Counts	Percent of Total Count <sup>5</sup>	Rate per 100,000 <sup>4</sup>
	Unintentional	Self-Inflicted	Assault	Undetermined	Legal/Terrorism <sup>2</sup>			
Cut/pierce	42,377	2,435	1,038	--	--	46,020	7.7%	662.4
Drowning/Submersion	110	--	--	33	--	154	0.0%	2.2
Fall	173,446	36	21	40	--	173,543	29.1%	2,498.0
Fire/burn	6,166	64	19	71	--	6,320	1.1%	91.0
<i>Fire/flame</i>	1,074	--	--	23	--	1,126	0.2%	16.2
<i>Burns/hot objects &amp; substances</i>	5,092	42	12	48	0	5,194	0.9%	74.8
Firearm	220	--	146	--	--	384	0.1%	5.5
Machinery	2,974	--	--	--	--	2,974	0.5%	42.8
Natural/Environmental <sup>6</sup>	24,653	--	--	49	--	24,711	4.1%	355.7
<i>Bites and stings, nonvenomous</i>	18,131	--	--	--	--	18,131	3.0%	261.0
<i>Bites and stings, venomous</i>	2,923	--	--	49	--	2,980	0.5%	42.9
<i>Natural/environmental, other</i>	3,599	--	--	0	--	3,600	0.6%	51.8
Overexertion	40,889	--	--	--	--	40,889	6.9%	588.6
Poisoning	14,327	2,137	--	673	--	17,186	2.9%	247.4
<i>Drug poisoning</i>	12,212	2,031	22	588	--	14,853	2.5%	213.8
<i>Non-drug poisoning</i>	2,115	106	--	85	--	2,333	0.4%	33.6
Struck by or against object	68,691	71	15,912	171	276	85,121	14.3%	1,225.3
Suffocation <sup>7</sup>	98	--	--	0	0	143	0.0%	2.1
Transport Injuries:	76,114	29	--	--	--	76,178	12.8%	1,096.5
<i>Motor vehicle traffic-related</i>	66,886	26	--	--	--	66,945	11.2%	963.6
<i>MV Occupant<sup>8</sup></i>	60,455	15	--	--	--	60,477	10.1%	870.5
<i>Motorcyclist</i>	2,098	--	--	--	--	2,098	0.4%	30.2
<i>Pedal cyclist</i>	1,730	--	--	--	--	1,730	0.3%	24.9
<i>Pedestrian</i>	2,601	--	18	--	--	2,619	0.4%	37.7
<i>Other person</i>	--	--	--	--	--	13	0.0%	0.2
<i>Unspecified</i>	--	--	--	--	--	--	--	--
<i>Nontraffic-related</i>	7,741	--	--	--	--	7,741	1.3%	111.4
<i>MV-Motorcycle Occupant<sup>9</sup></i>	2,952	--	--	--	--	2,952	0.5%	42.5
<i>Pedal cyclist</i>	3,909	--	--	--	--	3,909	0.7%	56.3
<i>Pedestrian</i>	880	--	--	--	--	880	0.1%	12.7
<i>Other land transport</i>	1,226	--	--	--	--	1,231	0.2%	17.7
<i>Other transport</i>	261	0	0	--	0	261	0.0%	3.8
Other-specified & classifiable	13,909	--	1,677	--	0	15,608	2.6%	224.7
<i>Child and adult abuse</i>	--	--	1,100	--	--	1,100	0.2%	15.8
<i>Foreign body</i>	3,654	--	--	--	--	3,654	0.6%	52.6
<i>Other specified &amp; classifiable</i>	10,255	--	577	--	0	10,854	1.8%	156.2
Other specified, not classifiable	--	921	1,262	261	210	2,654	0.4%	38.2
Unspecified	79,651	193	1,064	0	76	80,984	13.6%	1,165.7

**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, 2017 - Sept. 30, 2018). 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 FY2018 (Oct. 1, 2017 - Sept. 30, 2018); 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 2018 population estimates (6,947,185) developed by the University of Massachusetts Donahue Institute 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.).