Injury-related Hospital Stays among MA Residents 2016

Injuries[1] are a leading cause of death and hospitalization among Massachusetts residents. In fiscal year 2016, there were 46,233 injury-related hospital stays, more than 3,800 per month. The leading injury mechanisms contributing to hospital stays were falls, poisoning/overdoses 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‡	**33,299**	**3,253**	**1,171**	**412**	**11**	**8,087**	**46,233**
Percent by Intent	72.0%	7.0%	2.5%	0.9%	0.0%	17.5%	100.0%
Rate per 100,000 population[4]	484.4	47.3	17.0	6.0	0.2	117.6	672.5

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	228	--	239	--	0	668	1.4%	9.7
Drowning/Submersion	13	--	--	17		32	0.1%	0.5
Fall	20,764	17	--	--		20,786	45.0%	302.4
Fire/burn	360	31	--	--	0	405	0.9%	5.9
Fire/flame	131	--	--	--	0	138	0.3%	2.0
Burns/hot objects & substances	229	--	--	--		267	0.6%	3.9
Firearm	68	--	173	--	--	258	0.6%	3.8
Machinery	181					181	0.4%	2.6
Natural/Environmental[6]	404	0	--	--		406	0.9%	5.9
Bites and stings, nonvenomous	182					182	0.4%	2.6
Bites and stings, venomous	74	0	--	--		76	0.2%	1.1
Natural/environmental, other	148	0	0	0		148	0.3%	2.2
Overexertion	26					26	0.1%	0.4
Poisoning	4,314	2,841	19	347	0	7,521	16.3%	109.4
Drug poisoning	3,930	2,730	17	324		7,001	15.1%	101.8
Non-Drug poisoning	384	111	--	--	0	520	1.1%	7.6
Struck by or against object	992	--	456	--	--	1,457	3.2%	21.2
Suffocation[7]	133	--	0	--	0	141	0.3%	2.1
Transport Injuries:	3,811	27	--	--		3,847	8.3%	56.0
Motor vehicle traffic-related	2,831	26	--	--		2,866	6.2%	41.7
MV Occupant[8]	1,812	--	--			1,828	4.0%	26.6
Motorcyclist	475					475	1.0%	6.9
Pedal cyclist	165					165	0.4%	2.4
Pedestrian	379	--	--			386	0.8%	5.6
Other person	--	--				--	--	--
Unspecified				--		--	--	--
Nontraffic-related	757					757	1.6%	11.0
MV-Motorcycle Occupant[9]	350					350	0.8%	5.1
Pedal cyclist	267					267	0.6%	3.9
Pedestrian	140					140	0.3%	2.0
Other land transport	177	--	--			178	0.4%	2.6
Other transport	46	0	0		0	46	0.1%	0.7
Other-specified & classifiable	592	--	122	--	--	717	1.6%	10.4
Child and adult abuse			88			88	0.2%	1.3
Foreign body	459					459	1.0%	6.7
Other specified & classifiable	133	--	34	--	--	170	0.4%	2.5
Other specified, not classifiable		92	72	--	--	184	0.4%	2.7
Unspecified	1,413	28	75	--	--	1,517	3.3%	22.1

Data Sources: Massachusetts Inpatient Hospital Discharge and Outpatient Observation Stay Databases, Center for Health Information and Analysis (CHIA). Data are collected and reported by fiscal year (Oct. 1, 2015 - Sept. 30, 2016). "Hospital Stays" combine hospital discharges and observation stays. 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. ‡Please note that injury intent counts and rates in FY2016 are lower than for FY2017. The MA Outpatient Observation Stays database did not include a designated external cause of injury code (E-code) field until FY2017 so a large percentage of injuries in the FY2016 file did not have a corresponding cause/intent code assigned.

General Notes: The injury case definition is based on the Council for State and Territorial Epidemiologists (CSTE) document: *Nonfatal Hospitalizations for All Injuries* and includes selected ICD-10-CM codes from the primary diagnosis field. 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 and transfers to another acute care hospital are excluded. Counts represent the number of injury-related hospital stays 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