

Hospitalizations for work-related injuries among 18- to 24-year-olds

Massachusetts
2009 – 2013

Table 1. Summary of All Hospitalizations

N = Number of Hospitalizations
% = Percent of Hospitalizations

		All Hospitalizations			
		N	%	Hospitalizations per 10,000 FTEs	95% CI
Total		301	100	2.3	2.0-2.5
Age	18	17	5.6	2.0	1.1-3.0
	19	32	10.6	2.9	1.9-3.9
	20	31	10.3	1.8	1.2-2.5
	21	50	16.6	2.9	2.1-3.7
	22	48	15.9	2.3	1.6-2.9
	23	64	21.3	2.4	1.8-3.0
	24	59	19.6	1.9	1.4-2.4
Gender⁺	Male	255	84.7	3.6	3.2-4.1
	Female	46	15.3	0.7	0.5-0.9
Race & Ethnicity	White only, non-Hispanic	206	68.4	2.1	1.8-2.3
	Hispanic	50	16.6	2.9	2.1-3.7
	Black only, non-Hispanic	23	7.6	3.1	1.8-4.3
	Asian only, non-Hispanic	a			
	Multi-racial	a			
Year of Hospital Visit	2009	74	24.6	2.6	2.0-3.2
	2010	66	21.9	2.7	2.0-3.3
	2011	58	19.3	2.2	1.7-2.8
	2012	53	17.6	1.9	1.4-2.5
	2013	50	16.6	1.9	1.3-2.4

(continued on next page)

Source: Hospital Discharge Data, for 1 Jan 2009 through 31 Dec 2013, Massachusetts Center for Health Information and Analysis.

(a) Counts not shown and rates not calculated for cells with less than 11 cases based on the CHIA rules pertaining to confidentiality. Rates based on counts less than 20 may be unstable.

Numbers may not add to total due to missing information.

A hospitalization for an injury is defined as any case having an ICD-9-CM Nature of Injury Code of 800-999 in the primary diagnosis field. Attribution of work-relatedness is based on designation of Workers' Compensation Insurance as expected payer.

Injuries per 10,000 FTE calculated as number of injury / FTE*10,000; FTEs=total hours per year / 2000.

Total hours worked for Massachusetts residents obtained from Current Population Survey, Bureau of Labor Statistics, Jan 2009 through Dec 2013.

*Difference is significant based on 95% confidence intervals; however, the standard error of the denominator was not taken into account when calculating confidence intervals.

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		All Hospitalizations			
		N	%	Hospitalizations per 10,000 FTEs	95% CI
Nature of Injury	Fractures	105	34.9	0.8	0.6-0.9
	Open wounds	34	11.3	0.3	0.2-0.3
	Internal organ	26	8.6	0.2	0.1-0.3
	Burns	21	7.0	0.2	0.1-0.2
	Other ^b	43	14.3	0.3	0.2-0.4
	Unspecified & Missing	72	23.9	0.5	0.4-0.7
External Cause of Injury	Falls	84	27.9	0.6	0.5-0.8
	Struck by/against	39	13.0	0.3	0.2-0.4
	Machinery	34	11.3	0.3	0.2-0.3
	Cut/pierce	23	7.6	0.2	0.1-0.2
	Motor vehicle traffic	23	7.6	0.2	0.1-0.2
	Fire/burn	22	7.3	0.2	0.1-0.2
	Other transportation	12	4.0	0.09	0.0-0.1
	Other ^c	39	13.0	0.3	0.2-0.4
	Unspecified & Missing	25	8.3	0.2	0.1-0.3

(b) Other includes crushings, sprains, superficial/contusions, dislocations, blood vessels, nerve injuries, amputations, and system wide and late effects.

(c) Other includes other specified, firearm, suffocation, drowning, poisonings, natural/environmental, overexertion, and not elsewhere classified.

Nature of Injury and Body Region groupings are based on Barell Injury Matrix, Barell et al., *Inj Prev*, 2002 Jun;8(2):91-96

External Cause of Injury groupings are based on 'ICD-9 Framework for Presenting Injury Mortality Data,' MMWR Recommendations and Reports, August 29, 1997, Volume 46/NORR-14.

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Table 2. Nature of Injury by Gender and Race & Ethnicity

N = Number of Hospitalizations
% = Percent of Hospitalizations

		Gender				Race/Ethnicity					
		Males		Females		White, non-Hispanic		Hispanic		Other, non-Hispanic	
		N	%	N	%	N	%	N	%	N	%
Total		255	100	46	100	206	100	50	100	24	100
Nature of Injury	Fractures	89	34.9	16	34.8	78	37.9	15	30.0	b	
	Open wounds	29	11.4	b		21	10.2	b		b	
	Internal organ	21	8.2	b		19	9.2	b		b	
	Burns	19	7.5	b		b		b		b	
	Other^a	37	14.5	b		26	12.6	b		b	
	Unspecified & Missing	60	23.5	12	26.1	b		b		b	

Source: Hospital Discharge Data, for 1 Jan 2009 through 31 Dec 2013, Massachusetts Center for Health Information and Analysis

(a) Other includes crushings, sprains, superficial/contusions, dislocations, blood vessels, nerve injuries, amputations, and system wide and late effects.

(b) Counts not shown for cells with less than 11 cases based on the CHIA rules pertaining to confidentiality.

Numbers may not add to total due to missing information.

A hospitalization for an injury is defined as any case having an ICD-9-CM Nature of Injury Code of 800-999 in the primary diagnosis field.

Attribution of work-relatedness is based on designation of Workers' Compensation Insurance as expected payer.

Nature of Injury and Body Region groupings are based on Barell Injury Matrix, Barell et al., *Inj Prev*, 2002 Jun;8(2):91-96.

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Table 3. Nature of Injury by Body Region

N = Number of Hospitalizations
% = Percent of Hospitalizations

		Hospitalizations	
		N	%
Total		301	100
Nature of Injury by Body Region	Fractures	105	34.9
	Extremities	73	69.5
	Head & neck	13	12.4
	Open wounds	34	11.3
	Extremities	27	79.4
	Internal Organ	26	8.6
	Head & neck	14	53.8
	Torso	12	46.2
	Burns	21	7.0
	Extremities	17	81.0
	Other	43	14.3
	Extremities	22	51.2
	Unspecified & Missing	72	23.9

Source: Hospital Discharge Data, for 1 Jan 2009 through 31 Dec 2013, Massachusetts Center for Health Information and Analysis.
 (a) Other includes sprains, superficial/contusions, dislocations, blood vessels, nerve injuries, amputations, and system wide and late effects. Counts not shown for cells with less than 11 cases based on the CHIA rules pertaining to confidentiality.
 Numbers may not add to total due to missing information. Not all subcategories shown for each nature of injury category.
 A hospitalization for an injury is defined as any case having an ICD-9-CM Nature of Injury Code of 800-999 in the primary diagnosis field. Attribution of work-relatedness is based on designation of Workers' Compensation Insurance as expected payer.
 Nature of Injury and Body Region groupings are based on Barell Injury Matrix, Barell et al., Inj Prev, 2002 Jun;8(2):91-96

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Table 4: External Cause of Injury

N = Number of Hospitalizations

% = Percent of Hospitalizations

		Hospitalizations	
		N	%
Total		301	100
External Cause of Injury	Falls	84	27.9
	Fall to lower level	21	25.0
	Fall to same level	19	22.6
	Fall from ladder	12	14.3
	Fall from building	14	16.7
	Other ^a	18	21.4
	Struck by/against	39	13.0
	Machinery	34	11.3
	Cut/pierce	23	7.6
	Motor vehicle traffic	23	7.6
	Fire/burn	22	7.3
	Burn	20	90.9
	Other transportation	12	4.0
	Other^b	39	13.0
Unspecified & Missing	25	8.3	

Source: Hospital Discharge Data, for 1 Jan 2009 through 31 Dec 2013, Massachusetts Center for Health Information and Analysis.

Counts not shown for cells with less than 11 cases based on the CHIA rules pertaining to confidentiality.

Numbers may not add to total due to missing information. Not all subcategories shown for each nature of injury category.

A hospitalization for an injury is defined as any case having an ICD-9-CM Nature of Injury Code of 800-999 in the primary diagnosis field.

Attribution of work-relatedness is based on designation of Workers' Compensation Insurance as expected payer.

(a) Other includes fall from stairs, fall from opening, and other falls.

(b) Other includes other specified, firearm, suffocation, drowning, poisonings, natural/environmental, overexertion, and not elsewhere classified.

External Cause of Injury groupings are based on 'ICD-9 Framework for Presenting Injury Mortality Data,' MMWR Recommendations and Reports, August 29, 1997, Volume 46/NORR-14.

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Table 5. Hospitalizations Distributed by Month

N = Number of Hospitalizations
% = Percent of Hospitalizations

		Hospitalizations	
		N	%
Total		301	100
Month of Injury	January	27	9.0
	February	23	7.6
	March	20	6.6
	April	22	7.3
	May	25	8.3
	June	28	9.3
	July	31	10.3
	August	35	11.6
	September	24	8.0
	October	25	8.3
	November	19	6.3
	December	22	7.3

Source: Hospital Discharge Data, for 1 Jan 2009 through 31 Dec 2013, Massachusetts Center for Health Information and Analysis.
Counts not shown for cells with less than 11 cases based on the CHIA rules pertaining to confidentiality.
A hospitalization for an injury is defined as any case having an ICD-9-CM Nature of Injury Code of 800-999 in the primary diagnosis field.
Attribution of work-relatedness is based on designation of Workers' Compensation Insurance as expected payer.