



Inpatient and Emergency Department Traumatic Injury Data, Kentucky 2009

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Introduction

The following tables provide a broad overview of 2009 hospital care provided to Kentucky residents whose primary diagnosis was some form of physical trauma. It is important to note that the data sources for these tables are the hospital discharge and emergency department (ED) datasets for all Kentucky general acute-care hospitals. These figures are not the same as those reported in the Kentucky Trauma Registry, which includes more detailed data from the 5 Kentucky hospitals that have been verified by the American College of Surgeons (ACS) as trauma facilities. As Kentucky moves toward a broader and deeper network for trauma care, review of the full statewide hospital discharge and ED datasets gives a comprehensive account of trauma-related hospitalization across the full range of facilities in the state.

This report sheds light on the magnitude of trauma as a public health issue because it includes many hospitalizations that do not require the services of a full-fledged Level I trauma center. County-specific reports of fewer than 5 patients are excluded in keeping with state data reporting standards that protect the identities of individual patients. The inpatient and ED datasets are notable for their size: on average, 54.5 Kentuckians are admitted to a Kentucky hospital for injury care every day, and an additional 586 receive care for injuries in hospital EDs. This figure does not include Kentuckians who receive care out-of-state, such as those treated at Cincinnati or Nashville facilities, nor does it include non-Kentuckians who receive injury-related care at Kentucky facilities.

Inpatient Data

Four-fifths (79.7%) of hospitalizations were for unintentional injuries, that is injuries not the result of an interpersonal or self-directed intention to cause harm. It is likely that this proportion would be even higher if we had complete information for the 16.5% of trauma hospitalizations for which a cause was not noted (Table 1). With regard to cause, falls accounted for nearly two-thirds (63.9%) of all unintentional injury hospitalizations and over half (51%) of all inpatient stays regardless of cause (Table 2).

Among intentional injuries, 83.5% (602/721) were classified as the result of assault or attempted homicide (Table 3). This finding is of interest because as a cause of death, suicide far exceeds homicide, often by ratios between 3:1 and 4:1 (CDC WISQARS). The wide divergence between hospitalization and fatality data points to the high rate of lethal injury among attempted suicides in comparison with assaults or homicides, and the preponderance of overdose (not classified as trauma) among suicides. It is also plausible that assailants are less likely to have fatal intent than those who attempt suicide.

The most common age group among hospitalized patients with trauma diagnoses was age 65 and older; these individuals accounted for half (50.9%) of all trauma hospitalizations (Table 4). This age distribution is quite different from that of the Kentucky Trauma Registry, where over 60% of patients in any reporting year are in the 18-55 age range and fewer than 10% are over 65. The difference is primarily

the result of including fall-related fractures, which are the leading cause of inpatient stays in those 65 and older. Isolated hip fracture, the most common cause of hospitalization following serious falls in older adults, is not included in the diagnostic categories reported in state trauma registries. This distinction also affects the distribution by gender (Inpatient Table 6), which includes more women (55.8%) than men. In contrast, trauma registry data typically show a ratio of about 2 male patients for every female patient. For statewide trauma system planning, the inclusion of the large group of older adults hospitalized for injuries has important implications because identifies a substantial group that can usually be managed safely at community facilities.

Trauma accounted for a total of 104,592 inpatient days in 2009, or an average of 5.4 days per inpatient stay (Table 7). While cost data are not reported in the hospital discharge dataset, inpatient care often costs thousands of dollars per day, suggesting the enormous financial burden this figure represents. The cost is borne disproportionately by public programs: Medicare and Medicaid total over 60% of the payment mix (Table 8).

Emergency Department Data

Emergency department (ED) data has been collected statewide in Kentucky only since January 2008; a comparison between 2008 and 2009 is not appropriate because the 2008 dataset was somewhat incomplete. As with the inpatient data, falls are the most commonly reported cause of unintentional injury at 31.8% of the total (Table 10). Overexertion, the second most common cause of injury, includes excessive physical effort and injuries due to lifting, pulling and pushing; this term also points to musculoskeletal injuries such as sprains or strains. The proportion of missing information regarding the cause of injury is higher in the ED dataset than for inpatient data, with 44,248 (20.7%) reported ED encounters for traumatic injury missing an indication of cause.

Unintentional injuries again account for the large majority (76.4%) of encounters and would undoubtedly be an even greater majority if cause-of-injury data were available for all ED visits (Tables 9, 11 and 13). With regard to the manner of intentional injury, suicide is again a much smaller factor than the combination of assault and homicide (Table 13), in contrast with their relative impact as causes of death. Again, the non-traumatic nature of overdose, the most common means of suicide, is likely to be the primary reason for this discrepancy.

Teens and young adults had the largest proportion of ED visits, with half (48.8%) falling in the 15 to 39-year-old range (Table 12). The difference between this finding and the preponderance of older adults in the inpatient dataset may reflect the relative underlying health status of these two age groups. Chronic conditions that complicate recovery from traumatic injuries are more common in older age groups. The ED data is roughly equal with regard to gender (49%:51%), in contrast with the Kentucky Trauma Registry's typical 70% male composition.

Payment source data reflects a very different mix for ED trauma visits than for inpatient stays (Table 15). One-fourth (24.87%) of ED visits classified as either self-pay or charity, categories indicating that the patient had no health insurance. These patients are often covered by either state Disproportionate

Share Hospital funding through Medicaid, or by the facility itself, potentially shifting the cost to other payers. Another 22.34% were billed to Medicaid. The total for these two categories, 47.21%, is an important indicator of trauma's financial burden on state and local payers.

Conclusion

The Kentucky Hospital Discharge and Emergency Department datasets provide a broad and detailed perspective on traumatic injury across the state. A comprehensive statewide trauma network will help address injury care in a more systematic manner, but a stronger emphasis on injury prevention in policy and practice will be essential if Kentucky is to reduce the toll of injury on its residents and its economy.

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Table 1: Inpatient Trauma Cases Classified by Intent

	Unintentional	Intentional	Other or Undetermined	Unclassified	Total
	N	N	N	N	N
County					
Adair	92	*	0	16	110
Allen	79	*	0	15	95
Anderson	66	*	0	15	83
Ballard	31	*	0	8	41
Barren	164	9	0	24	197
Bath	40	*	0	11	54
Bell	125	6	0	19	150
Boone	207	*	0	109	320
Bourbon	70	*	*	27	99
Boyd	256	*	0	18	277
Boyle	147	*	0	16	165
Bracken	18	*	0	10	30
Breathitt	78	*	0	22	102
Breckinridge	71	*	*	10	83
Bullitt	191	8	0	29	228
Butler	40	*	0	7	49
Caldwell	49	*	0	5	54
Calloway	121	6	0	10	137
Campbell	183	*	0	97	284
Carlisle	45	0	0	6	51
Carroll	47	*	0	8	57
Carter	116	*	0	7	125
Casey	68	0	0	15	83
Christian	119	*	*	14	137
Clark	104	*	0	25	133
Clay	105	6	0	25	136
Clinton	67	*	*	14	85
Crittenden	52	0	0	8	60
Cumberland	45	*	0	8	55
Daviess	419	25	*	76	521
Edmonson	44	*	0	8	54
Elliott	19	0	*	1	22
Estill	79	*	0	9	89
Fayette	721	45	0	252	1,019
Fleming	70	*	0	9	81

	Unintentional	Intentional	Other or Undetermined	Unclassified	Total
	N	N	N	N	N
Floyd	160	*	0	43	207
Franklin	181	8	0	30	219
Fulton	26	0	*	2	29
Gallatin	23	*	0	16	40
Garrard	63	*	0	18	84
Grant	74	*	0	24	99
Graves	246	5	0	26	277
Grayson	117	6	0	19	142
Green	47	0	*	19	67
Greenup	121	*	0	11	135
Hancock	31	*	0	6	39
Hardin	334	13	*	42	390
Harlan	117	*	0	17	138
Harrison	83	*	0	16	100
Hart	79	*	0	10	93
Henderson	163	6	0	9	178
Henry	83	*	0	16	101
Hickman	23	*	0	1	25
Hopkins	241	5	0	11	257
Jackson	92	*	0	11	105
Jefferson	2,767	271	14	560	3,612
Jessamine	124	7	*	59	191
Johnson	83	*	0	9	93
Kenton	404	11	0	147	562
Knott	78	7	*	25	111
Knox	117	5	0	17	139
Larue	55	*	0	3	61
Laurel	222	6	0	20	248
Lawrence	38	0	0	6	44
Lee	43	*	0	4	51
Leslie	65	*	0	25	91
Letcher	75	*	*	38	117
Lewis	21	0	0	8	29
Lincoln	118	*	0	18	138
Livingston	83	*	*	6	93
Logan	72	*	0	17	90

	Unintentional	Intentional	Other or Undetermined	Unclassified	Total
	N	N	N	N	N
Lyon	52	0	0	2	54
McCracken	416	11	0	42	469
McCreary	55	*	0	16	73
McLean	42	0	0	8	51
Madison	230	14	0	81	325
Magoffin	53	0	0	7	60
Marion	59	0	0	45	108
Marshall	188	*	0	27	217
Martin	27	*	0	3	32
Mason	54	*	0	21	76
Meade	76	0	0	7	83
Menifee	25	*	0	3	31
Mercer	105	*	*	22	130
Metcalfe	53	0	0	12	65
Monroe	59	0	0	19	78
Montgomery	108	*	0	34	144
Morgan	51	*	0	9	64
Muhlenberg	117	7	0	16	140
Nelson	219	13	*	19	252
Nicholas	41	*	0	11	54
Ohio	100	*	*	29	133
Oldham	179	8	0	34	221
Owen	38	*	*	14	57
Owsley	25	*	0	9	36
Pendleton	38	*	0	17	56
Perry	238	8	0	58	304
Pike	217	7	0	53	277
Powell	66	*	0	10	77
Pulaski	326	10	*	82	419
Robertson	10	0	0	2	12
Rockcastle	84	*	0	17	103
Rowan	91	*	0	4	97
Russell	99	*	0	7	110
Scott	129	6	0	29	164
Shelby	112	10	0	51	173
Simpson	43	*	0	17	61

	Unintentional	Intentional	Other or Undetermined	Unclassified	Total
	N	N	N	N	N
Spencer	55	*	0	17	74
Taylor	120	*	0	29	152
Todd	25	*	0	2	28
Trigg	37	0	0	4	41
Trimble	50	*	0	11	62
Union	33	*	0	4	38
Warren	312	9	0	49	370
Washington	44	*	0	13	58
Wayne	72	*	0	11	87
Webster	69	*	0	1	71
Whitley	266	*	0	14	283
Wolfe	60	*	0	5	66
Woodford	71	*	*	23	98
Total	15,856	721	36	3,282	19,895

**Total of 1-5 suppressed by state data management policy*

Table 2: 2009 Kentucky Inpatient Unintentional Injuries Classified by Cause

	MVTC	Falls	Fire/ Burn	Struck by/ Against	Other Transport	Overexertion	Other causes	Missing	Total
	N	N	N	N	N	N	N	N	N
County									
Adair	20	57	0	*	5	0	9	0	92
Allen	6	60	*	0	7	*	*	0	79
Anderson	9	44	*	*	5	0	5	0	66
Ballard	6	22	0	0	0	0	*	0	31
Barren	14	127	5	*	5	*	8	0	164
Bath	7	23	*	*	*	0	*	0	40
Bell	17	81	6	0	6	*	10	*	125
Boone	13	158	*	8	5	*	16	*	207
Bourbon	22	36	*	0	*	*	6	0	70
Boyd	15	218	*	*	*	*	15	*	256
Boyle	14	111	*	*	5	*	11	0	147
Bracken	8	9	*	0	0	*	0	0	18
Breathitt	18	39	*	*	5	*	9	*	78
Breckinridge	21	27	*	*	*	*	12	0	71
Bullitt	46	103	*	6	8	*	19	*	191
Butler	6	31	*	0	0	0	*	*	40
Caldwell	*	36	*	*	*	0	*	*	49
Calloway	7	95	*	*	*	*	7	*	121
Campbell	10	144	*	*	*	*	17	*	183
Carlisle	9	30	*	*	*	0	*	*	45
Carroll	11	22	*	*	*	0	8	0	47
Carter	20	77	*	*	5	*	6	*	116
Casey	18	43	*	0	*	0	5	*	68
Christian	12	83	*	*	7	*	8	*	119
Clark	19	73	*	*	*	0	*	*	104
Clay	26	55	*	6	10	0	7	0	105
Clinton	11	34	7	*	*	*	10	*	67
Crittenden	*	44	*	0	*	0	*	0	52
Cumberland	6	28	*	*	*	*	*	*	45
Daviess	50	308	*	10	8	5	34	0	419
Edmonson	13	21	0	0	*	*	5	0	44
Elliott	5	12	0	*	0	0	*	0	19
Estill	27	35	0	*	6	0	9	0	79
Fayette	173	439	7	15	15	*	60	0	721

	MVTC	Falls	Fire/ Burn	Struck by/ Against	Other Transport	Overexertion	Other causes	Missing	Total
	N	N	N	N	N	N	N	N	N
Fleming	13	38	*	0	4	*	10	*	70
Floyd	23	95	*	*	10	*	19	*	160
Franklin	25	131	*	7	7	*	9	0	181
Fulton	*	18	0	*	0	0	*	*	26
Gallatin	5	13	0	*	*	*	*	0	23
Garrard	10	40	0	*	*	0	9	*	63
Grant	16	49	0	*	*	0	5	*	74
Graves	45	149	5	9	15	*	12	7	246
Grayson	31	60	*	6	6	*	5	*	117
Green	8	30	*	*	*	0	*	0	47
Greenup	12	100	*	*	*	0	*	*	121
Hancock	*	23	0	0	*	*	*	0	31
Hardin	68	204	10	9	13	*	21	5	334
Harlan	16	82	*	*	5	*	*	*	117
Harrison	22	50	*	*	*	0	*	0	83
Hart	16	43	5	*	*	0	9	0	79
Henderson	33	98	11	0	6	1	14	0	163
Henry	13	55	*	*	*	*	5	*	83
Hickman	*	18	0	*	0	*	*	0	23
Hopkins	19	164	*	11	11	9	23	*	241
Jackson	35	37	*	*	9	*	7	*	92
Jefferson	529	1,870	59	65	37	48	155	*	2,767
Jessamine	27	63	*	5	11	0	15	*	124
Johnson	15	50	0	*	*	0	13	0	83
Kenton	19	350	*	8	8	*	14	0	404
Knott	21	43	*	*	*	*	7	0	78
Knox	36	58	0	*	8	*	11	*	117
Larue	15	32	*	0	*	*	*	0	55
Laurel	47	125	8	*	14	*	23	*	222
Lawrence	*	29	0	*	0	0	5	0	38
Lee	18	15	*	0	*	0	6	0	43
Leslie	18	32	0	6	7	0	*	0	65
Letcher	18	45	0	*	*	0	*	*	75
Lewis	8	9	0	0	*	0	*	0	21
Lincoln	27	79	*	*	*	0	6	0	118

	MVTC	Falls	Fire/ Burn	Struck by/ Against	Other Transport	Overexertion	Other causes	Missing	Total
	N	N	N	N	N	N	N	N	N
Livingston	11	42	*	6	9	2	7	*	83
Logan	9	51	*	*	*	0	*	0	72
Lyon	5	36	0	*	*	1	*	*	52
McCracken	54	289	*	15	14	8	26	8	416
McCreary	11	39	0	*	*	0	*	0	55
McLean	7	25	0	*	*	1	*	0	42
Madison	55	121	6	8	17	1	21	*	230
Magoffin	11	31	0	*	0	1	7	*	53
Marion	13	37	*	*	*	0	*	0	59
Marshall	29	119	*	8	12	5	6	6	188
Martin	5	17	*	*	0	0	*	0	27
Mason	13	35	*	0	*	0	*	0	54
Meade	33	26	0	*	5	2	5	*	76
Menifee	9	8	*	*	*	0	*	0	25
Mercer	30	63	*	*	*	2	*	*	105
Metcalfe	13	31	*	*	*	1	*	*	53
Monroe	11	40	*	*	*	0	*	0	59
Montgomery	40	45	*	*	10	1	5	*	108
Morgan	13	23	*	0	6	0	7	0	51
Muhlenberg	20	72	*	*	*	3	4	10	117
Nelson	45	136	*	*	13	2	16	*	219
Nicholas	11	24	0	*	0	0	*	0	41
Ohio	23	52	*	*	10	2	8	*	100
Oldham	33	108	*	*	15	3	15	0	179
Owen	*	25	*	*	*	2	*	0	38
Owsley	5	11	*	*	*	0	5	0	25
Pendleton	8	22	0	*	*	3	*	0	38
Perry	41	139	*	13	10	3	19	9	238
Pike	34	139	*	12	*	2	21	*	217
Powell	18	32	*	*	6	0	6	*	66
Pulaski	69	211	6	9	13	0	17	*	326
Robertson	*	*	0	*	*	0	*	*	10
Rockcastle	22	44	*	*	*	1	10	*	84
Rowan	25	46	0	*	*	4	8	*	91
Russell	26	48	*	5	*	2	8	5	99

	MVTC	Falls	Fire/ Burn	Struck by/ Against	Other Transport	Overexertion	Other causes	Missing	Total
	N	N	N	N	N	N	N	N	N
Scott	41	68	*	*	*	0	13	*	129
Shelby	30	64	*	*	6	1	6	0	112
Simpson	6	35	0	0	0	1	*	0	43
Spencer	19	22	*	*	5	1	*	0	55
Taylor	22	77	0	*	11	0	7	0	120
Todd	*	20	0	*	*	0	0	*	25
Trigg	3	29	*	*	0	0	*	0	37
Trimble	15	25	*	*	*	1	*	*	50
Union	11	16	0	0	0	1	5	0	33
Warren	43	222	0	9	6	5	22	5	312
Washington	11	27	0	2	*	0	*	0	44
Wayne	11	46	*	2	5	0	*	*	72
Webster	9	43	*	2	4	1	7	0	69
Whitley	46	171	*	6	9	6	24	*	266
Wolfe	18	19	6	*	6	0	9	0	60
Woodford	18	41	0	*	*	0	8	0	71
Total	2,945	10,138	277	428	588	201	1,129	150	15,856

**Total of 1-5 suppressed by state data management policy*

Table 3: Inpatient Intentional Injury by Manner and County of Residence

County	Suicide	Homicide/Assault	Total
	N	N	N
Adair	*	*	*
Allen	0	*	*
Anderson	0	*	*
Ballard	0	*	*
Barren	*	6	9
Bath	*	*	*
Bell	*	*	6
Boone	0	*	*
Bourbon	*	0	*
Boyd	*	*	*
Boyle	0	*	*
Bracken	0	*	*
Breathitt	0	*	*
Breckinridge	*	0	*
Bullitt	*	5	8
Butler	*	*	*
Calloway	*	*	6
Campbell	*	*	*
Carroll	0	*	*
Carter	0	*	*
Christian	*	*	*
Clark	*	*	*
Clay	*	5	6
Clinton	0	*	*
Cumberland	*	*	*
Daviess	7	18	25
Edmonson	*	*	*
Estill	*	0	*
Fayette	6	39	45
Fleming	0	*	*
Floyd	*	*	*
Franklin	*	*	8
Gallatin	0	*	*
Garrard	*	*	*

County	Suicide	Homicide/Assault	Total
	N	N	N
Grant	0	*	*
Graves	*	*	5
Grayson	*	*	6
Greenup	0	*	*
Hancock	*	*	*
Hardin	*	9	13
Harlan	0	*	*
Harrison	0	*	*
Hart	*	*	*
Henderson	*	5	6
Henry	*	*	*
Hickman	*	0	*
Hopkins	0	5	5
Jackson	0	*	*
Jefferson	14	257	271
Jessamine	*	6	7
Johnson	0	*	*
Kenton	*	8	11
Knott	*	6	7
Knox	*	*	5
Larue	0	*	*
Laurel	*	5	6
Lee	*	*	*
Leslie	*	0	*
Letcher	0	*	*
Lincoln	*	*	*
Livingston	*	*	*
Logan	0	*	*
McCracken	*	9	11
McCreary	*	*	*
McLean	0	*	*
Madison	*	11	14
Marion	0	*	*
Marshall	*	*	*
Martin	0	*	*
Mason	0	*	*
Menifee	*	*	*

County	Suicide	Homicide/Assault	Total
	N	N	N
Mercer	0	*	*
Montgomery	*	*	*
Morgan	*	*	*
Muhlenberg	0	7	7
Nelson	*	10	13
Nicholas	*	*	*
Ohio	0	*	*
Oldham	*	6	8
Owen	*	*	*
Owsley	*	*	*
Pendleton	0	*	*
Perry	*	5	8
Pike	*	6	7
Powell	0	*	*
Pulaski	*	6	10
Rockcastle	0	*	*
Rowan	0	*	*
Russell	0	*	*
Scott	*	5	6
Shelby	*	9	10
Simpson	0	*	*
Spencer	0	*	*
Taylor	0	*	*
Todd	0	*	*
Trimble	0	*	*
Union	0	*	*
Warren	*	8	9
Washington	0	*	*
Wayne	*	*	*
Webster	0	*	*
Whitley	*	*	*
Wolfe	*	0	*
Woodford	*	*	*
Total	119	602	721

**Total of 1-5 suppressed by state data management policy*

Table 4: Inpatient Injuries by Age Group

Age	Number	Percent
<1	80	0.4
1-4	235	1.2
5-9	223	1.1
10-14	327	1.6
15-19	706	3.6
20-24	729	3.7
25-29	704	3.5
30-34	717	3.6
35-39	759	3.8
40-44	768	3.9
45-49	1,021	5.1
50-54	1,173	5.9
55-59	1,123	5.6
60-64	1,196	6.0
65-69	1,269	6.4
70-74	1,476	7.4
75-79	1,832	9.2
80-84	2,199	11.1
85+	3,358	16.9
Total	19,895	100.0

Table 5: Inpatient Injury by Manner

Manner	Number	Percent
Unintentional	15,856	79.7
Suicide	119	0.6
Homicide/Assault	602	3.0
Other	10	0.1
Undetermined	26	0.1
Missing	3,282	16.5
Total	19,895	100.0

Table 6: Statewide Summary by Gender

Gender	Number	Percent
Female	11,105	55.8
Male	8,790	44.2
Total	19,895	100.0

Table 7: Length of Stay

Length of Stay	Number	Percent
1 day	2,742	13.8
2-6 days	12,678	63.7
7-13 days	3,321	16.7
14-20 days	688	3.5
21-30 days	284	1.4
31-60 days	164	0.8
61+ days	18	0.1
Total	19,895	100.0

Table 8: Primary Payment Source

Primary Payer	Number	Percent
Medicare	10265	51.60%
Commercial Ins.	4650	23.37%
Medicaid	1707	8.58%
Workers Comp	431	2.17%
Self pay/charity	1839	9.24%
Other	1003	5.04%
Total	19895	100.00%

Table 9: Emergency Department Injuries by County and Intent

	Unintentional	Intentional	Other/ Undetermined	Unclassified/ Missing	Total
County	N	N	N	N	N
Adair	1152	24	*	53	1232
Allen	737	26	0	220	983
Anderson	716	24	*	141	882
Ballard	209	5	0	46	260
Barren	1413	38	*	445	1897
Bath	844	9	*	194	1049
Bell	2150	31	*	390	2572
Boone	3580	82	0	504	4166
Bourbon	844	40	0	370	1254
Boyd	3387	179	*	797	4364
Boyle	1075	19	*	322	1417
Bracken	303	14	0	118	435
Breathitt	745	19	*	171	936
Breckinridge	803	19	0	167	989
Bullitt	1074	37	*	2029	3143
Butler	261	10	0	50	321
Caldwell	533	15	*	94	643
Calloway	793	11	*	78	883
Campbell	3507	160	8	411	4086
Carlisle	185	*	0	54	243
Carroll	518	20	0	138	676
Carter	1187	41	0	204	1432
Casey	259	9	0	659	927
Christian	1945	115	*	384	2445
Clark	1196	65	*	1057	2319
Clay	1130	52	0	628	1810
Clinton	635	28	0	48	711
Crittenden	430	15	0	86	531
Cumberland	555	9	*	95	660
Daviess	3338	122	*	800	4261
Edmonson	243	7	0	42	292
Elliott	207	5	0	32	244
Estill	1067	41	0	210	1319
Fayette	7274	312	14	2211	9811
Fleming	869	20	*	79	968

	Unintentional	Intentional	Other/ Undetermined	Unclassified/ Missing	Total
County	N	N	N	N	N
Floyd	2302	72	7	208	2589
Franklin	1822	99	*	399	2323
Fulton	202	9	0	12	223
Gallatin	405	16	0	72	493
Garrard	527	6	0	304	837
Grant	2096	60	0	218	2374
Graves	1555	18	0	459	2032
Grayson	1092	24	*	404	1521
Green	624	16	0	74	714
Greenup	1365	29	*	578	1973
Hancock	169	*	0	36	209
Hardin	4202	118	*	696	5017
Harlan	1487	41	0	226	1754
Harrison	1297	48	7	321	1673
Hart	344	*	0	263	611
Henderson	2094	56	*	140	2293
Henry	532	12	0	305	849
Hickman	97	*	*	13	115
Hopkins	2454	43	*	52	2553
Jackson	554	13	*	131	699
Jefferson	23723	1194	48	9710	34675
Jessamine	2014	71	*	605	2694
Johnson	1602	39	*	50	1692
Kenton	7176	369	11	873	8429
Knott	499	14	0	72	585
Knox	1072	21	*	834	1929
Larue	674	15	0	83	772
Laurel	2415	75	0	413	2903
Lawrence	650	8	0	139	797
Lee	393	11	0	81	485
Leslie	636	8	*	148	794
Letcher	1106	34	0	126	1266
Lewis	294	11	0	100	405
Lincoln	650	18	0	803	1471
Livingston	413	10	0	89	512
Logan	769	10	0	108	887
Lyon	215	*	*	49	269

	Unintentional	Intentional	Other/ Undetermined	Unclassified/ Missing	Total
County	N	N	N	N	N
McCracken	2453	83	*	777	3315
McCreary	344	12	*	60	417
McLean	378	7	0	58	443
Madison	3889	97	*	1063	5050
Magoffin	555	16	0	33	604
Marion	316	5	0	621	942
Marshall	1167	13	*	474	1655
Martin	473	21	0	62	556
Mason	478	33	*	219	731
Meade	542	10	0	83	635
Menifee	405	10	*	83	499
Mercer	866	23	0	388	1277
Metcalfe	404	10	*	131	546
Monroe	541	15	0	128	684
Montgomery	2086	33	*	511	2631
Morgan	618	14	*	97	730
Muhlenberg	1970	43	*	252	2266
Nelson	1855	62	*	357	2275
Nicholas	513	17	0	50	580
Ohio	1149	25	*	182	1358
Oldham	1394	38	0	226	1659
Owen	733	15	0	36	784
Owsley	274	5	0	61	340
Pendleton	744	29	0	78	851
Perry	926	36	*	199	1162
Pike	2537	69	*	500	3109
Powell	776	16	0	354	1146
Pulaski	2459	73	*	358	2892
Robertson	97	*	0	23	124
Rockcastle	901	25	*	87	1014
Rowan	1376	30	*	211	1621
Russell	970	28	*	132	1134
Scott	2065	79	*	390	2535
Shelby	337	16	0	1353	1706
Simpson	413	13	*	256	683
Spencer	238	7	0	409	654

	Unintentional	Intentional	Other/ Undetermined	Unclassified/ Missing	Total
County	N	N	N	N	N
Taylor	1439	38	*	200	1680
Todd	307	*	0	44	355
Trigg	295	6	0	26	327
Trimble	306	*	0	62	370
Union	1031	20	*	53	1105
Warren	2615	93	0	432	3140
Washington	239	*	0	231	474
Wayne	1125	31	*	125	1284
Webster	652	20	0	16	688
Whitley	2122	52	*	438	2616
Wolfe	382	11	*	98	492
Woodford	928	21	*	164	1114
Total	163368	5565	186	44712	213831

**Total of 1-5 suppressed by state data management policy*

Table 10: Emergency Department Unintentional Injuries by Cause

	MVTC	Falls	Cut/ Pierce	Struck by/ Against	Over- exertion	Other	Unclassified/ Missing	Total
County	N	N	N	N	N	N	N	N
Adair	141	362	85	111	223	222	8	1,152
Allen	112	298	46	78	116	87	0	737
Anderson	142	202	32	81	155	101	*	716
Ballard	19	90	5	17	49	29	0	209
Barren	238	427	49	152	420	125	*	1,413
Bath	48	152	41	44	121	90	348	844
Bell	247	766	111	202	460	362	*	2,150
Boone	556	1,175	136	440	859	395	19	3,580
Bourbon	118	251	54	86	144	170	21	844
Boyd	495	1,320	158	343	491	550	30	3,387
Boyle	157	356	24	105	182	246	5	1,075
Bracken	64	95	17	42	48	37	0	303
Breathitt	102	274	30	65	145	128	*	745
Breckinridge	124	304	46	94	123	112	0	803
Bullitt	263	306	33	124	217	129	*	1,074
Butler	56	91	11	21	51	31	0	261
Caldwell	42	202	37	64	72	114	*	533
Calloway	80	253	55	88	167	148	*	793
Campbell	444	1,137	127	433	1,036	324	6	3,507
Carlisle	24	59	8	20	51	23	0	185
Carroll	61	164	46	58	108	78	*	518
Carter	269	373	47	98	179	204	17	1,187
Casey	53	86	8	32	34	46	0	259
Christian	309	692	118	202	356	263	5	1,945
Clark	202	633	24	56	89	137	55	1,196
Clay	341	355	71	92	127	138	6	1,130
Clinton	64	236	43	55	78	156	*	635
Crittenden	51	143	27	37	77	95	0	430
Cumberland	60	127	27	43	86	46	166	555
Daviess	477	1,068	160	297	760	575	*	3,338
Edmonson	63	60	14	25	47	34	0	243
Elliott	46	59	15	17	34	35	*	207
Estill	168	314	61	78	300	136	10	1,067

	MVTC	Falls	Cut/ Pierce	Struck by/ Against	Over- exertion	Other	Unclassified/ Missing	Total
County	N	N	N	N	N	N	N	N
Fayette	1,181	2,431	426	891	1,424	906	15	7,274
Fleming	77	329	64	92	90	199	18	869
Floyd	371	640	128	183	432	537	11	2,302
Franklin	296	496	100	194	482	250	*	1,822
Fulton	20	60	12	22	15	73	0	202
Gallatin	55	124	26	43	99	56	*	405
Garrard	85	180	25	42	83	109	*	527
Grant	202	741	87	248	505	308	5	2,096
Graves	173	471	106	161	468	173	*	1,555
Grayson	164	361	63	117	163	224	0	1,092
Green	95	235	67	67	57	101	*	624
Greenup	280	491	53	123	198	203	17	1,365
Hancock	30	50	5	15	44	25	0	169
Hardin	598	1,365	420	610	676	527	6	4,202
Harlan	229	426	102	153	329	247	*	1,487
Harrison	128	454	131	159	247	175	*	1,297
Hart	69	103	20	31	78	42	*	344
Henderson	276	643	162	187	386	440	0	2,094
Henry	95	138	32	54	132	78	*	532
Hickman	13	34	10	7	14	19	0	97
Hopkins	313	697	123	230	482	606	*	2,454
Jackson	102	190	35	31	90	106	0	554
Jefferson	5,710	7,116	780	2,446	4,666	2,938	67	23,723
Jessamine	222	705	146	329	269	338	5	2,014
Johnson	235	444	75	161	267	417	*	1,602
Kenton	829	2,521	299	883	1,723	908	13	7,176
Knott	134	128	22	42	77	94	*	499
Knox	202	348	70	89	199	164	0	1,072
Larue	118	196	65	93	105	96	*	674
Laurel	462	626	178	194	455	499	*	2,415
Lawrence	113	206	40	54	126	109	*	650
Lee	66	127	21	29	85	60	5	393
Leslie	105	159	52	58	83	110	69	636
Letcher	204	325	60	106	179	229	*	1,106
Lewis	52	80	17	39	45	59	*	294
Lincoln	150	222	29	41	86	121	*	650
Livingston	57	160	26	29	61	79	*	413
Logan	115	224	59	77	221	73	0	769

	MVTC	Falls	Cut/ Pierce	Struck by/ Against	Over- exertion	Other	Unclassified/ Missing	Total
County	N	N	N	N	N	N	N	N
Lyon	22	97	20	13	34	29	0	215
McCracken	371	911	102	205	470	391	*	2,453
McCreary	78	110	6	35	58	57	0	344
McLean	52	111	18	29	85	83	0	378
Madison	586	1,461	190	442	742	461	7	3,889
Magoffin	112	172	31	38	100	100	*	555
Marion	94	135	10	11	31	34	*	316
Marshall	193	413	59	97	204	200	*	1,167
Martin	116	137	19	41	65	94	*	473
Mason	87	185	26	51	59	67	*	478
Meade	127	162	39	53	83	75	*	542
Menifee	25	65	11	15	48	46	195	405
Mercer	134	305	59	101	136	130	*	866
Metcalfe	74	123	17	33	99	47	11	404
Monroe	65	204	31	57	91	92	*	541
Montgomery	61	193	22	64	82	153	1,511	2,086
Morgan	85	174	53	52	133	103	18	618
Muhlenberg	254	682	96	165	285	483	5	1,970
Nelson	385	631	107	172	352	207	*	1,855
Nicholas	62	162	54	42	69	103	21	513
Ohio	148	315	99	110	297	176	*	1,149
Oldham	221	437	66	169	323	176	*	1,394
Owen	53	233	99	90	140	116	*	733
Owsley	48	97	11	24	49	44	*	274
Pendleton	108	253	45	69	167	98	*	744
Perry	288	242	40	63	141	146	6	926
Pike	457	802	130	226	498	414	10	2,537
Powell	78	229	11	33	72	86	267	776
Pulaski	499	837	111	208	397	404	*	2,459
Robertson	10	30	7	8	21	21	0	97
Rockcastle	139	272	60	66	152	211	*	901
Rowan	168	345	76	110	372	260	45	1,376
Russell	126	304	108	113	169	148	*	970
Scott	329	631	102	207	535	256	5	2,065
Shelby	67	96	13	38	75	47	*	337
Simpson	79	154	24	67	40	49	0	413
Spencer	51	74	7	20	46	39	*	238

	MVTC	Falls	Cut/ Pierce	Struck by/ Against	Over- exertion	Other	Unclassified/ Missing	Total
County	N	N	N	N	N	N	N	N
Taylor	205	525	86	168	215	240	0	1,439
Todd	34	94	24	33	74	47	*	307
Trigg	38	109	20	26	52	50	0	295
Trimble	55	84	10	26	72	57	*	306
Union	82	317	99	111	174	248	0	1,031
Warren	631	727	131	261	525	335	5	2,615
Washington	53	112	*	15	28	27	0	239
Wayne	149	392	114	118	145	204	*	1,125
Webster	94	175	37	72	133	140	*	652
Whitley	388	644	134	175	400	377	*	2,122
Wolfe	70	119	24	22	61	71	15	382
Woodford	108	265	59	125	201	163	7	928
Total	27,021	52,023	8,623	16,519	31,346	24,669	3,167	163,368

**Total of 1-5 suppressed by state data management policy*

**Table 11: Intentional Injury Emergency
Department Visits by Manner**

	Suicide	Homicide/ Assault	Total
County	N	N	N
Adair	*	23	24
Allen	5	21	26
Anderson	*	21	24
Ballard	0	5	5
Barren	*	34	38
Bath	0	9	9
Bell	7	24	31
Boone	*	79	82
Bourbon	5	35	40
Boyd	*	178	179
Boyle	*	16	19
Bracken	0	14	14
Breathitt	0	19	19
Breckinridge	*	18	19
Bullitt	5	32	37
Butler	0	10	10
Caldwell	*	14	15
Calloway	*	10	11
Campbell	*	157	160
Carlisle	*	*	*
Carroll	*	18	20
Carter	*	40	41
Casey	0	9	9
Christian	*	111	115
Clark	*	61	65
Clay	0	52	52
Clinton	*	26	28
Crittenden	0	15	15
Cumberland	0	9	9
Daviess	*	120	122
Edmonson	0	7	7
Elliott	*	*	5
Estill	*	40	41
Fayette	22	290	312
Fleming	*	17	20

	Suicide	Homicide/ Assault	Total
County	N	N	N
Floyd	*	69	72
Franklin	*	95	99
Fulton	0	9	9
Gallatin	0	16	16
Garrard	0	6	6
Grant	*	59	60
Graves	*	15	18
Grayson	7	17	24
Green	0	16	16
Greenup	0	29	29
Hancock	0	*	*
Hardin	15	103	118
Harlan	*	37	41
Harrison	0	48	48
Hart	*	*	*
Henderson	*	52	56
Henry	*	11	12
Hickman	0	*	*
Hopkins	*	40	43
Jackson	0	13	13
Jefferson	32	1,162	1,194
Jessamine	*	63	71
Johnson	*	37	39
Kenton	10	359	369
Knott	0	14	14
Knox	*	20	21
Larue	0	15	15
Laurel	7	68	75
Lawrence	0	8	8
Lee	*	10	11
Leslie	0	8	8
Letcher	*	31	34
Lewis	*	8	11
Lincoln	*	16	18
Livingston	*	9	10
Logan	*	8	10
Lyon	*	*	*
McCracken	5	78	83

	Suicide	Homicide/ Assault	Total
County	N	N	N
McCreary	0	12	12
McLean	0	7	7
Madison	*	93	97
Magoffin	*	13	16
Marion	0	5	5
Marshall	0	13	13
Martin	0	21	21
Mason	*	31	33
Meade	*	9	10
Menifee	*	9	10
Mercer	*	22	23
Metcalfe	*	7	10
Monroe	*	14	15
Montgomery	5	28	33
Morgan	*	13	14
Muhlenberg	*	41	43
Nelson	*	58	62
Nicholas	*	16	17
Ohio	*	23	25
Oldham	6	32	38
Owen	*	12	15
Owsley	0	5	5
Pendleton	0	29	29
Perry	0	36	36
Pike	*	65	69
Powell	*	14	16
Pulaski	*	70	73
Robertson	0	*	*
Rockcastle	0	25	25
Rowan	*	29	30
Russell	*	25	28
Scott	*	77	79
Shelby	5	11	16
Simpson	*	11	13
Spencer	*	6	7
Taylor	*	37	38
Todd	0	*	*

	Suicide	Homicide/ Assault	Total
County	N	N	N
Trigg	0	6	6
Trimble	0	*	*
Union	*	18	20
Warren	7	86	93
Washington	*	*	*
Wayne	*	29	31
Webster	*	18	20
Whitley	*	49	52
Wolfe	*	10	11
Woodford	*	20	21
Total	294	5,271	5,565

**Total of 1-5 suppressed by state data management policy.*

**Table 12: Emergency Department Injuries
by Age Group**

Age	Frequency	Percent
0 yr	1,263	0.6
1-4	10,020	4.7
5-9	9,614	4.5
10-14	15,000	7.0
15-19	20,979	9.8
20-24	21,950	10.3
25-29	23,052	10.8
30-34	20,389	9.5
35-39	18,061	8.5
40-44	16,206	7.6
45-49	14,927	7.0
50-54	11,671	5.5
55-59	8,209	3.8
60-64	5,786	2.7
65-69	4,241	2.0
70-74	3,468	1.6
75-79	2,971	1.4
80-84	2,752	1.3
85+	3,272	1.5
Total	213,831	100.0

Table 13: Emergency Department Injuries by Manner

Manner	Frequency	Percent
Unintentional	163,368	76.4
Suicide	294	0.1
Homicide/Assault	5,271	2.5
Other	71	0.0
Undetermined	115	0.1
Missing	44,712	20.9
Total	213,831	100.0

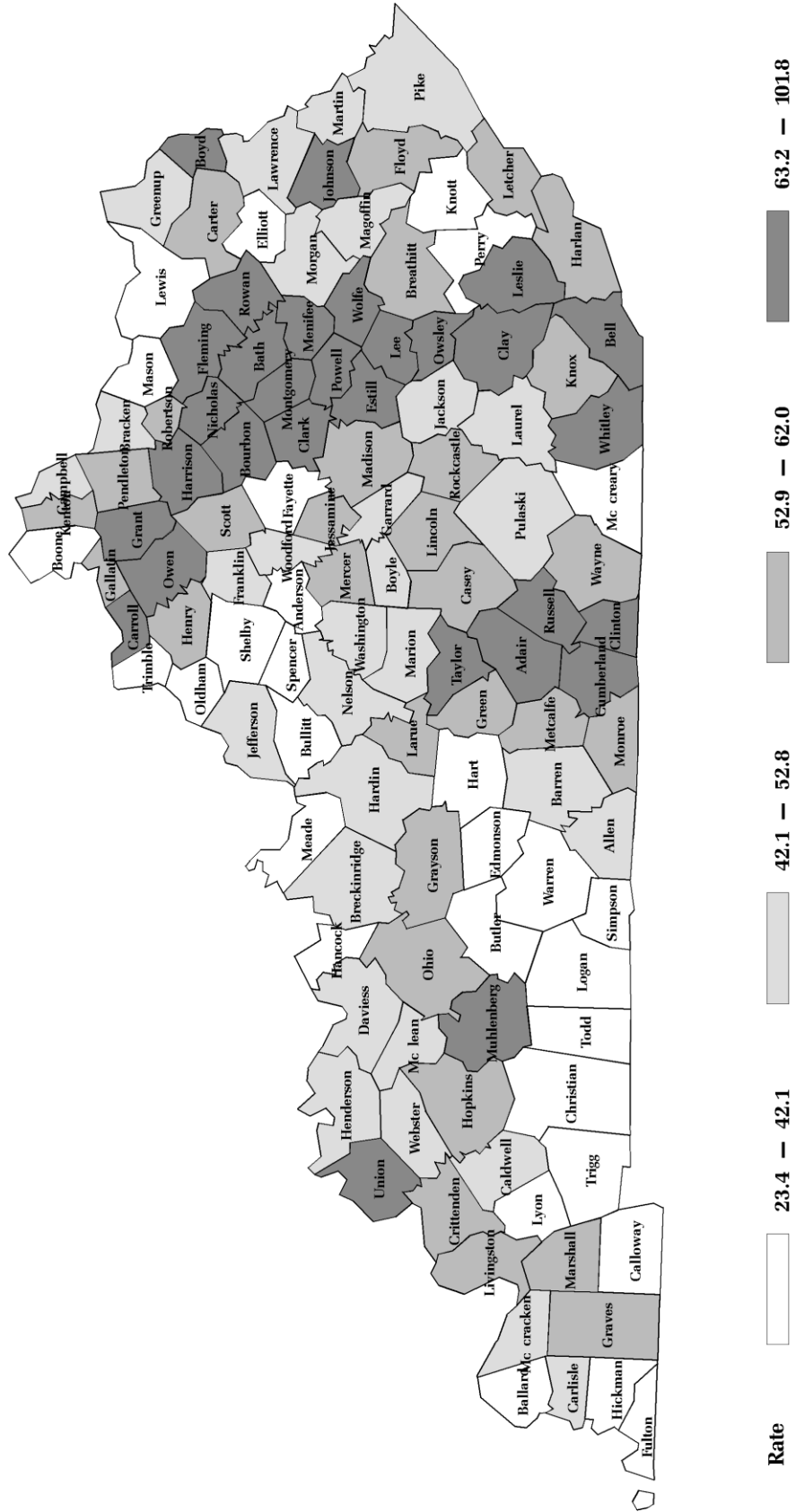
Table 14: Emergency Department Injuries by Gender

Gender	Frequency	Percent
Female	105,295	49.2
Male	108,531	50.8
Missing	5	0.0
Total	213,831	100.0

Table 15: Emergency Department Injuries by Payment Source

Primary Payer	Number	Percent
Commercial ins.	64735	30.27%
Self-pay/charity	53180	24.87%
Medicaid	47776	22.34%
Medicare	23700	11.08%
Worker comp	9063	4.24%
Other	15377	7.19%

ED Trauma Visit Rate by County, 2009



Rate per 1000 county population; Kentucky hospitals only

Inpatient Trauma Visit Rate by County, 2009

