

Mechanism/Cause ICD-10-CM		Mechanism/Cause ICD-9-CM																	Total
		Cut/pierce	Drowning	Fall	Fire/burn	Firearm	Machinery	MVT	Other pedal cyclist	Other pedestrian	Other transport	Natural/environmental	Overexertion	Poisoning	Struck by/against	Suffocation	Other specified	Not specified	
Cut/pierce		21	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	22
Drowning/submersion		0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Fall		0	0	178	0	0	0	1	1	0	0	0	0	1	1	0	0	0	182
Fire/flare		0	0	0	12	0	0	1	0	0	0	0	0	0	0	0	0	0	13
Hot object/substance		0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Firearm		0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20
Machinery		0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
MVT	Occupant	0	0	0	0	0	0	85	0	0	1	0	0	0	0	0	0	0	86
	Motor cyclist	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	17
	Pedal cyclist	0	0	0	0	0	0	12	3	0	0	0	0	0	0	0	0	0	15
	Pedestrian	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	17
Other pedal cyclist		0	0	0	0	0	0	2	28	0	0	0	0	0	0	0	0	0	30
Other pedestrian		0	0	0	0	0	0	3	0	4	0	0	0	0	0	0	0	0	7
MV nontraffic		0	0	0	0	0	0	21	0	0	3	0	0	0	0	0	0	0	24
Other land transport		0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
Other transport		0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	5
Natural/environmental	Bites & stings, non-venomous	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
	Bites & stings, venomous	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	Other	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Overexertion		0	0	5	0	0	0	0	0	0	1	0	1	0	0	0	0	0	6
Poisoning	Drug	1	0	0	0	0	0	0	0	0	0	0	0	48	0	0	1	0	49
	Non-drug	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Struck by/against		1	0	9	0	0	0	0	0	0	0	0	0	0	48	0	0	0	58
Suffocation		0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Other specified	Foreign body	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
	Classifiable	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	11	0	13
	NEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
	Child/adult abuse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Unspecified		1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	2	10
<b>Total</b>		24	7	194	25	20	2	159	32	4	23	8	4	52	49	3	22	4	632

Shaded cells indicate agreement on category assignment between ICD-9-CM and ICD-10-CM external cause matrices

**Table S1.** Medical Center A: Assignment of ICD-9-CM and ICD-10-CM codes for 632 dually coded injury records to specific mechanism/cause categories by external cause of injury matrices

Mechanism/Cause ICD-10-CM		Mechanism/Cause ICD-9-CM																	
		Cut/pierce	Falls	Fire/burn	Firearm	Machinery	MVT	Other pedal cyclist	Other pedestrian	Other transport	Natural/environmental	Overexertion	Poisoning	Struck by/against	Suffocation	NEC	Other specified	Not specified	Total
Cut/pierce		12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	14
Fall		0	157	0	0	1	0	0	0	1	0	1	0	1	0	0	0	0	161
Fire/flare		0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Hot object/substance		0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Firearm		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Machinery		1	1	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	13
MVT	Occupant	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	80
	Motor cyclist	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	52
	Pedal cyclist	0	0	0	0	0	4	6	0	0	0	0	0	0	0	0	0	0	10
	Pedestrian	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other pedal cyclist		0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12
Other pedestrian		0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
MV nontraffic		0	0	0	0	2	2	0	0	3	0	0	0	0	0	0	0	0	7
Other land transport		0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	18
Other transport		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	4
Natural/environmental	Bite & sting, nonvenomous	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	Other	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	4
Overexertion		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Poisoning	Drug	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	37
	Non-drug	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Struck by/against		0	1	0	0	0	0	0	0	0	0	0	31	0	0	0	0	1	33
Other specified	Foreign body	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	4	
	Classifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	0	11	
	NEC	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	
	Child/adult abuse	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	
Unspecified		0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	6	9	
<b>Total</b>		13	160	34	2	14	143	18	1	27	5	1	39	33	2	5	14	9	520

Shaded cells indicate agreement on category assignment between ICD-9-CM and ICD-10-CM external cause matrices

**Table S2.** Medical Center B: Assignment of ICD-9-CM and ICD-10-CM codes for 520 dually coded injury records to specific mechanism/cause categories by external cause of injury matrices