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## APPENDIX C: TRAUMATIC BRAIN INJURY DATA TABLES

**T1. Traumatic brain injury deaths, crude rates and age-adjusted rates:  
Colorado residents, 2001-2003 annual average**

Underlying Cause of Death	N	Crude Rate	Adj. Rate	Lower Limit	Upper Limit
Total brain injury deaths	914	20.2	21.0	19.7	22.4
Total unintentional injury	557	12.3	13.0	12.0	14.1
Transportation	357	7.9	7.9	7.1	8.7
Motor vehicle traffic	333	7.4	7.3	6.5	8.1
Other transportation	24	0.5	0.5	0.3	0.8
Drowning	*	*	*	*	*
Poisoning	*	*	*	*	*
Fall	149	3.3	3.9	3.3	4.6
Fire/burn	*	*	*	*	*
Natural/environmental	*	*	*	*	*
Suffocation	3	0.1	0.1	0.0	0.1
Other unintentional	42	0.9	1.0	0.7	1.3
Total intentional injury	338	7.5	7.6	6.8	8.4
Suicide	270	6.0	6.1	5.4	6.8
By firearm	263	5.8	6.0	5.2	6.7
Homicide/legal intervention	69	1.5	1.5	1.1	1.8
Homicide	68	1.5	1.5	1.1	1.8
By firearm	42	0.9	0.9	0.6	1.2
Legal intervention	*	*	*	*	*
Total undetermined intent	18	0.4	0.4	0.2	0.6
Total firearm-related	318	7.0	7.1	6.3	7.9

\* indicates fewer than three deaths in the category.

"Lower Limit" and "Upper Limit" describe the confidence interval for the adjusted rate.

Rates are per 100,000 population. Age-adjusted rates are adjusted to the 2000 U.S. standard population.

Traumatic brain injuries include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-10 codes S01.0-S01.9, S02.0, S02.1, S02.3, S02.7-S02.9, S04.0, S06.0-S06.9, S07.0, S07.1, S07.8, S07.9, S09.7-S09.9, T01.0, T02.0, T04.0, T06.0, T90.1, T90.2, T90.4, T90.5, T90.8, T90.9.

See Appendix F for the definitions of mechanism of injury and their associated ICD-10 codes.

Total firearm-related deaths include unintentional, intentional and undetermined intent events.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

**T2. Traumatic brain injury deaths, crude rates and age-adjusted rates by sex:  
Colorado residents, 2001-2003 annual average**

Underlying Cause of Death	N	Male				N	Female			
		Crude Rate	Adj. Rate	Lower Limit	Upper Limit		Crude Rate	Adj. Rate	Lower Limit	Upper Limit
Total brain injury deaths	677	29.8	32.5	30.0	35.1	237	10.6	10.7	9.3	12.1
Total unintentional injury	377	16.6	18.6	16.6	20.6	180	8.0	8.1	6.9	9.3
Transportation	247	10.9	10.9	9.5	12.3	110	4.9	4.9	4.0	5.8
Motor vehicle traffic	229	10.1	10.1	8.7	11.4	105	4.7	4.7	3.8	5.6
Other transportation	18	0.8	0.9	0.5	1.3	6	0.3	0.3	0.0	0.5
Drowning	*	*	*	*	*	*	*	*	*	*
Poisoning	*	*	*	*	*	*	*	*	*	*
Fall	93	4.1	5.7	4.5	6.9	56	2.5	2.6	1.9	3.3
Fire/burn	*	*	*	*	*	*	*	*	*	*
Natural/environmental	*	*	*	*	*	*	*	*	*	*
Suffocation	*	*	*	*	*	*	*	*	*	*
Other unintentional	32	1.4	1.7	1.1	2.3	10	0.4	0.5	0.2	0.7
Total intentional injury	286	12.6	13.3	11.7	15.0	53	2.3	2.3	1.7	3.0
Suicide	239	10.5	11.4	9.9	12.9	30	1.4	1.3	0.9	1.8
By firearm	234	10.3	11.1	9.7	12.6	29	1.3	1.3	0.8	1.8
Homicide/legal intervention	46	2.0	1.9	1.4	2.5	22	1.0	1.0	0.6	1.4
Homicide	46	2.0	1.9	1.4	2.5	22	1.0	1.0	0.6	1.4
By firearm	28	1.2	1.2	0.7	1.6	14	0.6	0.6	0.3	1.0
Legal intervention	*	*	*	*	*	*	*	*	*	*
Total undetermined intent	13	0.6	0.5	0.2	0.8	5	0.2	0.2	0.0	0.4
Total firearm-related	272	12.0	12.7	11.2	14.3	45	2.0	2.0	1.4	2.6

\* indicates fewer than three deaths in the category.

"Lower Limit" and "Upper Limit" describe the confidence interval for the adjusted rate.

Rates are per 100,000 population. Age-adjusted rates are adjusted to 2000 U.S. standard population.

Traumatic brain injuries include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-10 codes S01.0-S01.9, S02.0, S02.1, S02.3, S02.7-S02.9, S04.0, S06.0-S06.9, S07.0, S07.1, S07.8, S07.9, S09.7-S09.9, T01.0, T02.0, T04.0, T06.0, T90.1, T90.2, T90.4, T90.5, T90.8, T90.9. See Appendix F for the definitions of mechanism of injury and their associated ICD-10 codes.

Total firearm-related deaths include unintentional, intentional and undetermined intent events.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

## T3. Leading causes of traumatic brain injury deaths by age: Colorado residents, 2001-2003 total

All Ages	N	Rate	%
Total TBI deaths	2,742	20.2	100.0
1 Motor vehicle traffic	1,000	7.4	36.5
2 Suicide	809	6.0	29.5
3 Fall	446	3.3	16.3
4 Homicide	205	1.5	7.5

Ages 5-14	N	Rate	%
Total TBI deaths	86	4.5	100.0
1 Motor vehicle traffic	56	3.0	65.1
2 Homicide	9	0.5	10.5
3 Suicide	8	0.4	9.3
4 Other transportation	7	0.4	8.1

Ages 25-44	N	Rate	%
Total TBI deaths	819	19.3	100.0
1 Motor vehicle traffic	341	8.0	41.6
2 Suicide	279	6.6	34.1
3 Homicide	77	1.8	9.4
4 Fall	43	1.0	5.3

Ages 65+	N	Rate	%
Total TBI deaths	630	47.1	100.0
1 Fall	290	21.7	46.0
2 Suicide	159	11.9	25.2
3 Motor vehicle traffic	100	7.5	15.9
4 Other unintentional	49	3.7	7.8

Age < 5	N	Rate	%
Total TBI deaths	65	6.7	100.0
1 Motor vehicle traffic	29	3.0	44.6
2 Homicide	22	2.3	33.8
3 Fall	4	0.4	6.2
3 Undetermined intent	4	0.4	6.2

Ages 15-24	N	Rate	%
Total TBI deaths	507	26.1	100.0
1 Motor vehicle traffic	290	14.9	57.2
2 Suicide	109	5.6	21.5
3 Homicide	56	2.9	11.0
4 Other unintentional	15	0.8	3.0

Ages 45-64	N	Rate	%
Total TBI deaths	635	20.2	100.0
1 Suicide	254	8.0	40.0
2 Motor vehicle traffic	184	5.8	29.0
3 Fall	100	3.2	15.7
4 Homicide	31	1.0	4.9

Percentages are of total traumatic brain injury deaths with mechanism of injury mentioned for each age group.

Rates are crude rates per 100,000 population.

Traumatic brain injuries (TBI) include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration, and are selected using ICD-10 codes S01.0-S01.9, S02.0, S02.1, S02.3, S02.7-S02.9, S04.0, S06.0-S06.9, S07.0, S07.1, S07.8, S07.9, S09.7-S09.9, T01.0, T02.0, T04.0, T06.0, T90.1, T90.2, T90.4, T90.5, T90.8, T90.9. See Appendix F for the definitions of mechanism of injury and their associated ICD-10 codes.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

**T4. Traumatic brain injury deaths, crude rates and age-adjusted rates by region of residence:  
Colorado residents, 2001-2003 total**

Place of Residence	Total TBI Deaths				Unintentional Injury				Intentional Injury				Firearm-Related		
	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate
<b>Colorado</b>	2,742	20.2	21.0		1,671	12.3	13.0		1,015	7.5	7.6		953	7.0	7.1
<b>Urban/Rural Region</b>															
Denver CMSA	1,350	18.1	19.3		791	10.6	11.7		520	7.0	7.1		486	6.5	6.7
Other MSA	797	20.8	21.4		504	13.2	13.6		281	7.3	7.5		264	6.9	7.0
Rural non-remote	479	25.4	25.8	+	303	16.1	16.5	+	171	9.1	9.1		163	8.6	8.7
Rural remote	92	31.0	30.7	+	61	20.6	20.3	+	31	10.5	10.4		29	9.8	9.7
<b>Regional Emergency and Trauma Advisory Councils</b>															
Northwest	160	25.4	25.2		88	14.0	14.0		68	10.8	10.6		68	10.8	10.6
Western	47	18.8	18.7		26	10.4	10.0		21	8.4	8.7		20	8.0	8.2
Southwest	80	29.3	29.8	+	54	19.8	20.4	+	26	9.5	9.4		23	8.4	8.3
Foothills	373	14.7	15.4	-	206	8.1	8.8	-	157	6.2	6.1		154	6.1	6.0
Central Mountain	79	20.4	22.7		45	11.6	12.6		33	8.5	9.9		33	8.5	10.0
San Luis Valley	49	34.5	34.7	+	34	24.0	23.7	+	15	10.6	11.0		13	9.2	9.3
Northeast	338	20.9	21.2		235	14.5	14.6		102	6.3	6.5		94	5.8	6.0
Mile-High	1,003	19.8	21.3		599	11.8	13.1		375	7.4	7.6		343	6.8	7.1
Plains to Peaks	368	21.2	22.6		226	13.0	14.2		136	7.8	8.1		131	7.5	7.8
Southern	177	26.6	25.2		112	16.8	15.7		61	9.2	8.8		55	8.3	8.0
Southeast	44	28.3	27.8		34	21.9	21.3	+	9	5.8	5.8		8	5.1	5.2

Place of Residence	Motor Vehicle Traffic				Falls				Suicide				Homicide		
	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate
<b>Colorado</b>	1,000	7.4	7.3		446	3.3	3.9		809	6.0	6.1		205	1.5	1.5
<b>Urban/Rural Region</b>															
Denver CMSA	448	6.0	6.0	-	251	3.4	4.3		389	5.2	5.4		130	1.7	1.7
Other MSA	302	7.9	7.7		126	3.3	3.8		232	6.1	6.2		49	1.3	1.3
Rural non-remote	195	10.3	10.5	+	62	3.3	3.5		152	8.1	8.1	+	19	1.0	1.0
Rural remote	43	14.5	14.1	+	7	2.4	2.5		27	9.1	9.1		4	1.3	1.3
<b>Regional Emergency and Trauma Advisory Councils</b>															
Northwest	44	7.0	7.0		30	4.8	4.8		58	9.2	9.0	+	10	1.6	1.6
Western	15	6.0	5.8		6	2.4	2.1		19	7.6	7.7		*	*	*
Southwest	34	12.5	12.4	+	8	2.9	3.6		24	8.8	8.7		*	*	*
Foothills	117	4.6	4.6	-	65	2.6	3.2		137	5.4	5.3		20	0.8	0.8
Central Mountain	31	8.0	8.1		6	1.5	2.1		30	7.7	9.1		3	0.8	0.8
San Luis Valley	24	16.9	16.5	+	7	4.9	5.1		13	9.2	9.3		*	*	*
Northeast	166	10.3	10.0	+	38	2.4	2.7	-	86	5.3	5.6		16	1.0	1.0
Mile-High	342	6.7	6.8		187	3.7	4.9		262	5.2	5.5		112	2.2	2.1
Plains to Peaks	138	7.9	7.9		56	3.2	4.2		109	6.3	6.6		27	1.6	1.5
Southern	53	8.0	7.9		37	5.6	4.9		54	8.1	7.8		7	1.1	1.1
Southeast	24	15.4	15.4	+	6	3.9	3.5		8	5.1	5.2		*	*	*

\* indicates fewer than three deaths in the category.

+ or - indicates that the region rate is significantly higher or lower than the rate for the state.

Rates are per 100,000 population. Age-adjusted rates are adjusted to the 2000 U.S. standard population.

Traumatic brain injuries include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-10 codes S01.0-S01.9, S02.0, S02.1, S02.3, S02.7-S02.9, S04.0, S06.0-S06.9, S07.0, S07.1, S07.8, S07.9 S09.7-S09.9, T01.0, T02.0, T04.0, T06.0, T90.1, T90.2, T90.4, T90.5, T90.8, T90.9.

See Appendix E for definitions of regions.

See Appendix F for the definitions of mechanism of injury and their associated ICD-10 codes.

Total firearm-related deaths include unintentional, intentional and undetermined intent events.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

**T5. Hospitalized traumatic brain injuries, crude rates and age-adjusted rates:  
Colorado residents, 2001-2003 annual average**

Mechanism of Injury	N	Crude Rate	Adj. Rate	Lower Limit	Upper Limit
Total hospitalized brain injuries	4,201	93.0	97.0	94.1	100.0
Hospitalizations with mechanism mentioned	4,167	92.2	96.2	93.3	99.2
Total unintentional injury	3,778	83.6	87.9	85.1	90.8
Transportation	2,011	44.5	44.0	42.1	45.9
Motor vehicle traffic	1,653	36.6	36.1	34.4	37.9
Other transportation	358	7.9	7.9	7.1	8.7
Drowning/submersion	1	0.0	0.0	0.0	0.0
Poisoning	0	0.0	0.0	0.0	0.0
Fall	1,518	33.6	38.4	36.4	40.3
Fire/burn	0	0.0	0.0	0.0	0.0
Natural/environmental	26	0.6	0.6	0.4	0.8
Struck by or against	154	3.4	3.5	2.9	4.0
Machinery/cutting instrument	15	0.3	0.3	0.2	0.5
Other unintentional	53	1.2	1.2	0.8	1.5
Total intentional injury	374	8.3	8.0	7.2	8.8
Suicide/self-inflicted	41	0.9	0.9	0.6	1.2
Assault/legal intervention	333	7.4	7.1	6.3	7.8
Total undetermined intent	16	0.3	0.3	0.2	0.5
Total firearm-related	50	1.1	1.1	0.8	1.4

Transfer or multiple records of the same events were excluded.

The number of hospitalizations included an annual average of 245 inpatient deaths.

Sums may not add to the total due to rounding errors.

"Lower Limit" and "Upper Limit" describe the confidence interval for the adjusted rate.

Rates are per 100,000 population. Age-adjusted rates are adjusted to the 2000 U.S. standard population.

Traumatic brain injuries include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-9-CM codes 800.0-801.9, 803.0-804.9, 850.0-854.1, 950.1-950.3, 959.01, 995.55.

See Appendix F for the definitions of mechanism of injury and their associated ICD-9-CM codes.

Total firearm-related hospitalizations include unintentional, intentional and undetermined intent events.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

**T6. Hospitalized traumatic brain injuries, crude rates and age-adjusted rates by sex:  
Colorado residents, 2001-2003 annual average**

Mechanism of Injury	N	Male				N	Female			
		Crude Rate	Adj. Rate	Lower Limit	Upper Limit		Crude Rate	Adj. Rate	Lower Limit	Upper Limit
Total hospitalized brain injuries	2,677	117.7	124.9	120.0	129.8	1,524	68.0	69.0	65.6	72.5
Hospitalizations with mechanism mentioned	2,657	116.8	123.9	119.0	128.8	1,510	67.3	68.4	64.9	71.8
Total unintentional injury	2,335	102.7	110.5	105.8	115.1	1,442	64.3	65.4	62.1	68.8
Transportation	1,303	57.3	56.4	53.2	59.5	708	31.6	31.5	29.2	33.8
Motor vehicle traffic	1,057	46.5	45.6	42.8	48.4	595	26.5	26.5	24.4	28.6
Other transportation	245	10.8	10.7	9.4	12.1	113	5.0	5.0	4.1	5.9
Drowning/submersion	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Poisoning	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Fall	852	37.4	46.1	42.8	49.3	666	29.7	30.9	28.5	33.2
Fire/burn	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Natural/environmental	14	0.6	0.7	0.3	1.0	12	0.5	0.5	0.2	0.8
Struck by or against	116	5.1	5.2	4.2	6.1	37	1.7	1.7	1.1	2.2
Machinery/cutting instrument	14	0.6	0.6	0.3	0.9	1	0.1	0.1	0.0	0.2
Other unintentional	36	1.6	1.6	1.0	2.1	17	0.7	0.7	0.4	1.1
Total intentional injury	310	13.6	12.9	11.5	14.4	63	2.8	2.8	2.1	3.4
Suicide/self-inflicted	36	1.6	1.6	1.1	2.1	5	0.2	0.2	0.0	0.4
Assault/legal intervention	274	12.1	11.3	10.0	12.7	58	2.6	2.5	1.9	3.2
Total undetermined intent	11	0.5	0.5	0.2	0.7	4	0.2	0.2	0.0	0.4
Total firearm-related	43	1.9	1.9	1.3	2.5	7	0.3	0.3	0.1	0.5

Transfer or multiple records of the same events were excluded. The number of hospitalizations included inpatient deaths.

Sums may not add to the total due to rounding errors.

"Lower Limit" and "Upper Limit" describe the confidence interval for the adjusted rate.

Rates are per 100,000 population. Age-adjusted rates are adjusted to the 2000 U.S. standard population.

Traumatic brain injuries include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-9-CM codes 800.0-801.9, 803.0-804.9, 850.0-854.1, 950.1-950.3, 959.01, 959.55.

See Appendix F for the definitions of mechanism of injury and their associated ICD-9-CM codes.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

## T7. Leading causes of hospitalized traumatic brain injury by age: Colorado residents, 2001-2003 total

All Ages	N	Rate	%
Total TBI hospitalizations	12,501	92.2	100.0
1 Motor vehicle traffic	4,958	36.6	39.7
2 Fall	4,554	33.6	36.4
3 Other transportation	1,074	7.9	8.6
4 Assault	989	7.4	7.9

Ages 5-14	N	Rate	%
Total TBI hospitalizations	787	41.5	100.0
1 Motor vehicle traffic	291	15.3	37.0
2 Fall	209	11.0	26.6
3 Other transportation	169	8.9	21.5
4 Struck by or against	83	4.4	10.5

Ages 25-44	N	Rate	%
Total TBI hospitalizations	3,313	77.9	100.0
1 Motor vehicle traffic	1,638	38.5	49.4
2 Fall	671	15.8	20.3
3 Assault	390	9.2	11.8
4 Other transportation	342	8.0	10.3

Ages 65+	N	Rate	%
Total TBI hospitalizations	2,903	217.0	100.0
1 Fall	2,270	169.7	78.2
2 Motor vehicle traffic	419	31.3	14.4
3 Other transportation	78	5.8	2.7
4 Struck by or against	58	4.3	2.0

Age < 5	N	Rate	%
Total TBI hospitalizations	481	49.9	100.0
1 Fall	211	21.9	43.9
2 Assault	128	13.3	26.6
3 Motor vehicle traffic	67	7.0	13.9
4 Struck by or against	30	3.1	6.2

Ages 15-24	N	Rate	%
Total TBI hospitalizations	2,626	135.3	100.0
1 Motor vehicle traffic	1,601	82.5	61.0
2 Fall	342	17.6	13.0
3 Assault	287	14.8	10.9
4 Other transportation	216	11.1	8.2

Ages 45-64	N	Rate	%
Total TBI hospitalizations	2,391	75.7	100.0
1 Motor vehicle traffic	942	29.8	39.4
2 Fall	851	26.9	35.6
3 Other transportation	254	8.0	10.6
4 Assault	144	4.6	6.0

Transfer or multiple records of the same events were excluded. The number of hospitalizations included 736 inpatient deaths.

Percentages are of total hospitalized traumatic brain injury with mechanism of injury mentioned for each age group.

The number of hospitalizations with no mention of injury mechanism was 103 (less than 1% of the total 12,604 hospitalizations).

Rates are crude rates per 100,000 population.

Traumatic brain injuries (TBI) include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-9-CM codes 800.0-801.9, 803.0-804.9, 850.0-854.1, 950.1-950.3, 959.01, 995.55.

See Appendix F for the definitions of mechanism of injury and their associated ICD-9-CM codes.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.



**T8. Hospitalized traumatic brain injuries, crude rates and age-adjusted rates by region of residence:  
Colorado residents, 2001-2003 total**

Place of Residence	Total Hospitalized TBI				Mechanism Mentioned				Unintentional Injury				Intentional Injury			
	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.
<b>Colorado</b>	12,604	93.0	97.0		12,501	92.2	96.2		11,333	83.6	87.9		1,121	8.3	8.0	
<b>Urban/Rural Region</b>																
Denver CMSA	7,043	94.4	100.7		6,986	93.6	99.9		6,239	83.6	90.3		721	9.7	9.2	+
Other MSA	3,472	90.8	93.1		3,451	90.2	92.5		3,153	82.4	85.0		283	7.4	7.1	
Rural non-remote	1,774	94.1	95.6		1,756	93.2	94.7		1,660	88.1	89.6		90	4.8	4.8	-
Rural remote	284	95.8	96.5		277	93.5	94.2		257	86.7	87.6		20	6.7	6.6	
<b>Regional Emergency and Trauma Advisory Councils</b>																
Northwest	554	87.9	88.0		550	87.3	87.4		508	80.6	80.8		40	6.3	6.3	
Western	203	81.2	78.8	-	203	81.2	78.8	-	196	78.4	75.9		6	2.4	2.5	-
Southwest	163	59.8	61.4	-	161	59.1	60.8	-	155	56.9	58.5	-	6	2.2	2.3	-
Foothills	1,937	76.2	79.8	-	1,918	75.5	79.1	-	1,780	70.0	73.7	-	133	5.2	5.1	-
Central Mountain	390	100.6	105.6		388	100.1	105.1		367	94.7	100.1		20	5.2	4.7	-
San Luis Valley	142	100.1	100.8		134	94.4	95.0		121	85.3	85.2		12	8.5	9.1	
Northeast	1,358	84.1	84.8	-	1,350	83.6	84.3	-	1,270	78.6	79.6	-	77	4.8	4.5	-
Mile-High	5,267	103.9	112.1	+	5,228	103.1	111.3	+	4,613	91.0	99.7	+	594	11.7	11.2	+
Plains to Peaks	1,620	93.3	99.7		1,615	93.0	99.4		1,466	84.4	91.1		142	8.2	7.9	
Southern	765	115.0	109.9	+	752	113.0	108.1	+	672	101.0	95.8		75	11.3	11.5	+
Southeast	174	111.9	107.5		171	110.0	105.8		161	103.6	99.3		9	5.8	5.8	

Place of Residence	Motor Vehicle Traffic				Falls				Assault			
	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.	N	Crude Rate	Adj. Rate	Sig. Diff.
<b>Colorado</b>	4,958	36.6	36.1		4,554	33.6	38.4		998	7.4	7.1	
<b>Urban/Rural Region</b>												
Denver CMSA	2,724	36.5	36.4		2,599	34.8	41.5	+	646	8.7	8.2	+
Other MSA	1,378	36.0	34.8		1,284	33.6	37.4		250	6.5	6.2	
Rural non-remote	743	39.4	39.6		566	30.0	31.4	-	79	4.2	4.2	-
Rural remote	109	36.8	36.6		90	30.4	31.5		16	5.4	5.3	
<b>Regional Emergency and Trauma Advisory Councils</b>												
Northwest	210	33.3	33.1		206	32.7	33.1		34	5.4	5.4	
Western	87	34.8	34.8		65	26.0	22.5	-	4	1.6	1.7	-
Southwest	65	23.8	23.9	-	49	18.0	19.5	-	3	1.1	1.2	-
Foothills	806	31.7	31.0	-	683	26.9	31.4	-	111	4.4	4.3	-
Central Mountain	163	42.1	44.1		122	31.5	35.9		18	4.6	4.3	-
San Luis Valley	62	43.7	43.1		32	22.5	22.8	-	10	7.0	7.6	
Northeast	632	39.1	37.2		427	26.4	29.5	-	68	4.2	3.9	-
Mile-High	1,988	39.2	39.5	+	1,967	38.8	46.9	+	540	10.7	10.1	+
Plains to Peaks	616	35.5	34.6		614	35.3	43.0		129	7.4	7.1	
Southern	261	39.2	38.9		308	46.3	41.2		65	9.8	10.0	+
Southeast	64	41.2	41.4		66	42.5	37.8		9	5.8	5.8	

Transfer or multiple records of the same events were excluded. The number of hospitalizations included 736 inpatient deaths.

+ or - indicates that the region rate is significantly higher or lower than the rate for the state.

Rates are per 100,000 population. Age-adjusted rates are adjusted to the 2000 U.S. standard population.

Traumatic brain injuries (TBI) include concussions, skull fractures, and intracranial injuries resulting from an external impact or forces of acceleration/deceleration and are selected using ICD-9-CM codes 800.0-801.9, 803.0-804.9, 850.0-854.1, 950.1-950.3, 959.01, 995.55.

See Appendix E for definitions of regions.

See Appendix F for the definitions of mechanism of injury and their associated ICD-9-CM codes.

Prepared by the Colorado Traumatic Brain Injury Surveillance, Colorado Department of Public Health and Environment.

