

# Virginia CODES Crash Outcome Data Evaluation System



Motor Vehicle Crash Outcomes in 2005 by Vehicle Type and Age											
Age Group	Persons Involved	# Injured	Injury Rate	% of All Injuries	Fatal	Fatality Rate per 100,000	Inpatient Hospitalizations	Inpatient Hospitalizations per 100,000	Average Hospital Charge	Median Hospital Charges	Average Length of Stay
<b>Bicycle/Moped</b>											
00 - 17	356	337	94.7%	0.4%	6	1,685.4	38	10,674	\$ 21,135	\$ 15,226	4.61
18 - 34	374	352	94.1%	0.5%	4	1,069.5	36	9,626	\$ 32,460	\$ 20,238	6.58
35 - 64	342	304	88.9%	0.4%	11	3,216.4	42	12,281	\$ 39,470	\$ 23,483	6.21
65+	18	16	88.9%	0.0%	1	5,555.6	6	33,333	\$ 34,433	\$ 32,366	7.50
Not Stated	61	53	86.9%	0.1%	1	1,639.3	-	-	*	*	*
<b>Subtotal</b>	<b>1,151</b>	<b>1,062</b>	<b>92.3%</b>	<b>1.4%</b>	<b>23</b>	<b>1,998.3</b>	<b>122</b>	<b>10,599</b>	<b>\$ 31,443</b>	<b>\$ 21,450</b>	<b>5.89</b>
<b>City/Private/Commercial Buses</b>											
00 - 17	98	98	100.0%	0.1%	0	-	2	2,041	*	*	*
18 - 34	170	55	32.4%	0.1%	0	-	2	1,176	*	*	*
35 - 64	542	136	25.1%	0.2%	0	-	12	2,214	\$ 26,057	\$ 17,042	3.92
65+	63	9	14.3%	0.0%	1	1,587.3	5	7,937	*	*	*
Not Stated	22	8	36.4%	0.0%	0	-	-	-	*	*	*
<b>Subtotal</b>	<b>895</b>	<b>306</b>	<b>34.2%</b>	<b>0.4%</b>	<b>1</b>	<b>111.7</b>	<b>21</b>	<b>2,346</b>	<b>\$ 19,560</b>	<b>\$ 11,249</b>	<b>3.38</b>
<b>Emergency Vehicle</b>											
00 - 17	6	6	100.0%	0.0%	0	-	-	-	*	*	*
18 - 34	629	159	25.3%	0.2%	1	159.0	6	954	\$ 13,234	\$ 13,929	3.50
35 - 64	531	128	24.1%	0.2%	0	-	12	2,260	\$ 17,061	\$ 13,505	2.92
65+	13	5	38.5%	0.0%	0	-	-	-	*	*	*
Not Stated	49	3	6.1%	0.0%	0	-	-	-	*	*	*
<b>Subtotal</b>	<b>1,228</b>	<b>301</b>	<b>24.5%</b>	<b>0.4%</b>	<b>1</b>	<b>81.4</b>	<b>18</b>	<b>1,466</b>	<b>\$ 15,785</b>	<b>\$ 13,505</b>	<b>3.11</b>
<b>Large Commercial Truck</b>											
00 - 17	18	11	61.1%	0.0%	0	-	-	-	*	*	*
18 - 34	1,791	246	13.7%	0.3%	3	167.5	19	1,061	\$ 24,209	\$ 10,852	5.26
35 - 64	3,007	335	11.1%	0.4%	5	166.3	97	3,226	\$ 23,110	\$ 15,978	4.20
65+	183	20	10.9%	0.0%	2	1,092.9	11	6,011	\$ 45,830	\$ 38,939	9.64
Not Stated	158	5	3.2%	0.0%	0	-	-	-	*	*	*
<b>Subtotal</b>	<b>5,157</b>	<b>617</b>	<b>12.0%</b>	<b>0.8%</b>	<b>10</b>	<b>193.9</b>	<b>127</b>	<b>2,463</b>	<b>\$ 25,243</b>	<b>\$ 16,308</b>	<b>4.83</b>
<b>Motorcycle</b>											
00 - 17	34	25	73.5%	0.0%	4	11,764.7	6	17,647	\$ 37,948	\$ 40,201	4.33
18 - 34	1,063	840	79.0%	1.1%	30	2,822.2	171	16,087	\$ 46,830	\$ 25,639	7.16
35 - 64	1,317	1,082	82.2%	1.4%	30	2,277.9	293	22,248	\$ 50,915	\$ 24,936	7.79
65+	49	37	75.5%	0.0%	3	6,122.4	18	36,735	\$ 82,373	\$ 25,642	12.00
Not Stated	47	6	12.8%	0.0%	1	2,127.7	-	-	*	*	*
<b>Subtotal</b>	<b>2,510</b>	<b>1,990</b>	<b>79.3%</b>	<b>2.6%</b>	<b>68</b>	<b>2,709.2</b>	<b>488</b>	<b>19,442</b>	<b>\$ 50,484</b>	<b>\$ 25,545</b>	<b>7.68</b>
<b>Other Vehicle Types</b>											
00 - 17	75	56	74.7%	0.1%	2	2,666.7	10	13,333	\$ 38,515	\$ 33,066	6.10
18 - 34	170	54	31.8%	0.1%	5	2,941.2	14	8,235	\$ 45,380	\$ 20,740	5.43
35 - 64	388	75	19.3%	0.1%	4	1,030.9	23	5,928	\$ 32,918	\$ 14,924	5.78
65+	63	12	19.0%	0.0%	1	1,587.3	6	9,524	\$ 36,787	\$ 35,368	5.17
Not Stated	58	1	1.7%	0.0%	0	-	-	-	*	*	*
<b>Subtotal</b>	<b>754</b>	<b>198</b>	<b>26.3%</b>	<b>0.3%</b>	<b>12</b>	<b>1,591.5</b>	<b>53</b>	<b>7,029</b>	<b>\$ 37,704</b>	<b>\$ 19,098</b>	<b>5.68</b>
<b>Passenger Car</b>											
00 - 17	13,925	5,922	42.5%	7.8%	58	416.5	260	1,867	\$ 29,343	\$ 15,076	4.82
18 - 34	77,749	19,692	25.3%	25.9%	154	198.1	2,291	2,947	\$ 20,968	\$ 9,731	4.15
35 - 64	59,285	15,420	26.0%	20.3%	131	221.0	2,266	3,822	\$ 29,178	\$ 14,688	5.55
65+	13,020	3,418	26.3%	4.5%	84	645.2	834	6,406	\$ 31,672	\$ 17,050	6.66
Not Stated	4,844	363	7.5%	0.5%	3	61.9	-	-	*	*	*
<b>Subtotal</b>	<b>168,823</b>	<b>44,815</b>	<b>26.5%</b>	<b>58.9%</b>	<b>430</b>	<b>254.7</b>	<b>5,651</b>	<b>3,347</b>	<b>\$ 26,225</b>	<b>\$ 12,783</b>	<b>5.11</b>
<b>Pick-Up Truck / SUV</b>											
00 - 17	5,174	2,266	43.8%	3.0%	14	270.6	83	1,604	\$ 37,720	\$ 16,438	6.71
18 - 34	31,402	6,744	21.5%	8.9%	85	270.7	907	2,888	\$ 24,791	\$ 10,652	4.45
35 - 64	40,487	8,278	20.4%	10.9%	118	291.5	1,570	3,878	\$ 28,390	\$ 14,482	5.30
65+	4,402	981	22.3%	1.3%	28	636.1	276	6,270	\$ 35,939	\$ 17,162	6.69
Not Stated	2,358	137	5.8%	0.2%	0	-	-	-	*	*	*
<b>Subtotal</b>	<b>83,823</b>	<b>18,406</b>	<b>22.0%</b>	<b>24.2%</b>	<b>245</b>	<b>292.3</b>	<b>2,836</b>	<b>3,383</b>	<b>\$ 28,247</b>	<b>\$ 13,441</b>	<b>5.21</b>

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<b>School Bus</b>												
00 - 17	320	317	99.1%	0.4%	3	937.5	5	1,562.5	*	*	*	
18 - 34	161	28	17.4%	0.0%	-	-	4	2,484.5	*	*	*	
35 - 64	651	65	10.0%	0.1%	-	-	22	3,379.4	\$ 32,419	\$ 13,747	4.77	
65+	114	5	4.4%	0.0%	-	-	5	4,386.0	*	*	*	
Not Stated	27	14	51.9%	0.0%	-	-	-	-	*	*	*	
<b>Subtotal</b>	<b>1,273</b>	<b>429</b>	<b>33.7%</b>	<b>0.6%</b>	<b>3</b>	<b>235.7</b>	<b>36</b>	<b>2,828.0</b>	<b>\$ 27,741</b>	<b>\$ 13,532</b>	<b>5.14</b>	
<b>Tractor-Trailer Truck</b>												
00 - 17	11	7	63.6%	0.0%	-	-	-	-	*	*	*	
18 - 34	1,158	135	11.7%	0.2%	4	345.4	12	1,036.3	\$ 62,041	\$ 20,868	11.00	
35 - 64	3,749	364	9.7%	0.5%	11	293.4	86	2,293.9	\$ 21,047	\$ 14,406	4.22	
65+	212	24	11.3%	0.0%	1	471.7	14	6,603.8	\$ 39,166	\$ 17,892	5.71	
Not Stated	256	-	0.0%	0.0%	-	-	-	-	*	*	*	
<b>Subtotal</b>	<b>5,386</b>	<b>530</b>	<b>9.8%</b>	<b>0.7%</b>	<b>16</b>	<b>297.1</b>	<b>112</b>	<b>2,079.5</b>	<b>\$ 27,704</b>	<b>\$ 15,364</b>	<b>5.13</b>	
<b>Van</b>												
00 - 17	1,336	925	69.2%	1.2%	2	149.7	20	1,497.0	\$ 25,494	\$ 17,818	4.15	
18 - 34	6,245	1,385	22.2%	1.8%	8	128.1	164	2,626.1	\$ 15,785	\$ 9,380	3.85	
35 - 64	11,942	2,541	21.3%	3.3%	23	192.6	429	3,592.4	\$ 25,152	\$ 13,705	4.85	
65+	1,492	369	24.7%	0.5%	9	603.2	85	5,697.1	\$ 30,286	\$ 16,987	6.55	
Not Stated	664	81	12.2%	0.1%	1	150.6	-	-	*	*	*	
<b>Subtotal</b>	<b>21,679</b>	<b>5,301</b>	<b>24.5%</b>	<b>7.0%</b>	<b>43</b>	<b>198.3</b>	<b>698</b>	<b>3,219.7</b>	<b>\$ 23,586</b>	<b>\$ 13,198</b>	<b>4.81</b>	
<b>Not Stated</b>												
00 - 17	524	470	89.7%	0.6%	11	2,099.2	59	11,259.5	\$ 29,921	\$ 21,869	4.69	
18 - 34	1,247	693	55.6%	0.9%	17	1,363.3	51	4,089.8	\$ 42,960	\$ 20,767	7.39	
35 - 64	1,630	750	46.0%	1.0%	47	2,883.4	112	6,871.2	\$ 48,396	\$ 24,314	8.10	
65+	207	120	58.0%	0.2%	19	9,178.7	29	14,009.7	\$ 41,126	\$ 21,642	8.10	
Not Stated	5,531	35	0.6%	0.0%	-	-	-	-	*	*	*	
<b>Subtotal</b>	<b>9,139</b>	<b>2,068</b>	<b>22.6%</b>	<b>2.7%</b>	<b>94</b>	<b>1,028.6</b>	<b>251</b>	<b>2,746.5</b>	<b>\$ 42,109</b>	<b>\$ 22,295</b>	<b>7.16</b>	
<b>State Total</b>	<b>301,818</b>	<b>76,023</b>	<b>25.2%</b>	<b>100.0%</b>	<b>946</b>	<b>313.4</b>	<b>10,413</b>	<b>3,450.1</b>	<b>\$ 28,216</b>	<b>\$ 13,830</b>	<b>5.29</b>	

\* Too few to calculate

**Vehicle Type** - According to police crash reports includes Bicycle/Moped, City/Private/Commercial Buses, Emergency Vehicle, Large Commercial Truck, Motorcycle, Passenger Car, Pick-up Truck, School Bus, Tractor-Trailer Truck, Van, Other Vehicle Types (Motor homes, Farm Equipment, Hearse, etc.) and Not Stated

**Age Group** - According to police crash reports the age of occupant grouped into the following categories 0-17, 18-34, 35-64 and 65+

**Persons Involved** - Number of persons involved in crashes, according to police crash reports, and includes all drivers as well as those passengers and pedestrians who were killed or injured

**# Injured** - Number of persons who were injured according to police crash reports (FR-300); includes 2 -Visible sign of injury - had to be transported, 3 - Other visible injury and 4 - no visible injury but complaint of pain or momentary unconsciousness; # Injured does not include 1 - Dead on Arrival, 5 - Died Later (within 30 days), 6 - Not Stated or blank values

**Injury Rate** - Of all persons involved in a crash and categorized within a **Vehicle Type and Age Group, Subtotal or State Total**, the percentage for the Vehicle Type and Age Group, Subtotal or State Total that were injured

**% of All Injuries** - Of all persons involved in a crash and categorized in a **Vehicle Type and Age Group, Subtotal or State Total**, the percentage of all injuries that category represents

**Fatal** - Number of persons killed, according to police crash reports, and includes those who died at the crash scene or up to 30 days later

**Fatality Rate per 100,000** - The fatality rate per 100,000 persons involved in crashes: (Persons Killed / Persons Involved) \* 100,000

**Inpatient Hospitalizations** - # of persons involved in crashes who were identified by data imputation as having been hospitalized in Virginia

**Inpatient Hospitalizations per 100,000** - The hospitalization rate per 100,000 persons involved in crashes: (Inpatient Hospitalizations)/(Persons Involved) \* 100,000

**Average Hospital Charge** - The total inpatient hospital charges divided by the number of persons hospitalized: Total Hospital Charges / Linked to Hospital

**Median Hospital Charges** - The midpoint of all of the hospital charges where half of the values are above the median charge and half are below; the halfway point of a set of numbers is less affected by low or high numbers that might otherwise skew a mean or average

**Average Length of Stay** - The total inpatient hospital days divided by the number of persons hospitalized: Total Hospital Days / Inpatient Hospitalizations

*This report is based on Virginia Department of Motor Vehicles crash data combined with Virginia hospital discharge data. Reports produced with small numbers in a grouping may distort rates and averages. Use caution when interpreting these results. Virginia CODES is a cooperative program of the Department of Motor Vehicles, Virginia Department of Health, Virginia Health Information and Inova Regional Trauma Center. For more information please contact [info@vacodes.org](mailto:info@vacodes.org) or 804-643-5573.*