

Virginia CODES Crash Outcome Data Evaluation System



Motor Vehicle Crash Outcomes in 2007 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	
Bicycle												
00 - 17	251	239	95.2%	0.3%	2	796.8	17	6,772.9	\$ 28,948	\$ 13,789	4.76	
18 - 34	270	258	95.6%	0.4%	-	-	34	12,592.6	\$ 22,755	\$ 12,303	3.65	
35 - 64	272	261	96.0%	0.4%	3	1,102.9	40	14,705.9	\$ 55,468	\$ 20,479	6.90	
65+	14	14	100.0%	0.0%	-	-	5	35,714.3	*	*	*	
Not Stated	77	67	87.0%	0.1%	2	2,597.4	-	-	*	*	*	
Van	884	839	94.9%	1.2%	7	791.9	96	10,859.7	\$ 38,277	\$ 17,577	5.16	
City/Private/Commercial Buses												
00 - 17	46	46	100.0%	0.1%	-	-	-	-	*	*	*	
18 - 34	154	51	33.1%	0.1%	-	-	7	4,545.5	\$ 7,429	\$ 6,635	2.86	
35 - 64	493	121	24.5%	0.2%	-	-	10	2,028.4	\$ 22,698	\$ 13,313	4.20	
65+	59	12	20.3%	0.0%	-	-	5	8,474.6	*	*	*	
Not Stated	27	11	40.7%	0.0%	-	-	-	-	*	*	*	
Subtotal	779	241	30.9%	0.4%	-	-	22	2,824.1	\$ 17,331	\$ 9,798	3.18	
Emergency Vehicle												
00 - 17	1	1	100.0%	0.0%	-	-	-	-	*	*	*	
18 - 34	596	133	22.3%	0.2%	1	167.8	15	2,516.8	\$ 19,309	\$ 13,248	5.73	
35 - 64	464	86	18.5%	0.1%	-	-	12	2,586.2	\$ 33,931	\$ 26,851	6.25	
65+	10	4	40.0%	0.0%	-	-	-	-	*	*	*	
Not Stated	68	5	7.4%	0.0%	-	-	-	-	*	*	*	
Subtotal	1,139	229	20.1%	0.3%	1	87.8	27	2,370.5	\$ 25,808	\$ 17,336	5.96	
Large Commercial Truck												
00 - 17	30	20	66.7%	0.0%	-	-	3	10,000.0	*	*	*	
18 - 34	1,624	209	12.9%	0.3%	3	184.7	27	1,662.6	\$ 19,559	\$ 8,373	3.22	
35 - 64	2,924	322	11.0%	0.5%	2	68.4	62	2,120.4	\$ 35,478	\$ 16,942	5.48	
65+	190	19	10.0%	0.0%	-	-	5	2,631.6	*	*	*	
Not Stated	254	11	4.3%	0.0%	-	-	-	-	*	*	*	
Subtotal	5,022	581	11.6%	0.8%	5	99.6	97	1,931.5	\$ 39,705	\$ 15,583	6.28	
Moped												
00 - 17	43	40	93.0%	0.1%	1	2,325.6	7	16,279.1	\$ 32,877	\$ 22,569	3.43	
18 - 34	125	105	84.0%	0.2%	2	1,600.0	27	21,600.0	\$ 41,805	\$ 21,817	5.11	
35 - 64	92	74	80.4%	0.1%	4	4,347.8	25	27,173.9	\$ 41,060	\$ 19,576	5.56	
65+	11	10	90.9%	0.0%	1	9,090.9	5	45,454.5	*	*	*	
Not Stated	7	2	28.6%	0.0%	-	-	-	-	*	*	*	
Subtotal	278	231	83.1%	0.3%	8	2,877.7	64	23,021.6	\$ 39,406	\$ 20,997	5.30	
Motorcycle												
00 - 17	67	61	91.0%	0.1%	-	-	9	13,432.8	\$ 75,910	\$ 42,365	6.56	
18 - 34	1,230	972	79.0%	1.4%	67	5,447.2	251	20,406.5	\$ 39,822	\$ 21,379	5.11	
35 - 64	1,490	1,189	79.8%	1.7%	54	3,624.2	407	27,315.4	\$ 43,168	\$ 24,976	6.29	
65+	77	54	70.1%	0.1%	5	6,493.5	32	41,558.4	\$ 64,311	\$ 35,919	7.69	
Not Stated	42	8	19.0%	0.0%	-	-	-	-	*	*	*	
Subtotal	2,906	2,284	78.6%	3.3%	126	4,335.9	699	24,053.7	\$ 43,357	\$ 24,078	5.94	
Other Vehicles												
00 - 17	24	18	75.0%	0.0%	-	-	1	4,166.7	*	*	*	
18 - 34	138	28	20.3%	0.0%	2	1,449.3	3	2,173.9	*	*	*	
35 - 64	350	67	19.1%	0.1%	3	857.1	11	3,142.9	\$ 20,118	\$ 17,434	3.18	
65+	84	20	23.8%	0.0%	1	1,190.5	13	15,476.2	\$ 33,641	\$ 19,222	4.31	
Not Stated	101	1	1.0%	0.0%	-	-	-	-	*	*	*	
Subtotal	697	134	19.2%	0.2%	6	860.8	28	4,017.2	\$ 26,650	\$ 23,767	3.71	
Passenger Car												
00 - 17	11,810	5,010	42.4%	7.3%	49	414.9	323	2,735.0	\$ 33,421	\$ 14,453	4.97	
18 - 34	72,072	17,530	24.3%	25.5%	195	270.6	2,655	3,683.8	\$ 23,088	\$ 10,858	4.10	
35 - 64	55,217	13,823	25.0%	20.1%	110	199.2	2,626	4,755.8	\$ 29,918	\$ 15,859	4.99	
65+	12,624	3,115	24.7%	4.5%	96	760.5	1,078	8,539.3	\$ 36,138	\$ 19,183	6.23	
Not Stated	8,326	316	3.8%	0.5%	3	36.0	-	-	*	*	*	
Subtotal	160,049	39,794	24.9%	57.8%	453	283.0	6,682	4,175.0	\$ 28,378	\$ 18,178	4.83	
Pick-Up Truck												
00 - 17	1,679	654	39.0%	1.0%	9	536.0	43	2,561.0	\$ 26,828	\$ 15,039	4.00	
18 - 34	12,108	2,439	20.1%	3.5%	53	437.7	388	3,204.5	\$ 25,238	\$ 11,456	4.26	
35 - 64	17,616	3,302	18.7%	4.8%	64	363.3	759	4,308.6	\$ 34,800	\$ 18,587	5.54	
65+	2,619	561	21.4%	0.8%	14	534.6	198	7,560.1	\$ 44,689	\$ 20,176	6.77	
Not Stated	1,983	55	2.8%	0.1%	1	50.4	-	-	*	*	*	
Subtotal	36,005	7,011	19.5%	10.2%	141	391.6	1,388	3,855.0	\$ 33,291	\$ 14,342	5.31	

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School Bus												
00 - 17	206	206	100.0%	0.3%	-	-	5	2,427.2	*	*	*	
18 - 34	109	19	17.4%	0.0%	-	-	1	917.4	*	*	*	
35 - 64	547	59	10.8%	0.1%	-	-	10	1,828.2	\$ 30,609	\$ 22,716	5.20	
65+	102	6	5.9%	0.0%	-	-	6	5,882.4	\$ 73,970	\$ 38,388	10.67	
Not Stated	38	5	13.2%	0.0%	-	-	-	-	*	*	*	
Subtotal	1,002	295	29.4%	0.4%	-	-	22	2,195.6	\$ 37,813	\$ 16,442	6.00	
Special vehicle - ATV												
00 - 17	21	19	90.5%	0.0%	-	-	4	19,047.6	*	*	*	
18 - 34	35	27	77.1%	0.0%	2	5,714.3	10	28,571.4	\$ 75,065	\$ 75,206	8.90	
35 - 64	15	9	60.0%	0.0%	3	20,000.0	3	20,000.0	*	*	*	
65+	-	-	-	-	-	-	-	-	*	*	*	
Not Stated	1	-	0.0%	0.0%	-	-	-	-	*	*	*	
Subtotal	72	55	76.4%	0.0%	5	6,944.4	17	23,611.1	\$ 62,707	\$ 19,609	7.94	
Sport Utility Vehicle												
00 - 17	3,102	1,378	44.4%	2.0%	16	515.8	83	2,675.7	\$ 21,764	\$ 12,371	4.02	
18 - 34	16,676	3,746	22.5%	5.4%	43	257.9	623	3,735.9	\$ 23,484	\$ 10,293	4.23	
35 - 64	21,321	4,448	20.9%	6.5%	61	286.1	938	4,399.4	\$ 29,889	\$ 15,779	4.92	
65+	1,961	469	23.9%	0.7%	15	764.9	165	8,414.1	\$ 31,844	\$ 19,748	5.90	
Not Stated	1,918	72	3.8%	0.1%	-	-	-	-	*	*	*	
Subtotal	44,978	10,113	22.5%	14.7%	135	300.1	1,809	4,022.0	\$ 27,489	\$ 24,306	4.73	
Tractor-Trailer Truck												
00 - 17	7	4	57.1%	0.0%	-	-	-	-	*	*	*	
18 - 34	901	86	9.5%	0.1%	3	333.0	12	1,331.9	\$ 16,946	\$ 11,272	3.83	
35 - 64	3,383	329	9.7%	0.5%	12	354.7	65	1,921.4	\$ 40,937	\$ 18,647	7.00	
65+	179	13	7.3%	0.0%	-	-	4	2,234.6	\$ 27,324	\$ 23,554	8.50	
Not Stated	238	1	0.4%	0.0%	-	-	-	-	*	*	*	
Subtotal	4,708	433	9.2%	0.6%	15	318.6	81	1,720.5	\$ 36,711	\$ 14,025	6.60	
Van												
00 - 17	1,112	748	67.3%	1.1%	6	539.6	29	2,607.9	\$ 11,150	\$ 6,459	2.17	
18 - 34	5,363	1,187	22.1%	1.7%	4	74.6	211	3,934.4	\$ 20,043	\$ 9,515	4.05	
35 - 64	10,485	2,242	21.4%	3.3%	16	152.6	408	3,891.3	\$ 32,145	\$ 16,183	5.30	
65+	1,493	355	23.8%	0.5%	7	468.9	103	6,898.9	\$ 31,076	\$ 20,161	5.64	
Not Stated	968	55	5.7%	0.1%	-	-	1	103.3	*	*	*	
Subtotal	19,421	4,587	23.6%	6.7%	33	169.9	752	3,872.1	\$ 27,806	\$ 18,433	4.87	
Not Stated												
00 - 17	474	423	89.2%	0.6%	6	1,265.8	45	9,493.7	\$ 33,496	\$ 21,054	4.87	
18 - 34	982	636	64.8%	0.9%	26	2,647.7	93	9,470.5	\$ 33,975	\$ 18,200	4.95	
35 - 64	1,144	753	65.8%	1.1%	39	3,409.1	149	13,024.5	\$ 49,621	\$ 24,120	7.58	
65+	213	155	72.8%	0.2%	19	8,920.2	63	29,577.5	\$ 41,748	\$ 28,723	6.41	
Not Stated	5,380	28	0.5%	0.0%	1	18.6	-	-	*	*	*	
Subtotal	8,193	1,995	24.4%	2.9%	91	1,110.7	350	4,271.9	\$ 41,974	\$ 14,261	6.32	
State Total	286,133	68,822	24.1%	100.0%	1,026	358.6	12,134	4,240.7	\$ 30,345	\$ 15,247	5.01	

* 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

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

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 -

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

% 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

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 or 804-643-5573.

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