

FLHealthCHARTS.com Statistical Brief Trends in Motor Vehicle Crashes and Deaths in Florida 2007 – 2016

Description

According to data from the Florida Department of Highway Safety and Motor Vehicles¹, motor vehicle crashes decreased in Florida in the years 2007 through 2011. The rate of motor vehicle crashes per 100,000 population was 1384.8 in 2007 and decreased by 12.9% to 1206.2 in 2011. In the years 2011 through 2016 the decreasing trend reversed and became an increasing trend. The motor vehicle crash rate increased from 1206.2 in 2011 to 1955.0 in 2016; a 62.0% increase (Graph 1 and Table 1).

Deaths from motor vehicle crashes are available on CHARTS² and come from the Florida Vital Statistics death certificate data. The death rate for motor vehicle crashes decreased 29.8% from a rate of 17.8 per 100,000 population in 2007 to a rate of 12.5 in 2012 and 2013. In the period 2013 to 2016 the motor vehicle crash death rate increased 28.0% from 12.5 per 100,000 population in 2013 to 16.0 in 2016 (Graph2 and Table 2).

Based on the motor vehicle crash and death data, the deaths per 1,000 crashes decreased by 43.7% from 12.8 deaths per 1,000 crashes in 2007 to 7.2 deaths per 1,000 crashes in 2014. In 2015 and 2016 the deaths per 1,000 crashes increased to 7.9 and 8.2 respectively. The rate of 8.2 in 2016 is a 13.9% increase over the rate of 7.2 in 2014 and is a statistically significant increase (p value < 0.0001). This indicates that people involved in a motor vehicle crash were 13.9% more likely to die from the crash in 2016 compared to 2014 (Table 3).

Motor vehicle crash death rates are higher for males compared to females. This pattern is consistent across all age categories except age < 1 (Graph 3 and Table 4). For both males and females, the highest death rates occur in the 15 to 34 and 75 and over, age categories.

Discussion

Data for the years 2011 through 2016 showed a reversal of the decreasing trend in motor vehicle crashes and deaths. The rates for crashes and deaths decreased until 2011 and then began an upward trend. The deaths per 1,000 crashes continued to decrease until 2014 and then increased in 2015 and 2016. These increasing trends indicate that the risk of being involved in a motor vehicle crash is increasing and the risk of dying, for persons involved in a motor vehicle crash, is also increasing.

Data for deaths due to motor vehicle crashes for 2016 show that males are more likely to die from motor vehicle crashes compared to females.

Table 1

Florida Motor Vehicle Crashes

	Motor Vehicle	Rate per 100,000
Year	Crashes	Population
2007	256,206	1384.8
2008	243,342	1305.7
2009	235,778	1260.0
2010	235,461	1251.1
2011	228,471	1206.2
2012	281,549	1472.6
2013	316,943	1641.0
2014	344,240	1758.1
2015	374,511	1882.2
2016	395,521	1955.0

Graph 1

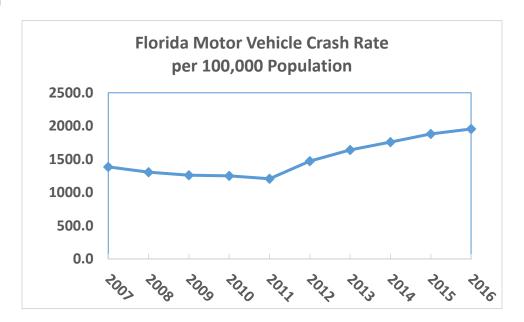
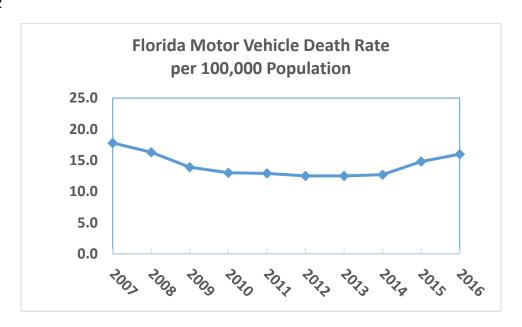


Table 2

Florida Motor Vehicle Crash Deaths

	Motor Vehicle Crash	Rate per 100,000	
Year	Deaths	Population	
2007	3,291	17.8	
2008	3,028	16.3	
2009	2,601	13.9	
2010	2,449	13.0	
2011	2,439	12.9	
2012	2,392	12.5	
2013	2,412	12.5	
2014	2,491	12.7	
2015	2,945	14.8	
2016	3.226	16.0	

Graph 2



Trends in Motor Vehicle Crashes and Deaths in Florida 2007 – 2016

Table 3

Florida Motor Vehicle Crash Deaths Per 1,000 Crashes

	Matau	Motor	
	Motor	Vehicle	
	Vehicle	Crash	Deaths per
Year	Crashes	Deaths	1,000 Crashes
2007	256,206	3291	12.8
2008	243,342	3028	12.4
2009	235,778	2601	11.0
2010	235,461	2449	10.4
2011	228,471	2439	10.7
2012	281,549	2392	8.5
2013	316,943	2412	7.6
2014	344,240	2491	7.2
2015	374,511	2945	7.9
2016	395,521	3226	8.2

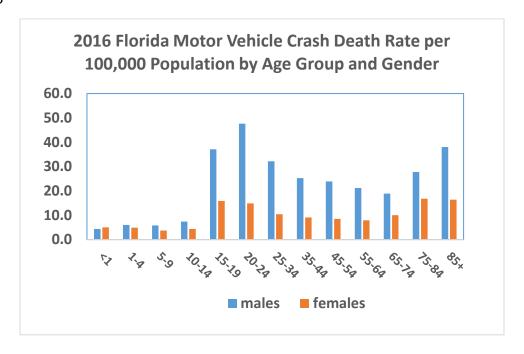
Trends in Motor Vehicle Crashes and Deaths in Florida 2007 – 2016

Table 4

Florida Motor Vehicle Crash Deaths in 2016 by Age and Gender

	Motor	Motor			
	Vehicle	Vehicle	Rate per	Rate per	
	Crash	Crash	100,000	100,000	
	Deaths	Deaths	Population	Population	Male:Female
Age	Males	Females	Males	Females	Rate Ratio
<1	216	237	4.4	5.0	0.88
1-4	1151	897	6.0	4.9	1.22
5-9	1424	876	5.8	3.7	1.57
10-14	1863	1052	7.4	4.4	1.68
15-19	9664	3948	37.1	15.9	2.33
20-24	12577	3798	47.6	14.9	3.19
25-34	16988	5449	32.2	10.4	3.10
35-44	12681	4662	25.3	9.1	2.78
45-54	11192	4193	23.9	8.5	2.81
55-64	8681	3717	21.2	7.9	2.68
65-74	6703	4194	18.9	10.0	1.89
75-84	5572	4389	27.8	16.8	1.65
85+	2212	1671	38.0	16.4	2.32
Unknown	143	20			
Total	91067	39103	24.1	9.8	2.46

Graph 3



- 1. Link to CHARTS motor vehicle crash data: http://www.flhealthcharts.com/charts/OtherIndicators/NonVitalIndNoGrpDataViewer.aspx?cid=0 http://www.flhealthcharts.com/charts/OtherIndicators/NonVitalIndNoGrpDataViewer.aspx?cid=0 http://www.flhealthcharts.com/charts/OtherIndicators/NonVitalIndNoGrpDataViewer.aspx?cid=0
- 2. Link to CHARTS motor vehicle crash death data: http://www.flhealthcharts.com/charts/DataViewer/DeathViewer/DeathViewer.aspx?indNumber=0 http://www.flhealthcharts.com/charts/DataViewer/DeathViewer/DeathViewer.aspx?indNumber=0 <a href="http://www.flhealthcharts.com/charts/DataViewer/DeathVi