Traffic Safety Facts

2016 Data

NHTSA

Key Findings

- In 2016, there were 5,286 motorcyclists killed—a 5.1-percent increase from the 5,029 motorcyclists killed in 2015.

- Per vehicle miles traveled in 2016, motorcyclist fatalities occurred nearly 28 times more frequently than passenger car occupant fatalities in traffic crashes.

- Twenty-seven percent of motorcycle riders involved in fatal crashes in 2016 were riding without valid motorcycle licenses.

- In 2016, motorcycle riders involved in fatal crashes were found to have the highest percentage of alcohol-impaired drivers than any other vehicle types (25% for motorcycles, 21% for passenger cars, 20% for light trucks, and 2% for large trucks).

- Thirty-seven percent of motorcycle riders who died in single-vehicle crashes in 2016 were alcohol-impaired.

- Motorcycle riders killed in traffic crashes at night were three times more frequently alcohol-impaired than those killed during the day in 2016.

- NHTSA estimates that helmets saved 1,859 motorcyclists' lives in 2016, and that 802 more lives could have been saved if all motorcyclists had worn helmets.

U.S. Department of Transportation
National Highway Traffic Safety Administration

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Motorcycles

The following definitions apply to terms used throughout this fact sheet:

- For the purposes of this fact sheet, motorcycles include two- or three-wheeled motorcycles, off-road motorcycles, mopeds, scooters, mini bikes, and pocket bikes.

- The motorcycle rider is the person operating the motorcycle; the passenger is a person seated on, but not operating, the motorcycle; the motorcyclist is a general term referring to either the rider or passenger.

- Drivers or motorcycle riders are considered to be alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher.

In this fact sheet for 2016, the information on motorcycles is presented as follows.

- Overview
- Registration
- Environmental Characteristics
- Crash Involvement
- Speeding
- Age
- Motorcycle Engine Size
- Licensing and Previous Driving Records
- Alcohol
- Helmet Use and Effectiveness

This fact sheet contains information on fatal motor vehicle crashes and fatalities based on data from the Fatality Analysis Reporting System (FARS). FARS is a census of fatal crashes in the 50 States, the District of Columbia, and Puerto Rico (Puerto Rico is not included in U.S. totals). Crash and injury statistics are based on data from the National Automotive Sampling System (NASS) General Estimates System (GES). The NASS GES is a probability-based sample of police-reported crashes from 60 locations across the country, from which estimates of national totals for injury and property-damage-only crashes are derived.

NASS GES was discontinued in 2016 and replaced with a new system called the Crash Report Sampling System (CRSS). The 2016 data year is the first data collection year of CRSS. However, the 2016 estimates are not currently available. Thus, injury and property-damage-only crash estimates for 2016 will not be presented in this publication. For more information, read Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES) at the end of this publication.

Overview

In 2016:

- There were 5,286 motorcyclists killed in motor vehicle traffic crashes—an increase of 5.1 percent from the 5,029 motorcyclists killed in 2015.
- Two-wheeled motorcycles accounted for 93 percent of all motorcycles in fatal crashes.
- Motorcyclists accounted for 14 percent of all traffic fatalities and 17 percent of all occupant (driver and passenger) fatalities.
- Of the 5,286 motorcyclists killed in traffic crashes, 94 percent (4,950) were riders and 6 percent (336) were passengers.

Table 1 presents information about motorcyclists killed from 2007 to 2016 and motorcyclists injured from 2007 to 2015. Motorcyclist fatalities increased for the second consecutive year in 2016 and have now reached levels last seen during the 2007–2008 time period. The number of registered motorcycles and motorcycle vehicle miles traveled (VMT) are also presented in Table 1, along with the respective fatality and injury rates.

Table 1
Motorcyclists Killed and Injured, and Fatality and Injury Rates, 2007–2016

Year	Killed	Registered Vehicles	Fatality Rate*	Vehicle Miles Traveled (millions)	Fatality Rate**
2007	5,174	7,138,476	72.48	21,396	24.18
2008	5,312	7,752,926	68.52	20,811	25.52
2009	4,469	7,929,724	56.36	20,822	21.46
2010	4,518	8,009,503	56.41	18,513	24.40
2011	4,630	8,437,502	54.87	18,542	24.97
2012	4,986	8,454,939	58.97	21,385	23.32
2013	4,692	8,404,687	55.83	20,366	23.04
2014	4,594	8,417,718	54.58	19,970	23.00
2015	5,029	8,600,936	58.47	19,606	25.65
2016	5,286	8,679,380	60.90	20,445	25.85
Year	Injured	Registered Vehicles	Injury Rate*	Vehicle Miles Traveled (millions)	Injury Rate**
2007	103,000	7,138,476	1,443	21,396	481
2008	96,000	7,752,926	1,238	20,811	461
2009	90,000	7,929,724	1,130	20,822	430
2010	82,000	8,009,503	1,024	18,513	443
2011	81,000	8,437,502	965	18,542	439
2012	93,000	8,454,939	1,099	21,385	434
2013	88,000	8,404,687	1,052	20,366	434
2014	92,000	8,417,718	1,088	19,970	459
2015	88,000	8,600,936	1,028	19,606	451
2016	N/A	8,679,380	N/A	20,445	N/A

*Rate per 100,000 registered vehicles.   **Rate per 100 million vehicle miles traveled.
N/A – Not available.
Source: Fatalities – FARS 2007–2015 Final, 2016 Annual Report File (ARF); Vehicles miles traveled and registered vehicles – Federal Highway Administration (FHWA); Injured – NASS GES 2007–2015.

Registration

Motorcycles made up 3 percent of all registered vehicles in the United States in 2016 and accounted for only 0.6 percent of all vehicle miles traveled. Per registered vehicles, the fatality rate for motorcyclists in 2016 was six times the fatality rate for passenger car occupants, as shown in Table 2. Per VMT in 2016, motorcyclist fatalities occurred nearly 28 times more frequently than passenger car occupant fatalities in motor vehicle traffic crashes.

Table 2
Occupant* Fatality Rates, by Vehicle Type, 2015 and 2016

Fatality Rate		Vehicle Type		
		Motorcycles	**Passenger Cars**	**Light Trucks**
2015	Per 100,000 Registered Vehicles	58.47	9.58	7.75
	Per 100 Million Vehicle Miles Traveled	25.65	0.90	0.73
2016	Per 100,000 Registered Vehicles	60.90	9.94	7.80
	Per 100 Million Vehicle Miles Traveled	25.85	0.93	0.73

*Occupants include both riders/drivers and passengers.
Sources: Fatalities – FARS 2015 Final File, 2016 ARF; Vehicle miles traveled and registered motorcycles – FHWA

Environmental Characteristics

Figure 1 displays information about the setting surrounding the motorcyclist fatalities in 2016 including land use, motorcyclist location, weather, light condition, and roadway function class. In 2016 (based on known values):

- 57 percent of the motorcycle fatalities occurred in urban areas, compared to 43 percent in rural areas.

- 66 percent occurred on non-intersection locations, compared to 34 percent on intersections.

- 59 percent occurred during daylight, compared to 36 percent in the dark, 4 percent during dusk, and 1 percent during dawn.

- 97 percent occurred in cloudy/clear conditions, compared to 2 percent in the rain, and 1 percent in other conditions.

- 91 percent occurred on non-interstate roads, compared to 9 percent on interstates.[1]

Figure 1
Motorcycle Traffic Fatalities, by Land Use, Motorcyclist Location, Weather, Light Condition, and Roadway Function Class[1], 2016
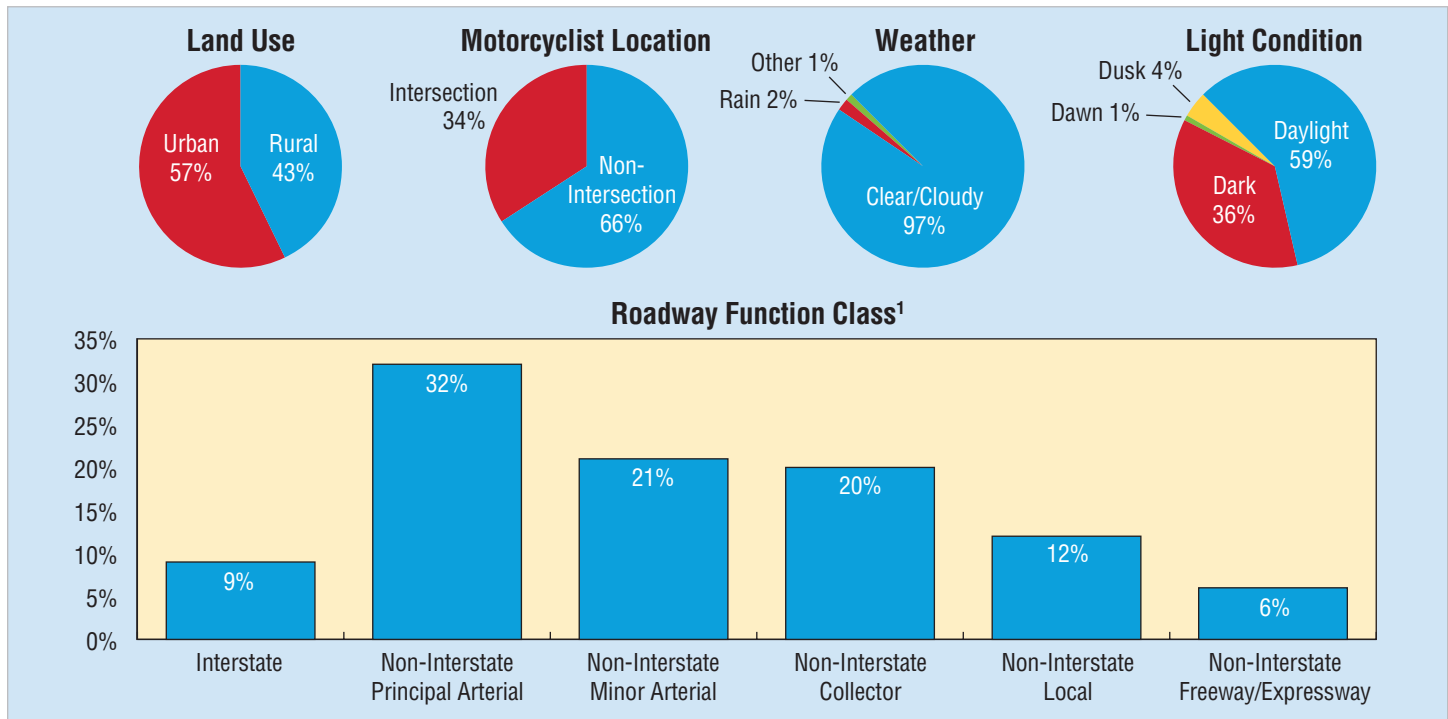
Source: 2016 FARS ARF
Note: Unknowns were removed before calculating percentages.

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[1] Definitions for the different roadway function class can be found at www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf.

Crash Involvement

Data shows in 2016 that the most harmful event for 2,976 (55%) of the 5,421 motorcycles involved in fatal crashes were collisions with motor vehicles in transport.

In two-vehicle crashes, 72 percent of the motorcycles involved in motor vehicle traffic crashes were impacted in the front. Only 7 percent were impacted in the rear.

Motorcycles were more frequently involved in fatal collisions with fixed objects than other vehicle types. In 2016, 23 percent of the motorcycles involved in fatal crashes collided with fixed objects, compared to 17 percent for passenger cars, 13 percent for light trucks, and 4 percent for large trucks.

In 2016, there were 2,625 two-vehicle fatal crashes involving a motorcycle and another type of vehicle. In 41 percent (1,081) of these crashes, the other vehicles were turning left while the motorcycles were going straight, passing, or overtaking other vehicles. Both vehicles were going straight in 594 crashes (23%).

Speeding

NHTSA considers a crash to be speeding-related if the driver was charged with a speeding-related offense or if an investigating police officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash. In 2016, 33 percent of all motorcycle riders involved in fatal crashes were speeding, compared to 19 percent for passenger car drivers, 15 percent for light-truck drivers, and 7 percent for large-truck drivers.

Age

From 2007 to 2016, motorcyclist fatalities increased by 2 percent. The 40-and-older age group made up 49 percent of motorcyclists killed in 2007, as compared to 54 percent of the motorcyclists killed in 2016. Over the 10-year period from 2007 to 2016, fatalities among the 40-and-older age group increased by 12 percent (from 2,545 to 2,841). In 2007, the average age of motorcycle riders killed in motor vehicle traffic crashes was 39, whereas in 2016 the average age was 43.

Weekday is defined as 6 a.m. Monday to 5:59 p.m. Friday, and weekend is defined as 6 p.m. Friday to 5:59 a.m. Monday. Table 3 shows that in 2007 and 2016, roughly half of the motorcyclists were killed in traffic crashes during the weekend versus weekday.

Based on the difference in the number of hours between weekday and weekend, there were more than 1.6 times as many motorcyclist fatalities in traffic crashes in 2016 during the weekend (19.1) versus weekday (11.9), which is similar to 2007 (19.7 versus 11.1). Among the different age groups in 2007, the 30-and-younger motorcyclists were found to have the highest rate of motorcyclists killed in traffic crashes during the weekend (5.8) versus weekday (3.5). In 2016, the 50-and-older age group had the highest rate during the weekend (6.9) versus weekday (4.4).

Table 3

Motorcyclist Fatalities, by Age Group, Year, and Day of Week, 2007 and 2016

Age Group	Weekday (6 a.m. Monday to 5:59 p.m. Friday)	Weekend (6 p.m. Friday to 5:59 a.m. Monday)	Total*
2007			
<30	824	751	1,581
30–39	520	519	1,043
40–49	564	604	1,173
50+	691	680	1,372
Total*	2,601	2,557	5,174
2016			
<30	815	670	1,488
30–39	501	446	952
40–49	437	462	901
50+	1,038	900	1,940
Total*	2,793	2,481	5,286

Source: FARS 2007 Final File, 2016 ARF
*Total includes unknown age and unknown time of day.

Motorcycle Engine Size

Table 4 presents motorcyclist fatalities by the engine sizes of the motorcycles. Twenty-seven percent of motorcyclists killed in motor vehicle traffic crashes in 2016 were riding motorcycles with engine sizes from 1,001 to 1,500 cubic centimeters (cc), down from 36 percent in 2007. In 2016, 22 percent of motorcyclists were killed while riding motorcycles with engine sizes of 1,501 cc or higher, up from just 8 percent in 2007.

Overall, the total number of motorcyclist fatalities, including all engine sizes, increased by 2 percent over the same period from 5,174 in 2007 to 5,286 in 2016.

The number of motorcyclist fatalities on motorcycles with engine sizes of 1,000 cc or less showed a decrease of 9 percent during this time period. Motorcyclist fatalities on motorcycles with engine sizes between 1,001 and 1,500 cc decreased by 23 percent (from 1,839 to 1,418), while the number of motorcyclists killed on motorcycles with engine sizes of 1,501 cc or higher increased by nearly 186 percent (from 403 to 1,151).

Table 4
Motorcyclist Fatalities, by Engine Size (cc), 2007 and 2016

| Year	Engine Displacement (cc)										Total	
	Up to 500		501–1,000		1,001–1,500		1,501 & Higher		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2007	233	5%	2,280	44%	1,839	36%	403	8%	419	8%	5,174	100%
2016	339	6%	1,959	37%	1,418	27%	1,151	22%	419	8%	5,286	100%

Source: FARS 2007 Final File, 2016 ARF
Note: Other motorcycle characteristics besides engine displacement influence power and speed capability. NHTSA has not determined that there is a causal relationship between displacement and fatality risk. FHWA motorcycle registration data not available by engine size.

Licensing and Previous Driving Records

Twenty-seven percent of motorcycle riders involved in fatal crashes in 2016 were riding without valid motorcycle licenses at the time of the collisions, while only 13 percent of passenger vehicle drivers in fatal crashes did not have valid licenses. (Passenger vehicles include passenger cars and light trucks.) A valid motorcycle license includes a rider having a valid driver license (non-CDL license status) with a motorcycle endorsement or motorcycle-only license.

As shown in Figure 2, motorcycle riders involved in fatal crashes had the highest percentages of drivers with previous driving convictions (driving while impaired [DWI], speeding, and revocation) as compared to other vehicle drivers. Motorcycle riders involved in fatal crashes were 1.2 times more likely than passenger car drivers to have previous license suspensions or revocations (20.4% and 16.5%, respectively). Note that FARS records drivers' previous driving records that occurred up to five years prior to the date of the crash starting in 2015.

Figure 2
Previous Driving Records of Drivers Involved in Fatal Traffic Crashes, by Vehicle Type, 2016
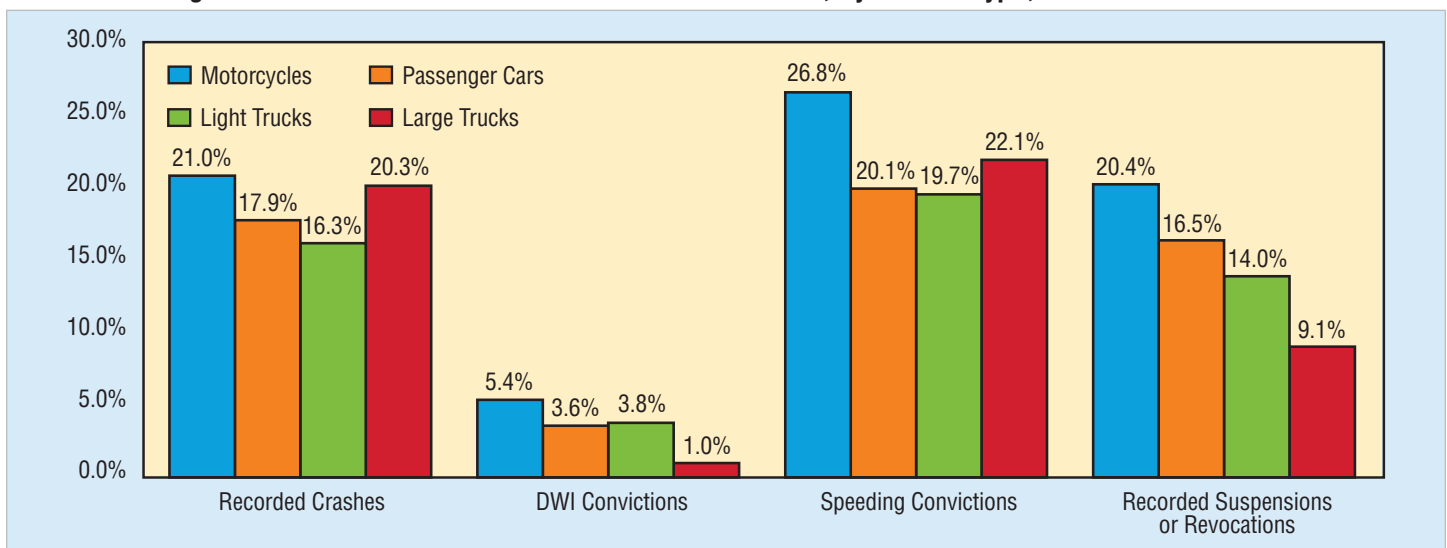
Source: 2016 FARS ARF
Note: Excludes all drivers with a previous record that were unknown.

Alcohol

In 2016, there were 4,950 motorcycle riders killed in motor vehicle traffic crashes. Of those, 1,259 (25%) were alcohol-impaired (BAC of .08 g/dL or higher). In addition, there were 355 (7%) fatally injured motorcycle riders who had lower alcohol levels (BACs of .01 to .07 g/dL).

Motorcycle riders involved (killed or survived) in fatal crashes in 2016 had higher percentages of alcohol impairment than any other type of motor vehicle driver (25% for motorcycle riders, 21% for passenger car drivers, 20% for light-truck drivers, and 2% for drivers of large trucks).

The highest percentages of fatally injured, alcohol-impaired motorcycle riders were in the 35-to-39 age group (38%), followed by the 45-to-49 age group (37%) and the 40-to-44 age group (32%), when compared to other age groups.

As shown in Table 5, 37 percent of the 1,970 motorcycle riders who died in single-vehicle crashes in 2016 were alcohol-impaired, as compared to 41 percent in 2007. Fifty-five percent of those killed in single-vehicle crashes on weekend nights were alcohol-impaired.

Table 5
Motorcycle Riders Killed With BACs of .08 or Higher, by Crash Type and Day of Week, 2007 and 2016

Crash Type and Day of the Week		2007			2016		
		Total Motorcycle Riders Killed	With BAC=.08+		Total Motorcycle Riders Killed	With BAC=.08+	
			Number	Percent		Number	Percent
Total	Total*	4,853	1,357	28%	4,950	1,259	25%
	Weekday	2,459	536	22%	2,650	554	21%
	Weekend	2,380	812	34%	2,289	699	31%
Single-Vehicle	Total*	2,190	894	41%	1,970	720	37%
	Weekday	989	330	33%	918	288	31%
	Weekend	1,189	556	47%	1,041	425	41%
Multiple-Vehicle	Total*	2,663	463	17%	2,980	539	18%
	Weekday	1,470	207	14%	1,732	265	15%
	Weekend	1,191	256	22%	1,248	274	22%

Source: FARS 2007 Final File, 2016 ARF
*Includes riders involved in fatal crashes when time of day was unknown.

Motorcycle riders killed in traffic crashes at night were three times more frequently found to be alcohol-impaired than those killed during the day (40% and 12%, respectively).

The reported helmet use rate for alcohol-impaired motorcycle riders killed in traffic crashes was 50 percent, as compared to 65 percent for those with no alcohol (BAC=.00 g/dL).

Table 6 presents the percentage of motorcycle riders killed who were alcohol-impaired, by States where the crashes occurred. The percentages ranged from a low of 9 percent (Mississippi) to a high of 47 percent (Nebraska), compared to the national average of 25 percent.

Additional State/county-level data is available at NHTSA's State Traffic Safety Information website: https://cdan.nhtsa.gov/stsi.htm.

Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)

NHTSA's National Center for Statistics and Analysis (NCSA) redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property-damage-only crashes in the United States. The new system, called CRSS, replaced NASS GES in 2016. However, the 2016 estimates are not currently available. NHTSA is currently processing the file to ensure the data is accurate and complete, and is finalizing the new weighting and calibration procedures to produce national estimates. Once completed, NHTSA will release the data and publish the estimated number of police-reported injury and property-damage-only crashes that occurred during 2016.

Table 6
Motorcycle Rider Fatalities, by State and Rider's BAC, 2016

State	Total Motorcycle Riders Killed	Percentage of Motorcycle Riders Killed, by Their BAC		
		BAC=.01+	BAC=.08+	BAC=.15+
Alabama	96	32%	25%	14%
Alaska	5	26%	24%	20%
Arizona	136	34%	27%	14%
Arkansas	69	29%	18%	11%
California	529	31%	24%	14%
Colorado	114	29%	21%	14%
Connecticut	50	44%	32%	16%
Delaware	13	48%	39%	23%
District of Columbia	6	45%	45%	22%
Florida	555	34%	28%	16%
Georgia	167	25%	21%	10%
Hawaii	24	28%	21%	11%
Idaho	21	41%	29%	23%
Illinois	139	31%	27%	19%
Indiana	90	31%	25%	11%
Iowa	55	31%	19%	11%
Kansas	48	24%	20%	9%
Kentucky	107	24%	19%	12%
Louisiana	88	35%	31%	23%
Maine	18	35%	28%	13%
Maryland	71	32%	21%	7%
Massachusetts	39	34%	22%	12%
Michigan	141	29%	22%	11%
Minnesota	49	27%	18%	10%
Mississippi	49	19%	9%	5%
Missouri	118	31%	23%	15%
Montana	16	44%	44%	35%
Nebraska	19	58%	47%	26%
Nevada	73	31%	24%	11%
New Hampshire	17	31%	25%	18%
New Jersey	69	31%	20%	13%
New Mexico	42	37%	26%	19%
New York	128	24%	16%	7%
North Carolina	176	31%	21%	13%
North Dakota	12	26%	17%	17%
Ohio	178	41%	32%	19%
Oklahoma	81	36%	32%	21%
Oregon	51	40%	33%	15%
Pennsylvania	174	27%	23%	13%
Rhode Island	4	25%	25%	25%
South Carolina	168	33%	26%	19%
South Dakota	21	20%	20%	7%
Tennessee	135	32%	24%	16%
Texas	458	40%	33%	19%
Utah	39	21%	17%	4%
Vermont	10	32%	31%	11%
Virginia	78	31%	28%	18%
Washington	78	36%	30%	18%
West Virginia	26	35%	23%	14%
Wisconsin	79	44%	31%	21%
Wyoming	21	33%	28%	17%
U.S. Total	4,950	33%	25%	15%
Puerto Rico	42	40%	25%	10%

Source: FARS 2016 ARF

Helmet Use and Effectiveness

NHTSA estimates that helmets saved the lives of 1,859 motorcyclists in 2016. If all motorcyclists had worn helmets, an additional 802 lives could have been saved.[2]

Helmets are estimated to be 37-percent effective in preventing fatal injuries to motorcycle riders, and 41 percent for motorcycle passengers. In other words, for every 100 motorcycle riders killed in crashes while not wearing helmets, 37 of them could have been saved had all 100 worn helmets.

According to results from the National Occupant Protection Use Survey (NOPUS), the overall rate of DOT-compliant motorcycle helmet use in the United States was 65.3 percent in 2016. Helmet use continued to be significantly higher in States that required all motorcyclists to be helmeted than in other States (see Figure 3 in Motorcycle Helmet Use in 2016 – Overall Results, Report No. DOT HS 812 378, available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812378).

Reported helmet use rates for fatally injured motorcyclists in 2016 were 60 percent for riders and 44 percent for passengers, compared with 61 percent and 48 percent, respectively, in 2015. Table 7 shows that 41 percent of the 5,286 motorcyclists killed in motor vehicle traffic crashes were not helmeted, based on known helmet use. The State-level percentages ranged from a high of 100 percent (Rhode Island) to a low of 0 percent (District of Columbia).

All motorcycle helmets sold in the United States are required to meet Federal Motor Vehicle Safety Standard 218, the performance standard that establishes the minimum level of protection for helmets designed for use by motorcyclists.

In 2016, only 19 States, the District of Columbia, and Puerto Rico required helmet use for all motorcyclists. Excluding the District of Columbia and Puerto Rico, the "known" helmet use percentages in fatal crashes ranged from 66 percent (West Virginia) to 96 percent (Washington) for these 19 States.

In 28 States, helmet use was required for only a subset of motorcyclists (typically, motorcyclists under age 18), and 3 States (Illinois, Iowa, and New Hampshire) did not require helmet use for motorcyclists of any age. The "known" helmet use percentages in fatal crashes ranged from 0 percent (Rhode Island) to 69 percent (Delaware) for these 31 States.

The most current information on helmet use laws is available on the GHSA website at http://www.ghsa.org/state-laws/issues/motorcyclists. In States without universal helmet laws, 60 percent of motorcyclists killed in 2016 were not wearing helmets, as compared to 8 percent in States with universal helmet laws. According to NOPUS, in 2016, DOT-compliant motorcycle helmet use in States requiring all to use helmets was 79.6 percent, compared to 53.5 percent in other States.

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[2] National Center for Statistics and Analysis. (2017, October). Lives saved in 2016 by restraint use and minimum-drinking-age laws (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 454). Washington, DC: National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812454.

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For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NSA-230, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at ncsarequest@dot.gov. General information on highway traffic safety can be found at www.nhtsa.gov/NCSA. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Large Trucks, Occupant Protection, Older Population, Passenger Vehicles, Pedestrians, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, Summary of Motor Vehicle Crashes,* and *Young Drivers*. Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*. The fact sheets and annual Traffic Safety Facts report can be found at https://crashstats.nhtsa.dot.gov/.

U.S. Department of Transportation

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Table 7
Motorcyclist Fatalities, by State and Helmet Use, 2016

| State | Helmet Use | | | | | | Total | | Percent "Known" Helmeted | Percent "Known" Unhelmeted |
| | Helmeted | | Unhelmeted | | Unknown | | | | | |
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Percent	Percent
Alabama	93	90%	10	10%	0	0%	103	100%	90%	10%
Alaska	4	67%	2	33%	0	0%	6	100%	67%	33%
Arizona	53	36%	86	59%	7	5%	146	100%	38%	62%
Arkansas	23	29%	57	71%	0	0%	80	100%	29%	71%
California	511	93%	25	5%	12	2%	548	100%	95%	5%
Colorado	42	34%	82	66%	1	1%	125	100%	34%	66%
Connecticut	14	27%	36	69%	2	4%	52	100%	28%	72%
Delaware	9	64%	4	29%	1	7%	14	100%	69%	31%
District of Columbia	5	83%	0	0%	1	17%	6	100%	100%	0%
Florida	288	49%	283	48%	15	3%	586	100%	50%	50%
Georgia	154	90%	9	5%	9	5%	172	100%	94%	6%
Hawaii	9	38%	15	63%	0	0%	24	100%	38%	63%
Idaho	7	32%	14	64%	1	5%	22	100%	33%	67%
Illinois	38	25%	116	75%	1	1%	155	100%	25%	75%
Indiana	24	24%	72	71%	5	5%	101	100%	25%	75%
Iowa	13	22%	47	78%	0	0%	60	100%	22%	78%
Kansas	21	40%	30	58%	1	2%	52	100%	41%	59%
Kentucky	35	32%	76	68%	0	0%	111	100%	32%	68%
Louisiana	80	85%	11	12%	3	3%	94	100%	88%	12%
Maine	6	33%	12	67%	0	0%	18	100%	33%	67%
Maryland	63	84%	11	15%	1	1%	75	100%	85%	15%
Massachusetts	38	90%	2	5%	2	5%	42	100%	95%	5%
Michigan	63	41%	78	51%	11	7%	152	100%	45%	55%
Minnesota	17	30%	36	64%	3	5%	56	100%	32%	68%
Mississippi	39	78%	7	14%	4	8%	50	100%	85%	15%
Missouri	108	85%	15	12%	4	3%	127	100%	88%	12%
Montana	5	29%	12	71%	0	0%	17	100%	29%	71%
Nebraska	9	45%	3	15%	8	40%	20	100%	75%	25%
Nevada	59	80%	12	16%	3	4%	74	100%	83%	17%
New Hampshire	11	58%	8	42%	0	0%	19	100%	58%	42%
New Jersey	63	89%	3	4%	5	7%	71	100%	95%	5%
New Mexico	25	53%	22	47%	0	0%	47	100%	53%	47%
New York	119	89%	9	7%	6	4%	134	100%	93%	7%
North Carolina	168	91%	14	8%	3	2%	185	100%	92%	8%
North Dakota	2	17%	10	83%	0	0%	12	100%	17%	83%
Ohio	53	27%	145	73%	1	1%	199	100%	27%	73%
Oklahoma	24	27%	64	73%	0	0%	88	100%	27%	73%
Oregon	46	85%	3	6%	5	9%	54	100%	94%	6%
Pennsylvania	87	46%	97	51%	7	4%	191	100%	47%	53%
Rhode Island	0	0%	4	100%	0	0%	4	100%	0%	100%
South Carolina	52	28%	133	72%	0	0%	185	100%	28%	72%
South Dakota	6	27%	15	68%	1	5%	22	100%	29%	71%
Tennessee	133	90%	13	9%	1	1%	147	100%	91%	9%
Texas	213	43%	265	54%	12	2%	490	100%	45%	55%
Utah	18	44%	21	51%	2	5%	41	100%	46%	54%
Vermont	9	82%	2	18%	0	0%	11	100%	82%	18%
Virginia	75	95%	4	5%	0	0%	79	100%	95%	5%
Washington	76	94%	3	4%	2	2%	81	100%	96%	4%
West Virginia	19	66%	10	34%	0	0%	29	100%	66%	34%
Wisconsin	17	20%	65	76%	3	4%	85	100%	21%	79%
Wyoming	8	33%	16	67%	0	0%	24	100%	33%	67%
U.S. Total	3,054	58%	2,089	40%	143	3%	5,286	100%	59%	41%
Puerto Rico	20	44%	25	56%	0	0%	45	100%	44%	56%

Source: FARS 2016 ARF   Note: Shading indicates States requiring helmet use for all motorcyclists.