Traffic Safety Facts

2018 Data

NHTSA

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.

Key Findings

- In 2018 there were 4,985 motorcyclists killed—a decrease of 5 percent from the 5,229 motorcyclists killed in 2017.

- An estimated 82,000 motorcyclists were injured during 2018, an 8-percent decrease from the 89,000 motorcyclists injured in 2017.

- Per vehicle miles traveled in 2018, motorcyclist fatalities occurred nearly 27 times more frequently than passenger car occupant fatalities in traffic crashes.

- Twenty-eight percent of motorcycle riders involved in fatal crashes in 2018 were riding without valid motorcycle licenses.

- In 2018 motorcycle riders involved in fatal crashes had higher percentages of alcohol impairment than drivers of any other motor vehicle type (25% for motorcycles, 21% for passenger cars, 19% for light trucks, and 3% for large trucks).

- Thirty-nine percent of motorcycle riders who died in single-vehicle crashes in 2018 were alcohol-impaired.

- Motorcycle riders killed in traffic crashes at night were almost three times more frequently alcohol-impaired than those killed during the day in 2018.

- NHTSA estimates that helmets saved the lives of 1,872 motorcyclists in 2017, and that 749 more could have been saved if all motorcyclists had worn helmets.

- In States without universal helmet laws, 57 percent of motorcyclists killed in 2018 were not wearing helmets, as compared to 9 percent in States with universal helmet laws.

This fact sheet contains information on fatal motor vehicle crashes and fatalities based on data from the Fatality Analysis Reporting System (FARS). Refer to the end of this publication for more information on FARS. Injury estimates are based on data obtained from a nationally representative sample of police-reported crashes from the Crash Report Sampling System. In addition, the methodology for estimating people injured has changed. For more information, read **Crash Report Sampling System (CRSS) Replaced the National Automotive Sampling System (NASS) General Estimates System (GES)** at the end of this publication.

Overview

In 2018:

- There were 4,985 motorcyclists killed in motor vehicle traffic crashes – a decrease of 5 percent from the 5,229 motorcyclists killed in 2017.

- An estimated 82,000 motorcyclists were injured during 2018, an 8-percent decrease from the 89,000 motorcyclists injured in 2017.

- Two-wheeled motorcycles accounted for 92 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 4,985 motorcyclists killed in traffic crashes, 94 percent (4,675) were riders and 6 percent (310) were passengers.

Table 1 presents information about motorcyclists killed and injured from 2009 to 2018. From 2009 to 2018 motorcyclist fatalities increased by 12 percent and peaked in 2016. Motorcyclists fatalities increased from 4,594 in 2014 to 5,337 in 2016 and then decreased to 4,985 in 2018. 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, 2009–2018

Year	Killed	Registered Vehicles	Fatality Rate*	Vehicle Miles Traveled (millions)	Fatality Rate**
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	5,337	8,679,380	61.49	20,445	26.10
2017	5,229	8,715,204	60.00	20,149	25.95
2018	4,985	8,666,185	57.52	20,076	24.83
Year	Injured	Registered Vehicles	Injury Rate*	Vehicle Miles Traveled (millions)	Injury Rate**
2009	89,000	7,929,724	1,129	20,822	430
2010	82,000	8,009,503	1,028	18,513	445
2011	82,000	8,437,502	968	18,542	441
2012	93,000	8,454,939	1,103	21,385	436
2013	89,000	8,404,687	1,056	20,366	436
2014	92,000	8,417,718	1,093	19,970	461
2015	89,000	8,600,936	1,032	19,606	453
2016[†]	104,000	8,679,380	1,203	20,445	511
2017[†]	89,000	8,715,204	1,017	20,149	440
2018[†]	82,000	8,666,185	944	20,076	408

Sources: FARS 2009–2017 Final File, 2018 Annual Report File (ARF); NASS GES 2009–2015 and CRSS 2016–2018; VMT and Registered Vehicles – Federal Highway Administration (FHWA)
*Rate per 100,000 registered vehicles.
**Rate per 100 million VMT.

[†]CRSS estimates and NASS GES estimates are not comparable to different sample designs. Refer to end of document for more information about CRSS.

Registration

Motorcycles made up 3 percent of all registered vehicles in the United States in 2018 and accounted for only 0.6 percent of all vehicle miles traveled. Per registered vehicle, the fatality rate for motorcyclists in 2018 was 6 times the fatality rate for passenger car occupants, as shown in Table 2. The injury rate for motorcyclists

(944) was lower than the injury rate for passenger car occupants (1,137). Per VMT in 2018, motorcyclist fatalities occurred nearly 27 times more frequently than passenger car occupant fatalities in motor vehicle traffic crashes, and motorcyclists were nearly 4 times more likely to be injured.

Table 2
Occupant* Fatality and Injury Rates, by Vehicle Type, 2017 and 2018

|		Vehicle Type					
		Motorcycles		Passenger Cars		Light Trucks	
	Rate	Fatality Rate	Injury Rate	Fatality Rate	Injury Rate	Fatality Rate	Injury Rate
2017	Per 100,000 Registered Vehicles	60.00	1,017	10.14	1,151	7.51	691
	Per 100 Million Vehicle Miles Traveled	25.95	440	0.95	107	0.70	64
2018	Per 100,000 Registered Vehicles	57.52	944	9.61	1,137	7.02	652
	Per 100 Million Vehicle Miles Traveled	24.83	408	0.91	108	0.66	62

Sources: FARS 2017 Final File, 2018 ARF; CRSS 2017–2018; VMT and Registered Vehicles – FHWA
*Includes both riders/drivers and passengers.

Environmental Characteristics

Figure 1 displays information about the setting surrounding the motorcyclist fatalities in 2018 including land use, motorcyclist location, light condition, weather, and functional system. In 2018 (based on known values):

- 61 percent of the motorcycle fatalities occurred in urban areas compared to 39 percent in rural areas.

- 65 percent occurred at locations that were not intersections, compared to 35 percent at intersections.

- 59 percent occurred during daylight compared to 37 percent in the dark, 4 percent during dusk, and 1 percent during dawn.

- 96 percent occurred in clear/cloudy conditions compared to 3 percent in the rain and 1 percent in fog conditions.

- 90 percent occurred on non-interstate roads compared to 10 percent on interstates.[1]

Figure 1
Motorcyclist Fatalities in Relation to Land Use, Motorcyclist Location, Light Condition, Weather, and Functional System, 2018
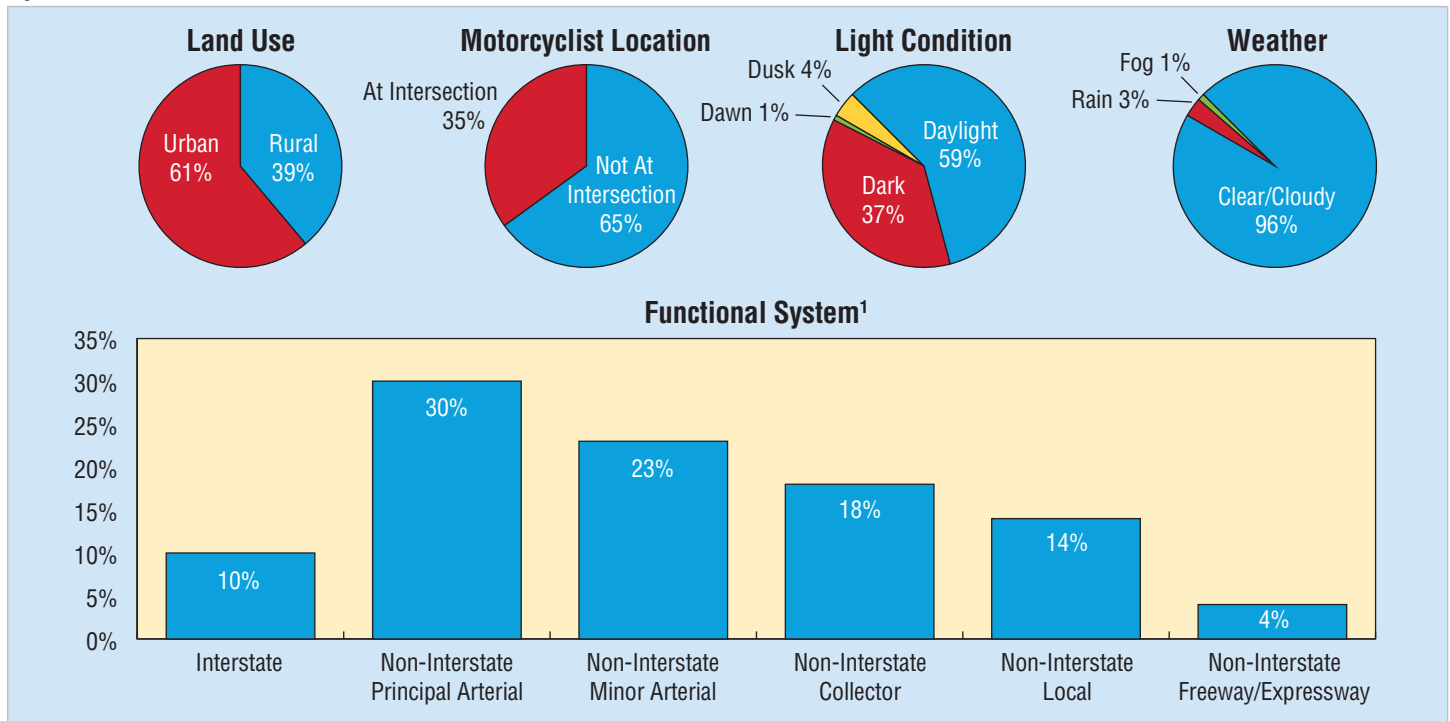
Source: 2018 FARS ARF
Note: Unknowns were removed before calculating percentages.

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[1] Definitions for the different functional system classification categories can be found at www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf.

Crash Involvement

Data shows in 2018 that the most harmful event for 2,880 (56%) of the 5,115 motorcycles involved in fatal crashes were collisions with motor vehicles in transport.

In two-vehicle crashes, 76 percent of the motorcycles involved in motor vehicle traffic crashes were impacted in the front. Only 8 percent were impacted in the rear.

Motorcycles were more frequently involved in fatal collisions with fixed objects than were other vehicle types. Twenty-two percent of motorcycles involved in fatal crashes in 2018 collided with fixed objects, compared to 16 percent for passenger cars, 13 percent for light trucks, and 5 percent for large trucks.

In 2018 there were 2,540 two-vehicle fatal crashes involving a motorcycle and another type of vehicle. In 43 percent (1,091) 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 546 crashes (21%).

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. Thirty-one percent of all motorcycle riders involved in fatal crashes in 2018 were speeding, compared to 18 percent for passenger car drivers, 14 percent for light-truck drivers, and 7 percent for large-truck drivers.

Age

From 2009 to 2018, motorcyclist fatalities increased by 12 percent. The 40-and-older age group motorcyclists killed remained almost the same at 54 percent when compared between 2009 and 2018. Over the 10-year period from 2009 to 2018, fatalities among the 40-and-older age group increased by 11 percent, from 2,428 to 2,683. In 2009, the average age of motorcycle riders killed in motor vehicle traffic crashes was 41, whereas in 2018 the average age was 43.

Weekday is defined as Monday 6 a.m. to Friday 5:59 p.m. and weekend is defined as Friday 6 p.m. to Monday 5:59 a.m. Table 3 shows that in 2009 and 2018 roughly half 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 1.7 times as many motorcyclist fatalities in traffic crashes in 2018 during the weekend (18.4) versus weekday (11.0), which is similar to 2009 (17.2 versus 9.5). Among the different age groups the 50-and-older

motorcyclists were found to have the highest rate of motorcyclists killed in traffic crashes during the weekend (5.2) and weekday (3.2) in 2009. In 2018, the 50-and-older age group had the highest rate during the weekend (6.7) versus weekday (4.1).

Table 3

Motorcyclist Fatalities, by Age Group and Day of Week, 2009 and 2018

Age Group	Weekday	Weekend	Total*
	2009		
<30	617	567	1,186
30–39	390	460	852
40–49	473	542	1,016
50+	739	671	1,412
Total*	**2,220**	**2,242**	**4,469**
	2018		
<30	726	645	1,372
30–39	483	443	928
40–49	419	434	854
50+	948	875	1,829
Total*	**2,578**	**2,397**	**4,985**

Source: FARS 2009 Final File, 2018 ARF
Weekday — Monday 6 a.m. to Friday 5:59 p.m.
Weekend — Friday 6 p.m. to Monday 5:59 a.m.
*Includes unknown age and unknown day of week.

Motorcycle Engine Size

Table 4 presents motorcyclist fatalities by the engine sizes (displacements) of the motorcycles. Twenty-five percent of motorcyclists killed in motor vehicle traffic crashes in 2018 were riding motorcycles with engine sizes from 1,001 to 1,500 cubic centimeters (cc), down from 33 percent in 2009. In 2018 some 24 percent of motorcyclists killed while riding motorcycles with engine sizes of 1,501 cc or higher, up from 13 percent in 2009.

The number of motorcyclist fatalities on motorcycles with engine sizes of 1,000 cc or less showed an increase of 11 percent during this time. Motorcyclist fatalities on motorcycles with engine sizes from 1,001 to 1,500 cc decreased by 15 percent (from 1,492 to 1,271), while the number of motorcyclists killed on motorcycles 1,501 cc or higher increased by 103 percent (from 592 to 1,200).

Table 4
Motorcyclist Fatalities, by Engine Size (cc), 2009 and 2018

| Year	Engine Size (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
2009	258	6%	1,668	37%	1,492	33%	592	13%	459	10%	4,469	100%
2018	370	7%	1,776	36%	1,271	25%	1,200	24%	368	7%	4,985	100%

Source: FARS 2009 Final File, 2018 ARF
Note: Other motorcycle characteristics besides engine size (displacement) influence power and speed capability. NHTSA has not determined that there is a causal relationship between engine size and fatality risk. FHWA motorcycle registration data not available by engine size.

Licensing and Previous Driving Records

Twenty-eight percent of motorcycle riders involved in fatal crashes in 2018 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 (recorded crashes, driving while impaired [DWI], speeding, and revocation) as compared to other vehicle drivers. Motorcycle riders involved in fatal crashes were 1.3 times more likely than passenger car drivers to have previous license suspensions or revocations (21.1% and 16.0%, respectively).

Figure 2
Previous 5-Year Driving Records of Drivers Involved in Fatal Traffic Crashes, by Vehicle Type, 2018
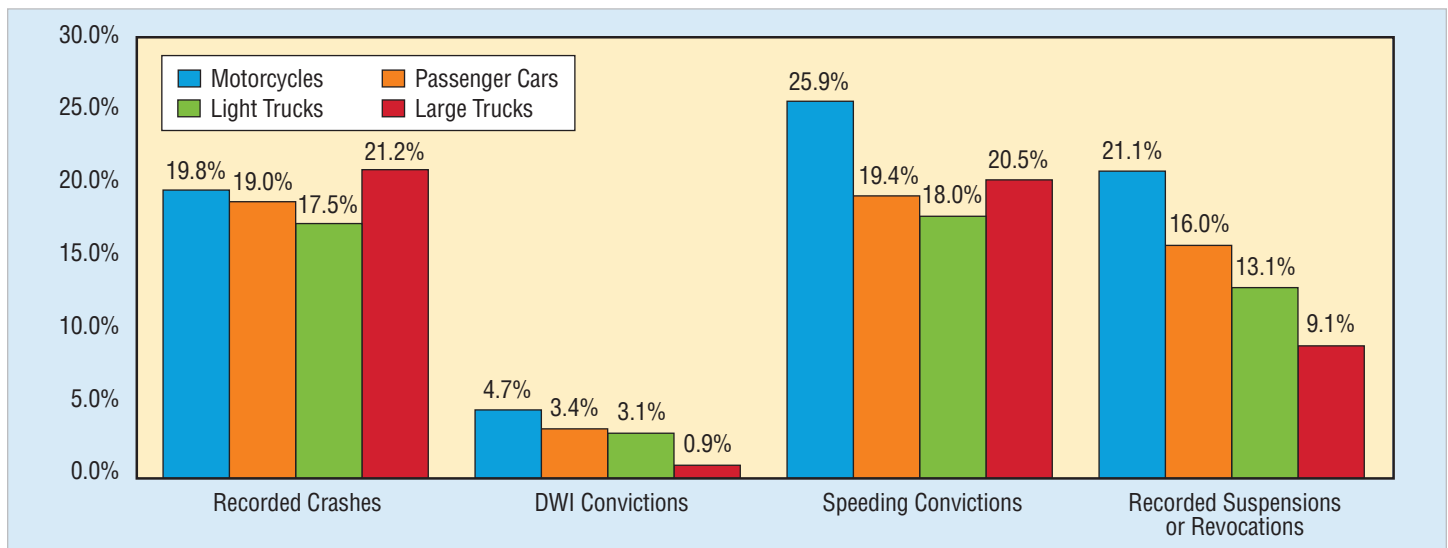
Source: 2018 FARS ARF
Note: Excludes all drivers with a previous record that was unknown.

Alcohol

In 2018 there were 4,675 motorcycle riders killed in motor vehicle traffic crashes. Of those, 1,213 (26%) were alcohol-impaired (BAC of .08 g/dL or higher). In addition, there were 373 (8%) 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 2018 had higher percentages of alcohol impairment than any other type of motor vehicle driver (25% for motorcycle riders, 21% for passenger car drivers, 19% for light-truck drivers, and 3% for drivers of large trucks).

The highest percentages of alcohol-impaired motorcycle riders killed were in the 40-to-44 age group (34%) followed by the 45-to-49 age group (33%) and 35-to-39 age group (33%), when compared to other age groups.

As shown in Table 5, 39 percent of the 1,793 motorcycle riders who died in single-vehicle crashes in 2018 were alcohol-impaired as compared to 42 percent of the 1,912 motorcycle riders who died in single-vehicle crashes in 2009. Fifty-eight percent of those killed in single-vehicle crashes on weekend nights were alcohol-impaired.

Table 5
Alcohol-Impaired Motorcycle Riders Killed, by Crash Type and Day of Week, 2009 and 2018

Crash Type and Day of Week		2009			2018		
		Total Motorcycle Riders Killed	Alcohol-Impaired (BAC=.08+ g/dL)		Total Motorcycle Riders Killed	Alcohol-Impaired (BAC=.08+ g/dL)	
			Number	Percent		Number	Percent
Single-Vehicle	Weekday	898	326	36%	826	275	33%
	Weekend	1,007	465	46%	958	423	44%
	Total*	1,912	795	42%	1,793	702	39%
Multiple-Vehicle	Weekday	1,209	173	14%	1,627	226	14%
	Weekend	1,044	270	26%	1,254	286	23%
	Total*	2,253	443	20%	2,882	511	18%
Total	Weekday	2,107	500	24%	2,453	501	20%
	Weekend	2,051	734	36%	2,212	709	32%
	Total*	4,165	1,238	30%	4,675	1,213	26%

Source: FARS 2009 Final File, 2018 ARF
*Includes riders involved in fatal crashes when day of week was unknown.

Motorcycle riders killed in traffic crashes at night were almost three times more frequently found to be alcohol-impaired than those killed during the day (39% and 14%, respectively).

The reported helmet use rate for alcohol-impaired motorcycle riders killed in traffic crashes was 53 percent as compared to 66 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 11 percent (Alaska) to a high of 54 percent (Puerto Rico) and 53 percent (Maine), compared to the national average of 26 percent.

Helmet Use and Effectiveness

NHTSA estimates that helmets saved the lives of 1,872 motorcyclists in 2017. If all motorcyclists had worn helmets, an additional 749 lives could have been saved (latest data available).[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 71.0 percent in 2018. 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 2018 – Overall Results,* Report No. DOT HS 812 720, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812720).

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[2] National Center for Statistics and Analysis. (2019, March). Lives saved in 2017 by restraint use and minimum-drinking-age laws (Traffic Safety Facts CrashStats. Report No. DOT HS 812 683. National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683.

Table 6
Motorcycle Rider Fatalities, by State and Their BACs, 2018

| State | Total Fatalities | Motorcycle Rider Fatalities, by Their BAC | | | | | |
| | | BAC=.01+ g/dL | | Alcohol-Impaired (BAC=.08+ g/dL) | | Alcohol-Impaired (BAC=.15+ g/dL) | |
		Number	Percent	Number	Percent	Number	Percent
Alabama	80	29	37%	23	29%	15	19%
Alaska	9	2	22%	1	11%	1	11%
Arizona	142	51	36%	35	25%	23	16%
Arkansas	58	19	33%	14	24%	7	12%
California	472	145	31%	114	24%	64	14%
Colorado	99	32	32%	25	26%	19	19%
Connecticut	48	23	48%	15	31%	8	17%
Delaware	16	7	45%	3	20%	3	19%
District of Columbia	8	2	30%	2	28%	2	20%
Florida	547	159	29%	121	22%	72	13%
Georgia	148	50	34%	36	24%	24	16%
Hawaii	32	13	41%	8	25%	8	24%
Idaho	35	13	36%	10	29%	8	22%
Illinois	106	37	35%	30	29%	21	20%
Indiana	101	35	34%	25	25%	13	13%
Iowa	39	12	31%	10	25%	6	15%
Kansas	57	12	20%	10	18%	6	10%
Kentucky	86	23	26%	13	15%	9	10%
Louisiana	75	30	40%	25	33%	17	23%
Maine	21	13	63%	11	53%	6	30%
Maryland	58	20	35%	14	24%	9	15%
Massachusetts	58	22	38%	17	29%	10	17%
Michigan	129	40	31%	32	25%	20	16%
Minnesota	57	24	41%	19	33%	7	13%
Mississippi	39	13	33%	8	20%	4	10%
Missouri	101	35	34%	28	28%	21	21%
Montana	21	11	51%	9	44%	6	30%
Nebraska	22	5	24%	5	22%	3	15%
Nevada	57	19	33%	14	24%	8	14%
New Hampshire	27	14	51%	11	40%	4	16%
New Jersey	51	22	43%	15	30%	11	22%
New Mexico	43	18	43%	14	32%	9	20%
New York	141	45	32%	35	25%	21	15%
North Carolina	181	54	30%	43	24%	26	14%
North Dakota	14	7	46%	4	31%	2	16%
Ohio	124	41	33%	34	28%	20	16%
Oklahoma	85	27	31%	19	23%	12	14%
Oregon	73	29	39%	22	31%	13	17%
Pennsylvania	153	60	39%	51	33%	35	23%
Rhode Island	18	5	28%	4	21%	2	13%
South Carolina	130	42	32%	33	25%	23	18%
South Dakota	15	7	47%	6	38%	4	29%
Tennessee	157	43	27%	29	18%	15	10%
Texas	396	170	43%	134	34%	84	21%
Utah	44	10	22%	7	15%	5	12%
Vermont	6	1	17%	1	17%	1	17%
Virginia	98	33	33%	22	22%	14	14%
Washington	76	24	31%	18	24%	12	16%
West Virginia	36	12	33%	12	32%	7	19%
Wisconsin	72	22	31%	16	23%	11	16%
Wyoming	14	7	49%	6	41%	5	32%
U.S. Total	**4,675**	**1,586**	**34%**	**1,213**	**26%**	**754**	**16%**
Puerto Rico	39	26	67%	21	54%	15	38%

Source: FARS 2018 ARF

Reported helmet use rates for motorcyclists killed in 2018 were 62 percent for riders and 52 percent for passengers, compared with 63 percent and 41 percent, respectively, in 2017. Figure 3 presents the percentage of motorcyclists killed who were not helmeted by each state in 2018, based on known helmet use. Table 7 shows that 38 percent of the 4,985 motorcyclists killed in motor vehicle traffic crashes were not helmeted, based on known helmet use. The State-level percentages ranged from a high of 81 percent (Indiana) to a low of 3 percent (Louisiana).

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

In 2018 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 62 percent (West Virginia) to 97 percent (Louisiana) 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 19 percent (Indiana) to 58 percent (Michigan) for these 31 States.

The most current information on helmet use laws is available on the GHSA website at www.ghsa.org/state-laws/issues/motorcyclists. In States without universal helmet laws, 57 percent of motorcyclists killed in 2018 were not wearing helmets, as compared to 9 percent in States with universal helmet laws. According to NOPUS, in 2018 DOT-compliant motorcycle helmet use in States requiring all to use helmets was 83.0 percent compared to 56.9 percent in other States.

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

Figure 3
Percentage of Known Unhelmeted* Motorcyclists Killed, 2018

Legend:
- < 22%
- 22% – 60%
- > 60%
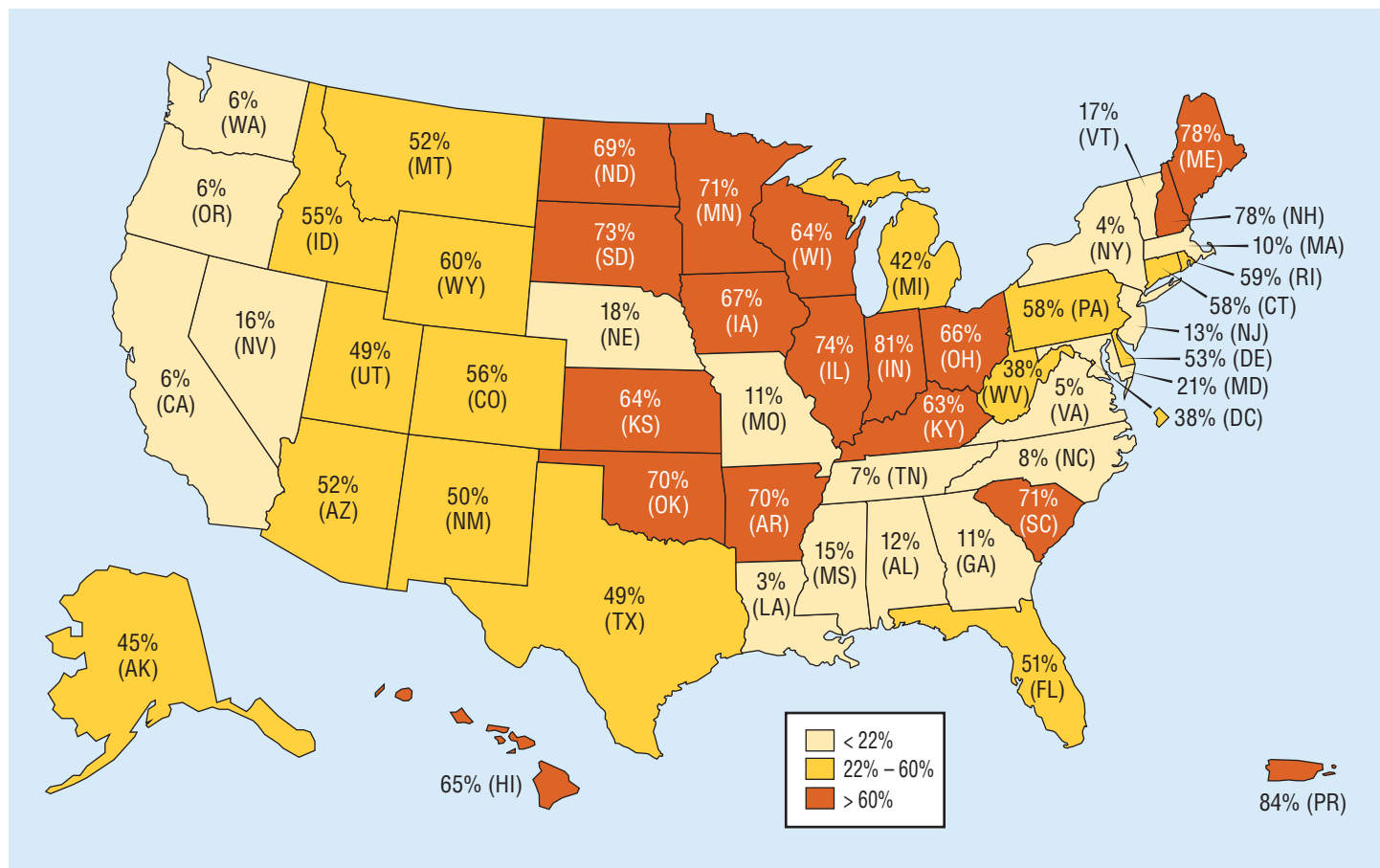
Source: 2018 FARS ARF
*Based on known helmet use.

Table 7
Motorcyclist Fatalities, by State and Helmet Use, 2018

State	Helmet Use						Total		Known Helmeted Use	
	Helmeted		Unhelmeted		Unknown					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Percent Helmeted	Percent Unhelmeted
Alabama	72	88%	10	12%	0	0%	82	100%	88%	12%
Alaska	6	50%	5	42%	1	8%	12	100%	55%	45%
Arizona	63	42%	68	46%	18	12%	149	100%	48%	52%
Arkansas	19	29%	45	68%	2	3%	66	100%	30%	70%
California	449	92%	30	6%	9	2%	488	100%	94%	6%
Colorado	45	44%	58	56%	0	0%	103	100%	44%	56%
Connecticut	20	41%	28	57%	1	2%	49	100%	42%	58%
Delaware	8	47%	9	53%	0	0%	17	100%	47%	53%
District of Columbia	5	63%	3	38%	0	0%	8	100%	63%	38%
Florida	278	48%	285	50%	11	2%	574	100%	49%	51%
Georgia	134	87%	16	10%	4	3%	154	100%	89%	11%
Hawaii	12	35%	22	65%	0	0%	34	100%	35%	65%
Idaho	17	45%	21	55%	0	0%	38	100%	45%	55%
Illinois	31	26%	87	73%	1	1%	119	100%	26%	74%
Indiana	21	18%	89	76%	7	6%	117	100%	19%	81%
Iowa	14	33%	29	67%	0	0%	43	100%	33%	67%
Kansas	22	34%	39	61%	3	5%	64	100%	36%	64%
Kentucky	35	37%	60	63%	0	0%	95	100%	37%	63%
Louisiana	71	90%	2	3%	6	8%	79	100%	97%	3%
Maine	5	22%	18	78%	0	0%	23	100%	22%	78%
Maryland	48	77%	13	21%	1	2%	62	100%	79%	21%
Massachusetts	53	90%	6	10%	0	0%	59	100%	90%	10%
Michigan	79	55%	58	41%	6	4%	143	100%	58%	42%
Minnesota	17	29%	42	71%	0	0%	59	100%	29%	71%
Mississippi	35	85%	6	15%	0	0%	41	100%	85%	15%
Missouri	98	87%	12	11%	3	3%	113	100%	89%	11%
Montana	10	48%	11	52%	0	0%	21	100%	48%	52%
Nebraska	9	39%	2	9%	12	52%	23	100%	82%	18%
Nevada	46	78%	9	15%	4	7%	59	100%	84%	16%
New Hampshire	6	21%	21	75%	1	4%	28	100%	22%	78%
New Jersey	45	85%	7	13%	1	2%	53	100%	87%	13%
New Mexico	20	44%	20	44%	5	11%	45	100%	50%	50%
New York	135	91%	5	3%	9	6%	149	100%	96%	4%
North Carolina	176	92%	15	8%	0	0%	191	100%	92%	8%
North Dakota	5	31%	11	69%	0	0%	16	100%	31%	69%
Ohio	48	33%	95	66%	2	1%	145	100%	34%	66%
Oklahoma	26	29%	60	66%	5	5%	91	100%	30%	70%
Oregon	66	85%	4	5%	8	10%	78	100%	94%	6%
Pennsylvania	66	40%	92	56%	7	4%	165	100%	42%	58%
Rhode Island	7	39%	10	56%	1	6%	18	100%	41%	59%
South Carolina	41	29%	98	70%	2	1%	141	100%	29%	71%
South Dakota	4	25%	11	69%	1	6%	16	100%	27%	73%
Tennessee	153	91%	12	7%	3	2%	168	100%	93%	7%
Texas	205	49%	194	47%	17	4%	416	100%	51%	49%
Utah	23	49%	22	47%	2	4%	47	100%	51%	49%
Vermont	5	71%	1	14%	1	14%	7	100%	83%	17%
Virginia	95	95%	5	5%	0	0%	100	100%	95%	5%
Washington	75	94%	5	6%	0	0%	80	100%	94%	6%
West Virginia	23	59%	14	36%	2	5%	39	100%	62%	38%
Wisconsin	30	36%	53	64%	0	0%	83	100%	36%	64%
Wyoming	6	40%	9	60%	0	0%	15	100%	40%	60%
U.S. Total	**2,982**	**60%**	**1,847**	**37%**	**156**	**3%**	**4,985**	**100%**	**62%**	**38%**
Puerto Rico	7	16%	37	84%	0	0%	44	100%	16%	84%

Source: FARS 2018 ARF   Note: Shading indicates States requiring helmet use for all motorcyclists.

Fatality Analysis Reporting System (FARS)

The FARS contains data on every fatal motor vehicle traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a public trafficway and must result in the death of a vehicle occupant or a nonoccupant within 30 days of the crash. The Annual Report File (ARF) is the FARS data file associated with the most recent available year, which is subject to change when it is finalized about a year later. The final version of the file is aptly known as the "Final" file. The additional time between the ARF and the Final file provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts.

The updated final counts for a given previous calendar year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2018 ARF, the 2017 Final file was also released to replace the previous year's 2017 ARF. The final fatality count in motor vehicle crashes for 2017 was 37,473, which was updated from 37,133 from the 2017 ARF. The motorcyclist crash fatality count from the 2017 Final file is 5,229 versus 5,172 from the 2017 ARF.

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. For more information on CRSS, see the Additional Resources section of the CRSS web page at www.nhtsa.gov/crash-data-systems/crash-report-sampling-system.

Methodology Change for Estimating People Injured

NCSA has changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach is to combine people nonfatally injured from both FARS and NASS GES/CRSS. This is done by extracting people nonfatally injured in fatal crashes from FARS with people nonfatally injured in nonfatal injury crashes from NASS GES/CRSS. The old approach was to extract people injured from only NASS GES/CRSS by selecting people nonfatally injured in all crashes, regardless of crash severity. This change in methodology caused some estimates of people injured to change for some prior years.

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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 email at NCSARequests@dot.gov. General information on highway traffic safety can be found at www.nhtsa.gov/data. 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 in Passenger Vehicles, Older Population, Passenger Vehicles, Pedestrians, Rural/Urban Comparison of Traffic Fatalities, School-Transportation-Related Crashes, Speeding, State Alcohol-Impaired-Driving 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.* The fact sheets and annual Traffic Safety Facts report can be found at https://crashstats.nhtsa.dot.gov/.

U.S. Department of Transportation

National Highway Traffic Safety Administration