



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



# Traffic Safety Facts

## 2024 Data

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# Motorcycles

In this fact sheet for 2024 the information is presented as follows.

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The following definitions apply to terms in this fact sheet:

- Motorcycles include 2- and 3-wheeled motorcycles, off-road motorcycles, mopeds, motor scooters, minibikes, 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 alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher.

## Key Findings

- In 2024 there were 6,228 motorcyclists killed, 16 percent of all traffic fatalities.
- The number of motorcyclist fatalities in 2024 decreased 2.2 percent from 2023, from 6,366 to 6,228.
- An estimated 86,887 motorcyclists were injured in 2024, an increase of 5.2 percent from 82,567 motorcyclists injured in 2023.
- Per 100 million vehicle miles traveled in 2024, the fatality rate for motorcyclists (28.00) was almost 27 times the passenger car occupant fatality rate (1.05).
- Thirty-five percent of motorcycle riders in fatal crashes in 2024 had no valid motorcycle licenses.
- In 2024 motorcycle riders and passenger car drivers in fatal crashes had higher percentages of alcohol impairment than drivers of any other motor vehicle type (25% for motorcycles, 25% for passenger cars, 19% for light trucks, and 4% for large trucks).
- Forty percent of motorcycle riders who died in single-vehicle crashes in 2024 were alcohol-impaired.
- Motorcycle riders killed in traffic crashes at night were 2.6 times more frequently alcohol-impaired than those killed during the day (37% and 14%) in 2024.
- In States without universal helmet laws, based on known helmet use, 48 percent of motorcyclists killed in 2024 were not wearing helmets, as compared to 11 percent in States with universal helmet laws.

This fact sheet has motor vehicle traffic crash data from the Fatality Analysis Reporting System (FARS), National Automotive Sampling System (NASS) General Estimates System (GES), and Crash Report Sampling System (CRSS). Results from FARS such as fatal crashes and fatalities are actual counts, while results from NASS GES and CRSS such as non-fatal crashes and people injured are estimates. Refer to the end of this publication for more information on FARS, NASS GES, and CRSS.

Due to a vehicle classification change, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. Refer to the end of this publication for information on Product Information Catalog and Vehicle Listing (vPIC) Vehicle Classification.

**Important Change for Motorized Bicycles:** Prior to 2022, motorized bicycles were collected as motor vehicles and classified as motorcycles in FARS and CRSS, and their operators and passengers were captured as “motorists.” Beginning in 2022, FARS and CRSS are no longer collecting motorized bicycles as motor vehicles. Consequently, operators and passengers of motorized bicycles will be captured as pedalcyclists when involved in a motor vehicle traffic crash. Any traffic crash involving only motorized bicycles will no longer be captured in FARS or CRSS. In 2021, there were 43 traffic fatalities on motorized bicycles reported to FARS, accounting for 0.7 percent of all motorcyclist fatalities.

A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in-transport and originated on or had a harmful event (injury or damage) on a public trafficway, such as a road or highway. Crashes that occur on private property not regularly used by the public for transport, including some parts of parking lots and driveways, are excluded. The terms “motor vehicle traffic crash” and “traffic crash” are used interchangeably in this fact sheet.

## Overview

In 2024:

- There were 6,228 motorcyclists killed in motor vehicle traffic crashes – a 2.2-percent decrease from the 6,366 motorcyclists killed in 2023.
- Motorcyclists accounted for 16 percent of all traffic fatalities and 20 percent of all motor vehicle occupant (driver and passenger) fatalities.
- Of the 6,228 motorcyclists killed in traffic crashes, 96 percent (5,950) were riders and 4 percent (278) were passengers.
- An estimated 86,887 motorcyclists were injured in traffic crashes, an increase of 5.2 percent from 82,567 motorcyclists injured in 2023.

Table 1 shows information about motorcyclists killed and injured from 2015 to 2024. The number of registered motorcycles and motorcycle vehicle miles traveled (VMT) are also shown in Table 1, along with the respective fatality and injury rates.

**Table 1. Motorcyclists Killed and Injured in Traffic Crashes, and Fatality and Injury Rates, 2015-2024**

Year	Killed	Registered Vehicles	Fatality Rate per 100,000 Registered Vehicles	VMT (millions)	Fatality Rate per 100 Million VMT
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	5,226	8,664,108	60.32	20,149	25.94
2018	5,038	8,659,741	58.18	20,076	25.09
2019	5,044	8,596,314	58.68	19,688	25.62
2020	5,620	8,347,435	67.33	17,947	31.31
2021	6,144	9,424,769	65.19	19,642	31.28
2022	6,251*	9,186,256	68.05	23,765	26.30
2023	6,366*	9,516,910	66.89	20,181	31.54
2024	6,228*	9,261,249	67.25	22,241	28.00
Year	Injured	Registered Vehicles	Injury Rate per 100,000 Registered Vehicles	VMT (millions)	Injury Rate per 100 Million VMT
2015†	88,738	8,600,936	1,032	19,606	453
2016	104,442	8,679,380	1,203	20,445	511
2017	88,592	8,664,108	1,023	20,149	440
2018	81,859	8,659,741	945	20,076	408
2019	83,814	8,596,314	975	19,688	426
2020	80,662	8,347,435	966	17,947	449
2021	84,898	9,424,769	901	19,642	432
2022	82,690*	9,186,256	900	23,765	348
2023	82,567*	9,516,910	868	20,181	409
2024	86,887*	9,261,249	938	22,241	391

Sources: FARS 2015-2023 Final File, 2024 Annual Report File (ARF); NASS GES 2015; CRSS 2016-2024; VMT and Registered Vehicles – Federal Highway Administration (FHWA)

\*Starting in 2022, motorcyclists exclude people on motorized bicycles.

†NASS GES and CRSS estimates are not comparable due to different sample designs. Refer to the end of the publication for more information about CRSS.

Notes: Due to a vehicle classification change, the 2020 and later-year data is not comparable to 2019 and earlier years. Refer to the end of this publication for more information on vPIC vehicle classification.

Motorcycles made up 3 percent of all registered vehicles in the United States in 2024 and accounted for only 0.7 percent of all VMT. Per 100,000 registered vehicles in 2024, the fatality rate for motorcyclists (67.25) was over 6 times the fatality rate for passenger car occupants (10.81) and over 10 times the fatality rate for light-truck occupants (6.54), as shown in Table 2. The injury rate for motorcyclists (938) was higher than the injury rate for passenger car occupants (888), and higher than the injury rate of light-truck occupants (560).

Per 100 million VMT in 2024, the fatality rate for motorcyclists (28.00) was almost 27 times the passenger car occupant fatality rate (1.05) and over 44 times the fatality rate for light-truck occupants (0.63). The motorcyclist injury rate (391) was nearly 5 times the injury rate of passenger car occupants (86) and over 7 times the injury rate of light-truck occupants (54).

**Table 2. Occupant\* Fatality and Injury Rates in Traffic Crashes, by Vehicle Type, 2023 and 2024**

Rate		Vehicle Type					
		Motorcycles		Passenger Cars		Light Trucks	
		Fatality Rate	Injury Rate	Fatality Rate	Injury Rate	Fatality Rate	Injury Rate
2023	Per 100,000 Registered Vehicles	66.89	868	11.64	905	6.82	575
	Per 100 Million VMT	31.54	409	1.13	88	0.66	56
2024	Per 100,000 Registered Vehicles	67.25	938	10.81	888	6.54	560
	Per 100 Million VMT	28.00	391	1.05	86	0.63	54

Sources: FARS 2023 Final File, 2024 ARF; CRSS 2023-2024; Registered Motorcycles and Motorcycle VMT – FHWA; Registered Passenger Cars and Light Trucks – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.; Passenger Car and Light-Truck VMT – FHWA, revised by NHTSA

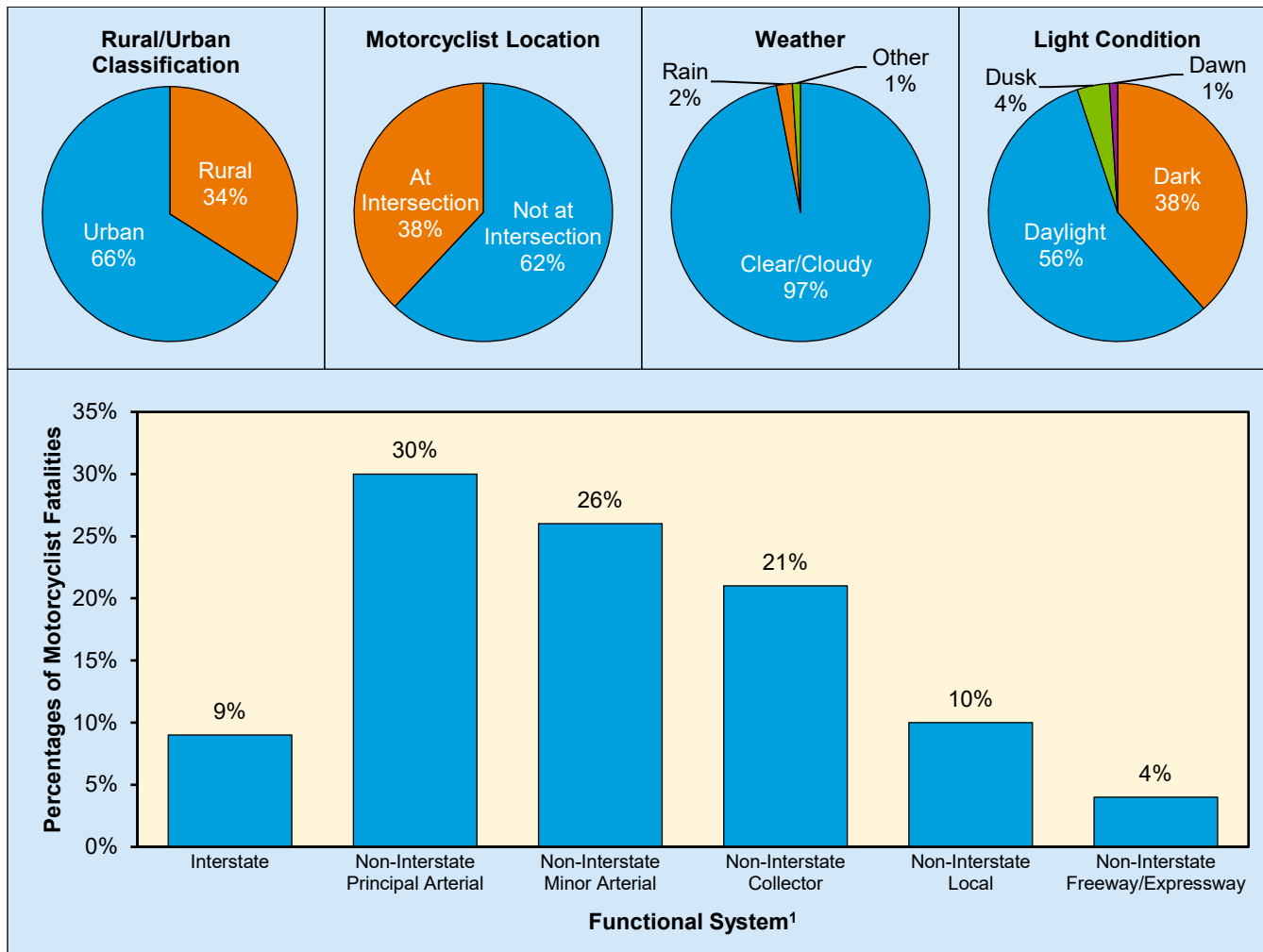
\*Includes both riders/drivers and passengers.

## Crash Characteristics

Figure 1 shows information about the environment surrounding the motorcyclist fatalities in 2024 including rural/urban classification, motorcyclist location, light condition, weather, and functional system. In 2024 (based on known values):

- 66 percent of the motorcyclist fatalities occurred in urban areas compared to 34 percent in rural areas;
- 62 percent occurred at locations that were not intersections compared to 38 percent at intersections;
- 97 percent occurred in clear/cloudy weather compared to 2 percent in rain and 1 percent in snow/sleet, fog, or other conditions;
- 56 percent occurred during daylight compared to 38 percent in the dark, 4 percent during dusk, and 1 percent during dawn; and
- 91 percent occurred on non-interstate roads compared to 9 percent on interstates.

**Figure 1. Motorcyclist Fatalities in Traffic Crashes in Relation to Rural/Urban Classification, Motorcyclist Location, Weather, Light Condition, and Functional System,<sup>1</sup> 2024**



Source: FARS 2024 ARF

Notes: Unknowns were removed before calculating percentages. Percentages may not add up to 100 percent due to independent rounding.

### Crash Involvement

The most harmful events in 2024 for 3,790 (60%) of the 6,366 motorcycles in fatal crashes were collisions with motor vehicles in transport.

In two-vehicle crashes, 78 percent of the motorcycles in fatal crashes were impacted on the front. Only 6 percent were impacted on the rear.

Motorcycles were more frequently involved in fatal collisions with fixed objects than other vehicle types. Twenty-four percent of motorcycles in fatal traffic crashes in 2024 collided with fixed objects, compared to 16 percent for passenger cars, 12 percent for light trucks, and 5 percent for large trucks.

In 2024 there were 3,396 two-vehicle fatal crashes each involving a motorcycle and another type of vehicle. In 45 percent (1,532) 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 689 crashes (20%).

<sup>1</sup> Definitions for the different functional systems can be found at [www.fhwa.dot.gov/planning/processes/statewide/related/highway\\_functional\\_classifications/fcauab.pdf](http://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf)

## Motorcyclists

### Age

From 2023 to 2024 motorcyclist fatalities among the younger age groups increased; <15 age group increased 114 percent (from 14 to 30), 15-to-20 age group increased 20 percent (from 508 to 609), and 21-24 age group increased 15 percent (from 613 to 705). The motorcyclist fatalities among the 15-to-20 age group increased 20 percent (from 293 to 353) from 2023 to 2024 during weekdays and increased 19 percent (from 215 to 256) during weekends. The average age of motorcycle riders killed in traffic crashes was 40 in 2024.

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 47 percent of motorcyclists were killed in traffic crashes during the weekend in 2023 versus 46 percent in 2024. Additionally, motorcyclist fatalities on weekdays have decreased from 3,391 in 2023 to 3,347 in 2024.

**Table 3. Motorcyclist Fatalities in Traffic Crashes, by Age Group and Day of Week, 2023 and 2024**

Age Group	2023			2024		
	Weekday	Weekend	Total*	Weekday	Weekend	Total*
<15	7	7	14	18	12	30
15-20	293	215	508	353	256	609
21-24	352	261	613	384	321	705
25-29	406	361	767	366	339	706
30-34	367	325	693	351	347	698
35-39	288	293	581	316	264	582
40-44	322	246	569	284	244	529
45-49	241	254	496	219	205	426
50-54	260	256	517	215	243	461
55-59	242	266	508	217	225	443
60-64	248	222	471	242	158	400
65+	364	261	626	381	253	637
<b>Total*</b>	<b>3,391</b>	<b>2,969</b>	<b>6,366</b>	<b>3,347</b>	<b>2,868</b>	<b>6,228</b>

Source: FARS 2023 Final File, 2024 ARF

Weekday — Monday 6 a.m. to Friday 5:59 p.m. (4.5 days)

Weekend — Friday 6 p.m. to Monday 5:59 a.m. (2.5 days)

\*Includes unknown age and unknown day of week.

### Motorcycle Engine Size

Table 4 shows motorcyclist fatalities by the engine size (displacement) of motorcycles from 2020 to 2024. Of the motorcyclists killed in traffic crashes in 2024, there were 37 percent riding on motorcycles with engine sizes of 501 to 1,000 cubic centimeters (cc), followed by 26 percent on motorcycles with engine sizes of 1,501 cc or higher, 19 percent on motorcycles with engine sizes of 1,001 to 1,500 cc, and 12 percent on motorcycles with engine sizes up to 500 cc.

The number of motorcyclist fatalities on motorcycles with engine sizes up to 500 cc increased 5 percent (from 705 to 739) between 2023 and 2024, while the motorcyclist fatalities on motorcycles with engine sizes from 501 to 1,000 cc decreased 1 percent (from 2,316 to 2,294). Motorcyclist fatalities on motorcycles with engine sizes from 1,001 to 1,500 cc decreased 11 percent (from 1,354 to 1,206), while the number of motorcyclists killed on motorcycles with engine sizes 1,501 cc or higher decreased 1 percent (from 1,612 to 1,592).

**Table 4. Motorcyclist Fatalities in Traffic Crashes, by Engine Size\* (cc), 2020-2024**

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
2020	502	9%	1,947	35%	1,263	22%	1,427	25%	481	9%	5,620	100%
2021	612	10%	2,112	34%	1,367	22%	1,619	26%	434	7%	6,144	100%
2022	698	11%	2,207	35%	1,366	22%	1,610	26%	370	6%	6,251	100%
2023	705	11%	2,316	36%	1,354	21%	1,612	25%	379	6%	6,366	100%
2024	739	12%	2,294	37%	1,206	19%	1,592	26%	397	6%	6,228	100%

Source: FARS 2020-2023 Final File, 2024 ARF

\*Based on data from NHTSA's vPIC.

Notes: Starting in 2022, motorcyclists exclude people on motorized bicycles. Other motorcycle characteristics besides engine size (displacement) influence power and speed capability. NHTSA has not determined if there is a causal relationship between displacement and fatality risk.

### Speeding

NHTSA considers a traffic 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 factor in the crash.

The number of speeding motorcycle riders in fatal crashes decreased from 2023 to 2024. Thirty-seven percent of all motorcycle riders in fatal crashes in 2024 were speeding, compared to 22 percent for passenger car drivers, 15 percent for light-truck drivers, and 8 percent for large-truck drivers. As shown in Table 5, motorcycle riders 15 to 20 years old in fatal crashes had the highest speeding involvement at 56 percent in 2024, while motorcycle riders 21 to 24 years old had the highest speeding involvement at 55 percent in 2023.

**Table 5. Motorcycle Riders in Fatal Traffic Crashes, by Age Group and Speeding Involvement, 2023 and 2024**

Age Group	2023						2024					
	Speeding Involvement				Total		Speeding Involvement				Total	
	Speeding		Not Speeding				Speeding		Not Speeding			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<15	0	0%	8	100%	8	100%	3	14%	19	86%	22	100%
15-20	261	51%	251	49%	512	100%	343	56%	273	44%	616	100%
21-24	346	55%	282	45%	628	100%	373	52%	347	48%	720	100%
25-29	377	48%	405	52%	782	100%	355	48%	377	52%	732	100%
30-34	275	39%	428	61%	703	100%	305	43%	407	57%	712	100%
35-39	234	40%	357	60%	591	100%	238	41%	343	59%	581	100%
40-44	214	38%	345	62%	559	100%	188	34%	360	66%	548	100%
45-49	165	33%	334	67%	499	100%	141	33%	289	67%	430	100%
50-54	135	25%	399	75%	534	100%	112	24%	359	76%	471	100%
55-59	113	21%	414	79%	527	100%	96	21%	357	79%	453	100%
60-64	96	20%	385	80%	481	100%	74	18%	339	82%	413	100%
65+	113	18%	514	82%	627	100%	93	14%	555	86%	648	100%
<b>Total*</b>	<b>2,332</b>	<b>36%</b>	<b>4,133</b>	<b>64%</b>	<b>6,465</b>	<b>100%</b>	<b>2,322</b>	<b>37%</b>	<b>4,035</b>	<b>63%</b>	<b>6,357</b>	<b>100%</b>

Source: FARS 2023 Final File, 2024 ARF

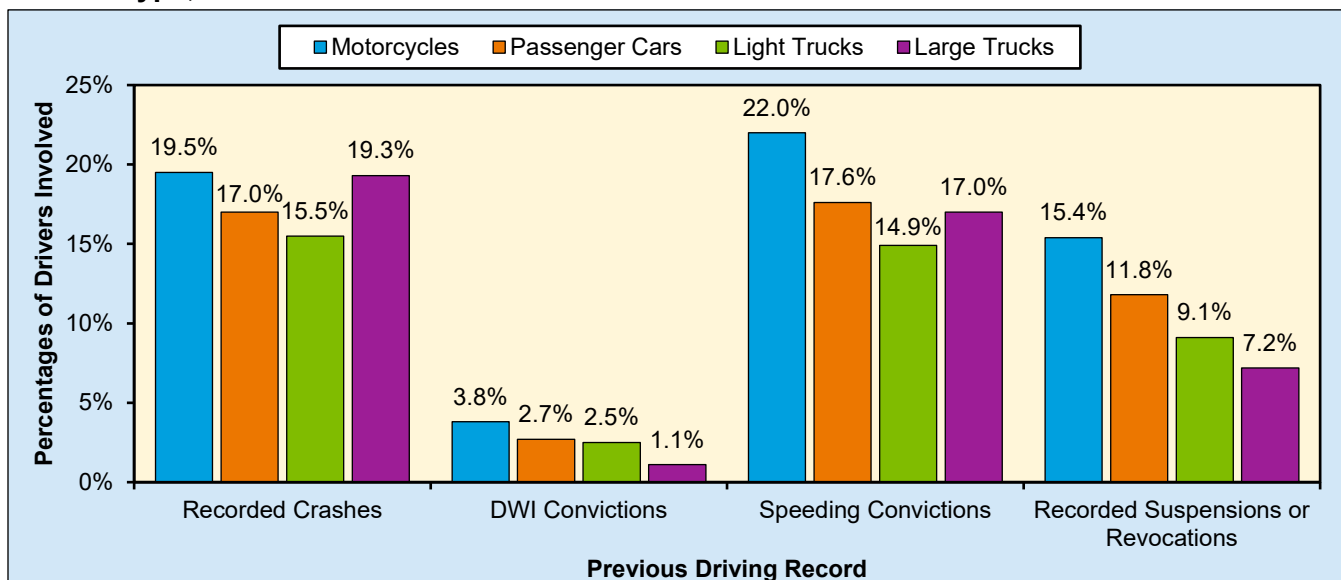
\*Includes unknown age.

### Licensing and Previous Driving Records

Thirty-five percent of motorcycle riders in fatal traffic crashes in 2024 were riding without valid motorcycle licenses at the time of the crashes, while only 14 percent of passenger vehicle (passenger cars and light trucks) drivers in fatal crashes did not have valid licenses. A valid motorcycle license includes a rider having a valid driver license (non-CDL license status) with a motorcycle endorsement or a motorcycle-only license.

As shown in Figure 2, motorcycle riders in fatal traffic crashes had the highest percentages of drivers with previous driving records as compared to other vehicle drivers. Motorcycle riders in fatal traffic crashes were 1.3 times more likely than passenger car drivers to have previous license suspensions or revocations (15.4% and 11.8%). Note that FARS records drivers' previous driving records that occurred within 5 years from the crash date.

**Figure 2. Percentages of Previous 5-Year Driving Records of Drivers in Fatal Traffic Crashes, by Vehicle Type, 2024**



Source: FARS 2024 ARF

Note: Excludes all drivers with previous records that were unknown.

### Alcohol

In 2024 there were 5,950 motorcycle riders killed in traffic crashes compared to 6,056 in 2023. Of the 5,950 in 2024, there were 1,529 (26%) who were alcohol-impaired (BAC of .08 g/dL or higher). In 2023 there were 1,578 (26%) motorcycle riders who were alcohol impaired. There were 472 (8%) motorcycle riders killed in 2024 who had lower alcohol levels (BACs of .01 to .07 g/dL).

Motorcycle riders (killed or survived) and passenger car drivers in fatal crashes in 2024 had higher percentages of alcohol impairment than any other type of motor vehicle driver (25% for motorcycle riders, 25% for passenger car drivers, 19% for light-truck drivers, and 4% for large-truck drivers).

In 2024 the highest percentage of alcohol-impaired motorcycle rider fatalities was in the 30-to-34 age group (35%) followed by the 35-to-39, 40-to-44, and 45-to-49 age groups at 34 percent.

Forty percent of the 2,125 motorcycle riders who died in single-vehicle crashes in 2024 were alcohol-impaired as compared to 18 percent of the 3,825 motorcycle riders who died in multivehicle crashes, as shown in Table 6. Forty-three percent of those killed in single-vehicle crashes on weekends in 2024 were alcohol-impaired.

**Table 6. Alcohol-Impaired Motorcycle Riders Killed in Traffic Crashes, by Crash Type and Day of Week, 2023 and 2024**

Crash Type and Day of Week		2023			2024		
		Total Motorcycle Riders Killed	Alcohol-Impaired		Total Motorcycle Riders Killed	Alcohol-Impaired	
			Number	Percent		Number	Percent
Single-Vehicle	Weekday	1,031	370	36%	984	351	36%
	Weekend	1,138	500	44%	1,129	491	43%
	<b>Total*</b>	<b>2,175</b>	<b>875</b>	<b>40%</b>	<b>2,125</b>	<b>848</b>	<b>40%</b>
Multivehicle	Weekday	2,226	322	14%	2,251	317	14%
	Weekend	1,655	381	23%	1,574	364	23%
	<b>Total*</b>	<b>3,881</b>	<b>702</b>	<b>18%</b>	<b>3,825</b>	<b>681</b>	<b>18%</b>
Total	Weekday	3,257	692	21%	3,235	668	21%
	Weekend	2,793	881	32%	2,703	855	32%
	<b>Total*</b>	<b>6,056</b>	<b>1,578</b>	<b>26%</b>	<b>5,950</b>	<b>1,529</b>	<b>26%</b>

Source: FARS 2023 Final File, 2024 ARF

Weekday — Monday 6 a.m. to Friday 5:59 p.m. (4.5 days)

Weekend — Friday 6 p.m. to Monday 5:59 a.m. (2.5 days)

\*Includes riders in fatal crashes when day of week was unknown.

Notes: Starting in 2022, motorcycle riders exclude riders on motorized bicycles. Percentages are computed based on unrounded estimates. NHTSA estimates BACs when alcohol test results are unknown.

Motorcycle riders killed in traffic crashes at night were 2.6 times more frequently alcohol-impaired than those killed during the day (37% and 14%).

The reported helmet use rate for alcohol-impaired motorcycle riders killed in traffic crashes in 2024 was 59 percent as compared to 70 percent for those with no alcohol (BAC=.00 g/dL).

## Helmet Use and Effectiveness

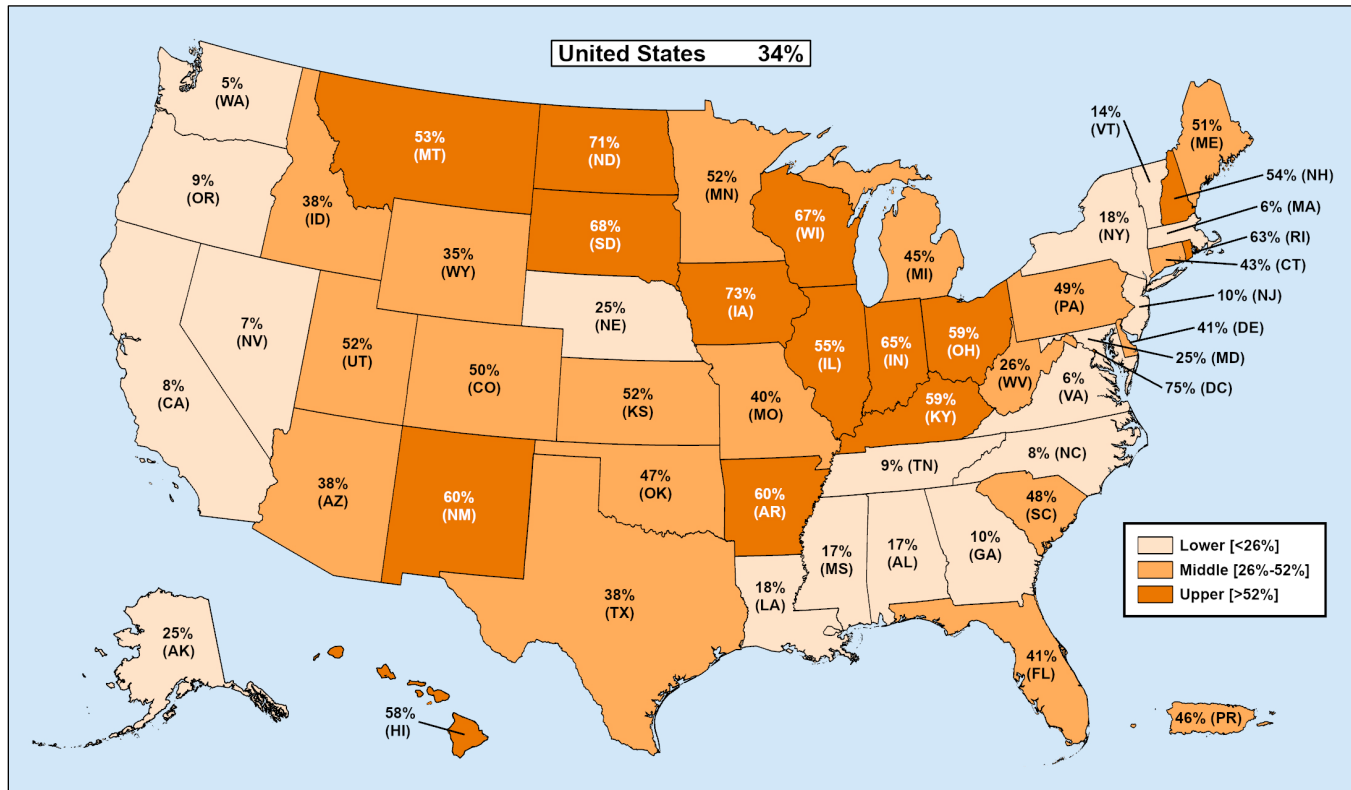
All motorcycle helmets sold in the United States must meet Federal Motor Vehicle Safety Standard 218, the performance standard that establishes the minimum level of protection for helmets designed for use by motorcyclists. According to results from the National Occupant Protection Use Survey, the overall rate of DOT-compliant motorcycle helmet use in the United States was 73.8 percent in 2023 (last data available). Helmet use continued to be significantly higher in States that required all motorcyclists to be helmeted than in other States.<sup>2</sup>

<sup>2</sup> National Center for Statistics and Analysis. (2024, September). Motorcycle helmet use in 2023 – Overall results (Traffic Safety Fact Research Note. Report No. DOT HS 813 634). National Highway Traffic Safety Administration. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813634>

## States

Reported helmet use rates for motorcyclists killed in 2024 were 67 percent for riders and 48 percent for passengers, compared with 65 percent and 51 percent in 2023. Figure 3 presents the percentages of motorcyclists killed who were not helmeted by each State in 2024, based on known helmet use.

**Figure 3. Percentages of Known Unhelmeted\* Motorcyclists Killed in Traffic Crashes, 2024**



Source: FARS 2024 ARF

\*Based on known helmet use.

In 2024 only 17 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 traffic crashes ranged from 74 percent (West Virginia) to 95 percent (Washington) for these 17 States.

In 30 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 traffic crashes in 2024 ranged from 27 percent (Iowa) to 75 percent (Alaska and Nebraska) for these 33 States.

The most current information on helmet use laws is available on the Governors Highway Safety Association website at [www.ghsa.org/state-laws/issues/motorcyclists](http://www.ghsa.org/state-laws/issues/motorcyclists). Based on known helmet use, 48 percent of motorcyclists killed in 2024 were not wearing helmets in States without universal helmet laws, as compared to 11 percent in States with universal helmet laws. According to NOPUS, in 2023 (latest data available) DOT-compliant motorcycle helmet use in States requiring all to use helmets was 82.7 percent compared to 65.9 percent in other States.

Table 7 shows that 34 percent of the 6,228 motorcyclists killed nationwide in traffic crashes in 2024 were not helmeted, based on known helmet use. The State-level unhelmeted percentages ranged from a high of 75 percent (District of Columbia), followed by 73 percent (Iowa) to a low of 5 percent (Washington), based on known use.

Table 8 shows the percentages of motorcycle riders killed who were alcohol-impaired, by State in 2024. The percentages of alcohol-impaired motorcycle riders killed ranged from a low of 12 percent (Maine) to a high of 57 percent (Vermont), compared to the national average of 26 percent.

**Table 7. Motorcyclist Fatalities in Traffic Crashes, by State and Helmet Use, 2024**

State	Helmet Use						Total		Percent Based on Known Helmet Use	
	Helmeted		Unhelmeted		Unknown					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Helmeted	Unhelmeted
Alabama	103	81%	21	17%	3	2%	127	100%	83%	17%
Alaska	6	60%	2	20%	2	20%	10	100%	75%	25%
Arizona	125	57%	77	35%	17	8%	219	100%	62%	38%
Arkansas	29	38%	43	57%	4	5%	76	100%	40%	60%
California	471	90%	39	7%	12	2%	522	100%	92%	8%
Colorado	81	49%	80	48%	4	2%	165	100%	50%	50%
Connecticut	39	52%	29	39%	7	9%	75	100%	57%	43%
Delaware	13	59%	9	41%	0	0%	22	100%	59%	41%
District of Columbia	2	22%	6	67%	1	11%	9	100%	25%	75%
Florida	371	58%	263	41%	8	1%	642	100%	59%	41%
Georgia	155	85%	17	9%	10	5%	182	100%	90%	10%
Hawaii	11	42%	15	58%	0	0%	26	100%	42%	58%
Idaho	28	60%	17	36%	2	4%	47	100%	62%	38%
Illinois	65	44%	78	52%	6	4%	149	100%	45%	55%
Indiana	45	33%	85	62%	7	5%	137	100%	35%	65%
Iowa	17	27%	45	71%	1	2%	63	100%	27%	73%
Kansas	23	41%	25	45%	8	14%	56	100%	48%	52%
Kentucky	48	41%	70	59%	0	0%	118	100%	41%	59%
Louisiana	55	79%	12	17%	3	4%	70	100%	82%	18%
Maine	17	49%	18	51%	0	0%	35	100%	49%	51%
Maryland	71	75%	24	25%	0	0%	95	100%	75%	25%
Massachusetts	64	91%	4	6%	2	3%	70	100%	94%	6%
Michigan	93	51%	77	42%	14	8%	184	100%	55%	45%
Minnesota	35	46%	38	50%	3	4%	76	100%	48%	52%
Mississippi	43	78%	9	16%	3	5%	55	100%	83%	17%
Missouri	84	58%	56	39%	5	3%	145	100%	60%	40%
Montana	17	45%	19	50%	2	5%	38	100%	47%	53%
Nebraska	24	75%	8	25%	0	0%	32	100%	75%	25%
Nevada	81	91%	6	7%	2	2%	89	100%	93%	7%
New Hampshire	16	46%	19	54%	0	0%	35	100%	46%	54%
New Jersey	98	88%	11	10%	3	3%	112	100%	90%	10%
New Mexico	17	34%	25	50%	8	16%	50	100%	40%	60%
New York	159	76%	36	17%	14	7%	209	100%	82%	18%
North Carolina	191	90%	16	8%	5	2%	212	100%	92%	8%
North Dakota	5	29%	12	71%	0	0%	17	100%	29%	71%
Ohio	88	40%	128	58%	6	3%	222	100%	41%	59%
Oklahoma	52	49%	46	43%	8	8%	106	100%	53%	47%
Oregon	74	87%	7	8%	4	5%	85	100%	91%	9%
Pennsylvania	109	50%	103	47%	5	2%	217	100%	51%	49%
Rhode Island	3	38%	5	63%	0	0%	8	100%	38%	63%
South Carolina	80	52%	73	47%	1	1%	154	100%	52%	48%
South Dakota	10	30%	21	64%	2	6%	33	100%	32%	68%
Tennessee	170	90%	16	9%	2	1%	188	100%	91%	9%
Texas	350	60%	211	36%	22	4%	583	100%	62%	38%
Utah	25	47%	27	51%	1	2%	53	100%	48%	52%
Vermont	6	86%	1	14%	0	0%	7	100%	86%	14%
Virginia	115	94%	7	6%	0	0%	122	100%	94%	6%
Washington	105	93%	5	4%	3	3%	113	100%	95%	5%
West Virginia	28	74%	10	26%	0	0%	38	100%	74%	26%
Wisconsin	33	31%	68	64%	5	5%	106	100%	33%	67%
Wyoming	11	46%	6	25%	7	29%	24	100%	65%	35%
<b>U.S. Total</b>	<b>3,961</b>	<b>64%</b>	<b>2,045</b>	<b>33%</b>	<b>222</b>	<b>4%</b>	<b>6,228</b>	<b>100%</b>	<b>66%</b>	<b>34%</b>
Puerto Rico	37	54%	32	46%	0	0%	69	100%	54%	46%

Source: FARS 2024 ARF

Notes: Shading indicates requiring helmet use for all motorcyclists. Percentages may not add up to 100 percent due to independent rounding.

**Table 8. Motorcycle Rider Fatalities in Traffic Crashes, by State and Their BACs, 2024**

State	Total Fatalities	Motorcycle Rider Fatalities, by Their BACs					
		BAC=.01+ g/dL		Alcohol-Impaired			
		Number	Percent	BAC=.08+ g/dL		BAC=.15+ g/dL	
				Number	Percent	Number	Percent
Alabama	123	37	30%	25	20%	13	11%
Alaska	10	3	25%	2	21%	1	10%
Arizona	215	71	33%	56	26%	35	16%
Arkansas	71	23	32%	17	24%	10	15%
California	507	175	35%	132	26%	88	17%
Colorado	164	52	32%	41	25%	22	13%
Connecticut	68	32	47%	24	35%	17	26%
Delaware	21	4	17%	3	13%	1	7%
District of Columbia	6	1	22%	1	18%	1	23%
Florida	615	181	29%	134	22%	83	14%
Georgia	171	46	27%	37	22%	21	12%
Hawaii	25	11	45%	10	41%	7	28%
Idaho	42	23	54%	18	42%	12	30%
Illinois	140	40	29%	31	22%	17	12%
Indiana	126	38	30%	30	24%	15	12%
Iowa	58	27	47%	19	33%	13	23%
Kansas	53	18	33%	13	24%	6	11%
Kentucky	104	27	25%	23	22%	15	14%
Louisiana	69	27	40%	19	28%	10	15%
Maine	34	7	20%	4	12%	3	8%
Maryland	93	39	42%	35	38%	23	25%
Massachusetts	69	26	38%	23	33%	15	22%
Michigan	181	64	35%	53	29%	32	18%
Minnesota	71	22	31%	13	18%	8	11%
Mississippi	51	12	23%	10	19%	5	10%
Missouri	137	47	35%	37	27%	27	19%
Montana	37	10	26%	6	17%	3	9%
Nebraska	30	6	21%	4	13%	1	4%
Nevada	86	25	29%	17	20%	8	9%
New Hampshire	33	10	30%	7	20%	5	15%
New Jersey	109	41	38%	25	23%	15	14%
New Mexico	43	14	33%	11	25%	6	14%
New York	198	66	33%	49	24%	27	14%
North Carolina	208	63	30%	53	25%	31	15%
North Dakota	15	6	39%	6	38%	5	31%
Ohio	210	80	38%	62	29%	41	19%
Oklahoma	97	35	36%	27	28%	16	16%
Oregon	78	33	42%	26	33%	18	23%
Pennsylvania	212	64	30%	45	21%	33	15%
Rhode Island	8	6	69%	2	30%	2	29%
South Carolina	147	52	35%	43	29%	27	18%
South Dakota	32	12	37%	8	24%	4	13%
Tennessee	179	55	31%	43	24%	20	11%
Texas	559	222	40%	174	31%	110	20%
Utah	52	15	29%	14	27%	11	22%
Vermont	7	5	71%	4	57%	2	29%
Virginia	119	40	33%	24	20%	11	9%
Washington	110	32	29%	25	22%	9	8%
West Virginia	36	14	40%	12	32%	7	20%
Wisconsin	98	36	37%	30	31%	19	20%
Wyoming	23	7	29%	6	25%	4	17%
<b>U.S. Total</b>	<b>5,950</b>	<b>2,000</b>	<b>34%</b>	<b>1,529</b>	<b>26%</b>	<b>934</b>	<b>16%</b>
Puerto Rico	65	27	42%	20	31%	15	23%

Source: FARS 2024 ARF

Notes: Percentages are computed based on unrounded estimates. NHTSA estimates BACs when alcohol test results are unknown.

## Important Safety Reminders

### *For Motorcyclists:*

- Wearing a helmet is the single most effective way to protect yourself from a head injury. Use a motorcycle helmet for every ride, and ensure your passengers also use a helmet.
- Make sure your helmet has a valid U.S. Department of Transportation (DOT) label; the label means the helmet meets the Federal Motor Vehicle Safety Standards – this is also known as the FMVSS 218 standard. Novelty helmets without this label may not meet the same standard and will not provide the best protection needed in a crash.



- Check the fit of your helmet to ensure optimal protection.
- Wear protective gear like a sturdy jacket, pants, boots, and gloves; safety gear provide protection in case of falls or crashes and improves comfort during the ride.
- Make yourself visible by using high-visibility colors and retro-reflective materials to maximize the ability of drivers to see you.
- Motorcycle riding requires full attention, skill, and coordination. Avoid combining riding with drinking alcohol or using other impairing drugs.

### *For Drivers:*

- Always be on the lookout for motorcyclists.
- A motorcycle's smaller size means it can be hidden in your vehicle's blind spot.
- A motorcycle's size and narrow profile can make it difficult to judge its distance and speed. Take extra care when judging when to turn or merge.
- Keep a safe distance from the motorcycle in front of you; motorcyclists can slow their motorcycles by downshifting instead of using their brakes. This means the brake lights won't come on.
- Remember that motorcyclists sometimes change positions in their lane to avoid debris on the road.

— NHTSA's Research and Program Development

## Fatality Analysis Reporting System

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 traffic crash must involve a motor vehicle traveling on a trafficway customarily open to the public 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 the following year to the final version 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. More information on FARS can be found at [www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system](http://www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system).

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2024 ARF, the 2023 Final File was released to replace the 2023 ARF. The final fatality count in motor vehicle traffic crashes for 2023 was 41,025, updated from 40,901 in the 2023 ARF. The number of motorcycle fatalities from the 2023 Final File was 6,366, updated from 6,335 from the 2023 ARF.

## Crash Report Sampling System

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. CRSS replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at [www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss](http://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss).

## Product Information Catalog and Vehicle Listing (vPIC) Vehicle Classification

Historically, vehicle type classifications (passenger cars, light trucks, large trucks, motorcycles, buses) from FARS, NASS GES, and CRSS used for analysis and data reporting were based on analyst-coded vehicle body type. NHTSA did not have manufacturer authoritative data to assist in vehicle body type coding. NCSA has developed a vPIC dataset to decode Vehicle Identification Numbers (VINs) and extract vehicle information. Details of vehicles (make, model, body class, etc.) in crashes are obtained from vPIC via VIN-linkage. The VIN-derived information from vPIC uses the manufacturer's classification of body class, which allows for more accurate vehicle type analysis.

The vPIC-based analysis data is available beginning with the 2020 FARS and CRSS data files. Vehicle-related analysis for 2020 and later years are based on vPIC vehicle classification. As a result, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. More information on vPIC can be found at <https://vpic.nhtsa.dot.gov>.

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## For More Information:

Motor vehicle traffic crash data is available from the National Center for Statistics and Analysis, NSA-230. NCSA can be contacted at [NCSARequests@dot.gov](mailto:NCSARequests@dot.gov) or 800-934-8517. NCSA programs can be found at [www.nhtsa.gov/data](http://www.nhtsa.gov/data). To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or [www.nhtsa.gov/report-a-safety-problem](http://www.nhtsa.gov/report-a-safety-problem).

The following data tools and resources can be found at <https://cdan.dot.gov>.

- Fatal Motor Vehicle Crash Data Visualizations
- Fatality and Injury Reporting System Tool (FIRST)
- State Traffic Safety Information (STSI)
- Traffic Safety Facts Annual Report Tables
- FARS Data Tables (FARS Encyclopedia)
- Motor Vehicle Crash Databook
- Leading Cause of Death Reports
- Crash Viewer
- Product Information Catalog and Vehicle Listing (vPIC)
- FARS, NASS GES, CRSS, NASS Crashworthiness Data System (CDS), and Crash Investigation Sampling System (CISS) data can be downloaded for further analysis.

Other fact sheets available from NCSA:

- Alcohol-Impaired Driving
- Bicyclists and Other Cyclists
- Children
- Large Trucks
- Occupant Protection in Passenger Vehicles
- Older Population
- Passenger Vehicles
- Pedestrians
- Race and Ethnicity
- Rural/Urban Traffic Fatalities
- School-Transportation-Related Traffic Crashes
- Speeding
- State Alcohol-Impaired-Driving Estimates
- State Traffic Data
- Summary of Motor Vehicle Traffic Crashes
- Young Drivers

Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Traffic Crash Data*. The fact sheets and Traffic Safety Facts annual reports can be found at <https://crashstats.nhtsa.dot.gov>.



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