



# Trends in Motorcycle Crashes in New Mexico

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New Mexico Motorcycle Safety Program

Prepared by The University of New Mexico, Geospatial and Population Studies (UNM-GPS)

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# Agenda and Sources

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Motorcycle Crashes and Fatalities

Motorcycle Vehicle Types

Licensing

Driver Behavior

Crash and Fatality Rates

Alcohol/Drugs

Helmet Usage

## Sources:

- NMDOT Crash Database
  - 2019 - 2023 data, preliminary 2023.
- NMDOT Fatal Log
  - Preliminary 2023 data, as of May 2024
- NM Taxation and Revenue, Motor Vehicle Division, License Files, July version.
- NHTSA Product Information Catalog and Vehicle Listing (vPIC)

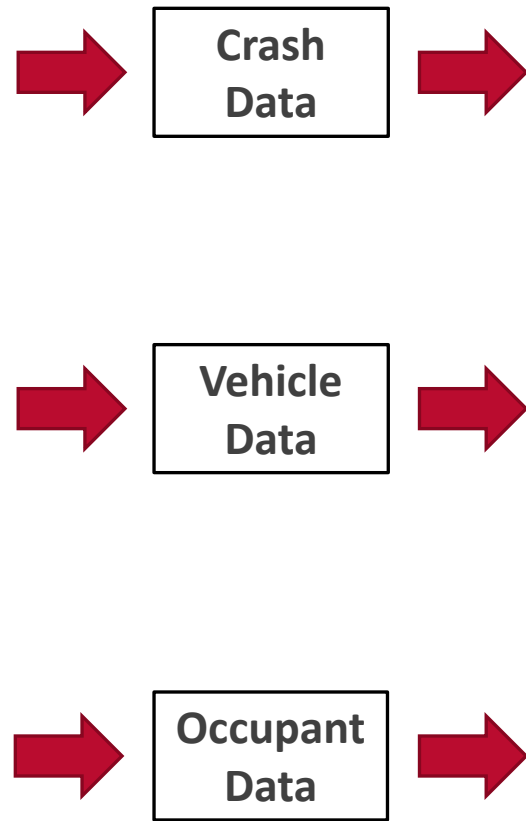
Terms: “Motorcyclists” or “Motorcycle Riders” includes drivers and passengers.

The database only contains reportable crashes.

# New Mexico Crash Report → NMDOT Crash Database

**STATE OF NEW MEXICO UNIFORM CRASH REPORT**  
 NM Statute 66-7-209

Crash Report Number: XXXXXXXXXXXX SHEET 1 OF 3 SHEETS



**Agency, City, County, Crash Severity, Date, Time, Crash Location**

**Contributing Factors, Vehicle VIN, Make, License Type, License Number, Driver Alcohol/Drug-involvement**

**Age, Sex, Injury, Helmet Use**

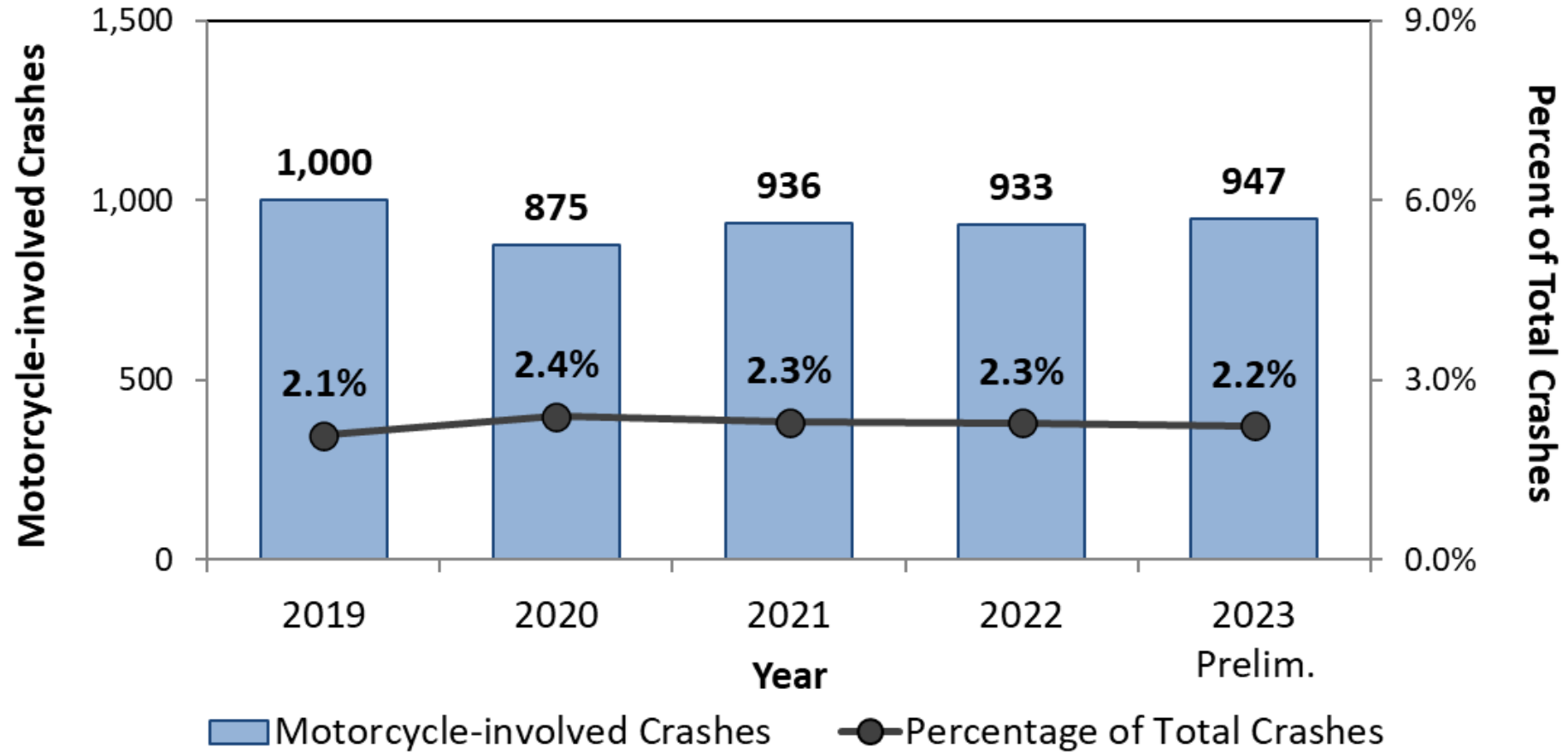


The state crash database only tracks reported crashes involving a motor vehicle on a public roadway with fatalities, injuries, or at least \$500 in property damage.

# Crashes and Injuries

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# Motorcycle-involved Crashes

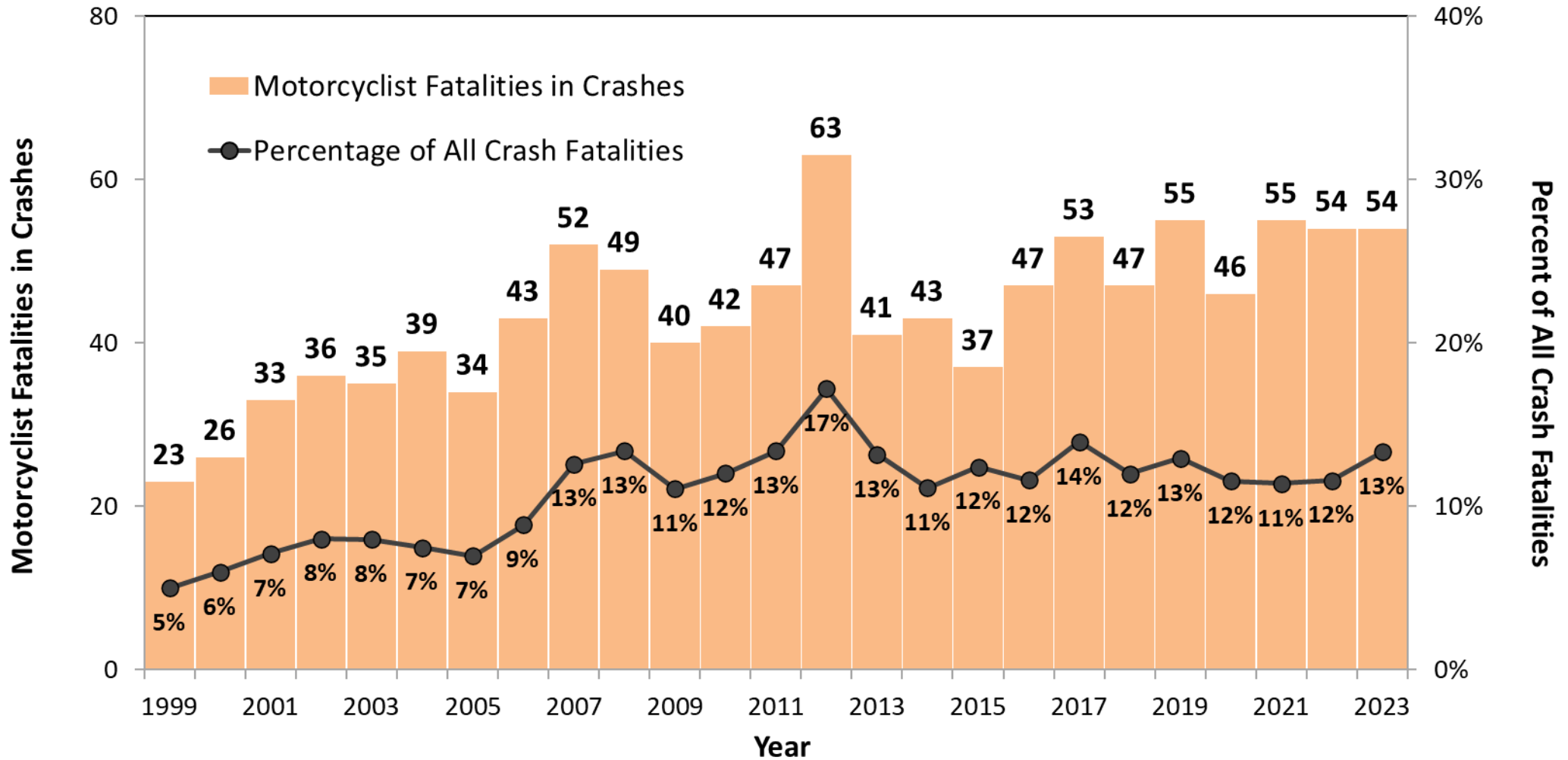


# Severity of Injuries to Motorcyclists in Crashes

Year	Severity of Injuries to Motorcyclists (Drivers & Passengers) in Crashes										Total Motorcyclists	
	Fatalities (Class K)		Suspected Serious Injuries (Class A)		Suspected Minor Injuries (Class B)		Possible Injuries (Class C)		No Apparent Injuries (Class O)			
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
2019	55	5%	134	12%	474	43%	185	17%	255	23%	1,103	100%
2020	46	5%	117	12%	473	49%	157	16%	170	18%	963	100%
2021	55	5%	141	14%	536	51%	142	14%	168	16%	1,042	100%
2022	54	5%	148	14%	504	49%	143	14%	172	17%	1,021	100%
2023	52	5%	166	16%	486	47%	141	14%	180	18%	1,025	100%
<b>Total</b>	<b>262</b>	<b>5%</b>	<b>706</b>	<b>14%</b>	<b>2,473</b>	<b>48%</b>	<b>768</b>	<b>15%</b>	<b>945</b>	<b>18%</b>	<b>5,154</b>	<b>100%</b>

Severity of Injuries to All People in <i>All Vehicles</i> in All Crashes, 2019 - 2023												
<b>Total</b>	<b>2,157</b>	<b>0.4%</b>	<b>5,372</b>	<b>1%</b>	<b>25,643</b>	<b>5%</b>	<b>59,929</b>	<b>12%</b>	<b>413,238</b>	<b>82%</b>	<b>506,339</b>	<b>100%</b>

# Motorcyclist Fatalities in Crashes



Data from 2023 are preliminary.



# Motorcycle Types and Makes

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## Trends in Vehicle Type, 2019 - 2023

Vehicle Type	Motorcycles in Crashes					Total Motorcycles
	2019	2020	2021	2022	2023	
Touring	221	151	185	202	195	954
Cruiser	284	243	266	230	223	1,246
Sport	167	161	198	211	206	943
Standard / Street	82	82	91	70	104	429
Moped / Scooter	32	30	33	21	23	139
Dirt Bike / Dual Sport / Off-Road	29	38	51	63	62	243
Trike / Unenclosed 3-Wheeled	6	7	8	9	14	44
Missing Data	207	182	139	151	138	817
<b>Total</b>	<b>1,028</b>	<b>894</b>	<b>971</b>	<b>957</b>	<b>965</b>	<b>4,815</b>

## Driver Age and Motorcycle Type

Age Group	Motorcycle Type in Crashes, 2019 - 2023								Total Motorcycle Drivers in Crashes
	Touring	Cruiser	Sport	Standard / Street	Moped / Scooter	Dirt Bike / Dual Sport / Off-Road	Trike / Unenclosed 3-Wheeled	Missing Data	
<18	5	16	58	39	7	52	0	89	266
18-19	2	20	65	9	6	8	0	20	130
20-24	31	149	272	76	19	29	1	111	688
25-29	60	151	171	57	8	33	0	83	563
30-34	74	126	133	42	14	18	1	84	492
35-39	78	124	67	42	9	11	3	60	394
40-44	110	123	69	46	12	13	0	55	428
45-49	106	117	30	21	12	18	6	49	359
50-54	122	108	19	23	17	11	0	42	342
55-59	101	114	6	21	16	14	6	52	330
60-64	115	73	6	17	7	17	8	44	287
65-69	66	54	3	16	5	6	9	23	182
70+	58	37	5	11	6	9	10	19	155
Missing	26	34	39	9	1	4	0	86	199
<b>Total</b>	<b>954</b>	<b>1,246</b>	<b>943</b>	<b>429</b>	<b>139</b>	<b>243</b>	<b>44</b>	<b>817</b>	<b>4,815</b>
<b>Source:</b>	UNM-GPS utilizes NHTSA vPIC database data to decode VINs and identify motorcycle type								<b>NM Crash Database</b>

Data gap: Motorcycle type missing for 17% of motorcycles in crashes (likely VIN-related).  
Data from 2023 are preliminary.

# Driver Age and Vehicle Make

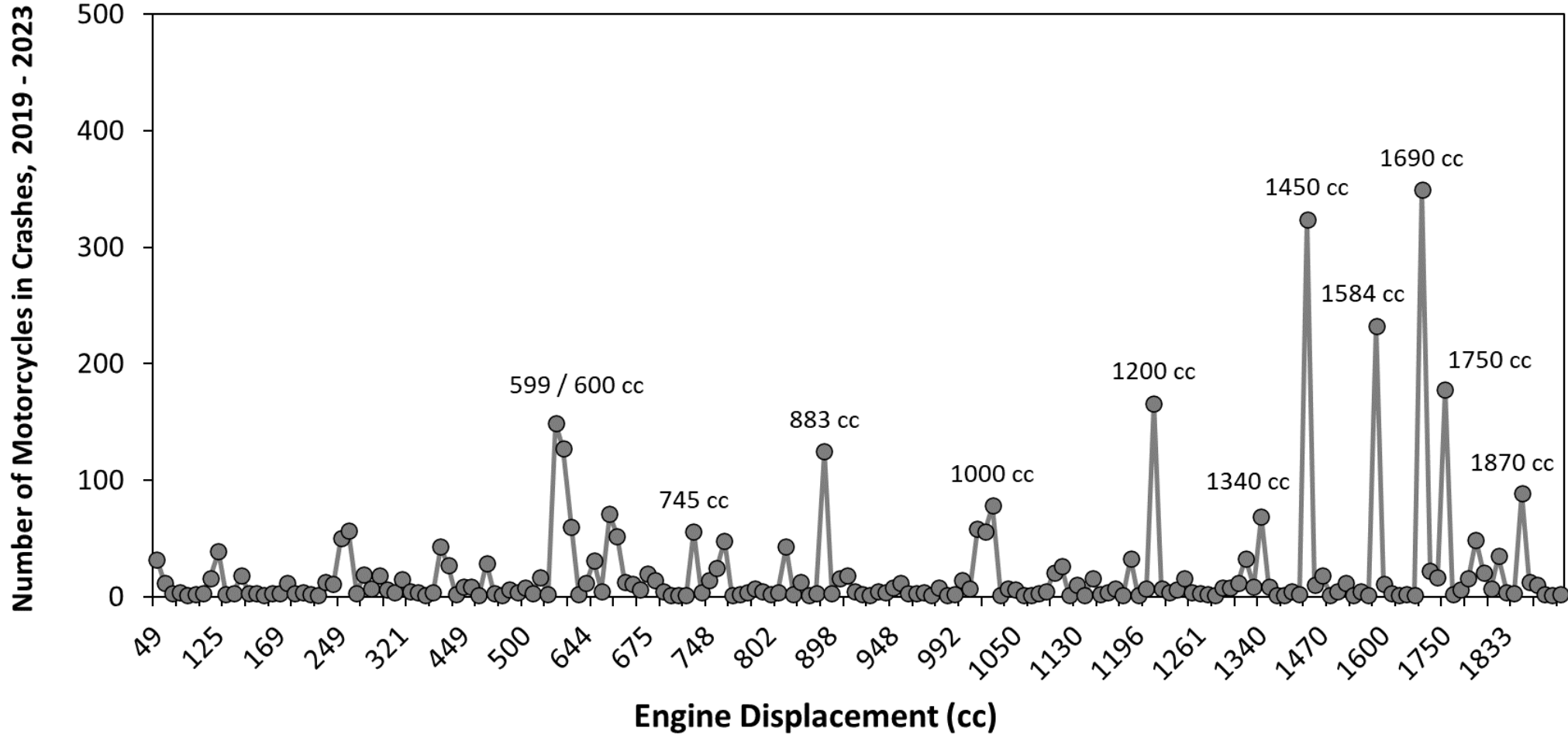
Driver Age Group	Motorcycle Vehicles in Crashes by Driver Age Group and Manufacturer, 2019 - 2023												Total Vehicles
	Harley Davidson	Honda	Yamaha	Kawasaki	Suzuki	BMW	Triumph	Ducati	Victory	Can-Am	Other	Missing Data	
<18	18	45	49	52	28	0	3	0	0	0	34	37	266
18-19	11	21	35	27	18	2	1	0	0	0	11	4	130
20-24	140	112	127	137	61	6	11	9	0	1	50	34	688
25-29	150	88	104	65	58	13	12	8	4	0	33	28	563
30-34	142	68	74	62	60	14	5	7	2	1	36	21	492
35-39	159	50	47	36	32	9	7	9	2	2	26	15	394
40-44	195	42	53	38	39	9	1	6	3	0	25	17	428
45-49	187	36	36	18	16	9	4	2	2	4	29	16	359
50-54	197	30	19	15	20	11	2	1	1	0	33	13	342
55-59	179	27	28	19	13	16	3	3	2	1	26	13	330
60-64	155	34	23	12	8	11	6	1	3	4	18	12	287
65-69	94	26	16	6	4	11	4	0	1	2	11	7	182
70 +	75	24	8	8	4	10	2	0	0	3	16	5	155
Missing Data	41	29	22	17	10	7	2	0	1	0	9	61	199
<b>Total</b>	<b>1,743</b>	<b>632</b>	<b>641</b>	<b>512</b>	<b>371</b>	<b>128</b>	<b>63</b>	<b>46</b>	<b>21</b>	<b>18</b>	<b>357</b>	<b>283</b>	<b>4,815</b>

Missing data are primarily hit-and-run situations.  
Data from 2023 are preliminary.

# Vehicle Type and Helmet Usage of Motorcyclist Fatalities in Crashes

Vehicle Type	Motorcyclist Fatalities in Crashes										
	Helmeted					Unhelmeted					Total
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	
Touring	3	3	3	2	6	11	9	11	7	4	59
Cruiser	2	4	4	2	2	15	7	7	9	7	59
Sport	6	5	11	12	12	5	0	7	5	4	67
Standard / Street	3	1	1	3	2	1	6	3	3	1	24
Moped / Scooter	0	0	0	0	0	0	0	1	0	0	1
Dirt Bike/Dual Sport/Off-Rd.	0	3	0	3	1	0	0	1	1	1	10
Trike/Unenclosed 3-Wheeled	0	0	0	0	0	0	2	0	0	0	2
Missing Data	4	3	1	3	3	5	3	5	4	3	34
<b>Total</b>	18	19	20	25	26	37	27	35	29	20	256

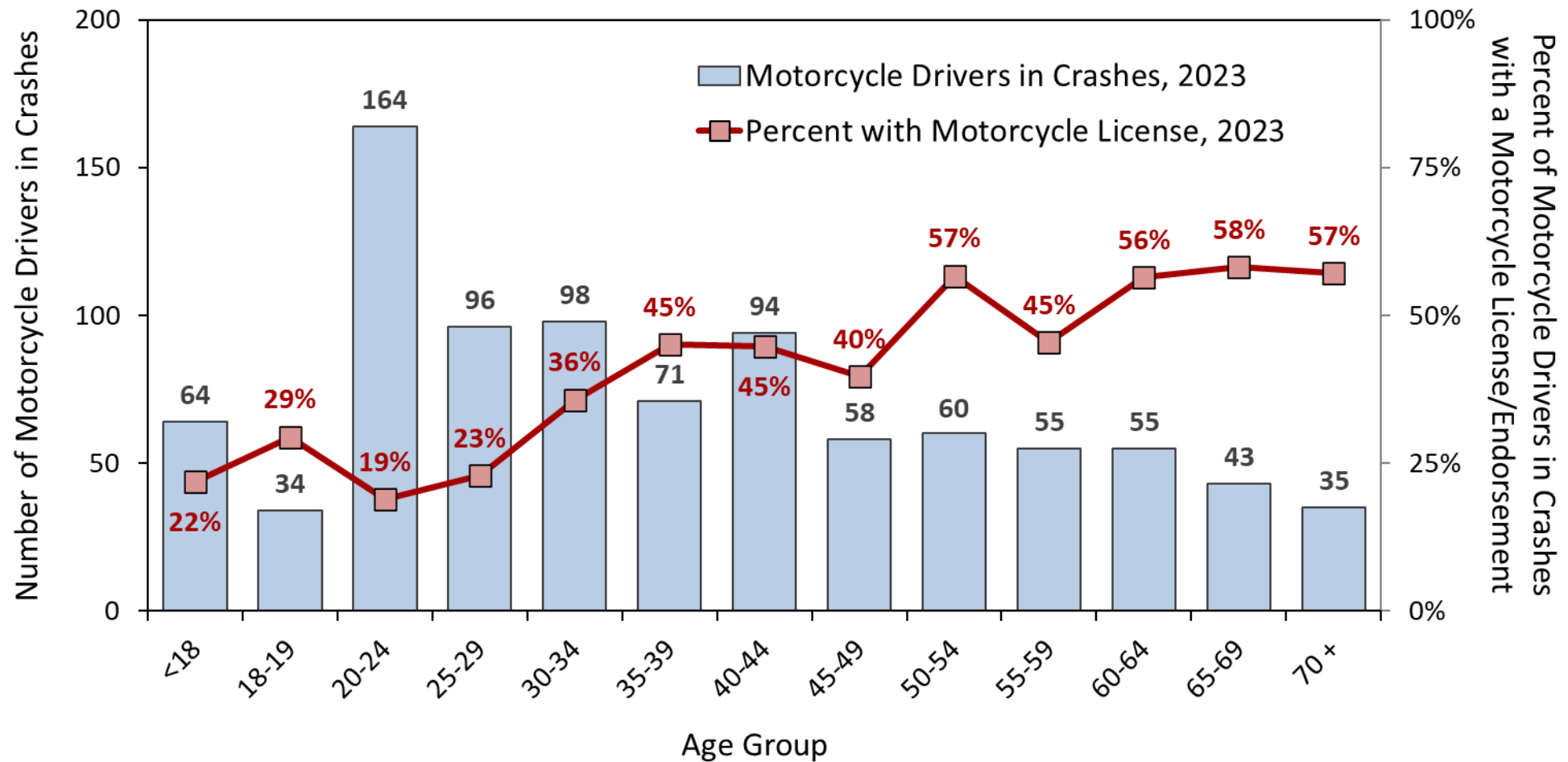
# Motorcycles in Crashes by Engine Displacement, 2019 - 2023



# Licenses

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# Percent of Motorcycle Drivers in Crashes with a Motorcycle License/Endorsement by Age Group, 2023



Overall, in 2023, at least 36% of motorcycle drivers in crashes had a motorcycle license or endorsement. Data from 2023 are preliminary.



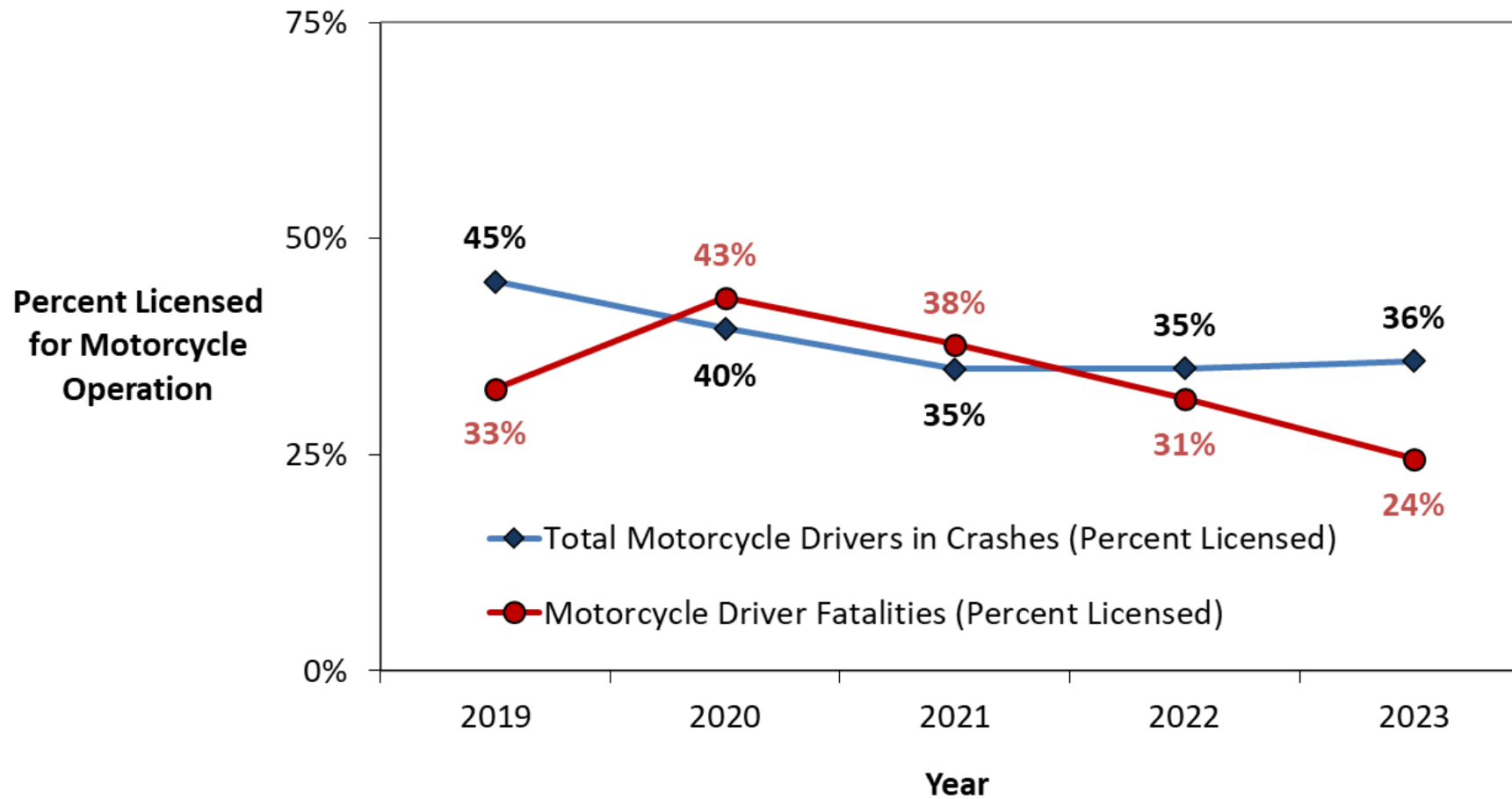
## Vehicle Type of Licensed Motorcycle Drivers in Crashes, 2019 - 2023

Vehicle Type	Percent Licensed (Percent of Motorcycle Drivers in Crashes with a Motorcycle License/Endorsement)					
	2019	2020	2021	2022	2023	Total
Touring	55%	59%	50%	47%	55%	53%
Cruiser	47%	49%	41%	41%	38%	43%
Sport	37%	28%	29%	30%	28%	30%
Standard / Street	55%	34%	33%	39%	36%	39%
Moped / Scooter	25%	27%	27%	14%	9%	22%
Dirt Bike / Dual Sport / Off-Road	45%	26%	31%	29%	31%	31%
Trike / Unenclosed 3-Wheeled	83%	43%	50%	56%	79%	64%
Missing Data	37%	29%	14%	20%	19%	25%
<b>Total Licensed</b>	<b>45%</b>	<b>40%</b>	<b>35%</b>	<b>35%</b>	<b>36%</b>	<b>38%</b>

“Licensed” means either an “M” class license or endorsement of W, Y or Z, on either the crash report or in the MVD License Driver database. Darker shading identifies higher percentages. Data from 2023 are preliminary.



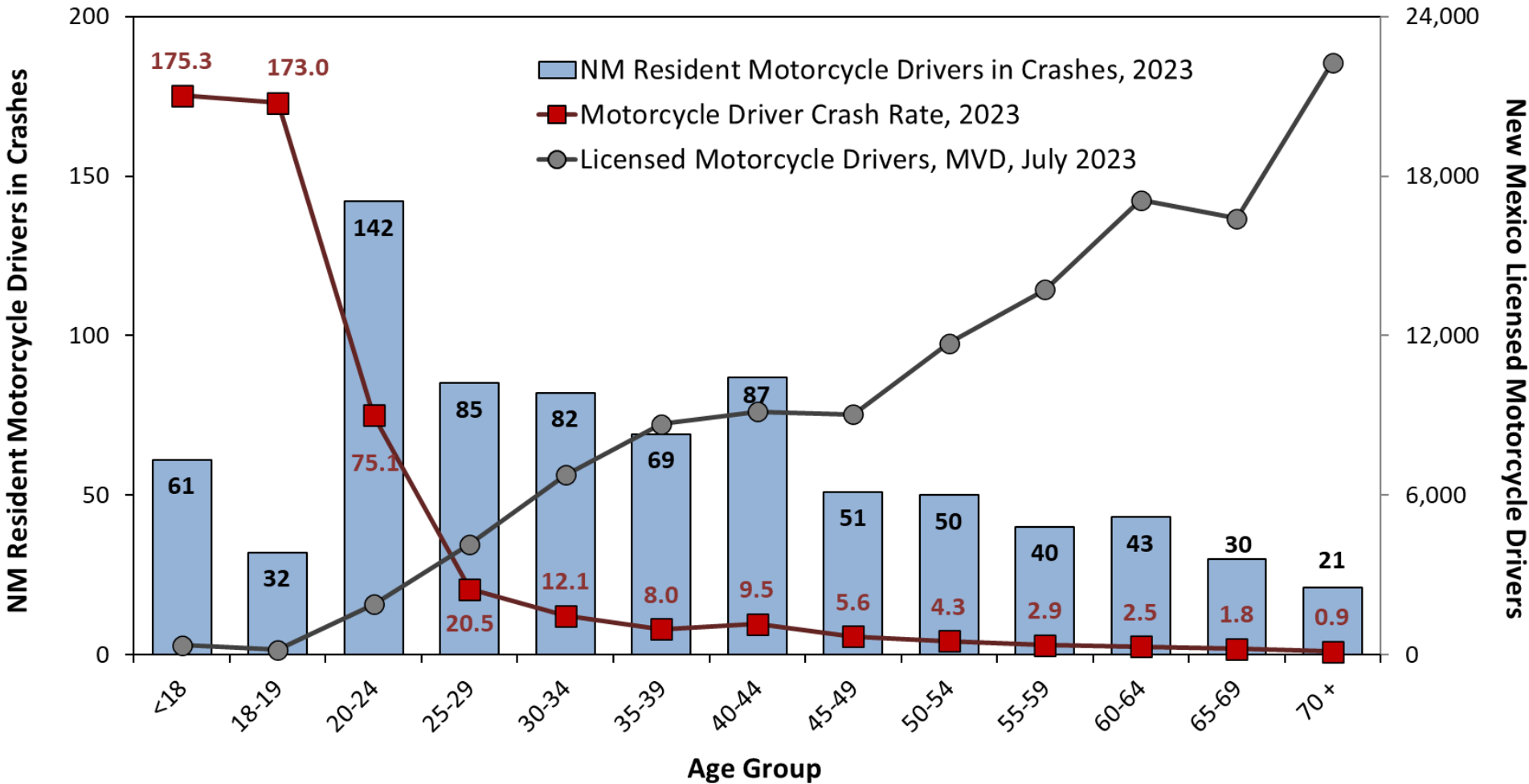
# Percent of Motorcycle Drivers in Crashes with a Motorcycle License or Endorsement, 2019 - 2023



# Crash and Fatality Rates

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# Crash Rates by Age Group, 2023



Crash Rate: The number of New Mexico resident motorcycle drivers in crashes per 1,000 MVD motorcycle licenses/endorsements in each age group. Excludes parked motorcycles and out-of-state drivers.



# Fatality Rates (Percent Killed) by Age

Age Group	Motorcyclist Fatalities, 2019 - 2023	Total Motorcyclists in Crashes, 2019 - 2023		Total Fatalities in Crashes, 2019 - 2023	
		Count	Percent Killed	Count	Percent Motorcyclists
<18	9	319	2.8%	162	5.6%
18-19	6	141	4.3%	41	14.6%
20-24	35	718	4.9%	225	15.6%
25-29	37	603	6.1%	246	15.0%
30-34	21	515	4.1%	222	9.5%
35-39	21	421	5.0%	200	10.5%
40-44	25	452	5.5%	168	14.9%
45-49	27	393	6.9%	148	18.2%
50-54	19	371	5.1%	148	12.8%
55-59	20	363	5.5%	158	12.7%
60-64	15	298	5.0%	145	10.3%
65-69	17	191	8.9%	103	16.5%
70 +	10	155	6.5%	207	4.8%
Missing Data	0	214	0.0%	4	0.0%
<b>Total</b>	<b>262</b>	<b>5,154</b>	<b>5.1%</b>	<b>2,177</b>	<b>12.0%</b>

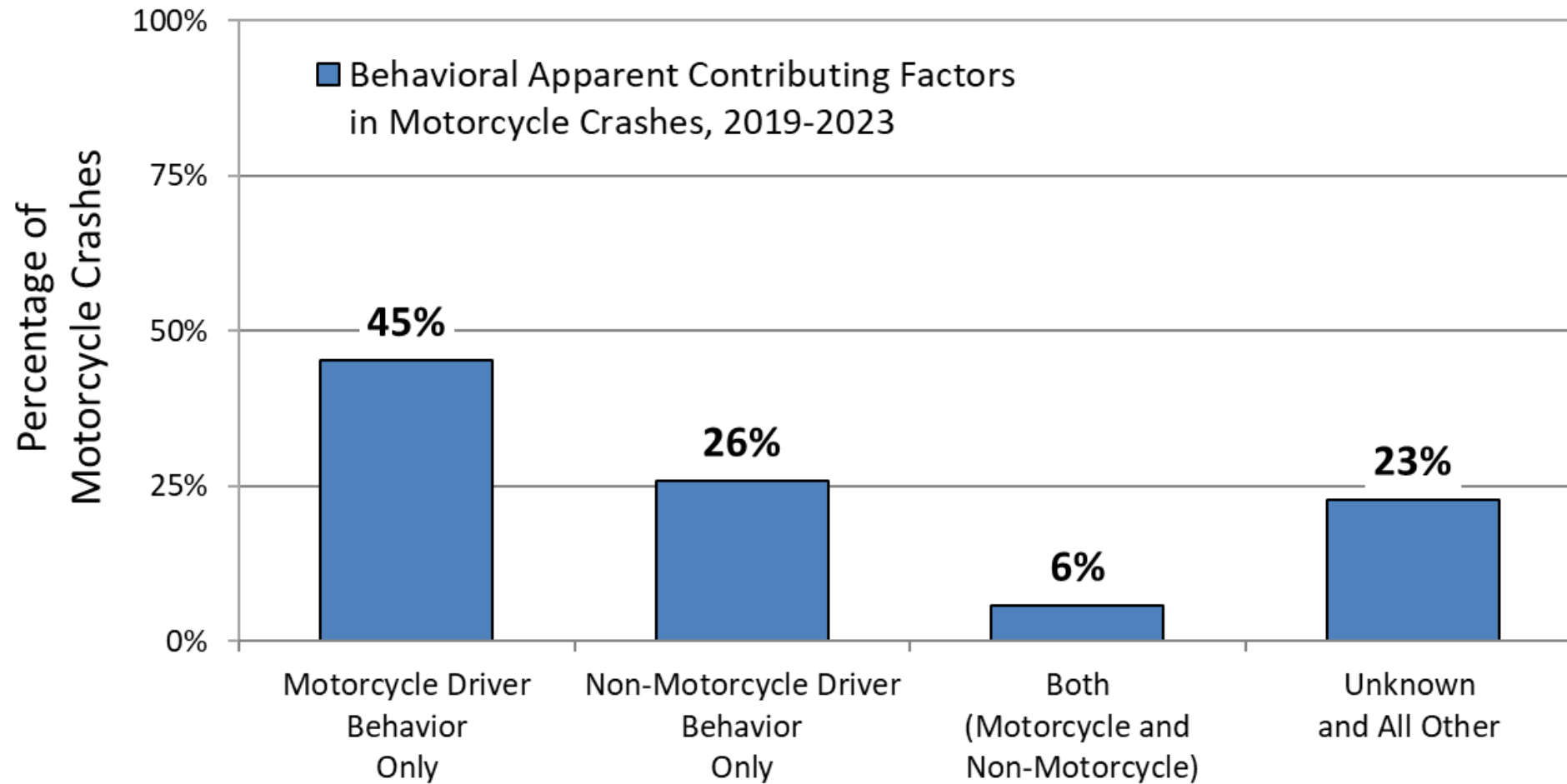
# Annual Crash Rates

Year	Total Motorcycles in Crashes	New Mexico Registered Motorcycle Vehicles	New Mexico Licensed Motorcycle Drivers	Rate (Motorcycles in Crashes per 1,000 Registered Motorcycles)	Rate (Motorcycle Drivers in Crashes per 1,000 Licensed Motorcycle Drivers)
2018	1,008	60,348	118,499	16.7	8.5
2019	1,029	60,466	118,764	17.0	8.7
2020	899	54,946	118,987	16.4	7.6
2021	971	56,494	119,288	17.2	8.1
2022	957	56,881	120,426	16.8	7.9

# Driver Behavior

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# Driver Behaviors in Motorcycle Crashes, 2019 - 2023



# Motorcycle Driver Behaviors and Age

Age Group	Common Contributing Factors of Motorcycle Drivers in Crashes, 2019 - 2023						Total Motorcycle Drivers
	Under the Influence of Drugs	Under the Influence of Alcohol	Speeding	Distracted Driving	Other Aggressive Driving	None / No Driver Error	
10-14	2	0	76	81	96	66	266
15-19	2	6	39	33	50	35	130
20-24	10	41	173	150	181	242	688
25-29	14	40	122	130	174	201	563
30-34	16	32	102	100	122	177	492
35-39	11	25	83	86	77	160	394
40-44	11	20	78	81	109	170	428
45-49	6	20	47	71	94	159	359
50-54	7	27	34	59	76	162	342
55-59	7	22	42	70	72	149	330
60-64	4	10	28	57	63	140	287
65-69	4	5	15	43	43	78	182
70 +	2	2	14	36	28	74	155
Missing Data	0	0	50	76	68	58	199
Total	96	250	903	1,073	1,253	1,871	4,815



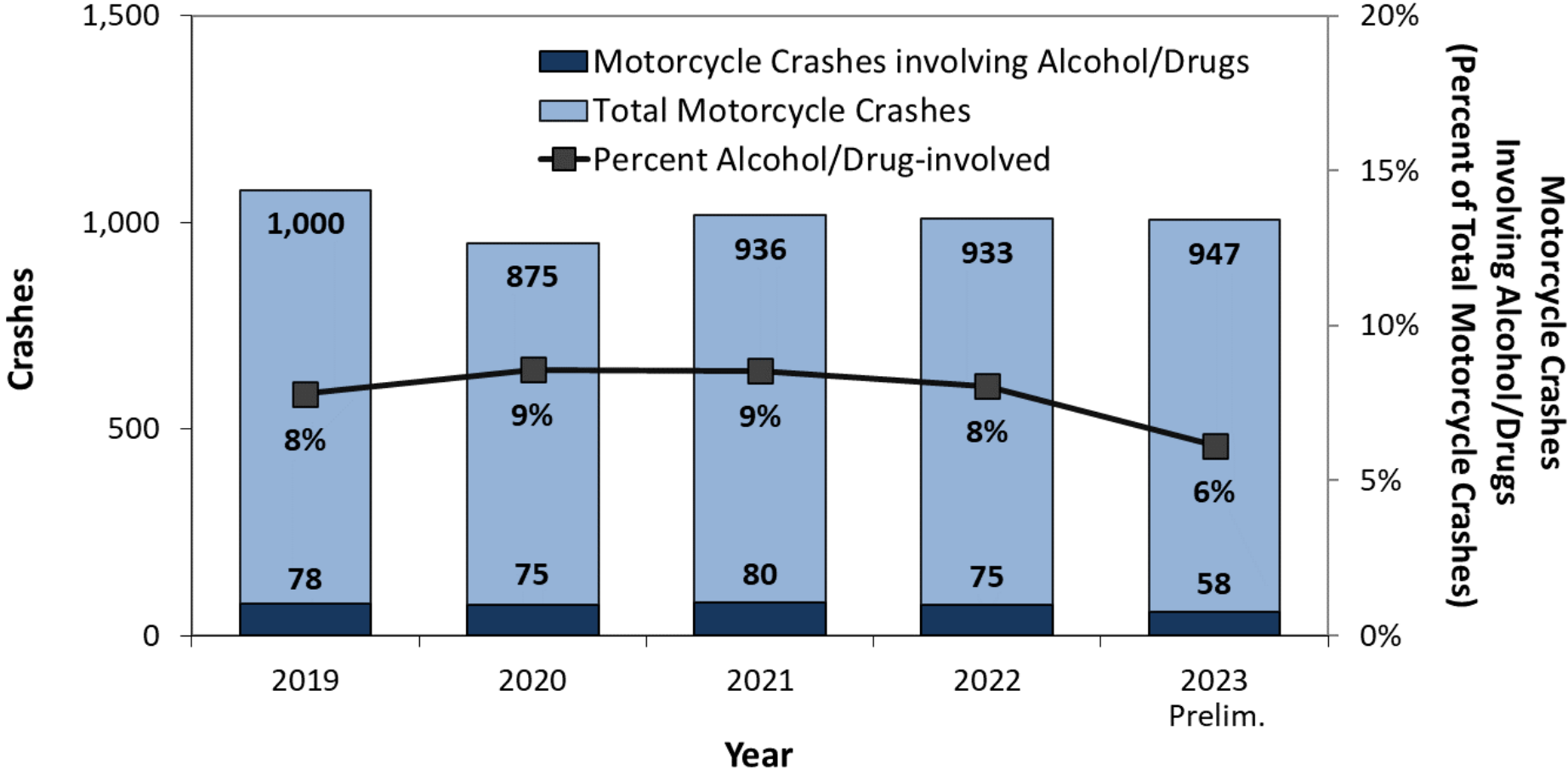
# Non-Motorcycle Driver Behaviors in Motorcycle Crashes and Age

Age Group	Common Contributing Factors of Non-Motorcycle Drivers in Motorcycle Crashes, 2019 - 2023						Total Non-Motorcycle Drivers
	Under the Influence of Drugs	Under the Influence of Alcohol	Speeding	Distracted Driving	Other Aggressive Driving	None / No Driver Error	
10-14	0	0	1	3	2	0	4
15-19	1	1	4	75	96	60	204
20-24	1	6	10	87	98	128	279
25-29	1	6	6	87	95	103	246
30-34	1	9	3	61	93	105	237
35-39	1	5	7	62	66	115	231
40-44	1	4	4	60	68	93	196
45-49	3	3	1	31	52	78	151
50-54	0	7	4	41	41	86	158
55-59	2	1	0	39	62	85	170
60-64	0	3	0	40	59	70	156
65-69	0	2	4	47	56	55	140
70 +	0	2	0	86	123	103	270
Missing Data	0	2	20	137	165	128	363
Total	11	51	64	856	1,076	1,209	2,805

# Alcohol and Drugs

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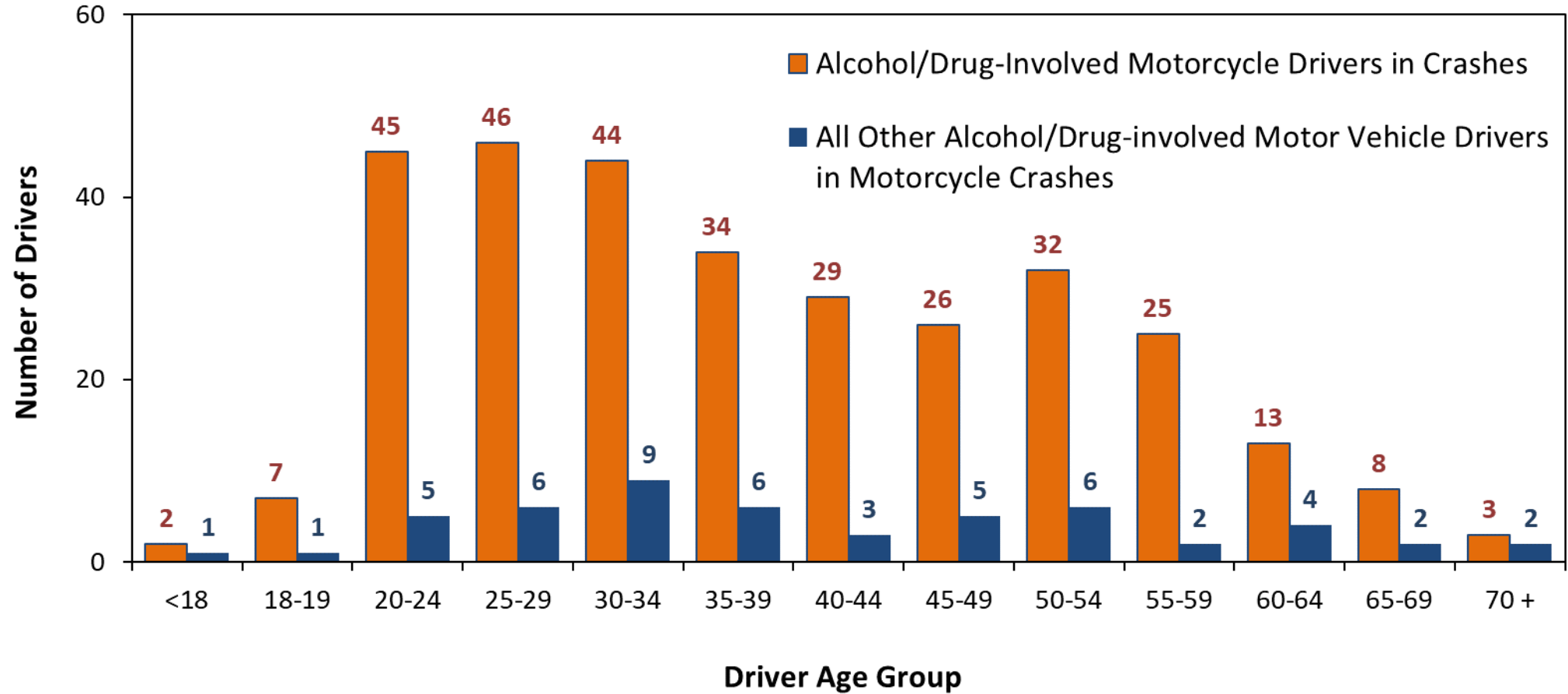
# Alcohol/Drug Involvement in Motorcycle Crashes



Alcohol/Drug toxicology data from 2023 are preliminary and expected to increase.



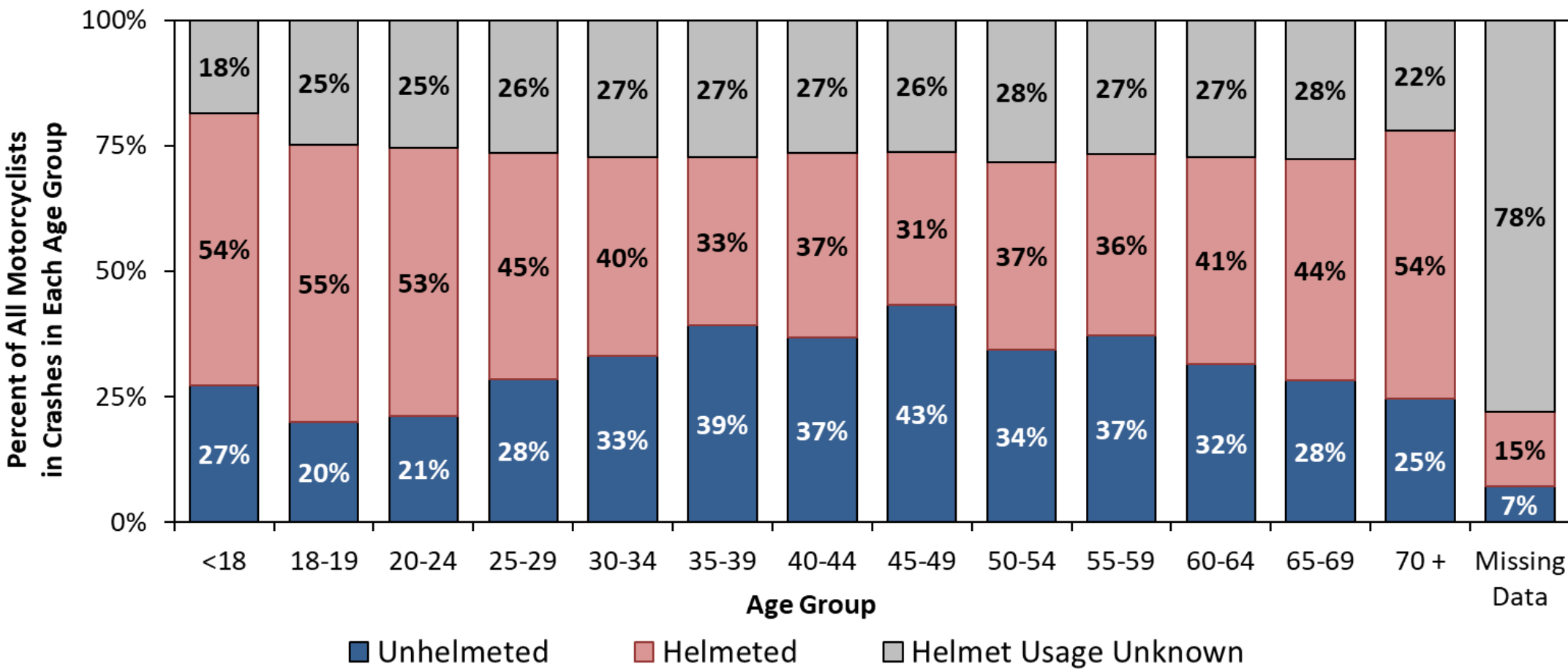
# Driver Alcohol/Drug Involvement, 2019-2023



# Helmet Usage

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# Helmet Usage by Age Group, 2019 - 2023



Data from 2023 are preliminary.

# Trends in Motorcyclist Helmet Usage

Year	Helmet Usage of Motorcyclists in Crashes						Total Motorcyclists in Crashes	
	Helmeted		Unhelmeted		Missing Data		Count	Percent
	Count	Percent	Count	Percent	Count	Percent		
2019	431	<b>39%</b>	317	<b>29%</b>	355	<b>32%</b>	1,103	<b>100%</b>
2020	386	<b>40%</b>	335	<b>35%</b>	242	<b>25%</b>	963	<b>100%</b>
2021	413	<b>40%</b>	369	<b>35%</b>	260	<b>25%</b>	1,042	<b>100%</b>
2022	462	<b>45%</b>	295	<b>29%</b>	264	<b>26%</b>	1,021	<b>100%</b>
2023	438	<b>43%</b>	256	<b>25%</b>	331	<b>32%</b>	1,025	<b>100%</b>
<b>Total</b>	<b>2,130</b>	<b>41%</b>	<b>1,572</b>	<b>31%</b>	<b>1,452</b>	<b>28%</b>	<b>5,154</b>	<b>100%</b>

# Trends in Helmet Usage Fatality Rates

Year	Motorcyclists in Crashes						Increased Risk of Fatal Injury**
	Fatalities		Total Motorcyclists*		Percent Killed		
	Helmeted	Unhelmeted	Helmeted	Unhelmeted	Helmeted	Unhelmeted	
2019	18	37	431	317	4.2%	11.7%	<b>2.8 x greater</b>
2020	19	27	386	335	4.9%	8.1%	<b>1.6 x greater</b>
2021	20	35	413	369	4.8%	9.5%	<b>2.0 x greater</b>
2022	25	29	462	295	5.4%	9.8%	<b>1.8 x greater</b>
2023	21	32	438	256	4.8%	12.5%	<b>2.6 x greater</b>
<b>Total</b>	<b>103</b>	<b>160</b>	<b>2,130</b>	<b>1,572</b>	<b>4.8%</b>	<b>10.2%</b>	<b>2.1 x greater</b>

Unhelmeted motorcyclists in crashes were 2.1 times more likely to die in crashes compared to helmeted riders. Between 2019 and 2023, the fatality rate for motorcyclists in crashes was 4.8% for helmeted riders and 10.2% for unhelmeted riders.



\* Limited data: Helmet usage data is unavailable for 28% of motorcyclists in crashes. But fatality data is nearly complete.

\*\* Expressed as the fatality rate of unhelmeted motorcyclists divided by the fatality rate of helmeted motorcyclists.



# Helmet Usage Fatality Rates for Motorcycle Drivers Likely Not at Fault in Crashes

Year	Motorcycle Drivers in Crashes Likely Not at Fault in Crashes						Increased Risk of Fatal Injury
	Driver Fatalities		Total Motorcycle Drivers*		Percent Killed		
	Helmeted	Unhelmeted	Helmeted	Unhelmeted	Helmeted	Unhelmeted	
2019	0	7	216	136	0.0%	5.1%	-
2020	5	3	192	132	2.6%	2.3%	<b>0.9 x greater</b>
2021	2	7	201	157	1.0%	4.5%	<b>4.5 x greater</b>
2022	3	3	221	97	1.4%	3.1%	<b>2.3 x greater</b>
2023	6	9	209	106	2.9%	8.5%	<b>3.0 x greater</b>
<b>Total</b>	<b>16</b>	<b>29</b>	<b>1,039</b>	<b>628</b>	<b>1.5%</b>	<b>4.6%</b>	<b>3.0 x greater</b>

Unhelmeted motorcycle drivers, even when likely not at fault, were 3.0 times more likely to die in crashes compared to helmeted drivers. The fatality rate for these motorcycle drivers in crashes was 1.5% for helmeted riders and 4.6% for unhelmeted riders.

# Age and Helmet Usage of Motorcyclist Fatalities in Crashes

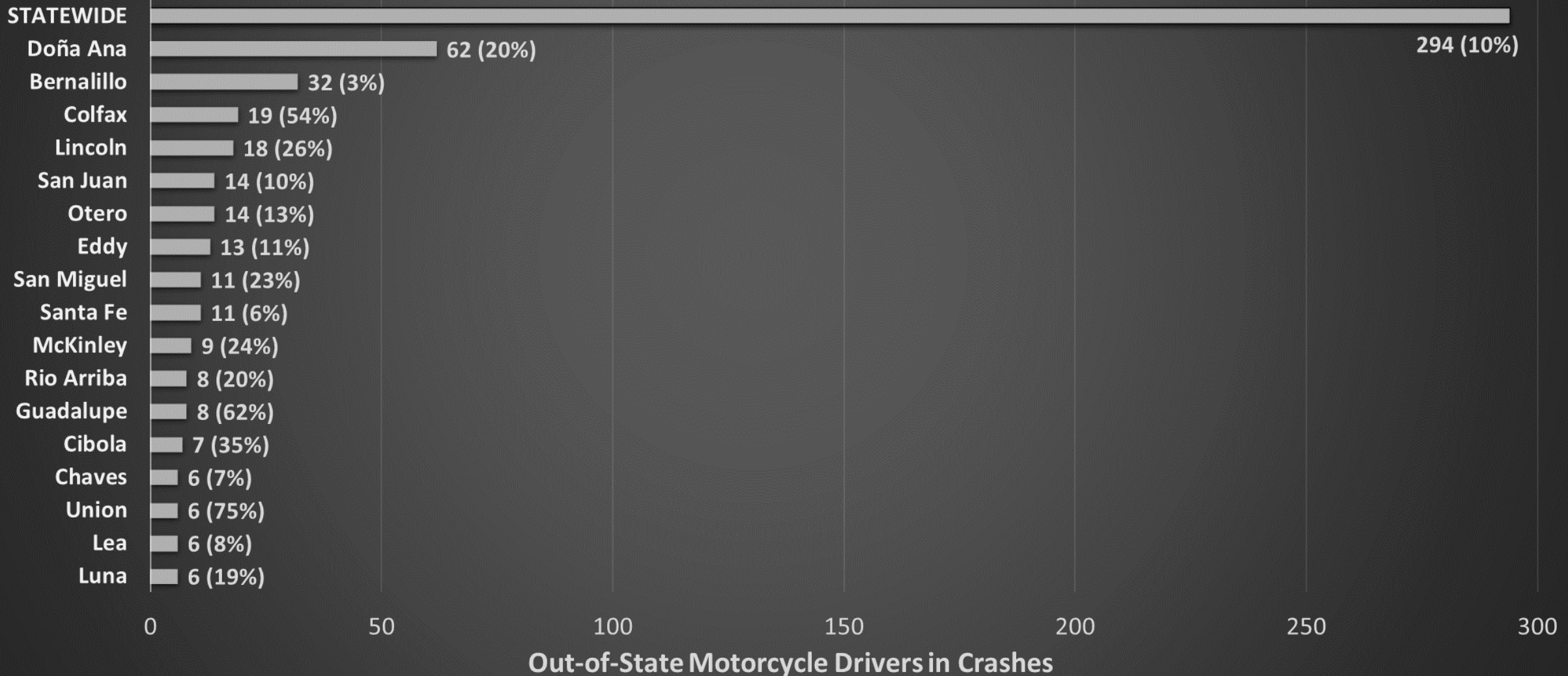
Age Group	Helmet Usage of Motorcyclist Fatalities in Crashes										
	Helmeted					Unhelmeted					Total
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	
<18	2	0	0	2	0	0	2	1	2	0	9
18-19	0	1	0	2	1	0	0	0	1	1	6
20-24	3	5	3	8	7	1	0	1	4	4	36
25-29	3	1	4	3	1	4	2	8	4	7	37
30-34	1	2	3	3	1	4	1	4	0	2	21
35-39	1	0	2	2	0	5	3	3	3	1	21
40-44	1	2	2	1	1	4	5	2	3	4	25
45-49	0	2	0	0	4	5	2	7	3	4	27
50-54	1	2	2	2	1	3	2	3	2	2	20
55-59	2	1	1	0	1	6	4	1	3	1	20
60-64	1	1	1	0	2	3	2	2	3	0	15
65-69	1	2	1	1	1	0	3	2	1	5	17
70 +	2	0	1	1	1	2	1	1	0	1	10
<b>Total</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>25</b>	<b>21</b>	<b>37</b>	<b>27</b>	<b>35</b>	<b>29</b>	<b>32</b>	<b>264</b>

# Out-of-State and ATV/ROV Crashes

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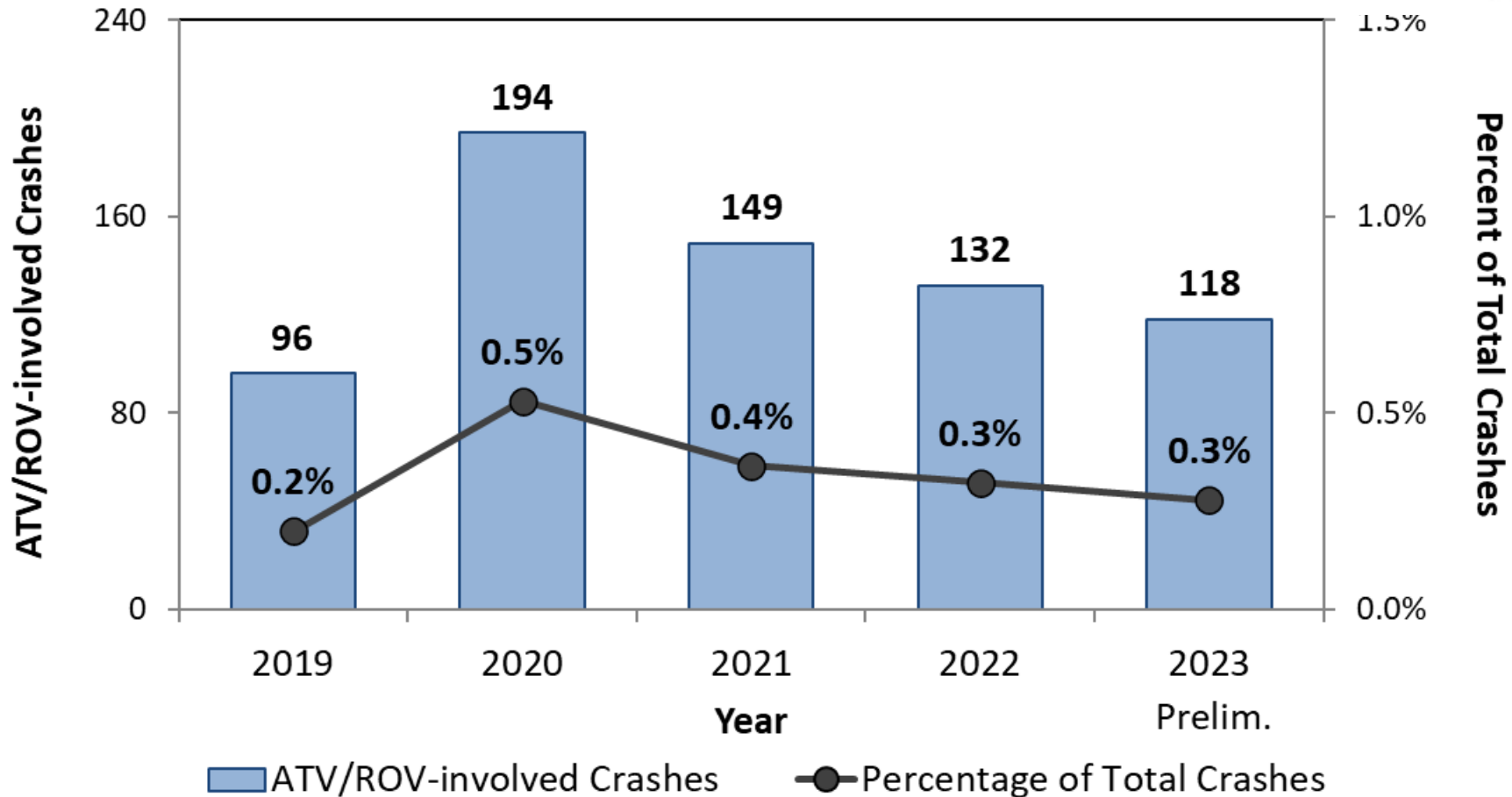
# Leading Counties for Out-of-State Motorcycle Drivers in Crashes, 2021 - 2023

Number (and as a percentage of total motorcycle drivers in crashes in the county)





# ATV/ROV-involved Crashes



# Additional New Mexico Motorcycle Crash Statistics

Prepared by

The University of New Mexico, Geospatial  
and Population Studies (UNM-GPS)

[ContactGPS@unm.edu](mailto:ContactGPS@unm.edu)

Special thanks to the staff at:  
UNM-GPS,  
NMDOT Traffic Records Bureau,  
NHTSA vPIC,  
NM Taxation and Revenue,  
and Law Enforcement Agencies



[Annual Reports](#) (Motorcycle Chapter) – Yearly summaries of motorcycle crashes in the state

[DWI Reports](#) (Motorcyclist Chapter) – Focuses on crashes involving alcohol

[Community Reports](#) – Provides statistics on crashes in various cities, towns and counties across the state

[2024 Fatality Reports](#) – The latest preliminary statistics on motorcycle fatalities

You can search for “motorcycl” (no “e”) within these reports to capture all descriptive variations (motorcycles, motorcyclists).

## [Maps](#)

- [Statewide Motorcycle Crashes](#)
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