

	All Fatalities from Motorcycle Crashes per Million Population	All Fatalities from Passenger Vehicle Crashes per Million Population	2016 DangerOmeter Rank**	2015 DangerOmeter Rank**
New Jersey	7.1	56.65	1	2
Mississippi	14.0	196.17	2	3
Massachusetts	7.0	45.90	3	1
Nebraska	10.8	105.72	4	4
Virginia	10.1	80.30	5	5
Rhode Island*	8.0	45.52	6	21
North Dakota*	14.9	160.02	7	6
New York	8.2	47.84	8	7
Georgia	14.2	115.95	9	10
West Virginia	15.5	136.14	10	9
Oregon	12.4	85.49	11	11
Minnesota	10.6	60.95	12	8
Alabama	17.4	165.31	13	12
Illinois	11.4	66.66	14	16
Washington	10.9	59.53	15	15
Alaska*	12.2	73.52	16	27
Maryland	12.2	71.15	17	18
Idaho	15.4	110.98	18	20
Kansas	15.9	115.36	19	17
Utah	12.7	73.14	20	13
Missouri	16.4	121.08	21	14
Michigan	13.9	86.59	22	19
Maine	15.0	100.62	23	23
California	12.9	71.92	24	22
Ohio	13.9	81.30	25	24
Louisiana	18.8	139.50	26	25
Texas	17.6	113.43	27	29
Vermont*	15.0	82.40	28	28
Pennsylvania	15.0	82.10	29	30
Wisconsin	15.5	84.50	30	32
Iowa	16.5	94.68	31	26
Oklahoma	21.6	149.75	32	36

North Carolina	19.4	120.35	33	34
Tennessee	20.6	133.58	34	33
Indiana	18.3	104.19	35	37
Delaware	18.8	109.49	36	41
Kentucky	21.9	146.72	37	31
Connecticut	14.8	64.89	38	35
Montana	25.2	173.50	39	40
Arkansas	24.2	151.88	40	38
New Mexico	23.3	140.93	41	43
New Hampshire	17.5	75.78	42	44
Colorado	18.6	82.23	43	39
Arizona	21.1	104.63	44	46
Wyoming	29.5	177.63	45	42
Nevada	21.2	89.63	46	45
South Dakota	27.7	129.90	47	47
Florida	27.2	117.62	48	49
South Carolina	32.6	163.26	49	48
Hawaii	21.2	59.02	50	50

The rate “Crash Fatalities per Population” is used to model “Societal Danger.” By considering Fatalities (All or Everybody killed in the crashes of interest) and Population, scientific comparisons between states can be made. Ranking the states by motorcycle societal danger weighted with the states' passenger vehicle societal danger increases the value of the comparison. In other words, we expect that if a state has an "environment for and culture of safety" that is reducing collisions between all vehicles, that state should have a lower motorcycle collision rate as well. Examples of measures that reduce collisions between all vehicles are well engineered road system, speed limit enforcement, weather, etc.

For the DangerOmeter calculation, crashes of interest are motorcycles, and we use passenger vehicles crashes for weighting. (An analogy is when sport teams are ranked by Win/Loss records and the rank is weighted by “Strength of Schedule.”) The fatality counts for crash victims include occupants (drivers and passengers) of all crash involved vehicles, pedestrians, bicyclists, and all others fatally injured in the crash of the vehicle type of interest. Every person who died in a crash was a part of the population. This is why the “All victims in the crash” is divided by population to make a rate useful when comparing the individual states.

To smooth out random fluctuations, we average the most recent five years of data. Note that states with low populations are more susceptible to random fluctuations when comparing year to year rankings.

*These states have very low motorcycle crash fatalities that result in a wider random year to year fluctuation on the DangerOmeter.

****Rank:** Sorting the resulting weighted averages (defined above) from lowest to the highest results in what is called the DangerOmeter. A Dangerometer ranking of 1 indicates the least relative dangerous motorcycling state in the nation. A larger number in rank indicates more relative motorcycle societal danger, with a rank of 50 indicating the state with the most relative motorcycle societal danger.