



UNIVERSITY *of* MARYLAND
SCHOOL OF MEDICINE

SHOCK, TRAUMA AND ANESTHESIOLOGY
RESEARCH CENTER

National Study Center for Trauma & Emergency Medical Services

MOTORCYCLE CRASHES AND HELMET USE

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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Number of Motorcycle Crashes (Benchmarks)	1,748	1,551	1,613	1,481	1,517	1,451	1,274	1,253	1,289	1,343
Number of motorcyclist fatalities (Driver Specific Benchmarks)	75	61	66	70	72	82	57	75	78	76
Number of unhelmeted motorcyclist fatalities (Maryland Crash Data)	15	9	12	9	8	17	9	7	6	15
Percent of fatalities that were unhelmeted	20.0%	14.8%	18.2%	12.9%	11.1%	20.7%	15.8%	9.3%	7.7%	19.7%

5-Year Average

15.41%
2012-2016

14.67%
2017-2021

**Motorcycle Involved
By Jurisdiction**

County	2017	2018	2019	2020	2021	5 Year Total	5 Year Avg.	5 Year %
Allegany	8	18	13	16	21	76	15.2	1.1
Anne Arundel	162	140	129	137	135	703	140.6	10.6
Baltimore	180	212	179	182	191	944	188.8	14.3
Calvert	25	21	19	23	21	109	21.8	1.6
Caroline	4	3	7	6	3	23	4.6	0.3
Carroll	37	31	45	36	27	176	35.2	2.7
Cecil	46	46	39	46	39	216	43.2	3.3
Charles	37	50	53	50	50	240	48	3.6
Dorchester	8	6	12	7	9	42	8.4	0.6
Frederick	86	61	67	78	75	367	73.4	5.6
Garrett	19	10	9	13	7	58	11.6	0.9
Harford	79	46	53	51	73	302	60.4	4.6
Howard	63	41	44	37	48	233	46.6	3.5
Kent	2	1	3	3	2	11	2.2	0.2
Montgomery	140	124	135	99	109	607	121.4	9.2
Prince George's	217	168	170	201	202	958	191.6	14.5
Queen Anne's	19	14	11	13	13	70	14	1.1
St. Mary's	27	37	33	26	47	170	34	2.6
Somerset	9	4	4	2	5	24	4.8	0.4
Talbot	10	11	4	2	9	36	7.2	0.5
Washington	56	51	46	61	52	266	53.2	4.0
Wicomico	32	31	44	29	42	178	35.6	2.7
Worcester	29	26	38	31	32	156	31.2	2.4
Baltimore City	156	122	96	140	131	645	129	9.8
Total Crashes	1,451	1,274	1,253	1,289	1,343	6610	1322	100

**Motorcycle Involved
Driver Gender**

Driver Gender	2017	2018	2019	2020	2021	5 Year Total	5 Year Avg.	5 Year %
Male	1,304	1,136	1,132	1,152	1,217	5,941	1,188	87.0
Female	98	69	77	78	70	392	78	5.7
Unknown	93	101	95	110	95	494	99	7.2
Total Drivers	1,495	1,306	1,304	1,340	1,382	6,827	1,365	100

**Motorcycle Involved
Passenger Gender**

Passenger Gender	2017	2018	2019	2020	2021	5 Year Total	5 Year Avg.	5 Year %
Male	8	17	10	17	11	63	13	13.4
Female	87	69	97	76	77	406	81	86.2
Unknown	0	0	0	1	1	2	0	0.4
Total Passengers	95	86	107	94	89	471	94	100

Motorcycle drivers only.

**Motorcycle Involved
Driver Age**

Driver Age	2017	2018	2019	2020	2021	5 Year Total	5 Year Avg.	5 Year %
15 and Under	5	5	9	10	11	40	8	0.6
16	2	4	3	2	7	18	4	0.3
17	8	10	4	8	10	40	8	0.6
18	17	14	15	7	10	63	13	0.9
19	20	20	25	22	19	106	21	1.6
20	35	28	20	32	23	138	28	2.0
21 - 24	170	137	135	137	126	705	141	10.3
25 - 29	211	164	161	191	177	904	181	13.2
30 - 34	149	137	128	155	173	742	148	10.9
35 - 39	126	106	121	134	163	650	130	9.5
40 - 44	118	74	87	92	104	475	95	7.0
45 - 49	138	111	104	90	102	545	109	8.0
50 - 54	137	116	145	98	111	607	121	8.9
55 - 59	111	124	116	108	108	567	113	8.3
60 - 64	75	86	70	65	69	365	73	5.3
65 - 69	51	42	40	47	50	230	46	3.4
70 - 79	24	32	27	23	24	130	26	1.9
80 +	5	1	4	6	1	17	3	0.2
Unknown	93	95	90	113	94	485	97	7.1
Total Drivers	1,495	1,306	1,304	1,340	1,382	6,827	1,365	100

**Motorcycle Involved
Passenger Age**

Passenger Age	2017	2018	2019	2020	2021	5 Year Total	5 Year Avg.	5 Year %
Under 5	1	1	0	2	1	5	1	1.1
5 - 9	0	3	1	3	1	8	2	1.7
10 - 11	1	1	5	0	4	11	2	2.3
12 - 13	0	1	0	2	2	5	1	1.1
14 - 15	0	1	2	0	0	3	1	0.6
16 - 17	1	2	3	2	2	10	2	2.1
18 - 19	2	3	5	1	3	14	3	3.0
20 - 24	9	9	12	11	9	50	10	10.6
25 - 29	10	10	12	8	4	44	9	9.3
30 - 34	4	7	10	15	9	45	9	9.6
35 - 39	5	7	3	11	14	40	8	8.5
40 - 44	13	2	5	7	9	36	7	7.6
45 - 49	14	12	10	5	8	49	10	10.4
50 - 54	15	9	16	12	7	59	12	12.5
55 - 59	10	12	12	7	8	49	10	10.4
60 - 64	6	5	4	6	5	26	5	5.5
65 - 69	3	0	6	0	1	10	2	2.1
70 - 79	0	0	0	1	2	3	1	0.6
80 +	1	1	1	1	0	4	1	0.8
Unknown	0	0	0	0	0	0	0	0.0
Total Passengers	95	86	107	94	89	471	94	100