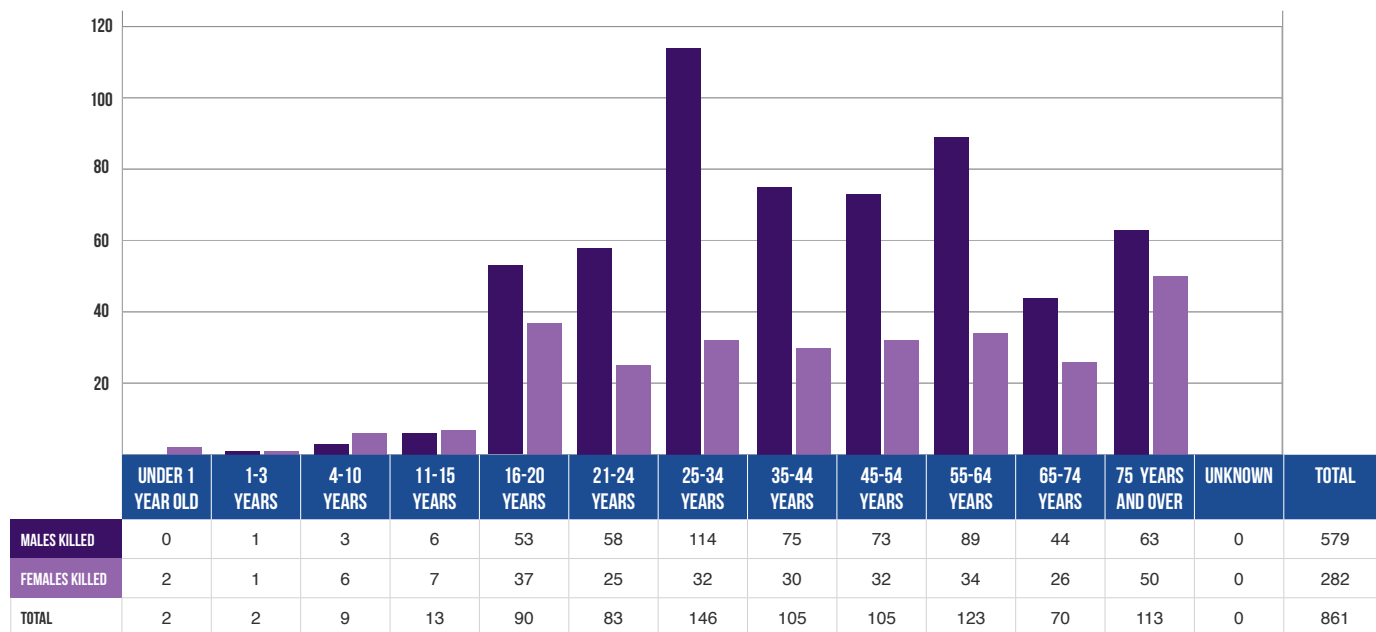


AGE AND GENDER OF OCCUPANTS KILLED OR INJURED IN MOTOR VEHICLE CRASHES

OCCUPANTS KILLED



The majority (67.2%) of occupants killed in traffic crashes in 2016 were male.

OCCUPANTS INJURED

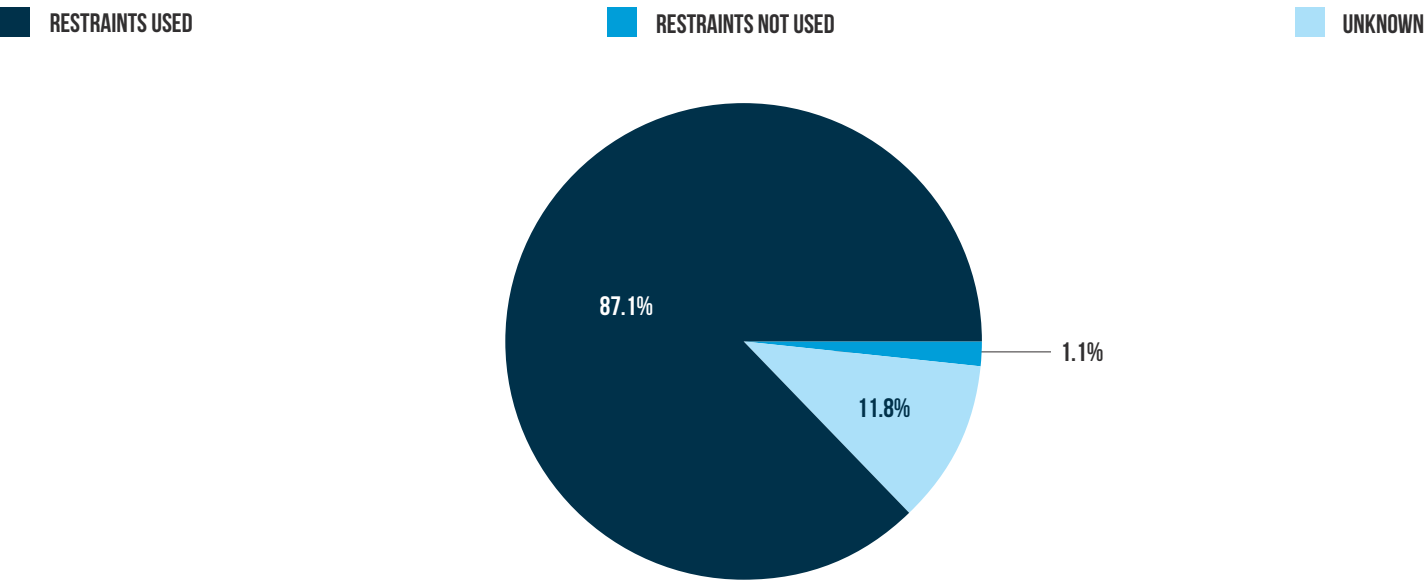


The majority (54.6%) of occupants injured in traffic crashes in 2016 were female.

Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

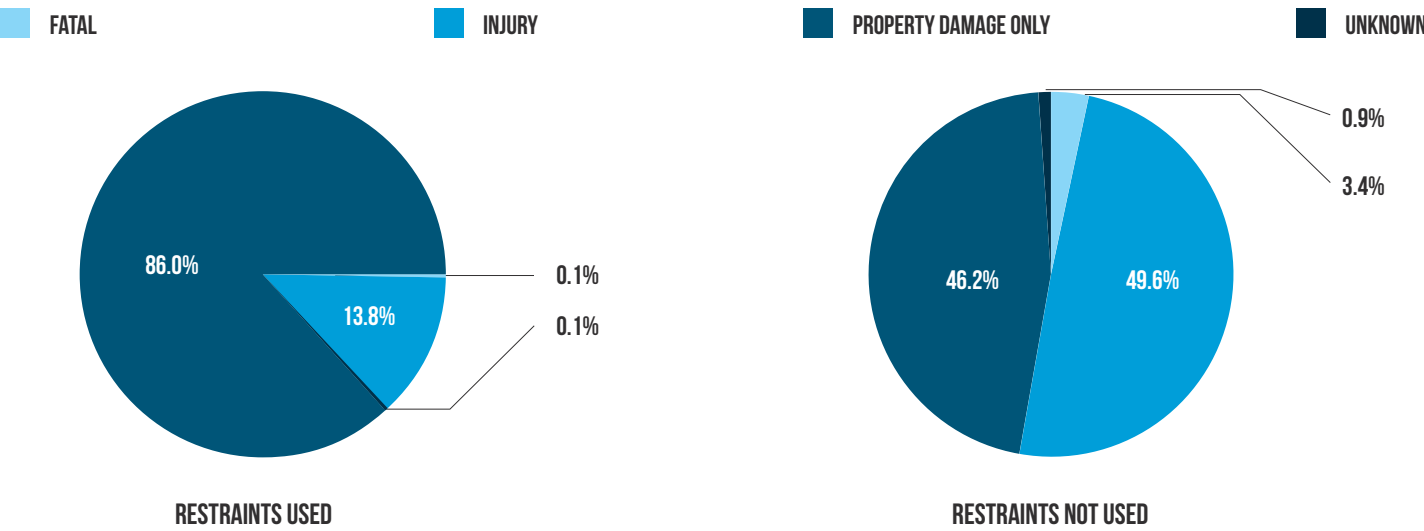
REPORTED OCCUPANT RESTRAINT USAGE FOR ALL DRIVERS AND INJURED PASSENGERS

REPORTED OCCUPANT RESTRAINT USAGE



Of the 553,266 drivers and injured passengers involved in crashes, 481,874 (87.1%) were REPORTED to be using occupant restraints.

INJURY SEVERITY



Occupants in crashes were 44 times more likely to be killed if they were not wearing their restraints.

Note: These charts do not include helmet usage.

MOTOR VEHICLE OCCUPANTS & INJURY SEVERITY BY SEATING POSITION AND KNOWN BELT USAGE

SEATING POSITION	BELTS USED*		FATAL	INJURY			NO INJURY
	Number	% of Total		A	B	C	
Left Front	464,336	96.8	269	2,464	11,656	36,645	413,302
Center Front	565	0.1	0	17	58	200	290
Right Front	11,123	2.3	79	539	2,170	7,859	476
Left Rear Second Seat	1,260	0.3	8	66	245	941	0
Center Rear Second Seat	193	0.0	3	13	49	128	0
Right Rear Second Seat	1,300	0.3	4	60	264	972	0
Left Rear Third Seat	319	0.1	0	10	58	251	0
Center Rear Third Seat	66	0.0	0	2	11	53	0
Right Rear Third Seat	406	0.1	1	22	84	299	0
Left Rear Fourth Seat	16	0.0	0	1	3	11	1
Center Rear Fourth Seat	3	0.0	0	0	1	2	0
Right Rear Fourth Seat	14	0.0	0	1	0	13	0
Other Passenger Area	47	0.0	0	0	9	32	6
Unknown	150	0.0	0	0	11	13	126
Uncoded & Errors	37	0.0	0	0	0	0	37
TOTAL †	479,835	100.0	364	3,195	14,619	47,419	414,238

* Belts Used includes use of lap, shoulder, or both belts, or restraint failure. Children who were using or not using a child restraint are in separate tables on the next two pages.

† This total does not include 500 occupants with unknown injury severity.

SEATING POSITION	BELTS NOT USED*		FATAL	INJURY			NO INJURY
	Number	% of Total		A	B	C	
Left Front	4,042	67.4	145	354	559	526	2,458
Center Front	64	1.1	2	11	12	18	21
Right Front	480	8.0	27	108	165	154	26
Left Rear Second Seat	264	4.4	15	45	68	136	0
Center Rear Second Seat	85	1.4	6	17	30	32	0
Right Rear Second Seat	286	4.8	9	40	94	143	0
Left Rear Third Seat	68	1.1	0	8	21	39	0
Center Rear Third Seat	37	0.6	0	6	12	19	0
Right Rear Third Seat	64	1.1	0	8	23	33	0
Left Rear Fourth Seat	10	0.2	0	1	3	6	0
Center Rear Fourth Seat	5	0.1	0	2	0	3	0
Right Rear Fourth Seat	4	0.1	0	1	0	3	0
Other Passenger Area	154	2.6	1	18	38	93	4
Unknown	395	6.6	1	10	7	86	291
Uncoded & Errors	38	0.6	0	0	0	0	38
TOTAL †	5,996	100.0	206	629	1,032	1,291	2,838

* No belts were available or no belts were used. Children who were using or not using a child restraint are in separate tables on the next two pages.

† This total does not include 52 occupants with unknown injury severity.

Note: Michigan law requires that all persons must wear a seatbelt when riding in the front seat of a motor vehicle.

REPORTED RESTRAINT USE - CHILDREN

On July 1, 2008, Michigan law was amended. (<http://legislature.mi.gov/doc.aspx?mcl-257-710e>)

Any child under four years of age must be in an approved Child Safety Seat (CSS)/Child Restraint Device (CRD), and riding in the rear seat. All children less than 8 years of age AND who are less than 4'9" in height, must be properly restrained in a child restraint system. All children ages 8 through 15 must wear a properly adjusted and fastened seat belt when riding in either the front or back seat of a vehicle.

RESTRAINT USAGE	CHILDREN		FATAL	INJURY		
	Number	% of Total		A	B	C
AGE 0						
Belts Used	32	13.4	0	5	3	24
No Belts Used	27	11.3	0	0	0	27
Child Restraint Used - Forward Facing	94	39.5	1	3	8	82
Child Restraint Used - Rear Facing	69	29.0	0	0	5	64
Child Restraint Used - Booster Seat	0	0.0	0	0	0	0
Child Restraint Not Used	5	2.1	1	2	1	1
Restraint Failed	2	0.8	0	1	0	1
Unknown	9	3.8	0	2	0	7
Total	238	100.0	2	13	17	206
AGE 1						
Belts Used	11	4.8	1	0	2	8
No Belts Used	2	0.9	0	0	0	2
Child Restraint Used - Forward Facing	155	67.4	0	4	33	118
Child Restraint Used - Rear Facing	35	15.2	0	0	1	34
Child Restraint Used - Booster Seat	4	1.7	0	0	1	3
Child Restraint Not Used	10	4.3	0	1	4	5
Restraint Failed	0	0.0	0	0	0	0
Unknown	13	5.7	0	2	1	10
Total	230	100.0	1	7	42	180
AGE 2						
Belts Used	17	7.2	0	0	5	12
No Belts Used	7	3.0	0	1	4	2
Child Restraint Used - Forward Facing	178	75.1	1	8	35	134
Child Restraint Used - Rear Facing	11	4.6	0	1	2	8
Child Restraint Used - Booster Seat	10	4.2	0	0	2	8
Child Restraint Not Used	8	3.4	0	0	3	5
Restraint Failed	0	0.0	0	0	0	0
Unknown	6	2.5	0	1	2	3
Total	237	100.0	1	11	53	172

REPORTED RESTRAINT USE - CHILDREN (CONTINUED)

RESTRAINT USAGE	CHILDREN		FATAL	INJURY		
	Number	% of Total		A	B	C
AGE 3						
Belts Used	23	9.4	0	1	3	19
No Belts Used	4	1.6	0	1	0	3
Child Restraint Used - Forward Facing	172	70.2	0	5	35	132
Child Restraint Used - Rear Facing	3	1.2	0	0	1	2
Child Restraint Used - Booster Seat	20	8.2	0	1	6	13
Child Restraint Not Used	12	4.9	0	0	5	7
Restraint Failed	0	0.0	0	0	0	0
Unknown	11	4.5	0	0	1	10
Total	245	100.0	0	8	51	186
AGE 4-7						
Belts Used	376	33.1	1	18	90	267
No Belts Used	47	4.1	1	5	9	32
Child Restraint Used - Forward Facing	455	40.1	0	15	93	347
Child Restraint Used - Rear Facing	5	0.4	0	1	3	1
Child Restraint Used - Booster Seat	149	13.1	0	11	25	113
Child Restraint Not Used	46	4.1	0	5	9	32
Restraint Failed	3	0.3	0	1	0	2
Unknown	54	4.8	1	2	13	38
Total	1,135	100.0	3	58	242	832
AGE 8-15						
Belts Used	2,382	83.2	8	80	440	1,854
No Belts Used	225	7.9	7	23	68	127
Child Restraint Used - Forward Facing	70	2.4	0	1	16	53
Child Restraint Used - Rear Facing	3	0.1	0	0	0	3
Child Restraint Used - Booster Seat	23	0.8	0	1	5	17
Child Restraint Not Used	11	0.4	0	1	2	8
Restraint Failed	1	0.0	0	0	0	1
Unknown	149	5.2	3	8	43	95
Total	2,864	100.0	18	114	574	2,158

Information about uninjured passengers is not required to be reported by the officer on the crash report, thus these tables relate the experience of only those children with injuries in crashes.

Note: Safety equipment usage is often self-reported and may not reflect actual usage.

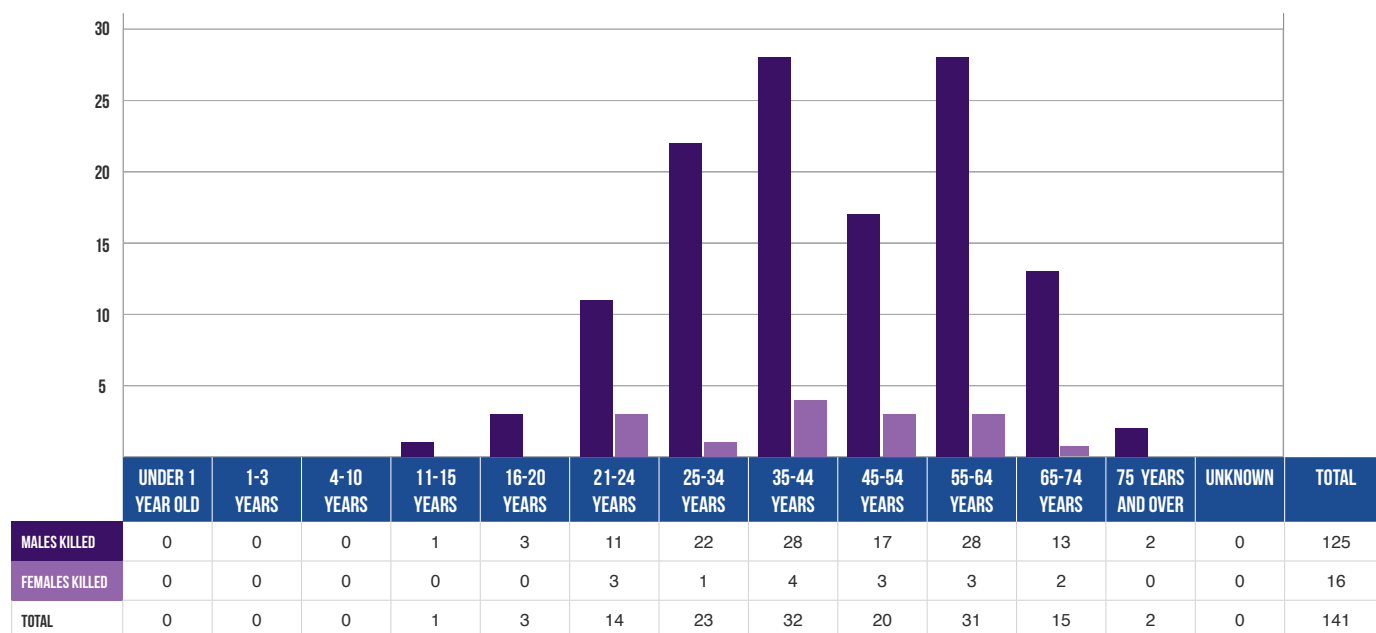
MOTOR VEHICLE OCCUPANT INJURY SEVERITY BY KNOWN AIRBAG DEPLOYMENT

MOTOR VEHICLE OCCUPANT AIRBAG DEPLOYMENT	OCCUPANTS		FATAL	OCCUPANT INJURY SEVERITY			NO INJURY
	Number	% of Total		A	B	C	
Deployed - front	52,516	9.4	292	1,941	6,969	14,316	28,802
Deployed - side	2,191	0.4	11	67	201	542	1,366
Deployed - curtain	1,393	0.2	8	41	161	362	819
Deployed - combination	6,662	1.2	69	440	1,194	2,104	2,853
Deployed - other	173	0.0	0	1	18	50	104
Not deployed	423,944	76.0	193	1,364	6,700	29,916	384,266
Not equipped	31,558	5.7	244	1,163	2,857	5,156	10,560
Unknown	27,999	5.0	44	83	174	455	3,543
Uncoded & Errors	11,439	2.1	0	13	13	44	709
TOTAL	557,875	100.0	861	5,113	18,287	52,945	433,022

* Includes 47,647 occupants (drivers and passengers) with unknown injury severity.

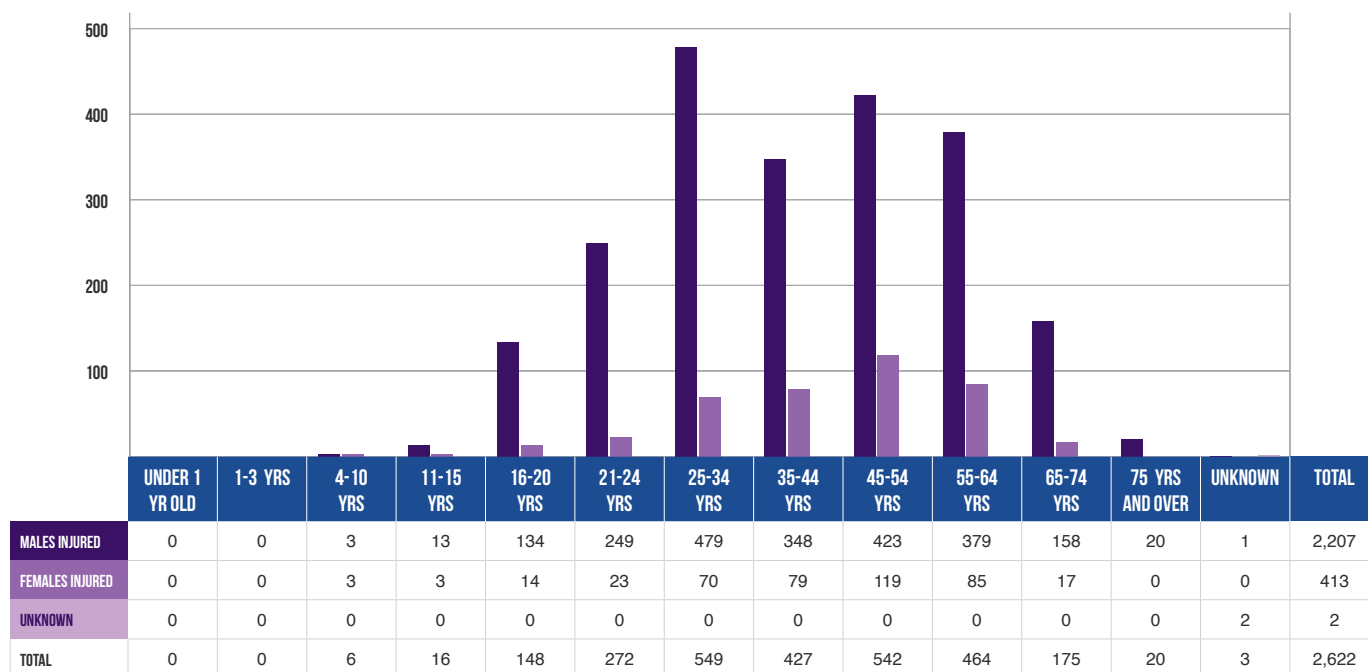
AGE AND GENDER OF MOTORCYCLISTS KILLED OR INJURED IN MOTOR VEHICLE CRASHES

MOTORCYCLISTS KILLED



Of the 141 motorcyclists killed in traffic crashes in 2016, 88.7 percent were male. In comparison, 67.2 percent of all occupants killed in crashes were male.

MOTORCYCLISTS INJURED



Of the 2,622 motorcyclists injured in traffic crashes in 2016, 84.2 percent were male. In comparison, 45.4 percent of all occupants injured in crashes were male.

MOTORCYCLE HELMET USAGE AND INJURY SEVERITY

AGE OF MOTORCYCLIST	FATALITIES	INJURY			NO INJURY
		A	B	C	
HELMET WORN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	2	3	2
11 - 15 years	0	2	7	2	0
16 - 20 years	2	25	57	32	31
21 - 24 years	9	41	99	69	56
25 - 34 years	10	69	171	119	94
35 - 44 years	12	47	113	85	83
45 - 54 years	8	75	129	102	108
55 - 64 years	10	69	142	91	106
65 - 74 years	10	35	51	33	38
75 years and over	2	4	8	5	8
Unknown	0	0	0	0	0
Subtotal	63	367	779	541	526
HELMET NOT WORN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	0	0	0
11 - 15 years	1	1	3	1	0
16 - 20 years	1	5	15	7	13
21 - 24 years	4	16	27	6	16
25 - 34 years	12	53	71	40	35
35 - 44 years	18	52	76	35	41
45 - 54 years	12	75	82	49	49
55 - 64 years	19	45	49	34	41
65 - 74 years	3	15	19	10	13
75 years and over	0	1	1	0	1
Unknown	0	0	1	0	0
Subtotal	70	263	344	182	209
HELMET USE UNKNOWN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	1	0	0
11 - 15 years	0	0	0	0	0
16 - 20 years	0	1	4	2	3
21 - 24 years	1	2	7	5	10
25 - 34 years	1	7	8	10	18
35 - 44 years	2	2	9	5	16
45 - 54 years	0	6	7	13	23
55 - 64 years	2	5	13	12	9
65 - 74 years	2	4	1	5	2
75 years and over	0	0	0	1	2
Unknown	0	0	1	0	2
Subtotal	8	27	51	53	85
TOTAL	141	657	1,174	776	820

2011 Michigan motor vehicle crash data represents the last full year of data that was collected during Michigan's universal helmet law, enacted in 1969: Michigan Vehicle Code Public Act 300 of 1949, Section 257.658, requiring all motorcycle riders to wear a helmet. On April 13, 2012, Michigan changed their helmet law from a universal to a partial helmet law. The partial law allows some certified Michigan riders, who are over 21 and carry additional insurance, to ride without a helmet.

HELMET WORN



DRIVERS KILLED: 58
PASSENGERS KILLED: 5

HELMET NOT WORN



DRIVERS KILLED: 64
PASSENGERS KILLED: 6

HELMET USE UNKNOWN



DRIVERS KILLED: 8
PASSENGERS KILLED: 0

OCCUPANT INJURY OUTCOME BY VEHICLE TYPE

VEHICLE	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
Passenger car, SUV, van	570	3,622	14,458	45,925	64,575	83.6
Motor home	7	54	291	938	1,290	1.7
Pickup truck	85	462	1,717	4,036	6,300	8.2
Small Truck under 10,000 lbs. GVWR	7	27	114	329	477	0.6
Motorcycle	141	659	1,183	780	2,763	3.6
Moped / goped	11	65	168	101	345	0.4
Go-cart / golf cart	0	7	13	7	27	0.0
Snowmobile	9	27	21	18	75	0.1
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	13	101	115	63	292	0.4
Other	5	28	56	141	230	0.3
Unknown	1	1	4	20	26	0.0
CDL Truck/Bus (breakdown below)	12	60	147	587	806	1.0
Total Number of Vehicles	861	5,113	18,287	52,945	77,206	100.0

HEAVY TRUCK/BUS GROSS VEHICLE WEIGHT RATING	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
10,000 lbs. or less	0	0	1	4	5	0.6
10,001 - 26,000 lbs.	2	14	26	116	158	19.6
Greater than 26,000 lbs.	10	46	120	466	642	79.7
Uncoded & Errors	0	0	0	1	1	0.1
Total Number of Occupants	12	60	147	587	806	100.0

Note:

1) School bus is not recorded on the UD-10 and cannot be broken out of CDL Truck/Bus.

2) These crashes involve a motor vehicle in transport on a public trafficway (in Michigan) and result in injury, death, or at least \$1,000 in property damage.