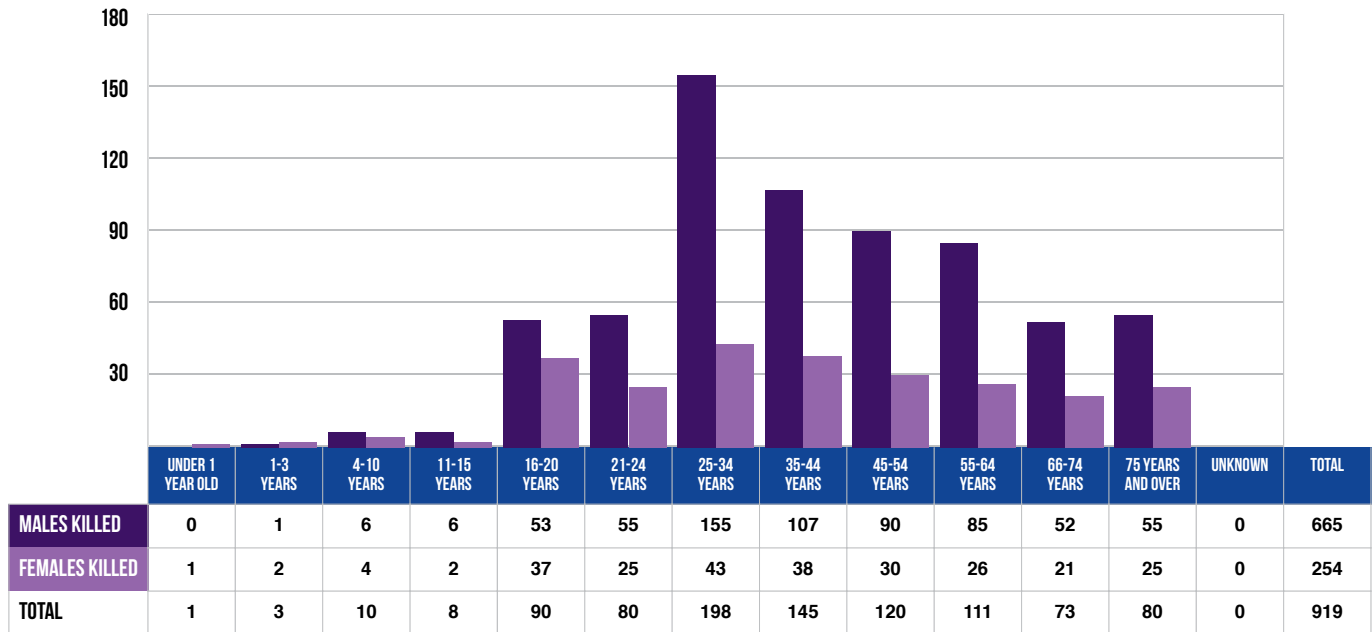


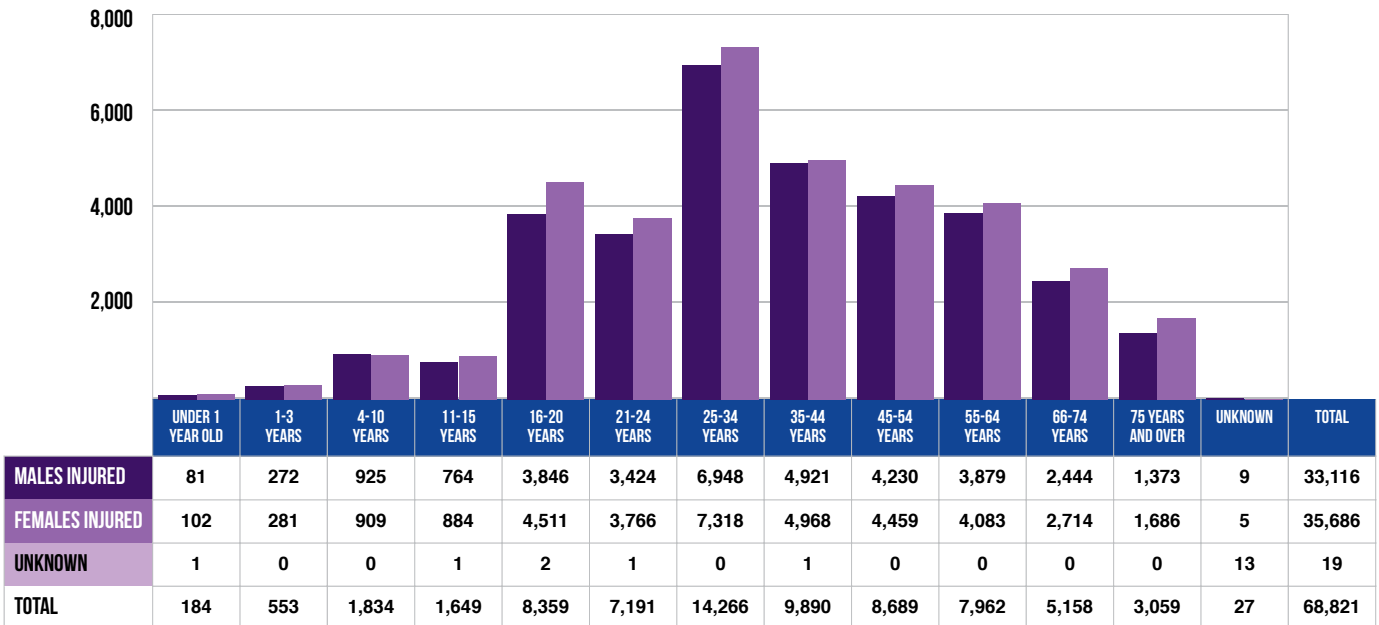
AGE AND GENDER OF OCCUPANTS KILLED OR INJURED IN MOTOR VEHICLE CRASHES

OCCUPANTS KILLED



The majority (72.4%) of occupants killed in traffic crashes in 2021 were male.

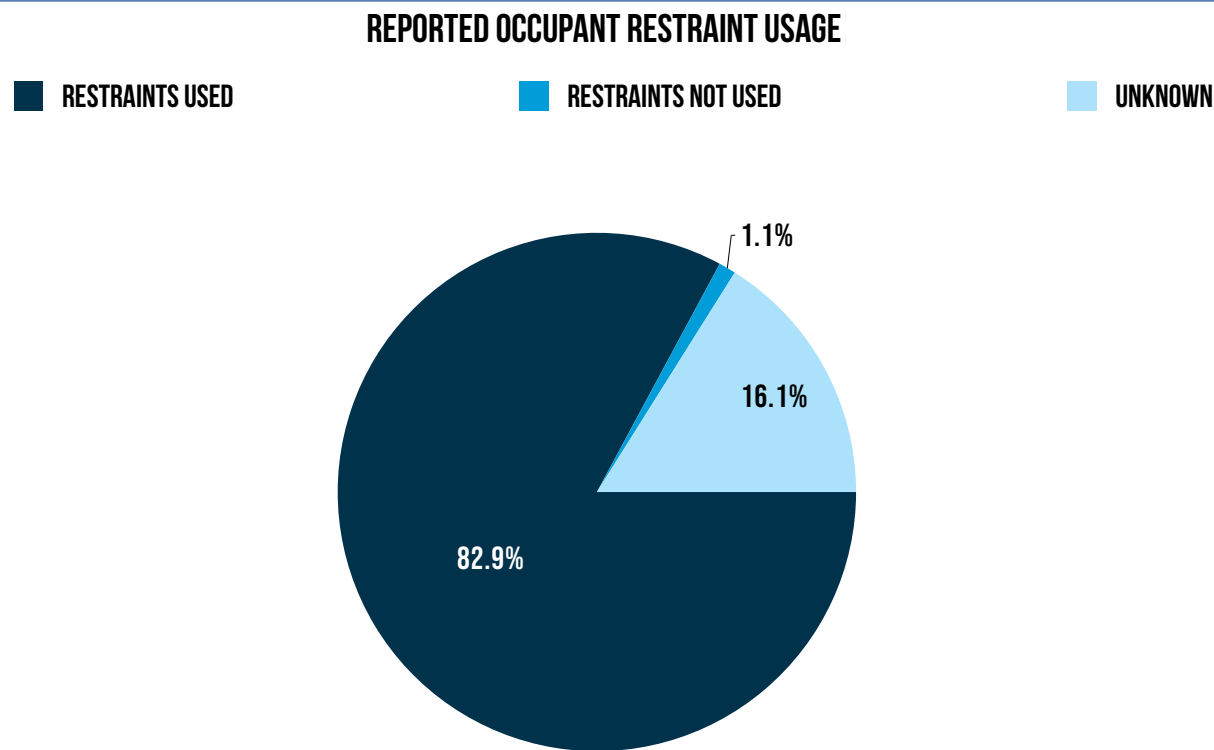
OCCUPANTS INJURED



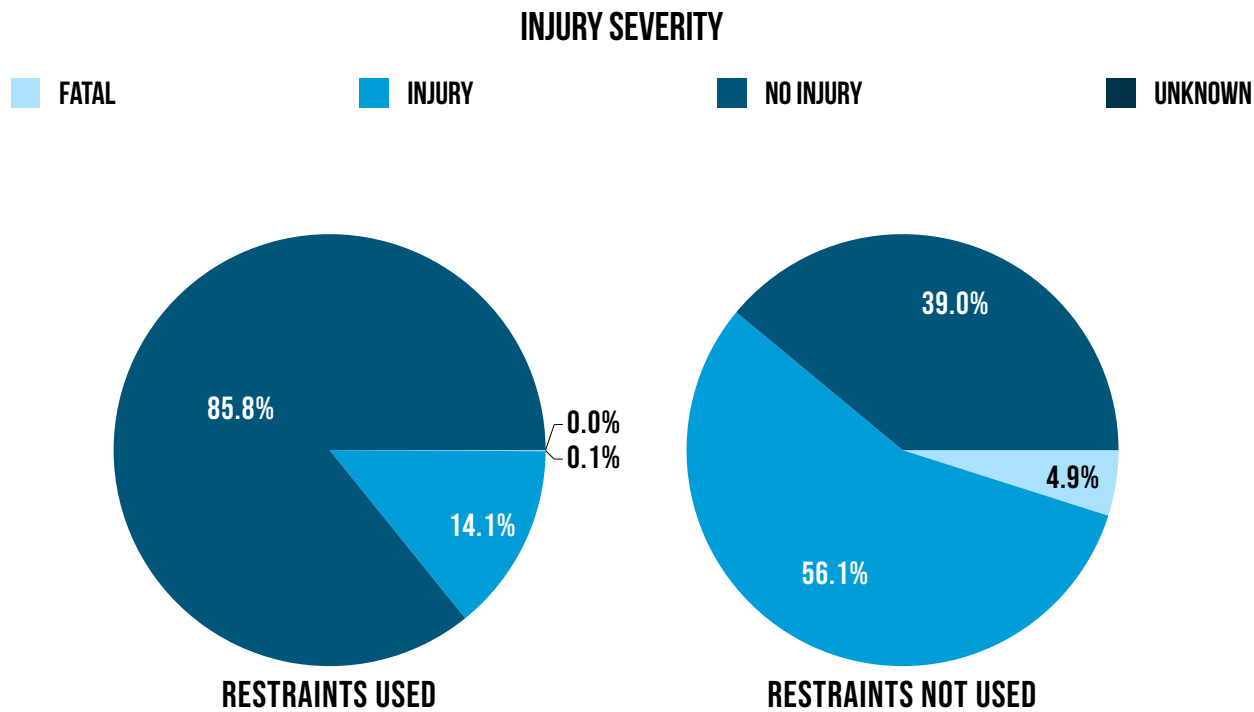
The majority (51.9%) of occupants injured in traffic crashes in 2021 were female.

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

REPORTED OCCUPANT RESTRAINT USAGE FOR ALL DRIVERS AND INJURED PASSENGERS



Of the 488,392 drivers and injured passengers involved in crashes, 404,682 (82.9%) were REPORTED to be using occupant restraints.



Occupants in crashes were 60 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	390,948	96.9	261	2,403	12,925	28,817	346,542
Center Front	526	0.1	1	20	80	222	203
Right Front	8,979	2.2	51	428	1,879	6,234	387
Left Rear Second Seat	1,225	0.3	2	71	271	881	0
Center Rear Second Seat	173	0.0	0	7	31	135	0
Right Rear Second Seat	1,212	0.3	6	54	251	901	0
Left Rear Third Seat	152	0.0	0	10	33	109	0
Center Rear Third Seat	29	0.0	0	2	10	17	0
Right Rear Third Seat	117	0.0	0	5	22	90	0
Left Rear Fourth Seat	11	0.0	0	2	3	6	0
Center Rear Fourth Seat	8	0.0	0	2	3	3	0
Right Rear Fourth Seat	14	0.0	0	1	5	8	0
Other Passenger Area	14	0.0	1	0	3	10	0
Unknown	129	0.0	1	0	4	22	102
Uncoded & Errors	2	0.0	0	0	0	1	1
TOTAL †	403,539	100.0	323	3,005	15,520	37,456	347,235

* 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.

SEATING POSITION	BELTS NOT USED *		FATAL	INJURY			NO INJURY
	Number	% of Total		A	B	C	
Left Front	3,663	71.2	204	515	589	594	1,761
Center Front	62	1.2	3	5	16	23	15
Right Front	463	9.0	28	121	145	151	18
Left Rear Second Seat	184	3.6	4	33	56	91	0
Center Rear Second Seat	63	1.2	2	15	22	24	0
Right Rear Second Seat	241	4.7	9	41	72	119	0
Left Rear Third Seat	36	0.7	1	2	13	20	0
Center Rear Third Seat	9	0.2	0	1	3	5	0
Right Rear Third Seat	26	0.5	1	2	9	14	0
Left Rear Fourth Seat	8	0.2	0	0	5	3	0
Center Rear Fourth Seat	2	0.0	0	0	0	2	0
Right Rear Fourth Seat	6	0.1	0	1	1	4	0
Other Passenger Area	88	1.7	1	12	12	61	2
Unknown	291	5.7	1	7	20	26	237
Uncoded & Errors	0	0.0	0	0	0	0	0
TOTAL †	5,142	100.0	254	755	963	1,137	2,033

* 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 three 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 USAGE - 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	25	13.5	0	0	2	23
No Belts Used	6	3.2	0	0	1	5
Child Restraint Used - Forward Facing	22	11.9	1	0	3	18
Child Restraint Used - Rear Facing	110	59.5	0	4	7	99
Child Restraint Used - Booster Seat	1	0.5	0	0	0	1
Child Restraint Not Used	7	3.8	0	1	4	2
Restraint Failed	0	0.0	0	0	0	0
Unknown	14	7.6	0	2	2	10
Total	185	100.0	1	7	19	158
AGE 1						
Belts Used	10	6.1	0	3	0	7
No Belts Used	3	1.8	0	1	1	1
Child Restraint Used - Forward Facing	64	39.0	0	0	11	53
Child Restraint Used - Rear Facing	67	40.9	0	0	11	56
Child Restraint Used - Booster Seat	5	3.0	0	0	0	5
Child Restraint Not Used	5	3.0	0	1	3	1
Restraint Failed	0	0.0	0	0	0	0
Unknown	10	6.1	0	0	2	8
Total	164	100.0	0	5	28	131
AGE 2						
Belts Used	19	11.0	0	1	2	16
No Belts Used	2	1.2	0	0	1	1
Child Restraint Used - Forward Facing	107	62.2	0	2	21	84
Child Restraint Used - Rear Facing	19	11.0	0	1	1	17
Child Restraint Used - Booster Seat	8	4.7	0	0	1	7
Child Restraint Not Used	7	4.1	0	1	3	3
Restraint Failed	0	0.0	0	0	0	0
Unknown	10	5.8	0	0	2	8
Total	172	100.0	0	5	31	136

REPORTED RESTRAINT USE - CHILDREN (CONTINUED)

RESTRAINT USAGE	CHILDREN		FATAL	INJURY		
	Number	% of Total		A	B	C
AGE 3						
Belts Used	25	11.4	0	0	5	20
No Belts Used	3	1.4	0	0	1	2
Child Restraint Used - Forward Facing	137	62.3	1	6	30	100
Child Restraint Used - Rear Facing	10	4.5	0	1	4	5
Child Restraint Used - Booster Seat	19	8.6	2	1	5	11
Child Restraint Not Used	8	3.6	0	2	5	1
Restraint Failed	0	0.0	0	0	0	0
Unknown	18	8.2	0	2	5	11
Total	220	100.0	3	12	55	150
AGE 4-7						
Belts Used	361	35.9	1	8	75	277
No Belts Used	52	5.2	2	3	19	28
Child Restraint Used - Forward Facing	275	27.4	1	7	61	206
Child Restraint Used - Rear Facing	9	0.9	0	0	3	6
Child Restraint Used - Booster Seat	188	18.7	1	5	47	135
Child Restraint Not Used	38	3.8	2	4	12	20
Restraint Failed	1	0.1	0	0	1	0
Unknown	81	8.1	1	7	18	55
Total	1,005	100.0	8	34	236	727
AGE 8-15						
Belts Used	1,873	79.2	4	71	392	1,406
No Belts Used	199	8.4	5	38	72	84
Child Restraint Used - Forward Facing	35	1.5	0	0	7	28
Child Restraint Used - Rear Facing	0	0.0	0	0	0	0
Child Restraint Used - Booster Seat	45	1.9	0	0	12	33
Child Restraint Not Used	8	0.3	0	0	3	5
Restraint Failed	3	0.1	0	0	1	2
Unknown	201	8.5	1	21	40	139
Total	2,364	100.0	10	130	527	1,697

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.

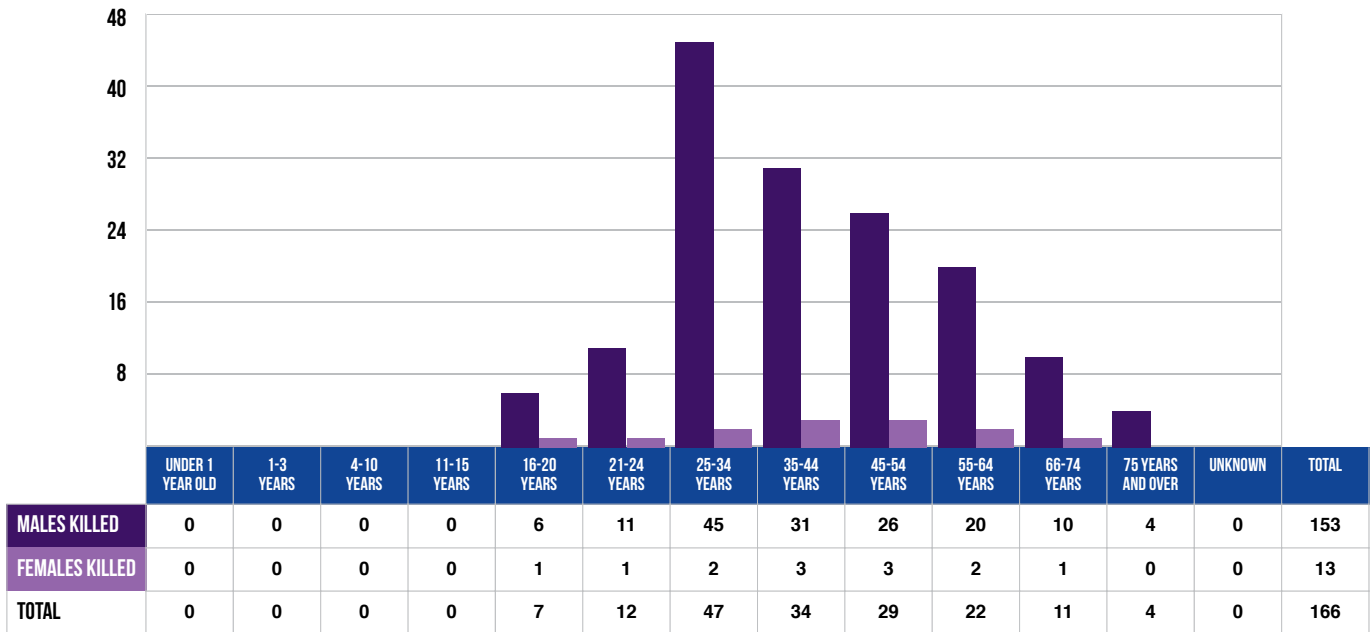
MOTOR VEHICLE OCCUPANT INJURY SEVERITY BY KNOWN AIRBAG DEPLOYMENT

MOTOR VEHICLE OCCUPANT AIRBAG DEPLOYMENT	OCCUPANTS*		FATAL	OCCUPANT INJURY SEVERITY			NO INJURY
	Number	% of Total		A	B	C	
Deployed - Front	37,462	7.6	208	1,238	5,146	8,805	22,064
Deployed - Side	5,088	1.0	18	120	493	1,178	3,279
Deployed - Curtain	3,830	0.8	11	88	484	973	2,274
Deployed - Combination	29,022	5.9	261	1,620	5,248	8,589	13,302
Deployed - Other	400	0.1	1	8	52	95	244
Not Deployed	348,225	70.7	148	1,232	6,247	21,901	318,679
Not Equipped	11,068	2.2	207	1,072	1,567	1,392	5,416
Unknown	50,854	10.3	65	125	316	823	6,549
Uncoded & Errors	6,683	1.4	0	1	2	6	9
TOTAL	492,632	100.0	919	5,504	19,555	43,762	371,816

*Includes 51,076 occupants (drivers and passengers) with unknown injury severity.

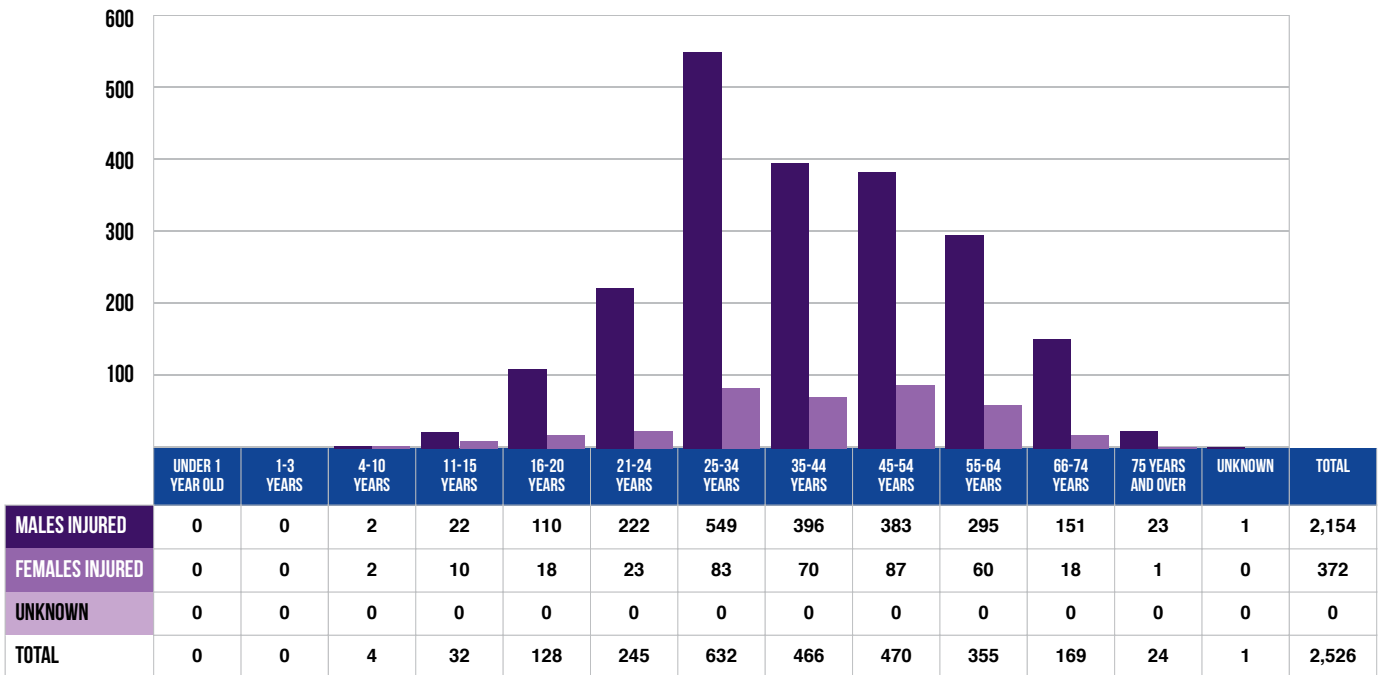
AGE AND GENDER OF MOTORCYCLISTS KILLED OR INJURED IN MOTOR VEHICLE CRASHES

MOTORCYCLISTS KILLED



Of the 166 motorcyclists killed in traffic crashes in 2021, 92.2 percent were male. In comparison, 72.4 percent of all occupants killed in crashes were male.

MOTORCYCLISTS INJURED



Of the 2,526 motorcyclists injured in traffic crashes in 2021, 85.3 percent were male. In comparison, 48.1 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	1	2	1
11 - 15 years	0	4	8	5	1
16 - 20 years	3	30	44	20	19
21 - 24 years	7	44	82	46	50
25 - 34 years	20	111	174	74	103
35 - 44 years	14	53	103	58	77
45 - 54 years	14	62	109	55	83
55 - 64 years	8	70	86	44	67
65 - 74 years	7	37	48	29	44
75 years and over	2	7	11	3	5
Unknown	0	0	0	0	0
Subtotal	75	418	666	336	450
HELMET NOT WORN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	0	0	0
11 - 15 years	0	5	6	3	0
16 - 20 years	2	12	12	3	4
21 - 24 years	4	24	25	12	17
25 - 34 years	25	90	94	50	60
35 - 44 years	13	88	83	48	50
45 - 54 years	11	69	97	37	44
55 - 64 years	13	65	55	21	32
65 - 74 years	3	14	30	6	10
75 years and over	1	0	2	1	0
Unknown	0	0	0	0	0
Subtotal	72	367	404	181	217
HELMET USE UNKNOWN					
3 years and under	0	0	0	0	1
4 - 10 years	0	1	0	0	0
11 - 15 years	0	1	0	0	0
16 - 20 years	2	2	3	2	0
21 - 24 years	1	1	7	3	5
25 - 34 years	2	11	17	11	22
35 - 44 years	7	12	13	8	18
45 - 54 years	4	17	15	9	11
55 - 64 years	1	7	5	2	12
65 - 74 years	1	1	4	0	7
75 years and over	1	0	0	0	2
Unknown	0	0	0	0	0
Subtotal	19	53	64	35	78
TOTAL	166	838	1,134	552	745

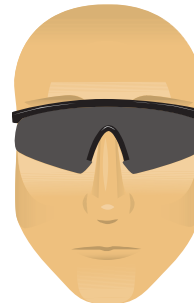
2011 Michigan motor vehicle crash data represents the last full year of data that was collected during Michigan's universal helmet law, enacted in 1969: Michigan Vehicle Code Public Act 300 of 1949, Section 257.658, requiring all motorcycle riders to wear a helmet. On April 13, 2012, Michigan changed 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: 73
PASSENGERS KILLED: 2

HELMET NOT WORN



DRIVERS KILLED: 68
PASSENGERS KILLED: 4

HELMET USE UNKNOWN



DRIVERS KILLED: 18
PASSENGERS KILLED: 1

OCCUPANT INJURY OUTCOME BY VEHICLE TYPE

VEHICLE	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
Passenger Car, SUV, Van	580	3,733	15,867	38,577	58,757	84.3
Motor Home	0	6	36	94	136	0.2
Pickup Truck	112	563	1,793	3,529	5,997	8.6
Small Truck Under 10,000 lbs. GVWR	2	16	46	106	170	0.2
Motorcycle	166	838	1,135	553	2,692	3.9
Moped/Goped	7	91	189	121	408	0.6
Go-Cart/Golf Cart	0	6	25	16	47	0.1
Snowmobile	5	32	20	12	69	0.1
Off-Road Vehicle (ORV)/All-Terrain Vehicle (ATV)	21	122	130	84	357	0.5
Other (non-registered farm equipment, construction equipment, snow plows, etc.)	8	33	52	98	191	0.3
Uncoded & Errors	0	1	3	7	11	0.0
Truck/Bus (over 10,000 lbs. GVWR/8+ occupants/hazmat placard) (breakdown below)	18	63	259	565	905	1.3
Total Number of Occupants	919	5,504	19,555	43,762	69,740	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	1	0	0	2	3	0.3
10,001-26,000 lbs.	8	19	100	228	355	39.2
Greater Than 26,000 lbs.	9	44	159	335	547	60.4
Uncoded & Errors	0	0	0	0	0	0.0
Total Number of Occupants	18	63	259	565	905	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.