

## UPPER PENINSULA VEHICLE TYPE AND CRASH INVOLVEMENT

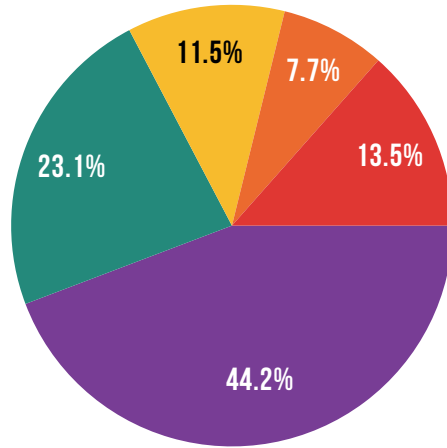
VEHICLE TYPE	MOTOR VEHICLES		FATAL CRASH		INJURY CRASH	PROPERTY DAMAGE ONLY	FATALITY IN VEHICLE		INJURY	NO INJURY
	Number of Vehicles	% of Total	Number	% of Total			Number	% of Total		
Passenger Car, SUV, Van	9,102	69.9	23	44.2	1,234	7,845	19	54.3	856	8,227
Motor Home	21	0.2	0	0.0	3	18	0	0.0	2	19
Pickup Truck	2,936	22.5	12	23.1	376	2,548	2	5.7	217	2,717
Small Truck under 10,000 lbs. GVWR	47	0.4	0	0.0	5	42	0	0.0	1	46
Motorcycle	102	0.8	6	11.5	67	29	6	17.1	62	34
Moped / Goped	5	0.0	0	0.0	4	1	0	0.0	4	1
Go-cart / Golf Cart	1	0.0	0	0.0	0	1	0	0.0	0	1
Snowmobile	89	0.7	5	9.6	69	15	5	14.3	58	26
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	54	0.4	2	3.8	39	13	2	5.7	36	16
Other	71	0.5	0	0.0	3	68	0	0.0	0	71
Unknown	192	1.5	0	0.0	6	186	0	0.0	0	192
CDL Truck/Bus (breakdown below)	404	3.1	4	7.7	47	353	1	2.9	13	390
<b>Total Number of Vehicles</b>	<b>13,024</b>	<b>100.0</b>	<b>52</b>	<b>100.0</b>	<b>1,853</b>	<b>11,119</b>	<b>35</b>	<b>100.0</b>	<b>1,249</b>	<b>11,740</b>

Note: Buses cannot be broken out of CDL Truck/Bus

CDL TRUCK/BUS SUB-CATEGORY TYPE	MOTOR VEHICLES		FATAL CRASH		INJURY CRASH	PROPERTY DAMAGE ONLY	FATALITY IN VEHICLE		INJURY	NO INJURY
	Number of Vehicles	% of Total	Number	% of Total			Number	% of Total		
10,000 lbs. or Less	8	2.0	0	0.0	0	8	0	0.0	0	8
10,001 - 26,000 lbs.	144	35.6	0	0.0	10	134	0	0.0	3	141
Greater than 26,000 lbs.	250	61.9	4	100.0	37	209	1	100.0	10	239
Unknown Truck	2	0.5	0	0.0	0	2	0	0.0	0	2
<b>Total Number of Vehicles</b>	<b>404</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>47</b>	<b>353</b>	<b>1</b>	<b>100.0</b>	<b>13</b>	<b>390</b>

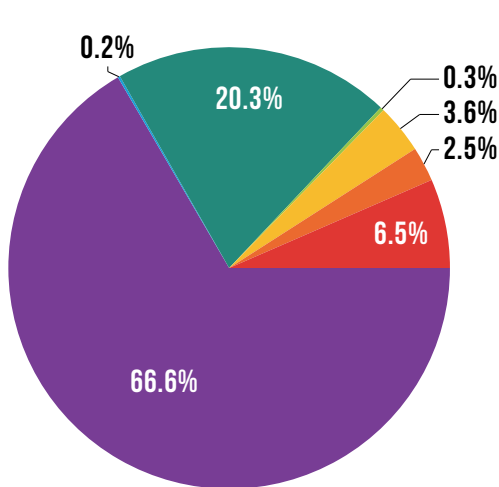
# UPPER PENINSULA VEHICLE TYPES IN CRASHES BY CRASH SEVERITY

■ PASSENGER CAR, SUV, VAN  
 ■ MOTOR HOME  
 ■ PICKUP TRUCK  
 ■ TRUCK UNDER 10,000 LBS.  
 ■ MOTORCYCLE  
 ■ CDL TRUCK/BUS  
 ■ OTHER

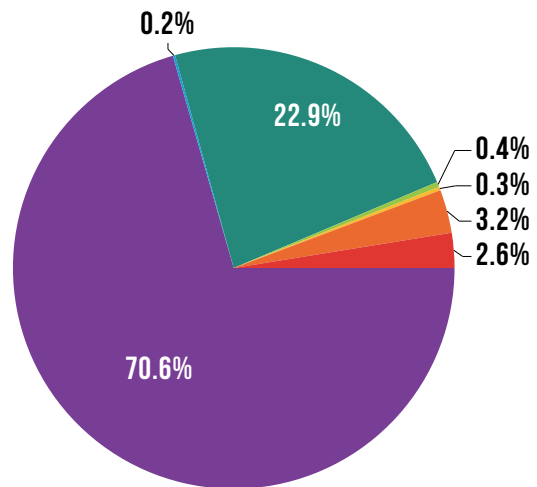


**FATAL**

The top chart shows that 67.3 percent of vehicles involved in fatal crashes in the Upper Peninsula are passenger vehicles (passenger cars, SUVs, vans, motor homes, pickup trucks, or trucks under 10,000 lbs.). Motorcycles make up 11.5 percent of fatal crash involvements.



**INJURY**



**PROPERTY DAMAGE ONLY**

Passenger vehicles (passenger cars, SUVs, vans, motor homes, pickup trucks, or trucks under 10,000 lbs.) make up an even larger share of vehicles in injury crashes (87.3%) and property damage only (PDO) crashes (94.0%) than they do of fatal crashes.

*Note: "Other" consists of moped, go-cart, snowmobile, off-road vehicle, other, and unknown.*

## UPPER PENINSULA ACTION PRIOR TO CRASH

DRIVER ACTION	VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number	% of Total		A	B	C	
Going straight ahead	8,399	64.5	41	201	306	634	7,217
Turning left	724	5.6	2	29	36	99	558
Turning right	356	2.7	1	8	13	17	317
Stopped on roadway	609	4.7	0	7	19	64	519
In prior crash	3	0.0	0	0	0	2	1
Changing lanes	103	0.8	0	2	3	6	92
Backing	450	3.5	0	1	3	12	434
Slowing/stopping on roadway	624	4.8	0	10	22	93	499
Slowing/stopping other	26	0.2	0	1	1	4	20
Starting up on roadway	224	1.7	0	6	13	20	185
Starting up other	5	0.0	1	0	0	0	4
Entering parking	27	0.2	0	0	0	1	26
Leaving parking	47	0.4	0	0	1	8	38
Entering roadway	179	1.4	2	11	10	24	132
Leaving roadway	30	0.2	1	3	2	3	21
Making U-turn	23	0.2	0	4	1	3	15
Overtaking or passing	94	0.7	0	2	6	9	77
Avoiding object	7	0.1	0	0	1	0	6
Avoiding animal	48	0.4	0	2	0	3	43
Avoiding pedestrian	1	0.0	0	1	0	0	0
Avoiding vehicle (front/back)	76	0.6	0	10	4	8	54
Avoiding vehicle (angle)	32	0.2	0	0	2	9	21
Driverless moving	4	0.0	0	0	0	0	4
Parked	585	4.5	0	5	15	14	551
Crossing at intersection	2	0.0	0	0	0	0	2
Crossing not at intersection	0	0.0	0	0	0	0	0
Getting on/off vehicle	0	0.0	0	0	0	0	0
In roadway with traffic	0	0.0	0	0	0	0	0
In roadway against traffic	2	0.0	0	0	0	0	2
Standing or lying in roadway	0	0.0	0	0	0	0	0
Pushing/working on vehicle	0	0.0	0	0	0	0	0
Other working in roadway	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0	0	0	0
In roadway other reason	0	0.0	0	0	0	0	0
Not in roadway	2	0.0	0	0	0	1	1
Negotiating a curve	196	1.5	3	10	22	12	149
Other	32	0.2	0	3	4	0	25
Unknown	114	0.9	1	2	1	4	106
<b>TOTAL</b>	<b>13,024</b>	<b>100.0</b>	<b>52</b>	<b>318</b>	<b>485</b>	<b>1,050</b>	<b>11,119</b>

## UPPER PENINSULA ACTION PRIOR TO CRASH (CONTINUED)

MOTORCYCLIST ACTION	MOTORCYCLES		MOTORCYCLISTS*		FATALITY	INJURY			NO INJURY
	Number of Motorcycles	% of Total	Number of Motorcyclists	% of Total		A	B	C	
Going straight ahead	69	67.6	78	69.0	4	23	16	10	24
Turning left	6	5.9	7	6.2	0	0	1	1	5
Turning right	4	3.9	4	3.5	1	1	1	0	1
Stopped on roadway	2	2.0	2	1.8	0	0	0	0	2
In prior crash	0	0.0	0	0.0	0	0	0	0	0
Changing lanes	0	0.0	0	0.0	0	0	0	0	0
Backing	0	0.0	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	1	1.0	1	0.9	0	0	1	0	0
Slowing/stopping other	0	0.0	0	0.0	0	0	0	0	0
Starting up on roadway	1	1.0	1	0.9	0	0	0	1	0
Starting up other	0	0.0	0	0.0	0	0	0	0	0
Entering parking	0	0.0	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0.0	0	0	0	0	0
Entering roadway	0	0.0	0	0.0	0	0	0	0	0
Leaving roadway	0	0.0	0	0.0	0	0	0	0	0
Making U-turn	1	1.0	1	0.9	0	1	0	0	0
Overtaking or passing	0	0.0	0	0.0	0	0	0	0	0
Avoiding object	0	0.0	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	1	1.0	1	0.9	0	1	0	0	0
Avoiding vehicle (angle)	2	2.0	2	1.8	0	0	1	1	0
Driverless moving	0	0.0	0	0.0	0	0	0	0	0
Parked	3	2.9	3	2.7	0	0	0	0	0
Crossing at intersection	0	0.0	0	0.0	0	0	0	0	0
Crossing not at intersection	0	0.0	0	0.0	0	0	0	0	0
Getting on/off vehicle	0	0.0	0	0.0	0	0	0	0	0
In roadway with traffic	0	0.0	0	0.0	0	0	0	0	0
In roadway against traffic	0	0.0	0	0.0	0	0	0	0	0
Standing or lying in roadway	0	0.0	0	0.0	0	0	0	0	0
Pushing/working on vehicle	0	0.0	0	0.0	0	0	0	0	0
Other working in roadway	0	0.0	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0.0	0	0	0	0	0
In roadway other reason	0	0.0	0	0.0	0	0	0	0	0
Not in roadway	0	0.0	0	0.0	0	0	0	0	0
Negotiating a curve	11	10.8	12	10.6	1	4	5	0	2
Other	0	0.0	0	0.0	0	0	0	0	0
Unknown	1	1.0	1	0.9	0	0	0	0	0
<b>TOTAL</b>	<b>102</b>	<b>100.0</b>	<b>113</b>	<b>100.0</b>	<b>6</b>	<b>30</b>	<b>25</b>	<b>13</b>	<b>34</b>

\*Includes five motorcyclists (drivers and passengers) with unknown injury severity

## UPPER PENINSULA ACTION PRIOR TO CRASH (CONTINUED)

BICYCLIST ACTION	BICYCLISTS*		FATALITY	INJURY			NO INJURY
	Number of Bicyclists	% of Total		A	B	C	
Going straight ahead	20	54.1	0	2	10	6	2
Turning left	0	0.0	0	0	0	0	0
Turning right	0	0.0	0	0	0	0	0
Stopped on roadway	0	0.0	0	0	0	0	0
In prior crash	0	0.0	0	0	0	0	0
Changing lanes	0	0.0	0	0	0	0	0
Backing	1	2.7	0	0	0	0	1
Slowing/stopping on roadway	0	0.0	0	0	0	0	0
Slowing/stopping other	0	0.0	0	0	0	0	0
Starting up on roadway	0	0.0	0	0	0	0	0
Starting up other	0	0.0	0	0	0	0	0
Entering parking	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0	0	0	0
Entering roadway	3	8.1	0	1	0	0	2
Leaving roadway	0	0.0	0	0	0	0	0
Making U-turn	0	0.0	0	0	0	0	0
Overtaking or passing	0	0.0	0	0	0	0	0
Avoiding object	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	1	2.7	0	0	1	0	0
Avoiding vehicle (angle)	0	0.0	0	0	0	0	0
Driverless moving	0	0.0	0	0	0	0	0
Parked	0	0.0	0	0	0	0	0
Crossing at intersection	9	24.3	0	0	2	5	1
Crossing not at intersection	1	2.7	0	0	1	0	0
Getting on/off vehicle	0	0.0	0	0	0	0	0
In roadway with traffic	1	2.7	0	1	0	0	0
In roadway against traffic	0	0.0	0	0	0	0	0
Standing or lying in roadway	0	0.0	0	0	0	0	0
Pushing/working on vehicle	0	0.0	0	0	0	0	0
Other working in roadway	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0	0	0	0
In roadway other reason	0	0.0	0	0	0	0	0
Not in roadway	0	0.0	0	0	0	0	0
Negotiating a curve	0	0.0	0	0	0	0	0
Other	0	0.0	0	0	0	0	0
Unknown	1	2.7	0	0	0	0	0
<b>TOTAL</b>	<b>37</b>	<b>100.0</b>	<b>0</b>	<b>4</b>	<b>14</b>	<b>11</b>	<b>6</b>

\*Includes two bicyclists with unknown injury severity

## UPPER PENINSULA ACTION PRIOR TO CRASH (CONTINUED)

PEDESTRIAN ACTION	PEDESTRIANS*		FATALITY	INJURY			NO INJURY
	Number of Pedestrians	% of Total		A	B	C	
Going straight ahead	0	0.0	0	0	0	0	0
Turning left	0	0.0	0	0	0	0	0
Turning right	0	0.0	0	0	0	0	0
Stopped on roadway	0	0.0	0	0	0	0	0
In prior crash	0	0.0	0	0	0	0	0
Changing lanes	0	0.0	0	0	0	0	0
Backing	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	0	0.0	0	0	0	0	0
Slowing/stopping other	0	0.0	0	0	0	0	0
Starting up on roadway	0	0.0	0	0	0	0	0
Starting up other	0	0.0	0	0	0	0	0
Entering parking	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0	0	0	0
Entering roadway	0	0.0	0	0	0	0	0
Leaving roadway	0	0.0	0	0	0	0	0
Making U-turn	0	0.0	0	0	0	0	0
Overtaking or passing	0	0.0	0	0	0	0	0
Avoiding object	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	0	0.0	0	0	0	0	0
Avoiding vehicle (angle)	0	0.0	0	0	0	0	0
Driverless moving	0	0.0	0	0	0	0	0
Parked	0	0.0	0	0	0	0	0
Crossing at intersection	15	44.1	0	3	3	4	4
Crossing not at intersection	3	8.8	1	0	0	2	0
Getting on/off vehicle	0	0.0	0	0	0	0	0
In roadway with traffic	5	14.7	0	3	2	0	0
In roadway against traffic	0	0.0	0	0	0	0	0
Standing or lying in roadway	2	5.9	1	1	0	0	0
Pushing/working on vehicle	1	2.9	0	1	0	0	0
Other working in roadway	1	2.9	0	0	0	0	1
Playing in roadway	1	2.9	0	0	0	1	0
In roadway other reason	3	8.8	1	1	0	1	0
Not in roadway	2	5.9	0	0	1	1	0
Negotiating a curve	0	0.0	0	0	0	0	0
Other	0	0.0	0	0	0	0	0
Unknown	1	2.9	0	1	0	0	0
<b>TOTAL</b>	<b>34</b>	<b>100.0</b>	<b>3</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>5</b>

\*Includes one pedestrian with unknown injury severity

## UPPER PENINSULA MOST HARMFUL EVENT

NONCOLLISION	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Loss of control	177	1.4	0	12	9	13	143
Cross center/median	30	0.2	0	1	1	2	26
Ran off road left	53	0.4	0	2	3	3	45
Ran off road right	95	0.7	0	4	7	6	78
Re-enter road	16	0.1	0	0	1	0	15
Overturn	298	2.3	8	32	38	56	164
Separation of Units	13	0.1	0	0	0	0	13
Fire/explosion	18	0.1	0	0	1	0	17
Immersion	1	0.0	0	0	0	0	1
Jackknife	13	0.1	0	0	0	0	13
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	19	0.1	0	0	0	1	18
Individual fell off	23	0.2	1	7	10	2	3
Other noncollision	34	0.3	0	0	1	4	29
<b>SUBTOTAL</b>	<b>790</b>	<b>6.1</b>	<b>9</b>	<b>58</b>	<b>71</b>	<b>87</b>	<b>565</b>

COLLISION WITH A NONFIXED OBJECT	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Pedestrian	29	0.2	3	9	6	6	5
Bicycle/ Pedalcycle	36	0.3	0	4	13	11	8
Motor vehicle in transport	6,564	50.4	28	190	282	786	5,278
Parked motor vehicle	591	4.5	0	4	14	15	558
Railway train	4	0.0	0	0	2	0	2
Animal	3,561	27.3	0	2	19	34	3,506
Other nonfixed objects	204	1.6	0	3	4	6	191
<b>SUBTOTAL</b>	<b>10,989</b>	<b>84.4</b>	<b>31</b>	<b>212</b>	<b>340</b>	<b>858</b>	<b>9,548</b>

## UPPER PENINSULA MOST HARMFUL EVENT (CONTINUED)

COLLISION WITH A FIXED OBJECT	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Bridge/pier/abutment	3	0.0	0	0	0	0	3
Bridge rail	9	0.1	0	0	0	2	7
Guardrail face	63	0.5	0	2	1	11	49
Guardrail end	14	0.1	0	1	2	2	9
Median barrier	10	0.1	0	0	0	1	9
Highway traffic sign post	102	0.8	0	0	1	3	98
Highway signal post	3	0.0	0	0	0	0	3
Luminaire/light support	93	0.7	2	2	7	10	72
Other pole	31	0.2	0	1	1	1	28
Culvert	10	0.1	0	0	3	1	6
Curb	22	0.2	0	0	1	0	21
Ditch	266	2.0	1	9	12	26	218
Embankment	95	0.7	0	4	5	4	82
Fence	10	0.1	0	1	0	1	8
Mailbox	45	0.3	0	1	0	1	43
Tree	300	2.3	9	23	32	30	206
Rail crossing signal	1	0.0	0	0	0	0	1
Building	13	0.1	0	0	2	2	9
Traffic island	1	0.0	0	0	0	0	1
Fire hydrant	6	0.0	0	0	0	0	6
Impact attenuator	2	0.0	0	1	0	0	1
Other fixed object	71	0.5	0	0	5	4	62
<b>SUBTOTAL</b>	<b>1,170</b>	<b>9.0</b>	<b>12</b>	<b>45</b>	<b>72</b>	<b>99</b>	<b>942</b>

	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Unknown Event	75	0.6	0	3	2	6	64
<b>MOST HARMFUL EVENT TOTAL</b>	<b>13,024</b>	<b>100.0</b>	<b>52</b>	<b>318</b>	<b>485</b>	<b>1,050</b>	<b>11,119</b>



## UPPER PENINSULA VEHICLE DEFECTS IN CRASH INVOLVEMENT

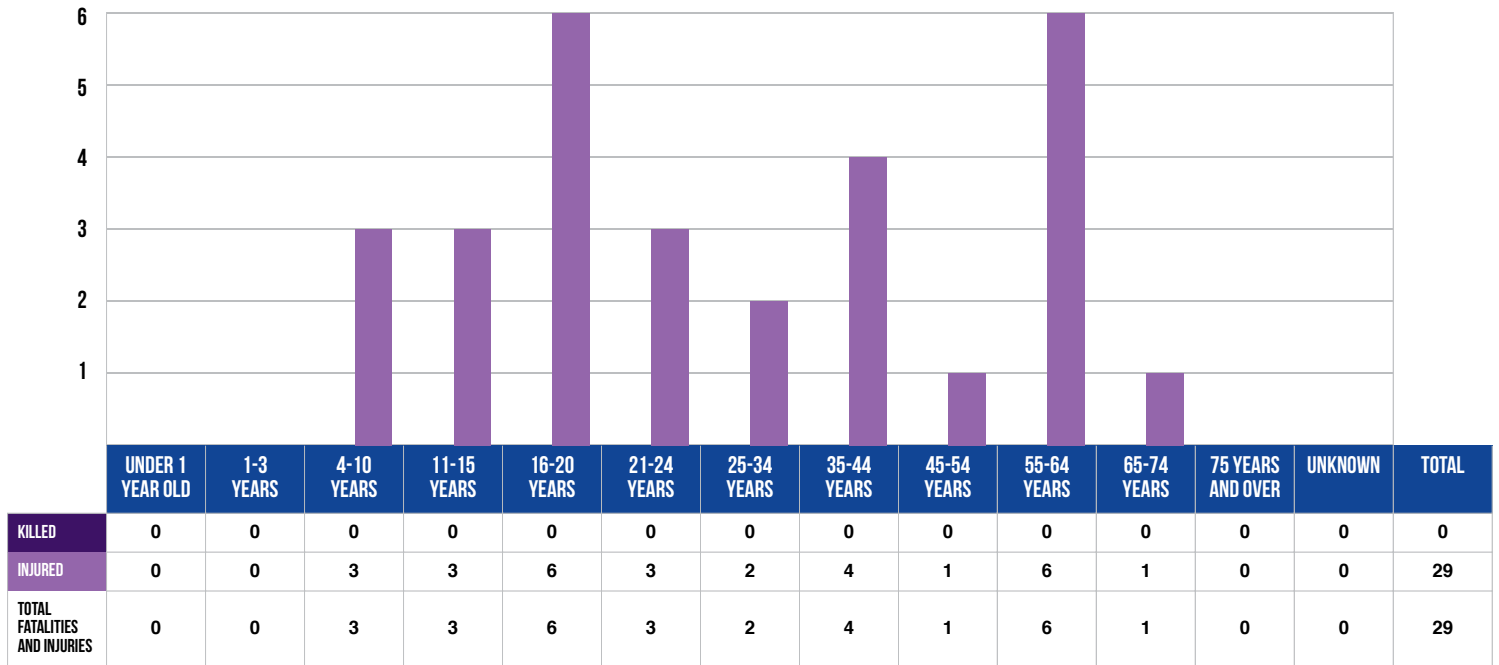
VEHICLE DEFECTS	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Brakes	24	0.2	0	0	2	8	14
Lights/reflectors	5	0.0	0	0	1	0	4
Steering	5	0.0	0	0	1	0	4
Tires/wheels	17	0.1	0	1	1	0	15
Windows	5	0.0	0	0	0	1	4
Coupling/hitch/chains	2	0.0	0	0	0	1	1
Other	24	0.2	0	0	0	4	20
None or Unknown	12,942	99.4	52	317	480	1,036	11,057
<b>TOTAL</b>	<b>13,024</b>	<b>100.0</b>	<b>52</b>	<b>318</b>	<b>485</b>	<b>1,050</b>	<b>11,119</b>

## UPPER PENINSULA DRIVER HAZARDOUS ACTION

HAZARDOUS ACTION	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
None	7,617	58.5	16	124	201	507	6,769
Speed too fast	1,127	8.7	7	58	61	94	907
Speed too slow	3	0.0	0	0	0	1	2
Failed to yield	1,049	8.1	5	38	66	156	784
Disregard traffic control	153	1.2	2	8	12	34	97
Drove wrong way	9	0.1	0	1	1	3	4
Drove left of center	64	0.5	3	3	3	3	52
Improper passing	55	0.4	0	0	1	6	48
Improper lane use	148	1.1	1	2	3	7	135
Improper turn	118	0.9	0	2	5	7	104
Improper/no signal	17	0.1	0	0	1	1	15
Improper backing	313	2.4	0	0	2	5	306
Unable to stop in assured clear distance	897	6.9	0	12	34	110	741
Reckless driving	43	0.3	1	11	10	3	18
Careless/negligent driving	442	3.4	3	36	43	55	305
Other	405	3.1	4	16	25	36	324
Unknown	564	4.3	10	7	17	22	508
<b>TOTAL</b>	<b>13,024</b>	<b>100.0</b>	<b>52</b>	<b>318</b>	<b>485</b>	<b>1,050</b>	<b>11,119</b>

# UPPER PENINSULA MICHIGAN BICYCLE CRASHES

## 2019 BICYCLIST FATALITIES AND INJURIES



In 2019 in the Upper Peninsula, there were 37 bicyclists involved in motor vehicle crashes, with 0 bicyclists killed and 29 injured.

## BICYCLE HELMET USE AND INJURY SEVERITY

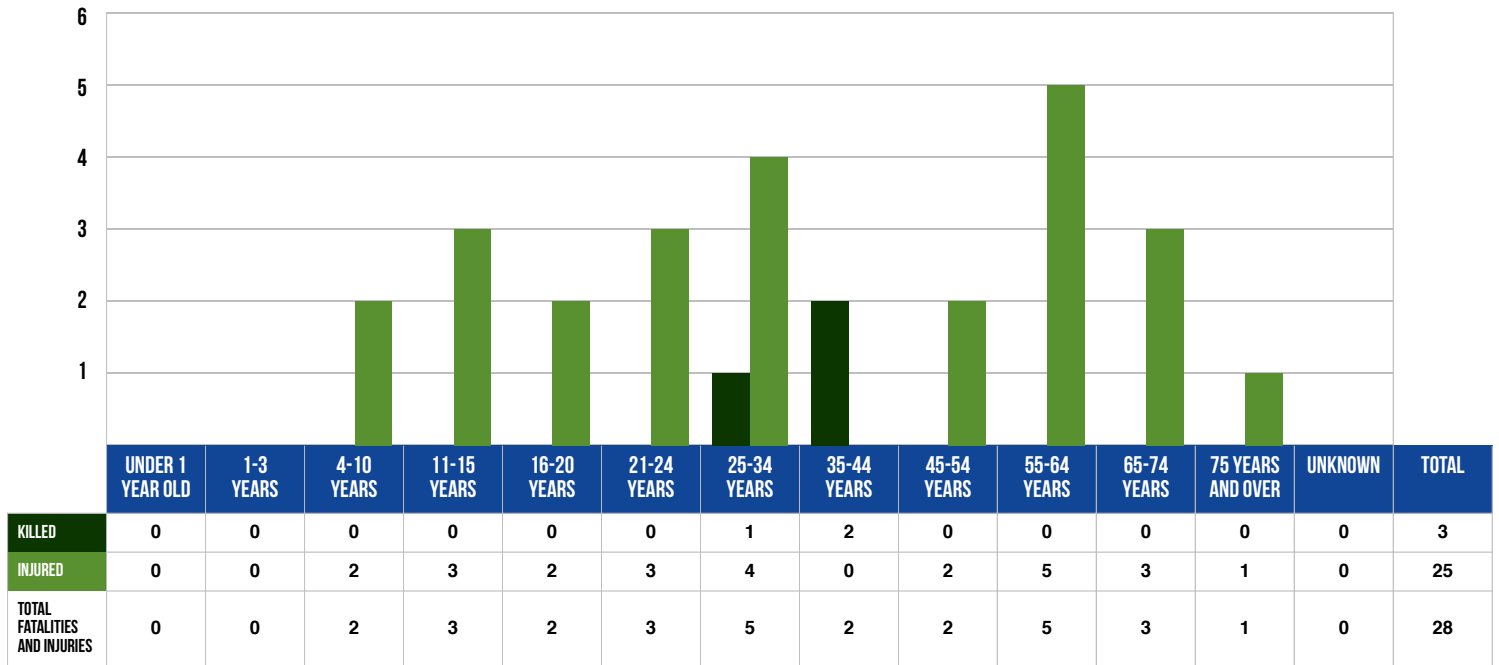
HELMET USE	FATALITY	INJURY			NO INJURY	UNKNOWN	TOTAL
		A	B	C			
Worn	0	0	3	2	1	0	6
Not Worn	0	2	2	5	1	0	10
Unknown	0	2	9	4	4	2	21
<b>Total</b>	<b>0</b>	<b>4</b>	<b>14</b>	<b>11</b>	<b>6</b>	<b>2</b>	<b>37</b>

*Note: The data does not include helmet use for all bicyclists. There were 21 bicyclists with unknown helmet use.*

The National Center for Statistics and Analysis of the National Highway Traffic Safety Administration cites a study by the Centers for Disease Control [12]: “Bicycle helmets are 85 to 88 percent effective in mitigating head and brain injuries in all types of bicycle accidents, making the use of helmets the single most effective countermeasure available to reduce head injuries and fatalities resulting from bicycle crashes.”

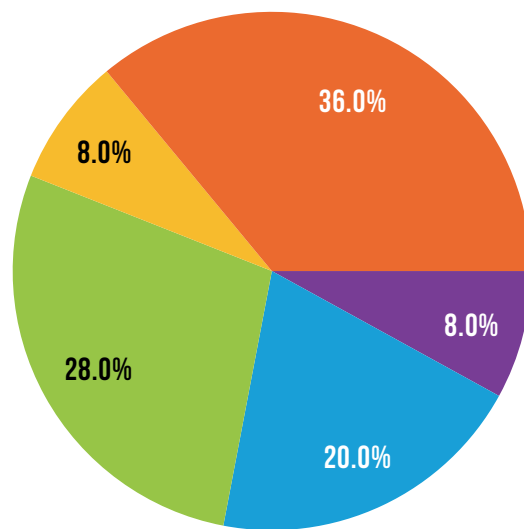
# UPPER PENINSULA MICHIGAN PEDESTRIAN CRASHES

## 2019 PEDESTRIAN FATALITIES AND INJURIES



In 2019 in the Upper Peninsula, there were 34 pedestrians involved in motor vehicle crashes, with three pedestrians killed and 25 injured.

■ 0-10 YEARS   
 ■ 11-20 YEARS   
 ■ 21-34 YEARS   
 ■ 35-54 YEARS   
 ■ 55 AND OVER   
 ■ UNKNOWN



### PEDESTRIANS INJURED

## UPPER PENINSULA MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT

NONCOLLISION	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Loss of control	1	1.1	0	0	1	0	0
Cross center/median	1	1.1	0	0	0	1	0
Ran off road left	0	0.0	0	0	0	0	0
Ran off road right	0	0.0	0	0	0	0	0
Re-enter road	0	0.0	0	0	0	0	0
Overturn	4	4.5	0	1	1	2	0
Separation of Units	0	0.0	0	0	0	0	0
Fire/explosion	1	1.1	0	0	0	0	1
Immersion	0	0.0	0	0	0	0	0
Jackknife	0	0.0	0	0	0	0	0
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	0	0.0	0	0	0	0	0
Individual fell off	6	6.7	0	3	2	0	1
Other noncollision	1	1.1	0	0	0	1	0
<b>SUBTOTAL</b>	<b>14</b>	<b>15.7</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>2</b>

COLLISION WITH A NONFIXED OBJECT	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Pedestrian	1	1.1	0	1	0	0	0
Bicycle/ Pedalcycle	0	0.0	0	0	0	0	0
Motor vehicle in transport	47	52.8	4	13	7	14	9
Parked motor vehicle	4	4.5	0	3	1	0	0
Railway train	0	0.0	0	0	0	0	0
Animal	1	1.1	0	0	0	0	1
Other nonfixed objects	3	3.4	0	1	0	1	1
<b>SUBTOTAL</b>	<b>56</b>	<b>62.9</b>	<b>4</b>	<b>18</b>	<b>8</b>	<b>15</b>	<b>11</b>

## UPPER PENINSULA MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT (CONTINUED)

COLLISION WITH A FIXED OBJECT	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Bridge/pier/abutment	0	0.0	0	0	0	0	0
Bridge rail	0	0.0	0	0	0	0	0
Guardrail face	0	0.0	0	0	0	0	0
Guardrail end	0	0.0	0	0	0	0	0
Median barrier	0	0.0	0	0	0	0	0
Highway traffic sign post	0	0.0	0	0	0	0	0
Highway signal post	0	0.0	0	0	0	0	0
Luminaire/light support	0	0.0	0	0	0	0	0
Other pole	1	1.1	0	1	0	0	0
Culvert	0	0.0	0	0	0	0	0
Curb	0	0.0	0	0	0	0	0
Ditch	1	1.1	0	1	0	0	0
Embankment	1	1.1	0	1	0	0	0
Fence	0	0.0	0	0	0	0	0
Mailbox	0	0.0	0	0	0	0	0
Tree	13	14.6	1	6	4	1	1
Rail crossing signal	0	0.0	0	0	0	0	0
Building	0	0.0	0	0	0	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	1	1.1	0	1	0	0	0
Other fixed object	2	2.2	0	0	1	0	1
<b>SUBTOTAL</b>	<b>19</b>	<b>21.3</b>	<b>1</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>2</b>

	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Unknown Event	0	0.0	0	0	0	0	0
<b>MOST HARMFUL EVENT TOTAL</b>	<b>89</b>	<b>100.0</b>	<b>5</b>	<b>32</b>	<b>17</b>	<b>20</b>	<b>15</b>

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

A total of 89 snowmobiles were reported in crashes on Upper Peninsula public roadways during 2019, resulting in four fatal crashes. A total of 69 snowmobiles were involved in 53 injury crashes.

## UPPER PENINSULA MICHIGAN ORV/ATV CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT

NONCOLLISION	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Loss of control	4	7.4	0	2	1	0	1
Cross center/median	0	0.0	0	0	0	0	0
Ran off road left	0	0.0	0	0	0	0	0
Ran off road right	0	0.0	0	0	0	0	0
Re-enter road	0	0.0	0	0	0	0	0
Overturn	16	29.6	2	9	2	3	0
Separation of Units	0	0.0	0	0	0	0	0
Fire/explosion	1	1.9	0	0	0	0	1
Immersion	0	0.0	0	0	0	0	0
Jackknife	0	0.0	0	0	0	0	0
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	1	1.9	0	0	0	1	0
Individual fell off	9	16.7	0	2	6	0	1
Other noncollision	0	0.0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>31</b>	<b>57.4</b>	<b>2</b>	<b>13</b>	<b>9</b>	<b>4</b>	<b>3</b>

COLLISION WITH A NONFIXED OBJECT	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Pedestrian	0	0.0	0	0	0	0	0
Bicycle/ Pedalcycle	0	0.0	0	0	0	0	0
Motor vehicle in transport	16	29.6	0	7	0	2	7
Parked motor vehicle	2	3.7	0	0	0	1	1
Railway train	0	0.0	0	0	0	0	0
Animal	0	0.0	0	0	0	0	0
Other nonfixed objects	0	0.0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>18</b>	<b>33.3</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>3</b>	<b>8</b>

## UPPER PENINSULA MICHIGAN ORV/ATV CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT (CONTINUED)

COLLISION WITH A FIXED OBJECT	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Bridge/pier/abutment	0	0.0	0	0	0	0	0
Bridge rail	0	0.0	0	0	0	0	0
Guardrail face	0	0.0	0	0	0	0	0
Guardrail end	0	0.0	0	0	0	0	0
Median barrier	0	0.0	0	0	0	0	0
Highway traffic sign post	0	0.0	0	0	0	0	0
Highway signal post	0	0.0	0	0	0	0	0
Luminaire/light support	0	0.0	0	0	0	0	0
Other pole	0	0.0	0	0	0	0	0
Culvert	0	0.0	0	0	0	0	0
Curb	0	0.0	0	0	0	0	0
Ditch	0	0.0	0	0	0	0	0
Embankment	0	0.0	0	0	0	0	0
Fence	0	0.0	0	0	0	0	0
Mailbox	0	0.0	0	0	0	0	0
Tree	5	9.3	0	3	0	0	2
Rail crossing signal	0	0.0	0	0	0	0	0
Building	0	0.0	0	0	0	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	0	0.0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>5</b>	<b>9.3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>

	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Unknown Event	0	0.0	0	0	0	0	0
<b>MOST HARMFUL EVENT TOTAL</b>	<b>54</b>	<b>100.0</b>	<b>2</b>	<b>23</b>	<b>9</b>	<b>7</b>	<b>13</b>

*Note: These crashes involve a motor vehicle in transport on a public trafficway and result in injury, death, or at least \$1,000 in property damage.*

A total of 54 off-road/all-terrain vehicles were reported in crashes on Upper Peninsula public roadways during 2019, resulting in two fatal crashes. An additional 39 ORV/ATVs were involved in 38 injury crashes.

## UPPER PENINSULA MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS

HAZARDOUS ACTION	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
None	29	32.6	1	9	6	8	5
Speed too fast	19	21.3	1	10	5	2	1
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	9	10.1	1	2	2	2	2
Disregard traffic control	4	4.5	0	1	0	2	1
Drove wrong way	1	1.1	0	1	0	0	0
Drove left of center	0	0.0	0	0	0	0	0
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	1	1.1	0	0	0	1	0
Improper turn	0	0.0	0	0	0	0	0
Improper/no signal	1	1.1	0	0	1	0	0
Improper backing	0	0.0	0	0	0	0	0
Unable to stop in assured clear distance	5	5.6	0	3	1	1	0
Reckless driving	0	0.0	0	0	0	0	0
Careless/negligent driving	6	6.7	0	3	1	1	1
Other	7	7.9	0	3	1	2	1
Unknown	7	7.9	2	0	0	1	4
<b>Total</b>	<b>89</b>	<b>100.0</b>	<b>5</b>	<b>32</b>	<b>17</b>	<b>20</b>	<b>15</b>

## UPPER PENINSULA MICHIGAN ORV/ATV CRASHES ON PUBLIC ROADWAYS

HAZARDOUS ACTION	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
None	12	22.2	0	5	1	2	4
Speed too fast	18	33.3	2	8	2	2	4
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	5	9.3	0	3	0	1	1
Disregard traffic control	0	0.0	0	0	0	0	0
Drove wrong way	0	0.0	0	0	0	0	0
Drove left of center	0	0.0	0	0	0	0	0
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	0	0.0	0	0	0	0	0
Improper turn	3	5.6	0	1	1	1	0
Improper/no signal	0	0.0	0	0	0	0	0
Improper backing	1	1.9	0	0	0	0	1
Unable to stop in assured clear distance	1	1.9	0	0	0	0	1
Reckless driving	3	5.6	0	2	1	0	0
Careless/negligent driving	5	9.3	0	2	1	0	2
Other	1	1.9	0	1	0	0	0
Unknown	5	9.3	0	1	3	1	0
<b>Total</b>	<b>54</b>	<b>100.0</b>	<b>2</b>	<b>23</b>	<b>9</b>	<b>7</b>	<b>13</b>

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



## UPPER PENINSULA MICHIGAN FARM EQUIPMENT CRASHES

FARM EQUIPMENT CRASHES	2018	2019	% CHANGE
Crashes	7	9	28.6%
Fatalities	0	0	0.0%
Injuries	4	1	-75.0%

Nine crashes involving farm equipment were reported on Upper Peninsula roadways during 2019. None of those crashes involved a fatality.

## UPPER PENINSULA MICHIGAN VEHICLE-TRAIN CRASHES

VEHICLE TRAIN CRASHES	2018	2019	% CHANGE
Crashes	0	4	---
Fatalities	0	0	0.0%
Injuries	0	2	---

A total of four motor-vehicle crashes involving trains were reported in the Upper Peninsula during 2019, none of which involved fatalities.

## UPPER PENINSULA MICHIGAN MOTORCYCLE CRASHES

MOTORCYCLE DATA	2018	2019	% CHANGE
Motorcycle Registrations	8,895	8,873	-0.2%
Motorcycles in Crashes	85	102	20.0%
Motorcyclist Deaths	4	6	50.0%
Motorcyclists Injured	68	68	0.0%
Death Rate based on 10,000 motorcycle registrations	4.50	6.76	50.4%
Estimated Mileage based on 3,000 miles per motorcycle	26,685,000	26,619,000	-0.2%
Death Rate based on deaths per 100 million vehicle miles traveled	14.99	22.54	50.4%

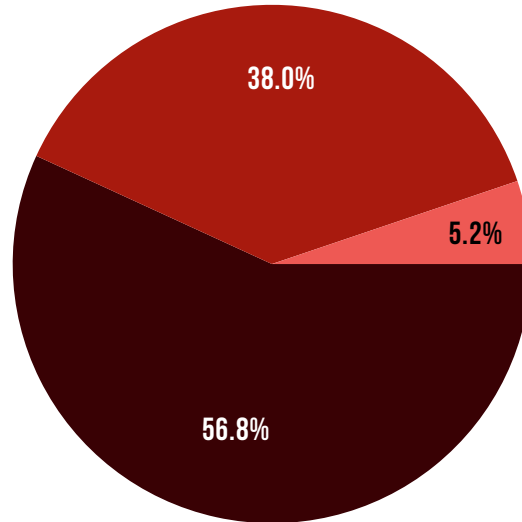
Motorcycles were involved in 1.0 percent of all traffic crashes in the Upper Peninsula in 2019. Injuries were proportionately more severe to motorcyclists than to persons in motor vehicles.

## UPPER PENINSULA DRIVER GENDER INFORMATION

MALES

FEMALES

UNKNOWN

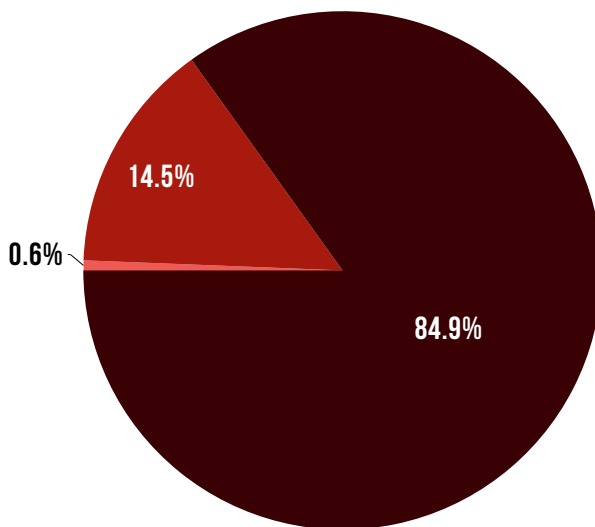


ALL DRIVERS

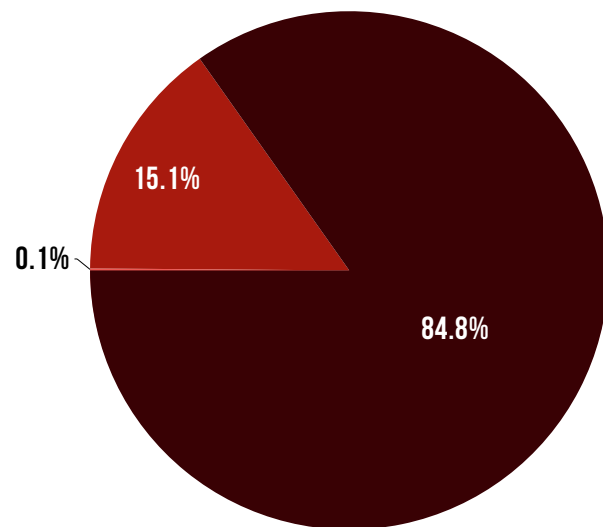
FATAL

INJURY

PROPERTY DAMAGE ONLY



MALE CRASH SEVERITY



FEMALE CRASH SEVERITY

A higher proportion of crashes involved male drivers than female drivers. When examining the severity of crashes involving drivers of each gender, fatal crashes are more prevalent among male drivers than female drivers (0.6% vs. 0.1%).

## UPPER PENINSULA PERSON AGE - DEMOGRAPHICS AND CRASH INVOLVEMENTS

AGE	LICENSED DRIVERS	POPULATION	TOTAL DRIVERS IN CRASHES	DRIVERS IN FATAL CRASHES	OCCUPANTS KILLED	OCCUPANTS INJURED	TOTAL BICYCLISTS IN CRASHES	BICYCLISTS IN FATAL CRASHES	TOTAL PEDESTRIANS IN CRASHES	PEDESTRIANS IN FATAL CRASHES
0-15	1,425	47,429	27	0	1	89	8	0	5	0
16	2,269	3,175	200	0	0	36	1	0	0	0
17	2,425	3,293	255	0	0	50	0	0	0	0
18	2,358	4,000	285	3	3	45	1	0	1	0
19	2,504	5,026	349	2	0	58	3	0	1	0
20	2,749	5,141	305	0	0	38	3	0	0	0
21-24	11,632	18,719	1,158	5	2	143	3	0	4	0
25-29	14,039	16,755	1,056	4	3	129	1	0	4	1
30-34	14,519	15,336	984	0	0	96	2	0	1	1
35-39	14,895	16,530	944	6	3	101	2	0	1	1
40-44	14,305	15,540	864	1	1	85	2	0	2	1
45-49	14,730	16,244	889	0	0	98	0	0	2	0
50-54	16,487	17,881	913	6	4	87	1	0	2	0
55-59	20,423	21,925	1,079	10	6	110	5	0	3	0
60-64	22,480	23,602	943	6	6	86	2	0	2	0
65-69	21,819	22,202	773	3	1	90	1	0	2	0
70-74	17,031	17,212	530	0	0	56	0	0	2	0
75-79	11,388	11,940	389	4	5	41	0	0	1	0
80-84	7,315	8,222	214	2	2	38	0	0	0	0
85+	5,496	8,679	145	0	0	18	0	0	0	0
Unknown	---	---	722	0	0	0	2	0	1	0
<b>TOTAL</b>	<b>220,289</b>	<b>298,851</b>	<b>13,024</b>	<b>52</b>	<b>37</b>	<b>1,494</b>	<b>37</b>	<b>0</b>	<b>34</b>	<b>4</b>

## UPPER PENINSULA CRASH RATE PER LICENSED DRIVER BY AGE OF DRIVER IN ALL CRASHES

AGE	LICENSED DRIVERS	TOTAL DRIVERS IN CRASHES*	CRASH RATE
0-15	1,425	27	0.019
16	2,269	200	0.088
17	2,425	255	0.105
18	2,358	285	0.121
19	2,504	349	0.139
20	2,749	305	0.111
21-24	11,632	1,158	0.100
25-29	14,039	1,056	0.075
30-34	14,519	984	0.068
35-39	14,895	944	0.063
40-44	14,305	864	0.060
45-49	14,730	889	0.060
50-54	16,487	913	0.055
55-59	20,423	1,079	0.053
60-64	22,480	943	0.042
65-69	21,819	773	0.035
70-74	17,031	530	0.031
75-79	11,388	389	0.034
80-84	7,315	214	0.029
85-89	3,804	108	0.028
90-94	1,495	31	0.021
95-99	188	5	0.027
100+	9	1	0.111
<b>TOTAL</b>	<b>220,289</b>	<b>12,302</b>	<b>0.056</b>

*Note: Data entry errors resulted in an over-representation of age "100+" drivers*

\* Excludes 722 drivers with unknown age

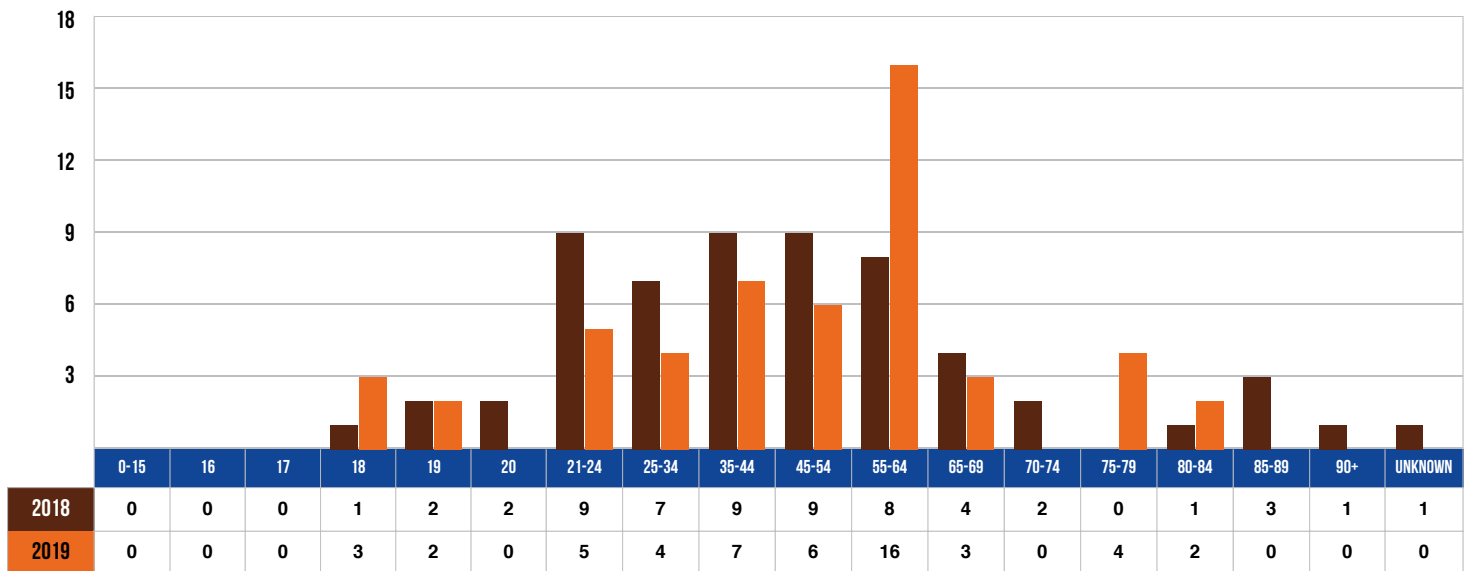
Licensed drivers age 19 have the highest crash rate at 0.139 (total crash involvements in age group divided by total number of licensed drivers in age group). The lower crash rates of the older groups (per licensed driver) may reflect reduced driving and exposure to the risk of a crash.

## UPPER PENINSULA DRIVER AGE

AGE OF DRIVERS IN FATAL CRASHES	2018	2019	PERCENT CHANGE	PERCENT 2019 FATAL CRASH INVOLVEMENT	PERCENT ACTIVE DRIVING POPULATION*
15 years and under	0	0	0.0	0.0	0.6
16 years	0	0	0.0	0.0	1.0
17 years	0	0	0.0	0.0	1.1
18 years	1	3	200.0	5.8	1.1
19 years	2	2	0.0	3.8	1.1
20 years	2	0	-100.0	0.0	1.2
21 - 24 years	9	5	-44.4	9.6	5.3
25 - 34 years	7	4	-42.9	7.7	13.0
35 - 44 years	9	7	-22.2	13.5	13.3
45 - 54 years	9	6	-33.3	11.5	14.2
55 - 64 years	8	16	100.0	30.8	19.5
65 - 69 years	4	3	-25.0	5.8	9.9
70 - 74 years	2	0	-100.0	0.0	7.7
75 - 79 years	0	4	---	7.7	5.2
80 - 84 years	1	2	100.0	3.8	3.3
85 - 89 years	3	0	-100.0	0.0	1.7
90 years and over	1	0	-100.0	0.0	0.8
Unknown	1	0	-100.0	0.0	---
<b>Total</b>	<b>59</b>	<b>52</b>	<b>-11.9</b>	<b>100.0</b>	<b>100.0</b>

\* Figures courtesy of the Michigan Department of State [13]

### DRIVER AGE IN FATAL CRASHES



## UPPER PENINSULA DRIVER CONDITION

POSSIBLE CONDITIONS OF DRIVER	CONDITIONS (CODED BY POLICE)	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Normal	9,945	15	180	332	851	8,567
Fatigued or Asleep	62	2	7	9	11	33
Sick	37	1	1	4	10	21
Medicated	20	0	1	7	4	8
Emotional	146	3	12	23	31	77
Physically Disabled	47	3	19	10	5	10
Unknown	1,739	22	54	49	75	1,539
Other	262	7	39	40	50	126

Note: Drivers may have more than one condition including "Normal." These are driver conditions that, in the opinion of the investigating officer, were involved in the crash. While some conditions may be evident, others will only be known if the driver admits to the condition, thus leading to possible underreporting.

## UPPER PENINSULA DRIVER INJURY SEVERITY BY RESTRAINT, ALCOHOL, AND DRUG USE

RESTRAINT USAGE	DRIVERS		FATALITY		INJURY			NO INJURY	UNKNOWN
	Number	% of Total	Number	% of Total	A	B	C		
<b>ALL DRIVERS</b>									
Restraint Used*	11,521	88.5	18	58.1	135	239	606	10,521	2
Restraint Not Used	172	1.3	11	35.5	25	29	15	92	0
Unknown	1,331	10.2	2	6.5	8	15	21	513	772
<b>TOTAL</b>	<b>13,024</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>168</b>	<b>283</b>	<b>642</b>	<b>11,126</b>	<b>774</b>
<b>DRINKING DRIVERS ONLY</b>									
Restraint Used*	176	68.0	4	50.0	19	21	19	113	0
Restraint Not Used	26	10.0	2	25.0	7	11	1	5	0
Unknown	57	22.0	2	25.0	3	5	6	41	0
<b>TOTAL</b>	<b>259</b>	<b>100.0</b>	<b>8</b>	<b>100.0</b>	<b>29</b>	<b>37</b>	<b>26</b>	<b>159</b>	<b>0</b>
<b>DRUGGED DRIVERS ONLY</b>									
Restraint Used*	54	76.1	1	50.0	4	9	9	31	0
Restraint Not Used	6	8.5	1	50.0	1	2	0	2	0
Unknown	11	15.5	0	0.0	0	3	0	8	0
<b>TOTAL</b>	<b>71</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>5</b>	<b>14</b>	<b>9</b>	<b>41</b>	<b>0</b>
<b>DRINKING AND DRUGGED DRIVERS ONLY</b>									
Restraint Used*	29	54.7	0	0.0	2	4	5	18	0
Restraint Not Used	16	30.2	4	100.0	5	3	1	3	0
Unknown	8	15.1	0	0.0	0	1	0	7	0
<b>TOTAL</b>	<b>53</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>28</b>	<b>0</b>

Note: 'Restraint Used' includes shoulder belt only, lap belt only, both lap and shoulder belts, restraint failed, and helmet worn