







UPPER PENINSULA ROADWAY INJURY EXPERIENCE FOR PERSONS WHO HAD BEEN DRINKING AND/OR USING DRUGS

VEHICLE	SEVERITY	TOTAL	CRASHES INVOLVING DRINKING, NOT DRUGS		CRASHES INVOLVING DRUGS, NOT DRINKING		CRASHES INVOLVING DRINKING AND DRUGS		TOTAL CRASHES INVOLVING DRINKING AND/OR DRUGS	
			Operator in Crash	Operator Drinking	Operator in Crash	Operator Drugs	Operator in Crash	Operator Drinking and Drugs	Operator in Crash	Operator Drinking and/or Drugs
 BICYCLISTS	Total*	28	1	1	0	0	0	0	1	1
	Killed	0	0	0	0	0	0	0	0	0**
	Injured	23	1	1	0	0	0	0	1	1
 DRIVERS	Total*	12,351	358	269	80	54	47	38	485	361
	Killed	28	4	3	4	4	3	3	11	10**
	Injured	1,137	107	96	28	21	13	11	148	128
 MOTORCYCLISTS	Total*	104	1	1	2	1	1	1	4	3
	Killed	4	0	0	0	0	1	1	1	1**
	Injured	68	1	1	2	1	0	0	3	2
 ORV/ATV RIDERS	Total*	59	13	13	0	0	0	0	13	13
	Killed	2	1	1	0	0	0	0	1	1**
	Injured	46	11	11	0	0	0	0	11	11
 PEDESTRIANS	Total*	37	5	5	2	1	2	0	9	6
	Killed	1	0	0	1	1	0	0	1	1**
	Injured	29	4	4	1	0	2	0	7	4
 SNOWMOBILERS	Total*	47	10	10	0	0	1	1	11	11
	Killed	0	0	0	0	0	0	0	0	0**
	Injured	24	8	8	0	0	1	1	9	9

*Total does include property damage only classes

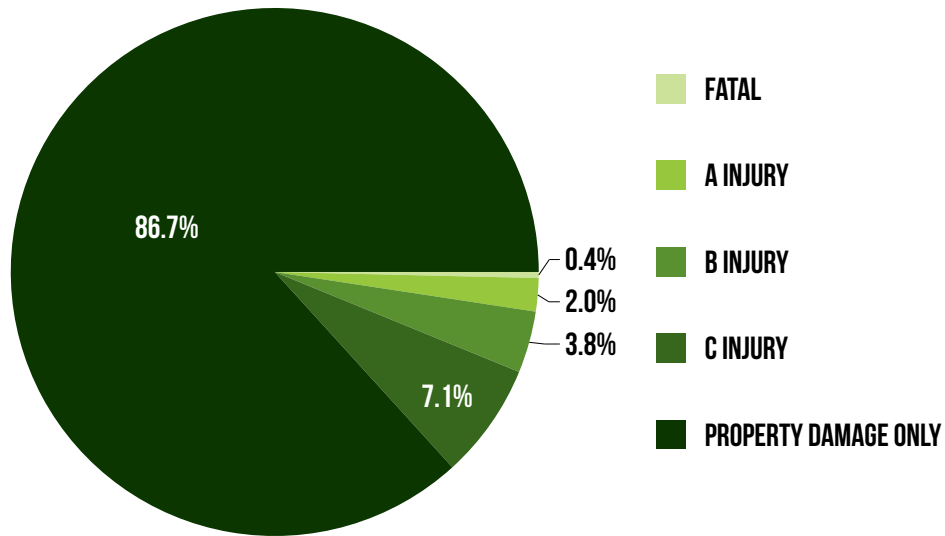
**In the Upper Peninsula, there were no bicyclists, 11 drivers, three motorcyclists, two ORV/ATV riders, no pedestrians, and one snowmobiler who were killed and coded as drinking and/or using drugs by the police officer.

UPPER PENINSULA DRIVER DRINKING AND/OR USING DRUGS AND INJURY SEVERITY IN CRASH BY AGE

AGE OF DRIVER IN CRASH	ALL CRASHES				FATAL				INJURY			
	Drinking Only	Drugs Only	Both	Total	Drinking Only	Drugs Only	Both	Total	Drinking Only	Drugs Only	Both	Total
13 years and under	0	0	0	0	0	0	0	0	0	0	0	0
14 years	0	0	0	0	0	0	0	0	0	0	0	0
15 years	0	0	0	0	0	0	0	0	0	0	0	0
16 years	2	0	1	3	0	0	0	0	2	0	0	2
17 years	1	1	2	4	0	0	0	0	1	0	1	2
18 years	1	0	0	1	0	0	0	0	1	0	0	1
19 years	10	2	0	12	0	0	0	0	4	1	0	5
20 years	8	2	2	12	0	1	0	1	1	1	1	3
21 - 24 years	35	3	5	43	2	0	1	3	17	3	1	21
25 - 34 years	80	22	11	113	0	1	1	2	33	11	3	47
35 - 44 years	51	14	6	71	0	2	1	3	21	6	4	31
45 - 54 years	35	5	5	45	2	0	0	2	14	2	0	16
55 - 64 years	29	3	4	36	0	0	0	0	11	2	2	15
65 - 69 years	8	0	2	10	1	0	0	1	3	0	2	5
70 - 74 years	5	1	0	6	0	1	0	1	3	0	0	3
75 - 79 years	3	0	0	3	0	0	0	0	1	0	0	1
80 - 84 years	0	1	0	1	0	0	0	0	0	0	0	0
85 - 89 years	1	0	0	1	0	0	0	0	0	0	0	0
90 years and over	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Total	269	54	38	361	5	5	3	13	112	26	14	152

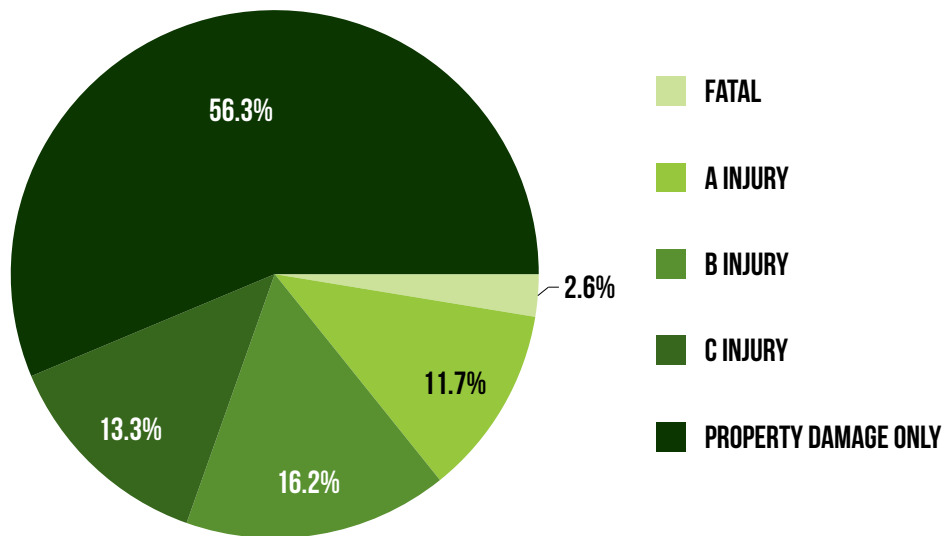
The driver age group 25 to 34 years represents the highest number of drinking and/or drug use in total crashes and injury crashes.

UPPER PENINSULA ALL CRASHES BY INJURY SEVERITY



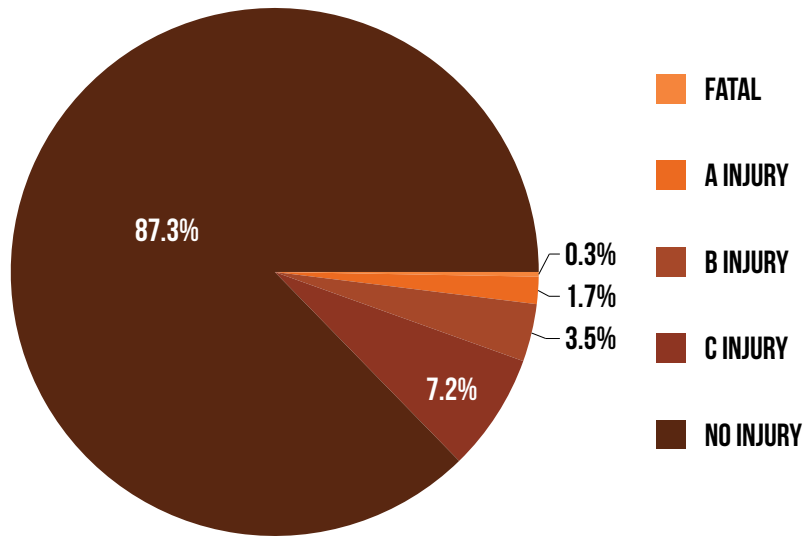
The majority of crashes do not involve injury (86.7%). Possible (C) injury crashes represent about 56% of all injury crashes.

UPPER PENINSULA HAD-BEEN-DRINKING CRASHES BY INJURY SEVERITY



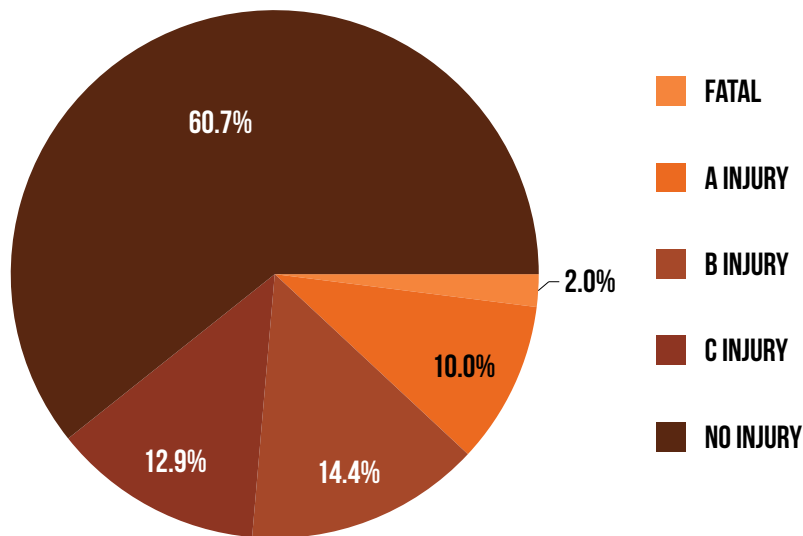
The problem of the drinking driver, pedestrian, and/or bicyclist is seen by comparing the two charts on this page. All injury levels are greater, and a fatality in the crash is about ten times more likely, when one of the crash-involved operators is reported as had-been-drinking (HBD).

UPPER PENINSULA DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS



The majority of occupants involved in crashes are not injured (87.1%). About 58% of those who are injured receive only possible (C) injuries.

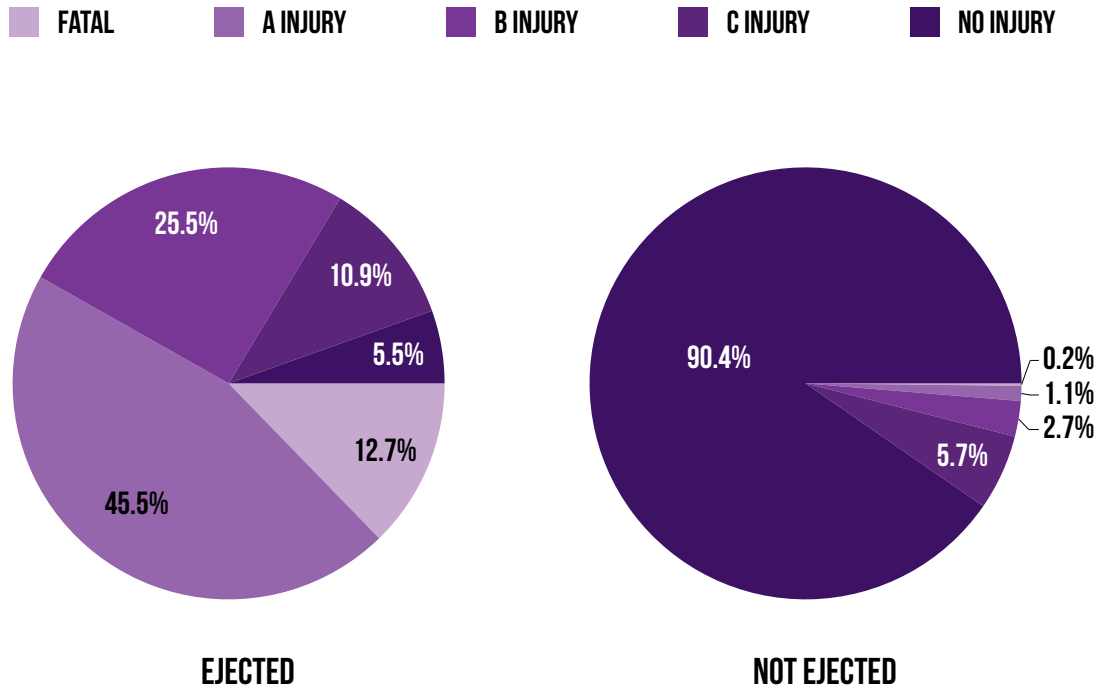
UPPER PENINSULA OCCUPANTS IN HAD-BEEN-DRINKING CRASHES



Crashes involving drinking tend to be more serious than non-drinking crashes. The percentage of fatalities is about nine times higher, and the most serious injury level (A) in had-been-drinking crashes is about seven times higher than in all crashes.

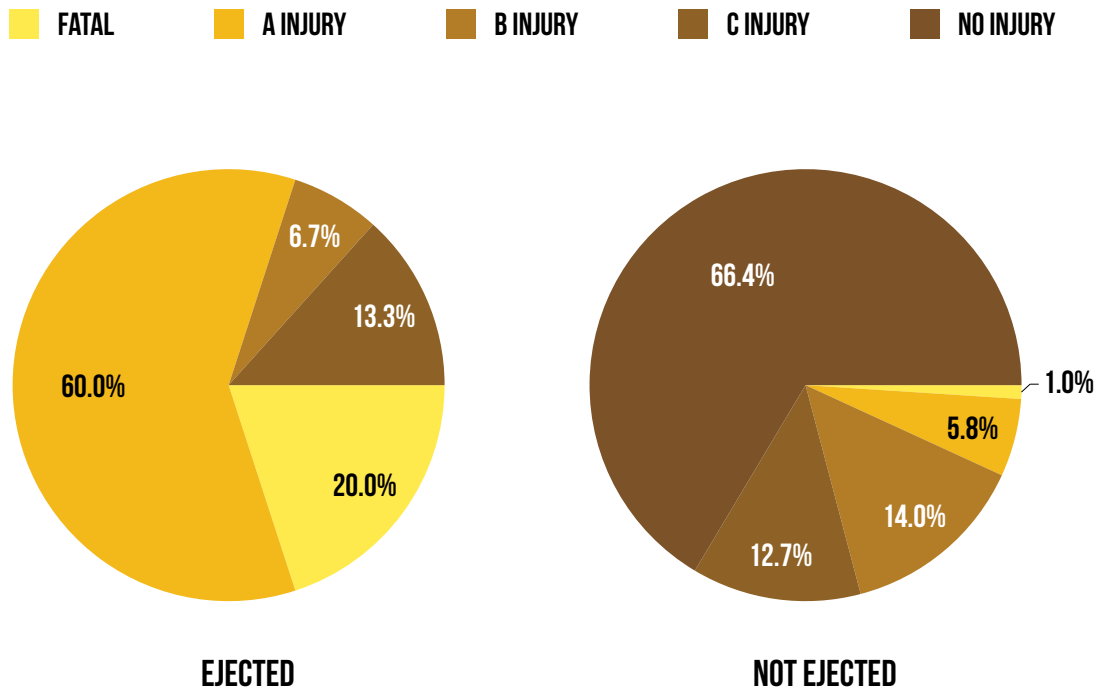
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

UPPER PENINSULA ALL DRIVERS INJURY SEVERITY - EJECTED VS. NOT EJECTED



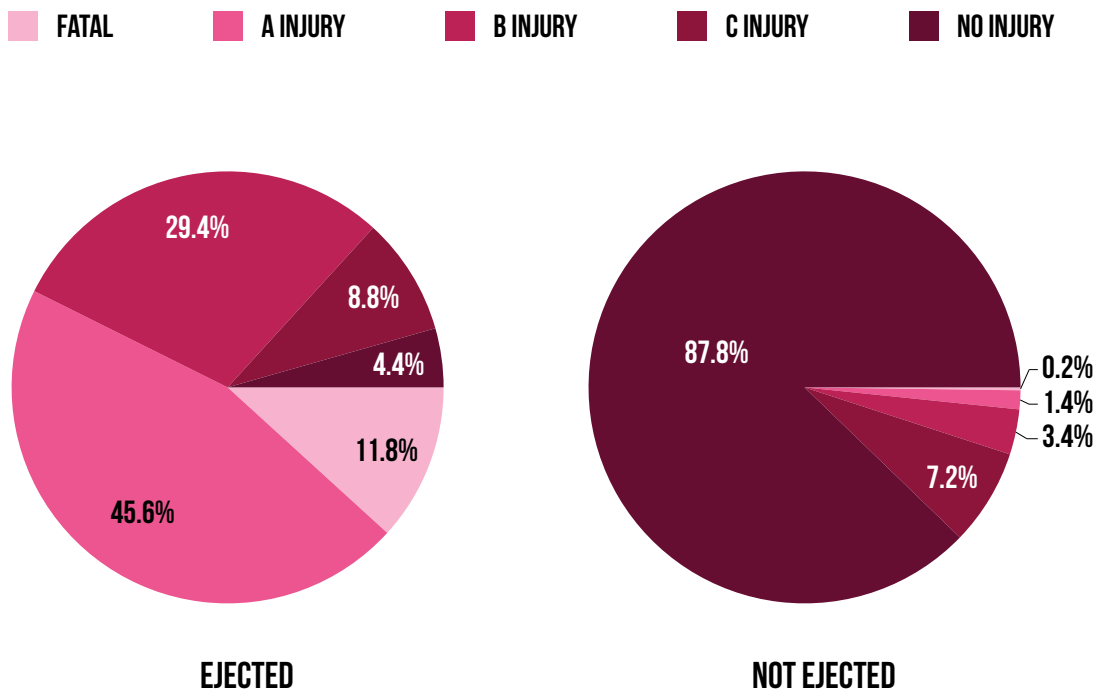
As shown by the two charts above, death and injury are much more likely when drivers are ejected from vehicles.

UPPER PENINSULA HAD-BEEN-DRINKING DRIVERS INJURY SEVERITY - EJECTED VS. NOT EJECTED



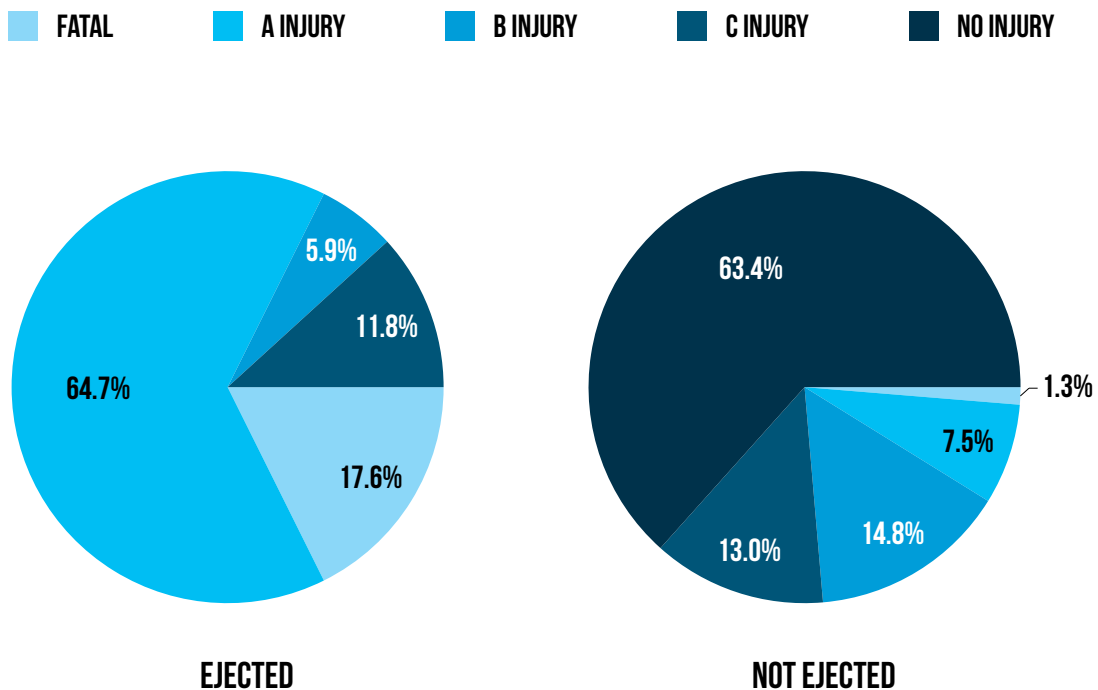
When compared to the charts above, the had-been-drinking charts demonstrate that injury severity is much worse for drivers reported to be drinking in both ejected and non-ejected events.

UPPER PENINSULA ALL OCCUPANTS OF CRASHES INJURY SEVERITY - EJECTED VS. NOT EJECTED.



As shown by the two charts above, death and injury are much more likely when occupants are ejected from vehicles.

UPPER PENINSULA OCCUPANTS OF HAD-BEEN-DRINKING CRASHES INJURY SEVERITY - EJECTED VS. NOT EJECTED

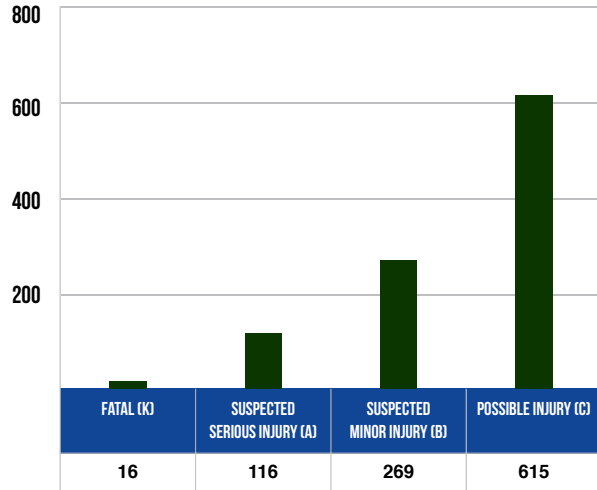


When compared to the charts above, the charts of occupants of had-been-drinking crashes demonstrate that injury severity is much worse for occupants in a crash where drinking is reported in both ejected and non-ejected events.

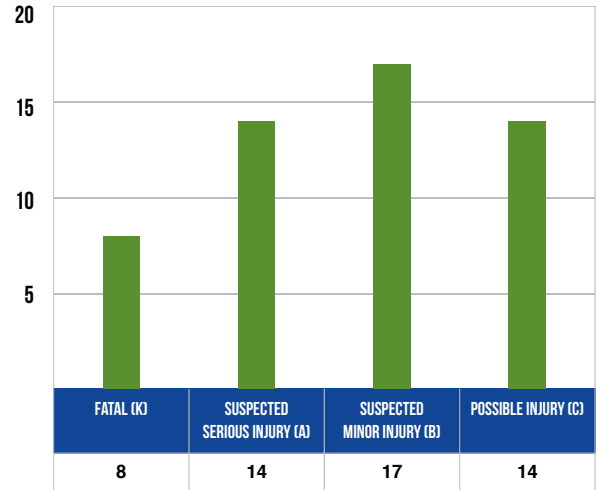
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

UPPER PENINSULA INJURY SEVERITY & BELT USE BY DRIVER INJURY

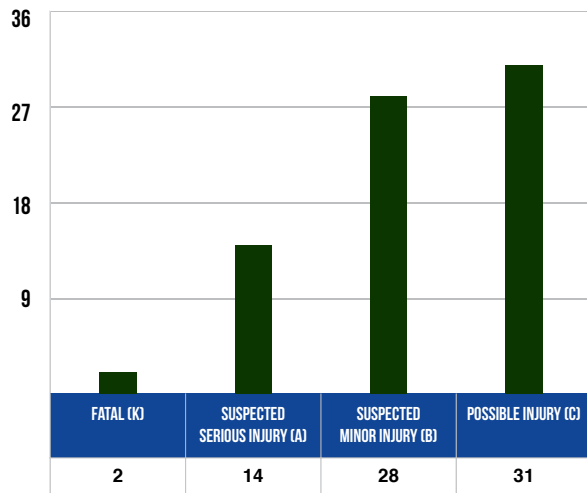
ALL CRASHES-BELTS USED



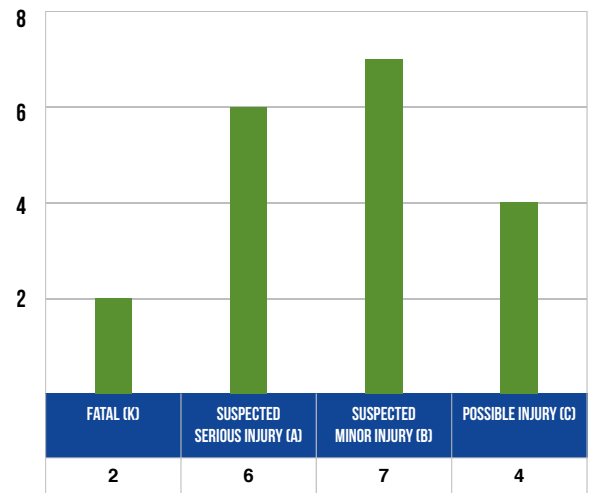
ALL CRASHES-BELTS NOT USED



HAD-BEEN DRINKING CRASHES-BELTS USED



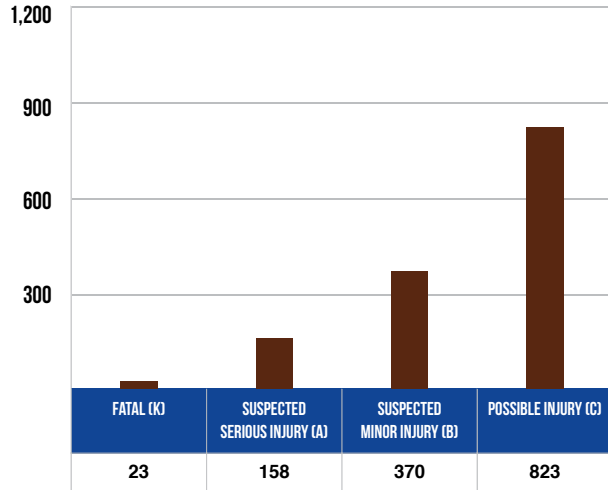
HAD-BEEN DRINKING CRASHES-BELTS NOT USED



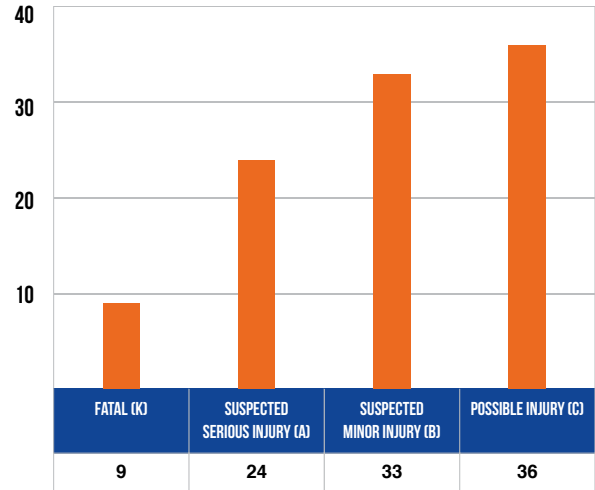
Note: "Belts Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, and restraint failure. "Belts Not Used" represents no belts available and no belts used.

UPPER PENINSULA INJURY SEVERITY & RESTRAINT USE BY OCCUPANT INJURY

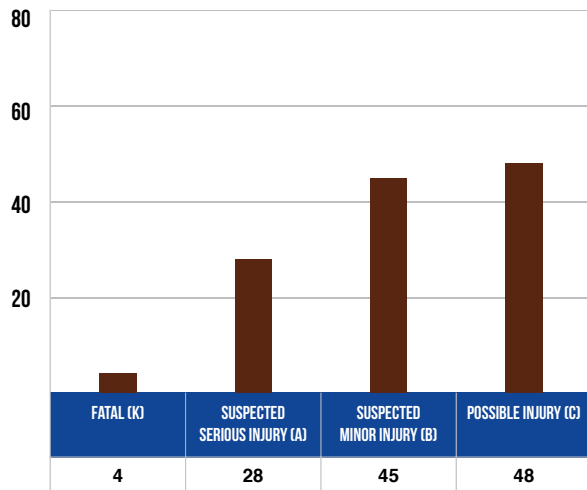
ALL CRASHES - RESTRAINTS USED



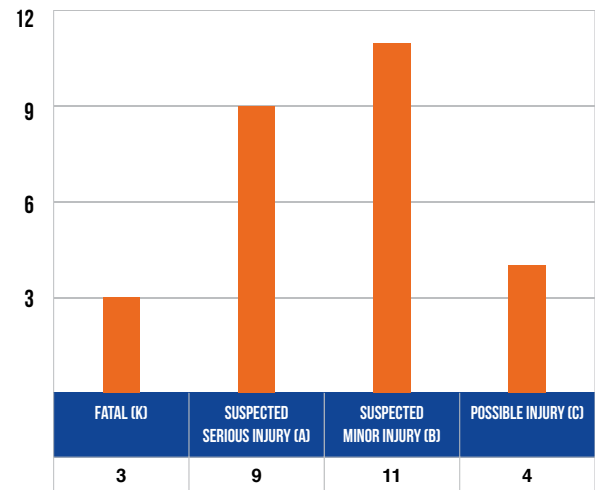
ALL CRASHES - RESTRAINTS NOT USED



HAD-BEEN-DRINKING CRASHES - RESTRAINTS USED



HAD-BEEN-DRINKING CRASHES - RESTRAINTS NOT USED

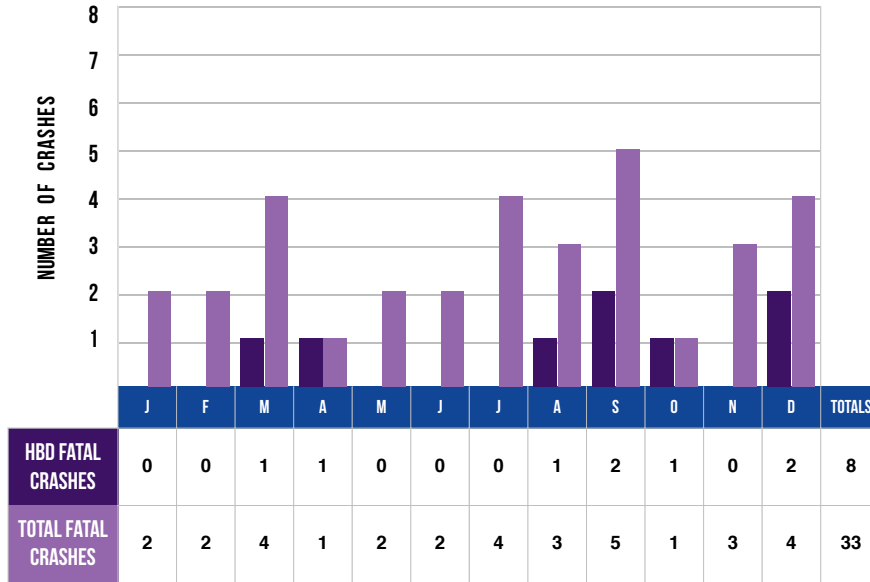


Note: "Restraints Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, child restraints used, and restraint failure. "Restraints Not Used" represents no belts available; no belts used; and child restraint not used, unavailable, or improper use.

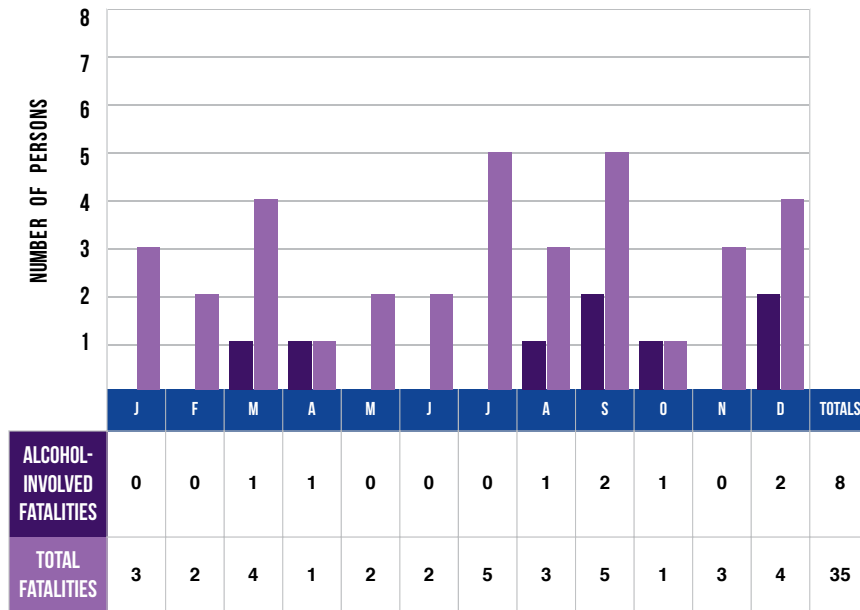
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

UPPER PENINSULA ALCOHOL INVOLVMENT IN FATAL CRASHES

HAD-BEEN-DRINKING FATAL CRASHES BY MONTH



ALCOHOL-INVOLVED FATALITIES BY MONTH

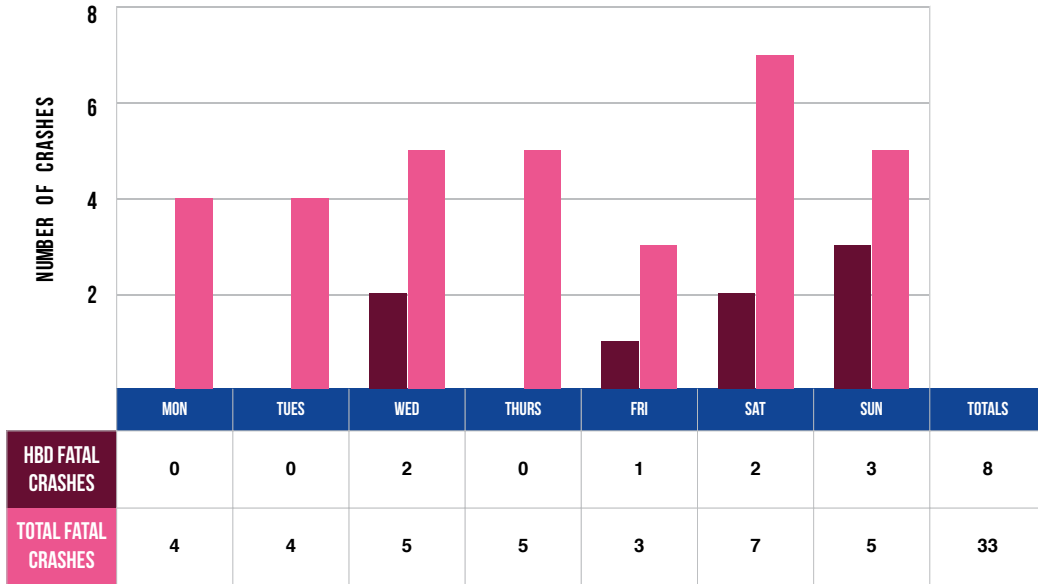


Had-been-drinking fatal crashes were highest in number during the months of April and May. The number of total fatal crashes (total of non-had-been-drinking and had-been-drinking fatal crashes) reached highest levels in December.

Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.

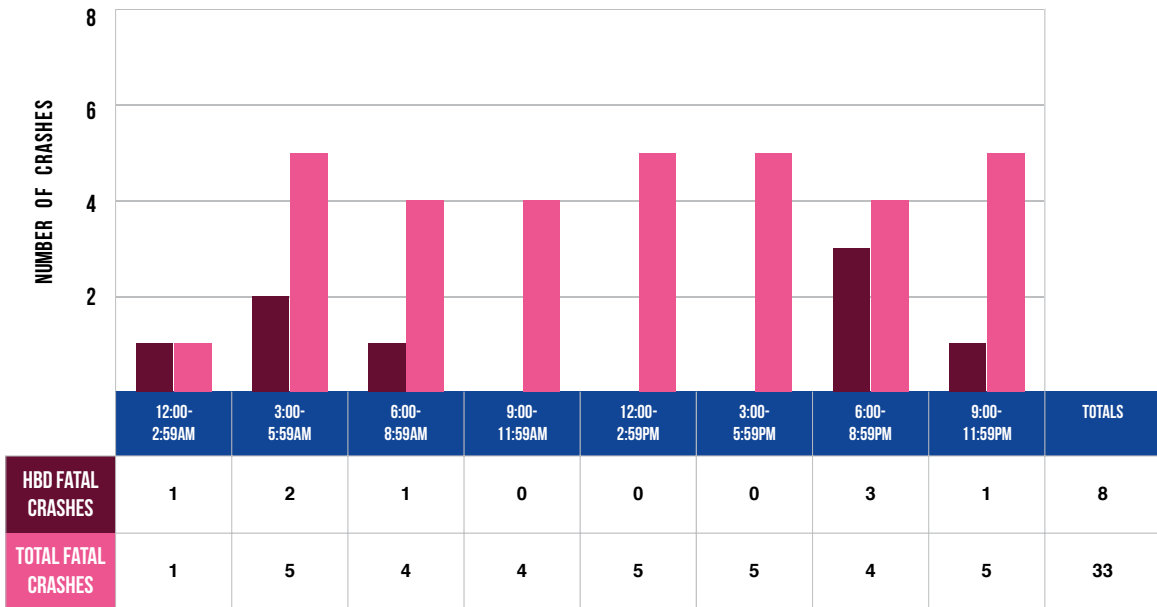
UPPER PENINSULA ALCOHOL INVOLVMENT IN FATAL CRASHES (CONTINUED)

HAD-BEEN-DRINKING FATAL CRASHES BY DAY OF THE WEEK



Friday had the highest number of fatal crashes, and the highest number of drinking-related fatal crashes in 2017.

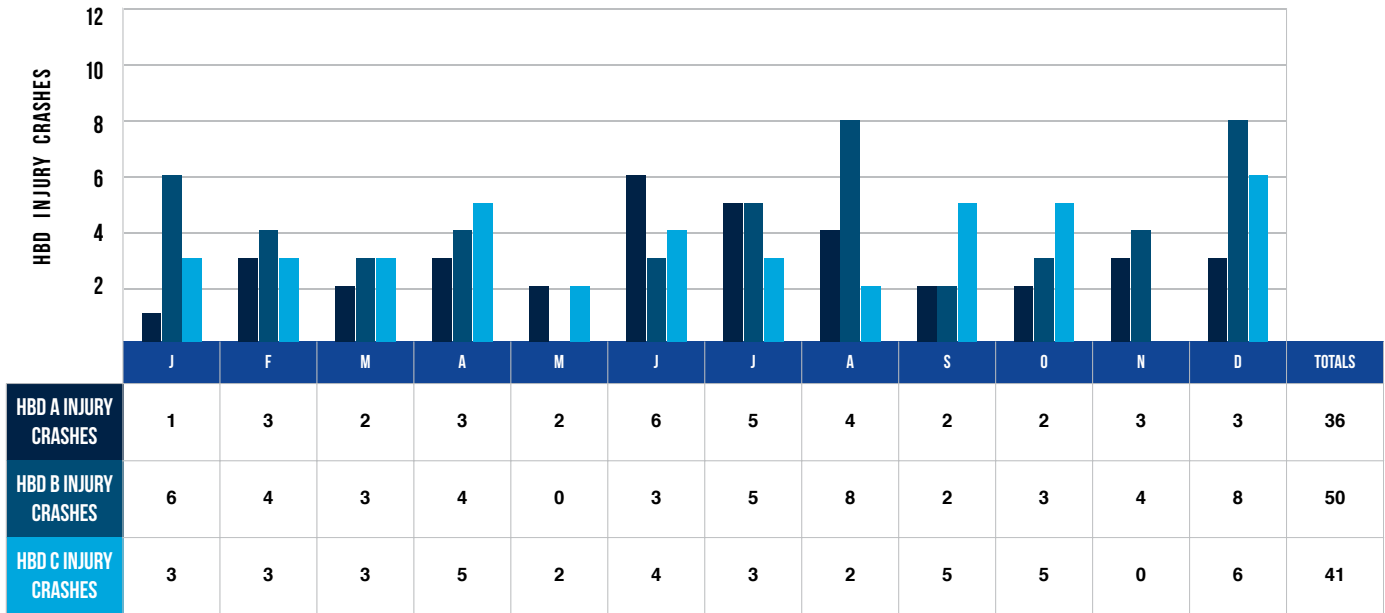
HAD-BEEN-DRINKING FATAL CRASHES BY TIME OF DAY



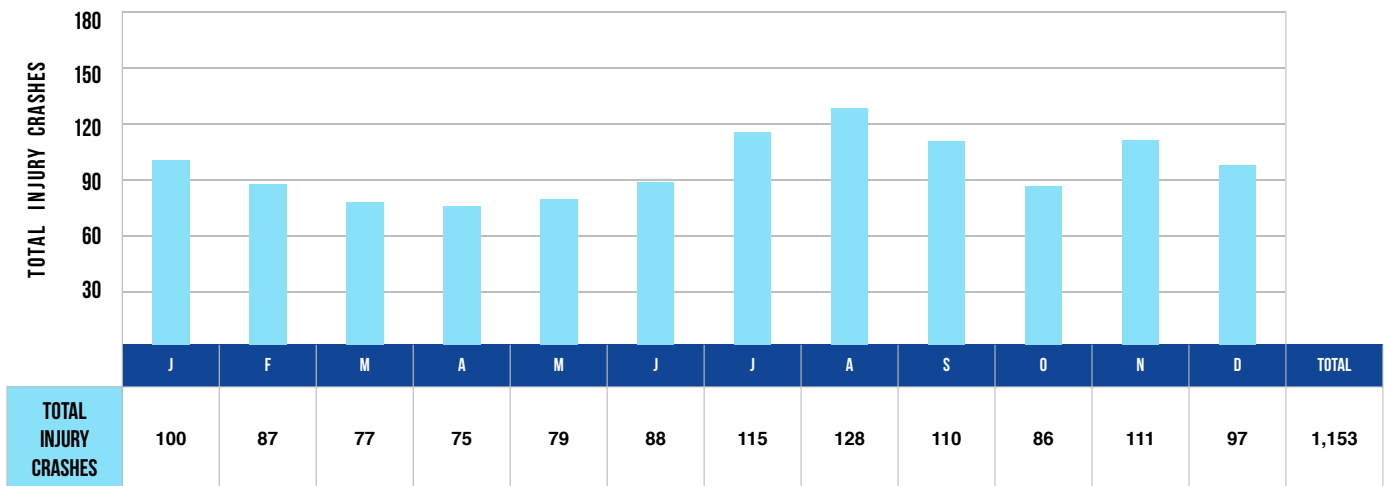
The 6:00 PM to 8:59 PM time period had the highest number of HBD fatal crashes (5), while the 12:00 PM to 2:59 PM time period had the highest number of total fatal crashes (7).

UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES

HAD-BEEN-DRINKING INJURY CRASHES BY MONTH



TOTAL INJURY CRASHES BY MONTH

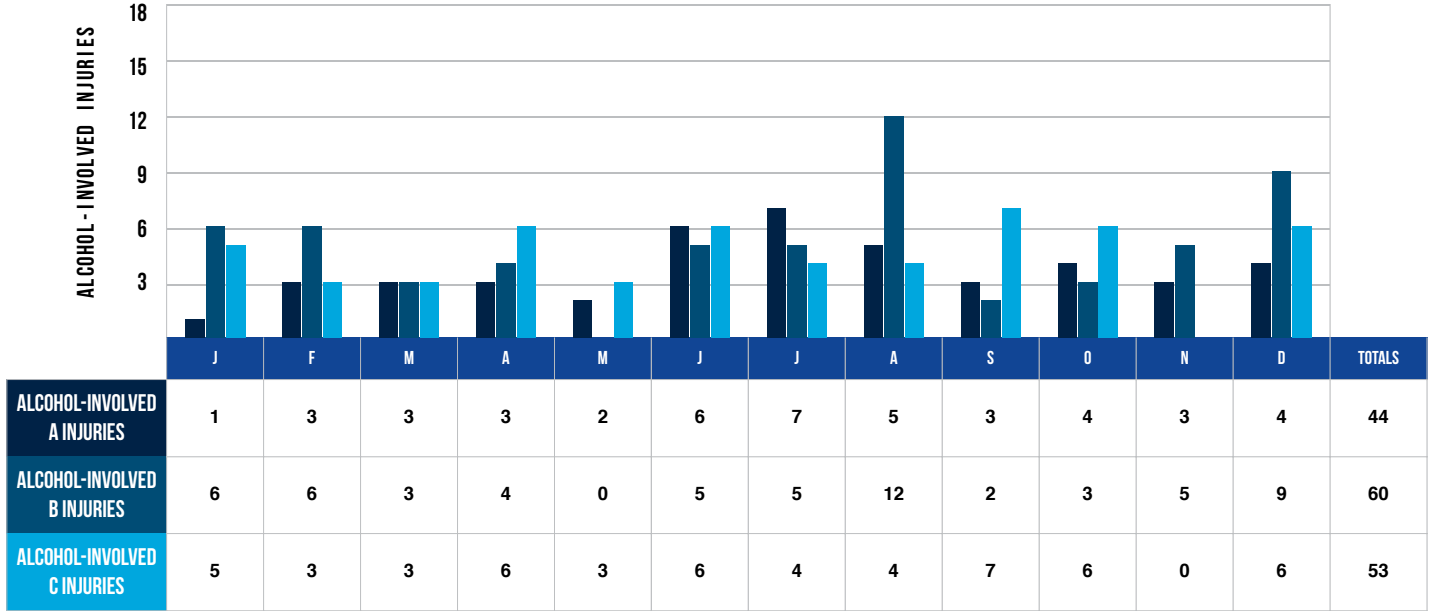


Alcohol involvement in injury crashes is an important indicator of the alcohol impaired driving problem. In 2017, the highest number of had-been-drinking injury crashes occurred in April (19).

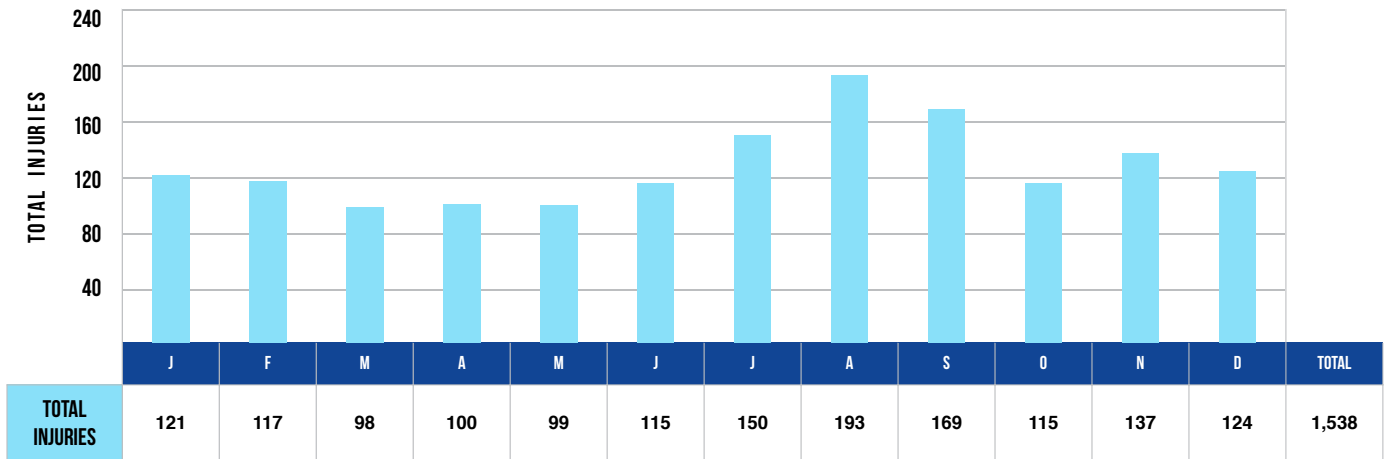
Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.

UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

ALCOHOL-INVOLVED INJURIES BY MONTH



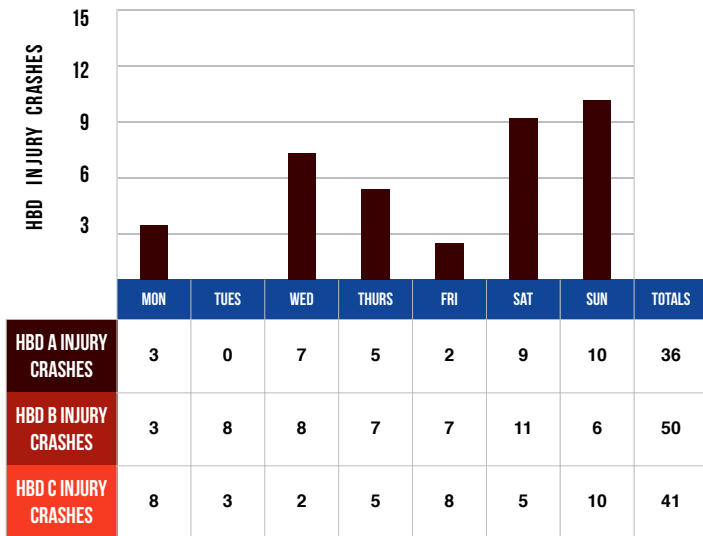
TOTAL INJURIES BY MONTH



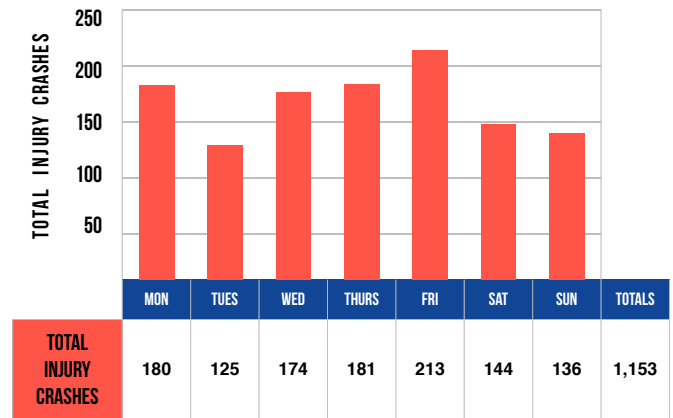
Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.

UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

HAD-BEEN-DRINKING INJURY CRASHES BY DAY OF THE WEEK

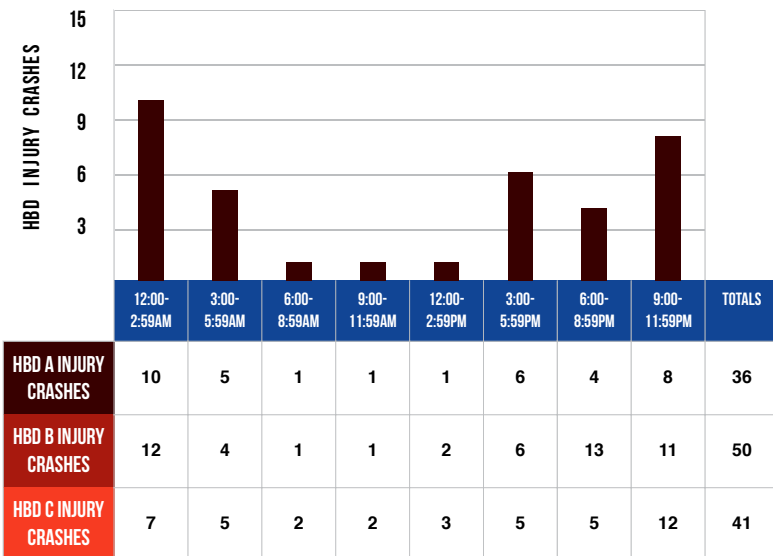


TOTAL INJURY CRASHES BY DAY OF THE WEEK

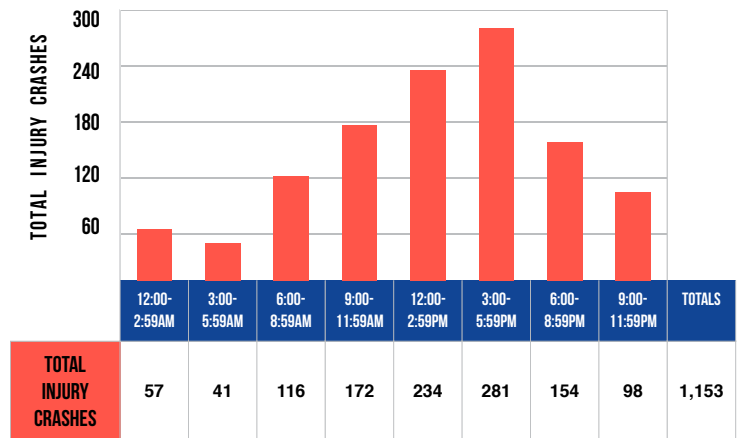


The peak day for all injury crashes is Friday. The highest proportion of had-been-drinking injury crashes to total injury crashes occurred on Saturday (21.7%).

HAD-BEEN-DRINKING INJURY CRASHES BY TIME OF DAY



TOTAL INJURY CRASHES BY TIME OF DAY



Total injury crash frequencies peak in the hours between 12:00 PM and 2:59 PM, while had-been-drinking injury crash frequencies peak between 12:00 AM and 2:59 AM. There were no had-been-drinking injury crashes and one injury crash where the time of day was unknown.

UPPER PENINSULA MALE DRIVERS BY AGE AND INJURY SEVERITY IN CRASH

AGE OF DRIVER IN CRASH	MALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
13 years and under	4	0.1	0	0.0	0	1	0	3
14 years	5	0.1	0	0.0	0	2	1	2
15 years	6	0.1	0	0.0	0	0	2	4
16 years	84	1.2	0	0.0	3	5	12	64
17 years	110	1.6	0	0.0	5	4	7	94
18 years	154	2.3	1	2.4	3	7	12	131
19 years	160	2.4	1	2.4	3	8	15	133
20 years	166	2.4	2	4.8	2	8	11	143
21 - 24 years	616	9.1	5	11.9	20	30	37	524
25 - 34 years	1,110	16.3	7	16.7	25	56	97	925
35 - 44 years	925	13.6	6	14.3	26	42	75	776
45 - 54 years	1,076	15.8	5	11.9	28	51	89	903
55 - 64 years	1,083	15.9	6	14.3	28	43	67	939
65 - 69 years	463	6.8	4	9.5	12	11	26	410
70 - 74 years	353	5.2	1	2.4	9	17	24	302
75 - 79 years	233	3.4	0	0.0	3	9	25	196
80 - 84 years	141	2.1	1	2.4	2	6	14	118
85 - 89 years	67	1.0	2	4.8	0	5	9	51
90 years and over	28	0.4	1	2.4	0	2	2	23
Unknown	20	0.3	0	0.0	0	1	1	18
TOTAL	6,804**	100.0	42	100.0	169	308	526	5,759

The male driver age group 45 to 54 experienced the highest number of fatal crashes, and the male driver age group 25 to 34 experienced the highest number of injury crashes. Property damage only crashes were highest among the male driver age group 55 to 64.

***Note: This table excludes 626 drivers of unknown gender.*

UPPER PENINSULA MALE DRINKING DRIVERS BY AGE AND INJURY SEVERITY IN CRASH

AGE OF DRINKING DRIVER IN CRASH	MALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
13 years and under	0	0.0	0	0.0	0	0	0	0
14 years	0	0.0	0	0.0	0	0	0	0
15 years	0	0.0	0	0.0	0	0	0	0
16 years	2	0.9	0	0.0	0	1	0	1
17 years	0	0.0	0	0.0	0	0	0	0
18 years	0	0.0	0	0.0	0	0	0	0
19 years	6	2.6	0	0.0	0	2	0	4
20 years	9	4.0	0	0.0	0	1	0	8
21 - 24 years	29	12.8	2	28.6	7	4	2	14
25 - 34 years	69	30.4	1	14.3	8	14	9	37
35 - 44 years	40	17.6	1	14.3	4	6	7	22
45 - 54 years	31	13.7	2	28.6	4	3	6	16
55 - 64 years	26	11.5	0	0.0	5	5	1	15
65 - 69 years	7	3.1	1	14.3	1	2	1	2
70 - 74 years	4	1.8	0	0.0	0	1	1	2
75 - 79 years	3	1.3	0	0.0	0	0	1	2
80 - 84 years	0	0.0	0	0.0	0	0	0	0
85 - 89 years	1	0.4	0	0.0	0	0	0	1
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	0	0.0	0	0.0	0	0	0	0
TOTAL	227**	100.0	7	100.0	29	39	28	124

The male drinking driver age group 25 to 34 years experienced the highest number of injury crashes and property damage only crashes.

***Note: This table excludes no drivers of unknown gender.*

UPPER PENINSULA FEMALE DRIVERS BY AGE AND INJURY SEVERITY IN CRASH

AGE OF DRIVER IN CRASH	FEMALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
13 years and under	5	0.1	0	0.0	2	2	0	1
14 years	3	0.1	0	0.0	0	1	0	2
15 years	8	0.2	0	0.0	1	1	0	6
16 years	99	2.0	0	0.0	4	5	11	79
17 years	113	2.3	0	0.0	5	9	22	77
18 years	136	2.8	0	0.0	2	5	23	106
19 years	140	2.9	1	6.3	3	5	15	116
20 years	117	2.4	0	0.0	0	4	9	104
21 - 24 years	437	8.9	4	25.0	5	20	39	369
25 - 34 years	831	17.0	0	0.0	20	41	83	687
35 - 44 years	707	14.4	3	18.8	15	27	72	590
45 - 54 years	774	15.8	4	25.0	13	23	79	655
55 - 64 years	804	16.4	2	12.5	10	22	83	687
65 - 69 years	290	5.9	0	0.0	3	14	33	240
70 - 74 years	165	3.4	1	6.3	5	5	15	139
75 - 79 years	121	2.5	0	0.0	2	6	10	103
80 - 84 years	72	1.5	0	0.0	2	3	3	64
85 - 89 years	50	1.0	1	6.3	2	2	6	39
90 years and over	10	0.2	0	0.0	0	1	0	9
Unknown	13	0.3	0	0.0	0	1	2	10
TOTAL	4,895**	100.0	16	100.0	94	197	505	4,083

The female driver age groups 35 to 44 and 45 to 54 years experienced the highest number of fatal crashes. The female driver age group 25 to 34 years experienced the highest number of injury crashes and property damage only crashes.

***Note: This table excludes 626 drivers of unknown gender.*

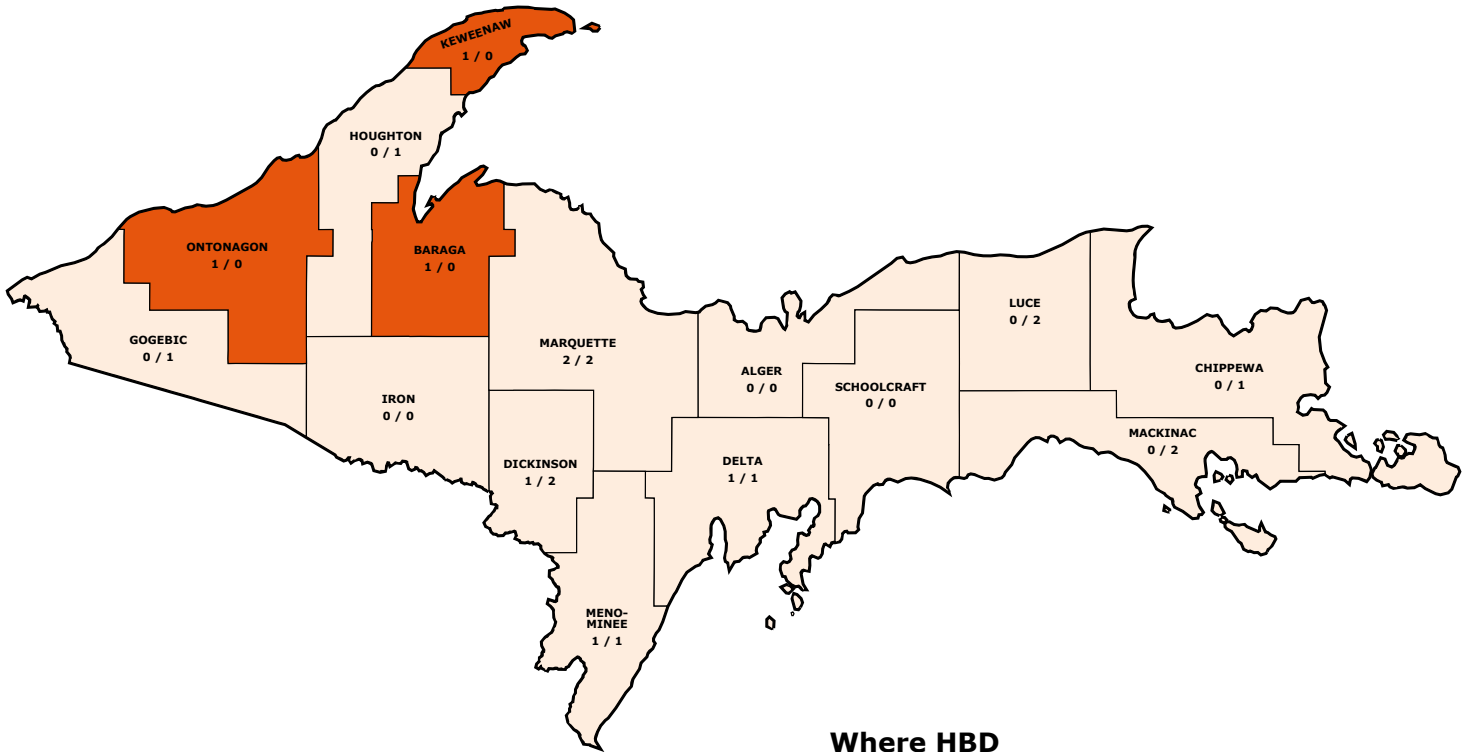
UPPER PENINSULA FEMALE DRINKING DRIVERS BY AGE AND INJURY SEVERITY IN CRASH

AGE OF DRINKING DRIVER IN CRASH	FEMALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
13 years and under	0	0.0	0	0.0	0	0	0	0
14 years	0	0.0	0	0.0	0	0	0	0
15 years	0	0.0	0	0.0	0	0	0	0
16 years	1	1.3	0	0.0	0	0	1	0
17 years	3	3.8	0	0.0	1	1	0	1
18 years	1	1.3	0	0.0	0	0	1	0
19 years	4	5.0	0	0.0	1	0	1	2
20 years	1	1.3	0	0.0	0	1	0	0
21 - 24 years	11	13.8	1	100.0	0	2	3	5
25 - 34 years	22	27.5	0	0.0	3	1	1	17
35 - 44 years	17	21.3	0	0.0	1	3	4	9
45 - 54 years	9	11.3	0	0.0	0	1	0	8
55 - 64 years	7	8.8	0	0.0	0	1	1	5
65 - 69 years	3	3.8	0	0.0	0	1	0	2
70 - 74 years	1	1.3	0	0.0	1	0	0	0
75 - 79 years	0	0.0	0	0.0	0	0	0	0
80 - 84 years	0	0.0	0	0.0	0	0	0	0
85 - 89 years	0	0.0	0	0.0	0	0	0	0
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	0	0.0	0	0.0	0	0	0	0
TOTAL	80**	100.0	1	100.0	7	11	12	49

The female drinking driver age groups 25-34 and 45-54 experienced the highest number of injury crashes. The age groups 25-34 and 35-44 experienced the highest number of property damage only crashes.

***Note: This table excludes no drivers of unknown gender.*

TRAFFIC FATALITIES WITH DRINKING INVOLVEMENT BY COUNTY



**Where HBD
Traffic Fatalities Occured**

**A One-Year Comparison
2018 = 8 / 2017 = 13**



- Same or decrease
- Increase