







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*	37	0	0	0	0	0	0	0	0
	Killed	0	0	0	0	0	0	0	0	0**
	Injured	29	0	0	0	0	0	0	0	0
 DRIVERS	Total*	13,024	333	258	111	70	77	53	521	381
	Killed	31	8	8	2	2	4	4	14	14**
	Injured	1,093	108	92	37	27	29	21	174	140
 MOTORCYCLISTS	Total*	113	15	13	0	0	3	3	18	16
	Killed	6	2	2	0	0	1	1	3	3**
	Injured	68	9	9	0	0	2	2	11	11
 ORV/ATV RIDERS	Total*	70	15	14	0	0	3	3	18	17
	Killed	2	2	2	0	0	0	0	2	2**
	Injured	46	9	9	0	0	3	3	12	12
 PEDESTRIANS	Total*	34	4	3	2	0	2	2	8	5
	Killed	3	2	2	0	0	1	1	3	3**
	Injured	25	2	1	2	0	1	1	5	2
 SNOWMOBILERS	Total*	92	11	11	0	0	0	0	11	11
	Killed	5	1	1	0	0	0	0	1	1**
	Injured	60	9	9	0	0	0	0	9	9

*Total does include property damage only crashes

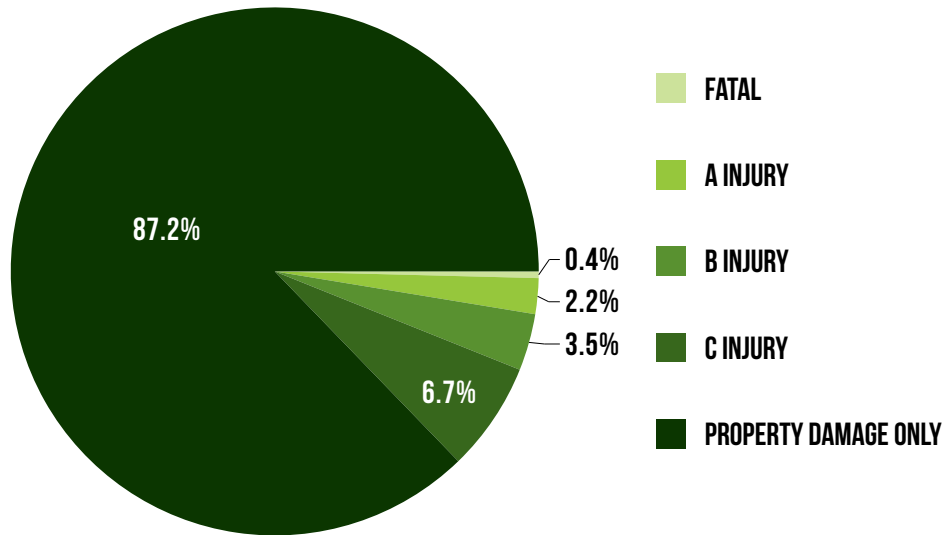
**In the Upper Peninsula, there were no bicyclists, 14 drivers, three motorcyclists, two ORV/ATV riders, three pedestrians, and one snowmobiler who were killed and coded as drinking and/or using drugs by the police officer.

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	1	0	0	1	0	0	0	0	0	0	0	0
16 years	0	0	0	0	0	0	0	0	0	0	0	0
17 years	4	3	0	7	0	0	0	0	2	1	0	3
18 years	4	5	1	10	1	1	0	2	1	3	0	4
19 years	9	5	2	16	0	2	0	2	4	1	2	7
20 years	4	1	1	6	0	0	0	0	2	1	1	4
21 - 24 years	40	2	12	54	0	0	0	0	14	2	6	22
25 - 34 years	65	16	15	96	1	1	1	3	24	7	6	37
35 - 44 years	50	15	8	73	1	0	1	2	26	7	4	37
45 - 54 years	31	9	4	44	1	0	0	1	15	5	3	23
55 - 64 years	36	9	8	53	4	0	2	6	14	5	3	22
65 - 69 years	7	3	2	12	0	1	0	1	4	1	0	5
70 - 74 years	4	1	0	5	0	0	0	0	1	0	0	1
75 - 79 years	4	1	0	5	1	0	0	1	2	0	0	2
80 - 84 years	0	1	0	1	0	0	0	0	0	1	0	1
85 - 89 years	0	0	0	0	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	259	71	53	383	9	5	4	18	109	34	25	168

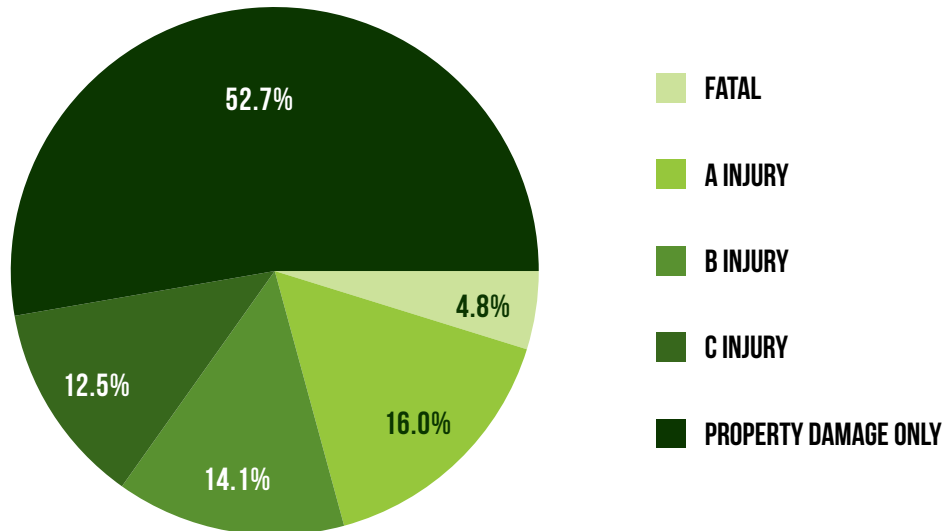
The driver age group 25 to 34 years represents the highest number of drinking and/or drug use in total crashes. That age group and the 35 to 44 years age group together represent the highest number of drinking and/or drug use in injury crashes.

UPPER PENINSULA ALL CRASHES BY INJURY SEVERITY



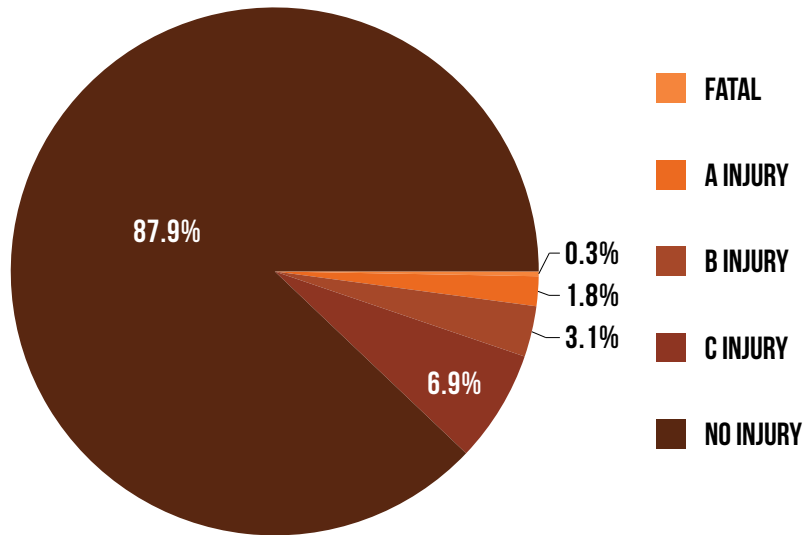
The majority of crashes do not involve injury (87.2%). Possible (C) injury crashes represent about 52% of all injury crashes.

UPPER PENINSULA HAD-BEEN-DRINKING CRASHES BY INJURY SEVERITY



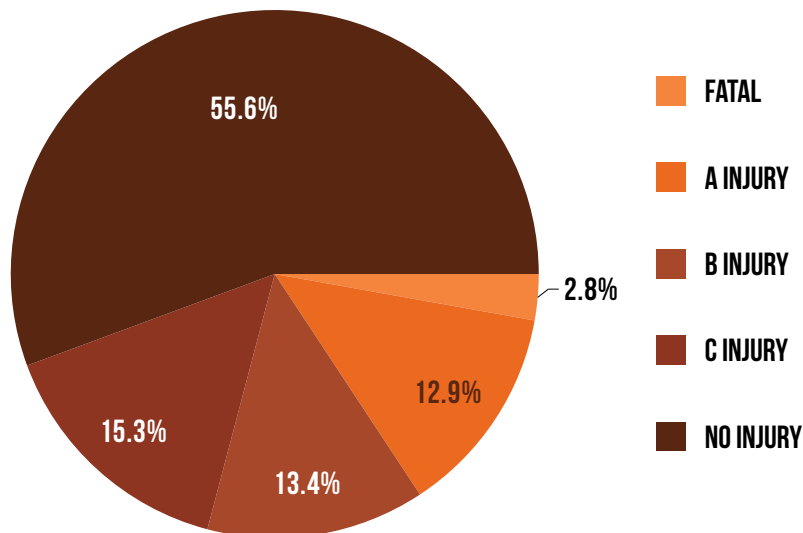
The problem of the drinking driver, pedestrian, and/or bicyclist is seen by comparing the two charts on this page. All injury levels are greater, and a fatality in the crash is about 12 times more likely when one of the crash-involved operators is reported as had-been-drinking (HBD).

UPPER PENINSULA DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS



The majority of occupants involved in crashes are not injured (87.9%). About 57% of those who are injured receive only possible (C) injuries.

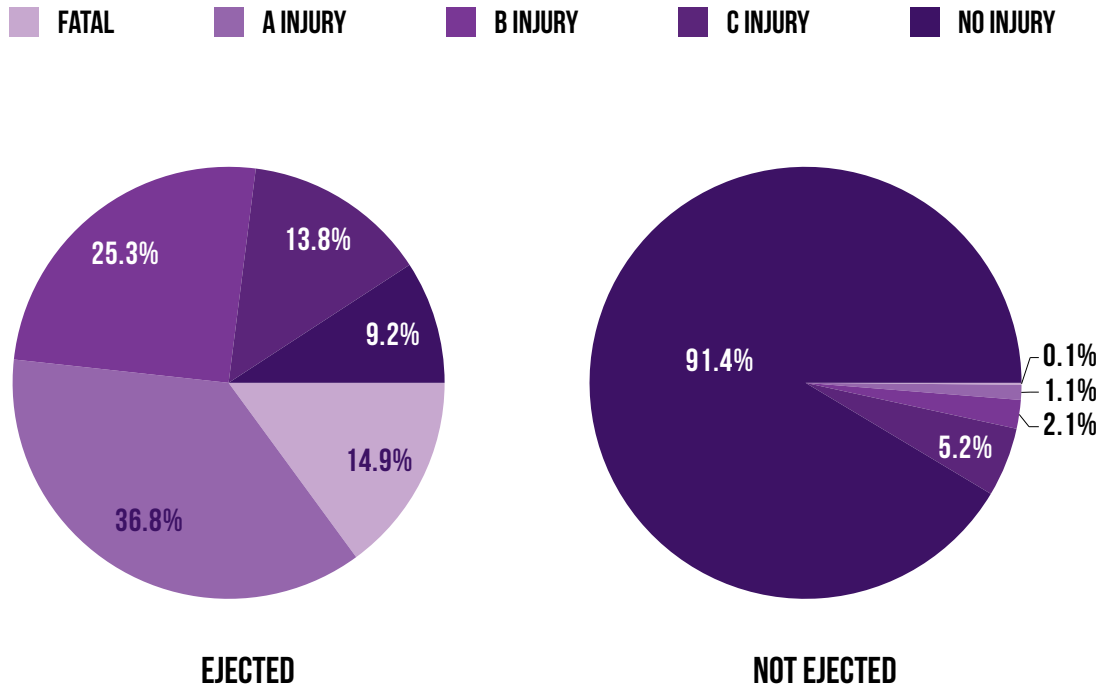
UPPER PENINSULA OCCUPANTS IN HAD-BEEN-DRINKING CRASHES



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

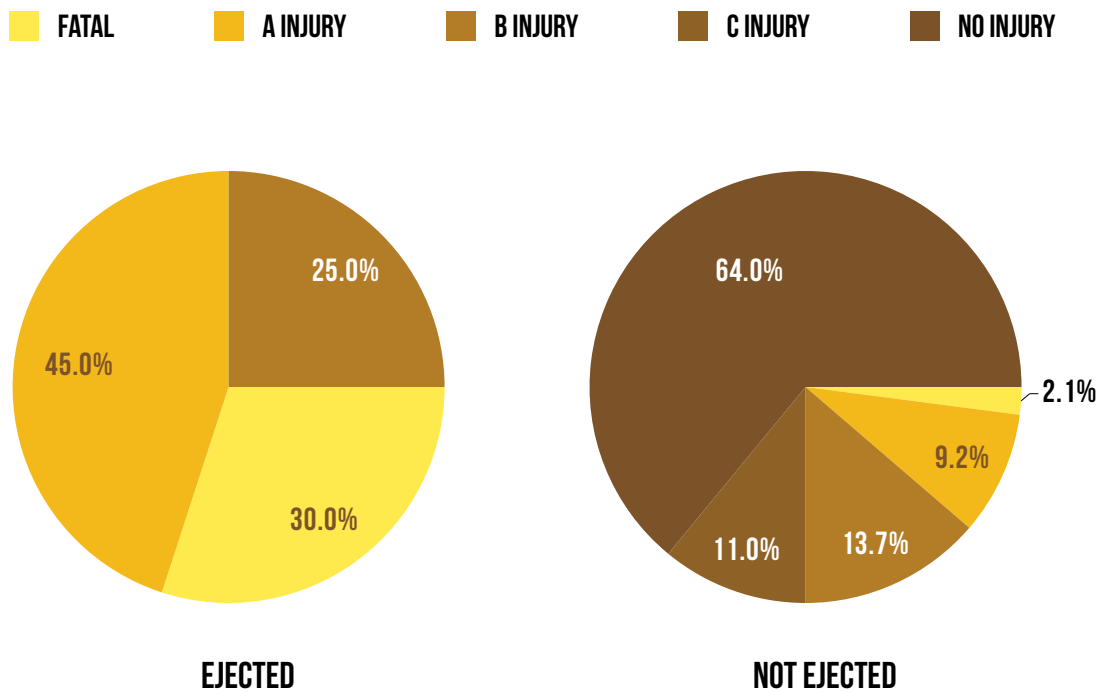
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

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



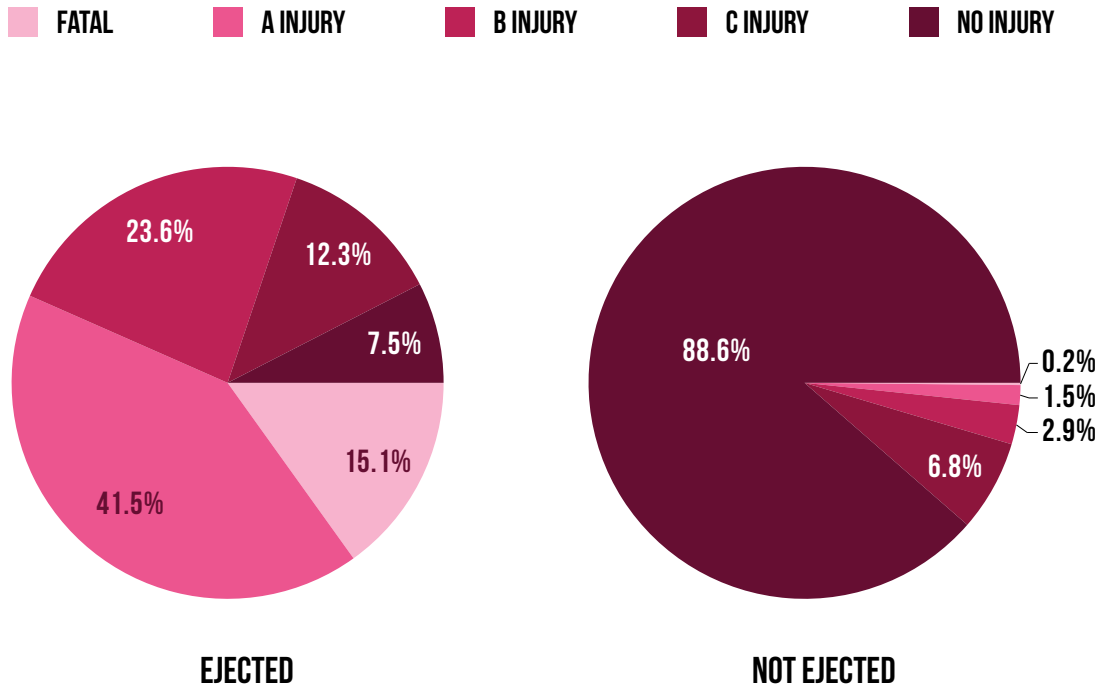
As shown by the two charts above, death and injury are much more likely when drivers are ejected from vehicles.

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



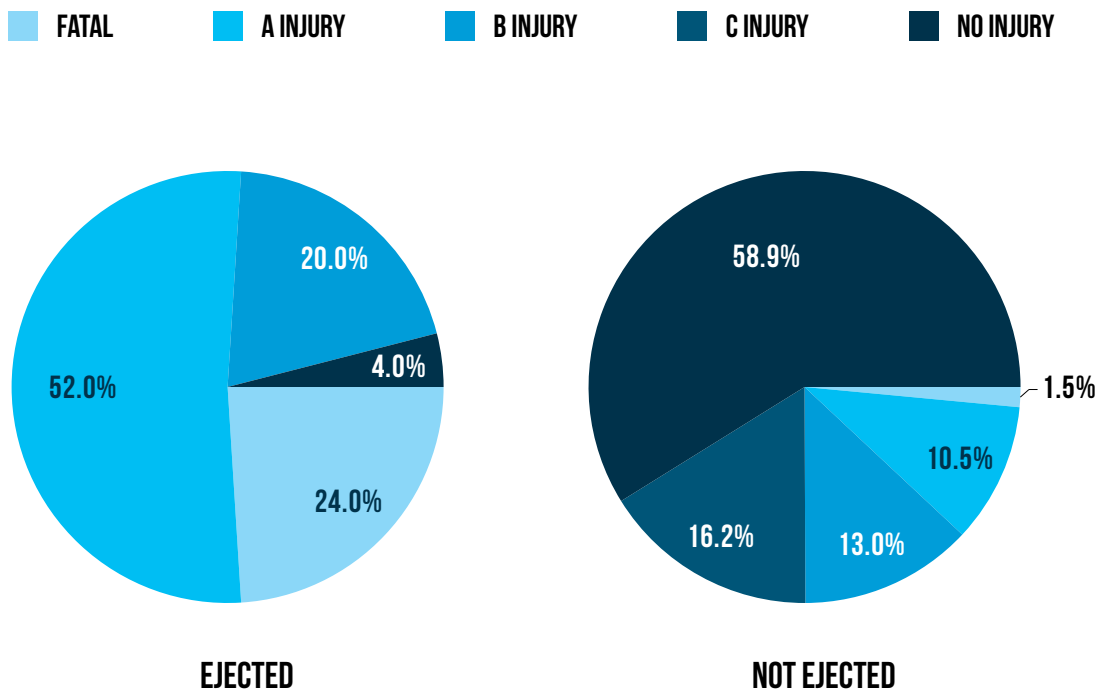
When compared to the charts above, the had-been-drinking charts demonstrate that injury severity is much worse for drivers reported to be drinking in both ejected and non-ejected events.

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

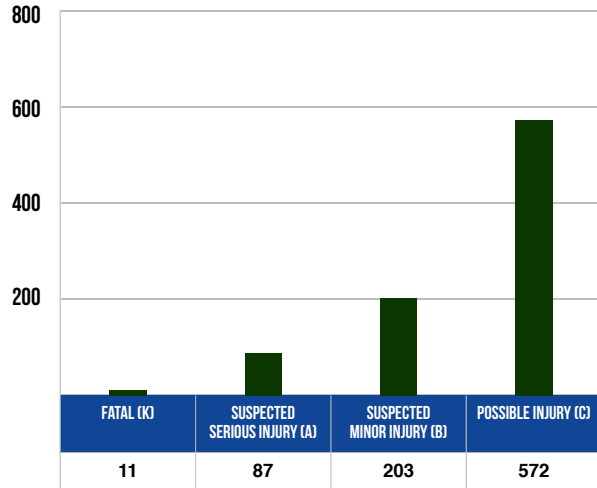


When compared to the charts above, the charts of occupants of had-been-drinking crashes demonstrate that injury severity is much worse for occupants in a crash where drinking is reported in both ejected and non-ejected events.

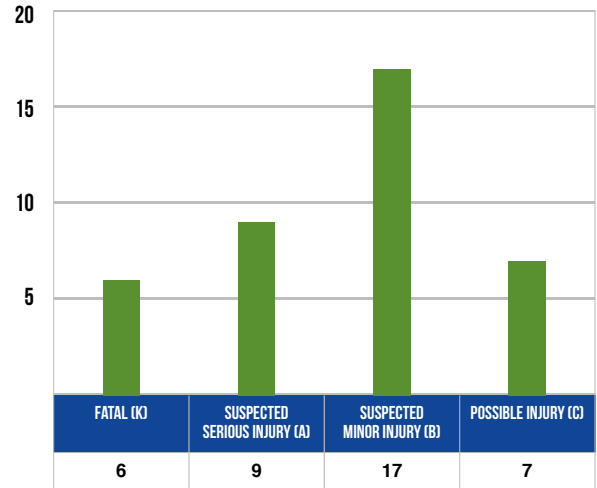
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

UPPER PENINSULA INJURY SEVERITY & BELT USE BY DRIVER INJURY

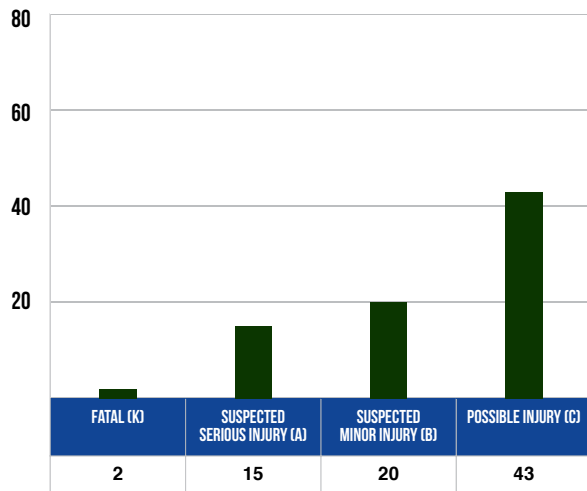
ALL CRASHES-BELTS USED



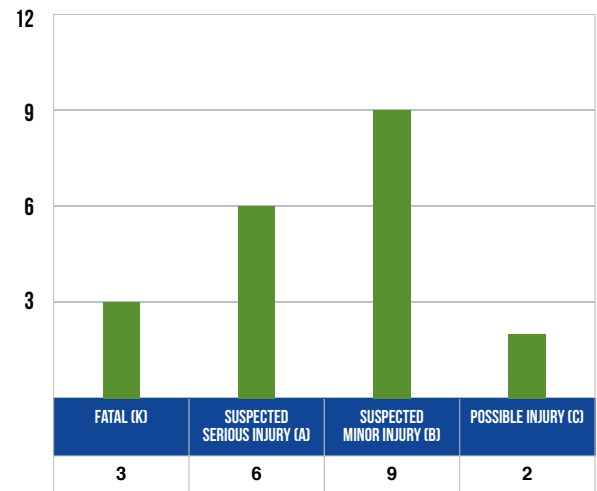
ALL CRASHES-BELTS NOT USED



HAD-BEEN DRINKING CRASHES-BELTS USED

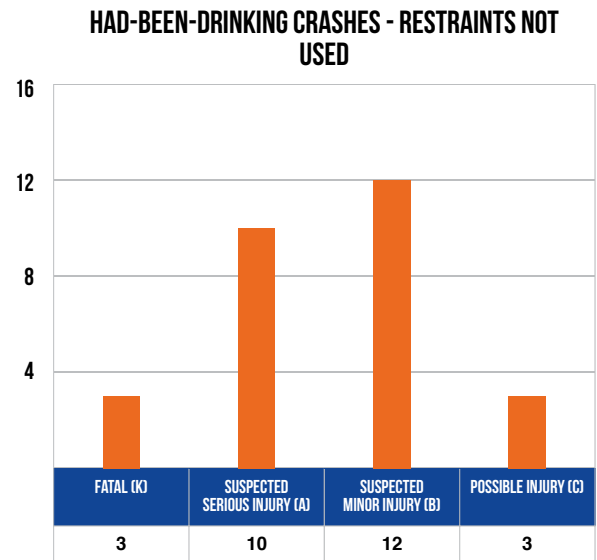
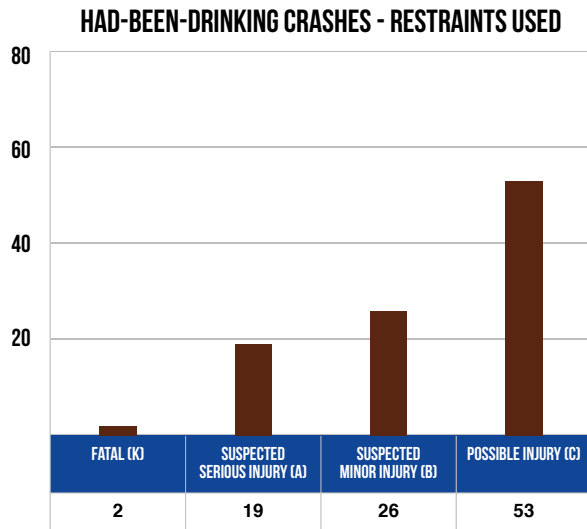
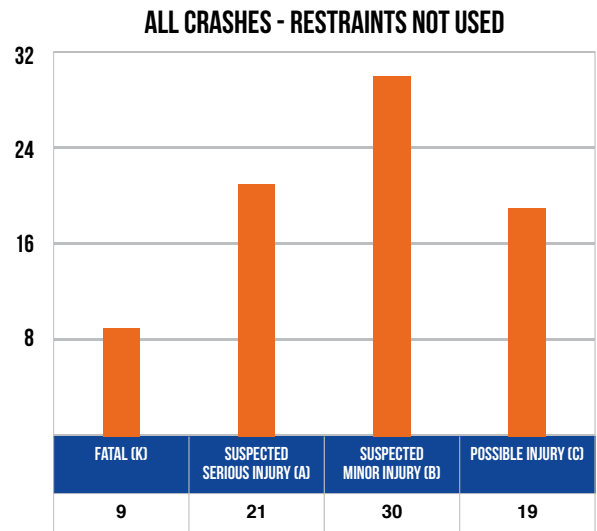
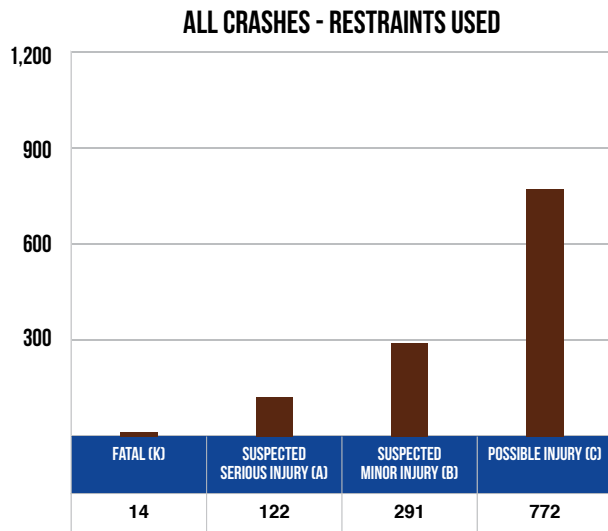


HAD-BEEN DRINKING CRASHES-BELTS NOT USED



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

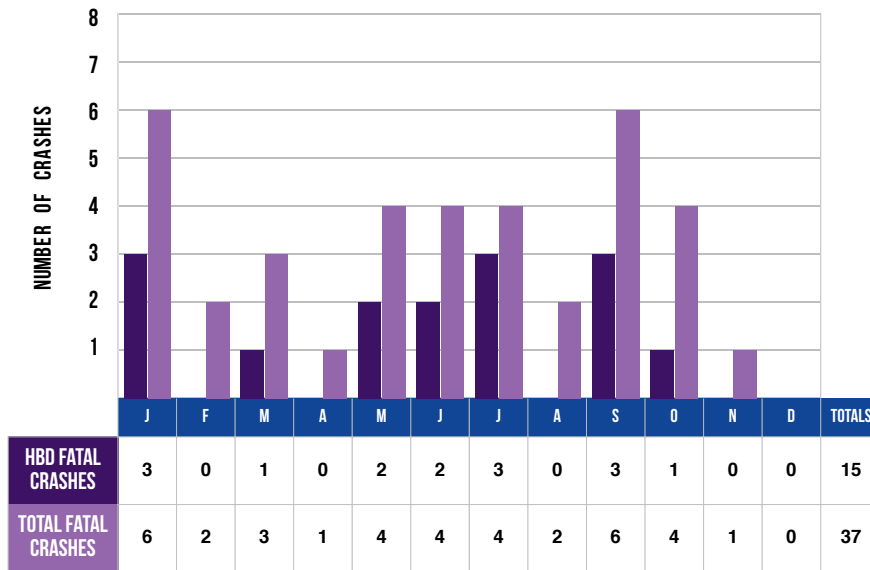


Note: "Restraints Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, child restraints used, and restraint failure. "Restraints Not Used" represents no belts available; no belts used; and child restraint not used, unavailable, or improper use.

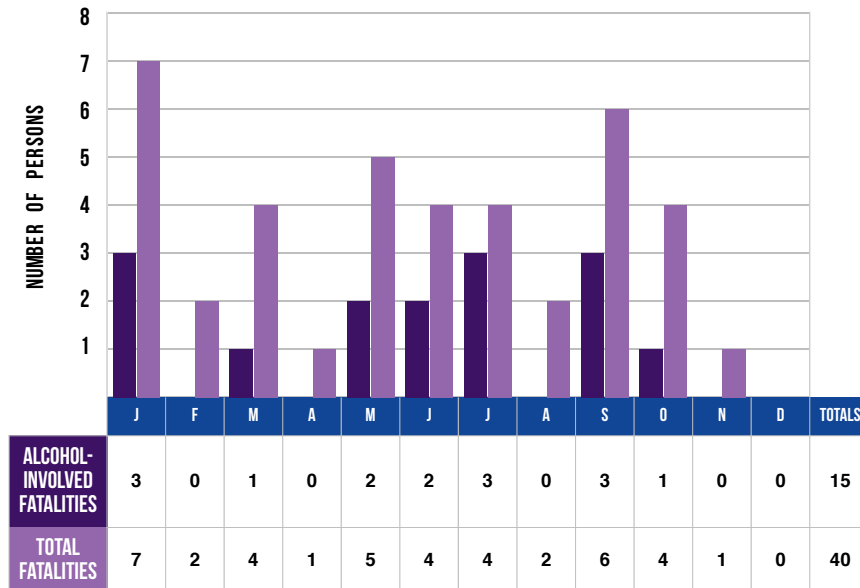
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

UPPER PENINSULA ALCOHOL INVOLVMENT IN FATAL CRASHES

HAD-BEEN-DRINKING FATAL CRASHES BY MONTH



ALCOHOL-INVOLVED FATALITIES BY MONTH

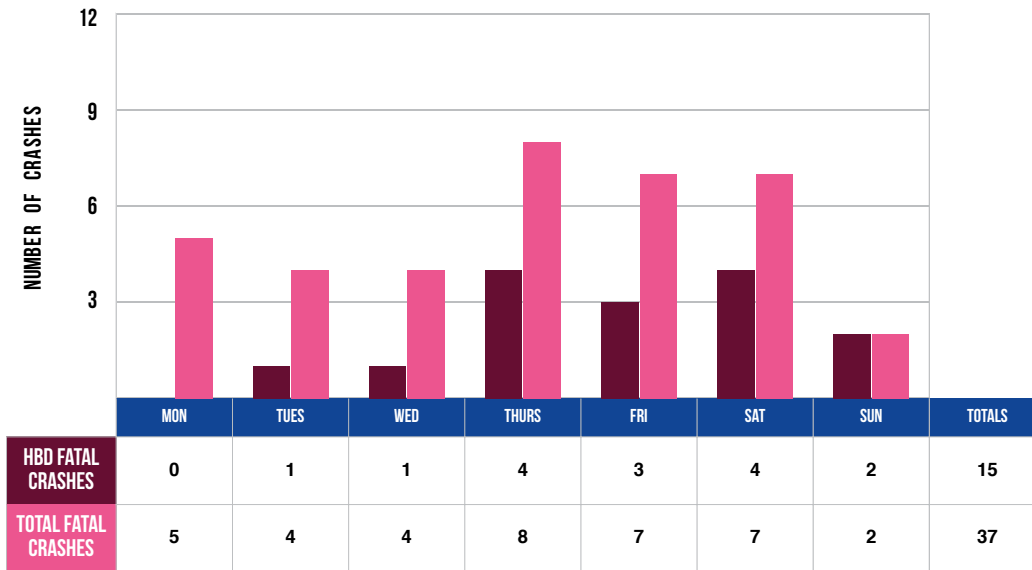


Had-been-drinking fatal crashes were highest in number during the months of January, July, and September. The number of total fatal crashes (total of non-had-been-drinking and had-been-drinking fatal crashes) reached highest levels in January and September.

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

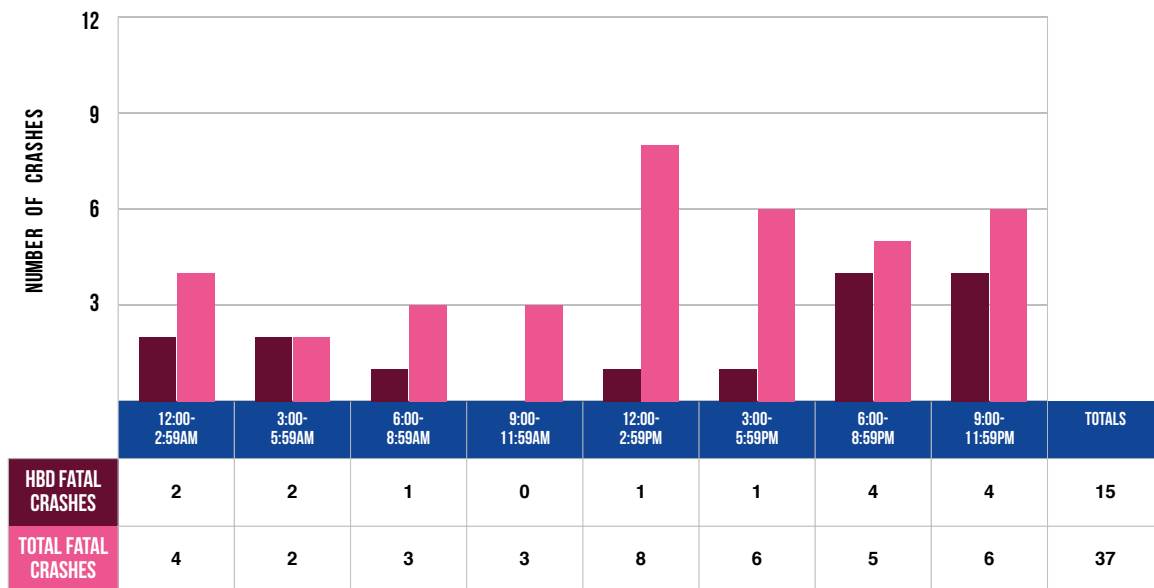
UPPER PENINSULA ALCOHOL INVOLVMENT IN FATAL CRASHES (CONTINUED)

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



Thursday had the highest number of fatal crashes, and Thursday and Saturday had the highest number of drinking-related fatal crashes in 2019.

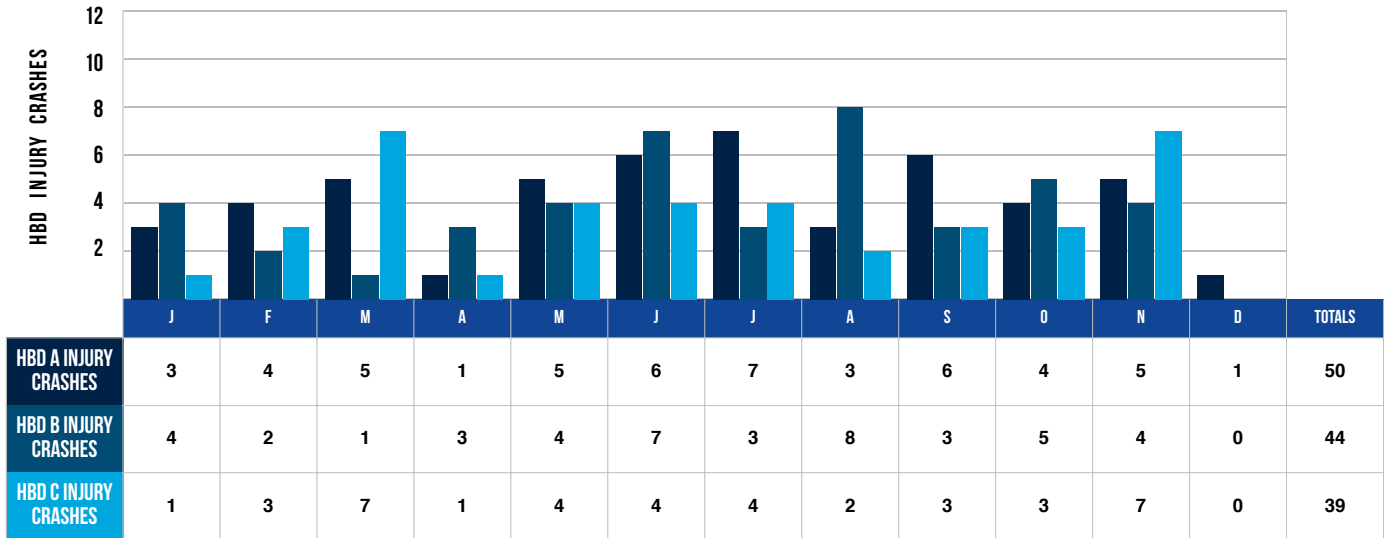
HAD-BEEN-DRINKING FATAL CRASHES BY TIME OF DAY



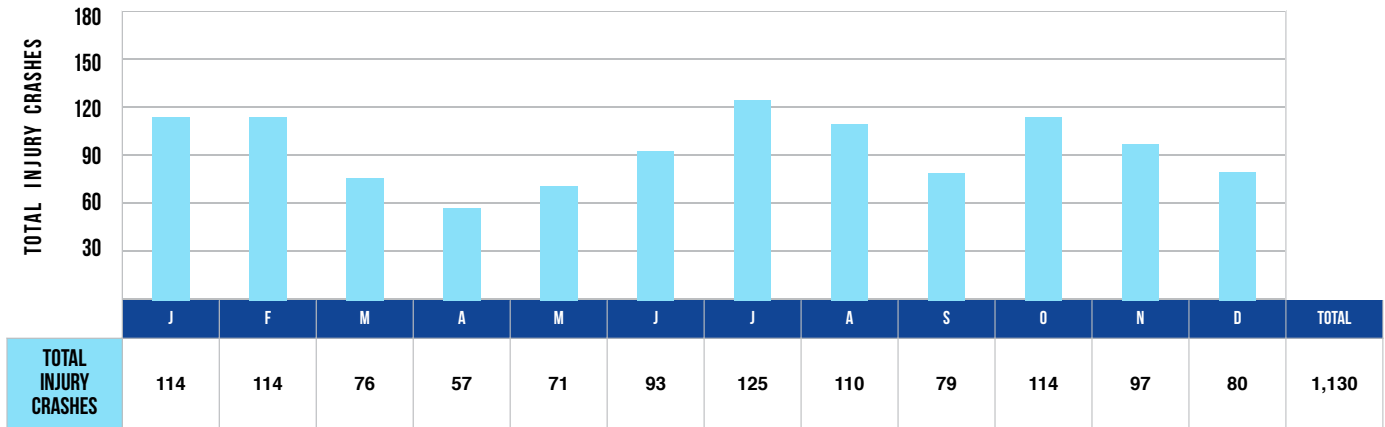
The 6:00 PM to 8:59 PM and 9:00 PM to 11:59 PM time periods had the highest number of HBD fatal crashes (4), while the 12:00 PM to 2:59 PM time period had the highest number of total fatal crashes (8).

UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES

HAD-BEEN-DRINKING INJURY CRASHES BY MONTH



TOTAL INJURY CRASHES BY MONTH

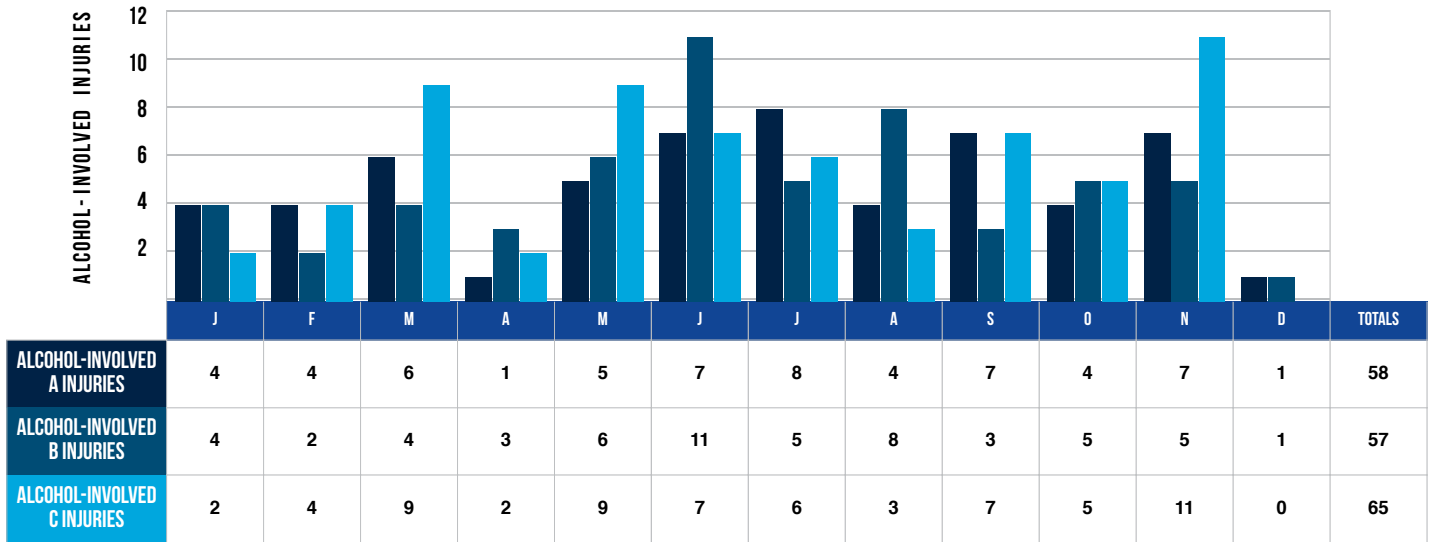


Alcohol involvement in injury crashes is an important indicator of the alcohol impaired driving problem. In 2019, the highest number of had-been-drinking injury crashes occurred in June (17).

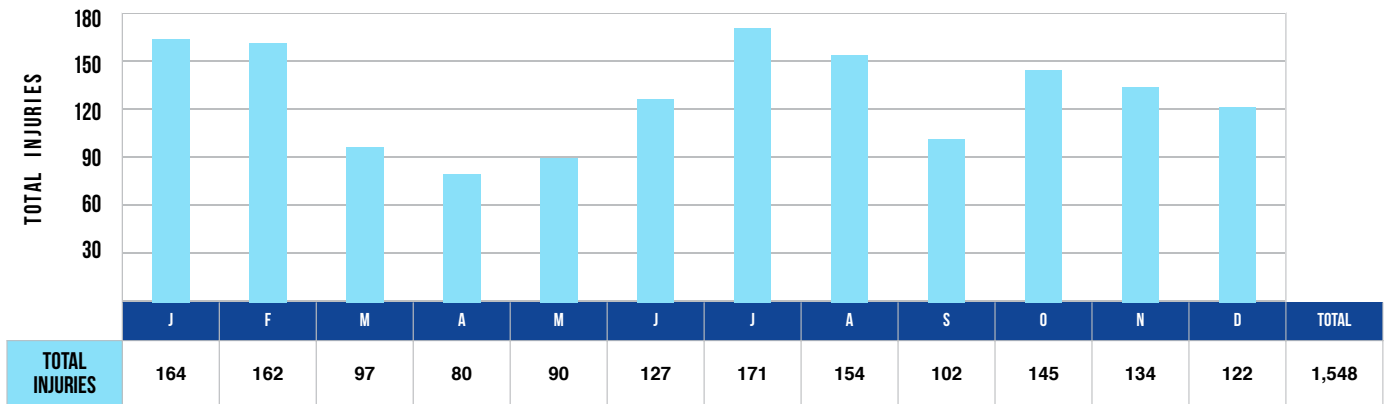
Note: An alcohol-involved injury is any person injured in a had-been-drinking crash.

UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

ALCOHOL-INVOLVED INJURIES BY MONTH



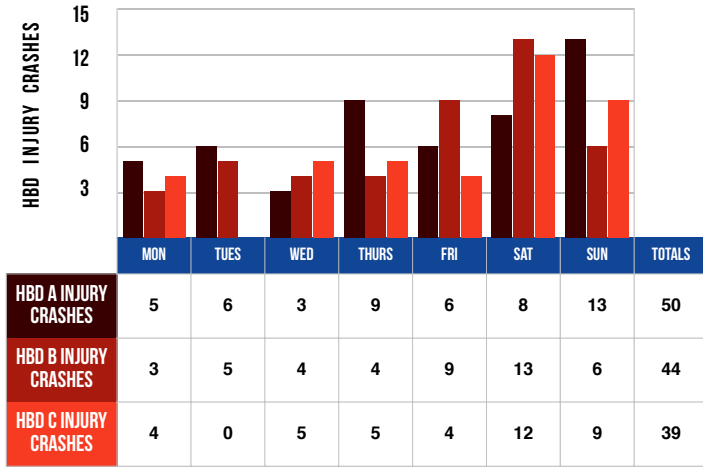
TOTAL INJURIES BY MONTH



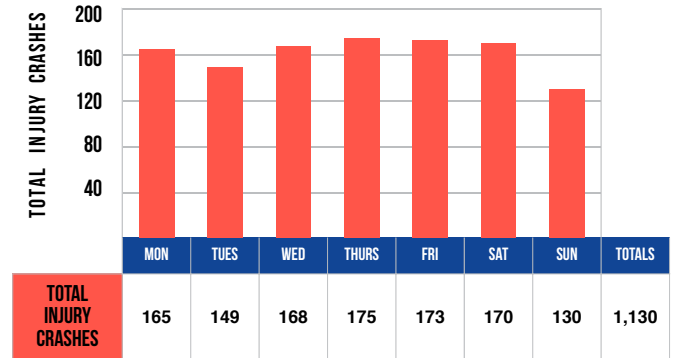
Note: An alcohol-involved injury is any person injured in a had-been-drinking crash.

UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

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

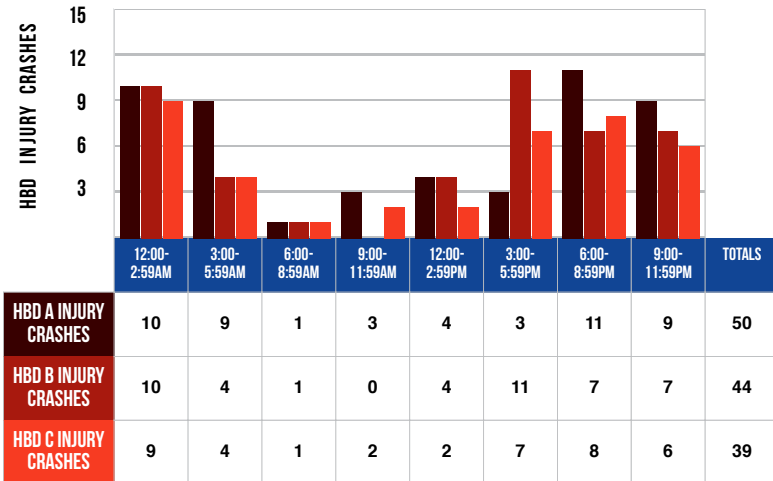


TOTAL INJURY CRASHES BY DAY OF THE WEEK

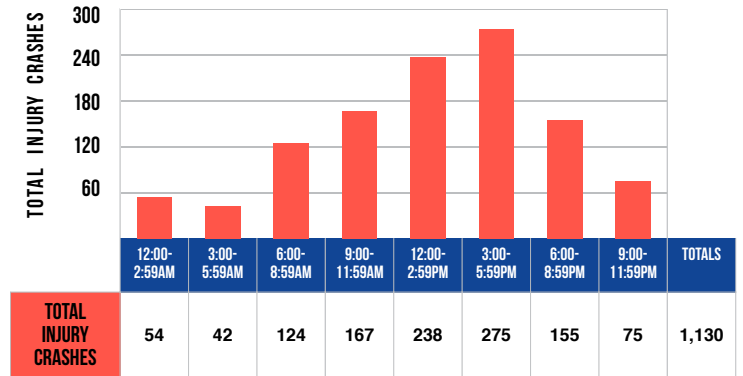


The peak day for all injury crashes is Thursday. The highest proportion of had-been-drinking injury crashes to total injury crashes occurred on Sunday (21.5%).

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 3:00 PM and 5:59 PM, while had-been-drinking injury crash frequencies peak between 12:00 AM and 2:59 AM. There were no injury crashes 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	5	0.1	0	0.0	3	2	0	0
14 years	3	0.0	0	0.0	1	1	0	1
15 years	10	0.1	0	0.0	1	3	1	5
16 years	111	1.5	0	0.0	3	6	10	92
17 years	130	1.8	0	0.0	4	7	10	109
18 years	178	2.4	2	4.3	3	8	15	150
19 years	182	2.5	1	2.2	6	15	19	141
20 years	175	2.4	0	0.0	2	7	13	153
21 - 24 years	661	8.9	5	10.9	11	26	54	565
25 - 34 years	1,169	15.8	3	6.5	31	44	86	1,005
35 - 44 years	1,080	14.6	5	10.9	36	44	75	920
45 - 54 years	1,083	14.6	6	13.0	36	35	73	933
55 - 64 years	1,280	17.3	15	32.6	34	45	94	1,092
65 - 69 years	493	6.7	3	6.5	21	28	33	408
70 - 74 years	343	4.6	0	0.0	11	10	23	299
75 - 79 years	251	3.4	4	8.7	4	11	25	207
80 - 84 years	138	1.9	2	4.3	3	10	12	111
85 - 89 years	65	0.9	0	0.0	4	4	5	52
90 years and over	19	0.3	0	0.0	0	1	1	17
Unknown	28	0.4	0	0.0	0	0	2	26
TOTAL	7,404**	100.0	46	100.0	214	307	551	6,286

The male driver age group 55 to 64 experienced the highest number of fatal crashes, injury crashes, and property damage only crashes.

***Note: This table excludes 676 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	0	0.0	0	0.0	0	0	0	0
17 years	4	1.7	0	0.0	0	1	1	2
18 years	5	2.1	1	8.3	0	1	0	3
19 years	8	3.4	0	0.0	1	2	1	4
20 years	4	1.7	0	0.0	0	1	1	2
21 - 24 years	35	14.8	0	0.0	6	2	2	25
25 - 34 years	54	22.9	2	16.7	9	4	5	34
35 - 44 years	45	19.1	1	8.3	12	8	4	20
45 - 54 years	29	12.3	1	8.3	6	7	3	12
55 - 64 years	38	16.1	6	50.0	5	5	4	18
65 - 69 years	7	3.0	0	0.0	1	3	0	3
70 - 74 years	4	1.7	0	0.0	1	0	0	3
75 - 79 years	3	1.3	1	8.3	0	0	2	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	236**	100.0	12	100.0	41	34	23	126

Among male drinking drivers, the age group 55 to 64 years experienced the highest number of fatal crashes, the 35 to 44 year age group experienced the highest number of injury crashes, and the 25 to 34 year age group experienced the highest number of 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	0	0.0	0	0.0	0	0	0	0
14 years	1	0.0	0	0.0	0	0	1	0
15 years	8	0.2	0	0.0	1	3	1	3
16 years	89	1.8	0	0.0	2	1	17	69
17 years	125	2.5	0	0.0	4	4	12	105
18 years	107	2.2	1	16.7	3	3	14	86
19 years	167	3.4	1	16.7	0	8	18	140
20 years	130	2.6	0	0.0	5	2	15	108
21 - 24 years	497	10.1	0	0.0	8	25	52	412
25 - 34 years	870	17.6	1	16.7	17	35	92	725
35 - 44 years	728	14.7	2	33.3	13	27	60	626
45 - 54 years	719	14.5	0	0.0	14	18	58	629
55 - 64 years	741	15.0	1	16.7	13	20	70	637
65 - 69 years	280	5.7	0	0.0	8	3	20	249
70 - 74 years	186	3.8	0	0.0	1	7	24	154
75 - 79 years	138	2.8	0	0.0	5	1	13	119
80 - 84 years	76	1.5	0	0.0	2	4	13	57
85 - 89 years	43	0.9	0	0.0	1	0	3	39
90 years and over	18	0.4	0	0.0	0	1	3	14
Unknown	21	0.4	0	0.0	0	0	1	20
TOTAL	4,944**	100.0	6	100.0	97	162	487	4,192

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 676 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	1	1.3	0	0.0	0	0	0	1
16 years	0	0.0	0	0.0	0	0	0	0
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	3	3.9	0	0.0	0	0	2	1
20 years	1	1.3	0	0.0	0	0	1	0
21 - 24 years	17	22.4	0	0.0	2	4	4	7
25 - 34 years	26	34.2	0	0.0	5	4	3	14
35 - 44 years	13	17.1	1	100.0	1	2	3	6
45 - 54 years	6	7.9	0	0.0	1	0	1	4
55 - 64 years	6	7.9	0	0.0	0	1	2	3
65 - 69 years	2	2.6	0	0.0	0	0	0	2
70 - 74 years	0	0.0	0	0.0	0	0	0	0
75 - 79 years	1	1.3	0	0.0	0	0	0	1
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	76**	100.0	1	100.0	9	11	16	39

The female 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.*

