







# 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*	1,558	61	47	10	4	7	2	78	53
	Killed	21	3	2	2	0	4	0	9	2**
	Injured	1,202	51	40	7	4	3	2	61	46
 DRIVERS	Total*	534,223	12,795	8,414	2,273	1,389	1,832	1,201	16,900	11,004
	Killed	633	115	98	81	60	81	67	277	225**
	Injured	55,111	3,382	2,530	795	571	622	485	4,799	3,586
 MOTORCYCLISTS	Total*	3,012	212	186	40	21	49	38	301	245
	Killed	134	23	19	16	8	22	17	61	44**
	Injured	2,160	165	148	19	13	27	21	211	182
 ORV/ATV RIDERS	Total*	373	69	66	1	1	2	2	72	69
	Killed	15	6	5	1	1	1	1	8	7**
	Injured	258	54	52	0	0	0	0	54	52
 PEDESTRIANS	Total*	2,317	204	159	38	20	35	21	277	200
	Killed	145	33	25	20	10	20	11	73	46**
	Injured	1,820	158	127	15	9	13	9	186	145
 SNOWMOBILERS	Total*	82	15	15	0	0	1	1	16	16
	Killed	0	0	0	0	0	0	0	0	0**
	Injured	50	13	13	0	0	1	1	14	14

\*Total does include property damage only classes

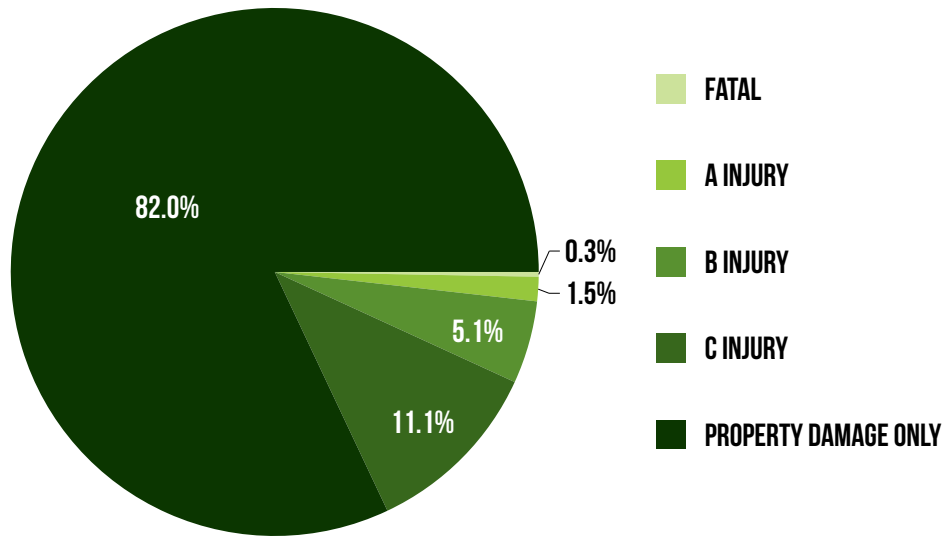
\*\*There were two bicyclists, 248 drivers, 43 motorcyclists, 13 ORV/ATV riders, 49 pedestrians, and two snowmobilers who were killed and coded as drinking and/or using drugs by the police officer.

## 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	1	1	0	0	0	0	0	0	0	0
14 years	1	0	0	1	0	0	0	0	0	0	0	0
15 years	2	3	0	5	0	0	0	0	2	2	0	4
16 years	16	11	3	30	1	0	0	1	3	5	1	9
17 years	38	21	10	69	2	1	1	4	15	10	4	29
18 years	62	40	12	114	0	4	0	4	26	21	3	50
19 years	115	47	28	190	2	3	1	6	46	22	13	81
20 years	166	47	33	246	1	5	4	10	64	24	12	100
21 - 24 years	1,278	192	200	1,670	20	14	19	53	463	93	88	644
25 - 34 years	2,660	454	427	3,541	53	33	37	123	1,024	228	194	1,446
35 - 44 years	1,528	258	206	1,992	31	17	18	66	579	113	97	789
45 - 54 years	1,252	168	150	1,570	25	13	10	48	493	64	63	620
55 - 64 years	939	120	104	1,163	16	11	8	35	373	61	45	479
65 - 69 years	199	20	18	237	2	4	0	6	88	7	10	105
70 - 74 years	107	14	5	126	5	3	0	8	38	6	2	46
75 - 79 years	39	3	0	42	1	0	0	1	12	1	0	13
80 - 84 years	14	3	3	20	1	0	0	1	7	0	1	8
85 - 89 years	8	0	0	8	1	0	0	1	1	0	0	1
90 years and over	3	0	1	4	0	0	0	0	2	0	0	2
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8,427</b>	<b>1,401</b>	<b>1,201</b>	<b>11,029</b>	<b>161</b>	<b>108</b>	<b>98</b>	<b>367</b>	<b>3,236</b>	<b>657</b>	<b>533</b>	<b>4,426</b>

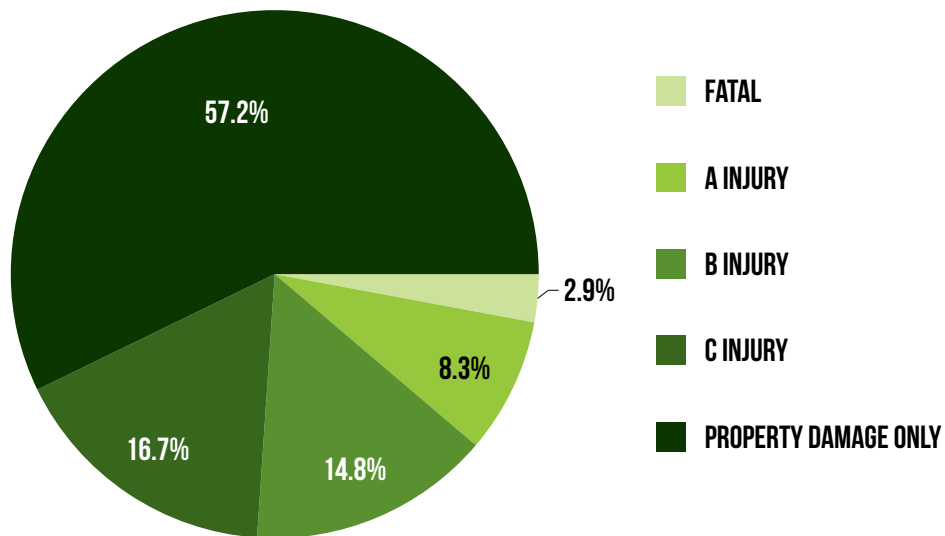
The driver age group 25 to 34 years represents the highest number of drinking and/or drug use in total crashes, injury crashes, and fatal crashes, with the exception of drugs only in fatal crashes, where the 35 to 44 age group has the highest involvement.

## ALL CRASHES BY INJURY SEVERITY



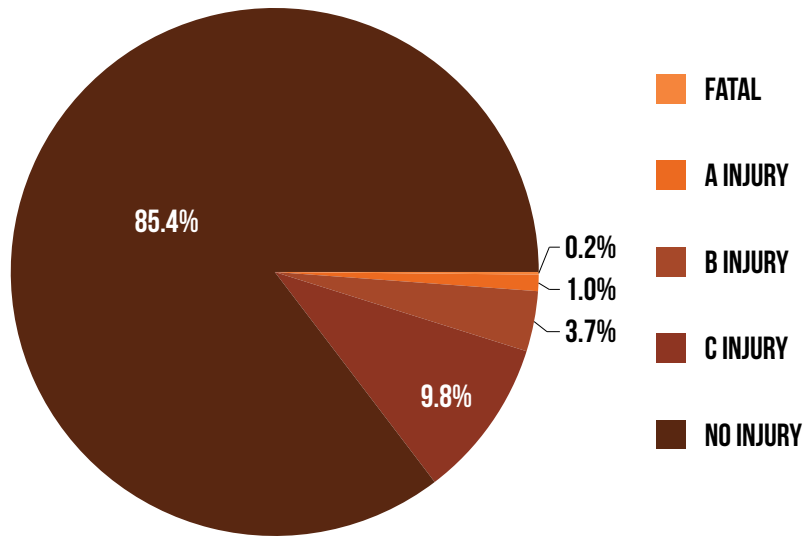
The majority of crashes do not involve injury (81.5%). Possible (C) injury crashes represent about 62% of those that do involve injury.

## HAD-BEEN-DRINKING CRASHES BY INJURY SEVERITY



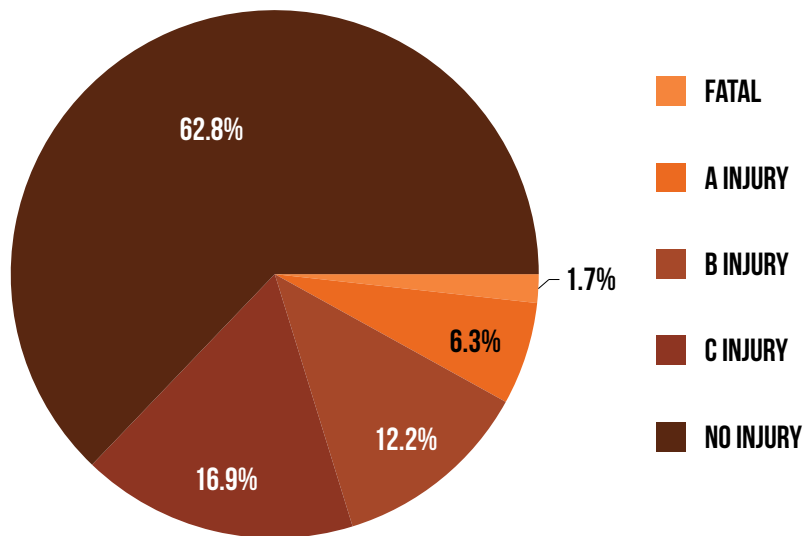
The problem of the drinking driver, pedestrian, and/or cyclist is seen by comparing the two charts on this page. For all had-been-drinking crashes, injury levels are greater, and a fatality in the crash is about ten times more likely when one of the crash-involved operators is reported as had-been-drinking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

## DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS



The majority of occupants involved in crashes are not injured (85.1%). About 67% percent of those who are injured receive only possible (C) injuries.

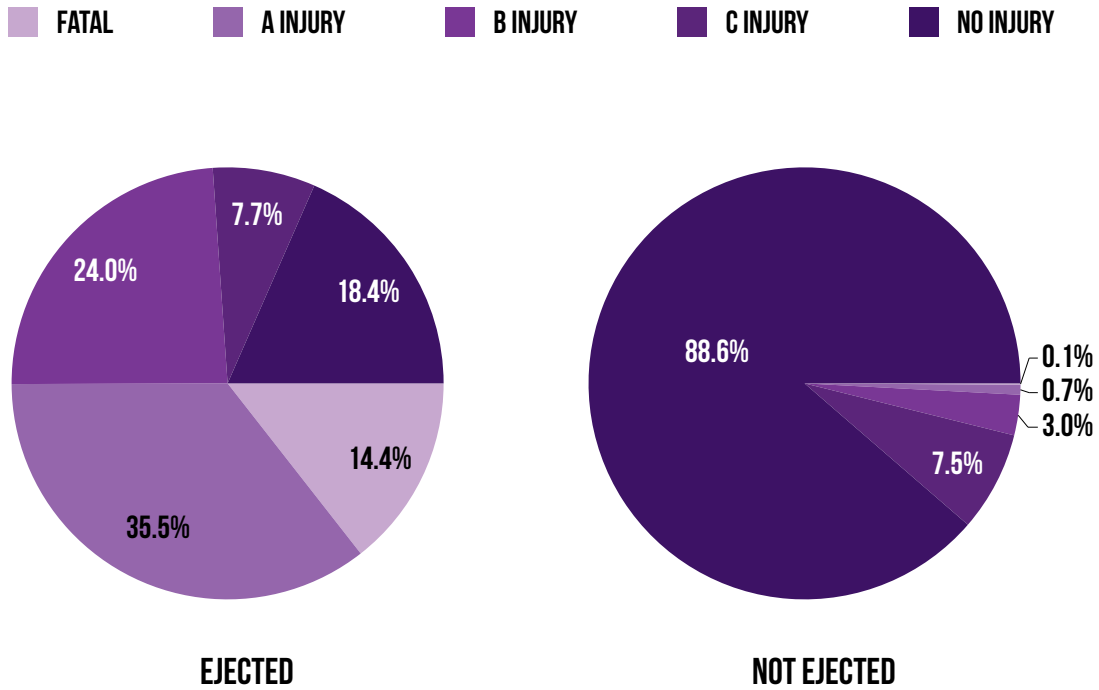
## OCCUPANTS IN HAD-BEEN-DRINKING CRASHES



Crashes involving drinking tend to be more serious than nondrinking crashes. The percentage of occupant fatalities is about 12 times higher than in all crashes and the incapacitating injury level (A) is about six times higher.

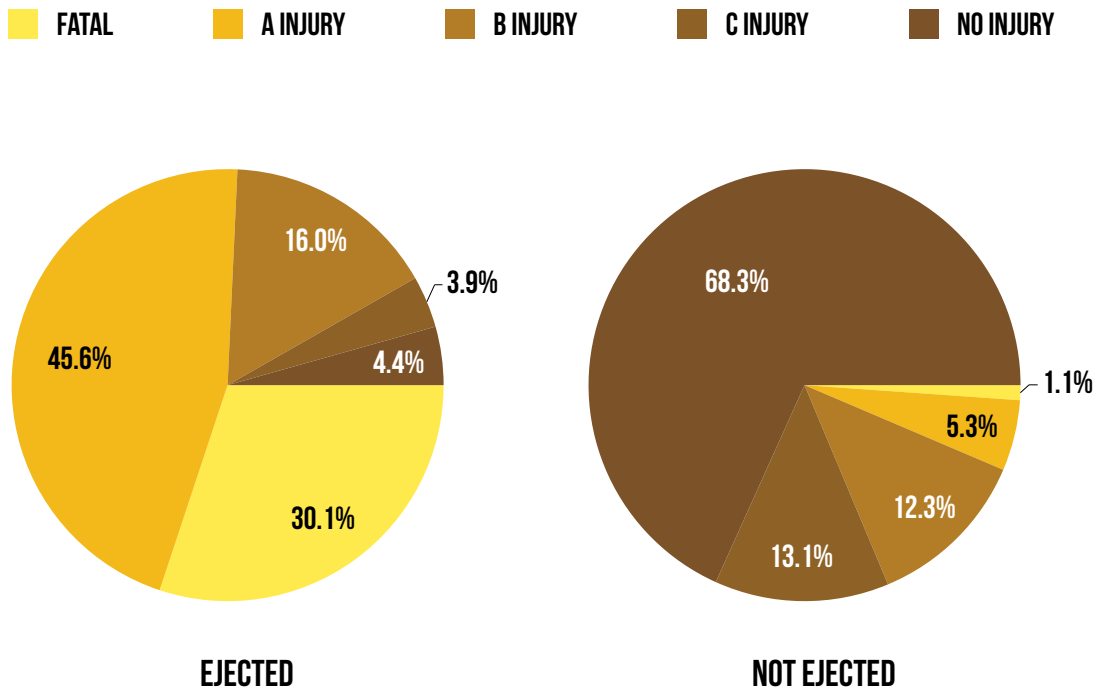
*Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.*

## ALL DRIVERS INJURY SEVERITY - EJECTED VS. NOT EJECTED



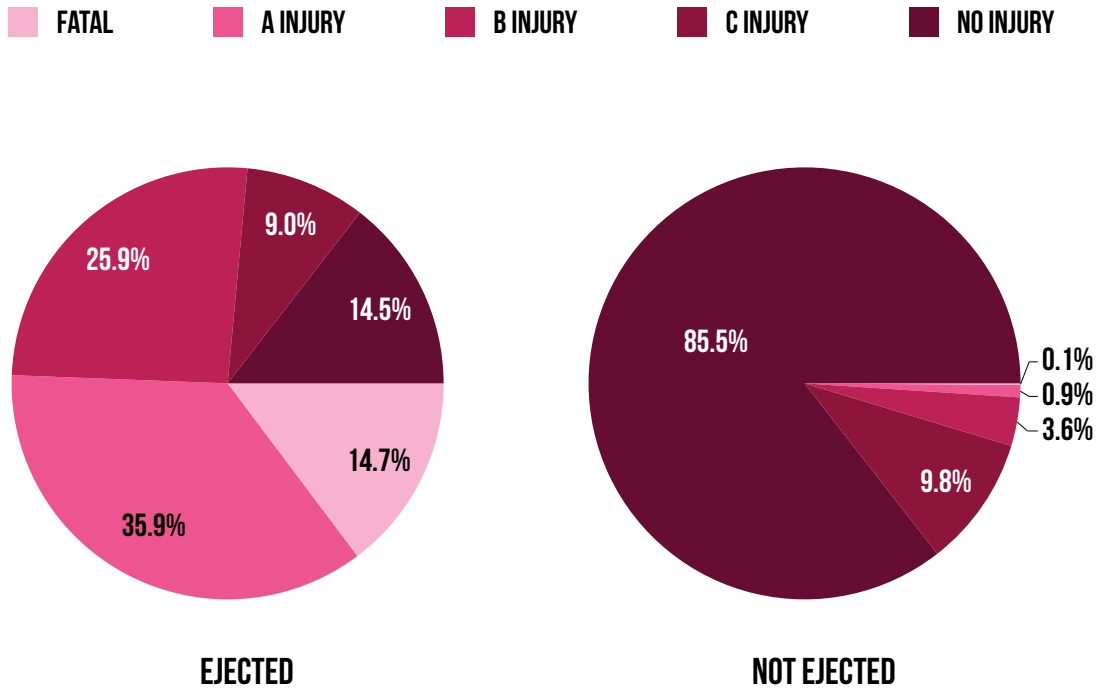
As shown by the two charts above, death and injury are much more likely when drivers are ejected from vehicles.

## HAD-BEEN-DRINKING DRIVERS INJURY SEVERITY - EJECTED VS. NOT EJECTED



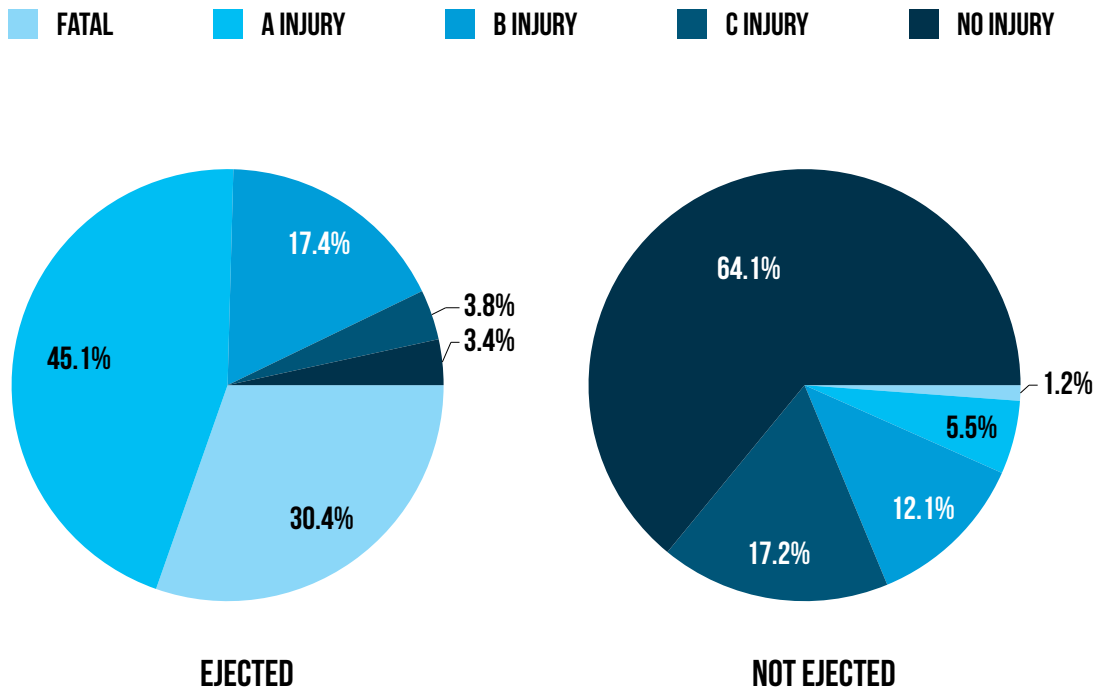
When compared to the charts above, the had-been-drinking charts demonstrate that injury severity is much worse for drivers reported to be drinking in both ejected and non-ejected events.

## 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.

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

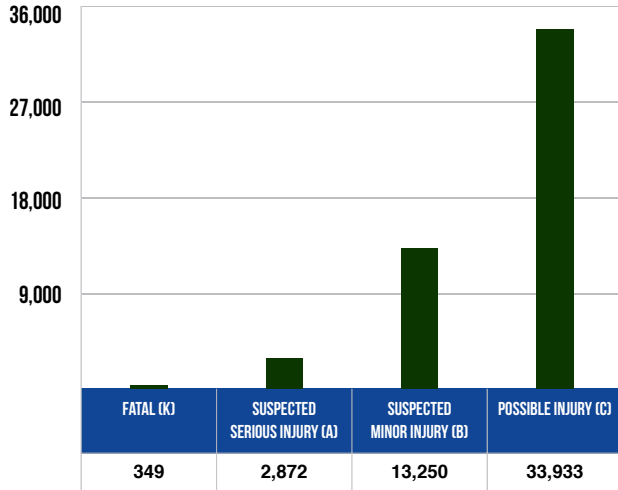


When compared to the charts above, the charts of occupants of had-been-drinking crashes demonstrate that injury severity is much worse for occupants in a crash where drinking is reported in both ejected and non-ejected events.

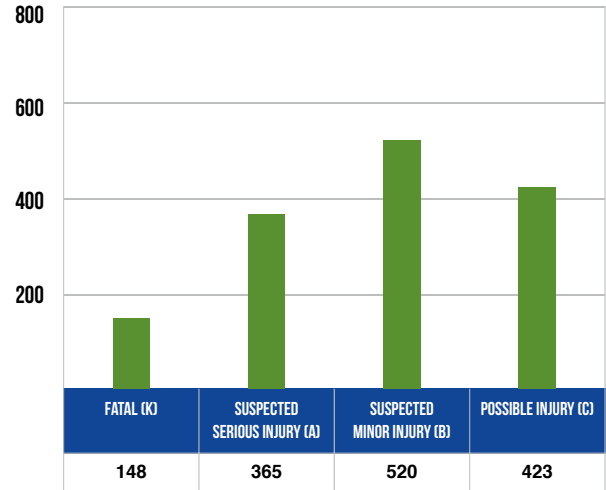
*Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.*

# INJURY SEVERITY & BELT USE BY DRIVER INJURY

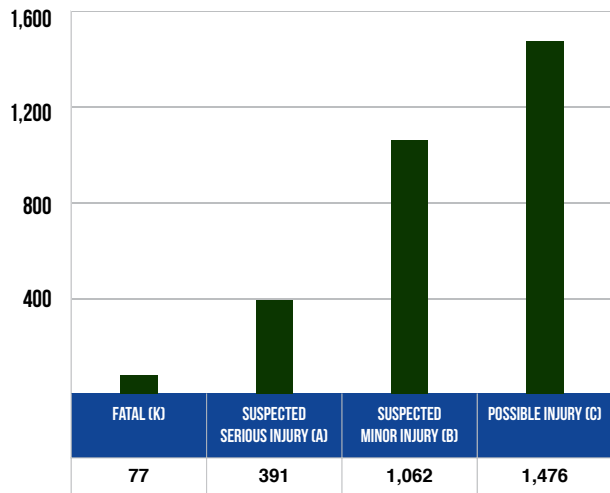
**ALL CRASHES-BELTS USED**



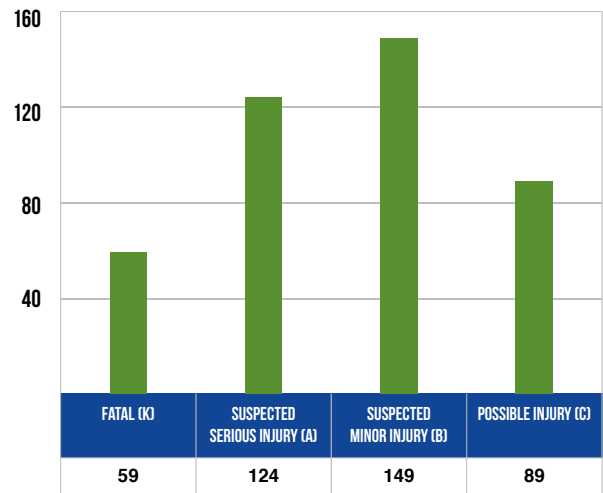
**ALL CRASHES-BELTS NOT USED**



**HAD-BEEN DRINKING CRASHES-BELTS USED**



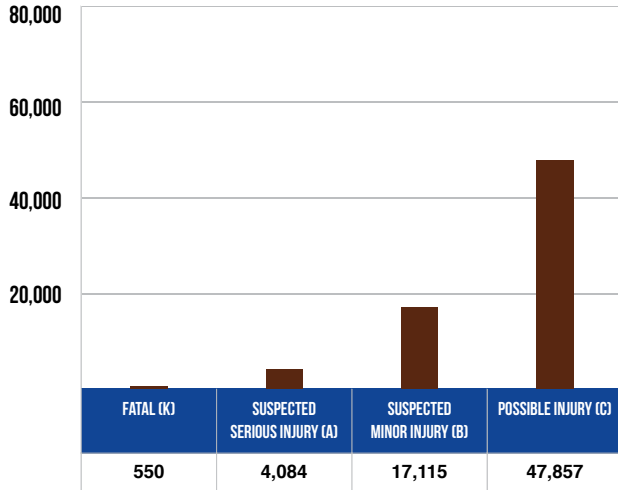
**HAD-BEEN DRINKING CRASHES-BELTS NOT USED**



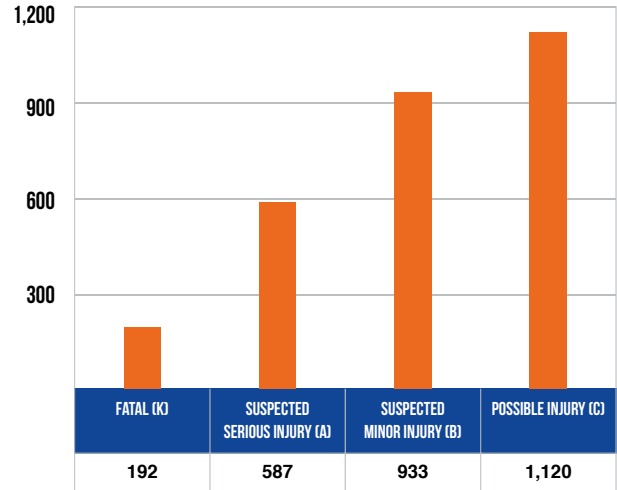
Note: "Belts Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, and restraint failure. "Belts Not Used" represents no belts available and no belts used.

# INJURY SEVERITY & RESTRAINT USE BY OCCUPANT INJURY

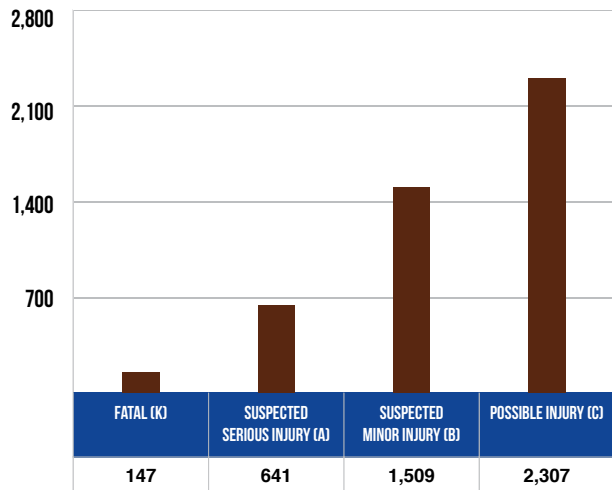
**ALL CRASHES - RESTRAINTS USED**



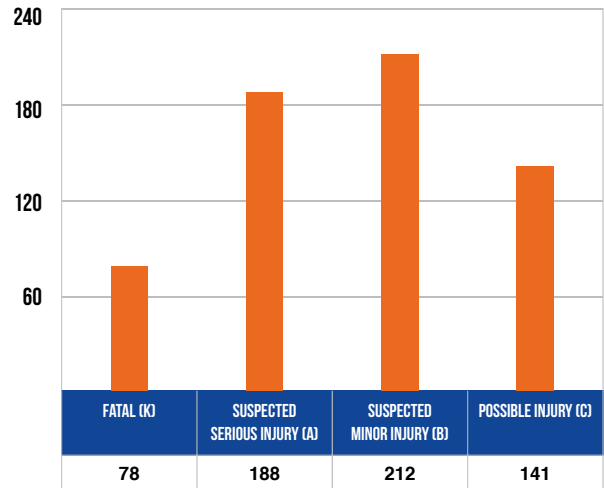
**ALL CRASHES - RESTRAINTS NOT USED**



**HAD-BEEN-DRINKING CRASHES - RESTRAINTS USED**



**HAD-BEEN-DRINKING CRASHES - RESTRAINTS NOT USED**



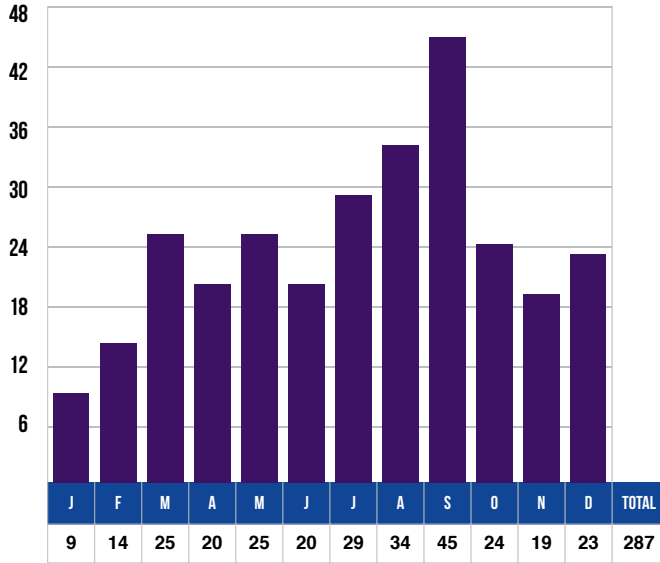
Note: "Restraints Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, child restraints used, and restraint failure. "Restraints Not Used" represents no belts available; no belts used; and child restraint not used, unavailable, or improper use.

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

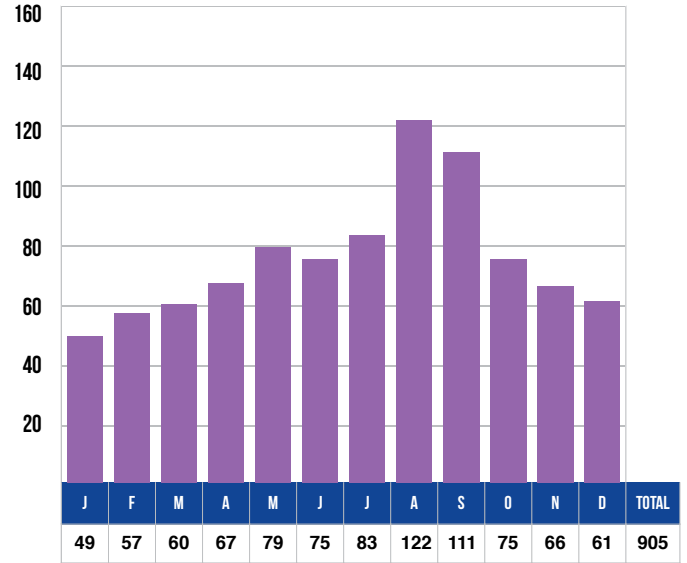


# ALCOHOL INVOLVEMENT IN FATAL CRASHES

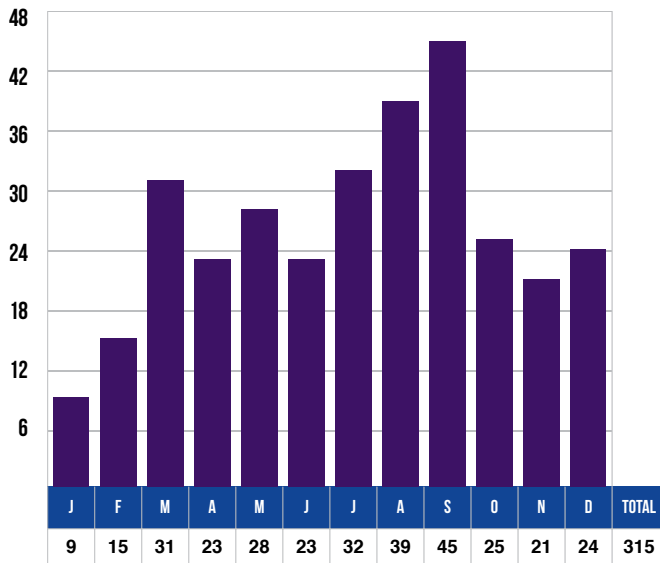
**HAD-BEEN-DRINKING FATAL CRASHES BY MONTH**



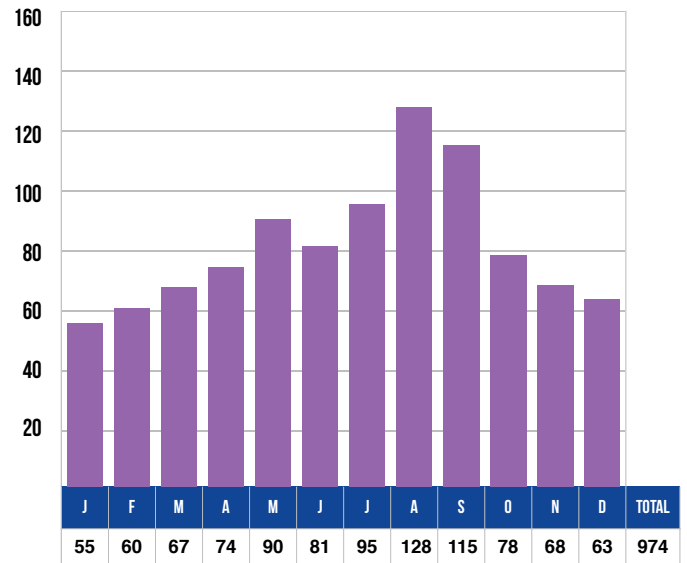
**TOTAL FATAL CRASHES BY MONTH**



**ALCOHOL-INVOLVED FATALITIES BY MONTH**



**TOTAL FATALITIES BY MONTH**

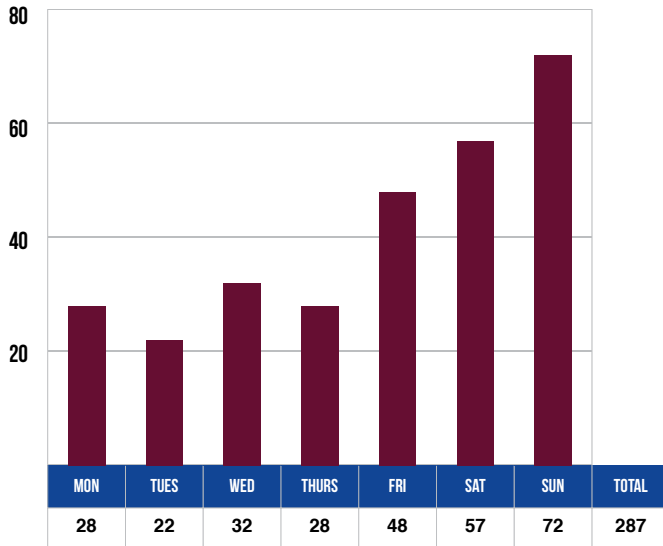


Had-been-drinking fatal crashes were highest in number during the month of April. The number of total fatal crashes (total of non-had-been-drinking and had-been-drinking fatal crashes) reached the highest level in June.

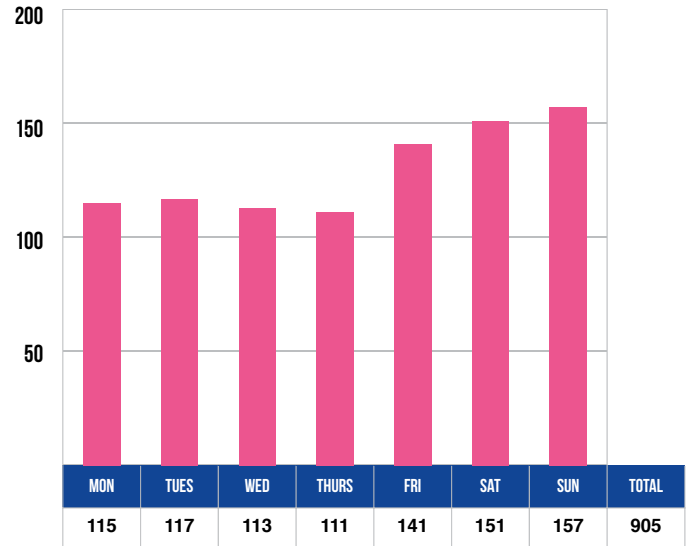
*Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.*

## ALCOHOL INVOLVMENT IN FATAL CRASHES (CONTINUED)

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

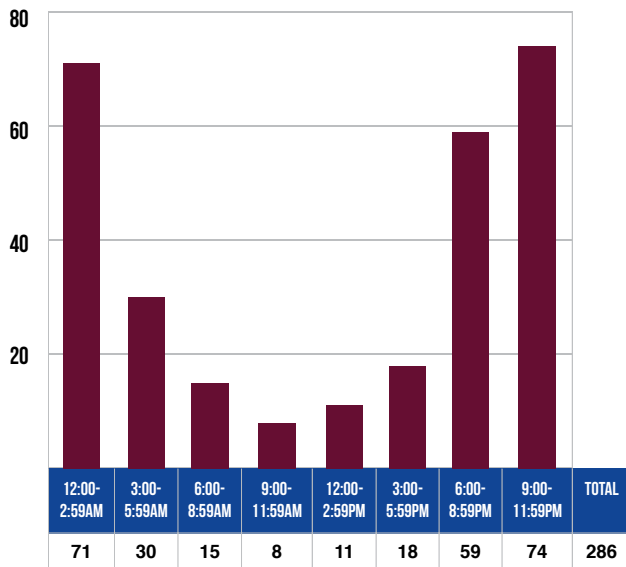


**TOTAL FATAL CRASHES  
BY DAY OF THE WEEK**

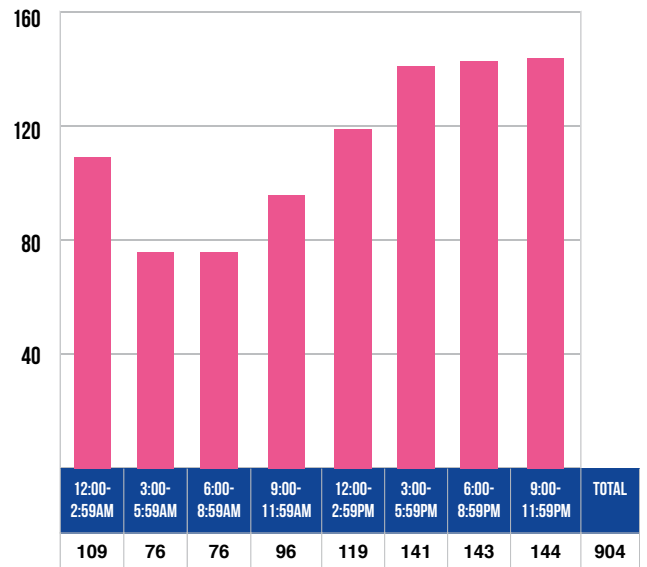


Saturday had the highest number of fatal crashes, and also the highest proportion (21.3%) of drinking-related fatal crashes in 2017.

**HAD-BEEN-DRINKING FATAL CRASHES BY TIME OF DAY**



**TOTAL FATAL CRASHES BY TIME OF DAY**

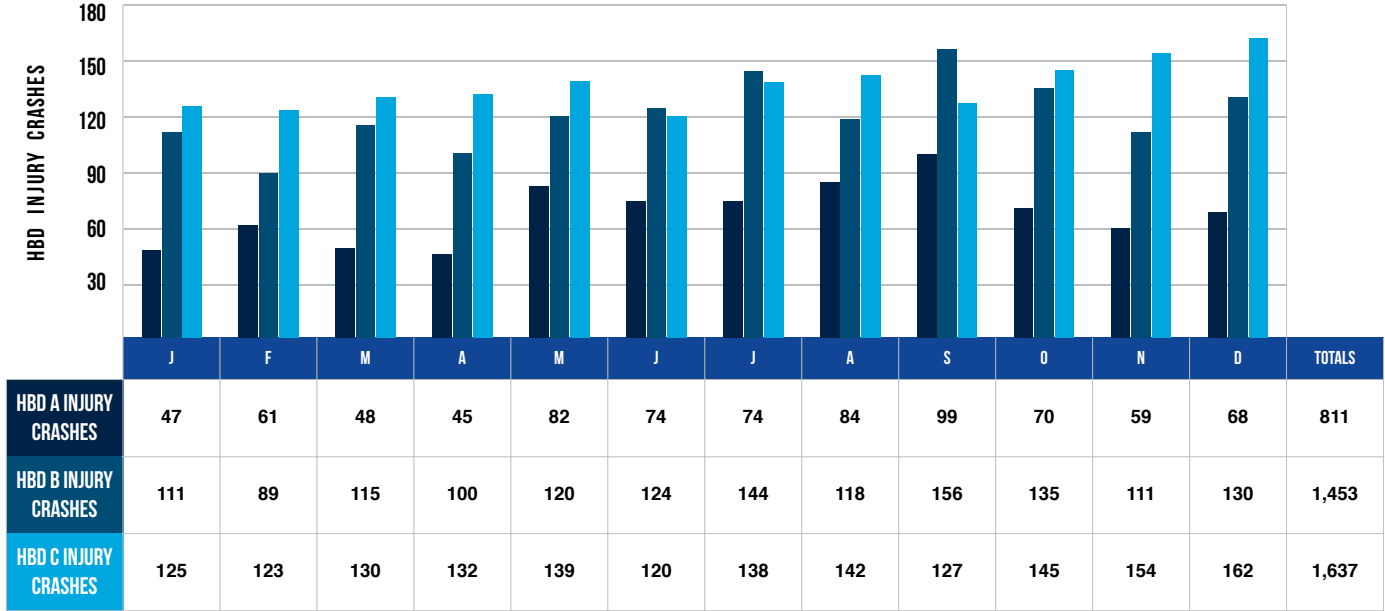


The 9:00 PM to midnight time period had the highest number of HBD fatal crashes (78). The 6:00 PM to 8:59 PM time period had the highest number of total fatal crashes (168).

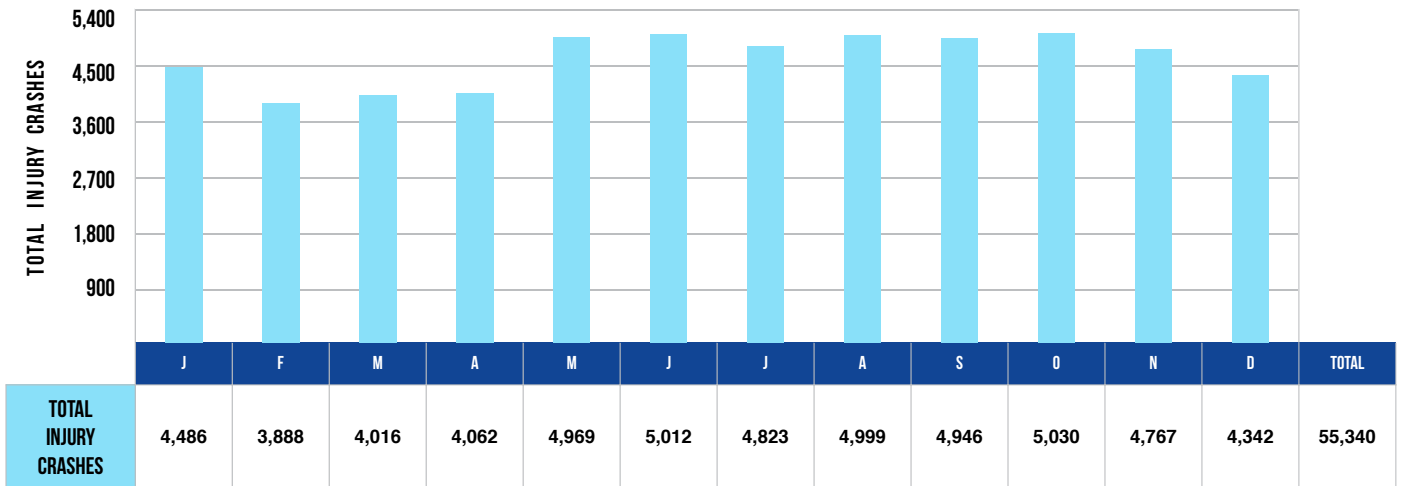
*Note: these charts exclude crashes where time of day was unknown.*

# ALCOHOL INVOLVEMENT IN INJURY CRASHES

## HAD-BEEN-DRINKING INJURY CRASHES BY MONTH



## TOTAL INJURY CRASHES BY MONTH

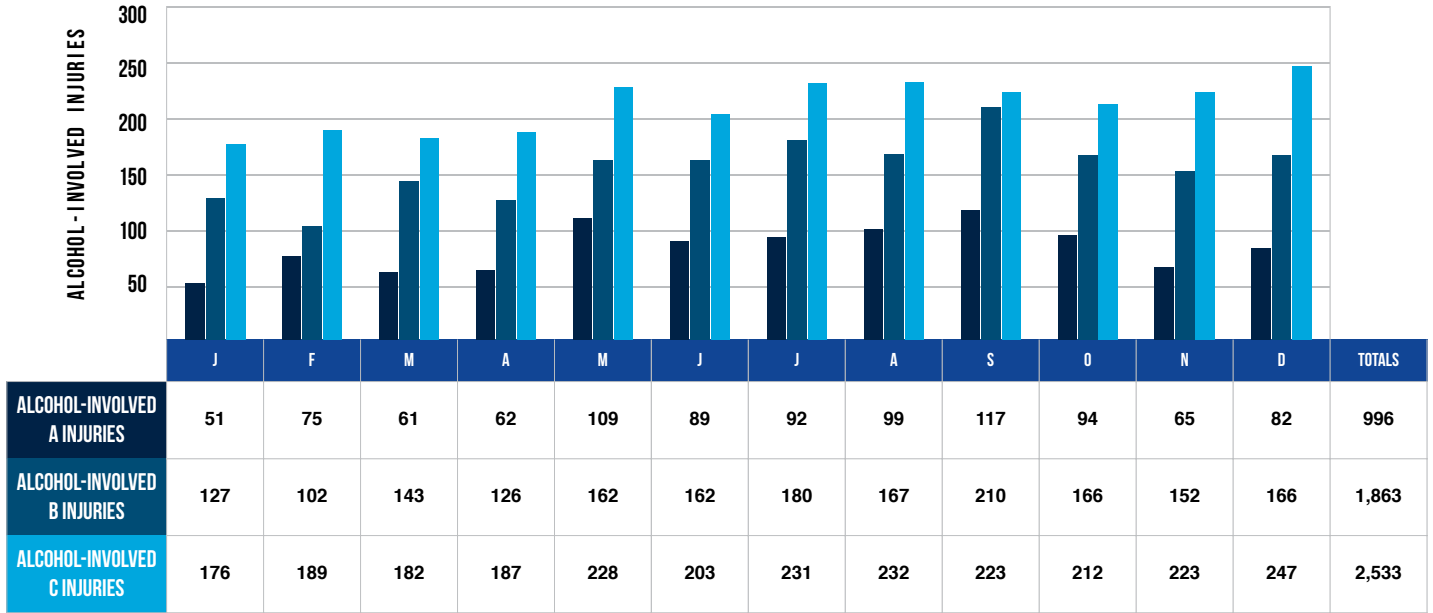


Alcohol involvement in injury crashes is an important indicator of the alcohol-impaired driving problem. In 2017, the highest number of had-been-drinking injury crashes occurred in July with 390. The highest proportion of had-been-drinking injury crashes occurred in April with 8.3 percent of the injury crashes involving alcohol.

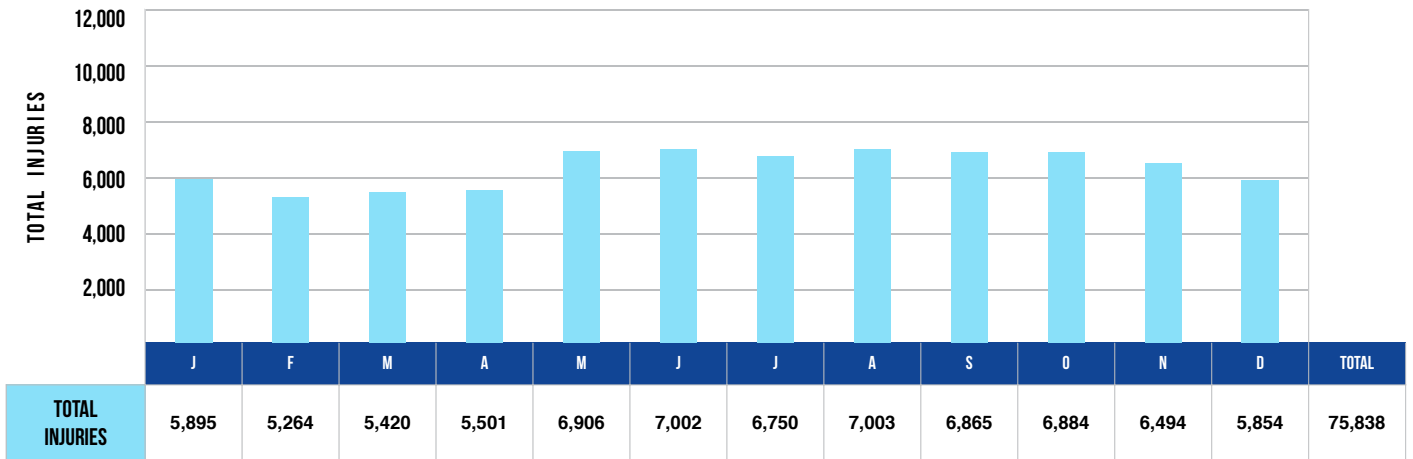
*Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.*

# ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

## ALCOHOL-INVOLVED INJURIES BY MONTH



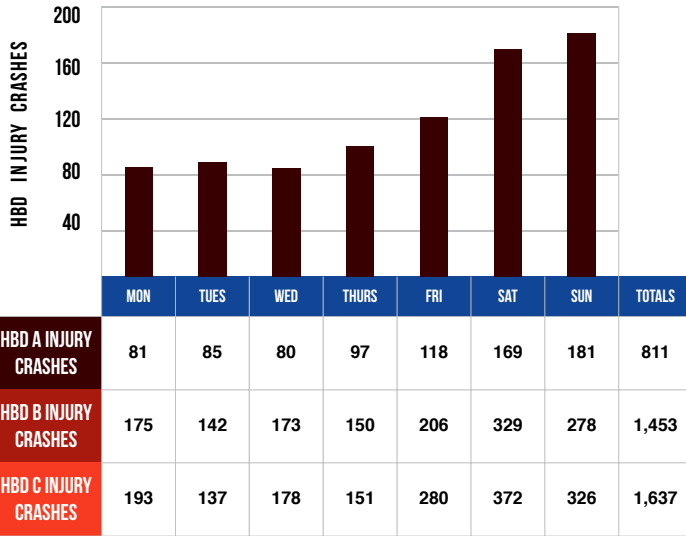
## TOTAL INJURIES BY MONTH



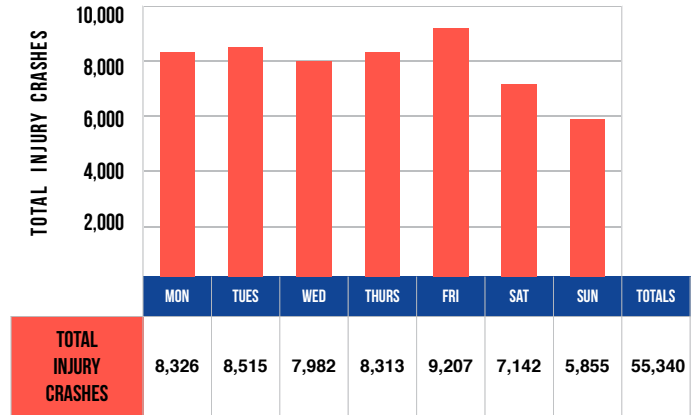
Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.

# ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

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

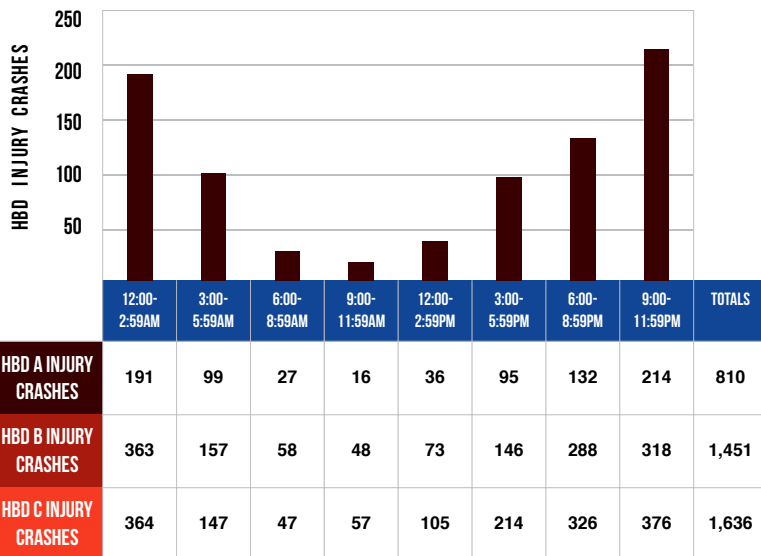


### TOTAL INJURY CRASHES BY DAY OF THE WEEK

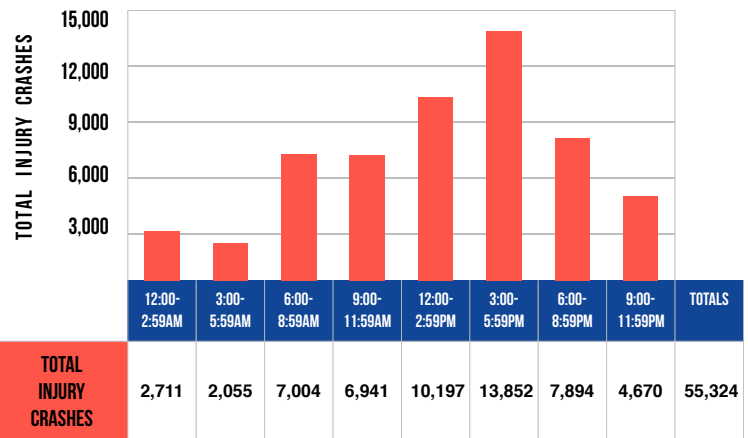


Had-been-drinking injury crashes follow the same basic trends as total crashes during the work week, but the weekend sees a dramatic increase in the proportion of had-been-drinking injury crashes to total injury crashes.

### 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 midnight and 2:59 AM (a particularly hazardous travel period). These frequencies exclude 17 injury crashes (including 2 had-been-drinking injury crashes) where time of day was unknown.

## 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	93	0.0	2	0.2	6	9	15	61
14 years	62	0.0	1	0.1	4	10	10	37
15 years	261	0.1	0	0.0	8	19	40	194
16 years	3,713	1.4	6	0.6	51	243	420	2,993
17 years	5,189	1.9	6	0.6	55	330	629	4,169
18 years	6,626	2.4	17	1.7	100	420	790	5,299
19 years	6,667	2.4	17	1.7	116	368	875	5,291
20 years	6,858	2.5	17	1.7	112	425	836	5,468
21 - 24 years	26,593	9.8	83	8.1	433	1,602	3,198	21,277
25 - 34 years	56,206	20.6	228	22.2	1,008	3,178	6,728	45,064
35 - 44 years	42,776	15.7	164	16.0	764	2,255	5,070	34,523
45 - 54 years	43,875	16.1	163	15.9	752	2,289	5,209	35,462
55 - 64 years	39,094	14.3	155	15.1	686	2,047	4,622	31,584
65 - 69 years	12,485	4.6	45	4.4	224	737	1,557	9,922
70 - 74 years	8,506	3.1	41	4.0	131	480	1,070	6,784
75 - 79 years	5,463	2.0	25	2.4	87	341	692	4,318
80 - 84 years	2,985	1.1	24	2.3	49	218	388	2,306
85 - 89 years	1,535	0.6	19	1.9	26	115	198	1,177
90 years and over	609	0.2	10	1.0	10	48	87	454
Unknown	2,884	1.1	3	0.3	23	85	315	2,458
<b>TOTAL</b>	<b>272,480**</b>	<b>100.0</b>	<b>1,026</b>	<b>100.0</b>	<b>4,645</b>	<b>15,219</b>	<b>32,749</b>	<b>218,841</b>

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

*\*\*Note: This table excludes 42,910 drivers of unknown gender.*

## 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	1	0.0	0	0.0	0	0	0	1
14 years	0	0.0	0	0.0	0	0	0	0
15 years	1	0.0	0	0.0	0	0	1	0
16 years	14	0.2	1	0.5	1	1	1	10
17 years	33	0.5	3	1.4	2	7	4	17
18 years	52	0.7	0	0.0	4	10	5	33
19 years	108	1.6	3	1.4	11	18	11	65
20 years	146	2.1	5	2.4	17	18	18	88
21 - 24 years	1,070	15.4	31	14.8	83	165	152	639
25 - 34 years	2,152	31.0	68	32.4	187	333	347	1,217
35 - 44 years	1,223	17.6	39	18.6	116	173	204	691
45 - 54 years	1,027	14.8	31	14.8	85	155	185	571
55 - 64 years	793	11.4	20	9.5	71	126	135	441
65 - 69 years	178	2.6	1	0.5	14	28	39	96
70 - 74 years	91	1.3	5	2.4	5	11	16	54
75 - 79 years	32	0.5	1	0.5	0	4	3	24
80 - 84 years	14	0.2	1	0.5	4	2	0	7
85 - 89 years	8	0.1	1	0.5	0	0	1	6
90 years and over	3	0.0	0	0.0	0	1	1	1
Unknown	0	0.0	0	0.0	0	0	0	0
<b>TOTAL</b>	<b>6,946**</b>	<b>100.0</b>	<b>210</b>	<b>100.0</b>	<b>600</b>	<b>1,052</b>	<b>1,123</b>	<b>3,961</b>

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

*\*\*Note: This table excludes 6 unknown gender drinking drivers.*

## 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	41	0.0	0	0.0	3	8	4	26
14 years	45	0.0	1	0.2	1	3	2	38
15 years	262	0.1	1	0.2	5	26	30	200
16 years	3,480	1.6	3	0.7	37	219	458	2,763
17 years	4,807	2.2	6	1.4	66	299	650	3,786
18 years	5,560	2.5	5	1.2	64	347	843	4,301
19 years	5,746	2.6	11	2.6	59	341	854	4,481
20 years	5,871	2.7	10	2.3	67	357	829	4,608
21 - 24 years	22,815	10.5	49	11.5	308	1,280	3,216	17,962
25 - 34 years	47,006	21.5	95	22.3	616	2,471	6,825	36,999
35 - 44 years	35,584	16.3	61	14.3	419	1,802	5,098	28,204
45 - 54 years	33,994	15.6	59	13.8	395	1,737	4,815	26,988
55 - 64 years	28,323	13.0	53	12.4	371	1,442	4,004	22,453
65 - 69 years	9,019	4.1	29	6.8	133	493	1,296	7,068
70 - 74 years	6,327	2.9	11	2.6	97	375	917	4,927
75 - 79 years	3,856	1.8	10	2.3	56	256	538	2,996
80 - 84 years	2,284	1.0	10	2.3	31	159	355	1,729
85 - 89 years	1,155	0.5	11	2.6	15	84	171	874
90 years and over	391	0.2	1	0.2	8	36	58	288
Unknown	1,728	0.8	0	0.0	7	52	167	1,502
<b>TOTAL</b>	<b>218,294**</b>	<b>100.0</b>	<b>426</b>	<b>100.0</b>	<b>2,758</b>	<b>11,787</b>	<b>31,130</b>	<b>172,193</b>

The female driver age group 25 to 34 years experienced the highest number of fatal crashes as well as the highest number of injury crashes and property damage only crashes.

*\*\*Note: This table excludes 42,910 drivers of unknown gender.*



## 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	1	0.0	0	0.0	0	0	0	1
15 years	1	0.0	0	0.0	1	0	0	0
16 years	5	0.2	0	0.0	0	0	1	4
17 years	15	0.6	0	0.0	2	1	3	9
18 years	22	0.8	0	0.0	0	3	7	12
19 years	35	1.3	0	0.0	4	8	7	16
20 years	53	2.0	0	0.0	3	9	11	30
21 - 24 years	408	15.2	8	16.3	25	63	63	249
25 - 34 years	935	34.9	22	44.9	68	123	160	562
35 - 44 years	510	19.0	10	20.4	18	75	90	317
45 - 54 years	375	14.0	4	8.2	20	40	71	240
55 - 64 years	250	9.3	4	8.2	18	25	43	160
65 - 69 years	39	1.5	1	2.0	2	8	7	21
70 - 74 years	21	0.8	0	0.0	2	1	5	13
75 - 79 years	7	0.3	0	0.0	1	2	2	2
80 - 84 years	3	0.1	0	0.0	0	0	2	1
85 - 89 years	0	0.0	0	0.0	0	0	0	0
90 years and over	1	0.0	0	0.0	0	0	0	1
Unknown	0	0.0	0	0.0	0	0	0	0
<b>TOTAL</b>	<b>2,681**</b>	<b>100.0</b>	<b>49</b>	<b>100.0</b>	<b>164</b>	<b>358</b>	<b>472</b>	<b>1,638</b>

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

*\*\*Note: This table excludes 6 unknown gender drinking drivers.*



