Illinois Marijuana Drivers Involved in Fatal Crashes are Increasing

Al Crancer, B.S., M.A., Phillip A. Drum, Pharm. D. For Educating Voices, <u>www.educatingvoices.org</u>

Summary

Since the Illinois law for medical marijuana was passed in 2013 there has been a steady increase of the involvement of marijuana impaired drivers being involved in fatal crashes. With only medical marijuana available and cardholders prohibited from driving under the influence, about 17% of the fatalities involved marijuana high drivers resulting in the death of more than 500 persons with more than 200 innocent victims in the crash in the last 5 years (See Table 1). As the numbers of medical marijuana cardholders increase it is expected that the percentage of fatalities in Illinois will rise and soon rival drunk driving as the No. 1 cause of fatal crashes.

If Illinois becomes a Recreational Marijuana state and the percentage of drivers involved in fatal crashes testing positive for marijuana follows the percentage of existing Recreational Marijuana states, the number of total fatalities in Illinois would have increased from 114 to 149, a 31% increase (See Table 3)

While the percentage of fatalities that are marijuana related has increased, testing of drivers for drugs has dropped a statistically significant percent, from 62% in 2014 to 43% in 2015 (See Table 1), calling into question the validity of the Illinois traffic safety data base. For example, in Cook County where there were 8 drivers marijuana impaired, 145 drivers were not tested for any drugs (See Table 2).

Most notable characteristics of the marijuana driver are that 75% are killed in the crash (See Table 1), 40% are killed from 4pm to midnight (See Table 5), and 46% are DUI (See Table 5).

Background

The Illinois Medical Marijuana program was signed into law in 2013 and implemented in January 2015. As of June 2017, there are 20,600 qualifying cardholders with 53 dispensaries. The medical cannabis act has a sunset clause and is set to be reconsidered in 2020.

However, data from the National Highway Safety Administration, NHTSA, shows that the presence of marijuana in fatal motor vehicle crashes has already been found and to a surprisingly high degree.

Involvement of Marijuana in Fatal Crashes

Table 1 shows the number and percent of fatalities involving a marijuana driver for the years 2011 to 2015, the most recent data available. Since less than half of the drivers in fatal crashes are tested for drugs, the actual number and percentage is likely to be much higher.

Of highest importance in Table 1 is the number of innocent persons known to have been killed in marijuana fatal crashes. Of the over 500 killed in the last 5 years over 200 innocent others were killed.

Table 1. Fatalities for Illinois Drivers in Fatal Crashes with Marijuana, 2011 to 2015, NHTSA FARS Data Group 2011 2012 2013 2014 2015 2011 - 15 **IL Driver with** 80 108 96 99 97 480 Marijuana* Percent 12.1% 15.7% 13.9% 16.3% 16.6% 14.9% Mariiuana Total Fatalities, 85 117 102 107 114 **525** where Driver Mj **Drivers Killed** 49 69 63 65 **73** 319 Others Kiilled 36 48 39 42 41 206 % Drivers Killed 61.3% 63.9% 65.6% 65.7% 75.3% 66.5% ILLINOIS Drivers 1246 1322 1346 1274 1357 6545 in Fatal crashes IL Drivers Drug 659 690 690 607 586 3231 Tested % Drug Tested 59.60% 60.70% 58.80% 61.70% 43.1%* 49.4%

A major detriment to accurately assessing drugged driving incidence is the lack of testing the blood of drivers during fatal crashes. The 2013 NHTSA report **shows** that only 62.6% of drivers of crash fatalities are tested for other drugs. In 2015, Illinois is consistent with this inadequate testing level **only** 58.8% of the counties with 3 or more **marijuana-related fatalities were tested (See Table 2).** The most populated county, Cook **County**, **tests** blood for the presence of drugs only in 45.9% of fatal crashes. To accurately assess the true incidence of poly-drug driving, **all** fatal crashes should have the drivers' blood assessed for drugs.

Table 2. IL Counties with 3 or more Fatal Marijuana Crashes, 2015 FARS Data					
County			% Not Tested	% Tested	
COOK	8	145	54.1%	45.9%	
MCLEAN	6	22	40.9%	59.1%	
ST CLAIR	6	38	55.3%	44.7%	
WILL	6	53	39.0%	61.0%	
KANE	5	35	42.9%	57.1%	
LAKE	4	42	50.0%	50.0%	
CHAMPAIGN	3	16	68.8%	31.2%	
CHRISTIAN	3	6	16.7%	83.3%	
DE KALB	3	12	33.3%	66.7%	
MACON	3	23	26.1%	73.9%	
PEORIA	3	13	26.3%	73.7%	
Total	50 of 91	405	41.2%	58.8%	

Table 3 shows how Illinois compares to other states by status of marijuana legislation in the state. Clearly the recreational use states have the highest fatality rate. As shown in Table 3, the Illinois percentage of 16.6%, is slightly less than the average of 18.5% in other medical marijuana states.

^{*} Statistically significant decrease in drug testing of drivers.

The Table also shows that 2,038 marijuana drivers were killed and a total of 3,142 persons were killed in marijuana fatal crashes. Most notable is that 1,104 other innocent persons were killed in the marijuana crashes.

Table 3. Fatalities in Marijuana Fatal Crashes for Drivers and Others by State and Marijuana Legal Status. 2015 FARS Data.

		Stati	us, 2015	FARS Data.			
State	Mj Drivers ÷ Total Tested and Percent Marijuana	Mj Driver Killed	Total Killed	State	Mj Drivers ÷ Total Tested and Percent Marijuana	Mj Driver Killed	Total Killed
Recreational Marijuana Allowed			Non-Legal Status for Marijuana				
Colorado	80/361 (22.2%)	60	90	Alabama	84/599 (14.0%)	51	94
Washington	93/400 (23.3%)	62	98	Arkansas	91/433 (21.0 %)	50	104
Oregon	16/110 (14.5%)	0	19	Florida	140/1125 (12.4%)	110	154
Total Rec.	189/871 (21.7%)	122	207	Georgia	96/678 (14.2 %)	69	105
				Idaho	14/100 (14.0 %)	11	17
"N	/ledical" Marijuana Allov	wed		Indiana	47/517 (9.1%)	30	55
Alaska	13/63 (20.6%)	6	11	lowa	25/126 (19.8%)	21	33
Arizona	50/357 (14.0%)	33	60	Kansas	13/136 (9.6%)	11	16
California	226/1089 (20.8%)	160	257	Kentucky	80/549 (14.6 %)	56	94
Connecticut	29/194 (15.0%)	28	30	Louisiana	42/311 (13.5%)	27	48
Delaware	15/48 (31.3 %)	10	16	Mississippi	33/235 (14.0%)	26	38
DC	3/11 (27.3 %)	2	3	Missouri	99/409 (24.2%)	78	104
Hawaii	15/65 (23.1 %)	6	16	Nebraska	20/84 (23.8%)	18	20
Illinois	97/586 (16.6 %)	73	114	N Carolina	2/33 (6.1%)	0	2
Maine	3/17 (17.6%)	2	4	N Dakota	5/90 (5.6%)	4	6
Maryland	1/254 (0.4%)	0	1	Ohio	163/815 (20.0%)	127	172
Mass.	35/130 (26.9 %)	35	37	Oklahoma	33/341 (9.7%)	0	39
Michigan	94/433 (21.7%)	61	105	Penn	84/677 (12.4%)	69	90
Minnesota	32/230 (13.9%)	25	35	S Carolina	125/506 (24.7%)	113	141
Montana	33/204 (16.2%)	20	36	S Dakota	3/54 (5.6%)	1	3
Nevada	47/226 (20.8%)	36	54	Tennessee	75/653 (11.5%)	44	80
New Hamp	26/105 (24.8%)	18	24	Texas	187/1118 (16.7%)	138	228
New Jersey	49/341 (14.4%)	34	53	Utah	38/254 (15.0%)	27	45
New Mexico	17/126 (13.5%)	17	18	Virginia	66/414 (15.9%)	66	69
New York	113/484 (23.3%)	87	127	W Virginia	28/175 (16.0%)	28	32
Rhode Island	10/31 (32.3%)	9	11	Wisconsin	88/421 (20.9%)	53	99
Vermont	11/35 (31.4%)	11	13	Wyoming	21/77 (27.3%)	15	22
Total Med	919/5029 (18.3%)	673	1025	Total Non Legal	1702/10930 (15.6%)	1243	1910
Ave Total U.S.	2810/16830 (16.7%)	2038	3142				

^{*} Statistical difference (p< .01), for Rec vs. Med states and Med vs. Non-Legal states. "States in RED = or > Rec States Mj as 21.7%."

Marijuana Most Common Drug in Fatal Crashes

As shown in Table 4, **marijuana** is the No. 1 drug found in the blood of Illinois drivers in fatal crashes at about 45%. The total of Narcotics at about 22% and Depressants at 18% is less than the total tested and found for marijuana at 45%. Note that in Table 1 above, the percent of drivers tested for drugs in Illinois has dropped sharply from 2014 to 2015, and probably masks the extent of marijuana involvement in fatal crashes.

	of Drug Tests Perfortal Crashes, 2015	
Drug Type	No. of Tests	Percent
Narcotics	63	21.8%
Depressants	52	18.0%
Stimulants	33	11.4%
Hallucinogens	11	3.8%
Marijuana	130	45.0%
Total Tests	289	100.0%

Top Counties for Marijuana Fatal Crashes

As shown in Table 5, Cook (Chicago), St. Clair (Belleville), Will (Joliet), and McLean (Bloomington) were the top four counties for marijuana fatal crashes. With 102 Counties in Illinois, most counties either had no marijuana fatalities or just 1 fatality.

	Table 5. Illinois Counties with 3 or More Marijuana Fatal Crashes, 2015 FARS Data			
1	соок	8		
2	ST CLAIR	7		
3	MCLEAN	6		
4	WILL	6		
5	KANE	5		
6	LAKE	4		
7	WINNEBAGO	4		
8	CHAMPAIGN	3		
9	CHRISTIAN	3		
10	DE KALB	3		
11	MACON	3		
12	MADISON	3		
13	PEORIA	3		
14	TAZEWELL	3		
Total top 14 Counties 61				

Many Illinois Marijuana Drivers Also DUI

Table 6 shows that over 30% of the marijuana drivers are also DUI with a BAC at 0.08% or higher. This is similar to the finding in other states where the marijuana drivers are also mixing marijuana with alcohol well above the impairment level of alcohol. Note also that 60.8% of marijuana drivers had no alcohol.

Table 6. IL Drivers in Fatal Crashes with Marihuana and Alcohol, 2015 FARS Data					
Mj Drivers Number Drivers Percent of Drivers					
NO Alcohol, BAC 0.00	59	60.80%			
BAC 0.01-0.07	8	8.20%			
DUI, BAC 0.08+	30	30.90%			
Total Mj drivers	97	100.00%			

Illinois Marijuana Drivers Younger than DUI Drivers

Table 7 shows the median age and the percent of drivers in several age groups for both Illinois marijuana and DUI drivers. A 10-year median age difference exists between marijuana and DUI drivers, with marijuana drivers younger. The percentages of marijuana drivers under age 25 at 44.3% and under age 21 at 15.5% are much higher and quite different than DUI drivers. The differences are statistically and practically different. Marijuana is often called the gateway drug and the Illinois data clearly shows the increased involvement for younger drivers in fatal crashes.

Table 7. Median Age and Percent of IL Drivers under Age 25 for DUI and Marijuana, 2015 FARS					
Group Mj Drivers DUI Drivers					
Median Age	26	36			
% 21 and Under	15.50%	6.10%			
% < Age 25	44.30%	20.40%			

Time of Marijuana Fatal Crashes are different than DUI Fatal Crashes

Table 8 shows that Illinois marijuana fatal crashes are most prevalent 4-8am and 4 to 8pm compared to 8pm to Midnight and Midnight-4am for DUI crashes. The more daytime fatal crashes for marijuana has resulted in a higher percentage of total fatalities per crash because of the traffic volume, and a higher percentage of innocent persons killed.

Table 8. Illinois Crash Hour of Marijuana & DUI Drivers, 2015 FARS Data

		Mj IL	DUIIL		
Crash Hour	#	%	#	%	
4am-7:59am	20	20.60%	28	14.50%	
8am-11:59am	8	8.20%	7	3.60%	
12pm-3:59pm	16	16.50%	10	5.20%	
4pm-7:59pm	23	23.70%	39	20.20%	
8pm-11:59pm	16	16.50%	51	26.40%	
Mid-3:59am	14	14.40%	58	30.10%	
Total	97	100.00%	193	100.00%	

THC Deaths, USA 1999 - 2015

