

Medical Marijuana Responsible for Traffic Fatalities

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Abstract

In California, where only 25% of the drivers in fatal crashes are tested for drugs, 252 persons were killed in 2015 in marijuana driver fatalities, with 1,332 killed in the last 5 years. Marijuana was present in 21% of passenger vehicle drivers and is approaching the level of drunk driving in CA which is about 29% of fatalities. Trend of marijuana involvement in fatal crashes is clear evidence that more lives will be lost if ballot Proposition 64 for recreational use of marijuana is approved in November.

For so many deaths to be related to the use of a “prescription” drug should sound alarms in the medical community and in the California legislature which is concerned about the overall health and welfare of California citizens.

Young marijuana drivers are affected the most with 41% of the marijuana fatalities being under age 25 and they were also speeding in 39% of the cases compared to 27% speeding in all other fatal cases.

No evidence that increasing marijuana use reduces opiate involvement in fatal crashes. Opiates are consistently present in about 6% of driving fatalities over the last 5 years.

Five Southern California counties are the most involved with marijuana driving fatalities with Los Angeles and Riverside being the top two counties. However California data is incomplete for many counties like San Francisco, where only 1 of 50 drivers in fatal crashes were tested in 2015 for marijuana and other drugs.

Table of Contents

Medical Marijuana Responsible for Traffic Fatalities	1
Marijuana Related All Motor Vehicle Fatalities	1
Percentage of Fatal Crash Drivers Involved with Marijuana	1
Marijuana Drivers are Young	2
Medical Marijuana Not Resulting in a Reduction of Opiate Use	2
Marijuana Drivers in Fatal Crashes by CA County	3
Marihuana Involvement in Passenger Vehicle Fatal Crashes by State and Marijuana law Status	4
Summary	5

Medical Marijuana Responsible for Traffic Fatalities

Medical Marijuana users are increasingly involved in California fatal crashes. The extent of marijuana involvement in fatal crashes should be a factor in deciding to vote for or against Proposition 64 which would increase availability and usage of marijuana for recreational purposes. The following data shows the involvement of marijuana in California fatal motor vehicle fatalities.

Marijuana Related All Motor Vehicle Fatalities

In 2015, **252 persons were killed in CA fatal crashes** where the driver was **known** to have **the psychoactive component in marijuana (THC) in their blood system**. **In the last five years, 1338 persons were fatally injured in THC-related crashes**. For so many deaths to be related to the use of a “prescription” drug should sound alarms in the medical community and in the California legislature which is concerned about the overall health and welfare of California citizens. THC is present in **55% of all fatal DUI cases** (found in 252 of the 457 total fatalities) in a state where the drug is not available to the general public.

Total Fatalities in CA Marijuana Fatal Crashes, 2011-2015 NHTSA FARS Data						
Year	2011	2012	2013	2014	2015	2011-15
Fatalities	187	227	373	299	252	1338

In 2015, **71%** of the 226 passenger vehicle drivers with THC were fatally injured.

Percentage of Fatal Crash Drivers Involved with Marijuana

The gap between use of a single agent involvement of either alcohol or THC in impaired driving cases is closing. In 2015, **21%** of the passenger vehicle drivers were known to have THC in their system based on blood test analysis. Delays in blood drawing, more than two hours from driving, will result in a large number of drivers being reported as negative that were impaired at the time of driving. In addition, 75% of passenger vehicle drivers (2,598 of 3,445 drivers) did not even have their blood tested for drugs due to cost of the tests or other factors. So the 21% THC positivity in fatal crashes is a low estimate of actual marijuana use. (Note that a test for alcohol is performed on more than 80% of drivers).

If the level of marijuana use in the 75% of untested drivers for drugs was near the level found in the drivers tested for drugs, the number of marijuana fatalities would probably be at least double the 252 found in the 2015 data and would eclipse the number of alcohol related fatalities which is at about 30% of total fatalities for the last 16 years. As was seen in Washington and Colorado following marijuana legalization, the marijuana driving fatalities will likely rise upwards of 50% if marijuana is available for recreational use.

Percent CA Marijuana Pass. Vehicle Drivers 2011 -2015, NHTSA FARS Data			
Year	# Drivers MJ	Pass. Vehicle Drivers	% MJ
2011	157	1328	11.8%
2012	255	1270	20.1%
2013	228	1324	17.2%
2014	245	1335	18.4%
2015	179	847	21.1%

Marijuana Drivers are Young

Marijuana drivers in passenger vehicle fatal crashes are **young** with **41% under age 25**. This concentration of fatal drivers at such a young age conflicts with the common understanding of the age of persons with true need for a recommendation for medical marijuana. This elevated death rate is about twice the level of **all drivers** in CA fatal crashes **under age 25** which is **at 21%**.

Age of CA Marijuana Drivers in Fatal Crashes, 2015 FARS Data		
Driver Age	# Drivers	%
<21	36	15.9%
21-24	57	25.2%
Under 25	93	41.15%
25-34	75	33.2%
35-44	16	7.1%
45-54	20	8.8%
55-64	16	7.1%
65+	6	2.7%
Total	226	100.0%

Also of interest was that **39%** of the marijuana drivers in fatal crashes were speeding compared to 27% for all driving fatalities in California.

Medical Marijuana Not Resulting in a Reduction of Opiate Use

Many pro-marijuana advocated claim that marijuana availability would result in less opiate related fatalities. The following table shows no reduction in the fatal crash involvement of opiate drivers. In fact, the involvement has risen slightly from 6.1% to 6.8% in the last 5 years.

CA Drivers with Narcotics* in Pass. Vehicle Fatal Crashes, 2010 vs. 2015, NHTSA FARS Data		
Group	2010	2015
Narcotic Drivers	80	58
# Pass. Veh. Drivers	1319	847
% Narcotics	6.1%	6.8%
* Blood test results		

Marijuana Drivers in Fatal Crashes by CA County

57% of the known marijuana drivers were in 5 southern CA counties: Los Angeles (43), Riverside (29), San Diego (19), San Bernardino (18), and Orange (15). Note the counties in **RED** are counties with less than 20% of drivers tested for drugs.

A drug testing rate of only 24.9% suggests that marijuana use is actually much higher and that the fatality level may be more than double the number where a driver was known to use marijuana. In San Francisco for example, only one of 50 drivers were tested for drugs..

Number and Percent of Marijuana Drivers & Percent Drivers Tested by CA County Where Fatal Crashes Occurred in 2015, NHTSA FARS Data											
County	# MJ Drivers	No. Tested	%MJ	Drivers in Fatal Crashes	% Drivers Drug Tested	County	# MJ Drivers	No. Tested	%MJ	Drivers in Fatal Crashes	% Drivers Drug Tested
ALAMEDA	4	24	16.7%	117	20.5%	ORANGE	15	78	19.2%	232	33.6%
BUTTE	0	12	0.0%	37	32.4%	PLACER	0	6	0.0%	27	22.2%
CALAVERAS	0	1	0.0%	13	7.7%	PLUMAS	0	2	0.0%	5	40.0%
COLUSA	0	2	0.0%	7	28.6%	RIVERSIDE	29	124	23.4%	344	36.0%
CONTRA COSTA	5	24	20.8%	97	24.7%	SACRAMENTO	5	35	14.3%	168	20.8%
DEL NORTE	2	2	100.0%	16	12.5%	SAN BERNARDINO	18	90	20.0%	360	25.0%
EL DORADO	2	6	33.3%	32	18.8%	SAN DIEGO	19	68	27.9%	313	21.7%
FRESNO	7	18	38.9%	124	14.5%	SAN FRANCISCO	1	1	100.0%	50	2.0%
GLENN	0	2	0.0%	8	25.0%	SAN JOAQUIN	4	32	12.5%	126	25.4%
HUMBOLDT	2	10	20.0%	27	37.0%	SAN LUIS OBISPO	2	18	11.1%	47	38.3%
IMPERIAL	0	5	0.0%	39	12.8%	SAN MATEO	1	7	14.3%	51	13.7%
INYO	1	1	100.0%	7	14.3%	SANTA BARBARA	3	14	21.4%	44	31.8%
KERN	10	73	13.7%	173	42.2%	SANTA CLARA	5	68	7.4%	156	43.6%
KINGS	0	5	0.0%	47	10.6%	SANTA CRUZ	0	6	0.0%	26	23.1%
LAKE	2	11	18.2%	22	50.0%	SHASTA	0	3	0.0%	37	8.1%
LASSEN	0	1	0.0%	10	10.0%	SISKIYOU	0	1	0.0%	10	10.0%
LOS ANGELES	43	166	25.9%	838	19.8%	SOLANO	3	10	30.0%	57	17.5%
MADERA	2	9	22.2%	41	22.0%	SONOMA	5	14	35.7%	72	19.4%
MARIN	0	3	0.0%	14	21.4%	STANISLAUS	2	15	13.3%	75	20.0%
MARIPOSA	0	1	0.0%	4	25.0%	SUTTER	0	1	0.0%	28	3.6%
MENDOCINO	1	2	50.0%	12	16.7%	TEHAMA	1	5	20.0%	20	25.0%
MERCED	2	18	11.1%	63	28.6%	TULARE	8	31	25.8%	102	30.4%
MODOC	0	1	0.0%	4	25.0%	TUOLUMNE	1	3	33.3%	14	21.4%
MONO	0	2	0.0%	7	28.6%	VENTURA	4	13	30.8%	74	17.6%
MONTEREY	6	18	33.3%	71	25.4%	YOLO	1	11	9.1%	34	32.4%
NAPA	0	7	0.0%	20	35.0%	YUBA	1	1	100.0%	11	9.1%
NEVADA	1	8	12.5%	17	47.1%	Total	218	1,089	20.0%	4382	24.9%

Marihuana Involvement in Passenger Vehicle Fatal Crashes by State and Marijuana law Status

The table below shows the involvement of marijuana in fatal crashes for all states and the District of Columbia for 2014 and 2015. The Medical Marijuana states have a 26% higher marijuana driver involvement percentage than the No Medical Marijuana states. Colorado and Washington, both Medical and Recreational use states are higher than California. Oregon opened their Recreational marijuana dispensaries in October of 2015. Alaska has yet to open their recreational dispensaries in 2015.

Marijuana Use by State of Passenger Vehicle Drivers in Fatal Crashes by Marijuana Law, 2014 and 2015, NHTSA FARS Data							
Medical Marijuana States				No Medical Marijuana States			
State	MJ 2014	MJ 2015	% Change		MJ 2014	MJ 2015	% Change
Alaska	28.1%	22.2%	-5.8%	Alabama	14.8%	14.6%	-0.2%
Arizona	10.5%	17.6%	7.0%	Arkansas	21.9%	22.0%	0.0%
California	18.4%	21.1%	2.8%	Florida	10.5%	11.6%	1.1%
Colorado*	20.5%	23.8%	3.4%	Georgia	18.1%	14.6%	-3.5%
Connecticut	10.8%	11.3%	0.5%	Idaho	19.1%	16.4%	-2.7%
Delaware	35.4%	27.5%	-7.9%	Indiana	11.6%	9.3%	-2.2%
DC	11.1%	25.0%	13.9%	Iowa	18.6%	19.6%	1.0%
Hawaii	16.0%	22.0%	6.0%	Kansas	12.3%	12.9%	0.5%
Illinois	17.2%	18.9%	1.7%	Kentucky	17.6%	13.9%	-3.7%
Maine	5.3%	20.0%	14.7%	Louisiana	21.2%	13.7%	-7.6%
Maryland	1.9%	0.5%	-1.3%	Mississippi	6.4%	16.0%	9.6%
Mass	19.6%	26.7%	7.0%	Missouri	24.5%	25.2%	0.7%
Michigan	20.8%	21.7%	1.0%	Nebraska	13.0%	25.8%	12.7%
Minnesota	8.5%	15.0%	6.6%	N Carolina	0.0%	7.1%	7.1%
Montana	21.5%	18.2%	-3.3%	North Dakota	3.8%	4.1%	0.3%
Nevada	15.4%	16.8%	1.4%	Ohio	18.0%	21.7%	3.8%
New Hamp.	18.7%	24.4%	5.7%	Oklahoma	8.4%	11.9%	3.5%
New Jersey	13.7%	14.1%	0.5%	Pennsylvania	10.3%	11.8%	1.4%
New Mexico	17.5%	13.8%	-3.7%	S. Carolina	21.2%	25.3%	4.2%
New York	13.7%	23.5%	9.8%	South Dakota	6.1%	7.7%	1.6%
Oregon*	21.7%	17.2%	-4.5%	Tennessee	14.5%	12.4%	-2.1%
Rhode Island	23.5%	26.1%	2.6%	Texas	15.3%	17.3%	2.0%
Vermont	26.1%	36.0%	9.9%	Utah	11.6%	13.9%	2.3%
Washington*	27.7%	24.4%	-3.2%	Virginia	11.1%	16.9%	5.8%
Ave. MJ states	17.6%	20.3%	9.8%	West Virginia	12.1%	17.8%	5.7%
* Also Recreational Use				Wisconsin	17.5%	21.8%	4.3%
Total US	15.7%	17.3%	1.5%	Wyoming	15.9%	29.3%	13.4%
				Ave. NO MJ St.	13.9%	16.1%	15.7%

Summary

- THC is present in 21% of CA fatal crash drivers blood in 2015 and the percentage is climbing (was 18% in 2014).
- 1,332 killed in CA with marijuana present in over 5 years, 252 killed in 2015 in fatal crashes and the percent in fatal crashes is increasing.
- Since only 25% of drivers are tested for drugs, the number of fatalities that are THC related may be as much as twice the known level of 252 found in 2015 data.
- Marijuana involvement percentage may reach DUI alcohol level if trend continues and with increased availability.
- Clear evidence that more lives will be lost if recreational use (Prop 64) is approved
- Young marijuana drivers are affected the most with 41% of the marijuana fatalities being under age 25 and they are also speeding in 39% of the cases compared to 27% speeding rates in all other fatal cases.
- No evidence that increasing marijuana use reduces opiate involvement in fatal crashes. Opiates are consistently present in about 6% of driving fatalities over the last 5 years.
- Five Southern California counties are the most involved with marijuana driving fatalities with Los Angeles and Riverside being the top two counties. However the data is incomplete for many counties like San Francisco, where only 1 of 50 drivers in fatal crashes were tested in 2015 for marijuana and other drugs.
- Colorado (23.8%) and Washington (24.4%), both Medical/Recreational use states have higher marijuana fatality driving rates than California (21.1%) – the longest medical marijuana state in the nation. Additional marijuana driving fatalities would be expected if Californians approve Prop 64 the marijuana legalization proposition in California.