

2016 FARS data shows Marijuana-positive fatal crashes are Increasing

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Lack of required testing of all fatal crash at-fault drivers results in covering up the true amount of drugs and alcohol in fatal crashes. The national Fatality Analysis Reporting System (FARS) in 2016 shows only 40% of the fatal crash drivers were tested for alcohol and only 31% were tested for drugs.

“Lack of mandatory drug & DUI testing is a National disgrace and is masking the true extent of alcohol & drugs (including marijuana) in fatal crashes.” - says Al Crancer, lead researcher of the report.

All drug involvement in fatal crashes is at 40%, alcohol (DUI, BAC 0.08 or above) at 27%, and marijuana presence in 18.5 %. Any drug involvement is up 173% and marijuana presence is up 95% in the last 5 years. The marijuana and No Drug/Alcohol groups had about 33% “other fatalities” (victims) - a higher percent than alcohol (28%).

“The large increase of marijuana found in fatal crashes, from 9.3% in 2011 to 18.5% in 2016, shows an awful trend that suggests that soon the marijuana fatal crash percentage will be higher than alcohol, if it is not already in some states.” – says coauthor Phillip Drum, Pharm D.

Fatal crash drivers in all DUI and Drug groups were younger than the No Drug/Alcohol Group. The mean age of marijuana positive drivers was 15 years younger (age = 29) and had the largest percent of drivers under age 21. All DUI & Drug (including marijuana) groups were more involved in speeding and less likely to wear seat belts.

The highest marijuana positive period was from 8pm to midnight. DUI and Drug drivers (including marijuana) avoid main roadways (highways/toll roads) and are more likely to be on local roads. The largest fatal crash time during the day for No Drug/Alcohol was 4 to 8pm, with DUI highest period at Midnight to 4am.

The percent of DUI drivers is down 10% in 5 years, but testing is also down 24%, casting doubt on the positive result.

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Profile of 2016 DUI, Drugged, and Marijuana Drivers in Fatal Crashes

NHTSA Fatality Analysis Reporting System (FARS) Data Source for Profile

The data in this report comes from NHTSA FARS and is available on-line from the NHTSA website at <https://www-fars.nhtsa.dot.gov/Main/index.aspx>.

The website allows researchers to query the fatal crash data base for various crash factors to determine the extent and characteristics of fatal crash involvement.

NOT all Drivers Tested for DUI and Drugs a Major Problem

Lack of mandatory testing of all drivers in fatal crashes results in the hiding of the true extent of drugs and alcohol in fatal crashes. As shown in the Table 1 below, only **40%** of the fatal crash drivers were tested for alcohol in **2016**, and only **31%** were tested for drugs.

Of even more concern is the decline in percent testing for DUI, **down 24.1%** in 5 years and testing for drugs **down 19.4%**.

In **2006**, 10 years ago, a higher percentage of drivers were tested, with **45.6%** tested for DUI and **31.2%** tested for drugs. Note that both known test results for Drugs and DUI are **down 16%** from 2015 to 2016.

Year	Total Drivers	DUI Tested	% Tested	Drug Tested	% Tested
2006	57,846	26,369	45.6%	18,048	31.2%
2011	43,840	23,303	53.2%	16,970	38.7%
2012	45,664	23,631	51.7%	17,459	38.2%
2013	44,803	22,597	50.4%	16,761	37.4%
2014	44,671	22,053	49.4%	16,806	37.6%
2015	49,162	23,855	48.5%	18,539	37.7%

2016	51,914	20,945	40.3%	16,215	31.2%
Change 5 Years	up 18.4%	dn 10.1%	dn 24.1%	dn 4.4%	dn 19.4%

Despite this lack of testing, the large number of available data for drivers allows us to get a clear picture of the differences of DUI, drugged, and Marijuana drivers in fatal crashes when compared to drivers with NO DUI or with drugs.

Summary Profile of Drugged, DUI, and Marijuana Drivers in Fatal Crashes

The data in the table below compares key crash factors for drivers tested and found DUI, with Drugs, and with Marijuana to Drivers that were tested and found not DUI or with Drugs.

Table 2. Key Crash Factors for All, DUI, Drugs, & Marijuana Drivers in Fatal Crashes, 2016 FARS Data						
Group*	All	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
Total Known Drivers	51914	7,355	6,523	5661	1,796	2958
% in Fatal Crashes*	100%	46.7%	40.2%	27.0%	11.4%	18.2%
Total Fatalities	37,365	7587	7,114	6,235	2023	3,365
Drivers Fatally Injured	23,560	4980	5,030	4,479	1,565	2,233
Others Fatally Injured	13,805	2607	2,084	1,756	458	1,132
% Other Fatally Injured	36.9%	34.4%	29.3%	28.2%	22.6%	33.6%
Male	72.4%	74.3%	77.2%	83.4%	81.3%	82.4%
Age Median	49	44	37	34	33	29
Age % <21	9.0%	5.8%	8.8%	5.3%	5.8%	14.7%
Speeding	26.3%	23.5%	33.0%	42.1%	44.7%	39.7%
Crash Hour Highest 4 Hrs	4-8pm	4-8pm	4-8pm	Mid-4am	Mid-4am	8pm-Mid
% in 4 Hour period	23.0%	24.0%	21.1%	32.5%	32.4%	20.3%
Weekends	33.1%	27.5%	34.5%	47.1%	45.2%	36.6%
Weekdays	66.9%	72.5%	65.5%	52.9%	54.8%	63.4%
Principal Arteries***	29.4%	31.1%	26.7%	23.3%	22.2%	25.5%
Restraint NOT Used	26.6%	40.1%	50.0%	54.1%	53.2%	47.9%

*Others: Other drivers, pedestrians, passengers, bicyclists. **No DUI or Drugs:** Drug & alcohol negative
Drugs: Drug positive with or without alcohol positive. **DUI:** BAC 0.08+ with or without drugs
DUI & Drugs: 0.08+ BAC & drug positive. **MJ:** Cannabinoid positive with or without alcohol or other drugs
****Based on known test results for drivers in fatal crashes. *** Largest road class**

Fatal Crash Involvement by Driver Group

The data in Table 2 below summarizes the approximate involvement of Drugged, DUI, and Marijuana drivers in fatal crashes compared to drivers with NO drugs or DUI.

A comparison to the percent involved 5 years ago clearly shows large and somewhat alarming increases in Drug and Marijuana drivers in fatal crashes, with only a 10% drop in DUI drivers. Although the **% DUI drivers is down 10% in 5 years, testing is down 24%**, casting doubt on this positive result. Further, the **median BAC of DUI drivers is 0.16**, twice the legal limit.

Drug involvement is **up 173%** and Marijuana involvement **up 95%** in the last 5 years. Also note that the NO DUI or Drug driver group is shrinking.

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The large increase of Marijuana in fatal crashes, from 9.3% in 2011 to 18.5% in 2016, shows a trend that suggests that soon the Marijuana fatal crash percentage will be higher than DUI.

Year	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
2016	46.7%	40.2%	27.0%	11.4%	18.2%
2011	49.1%	34.1%	30.1%	4.1%	9.3%
*Change '16-'11	Down 5%	Up 18%	Down 10%	Up 173%	Up 95%

* No DUI or Drugs: Drug & alcohol negative. Drugs: Drug+ with or without alcohol positive.
 DUI: BAC 0.08+ with or without drugs. DUI & Drugs: 0.08+ BAC & drug positive.
 MJ: Cannabinoid positive with or without alcohol or other drugs

Total Fatalities by Driver Group

Table 4 shows the total number of persons known to be victims of DUI and drugged driving. As explained earlier, with the percent tested very low, the number of fatalities is certainly much higher.

Seldom noted in the fatal crash statistics is the finding that fatalities for drivers with known drug use is larger than DUI. Also note that there were 3,365 Marijuana fatalities with more than 1,000 other persons killed in the fatal crashes.

Of concern is the sharp rise in the yearly total known fatalities for fatal drivers in the last five years. Marijuana fatalities for 2016 were up 1,029 and for drugs, up 848. DUI fatalities were down from 5 years ago, but still more than 6,000 persons were killed in DUI crashes.

The percent others fatally injured is highest for the All and NO DUI/Drug group, with marijuana group almost as high. The “% other” for Marijuana is also higher than for DUI.

Group*	All	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
Total Fatalities	37,365	7587	7,114	6,235	2023	3,365
Drivers Fatally Injured	23,560	4980	5,030	4,479	1,565	2,233
Others Fatally Injured	13,805	2607	2,084	1,756	458	1,132
% Others	36.9%	34.4%	29.3%	28.2%	22.6%	33.6%

* **No DUI or Drugs:** Drug & alcohol negative. **Drugs:** Drug+ with or without alcohol positive. **DUI:** BAC 0.08+ with or without drugs.
DUI & Drugs: 0.08+ BAC & drug positive. **MJ:** Cannabinoid positive with or without alcohol or other drugs

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Fatal Driver Age & Sex

Fatal crash drivers in all DUI and Drug groups were younger than the NO Group. Note that **Marijuana drivers** were **15 years younger** than No DUI/Drug group. Also, Marijuana drivers had the largest percent of drivers <21.

Group*	All	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
Male	72.4%	74.3%	77.2%	83.4%	81.3%	82.4%
Age Median	49	44	37	34	33	29
Age % <21	9.0%	5.8%	8.8%	5.3%	5.8%	14.7%

* **No DUI or Drugs:** Drug & alcohol negative. **Drugs:** Drug+ with or without alcohol positive. **DUI:** BAC 0.08+ with or without drugs.
DUI & Drugs: 0.08+ BAC & drug positive. **MJ:** Cannabinoid positive with or without alcohol or other drugs

Speeding

All of the DUI & Drug groups were more involved in speeding in the fatal crashes than the NO DUI/ Drug group. Counter to the popular myth, Marijuana drivers don't drive slow!

Group*	All	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
Speeding	26.3%	23.5%	33.0%	42.1%	44.7%	39.7%

* **No DUI or Drugs:** Drug & alcohol negative. **Drugs:** Drug+ with or without alcohol positive.
DUI: BAC 0.08+ with or without drugs. **DUI & Drugs:** 0.08+ BAC & drug positive.
MJ: Cannabinoid positive with or without alcohol or other drugs

Restraint Use

All of the DUI/Drug groups were less restrained in fatal crashes than the NO DUI/Drug group.

Table 9. Restraint Percentage Not Used by Fatal Driver Group, 2016 FARS Data

Group*	All	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
Restraint NOT Used	26.6%	40.1%	50.0%	54.1%	53.2%	47.9%

* No DUI or Drugs: Drug & alcohol negative. Drugs: Drug+ with or without alcohol positive. DUI: BAC 0.08+ with or without drugs. DUI & Drugs: 0.08+ BAC & drug positive. MJ: Cannabinoid positive with or without alcohol or other drugs

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Time of Day

The largest 4-hour time period for fatal crash drivers with NO DUI or Drugs was in the afternoon, 4-8pm. DUI fatal drivers were highest Mid-4am. Marijuana drivers had their highest period in the evening at 8pm-Midnight, which is earlier than the DUI drivers.

The lowest time period for all of the DUI/Drug groups was 8am-Noon.

4 Hour Period	ALL	NO DUI/DRG	DUI	Drug	DUI/Drug	Mj
	%	%	%	%	%	%
4-8am	12.5%	14.3%	10.1%	13.3%	11.2%	16.3%
8am-Noon	13.3%	15.7%	<u>3.1%</u>	<u>11.7%</u>	<u>3.5%</u>	<u>10.7%</u>
Noon-4pm	19.9%	23.0%	7.0%	18.7%	7.9%	15.0%
4-8pm	23.0%	24.0%	18.8%	21.1%	18.2%	17.8%
8pm-Mid	18.4%	14.9%	27.5%	18.6%	26.8%	20.3%
Mid-4am	<u>12.4%</u>	<u>8.1%</u>	32.5%	15.8%	32.4%	19.3%
Total	100.0%	100.0%	100.0%	99.2%	100.0%	100.0%

Red numbers for highest time period, Blue numbers for lowest period.

* No DUI or Drugs: Drug & alcohol negative. Drugs: Drug+ with or without alcohol positive. DUI: BAC 0.08+ with or without drugs. DUI & Drugs: 0.08+ BAC & drug positive. MJ: Cannabinoid positive with or without alcohol or other drugs

Weekends & Weekdays

All of the DUI/Drug groups were highest on weekends in sharp contrast to the NO DUI/Drug group.

Day of Week	All	NO DUI/Drug	DUI	Drugs	DUI/Drug	Tot Mj
Sunday	15.4%	11.5%	22.8%	15.8%	20.8%	17.1%

Monday	13.1%	13.9%	10.3%	13.7%	11.5%	13.3%
Tuesday	12.0%	13.2%	7.8%	12.1%	8.3%	12.5%
Wednesday	12.8%	14.3%	9.2%	11.8%	9.4%	10.4%
Thursday	13.5%	14.9%	10.7%	12.7%	10.3%	12.0%
Friday	15.5%	16.8%	14.9%	15.3%	15.4%	15.3%
Saturday	17.7%	15.5%	24.3%	18.7%	24.3%	19.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weekends	33.1%	27.0%	47.1%	34.5%	45.2%	36.6%
Week Days	66.9%	73.0%	52.9%	65.5%	54.8%	63.4%

** No DUI or Drugs: Drug & alcohol negative. **Drugs:** Drug+ with or without alcohol positive.
DUI: BAC 0.08+ with or without drugs. **DUI & Drugs:** 0.08+ BAC & drug positive.
MJ: Cannabinoid positive with or without alcohol or other drugs

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Principal Arteries

Data in Table 10 shows that DUI and Drug Drivers avoid the principal arteries and are more likely to be on the more local less traveled roads.

Group	All	No DUI or Drugs	Drugs	DUI	DUI & Drugs	Mj
Principal Arteries*	29.4%	31.1%	26.7%	23.3%	22.2%	25.5%

* Largest road class.

** No DUI or Drugs: Drug & alcohol negative. **Drugs:** Drug+ with or without alcohol positive. **DUI:** BAC 0.08+ with or without drugs.
DUI & Drugs: 0.08+ BAC & drug positive. **MJ:** Cannabinoid positive with or without alcohol or other drugs

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