

TRAFFIC SAFETY FACTS

Drug-Involved Driving

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INTRODUCTION

The use of cannabis, prescription drugs, and other drugs are increasingly prominent on roadways in the United States, where 25.1 percent of the nation's 36,096 fatalities in 2019 were related to drug-involved driving. Driving can be impaired by a variety of legal and illegal drugs, substances, and medications. Several states have legalized the use of medical and/or recreational cannabis, increasing concerns about traffic safety. Aside from alcohol, cannabis is the most frequently detected drug in drivers who are in crashes. The impact of drugs on the brain and behavior varies considerably depending on the type of drug and how it is metabolized. There are also large variations across jurisdictions in the frequency of testing suspected impaired drivers for drugs, the consistency of laboratory drug testing practices, and the capacity of law enforcement. Despite challenges in identifying causality and impairment, there is agreement that many illicit, prescription, and over-the-counter drugs impair driving.

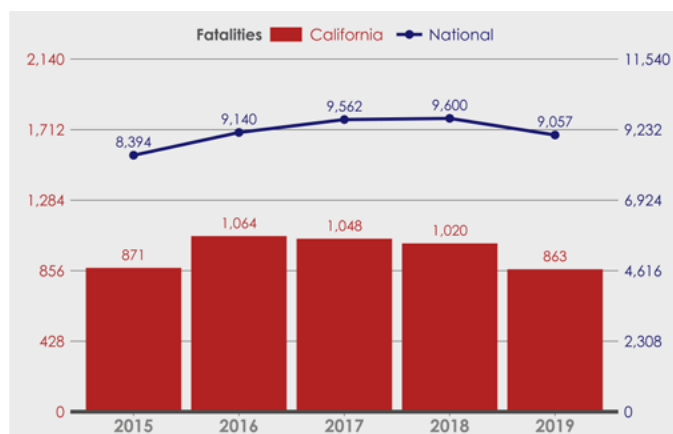
Historically, road safety efforts focused on changing human behaviors to prevent crashes. The Safe System approach reframes efforts to save lives by expecting crashes to happen and focusing attention on reducing the severity of injuries when a crash occurs. By understanding the nuances of drug-involved crashes, transportation professionals can better address every aspect of crash risks and implement multiple layers of protection to ensure that everyone traveling on California roadways will go safely. Analyses from FARS presented in the drug-involved program area include fatalities in crashes that involved a driver who tested positive for a drug that could cause impairment. Analyses from SWITRS presented in this program area refer to drug-involvement and include fatal and serious injuries where law enforcement reported the driver to be under the influence of drugs. Crashes in the program area are defined as where one or more drivers tested positive for a drug that could cause impairment or was reported as driving under the influence of drugs, depending on which data set is used.

KEY FINDINGS

NATIONAL DATA

- In the United States, 9,057 people were killed in drug-involved crashes in 2019, a 5.7 percent decrease from 9,600 in 2018, and a 8.1 percent increase from 8,394 in 2015 (see Figure 1).
- In 2019, of fatally injured drivers with known drug tests, 50.0 percent were positive for drugs - legal and illegal.
- Alcohol use in combination with drug use increases impairment. In 2019, the National Survey of Drug Use and Health found that 36.3 percent of those reporting that they drove under the influence of drugs within the past year also reported that they drove under the influence of alcohol in the same time period. While generally understood as unsafe, research is emerging on the specific dangers of driving under the influence of drugs and in combination with alcohol.

Figure 1: Drug-Involved Driving Fatality Trends, Nationwide, 2015-2019



Source: FARS 2015-2018, FARS ARF 2019

CALIFORNIA DATA

- In California, there were 863 fatalities in drug-involved fatalities in 2019, a 15.4 percent decrease from 1,020 in 2018 and a 0.9 percent decrease from 871 in 2015.
- In 2019, of fatally injured drivers with known drug tests, 49.6 percent were positive for drugs - legal and illegal.
- According to the 2020 California Traffic Safety Survey, over half (52.3 percent) of respondents said they thought driving under the influence of drugs including marijuana, prescription and illegal drugs was “a very big” problem, while another 35.4 percent thought it was somewhat of a problem.

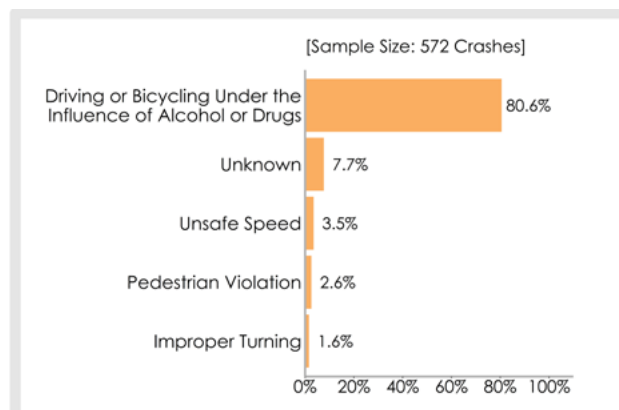
Fatal and Serious Injury Drug-Involved Driving Crashes by County

- The highest numbers of drug-involved road user fatalities and serious injuries were in the counties of Los Angeles, Riverside, and San Bernardino, followed by San Diego, Orange, Sacramento, Fresno, and Kern counties (see Figure 5).
- Conversely, the rates of drug-involved fatalities and serious injuries per 100,000 population were highest in Colusa, Mono, Del Norte, Sierra, Mendocino, Plumas, Calaveras and Glenn counties.

Drug-Involved Driving Fatal and Serious Injury Victim Demographics

- Half (50.0 percent) of the drug-involved driving fatal and serious injury victims in California in 2019 were young adults age 15 to 34.
- Among victims killed in drug-involved crashes with a known race, most were white (80.6 percent). Race was unknown for 29.4 percent of the victims.

Figure 2: Top Five Primary Crash Factors for Drug-Involved Driving Fatal and Serious Injury Crashes, California, 2019

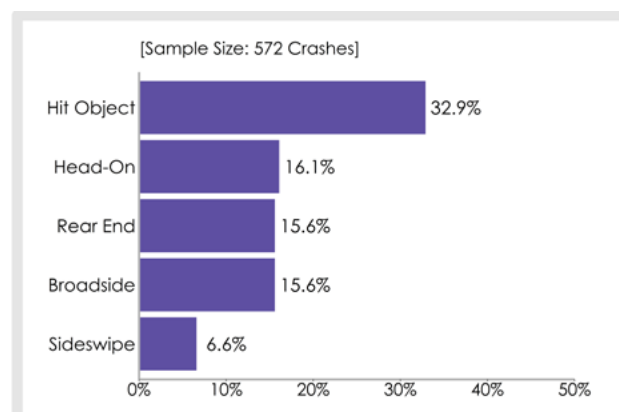


Source: Provisional SWITRS 2019

Primary Crash Factors of Drug-Involved Driving Fatal and Serious Injury Crashes

- The top primary crash factor was driving or bicycling under the influence of alcohol or drugs (80.6 percent) (see Figure 2).

Figure 3: Top Five Crash Types of Drug-Involved Driving Fatal and Serious Injury Crashes, California, 2019



Source: Provisional SWITRS 2019

Crash Types of Drug-Involved Driving Fatal and Serious Injury Crashes

- The most common crash type was hit object at 32.9 percent, followed by head-on at 16.9 percent, and rear end and broadside at 15.6 percent each (see Figure 3).

CALIFORNIA DATA

(continued)

Figure 4: Time of Day and Day of Week for Drug-Involved Driving Fatal and Serious Injury Victims, California, 2019

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
Midnight-3AM	26	19	16	12	25	42	54	194 [14.1%]
3-6AM	12	17	14	17	27	27	25	139 [10.1%]
6-9AM	9	17	28	16	22	21	12	125 [9.1%]
9AM-Noon	22	17	17	21	13	24	9	123 [8.9%]
Noon-3PM	28	22	32	20	15	32	26	175 [12.7%]
3-6PM	21	30	22	22	31	32	20	178 [12.9%]
6-9PM	23	21	31	32	31	30	38	206 [15.0%]
9PM-Midnight	32	22	35	24	37	35	26	211 [15.3%]
Unknown	5	5	4	2	3	3	3	25 [1.8%]
TOTAL	178 [12.9%]	170 [12.4%]	199 [14.5%]	166 [12.1%]	204 [14.8%]	246 [17.9%]	213 [15.5%]	1,376 [100.0%]

FSI Num+% 2-13 14-21 22-24 25-31 32-54

Source: FARS ARF 2019, Provisional SWITRS 2019

Time and Day of Drug-Involved Driving Fatal and Serious Injury Crashes

- Of fatal and serious injuries due to drug-involved driving, almost half (48.2 percent) occurred on Friday, Saturday, or Sunday. The most common hours for fatal and serious injuries due to drug-involved driving were between 6pm and 3am (44.4 percent) (see Figure 4).

Crash Location for Fatal Drug-Involved Driving Crash Victims

- Nearly three in five (59.6 percent) of the drug-involved fatal injuries occurred on urban roads.
- Most of the fatalities occurred on non-interstate principal arterials (40.7 percent), followed by non-interstate minor arterials (21.1 percent), and non-interstate collectors (18.0 percent).

Vehicle Type in Fatal Drug-Involved Driving Crashes

- Passenger cars were involved in 45.1 percent of drug-involved driving fatalities.
- Passenger vehicles, including motor vehicles weighing 10,000 pounds or less and passenger cars and light trucks (SUVs, pickup trucks, vans, and other light trucks) were involved in 73.6 percent of drug-involved driving fatalities.

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COUNTY TABLE: DRUG-INVOLVED**Figure 5: Drug-Involved Fatalities and Serious Injuries, by Number and Rate, 2019**

County	Population	Fatalities	Serious Injuries	Fatal & Serious Injuries (FSI)	FSI per 100K Population
Alameda	1,668,965	19	17	36	2.16
Alpine	1,123	0	0	0	0.00
Amador	37,724	5	0	5	13.25
Butte	214,532	15	13	28	13.05
Calaveras	44,403	4	3	7	15.77
Colusa	22,045	7	5	12	54.43
Contra Costa	1,147,269	13	4	17	1.48
Del Norte	27,207	6	4	10	36.76
El Dorado	188,818	11	4	15	7.94
Fresno	1,018,437	34	20	54	5.30
Glenn	29,072	3	1	4	13.76
Humboldt	133,820	11	2	13	9.71
Imperial	188,962	3	3	6	3.17
Inyo	18,463	0	0	0	0.00
Kern	909,697	40	11	51	5.61
Kings	153,522	7	7	14	9.12
Lake	64,080	2	3	5	7.80
Lassen	28,972	1	0	1	3.45
Los Angeles	10,210,966	124	75	199	1.95
Madera	157,686	5	1	6	3.81
Marin	260,969	1	2	3	1.15
Mariposa	17,842	0	0	0	0.00
Mendocino	88,125	11	10	21	23.83
Merced	281,592	12	4	16	5.68
Modoc	9,458	1	0	1	10.57
Mono	13,585	2	4	6	44.17
Monterey	443,397	10	10	20	4.51
Napa	139,874	8	1	9	6.43
Nevada	97,808	2	4	6	6.13
Orange	3,195,197	43	27	70	2.19
Placer	394,626	7	7	14	3.55
Plumas	18,450	2	2	4	21.68
Riverside	2,428,464	99	48	147	6.05
Sacramento	1,548,760	34	21	55	3.55
San Benito	62,051	2	2	4	6.45
San Bernardino	2,176,150	89	24	113	5.19
San Diego	3,346,937	38	36	74	2.21
San Francisco	897,114	0	5	5	0.56
San Joaquin	767,935	33	9	42	5.47
San Luis Obispo	277,276	13	13	26	9.38
San Mateo	776,002	1	5	6	0.77
Santa Barbara	452,066	6	7	13	2.88
Santa Clara	1,960,932	30	10	40	2.04
Santa Cruz	272,185	7	10	17	6.25
Shasta	177,620	1	3	4	2.25
Sierra	3,127	0	1	1	31.98
Siskiyou	44,000	4	1	5	11.36
Solano	439,990	16	12	28	6.36
Sonoma	495,058	7	17	24	4.85
Stanislaus	554,212	12	10	22	3.97
Sutter	102,808	4	1	5	4.86
Tehama	65,163	8	0	8	12.28
Trinity	13,374	0	0	0	0.00
Tulare	477,731	16	15	31	6.49
Tuolumne	52,557	2	0	2	3.81
Ventura	844,213	16	13	29	3.44
Yolo	220,723	6	6	12	5.44
Yuba	78,061	10	0	10	12.81
Total	39,761,195	863	513	1,376	3.46

Source: FARS ARF 2019, Provisional SWITRS 2019, California Department of Finance 2020