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TRAFFIC SAFETY FACTS

Drug-Involved Driving

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PROBLEM IDENTIFICATION AND DATA ANALYSIS

The use of cannabis, prescription drugs, and other drugs are increasingly prominent on roadways in the United States, where 25.3 percent of the nation's 38,824 fatalities in 2020 were related to drug-involved driving. Driving can be impaired by a variety of legal and illegal drugs, substances, and medications. The effect of specific drugs on behavior and driving skills vary considerably depending on how they act in the brain and are metabolized. They can slow reaction time, decrease coordination, increase aggressive and reckless driving, impair cognitive function, or cause drowsiness. All of these effects can contribute to crash risk.

Studies suggest that poly-drug use or combining alcohol and drugs can inflate the level of driver impairment and crash risk. There is variation across jurisdictions in the frequency of testing suspected impaired drivers for drugs, consistency in laboratory drug testing practices, and capacity of law enforcement personnel. Despite challenges in identifying causality and impairment, there is general consensus that many drugs impair driving. Preliminary data from an ongoing NHTSA study of alcohol and drug prevalence during the COVID-19 emergency found some significant increases in the prevalence of drugs detected in blood among fatally and seriously injured drivers, motorcyclists, and pedestrians when comparing the last quarter of 2019 and the first quarter of 2020 to the second, third, or fourth quarters of 2020. As of February 2022, nearly three-quarters of states, including California, have legalized medical-use of cannabis products and over one-third allow recreational cannabis, increasing concerns about traffic safety. According to the National Institute on Drug Abuse, aside from alcohol, cannabis is the most frequently detected drug in drivers who are in crashes.

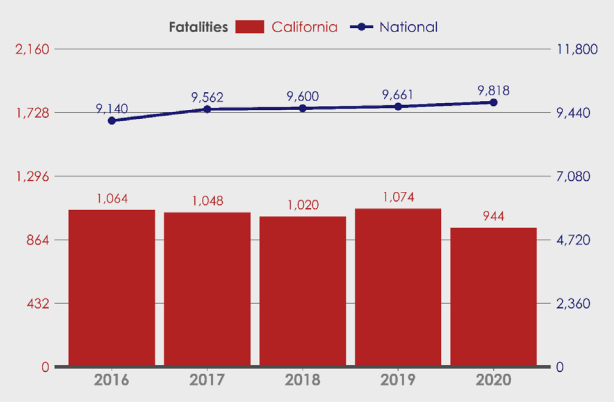
Analyses from FARS presented in the drug-impaired program area include fatalities in crashes that involved a driver who tested positive for a drug that could cause impairment. Analyses from SWITRS presented in this program area refer to drug-involvement and include fatal and serious injuries where law 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, 9,818 people were killed in drug-involved crashes in 2020, a 1.6 percent increase from 9,661 in 2019, and a 7.4 percent increase from 9,140 in 2016 (see Figure 1).
- In 2020, of fatally injured drivers with known drug tests, 53.1 percent were positive for drugs – legal and illegal.
- In 2020, the National Survey of Drug Use and Health found that 37.0 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.

Figure 1: Drug-Involved Fatality Trends, Nationwide and California, 2016-2020



Source: FARS 2016-2019, FARS ARF 2020

CALIFORNIA DATA

- In California, there were 944 fatalities in drug-involved fatalities in 2020, a 1.2 percent decrease from 1,074 in 2019 and a 1.1 percent decrease from 1,064 in 2016.
- In 2020, of fatally injured drivers with known drug tests, 55.2 percent were positive for drugs – legal and illegal.
- According to the 2021 California Traffic Safety Survey, over half (51.9 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 37.2 percent thought it was "somewhat of a problem".

Fatal and Serious Injury Drug-Involved Driving Crashes by County

- The counties with the highest number of fatalities in a drug-involved crash were Fresno, Kern, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, and San Diego Counties. Similarly, the counties with the highest number of serious injuries in a drug-involved crash were Orange, Los Angeles, Riverside, Sacramento, San Bernardino, and San Diego (see Figure 3).
- Per capita, the counties with the highest rate of fatalities in a drug-involved crash were Amador, Colusa, Lake, Lassen, Mendocino, Plumas, Sierra, and Trinity. Similarly, the counties with the highest rate of fatalities per capita in a drug-involved crash were Colusa and Mendocino, in addition to Glenn, Humboldt, Mono, Sutter, Siskiyou, and Tehama.

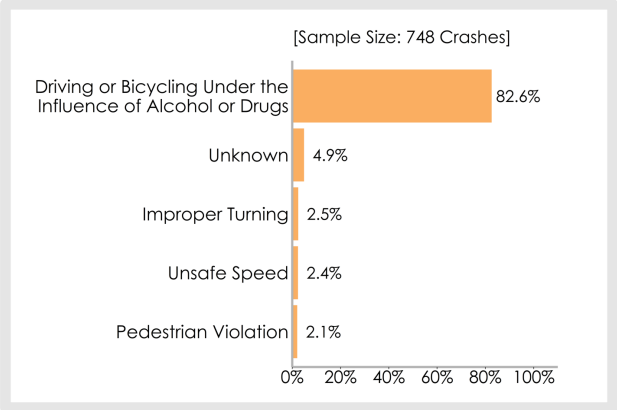
Primary Crash Factors of Drug-Involved Driving Fatal and Serious Injury Crashes

- The top primary crash factor (see Figure 2) was driving or bicycling under the influence of alcohol or drugs (82.6 percent).

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

- The most common crash type was hit object at 34.0 percent, followed by head-on at 16.6 percent, and broadside at 16.2 percent each.

Figure 2: Top Five Crash Types for Drug-InvolvedFatal and Serious Injury Crashes, California, 2020



Source: Provisional SWITRS 2020

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

- Almost half (45.2 percent) of all drug-involved driving fatalities occurred during the weekend, from 6pm Friday to 5:59am Monday .
- Similarly, over one-third (37.4 percent) of all drug-involved driving serious injuries occurred during the weekend, from 6pm Friday to 5:59am Monday .

Drug-Involved Driving Fatal and Serious Injury Victim Demographics

- Across most age groups, males were more likely to be killed than females in a drug-involved injury crash; males accounted for 75.7 percent of all fatalities. The age groups 15-24 and 25-34 accounted for 20.0 percent and 28.6 percent of all drug-involved crash fatalities, respectively.
- Similarly, across all age groups, males were more likely to be seriously injured than females in a drug-involved injury crash; males accounted for 66.9 percent of all fatalities. The age groups 15-24 and 25-34 accounted for 21.4 percent and 28.0 percent of serious injuries from drug-involved crashes, respectively.
- Race was unknown for 28.8 percent of those killed in a drug-involved crash. Among victims killed in drug-involved crashes with a known race, most were white (83.0 percent).

CALIFORNIA DATA

Crash Location for Fatal Drug-Involved Driving Crash Victims

- Nearly two-thirds (62.8 percent) of the drug-involved fatal injuries occurred on urban roads.
- Most of the fatalities occurred on non-interstate principal arterials (39.9 percent) followed by non-interstate minor arterials (24.9 percent).

Vehicle Type in Fatal Drug-Involved Driving Crashes

- Passenger cars were involved in 49.2 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 3: Drug-Involved Driving Fatalities and Serious Injuries, by Number and Rate, 2020

County	Population	Fatalities	Serious Injuries	Fatal & Serious Injuries (FSI)	FSI per 100K Population
Alameda	1,681,700	27	20	47	2.80
Alpine	1,199	0	0	0	0.00
Amador	40,506	6	1	7	17.28
Butte	211,216	12	9	21	9.94
Calaveras	45,277	1	0	1	2.21
Colusa	21,826	4	2	6	27.49
Contra Costa	1,166,669	10	10	20	1.71
Del Norte	27,745	0	1	1	3.60
El Dorado	191,282	5	6	11	5.75
Fresno	1,008,860	56	21	77	7.63
Glenn	28,822	2	3	5	17.35
Humboldt	136,514	11	12	23	16.85
Imperial	178,537	5	1	6	3.36
Inyo	18,977	1	1	2	10.54
Kern	907,021	66	15	81	8.93
Kings	153,085	10	8	18	11.76
Lake	68,099	8	4	12	17.62
Lassen	32,025	5	1	6	18.74
Los Angeles	10,012,474	117	91	208	2.08
Madera	156,519	13	7	20	12.78
Marin	262,410	4	3	7	2.67
Mariposa	17,123	1	1	2	11.68
Mendocino	91,602	15	13	28	30.57
Merced	280,873	8	6	14	4.98
Modoc	8,703	1	0	1	11.49
Mono	13,185	1	5	6	45.51
Monterey	439,008	16	8	24	5.47
Napa	138,433	7	3	10	7.22
Nevada	102,392	7	2	9	8.79
Orange	3,184,513	41	25	66	2.07
Placer	405,308	13	7	20	4.94
Plumas	19,666	3	1	4	20.34
Riverside	2,421,480	92	62	154	6.36
Sacramento	1,585,666	34	28	62	3.91
San Benito	64,110	1	1	2	3.12
San Bernardino	2,181,983	45	27	72	3.30
San Diego	3,303,736	114	59	173	5.24
San Francisco	870,985	0	2	2	0.23
San Joaquin	780,676	23	21	44	5.64
San Luis Obispo	282,996	3	15	18	6.36
San Mateo	763,497	8	6	14	1.83
Santa Barbara	448,659	7	4	11	2.45
Santa Clara	1,933,516	13	4	17	0.88
Santa Cruz	272,360	3	3	6	2.20
Shasta	181,881	6	7	13	7.15
Sierra	3,233	1	0	1	30.93
Siskiyou	44,091	2	4	6	13.61
Solano	453,405	11	8	19	4.19
Sonoma	489,880	12	8	20	4.08
Stanislaus	553,995	21	12	33	5.96
Sutter	100,751	6	6	12	11.91
Tehama	65,643	5	10	15	22.85
Trinity	16,135	2	0	2	12.40
Tulare	473,482	19	6	25	5.28
Tuolumne	55,500	2	0	2	3.60
Ventura	844,545	22	12	34	4.03
Yolo	216,544	9	3	12	5.54
Yuba	81,468	7	1	8	9.82
Total	**39,541,786**	**944**	**596**	**1,540**	**3.89**

Source: FARS ARF 2020; Provisional SWITRS 2020; California Department of Finance 2021.

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