

TRAFFIC SAFETY FACTS

Alcohol-Impaired Driving

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INTRODUCTION

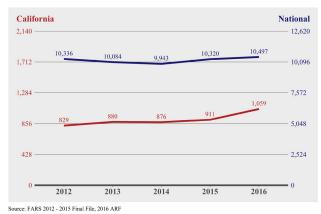
While alcohol-impaired driving fatalities have fallen significantly in the past three decades, alcohol-impaired driving still comprises a large percentage of traffic injuries and fatalities. On average in 2016, one person died from an alcohol-impaired driving collision every 50 minutes in the United States. Additionally, there was an increase in the number of alcohol-impaired driving fatalities in the United States between 2015 and 2016. Nationwide, there were 10,497 people killed in alcohol-impaired collisions in 2016, a 1.7 percent increase from 10,320 in 2015, and a 1.6 percent increase from 10,336 in 2012.

CALIFORNIA FACTS

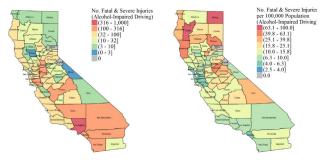
CALIFORNIA DATA

- There were 1,059 people killed in alcoholimpaired collisions in 2016, a 16.2% increase from 911 in 2015, and a 27.7% increase from 829 in 2012.
- Of the 3,623 motor vehicle fatalities in 2016, 29.2% involved a driver with a BAC of 0.08, which is slightly higher than the national average of 28%.
- The highest number of alcohol-involved fatal and severe injuries were concentrated in southern and central California, with the greatest number in Los Angeles County. Conversely, the highest rate of alcohol-involved fatal and severe injuries per population were concentrated in the northern and more rural parts of California, with the highest rates in Trinity and Modoc counties, followed by Calaveras, Mendocino, and Plumas counties.
- In 2017, residents were asked about their top traffic safety concerns in the Traffic Safety Study sponsored by the Office of Traffic Safety. The second-most frequently cited safety problem was "Drunk Driving," which spiked from 5.6% of concerns expressed in 2016 to 22.9% in 2017.
- The state only reported BAC results for 23.7% of drivers involved in a fatal crash in 2016, which is lower than the national average of 40.5%. Testing rates were higher for drivers who died than for drivers who survived.

Alcohol-Impaired Driving Fatality Trends, Nationwide and California, 2012-2016



Alcohol-Impaired Driving Fatal & Severe Injury and Fatal & Severe Injury per 100K Population by County, 2016



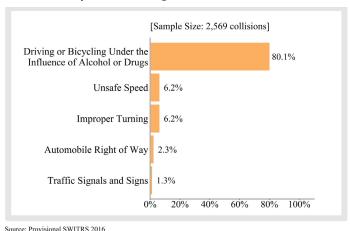
(a) Number of Fatal and Severe Injuries (b) Number of Fatal and Severe Injuries per 100,000 Population Source: FARS ARF 2016; Provisional SWITRS 2016; California Department of Finance 2016

CALIFORNIA DATA

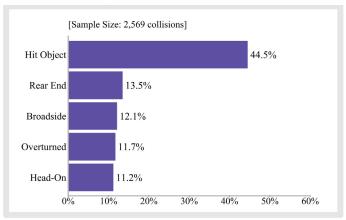
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- Expectedly, the vast majority, 80.1%, of the primary collision factors for alcohol-involved fatal and severe injury collisions were classified as driving or bicycling under the influence. This was followed by unsafe speed (6.2%) and improper turning (6.2%).
- Hit object was the most prevalent type of alcohol-involved collision (44.5%). This was followed by rear end collisions (13.5%), broadside (12.1%), overturned (11.7%), and head-on (11.2%).
- The rate of alcohol-involved fatal and severe injuries was much higher at night, especially on weekends.
- Almost half (48.2%) of alcohol-involved fatal and severe injuries occurred between 9pm and 3am. Alcohol-involved fatal and severe injuries were least recorded between 6am and noon (5.7%).
- Alcohol-involved fatal and severe injury victims were predominantly young male adults (age 15 to 34) at 39.4% of all victims.
- Over half (53.3%) of alcohol-impaired fatalities occurred in urban areas compared with 46.7% on rural roads. However only about 16% of travel took place on rural roads.
- Nearly half (44.4%) of all alcohol-impaired fatalities occurred on non-interstate principal arterials (high-capacity urban roads).
- In 2016, there were 640 alcohol-impaired fatalities in passenger vehicles, 162 victims on motorcycles, and 141 as pedestrians and bicyclists. Most alcohol-impaired fatalities (70.4%), took place in passenger vehicles.

Top Five Primary Collision Factors, Fatal & Severe Injury Alcohol-Impaired Driving Collisions, California, 2016

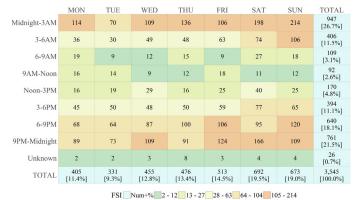


Top Five Crash Types for Alcohol-Impaired Driving Fatality & Severe Injury Collisions, California, 2016



Source: Provisional SWITRS 2016

Time and Day of Week for Alcohol-Impaired Driving Fatal & Severe Injury, California, 2016



Source: FARS ARF 2016; Provisional SWITRS 2016

REFERENCES

- National Center for Statistics and Analysis. (2018, January). State alcohol impaired-driving estimates: 2016 data (Traffic Safety Facts. Report No. DOT HS 812 483). Washington, DC: National Highway Traffic Safety Administra-
- National Center for Statistics and Analysis. (2017, October). Alcohol-im-paired driving: 2016 data. (Traffic Safety Facts. DOT HS 812 450). Washing-ton, DC: National Highway Traffic Safety Administration.
- Ewald & Wasserman Research Consultants, LLC. (2017, September). California Traffic Safety Survey 2017. Elk Grove, CA: California Office of Traffic Safety.
- California Department of Transportation. (2017, June). California Public Road Data 2015.
- Subramanian, R. (2002, January; Revised 2002, October). Transitioning to Multiple Imputation – A New Method to Impute Missing Blood Alcohol Concentration (BAC) values in FARS. (DOT HS 809 403). Washington, DC: National Highway Traffic Safety Administration.