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Fact Sheet

Title

2019 SafeTREC Traffic Safety Facts: Occupant Protection

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TRAFFIC SAFETY FACTS

Occupant Protection

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INTRODUCTION

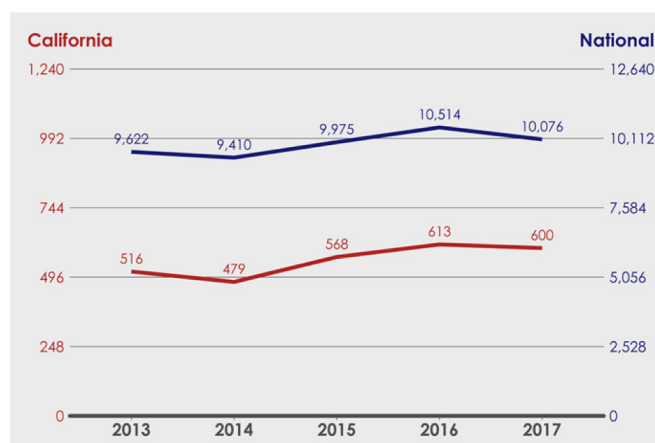
Restraint devices such as seat belts are a key element of motor vehicle occupant protection systems. Each year, NHTSA conducts the National Occupant Protection Use Survey (NOPUS) that measures, among many variables, the use of seat belts by occupants age eight and older. The 2018 NOPUS reported an 89.6 percent front seat belt use rate for the nation as a whole, which was essentially level with the 89.7 percent rate in 2017. However, it reflects a significant decrease in the seat belt use rate in the western region from 94.5 percent in 2017 to 92.7 percent in 2018. Drivers had an 89.9 percent use rate and right-front passengers had an 88.7 percent use rate. States with a primary seat belt use law had a seat belt use rate of 90.6 percent compared to 86.4 percent in other states.

CALIFORNIA FACTS

NATIONAL DATA

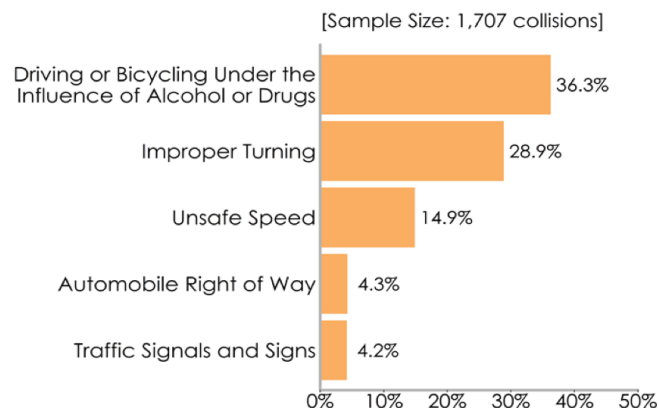
- The fatality trends for unrestrained passenger vehicle occupants in California and in the United States are similar.
- In the United States, there were 10,076 unrestrained passenger vehicle occupants killed in traffic collisions in 2017, a 4.2 percent decrease from 10,514 in 2016.
- In 2017, of the 21,464 passenger vehicle occupants with known restraint use killed in motor vehicle traffic collisions, 10,076 or 46.9 percent were known to be unrestrained.
- In 2017, daytime restraint use was higher than nighttime; 54.9 percent of passenger vehicle occupants with known restraint use involved in a nighttime fatal collision were unrestrained compared with 39.8 percent involved in a daytime collision.
- NHTSA estimated that, among passenger vehicle occupants aged five or older involved in traffic collisions, seat belt use saved 14,955 lives in 2017. In addition, if all passenger vehicle occupants aged five or older had been wearing seat belts, an additional 2,549 lives could have been saved in 2017.

Unrestrained Occupant Fatality Trends, Nationwide and California, 2013-2017



Source: FARS 2013-2016, FARS ARF 2017

Top Five Primary Collision Factors for Unrestrained Occupant Fatal and Serious Injury Collisions, 2017

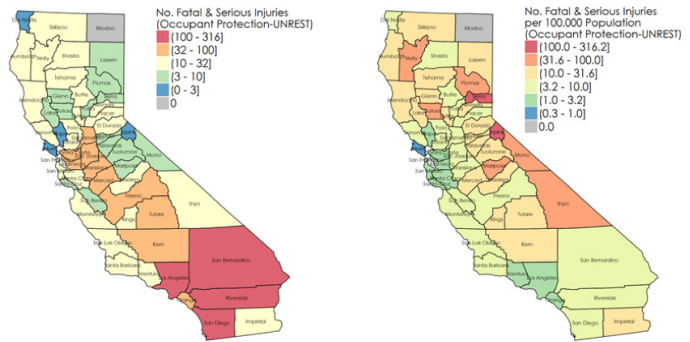


Source: FARS 2013-2016, FARS ARF 2017

CALIFORNIA DATA

- There were 600 unrestrained occupants killed in traffic collisions in 2017, a 2.1 percent decrease from 613 in 2016.
- In 2017, California’s front seat belt use was observed to be 96.2 percent, which was the third-highest use rate in the nation.
- California’s front seat belt use rate has been greater than 95 percent for the last ten years from 2008 to 2017.
- In 2017, seat belts saved 1,488 California passenger vehicle occupants, age five and older, involved in traffic collisions. If all vehicle occupants used seat belts, an additional 89 lives would have been saved.
- The Summer 2018 Seat Belt Usage study reported that the combined use rate for drivers and front seat passengers was 96.0 percent. This is a decrease from 96.2 percent in 2017, 96.5 percent in 2016, and 97.3 percent in 2015.
- Forty-five percent of pedestrian fatal and serious injuries occur between 6pm and midnight when dusk and darkness are factors. These injuries were most concentrated between 6pm and 9pm on weekdays, with a peak on Friday evenings.

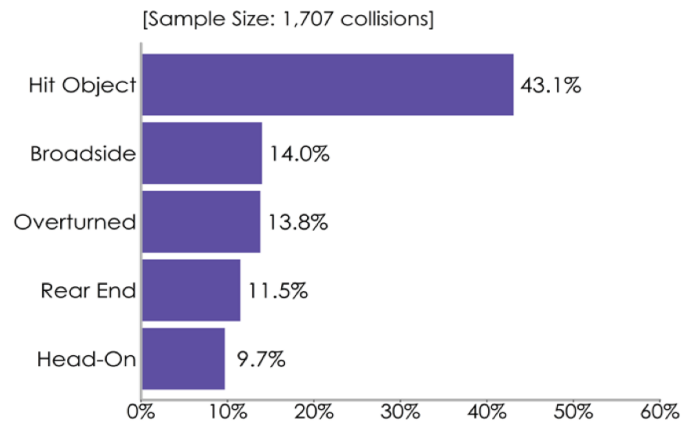
Unrestrained Occupant Fatal and Serious Injury Number and Rate per 100K Population by County, 2017



(a) Number of Fatal and Serious Injuries (b) Number of Fatal and Serious Injuries per 100,000 Population

Source: FARS ARF 2017; Provisional SWITRS 2017; California Department of Finance 2018

Top Five Crash Types for Unrestrained Occupant Fatal and Serious Injury Victims, California, 2017



Source: FARS ARF 2017, Provisional SWITRS 2017

REFERENCES

- California Department of Transportation. (2018, November). California Public Road Data 2017: Statistical Information Derived from the Highway Performance Monitoring System. Sacramento, CA: California State Transportation Agency.
- California State University, Fresno. (Summer, 2018). Summer 2018 Seat Belt Usage Report. California Office of Traffic Safety. <https://www.ots.ca.gov/wp-content/uploads/sites/67/2018/11/2018-OTS-Restraint-Usage-Summer-Report.pdf>
- Enriquez, J., Pickrell, T.M. (2019, January). Seat Belt Use in 2018 -- Overall Results (Report DOT HS 812 662). Washington, DC: National Highway Traffic Safety Administration.
- National Center for Statistics and Analysis. (2019, April). Occupant protection in passenger vehicles: 2017 data (Traffic Safety Facts. Report No. DOT HS 812 691). Washington, DC: National Highway Traffic Safety Administration.
- National Center for Statistics and Analysis. (2018, June (revised)). Seat Belt Use in 2017—Use Rates in the States and Territories (Traffic Safety Facts Crash Stats. Report No. DOT HS 812 546). Washington, DC: National Highway Traffic Safety Administration
- National Center for Statistics and Analysis. (2018, October). 2017 fatal motor vehicle crashes: Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 603). Washington, DC: National Highway Traffic Safety Administration.
- State Traffic Safety Information (STSI). Traffic Safety Performance (Core Outcome) Measures For California. Washington, DC: National Highway Traffic Safety Administration. <https://cdan.nhtsa.gov/STSI.htm>

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