

# UC Berkeley

## Fact Sheet

### Title

SafeTREC Traffic Safety Facts: Seat Belt Use

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## TRAFFIC SAFETY FACTS

# Seat Belt Use

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### INTRODUCTION

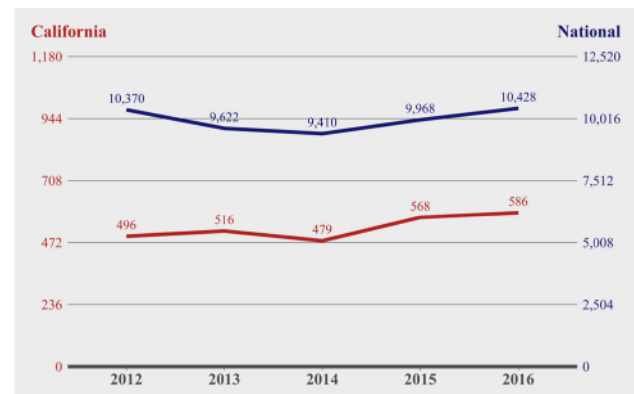
Restraint devices such as seat belts are a key element of motor vehicle occupant protection systems. According to the National Occupant Protection Use Survey (NOPUS), in 2016 there was a 90.1 percent front seat belt use rate for the nation as a whole, a 1.8 percent increase over the 88.5 percent reported in 2015. Front seat belt use was slightly higher among women (92.5 percent) compared with men (88.2 percent). Front passengers were more likely to use seat belts (90.1 percent) than rear seat occupants (80.6 percent). One strong determinant of seat belt use is the presence of a seat belt use law—states with a seat belt law that applied to all vehicle occupants had a rear seat belt use rate of 83.9 percent compared with 75.7 percent in states requiring front seat belt use only. In the United States, there were 10,428 unrestrained passenger vehicle occupants killed in traffic collisions in 2016, a 4.6 percent increase from 9,968 in 2015.

### CALIFORNIA FACTS

#### CALIFORNIA DATA

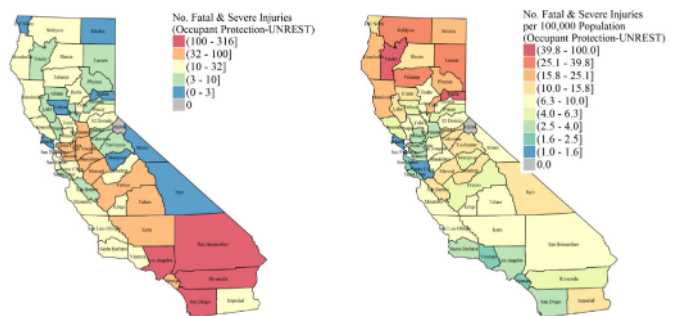
- There were 586 unrestrained occupants killed in traffic collisions in 2016, a 3.2% increase from 568 in 2015.
- In 2016, the state’s front seat belt use was observed to be 96.5%, which was the second-highest use rate in the nation.
- In 2016, seat belts saved 1,476 passenger vehicle occupants, age five and older, involved in traffic collisions. If all vehicle occupants used seat belts, an additional 74 lives would have been saved.
- The counties with the highest numbers of unrestrained occupants with fatal or severe injuries were Los Angeles, San Bernardino, Riverside, and San Diego.
- The state’s highest per-population rates of fatal or severe injury among unrestrained occupants were found in rural counties in Northern California. The counties with the highest per-100,000 population rates were Trinity and Sierra. A total of ten rural counties, all in Northern California, had rates greater than 15.8 fatal or severe injuries per 100,000 population.
- Unrestrained occupant fatal and severe injury collision victims were predominantly young male adults age 15 to 34 (40.4%).

Unrestrained Occupant Fatality Trends, Nationwide and California, 2012-2016



Source: FARS 2012 - 2015 Final File, 2016 ARF

Unrestrained Occupant 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

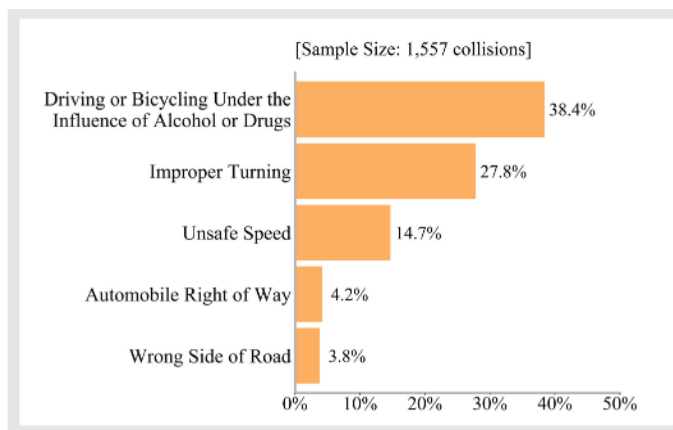
Source: FARS ARF 2016, Provisional SWITRS 2016, California Department of Finance 2016

**CALIFORNIA DATA**

(continued)

- The most common primary collision factors for unrestrained fatal and severe injury collisions were: driving or bicycling under the influence of alcohol or drugs (38.4%), improper turning (27.8%), and unsafe speed (14.7%).
- Almost half (46.4%) of all occupant protection fatal and severe injuries were due to hit object collisions, followed by overturned (13.7%), rear end (11.8%), and broadside (11.6%).
- Fatal and severe injuries among unrestrained occupants were more prevalent on Fridays, Saturdays, and Sundays, especially during nighttime hours. These time periods coincide with high rates of alcohol-impaired driving.
- Over half (54.7%) of unrestrained occupant fatalities and severe injuries occurred in rural areas compared with 45.3% on urban roads. Only about 16% of travel took place on rural roads.
- A little under half (42.0%) of all unrestrained occupant fatalities occurred on non-interstate principal arterials (high-capacity urban roads). The next most common locations for unrestrained occupant fatalities were on an interstate or on a non-interstate collector, both at 17.4% of fatalities.

**Top Five Primary Collision Factors, Fatal & Severe Injury Unrestrained Occupant Collisions, California, 2016**



Source: Provisional SWITRS 2016

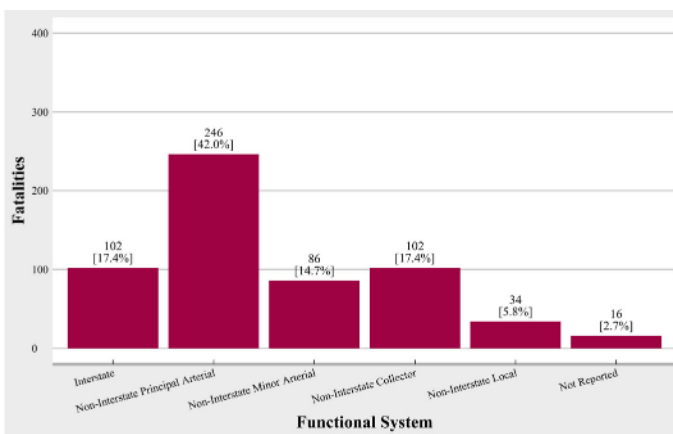
**Time and Day of Week for Unrestrained Occupant Fatal & Severe Injury, California, 2016**

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
Midnight-3AM	43	29	18	25	48	91	82	336 [19.4%]
3-6AM	26	19	19	20	21	49	44	198 [11.5%]
6-9AM	22	25	17	16	14	24	26	144 [8.3%]
9AM-Noon	15	9	11	22	9	26	17	109 [6.3%]
Noon-3PM	15	17	23	25	24	35	26	165 [9.5%]
3-6PM	26	20	29	28	43	41	27	214 [12.4%]
6-9PM	29	28	37	26	44	46	27	237 [13.7%]
9PM-Midnight	28	28	32	40	59	57	51	295 [17.1%]
Unknown	6	3	4	2	5	6	5	31 [1.8%]
TOTAL	210 [12.1%]	178 [10.3%]	190 [11.0%]	204 [11.8%]	267 [15.4%]	375 [21.7%]	305 [17.6%]	1,729 [100.0%]

FSI Num+% 1-15 16-23 24-27 28-41 42-91

Source: FARS ARF 2016; Provisional SWITRS 2016

**Roadway Type for Unrestrained Occupant Fatal Injury, California, 2016**



Source: FARS ARF 2016

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