INTRODUCTION

Bicycling is becoming more popular across the country, for commuting, exercise, and leisure. However, in the event of a traffic collision between a motor vehicle and a bicyclist, the bicyclist is the more vulnerable party and is more likely to be injured or killed than motor vehicle passengers. Bicycling fatalities increased 14.4 percent from 734 in 2012 to 840 in 2016 nationwide. Bicyclist fatalities represented 2.2 percent of the total number of traffic fatalities in 2016. Bicycle collisions are defined as crashes where one or more victims is a bicyclist, other cyclist, or bicycling passenger.

BICYCLE SAFETY

—Katherine L. Chen, Bor-Wen Tsai, Garrett Fortin, and Jill F. Cooper—

CALIFORNIA FACTS

- Bicycle fatalities represented 4.1% of the total number of traffic fatalities in 2016.
- Bicycle fatalities increased 8.1% from 136 fatalities in 2015 to 147 fatalities in 2016.
- The highest numbers of bicycle fatal and severe injuries occurred in densely populated areas of the state. Los Angeles County had the highest number of fatal and severe injuries, while the counties of Sacramento, San Francisco, Alameda, Santa Clara, Riverside, Orange and San Diego also had relatively high numbers.
- Rates of bicycle fatal and severe injuries per population were highest in more rural areas, including Sierra, Inyo, Mendocino, Marin, Santa Cruz, and Santa Barbara counties.
- More male (82.4%) than female (17.6%) bicyclists in every age group incurred fatal and severe injuries in 2016.
- Bicyclists most likely to be fatally or severely injured were ages 55 to 64 (19.7%), followed by those ages 45 to 54 (16.9%) and those ages 15 to 24 (16.%).
The two top primary collision factors for bicycling fatal and severe injury collisions were automobile right-of-way at 18.1% and improper turning at 15.7%. Unsafe speed, wrong side of road, and traffic signals and signs were clustered between 12.7% and 13.0%.

The time of day when the highest number of bicycle fatal and severe injury collisions occurred was between 3pm and 9pm on weekdays and between 9am and 9pm on weekends.

Over three-quarters (78.8%) of bicycle fatalities occurred in urban areas compared with 21.2% on rural roads.

Nearly half (48.3%) of all bicycle fatalities occurred on principal arterials (high-capacity urban roads), followed by minor arterials and collectors (low-to-moderate-capacity roads which serve to move traffic from residential streets to arterial roads).

REFERENCES

- Statewide Integrated Traffic Records System (Provisional 2016).

Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.