Pedestrian Injuries in California: Age and Race Differences

Walkable communities are increasingly important to the public’s health. One of the visions of the California Health in All Policies Task Force is for Californians to “have the option to safely walk, bicycle, or take public transit to school, work and essential destinations.” Survey data indicates an upward trend in walking and biking modes of transportation. As people walk more for work, school, daily needs or recreation, it is important to ensure that all of California’s streets are safe. In California, 22 percent of all traffic deaths are pedestrian deaths. This is much higher than the national average of 13 percent. In addition, after several years of decline, pedestrian fatalities have increased in recent years in California (Figure 1). Hospitalizations of non-fatally injured pedestrians increased slightly from 2011 to 2012 (Figure 2).

While no level of pedestrian death or injury is acceptable, the rate of serious injury is even higher among some age and racial/ethnic groups. Pedestrians 65 years of age and older have the highest death and non-fatally injury rates of all age groups (Figures 3 and 4). Asian/Pacific Islander adults 65 years of age and older had the highest death and hospitalization rates, 6.1 and 19.4 per 100,000, respectively. Among children under age 10 years, African-American and Hispanic children had significantly higher non-fatally hospitalization injury rates than other children 0-9 years of age. African-American children 10-14 years of age had the highest non-fatally injury rates (18.2 per 100,000).
Summary

- Following years of declining numbers (and rates) of pedestrian injuries, California experienced a 9.7% increase in the number of pedestrian deaths from 2010 to 2012. Hospitalizations of non-fatally injured pedestrians increased by 1.6% from 2011 to 2012.
- Pedestrians 65 years of age and older had significantly higher fatal and serious nonfatal injuries than all other age groups. In this age group, Asian/Pacific Islanders, African-Americans and Hispanics had significantly higher fatal injury rates than Whites.
- Among children ages 0-9 years, African-American and Hispanic children had the highest serious nonfatal injuries requiring hospitalization.

Pedestrian safety is a public health and transportation safety priority in California. For example, the California Department of Public Health recently launched the It's Up to All of Us campaign to bring statewide attention to pedestrian safety.4 These efforts combined with other public education, enforcement and engineering approaches will move California towards zero pedestrian deaths and injuries.

References

2. 2010-2012 California Household Travel Survey Final Report, California Department of Transportation, June 2013.

About the Data

Pedestrian injuries included in this fact sheet are those where a pedestrian is struck by a motor vehicle. This includes both traffic (on public streets and roadways) and non-traffic (such as driveways and private property) crashes. Ninety-three percent of these injuries occurred on public streets and roadways. The data source for the death data is the California Department of Public Health, Death Statistical Master File. The data source for nonfatal hospitalizations is the Office of Statewide Health Planning and Development, Patient Discharge Dataset.

Rates are per 100,000 people and were not calculated when there were fewer than 20 deaths or injuries. For Figures 3 and 4, the “All” category includes all race/ethnicities, including those not specified in the figures. People who identify their origin as Hispanic or Latino ethnicity may be any race. For more information on race/ethnicity categories and population data used to generate rates, visit the following site: http://www.cdph.ca.gov/HealthInfo/injviosaf/Pages/EpiCenterdata.aspx#pop.

There are limitations in interpreting data based on race/ethnicity in the absence of definitive measures of socio-economic status. For example, race/ethnicity may function as a proxy for measures that are more directly related to peoples’ access to safe places to live, work and play.

**Significance was based on non-overlapping 95% confidence intervals for rates.

About the Crash Medical Outcomes Data (CMOD) Project

This fact sheet was prepared by Lynn Walton-Haynes with assistance of Nana Tufuoh as part of the Crash Medical Outcomes Data (CMOD) Project. The CMOD project, modeled after the National Highway Transportation Safety Administration’s Crash Outcome Data Evaluation System (CODES), probabilistically links police collision records to health data from emergency department visits and hospitalizations. This information allows review of the medical outcomes of these crashes and the relationships between those outcomes and various risk factors and crash characteristics.

Information for persons injured in crashes may be accessed through the CMOD online query Linked Crash-Medical Data. This query is part of the EpiCenter online query system accessed at http://EpiCenter.cdph.ca.gov. There tables can be created, using up to 25 variables to see how victim characteristics and crash circumstances affect the victim’s medical outcome. For technical assistance on using the query or for other questions related to this fact sheet or the CMOD project, contact Lynn.Walton-Haynes@cdph.ca.gov.

Funding for the CMOD Project and the online query is provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.