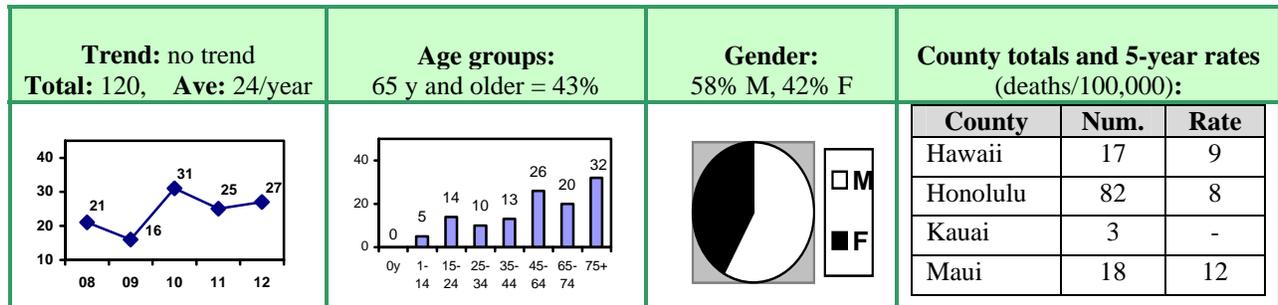


Motor vehicle crashes, pedestrians

Fatal injuries

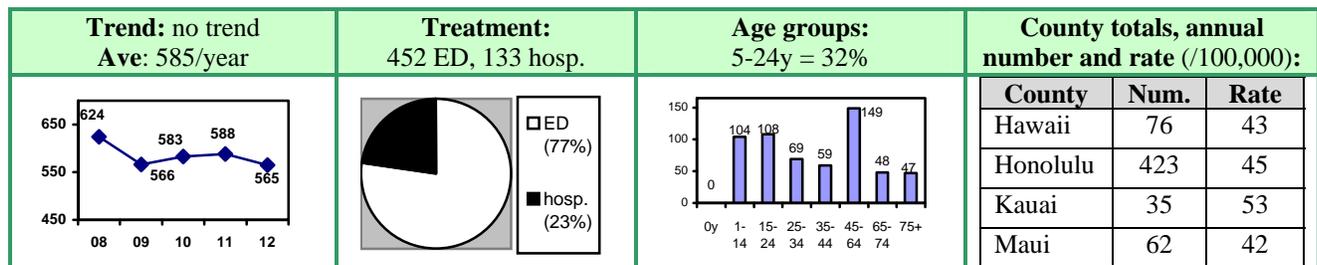
There was no statistically significant trend in the annual number of pedestrian fatalities, which averaged 24 deaths per year. Senior-aged residents comprised 43% of the victims, and the fatality rates increased dramatically across the oldest age groups. Most (68%) of the victims were hit on Oahu, but there were no significant differences in county-specific fatality rates. Three-fourths (75%) of the victims who were 65 years or older were hit on Oahu, and the fatality rate for Oahu seniors was statistically comparable to that for seniors living on Neighbor Islands (28 vs. 23 deaths /100,000, respectively).



FARS data, 2007-2010: There were 2 peak times for pedestrian fatalities: 27 crashes (21% of the total) occurred between 5:31 a.m. and 9:29 a.m., and 40 (31%) took place between 5:31 p.m. and 11:29 p.m.. Only 34% of the victims were in a crosswalk at the time of the crash; a nearly equal proportion (35%) were hit on open stretches of roadway. The most common speed zone for the 125 crashes was 25 miles per hour (45%, or 38 crashes). Almost two-thirds than half (63%) of the senior-aged victims were hit in 25 mph or slower zones, compared to 33% of pedestrians under the age of 65 years. More than one-quarter (26%) of the 84 fatally injured pedestrians tested positive for alcohol, and 25% had BAC levels of 0.08% or higher (Figure 65). Alcohol use was significantly higher among male victims (42%) compared to females (6%). The highest prevalence of alcohol use was seen among victims in the 21 to 34 year age group (70%, or 7 of 10), and the 35 to 54 year age group (52%, or 11 of 21). According to FARS data, 39% (33) of the pedestrian victims were in the roadway erroneously, most commonly by “improper crossing of roadway or intersection”, including jaywalking (21%, or 18 victims). Including the victims who tested positive for alcohol or drugs, 54% (or 45) of the pedestrians made an error that contributed to the crash. More than half (59%, or 52) of the 88 drivers made an error which contributed to the crash. Most commonly, they were described as “inattentive” (38%), failed to yield the right of way (25%), or were speeding (18%).

Nonfatal injuries

The annual number of nonfatal injuries to pedestrians varied inconsistently from 624 in 2008 to 565 in 2012. About one-quarter (23%) of the patients with nonfatal injuries were admitted to hospitals, the highest such proportion for any unintentional injury category. Patient age was widely distributed, but about one-third (32%) were in the 5 to 24 year age group. This group also had the highest rate of nonfatal injuries that were treated in EDs, while senior aged residents had the highest rates of hospitalizations.



Most (72%) of the patients were residents of Honolulu County. There were no statistically significant differences in the morbidity rates between counties, however. Nearly all (89%) of the nonfatal injuries were coded as “traffic” related, or occurring on a public roadway, while 11% were in “non-traffic” environments, including private roads, driveways and parking lots. Twenty-six percent of the patients injured in non-traffic crashes were in the 1 to 14 year age group. Patients were hospitalized for an average of 9 days, with over \$60,000 in medical charges. Hospitalizations accounted for 85% of the \$9.3 million in total medical charges.

EMS data and 2007 linked data (EMS, DOT, HHIC, FARS, death certificates)

There were 2 peak periods for the time of the EMS-attended crashes, from 6:31 a.m. to 8:29 a.m. (13%, or 287 crashes), and from 2:29 p.m. to 7:29 p.m. (35%, or 788 crashes). The time distribution differed by patient age, as crashes with senior-aged pedestrians were more likely to occur during daytime hours (86%), compared to crashes involving pedestrians under 65 years of age (73%). Patient condition differed by age, as senior-aged pedestrians were significantly less likely to not be transported, compared to pedestrians less than 65 years of age (15% vs. 20%, respectively), and had a significantly higher mortality rate (10.3% vs. 3.6%). The mortality rate was also significantly elevated among pedestrians who were hit during night time hours (7.4%, or 42 of 566), compared to those hit between 5:31 a.m. and 7:29 p.m. (4.1%, or 72 of 1747), despite the younger age distribution among the former. Probable alcohol use was noted for about 9% of the patients. Patients who had used alcohol had generally worse dispositions, and were more than three times as likely to require transport in critical condition, and nearly twice as likely to have died, compared to those who did not use alcohol.

Hawaii Trauma Registry (toxicology data)

Only 16% of the injured pedestrians in the HTR had been drinking at the time they were hit. This percentage was significantly higher among those under 65 years of age (22%), as only 2% (3) of the 138 senior-aged pedestrians tested positive for alcohol. Illicit drug usage was documented for 25% of the patients, including 30% of those who were under 65 years of age. Alcohol use was nearly 8 times likely among pedestrians hit during night time hours (41%) than among those hit between 6:30 a.m. and 7:29 p.m. (5%).