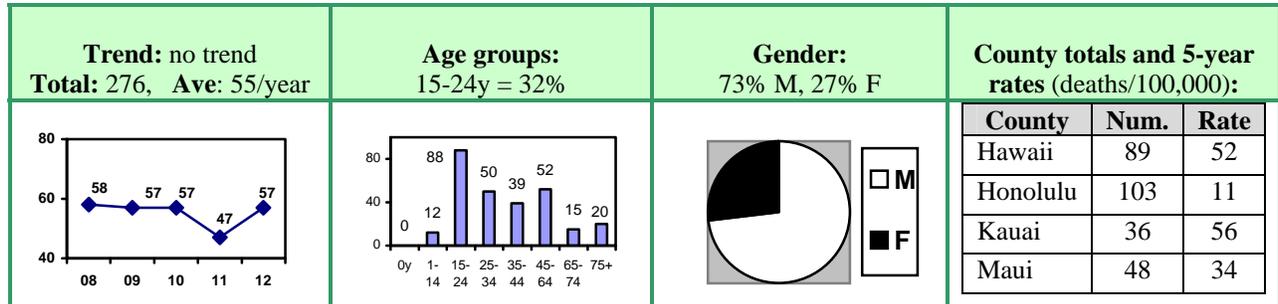


Motor vehicle crashes, occupants (excluding motorcyclists)

Fatal injuries

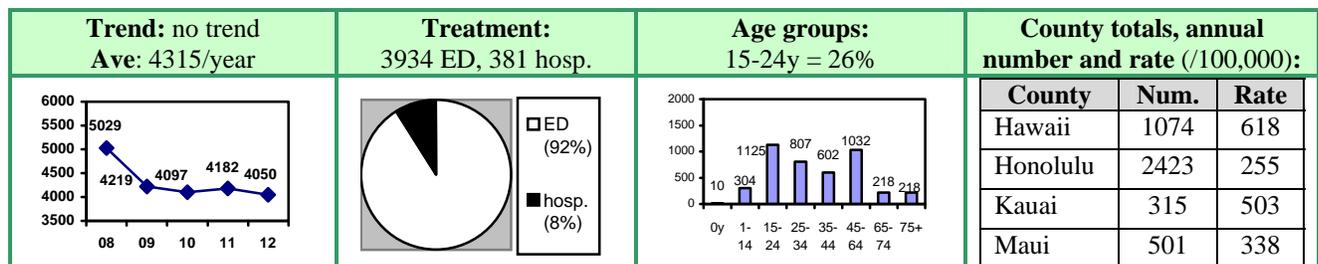
This category was the 4th leading cause of fatal injuries to Hawaii residents, averaging 55 deaths per year. About one-third (32%) of the victims were 15 to 24 years of age. Most (73%) of the victims were males. Fatality rates were significantly higher among Neighbor Island residents, compared to Oahu residents. The rates for residents of Hawaii and Kauai counties were particularly high, approximately 5 times higher than that computed for Honolulu County.



FARS data, 2007-2010: More than half (57%) of the fatal crashes occurred during nighttime hours (7:29 p.m. to 5:31 a.m.), and 61% involved only a single vehicle. Lack of restraint use was a major risk factor for occupant fatalities, as less than half of the victims (47%) were wearing seat belts at the time of the crash. Restraint use was especially low among back seat passengers (25%). Speeding was the most common contributing factor, noted for 41% of the drivers. Substance use was also an important contributing factor, as 40% of the drivers involved in fatal car crashes tested positive for alcohol, almost one-quarter (23%) tested positive for drugs, and nearly half (49%) tested positive for either alcohol or drugs. The peak age of alcohol use among drivers was 21 to 24 years of age, as 56% tested positive for alcohol. More than half (56%) of the fatalities from car crashes were related to alcohol consumption by at least one driver involved in the crash.

Nonfatal injuries

There were more than 4000 nonfatal injuries among car occupants each year in Hawaii, with little change in the annual number from 2009 through 2012. Most (92%) of the injuries were treated in EDs. Patient age was widely distributed, although 26% were 15 to 24 years of age, and this age group also had by far the highest rate of injury. There were nearly equal numbers of female (52%) and male (48%) patients.



The nonfatal injury rate for residents of Hawaii County was significantly higher than the rate for residents of any other county, while the rate for Honolulu County residents was significantly lower than that for residents of any other county. Almost all (95%) of the injuries were coded as “traffic”, or occurring on public roads. Patients were hospitalized for an average of 1 week, with over \$46,000 in average medical charges per patient.

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

Most (86%) of the injured occupants treated by EMS were wearing seatbelts. Restraint use was strongly associated with EMS patient disposition, including a 7-fold increase in mortality rate among unrestrained occupants (4.5%) compared to those who wore seatbelts (0.6%). Probable alcohol use was noted for about 10% of the patients, and drinkers were significantly less likely to use seatbelts (71%, vs. 88% for other occupants). Linked data from 2007 showed unrestrained EMS patients had more than twice (2.3) the odds of an injury that required hospitalization or resulted in death, compared to restrained occupants, and more than triple (3.2) the odds of a fatal injury. These excess risks were statistically independent of patient age, gender, or the county of the crash.

Hawaii Trauma Registry (toxicology data)

About one-third of the injured resident occupants in the HTR tested positive for alcohol (32%) or illicit drugs (35%). Considered together, more than half (52%, or 626) of the occupants tested positive for either alcohol or drugs. Occupants who were drinking were significantly younger than those who tested negative for alcohol (32 vs. 41 years, on average), more likely to be male (75% vs. 56%), and less likely to have used seat belts (46% vs. 63%).