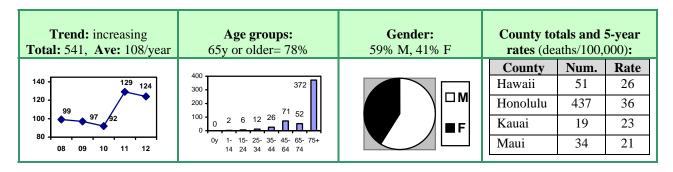
Falls

Fatal injuries

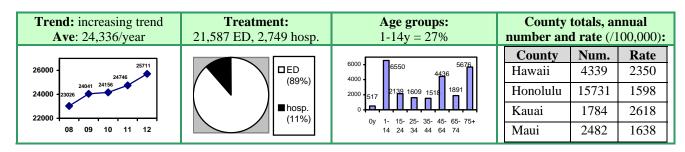
Falls were the most common type of fatal unintentional injury in the state, with the 541 deaths accounting for 25% of the total. More than three-quarters (78%) of the victims were aged 65 years or older, and the risk of fatal falls increased dramatically across the senior age range. Males comprised the majority (79%) of victims under 65 years of age, while gender was more equally distributed for the senior-aged victims. Honolulu County residents comprised most of the victims of all ages (80%) and those who were 65 years or older (83%). The fall fatality rate estimate for senior-aged residents of Honolulu County was significantly higher than the rates for residents of Hawaii or Maui counties, and 75% higher than for Neighbor Island residents considered as a whole.



Death certificates provided little information on the causes of falls, as most were coded as "falls on the same level" with no further description (45%), or "unspecified" causes (37%). Falls from stairs or steps were the most specifically coded cause, but comprised only 4% of the total. More than half (59%) of the falls occurred at the residence of the victim, including 67% of the senior-aged victims.

Nonfatal injuries

Falls were the leading cause of nonfatal injuries among Hawaii residents, with over 21,000 ED visits and 2,700 hospitalizations each year. The annual number of injuries generally increased. Children aged 1 to 14 years comprised 27% of all patients, but over two-thirds (69%) of those who were hospitalized were 65 years or older. Gender was equally distributed among patients treated in EDs, but females comprised 60% of the patients that were hospitalized.



Residents of Hawaii and Kauai counties had significantly higher rates of nonfatal injuries from falls than residents of Honolulu and Maui counties. The residents of Honolulu County had the lowest rates of hospitalizations. Among the more specifically coded injuries, the most common causes were falls from stairs, steps and escalators (5.3% of the total), beds

(3.7%), skateboards (3.5%), and chairs, playground equipment, and ladders (about 2% for each). At least half (53%) of the falls that caused hospitalizations in seniors occurred in home environments. This proportion increases to 84% if only records with specific information on location are considered. The most common activity related to the falls was "walking, marching and hiking", accounting for 30% of the total. Skateboarding, running, tackle football, and bathing and showering were also prominent activities. Hospitalizations averaged 6 days in duration, resulted in nearly \$32,000 in medical charges, and accounted for 70% (\$86.4 million) of the total annual charges of over \$124 million. Fractures were present in nearly three-fourths (74%) of the hospitalized patients, including 29% with hip fractures. Additional data is presented for nonfatal falls specifically among senior-aged residents.

EMS data

More than half (57%) of the EMS-attended falls occurred in the home or residence of the patient, and this proportion was significantly higher among the seniors (71%) compared to younger aged patients (41%). More than half (54%) of the patients were 65 years or older, including 22% who were 85 years or older. Senior-aged patients had worse dispositions, as they were more likely to be transported in serious condition (49%, compared to 40% of younger age patients) and less likely to be released at the scene (12% vs 19%, respectively). Probable alcohol use was noted 8% of the patients, and male patients were more than twice as likely to have used alcohol compared to females (12% vs. 5%).

Hawaii Trauma Registry (toxicology data)

Only 11% of the adult-aged (18 years and older) HTR resident patients who were injured by falls were positive for alcohol, with 4 times higher use among patients in the 18 to 64 year age group (19%), compared to senior-aged patients (5%). Fifteen percent of the patients tested positive for illicit drugs, most commonly narcotics (11%). Considered together, about one-quarter (24%, or 587) of the patients tested positive for either alcohol or drugs, although that proportion was much lower among the senior-aged patients (13%), compared to younger patients (36%).