

Dallas County Pedestrians Deaths among the Homeless

What We Learned

- The pedestrian death rate in Dallas County was 23 times higher in homeless persons, compared to non-homeless persons. This finding is similar to a recent report from Clark County, Nevada.
- Pedestrian deaths have decreased in homeless persons as shelters have expanded their capacity to house the homeless.

Background

In 2012, 4,743 pedestrian died in traffic crashes in the United States. In 2012, pedestrian deaths account for 14 percent of all traffic fatalities. (1) In a recent issue of *MMWR*, Hickox, et al., reviewed pedestrian traffic deaths among homeless persons from Clark County (Las Vegas), Nevada, and found that the annual pedestrian death rates for homeless persons was 30.7 per 100,000 population compared to 1.4 for residents. (2)

Dallas County

The Injury Prevention Center of Greater Dallas (IPC) reviewed pedestrian deaths in Dallas County that were identified by the Dallas County Medical Examiner's office since 1997. A pedestrian death was defined as a person who died within one year of being injured as a result of being struck by a motor vehicle while person was walking or standing. There have been 1,028 pedestrian deaths from 1997 to 2013, for an average of 60 pedestrian deaths per year. Ninety-seven percent (994/1028) of the deaths were classified as unintentional. Pedestrian deaths made up 23% of all motor vehicle-related deaths during that time period. Only the 994 unintentional pedestrian deaths were included in this report.

Homeless classification was determined from the Medical Examiner's database if the Medical Examiner labeled the person as "homeless" for home address or in the narrative section. Denominator data for death rate calculations used the Metro Dallas Homeless Alliance "Point-in-Time" Homeless Count and Census which has been performed since 2004. An annualized death rate was calculated using 2010 "Point-in-Time" Homeless count, and the 2010 Census data for Dallas County.

Homeless

From 1997-2013, 994 unintentional pedestrian deaths occurred in Dallas County; 941 non-homeless and 53 homeless. Seventy-four percent (736) of the deaths occurred in the City of Dallas; 738 (74%) were male. The median age was 40 years (range = 0-98 years). The annualized pedestrian death rate among the homeless was 54.2 per 100,000 population, and the non-homeless rate was 2.5 per 100,000 population. The homeless were 23 times (RR = 23.2, 95% CI 17.6-30.5) more likely to die in a pedestrian crash than non-homeless persons.

Age and race specific deaths rates for the homeless population could not be calculated due to the lack of age and race specific data.

For both non-homeless and homeless, the majority of pedestrian crashes occurred on a street or “limited-access” roadway. The highest proportion of pedestrian deaths occurred during 6 p.m. – 11:59 p.m. among both non-homeless (44.3%) and homeless persons (41.2%). Among the 772 pedestrians 16 years of age and over with BACs recorded, 37% of the pedestrians were legally intoxicated, (36% non-homeless and 40% among homeless).

Between 2004 and 2008, the annualized pedestrian death rate for the homeless was 81.4 deaths per 100,000. From 2009 to 2013, the annualized death rate declined to 39.1 pedestrian deaths per 100,000 population (RR = 2.1, 95% CI 1.0-4.4, $p \sim 0.05$ by Mid-P Exact).

Conclusion

The results of our analysis were similar to Hickox, et al., where homeless persons in Clack County, Nevada had much higher pedestrian death rates. In Dallas County, the number of homeless pedestrian deaths has decreased over the past decade. This may be due to county’s effort to house the chronically homeless. Success in housing means fewer homeless individuals are on the streets. Of the 5,285 homeless individuals in 2013, 2,313 were in supported houses and all but 7% were in some type of shelter.

The *MMWR* report made recommendation from the World Health Organization’s pedestrian safety manual. The manual recommends six categories of pedestrian safety interventions, including 1) reducing pedestrian exposure to vehicular traffic; 2) reducing vehicle speeds, 3) improving the visibility of pedestrians, 4) improving pedestrian and motorist safety awareness and behavior, and 5) providing care for injured pedestrians. (3). Proven interventions should be based on the needs in particular geographic locations and might include constructing pedestrian refuge islands and raised medians, upgrading traffic and pedestrian signals, constructing overpass or underpasses, installing speed management measures, and developing and enforcing traffic law. (3)

Reference

1. National Highway Traffic Safety Administration. Traffic safety facts, 2012 data: pedestrian. Washington, DC: National Highway Traffic Safety Administration; 2014. Available at <http://www-nrd.nhtsa.dot.gov/Pubs/811888.pdf>.
2. CDC. Pedestrian Traffic Deaths Among Residents, Visitors, and Homeless Person – Clark County, Nevada, 2008-2011. *MMWR* 2014; 63:597-602.
3. World Health Organization. Pedestrian safety: a road safety manual for decision-makers and practitioners. Geneva, Switzerland: world Health Organization; 2013. Available at http://apps.who.int/iris/bitstream/10665/79753/1/9789241505352_eng.pdf.

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