Unintentional Injury Mortality Risk in U.S. Workers

Diana Kachan BS, Alberto J. Caban-Martinez, DO, PhD, Lora E. Fleming MD, PhD, William G. LeBlanc PhD, Kristopher L. Arheart EdD, Sharon Christ PhD, Manuel A. Ocasio BA, David J. Lee PhD

Author affiliations: SC: Department of Child Development and Family Studies and Statistics, Purdue University, West Lafayette, IN 47907; all other authors (including KCB): Department of Epidemiology & Public Health, University of Miami Miller School of Medicine, Miami, FL 33136.

Methods

Using pooled 1986-2004 National Health Interview Survey data with mortality follow up data through 2006, age-adjusted unintentional injury mortality rates among U.S. workers aged >18 years were examined. Hazard ratios were calculated using Cox regression analysis comparing each occupational group to all other worker groups (controlling for age, gender, and education level).

Education level was included as a measure of socio-economic status and was categorized based on the highest grade completed: less than 12th grade, 12th grade, and more than 12th grade.

Recode value of 112-123 from the 113-category recode of the ICD-10 codes was used identify unintentional injury deaths.

All analyses were performed with adjustment for sample weights and design effects using SUDAAN statistical package.

Age and race/ethnicity adjusted hazard ratio estimates and corresponding 95% confidence intervals (CI) were calculated for all workers by gender for 41 occupations.

Second model was additionally adjusted for educational level.

Hazard ratios are not reported for occupations with fewer than 5 deaths

Conclusions

There exists a significant inequity in risk of unintentional injury mortality across occupations, and especially for blue collar as compared to white collar U.S. occupations.