VISITS TO EMERGENCY DEPARTMENT FOR FIREARM INJURIES IN THE USA

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**Background:** Firearm injury leads to significant morbidity and mortality with large demographic and geographic differences. This study examines the prevalence and characteristics of emergency department (ED) visits due to firearm injuries in the United States.

**Methods:** Data were obtained from the National Hospital Ambulatory Medical Care Survey (2003-2012), a nationally representative study of visits to the hospital EDs conducted annually by the Centers for Disease Control and Prevention. Available information included visit reason, injury cause, and patient characteristics. We identified visits related to firearm injuries with the International Classification of Diseases, 9th Revision, Clinical Modification codes and studied the weighted prevalence, characteristics, and odds ratios of firearm-injury visits.

**Results:** Approximately 92 thousand ED visits occurred annually that were caused by firearm injuries, a weighted prevalence of 0.075% (95% confidence interval [CI]: 0.063%-0.090%), including 40.6% (33.3%-48.4%) intentional injuries and 31.1% (24.5%-38.7%) unintentional injuries. Among these visits, 85.9% (80.3%-90.1%) were from men (odds ratio [OR]: 7.31, 95% CI: 4.89-10.95, for ED visits due to firearm injuries versus not), 44.8% (38.0%-51.8%) from those aged 15-24 (OR: 4.76, 2.87-7.90, compared to those aged 45-64), 37.4% (30.7%-44.7%) aged 25-44 (OR: 2.22, 1.30-3.79), 41.4% (33.1%-50.2%) non-Hispanic blacks (OR: 2.88, 2.01-4.12, compared to non-Hispanic whites), 47.3% (36.4%-58.5%) from the South (OR: 2.50, 1.44-4.33, compared to the Northeast), and 88.2% (75.1%-94.8%) from metropolitan areas (OR: 1.43, 0.70-2.91).

**Conclusions:** Over 90 thousand ED visits occur annually due to firearm injuries in the U.S. with men, people aged 15-44, non-Hispanic blacks, and those from the South at higher risks.

**Biography**

Lin Mu graduated summa cum laude from Denison University with a BS in Biology and a BA in economics. Later, he conducted research for three years in the Division of General Medicine and the Harvard Catalyst Clinical Research Center at Beth Israel Deaconess Medical Center. Currently, he is completing an MD degree while continuing research at Yale School of Medicine. Lin has led several clinical and population research projects, published on topics related to chronic disease and epidemiology, and been frequently invited to present at national medical and public health conferences.

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