

## Fatal Falls from Roofs

### **Fatal falls from roofs among U.S. construction workers**

*Xiuwen Sue Dong , Sang D. Choi, James G. Borchardt, Xuanwen Wang, Julie A. Largay. Journal of Safety Research, February 2013.*

#### **Overview**

Falls are the leading cause of fatalities among construction workers; about one-third of fatal falls in construction were due to falls from roofs. CPWR researchers looked at trends in fatal falls from roofs over an 18-year period, with a special focus on 2003-2009. Fall data were taken from the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries and rates were calculated using employment numbers from the Current Population Survey. This research brings to light the patterns and trends among fatal falls from roofs and links them to injury prevention strategies with real applications for the construction industry.

#### **Key Findings**

- OSHA regulations require that roof edges higher than six feet above the ground be protected by conventional fall protections (e.g., guardrail systems, safety net systems, or personal fall arrest systems). However, nearly half (46%) of fatal falls from roofs are from the roof edge, indicating that these protections are often not implemented or not sufficient at preventing fatal falls.
- Roofer, ironworker, construction helper, and construction laborer were the four occupations with the highest death rates incurred in falls from roofs.
- The rate of fatal falls from roofs was higher than average for younger (less than 20 years of age) or older (more than 44 years of age) construction workers, racial minorities, Hispanics, and immigrant workers.
- Those employed in the roofing and residential construction subsectors had higher odds of fatal falls from roofs than those in other construction subsectors.
- Self-employed workers, those who worked in residential construction sites, and those employed by small establishments (i.e., with fewer than 20 employees) experienced an elevated risk of fatal falls from roofs.

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#### **See abstract:**

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