

Category: Research to Practice

Title: Cost of Fall-Related Fatal Occupational Injuries in Construction, 2003-2006

Authors: Elyce Biddle, **Thomas Bobick**, Eugene McKenzie, Jr.

Abstract

Fall-related incidents remain the primary cause of fatalities in the U.S. construction industry. An analysis of fatality data from the Census of Fatal Occupational Injuries (CFOI), maintained by the Bureau of Labor Statistics, U.S. Department of Labor indicated that during the period 2003-2006, a total of 4,864 workers were killed in construction from all causes (annual average 1,216). During the same period, one-third of those construction fatalities resulted from a fall to a lower level. Further analyses of CFOI data indicated that construction-related falls from roof edges and through roof openings and skylights accounted for 32% of those construction-related falls to a lower level.

To more fully understand the impact of occupational fatal injuries on society, a cost estimation model was developed by researchers from the Division of Safety Research, National Institute for Occupational Safety and Health. Using this model, the impact on the U.S. Gross Domestic Product of occupational fatal injuries in the construction industry was estimated to be \$5.1 billion. The mean cost for each of these fatalities was \$1.1 million, with falls from elevation having a similar mean value. Additional cost estimations by case and demographic characteristics demonstrate the toll of occupational fatal injuries in construction that are borne by the U.S. society.

Objectives: The objective of this study was to develop a reliable estimate of the overall cost to U.S. society generated by fall-related occupational fatalities that occurred in the construction industry during the period 2003-2006.

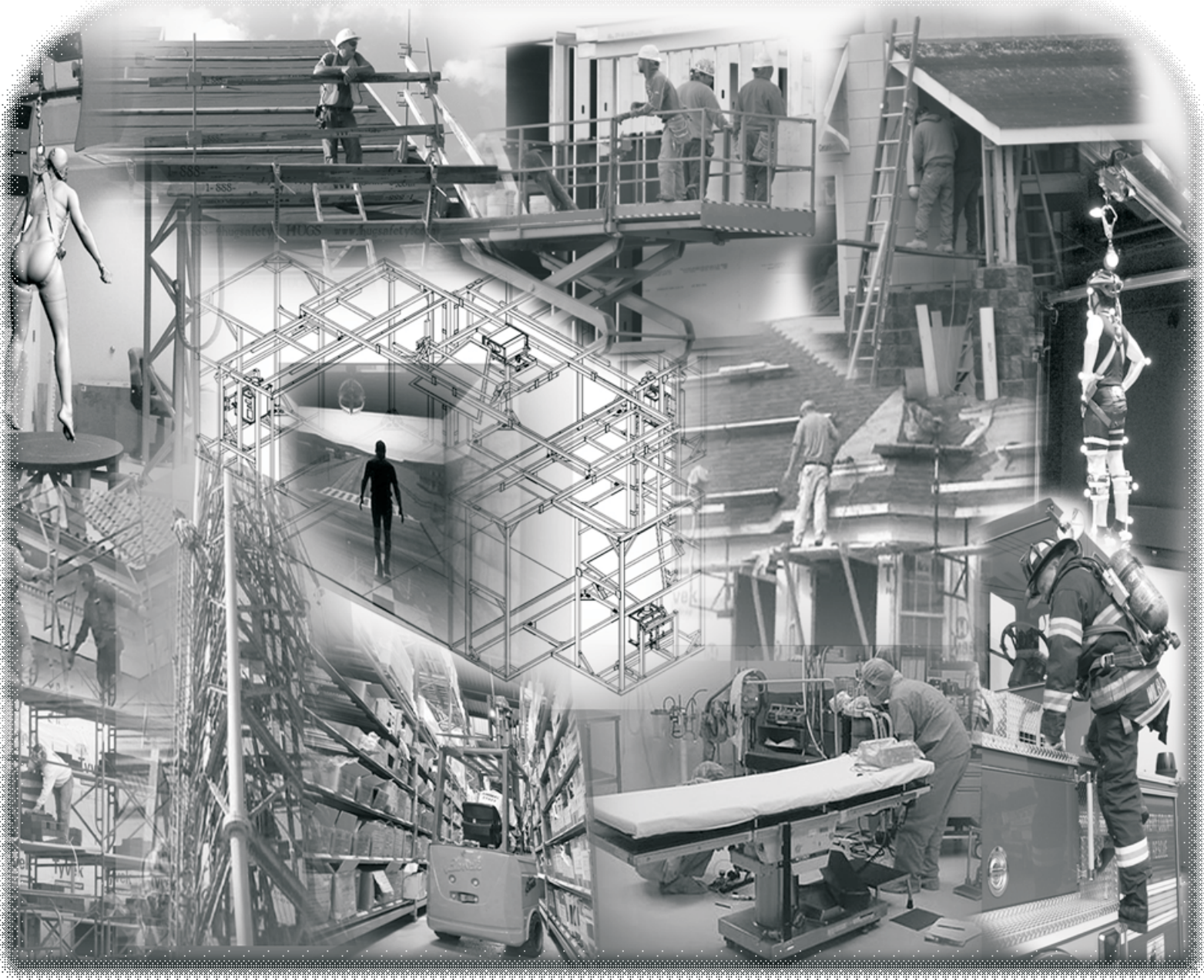
Methods: The fatality data from the Census of Fatal Occupational Injuries, which is maintained by the Bureau of Labor Statistics, U.S. Department of Labor, were analyzed for the years 2003-2006.

Results: A total of 4,864 workers were killed in construction from all causes (annual average 1,216) during the years 2003-2006. During the same 4-year period, one-third of those construction fatalities resulted from falls to a lower level. Using a cost estimation model developed by NIOSH, the total impact on the U.S. Gross Domestic Product from occupational fatal injuries in the construction industry from all types of events was estimated at \$5.1 billion. The total cost to society from falls to a lower level was about one-third of the estimated total.

Conclusions: Using the CFOI data to determine the total number of fatalities from different industries, along with using the NIOSH-developed cost estimation model to estimate corresponding costs provides a more detailed and comprehensive view of the problem to society when workers are fatally injured at work.

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