Examing the completeness of occupational injury and illness data: an update on current research

Data from the occupational safety and health statistics program of the Bureau of Labor Statistics are watched closely by various stakeholders and have been the subject of debate from time to time. Many program changes have come about as a result of this careful inspection and discussion. In the past few years, several researchers have identified new concerns about BLS workplace injury and illness data; these concerns are based on comparisons of individual cases from the BLS Survey of Occupational Injuries and Illnesses in selected states with case data from state workers’ compensation records. These studies suggest that BLS undercounts worker injuries and illnesses, although estimates of the extent of that undercount vary widely depending upon the research methodology and state studied. Other research and analysis concludes that the size of the undercount is small. On the heels of both this research and media reports of unsafe work places, Congress provided funding to BLS to follow up and expand on the previous research so as to understand the nature and magnitude of any undercount and attempt to identify solutions. This article updates an August 2008 Monthly Labor Review article that provided an overview of the BLS Survey of Occupational Injuries and Illnesses and introduced the research that led to concerns about an undercount. Details on three separate research projects conducted between 2009 and 2012 are discussed along with recommendations for the future.

Counting occupational injuries and illnesses is complex; potential issues include employee fear about reporting, lack of employer awareness of reporting requirements, complex definitions of workplace injuries, difficulty determining whether an injury actually occurred at work or is otherwise work related, disputes over responsibility, measurement issues, and more.¹ The Bureau of Labor Statistics provides the nation’s official statistics on workplace injuries and illnesses, including estimates of the number and rate of nonfatal injuries and illnesses by industry and state and, for selected cases, details about the worker involved and the circumstances of the incident.² These data are based on Occupational Safety and Health Administration (OSHA) recordkeeping...
requirements, which are a set of definitions and explanations used by employers nationwide to maintain workplace safety records for their establishment.\(^3\) The Occupational Safety and Health Act of 1970 (the OSH Act) requires employers selected by BLS to maintain these records, which are used by employers to complete the annual Survey of Occupational Injuries and Illnesses (SOII). From time to time, the completeness of the SOII estimates has been examined, most recently through a series of BLS-sponsored research projects. The goals and results of that research are the subject of this article.

More than once since its inception in the early 1970s, the BLS occupational safety and health statistics program has been the subject of scrutiny, often leading to program changes. For example, concern in the late 1980s that a sample survey could not provide a complete count of workplace fatalities led to the development of the BLS Census of Fatal Occupational Injuries (CFOI), which has provided a comprehensive count of fatal work injuries annually since 1992. Also in 1992, BLS expanded the SOII to include “case and demographic” details. These data elaborate on the worker involved (including occupation, age, and gender) and the circumstances surrounding the incident (including nature of injury and part of body affected). Since 1992, case and demographic data have only been available for cases that result in at least 1 day away from work, although BLS recently began publishing the results of pilot tests of these details for cases that result in no days away from work but lead to a job transfer or restricted work.\(^4\)

New concerns about BLS workplace injury and illness data were identified in the mid-2000s by researchers who attempted to compare data on individual cases from the SOII in selected states with case data from state workers’ compensation records. The results varied, with estimates of an undercount ranging from 20 percent to 70 percent of cases depending upon the research methodology and state studied.\(^5\) Other research and analysis concluded that the size of the undercount is small.\(^6\) On the heels of this research, and media reports of unsafe work places, Congress held hearings on the subject and later identified funding for BLS to follow up and expand on the previous research so as to understand the nature and magnitude of any undercount and attempt to identify solutions. At the same time, Congress provided funding to OSHA and to the National Institute for Occupational Safety and Health to conduct complementary research into issues surrounding the completeness of work injury data.\(^7\)