

Poster # 8

A Holistic View of Potential Risk Factors for Workers

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United States private industry reported 5.3 million workplace injuries and illnesses in 2002, with 2.8 million of those injuries/illnesses either being restricted work or lost-work day (BLS 2003). In 1996, it was estimated the total cost of occupational injuries was \$122.6 billion (NSC 2000). The back and trunk were the most affected areas, and overexertion was the most frequent attributable cause of injury, implicated in 30 percent of the cases (BLS 2004) and costing as much as \$100 billion (Bernard and Fine 1997). The leading nature of work-related injuries is sprains and strains, accounting for 33 percent to 49 percent of the cases (BLS 2004).

When considering the risks of injury and illness to workers often only occupational exposures are considered. The extent of the risk of injury and illness an individual faces goes beyond the time and effort spent in the occupational environment. A worker is exposed to nonoccupational (Leino 1993, Thorbjornsson et al., 1998), personal (Chaffin et al. 1978, Stone 1990, Tsai et al. 1992, Waters et al., 1993, Craig et al. 1998) and psychosocial (Hurrell and Murphy 1992, NIOSH 1997) risk factors in addition to occupational.

Occupational injury and illness is an intricate interaction between the affected person and the multitude of potential risk factors that have been linked to occupationally related injury and illness. The internal and external risk factors, whether personal, nonoccupational, occupational, and/or psychosocial in nature, are dynamic, interdependent, and subject to debate. In addition, personal abilities, skills, attributes, buffers, and thresholds of individuals are also dynamic in nature. Thus, the “dose” of the injuring “agent” may vary widely from person to person.

This poster discusses the numerous and varied risk factors and the fact that some are controllable while others are not. The importance of recognizing the potential risk factors and ways to minimize their effect are also presented.