Back Injuries in Construction and Other Industries

Workers in many construction occupations frequently perform activities that can lead to back problems (*see* page 34). As a result, back injuries¹ are the most common injuries in construction. In 2010, back injuries alone accounted for 16% of nonfatal injuries resulting in days away from work (DAFW) in construction based on the data collected by the U.S. Bureau of Labor Statistics (BLS; chart 48a).¹

The number of reported back injuries declined considerably over the past two decades. In 2002, there were more than 34,000 back injuries among construction workers reported to the BLS, but just over 12,000 such cases in 2010 – a 65% decrease (chart 48b). The significant injury reduction in recent years may be partially attributed to the economic downturn because the number of back injuries in construction declined by 46% between 2007 and 2010. The rate of back injuries has also declined over time, dropping 58% between 2002 and 2010, from 58.6 injuries per 10,000 *full-time equivalent workers* (FTEs, *see* Glossary) to a rate of 24.5. Even so, construction workers still have a higher risk of back injuries than other industries, with the exception of transportation and retail (chart 48c). In 2010, the rate of back injuries was 24.5 per 10,000 FTEs, compared to a rate of 21.4 for all industries combined. The risk of back injuries varies among construction subsectors. Glass and glazing contractors reported the highest rate of back injuries (97.8 per 10,000 FTEs) in 2010, followed by masonry contractors (45.3 per 10,000 FTEs; chart 48d). This may be a result of their exposure to lifting and carrying materials, bending and twisting of the body, and making repetitive motions in performing work tasks (*see* page 34).

The prevalence of back pain self-reported by construction workers was much higher than the BLS injury numbers. In 2010, more than one-third of construction workers reported back pain during the previous three months when they were asked this question in a household survey, with the highest proportion among those aged 35 to 54 (chart 48e). Middle-aged workers who have severe low back pain and engage in physically demanding work, such as construction, are much more likely than other workers to leave the industry due to disability.² Back injuries are also costly, particularly those injuries requiring longer recovery times.³ In addition, back injuries frequently reoccur and become chronic, and the cost increases with reoccurrence and severity.



48a. Distribution of nonfatal injuries resulting in days away from work in construction, by body part, 2010 (Private wage-and-salary workers)

^{1.} U.S. Bureau of Labor Statistics. Occupational Injury and Illness Classification Manual, Section 2: Definitions, Rules of Selection, and Titles and Descriptions.

http://www.bls.gov/iif/oiics manual 2007.pdf. The BLS defines back injuries as related to the posterior part of the trunk that is bounded by the neck and pelvis. *Includes:* cartilage, muscles, nerves, and neuroglia of the spine and spinal cord (except cervical); tendons, veins, and arteries of the back; and vertebra (backbone) and discs (except cervical). *Excludes:* neck or cervical vertebrae (C1 - C7); and cervical spine and/or cervical discs. The majority of the statistics reported on this page are based on the Survey of Occupational Injuries and Illnesses (SOII) conducted by the BLS (*see* page 38 for SOII).

^{2.} Welch LS. 2009. Improving work ability in construction workers - let's get to work. Scandinavian Journal of Work, Environment & Health, 35(5):321-324.

^{3.} Lipscomb HJ, Dement JM, Silverstein B, Cameron W, & Glazner JE. 2009. Compensation costs of work-related back disorders among union carpenters, Washington State 1989-2003. American Journal of Industrial Medicine, 52(8):587-595.

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48b. Number and rate of back injuries resulting in days away from work in construction, 1992-2010 (Private wage-and-salary workers)



48d. Rate of back injuries resulting in days away from work, by construction subsector, 2010 (Private wage-and-salary workers)



48c. Rate of back injuries resulting in days away from work, selected industries, 2010 (Private wage-and-salary workers)



48e. Rate of self-reported back pain among construction workers, by age group, 2010 (All employment)



Note: Chart 48a - Total may not add to 100% due to rounding.

Source:

Chart 48b - OSHA revised the requirements for recording injuries and illnesses in 2002. Therefore, data prior to 2002 may not be directly comparable to data from 2002 forward. Chart 48d - Chart 48d - Asterisk (*) represents four-digit NAICS; the remaining are five-digit NAICS.

Chart 48a - U.S. Bureau of Labor Statistics. 2010 Survey of Occupational Injuries and Illnesses. (Table R2). <u>http://www.bls.gov/iif/oshwc/osh/case/ostb2826.pdf</u> (Accessed June 2012).
Chart 48b - U.S. Bureau of Labor Statistics. 1992-2010 Survey of Occupational Injuries and Illnesses. <u>http://www.bls.gov/data/#injuries</u> (Accessed December 2011).
Charts 48c and 48d - U.S. Bureau of Labor Statistics. 2010 Survey of Occupational Injuries and Illnesses. (Table R6). <u>http://www.bls.gov/iif/oshwc/osh/case/ostb2830.pdf</u> (Accessed December 2011).

Chart 48e - National Center for Health Statistics. 2010 National Health Interview Survey. Calculations by CPWR Data Center.