



Nearly 50 years of occupational safety and health data

By Jeff Brown

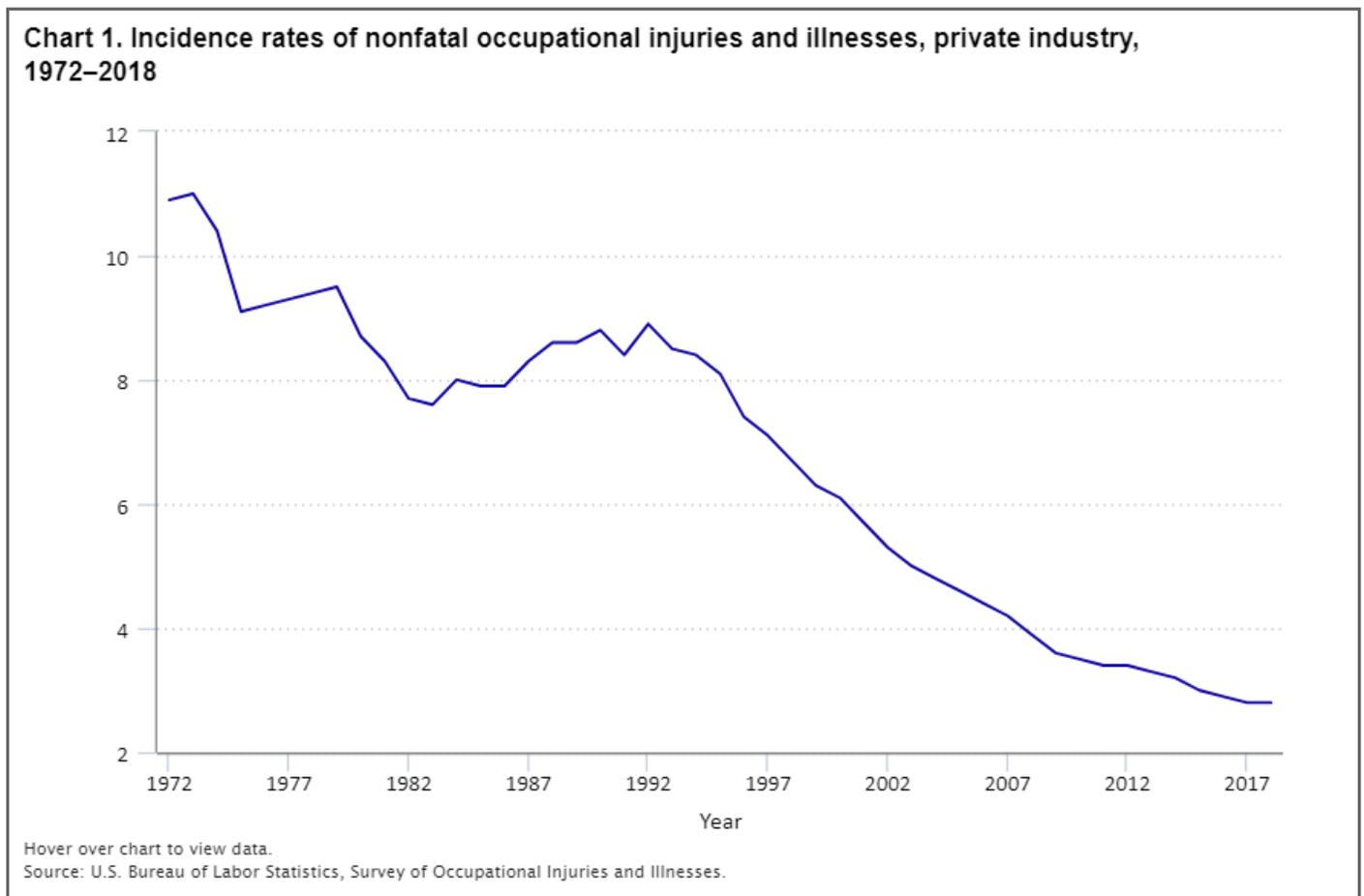
In 2020, the Department of Labor (DOL) marks 50 years since President Richard Nixon signed into law the Occupational Safety and Health (OSH) Act of 1970. This law was intended to ensure “so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources.”¹ To accomplish this, the OSH Act authorized the Secretary of Labor to “develop and maintain an effective program of collection, compilation, and analysis of occupational safety and health statistics.”² The Secretary delegated this responsibility to the Bureau of Labor Statistics (BLS), which first published estimates from the Survey of Occupational Injuries and Illnesses (SOII) for the 1972 survey year.³

This **Beyond the Numbers** article recognizes the 50th anniversary of the OSH Act of 1970 and discusses the SOII and the Census of Fatal Occupational Injuries (CFOI) and changes in occupational safety and health data. These sister programs publish information on the counts, incidence rates, and characteristics of nonfatal work-related injuries and illnesses and fatal injuries, respectively.⁴ Established following passage of the 1970 OSH Act, the SOII has been the source of nonfatal occupational injuries and illnesses among U.S. workplaces since its inception. BLS established the CFOI in 1992 to provide more detailed data and characteristics of fatal workplace injuries and is widely regarded as the most comprehensive source available on workplace fatalities.

For nearly five decades, BLS has published national- and state-level estimates of nonfatal workplace injuries and illnesses from the SOII annually.⁵ These BLS data are integral to the DOL mission to improve working conditions by informing the Occupational Safety and Health Administration (OSHA) and other policymakers about the incidence of nonfatal injuries and illnesses, occupational fatalities, and other related statistical data.⁶ OSHA and policymakers use these data to ensure safe and healthy working conditions of the American workforce.

Improving the national statistics

The incidence rate of nonfatal injuries and illnesses among private industry workplaces occurred at a rate of 10.9 cases per 100 full-time equivalent workers in 1972 and 2.8 cases in 2018. (See chart 1.)

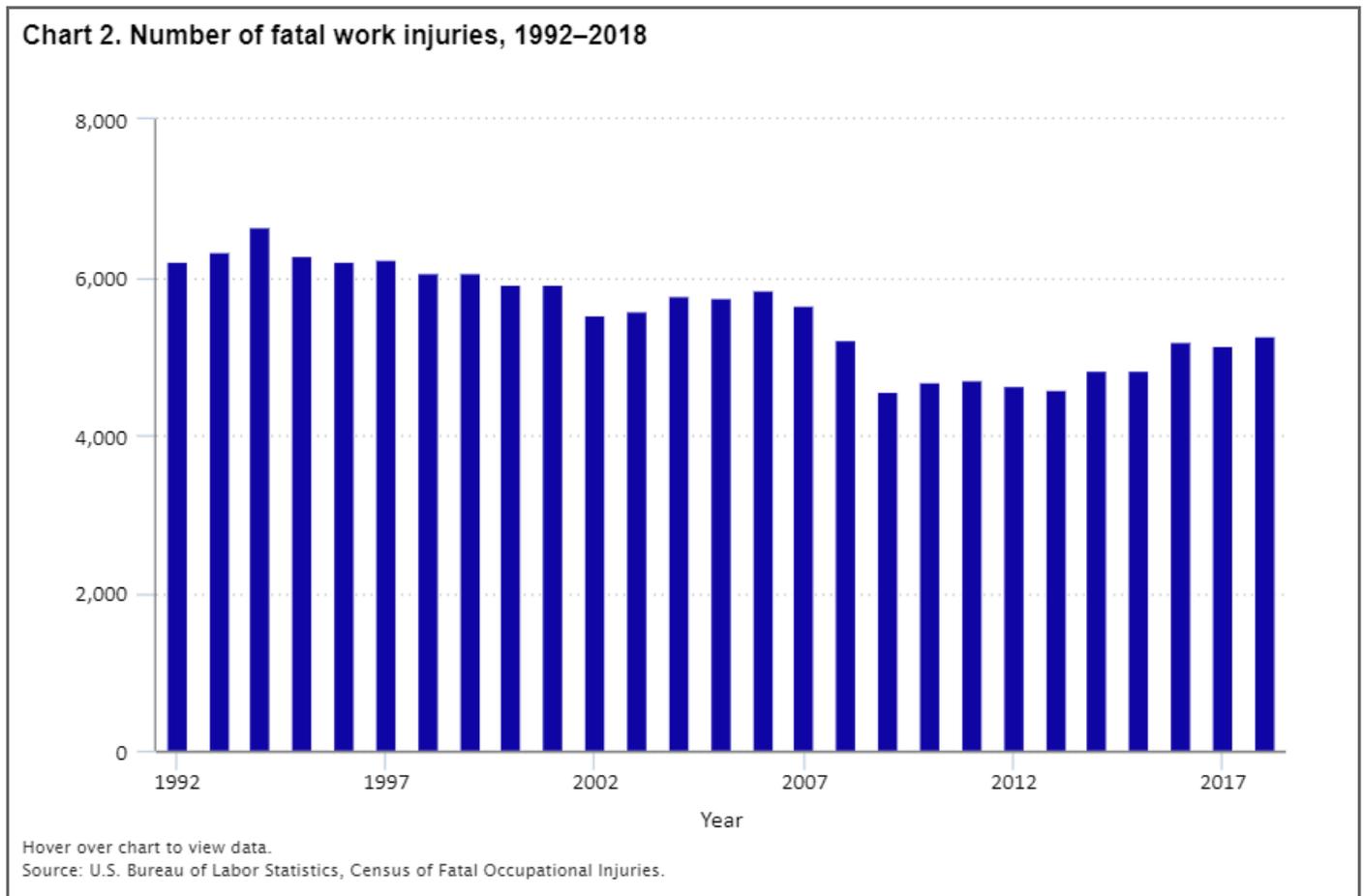


Many changes have taken place in the realm of occupational injury and illness measurement since the enactment of the OSH Act of 1970. About 15 years following passage of the act, there was broad concern among Congress and the safety and health community that statistics on workplace injuries and illnesses were inadequate. As a

result, BLS requested that the National Research Council convene a panel of experts to investigate these concerns and to recommend solutions for improving national statistics on workplace injuries and illnesses.⁷ This National Research Council panel published recommendations in 1987 that led BLS to restructure the SOII to capture detailed case circumstances and worker characteristics for injuries and illnesses that resulted in days away from work, first published for 1992.

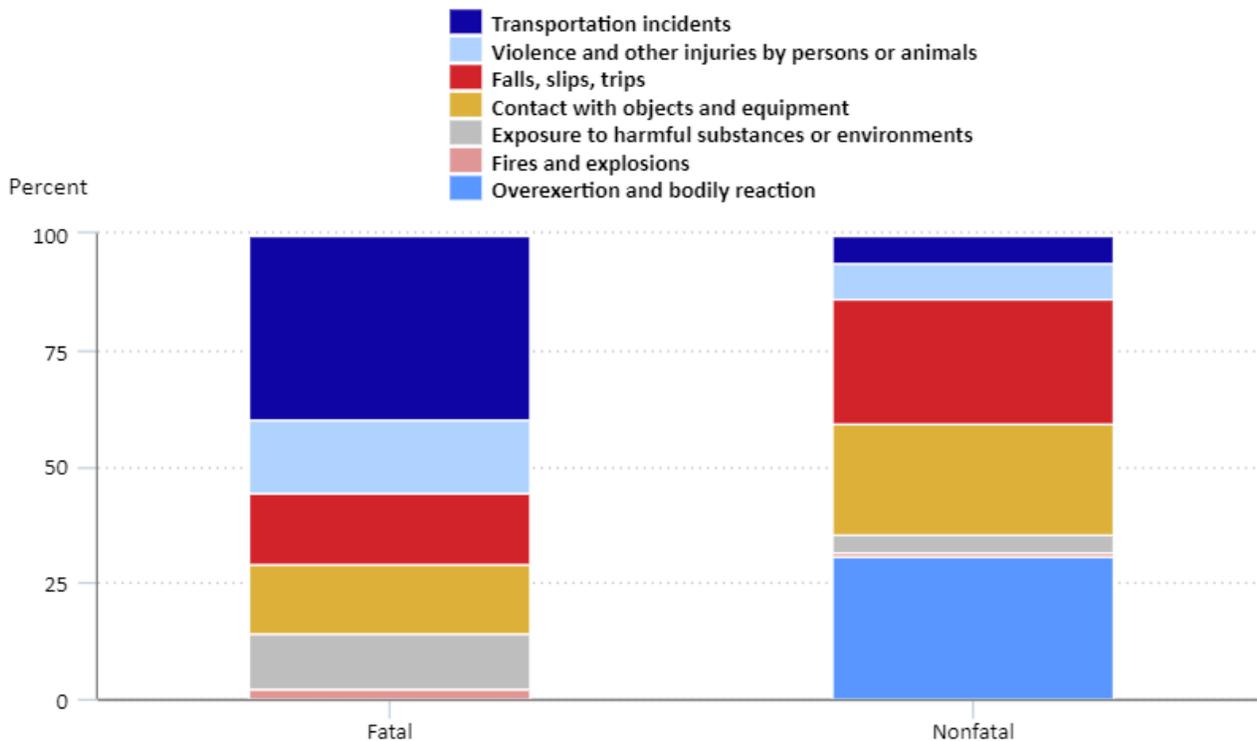
Improving workplace fatality statistics

In 1992, BLS established the CFOI to accurately enumerate and capture details of fatal work-related injuries among U.S. workplaces. The CFOI reported a high of 6,632 workplace fatalities in 1994 and a low of 4,551 in 2009. (See chart 2.)



Expansion of the SOII to collect case details and the creation of the CFOI has allowed BLS to provide data on the characteristics of fatal injuries and nonfatal injuries and illnesses in workplaces, such as events leading to work-related injuries. Such details are useful in helping to identify characteristics of cases that lead to different outcomes. For example, transportation incidents was the most common event leading to workplace fatalities in 2018, while incidents involving overexertion and bodily reaction most commonly resulted in nonfatal injuries and illnesses. (See chart 3.)

Chart 3. Distribution of fatal work injuries and nonfatal work injuries and illnesses by major event category, 2018



Click legend items to change data display. Hover over chart to view data.
 Source: U.S. Bureau of Labor Statistics, Census of Fatal Occupational Injuries and Survey of Occupational Injuries and Illnesses.

Conclusion

The OSH Act of 1970 was a seminal piece of legislation that led to the creation of the SOII as the first source of comprehensive national data on workplace injuries and illnesses. For the past five decades, regulatory agencies, policymakers, researchers, and others have used SOII data to improve the safety and health among the U.S. workforce. The SOII has evolved since its inception to better meet data users’ needs—adding a new data series first published for 1992, which includes detailed case circumstances and worker demographics to help identify the types and manner in which different kinds of nonfatal injuries and illnesses occur in the workplace. At the same time, the addition of the CFOI provided the first comprehensive national source of work-related fatalities. With routine efforts to improve data collection, CFOI uses a variety of independent source documents to compile a comprehensive count of work-related fatal injuries and their underlying circumstances.⁸ Additional research continues to identify ways to improve SOII estimates, including the use of autocoding and potential use of other data sources.⁹ Readers are encouraged to investigate the robust data available from both SOII and CFOI and the ways in which the BLS continually strives to ensure these data remain timely, accurate, and relevant toward efforts to improve the safety and health of the American workforce.¹⁰

This **Beyond the Numbers** article was prepared by Jeff Brown, supervisory economist in the Office of Compensation and Working Conditions, U.S. Bureau of Labor Statistics. Email: Brown.Jeff@bls.gov. Telephone: 202-691-6170.

Information in this article will be made available upon request to individuals with sensory impairments. Voice phone: (202) 691-5200. Federal Relay Service: 1-800-877-8339. This article is in the public domain and may be reproduced without permission.

RELATED ARTICLES

[The quest for meaningful and accurate occupational health and safety statistics](#)

[25 years of worker injury, illness, and fatality case data](#)

[Census of Fatal Occupational Injuries commemorates 20 years of occupational safety and health data](#)

NOTES

¹ For more information on the OSH Act of 1970, see www.govinfo.gov/content/pkg/STATUTE-84/pdf/STATUTE-84-Pg1590.pdf#page=1.

² For more information on the OSH Act of 1970, see www.govinfo.gov/content/pkg/STATUTE-84/pdf/STATUTE-84-Pg1590.pdf#page=1.

³ For the history of the Survey of Occupational Injuries and Illnesses, see www.bls.gov/opub/hom/soii/history.htm.

⁴ For background and methodology of the Survey of Occupational Injuries and Illnesses, see www.bls.gov/opub/hom/soii/home.htm; for background and methodology of the Census of Fatal Occupational Injuries, see www.bls.gov/opub/hom/cfoi/home.htm.

⁵ Data from the Survey of Occupational Injuries and Illnesses and the Census of Fatal Occupational Injuries can be found at www.bls.gov/iif/.

⁶ The 50-year history of the OSH Act can be found at www.osha.gov/osha50/.

⁷ Earl S. Pollack and Deborah Gellerman Keimig. "Counting Injuries and Illnesses in the Workplace: Proposals for a Better System." National Research Council, 1987. doi.org/10.17226/18911.

⁸ For details regarding the data sources for the Census of Fatal Occupational Injuries, see www.bls.gov/opub/hom/cfoi/data.htm.

⁹ For details on use of autocoding for SOII, see <https://www.bls.gov/iif/autocoding.htm>; for details about ongoing research to combine OSHA and SOII data, see www.bls.gov/iif/osha-ita-information.htm.

¹⁰ For details on past and ongoing research efforts to improve the SOII and CFOI, see www.bls.gov/iif/data-quality.htm.

SUGGESTED CITATION

Jeff Brown, "Nearly 50 years of occupational safety and health data," *Beyond the Numbers: Workplace Injuries*, vol. 9, no. 9 (U.S. Bureau of Labor Statistics, July 2020), <https://www.bls.gov/opub/btn/volume-9/nearly-50-years-of-occupational-safety-and-health-data.htm>