From: Kosuke Satake

To: erikkarlsson@live.com

cc: admin@terace.org

Date: 6 May 2022

S**ubject: Technical Report: The state of workplace safety**

Dear Dr. Erik Karlsson,

I have conducted a systematic review to uncover statistics on the status and progress of workplace safety since 2002. I was also fortunate to find a correlation of data from 1972. Attached is the full technical report, with figures documenting the progression of working environments and recommendations for assessing workplace safety's real-time and actual state of affairs.

Generally, the findings suggest:

- A decrease in the number of employees who stay off work because of injuries is attributed to a catalog increase in Personal Protective Equipment and Standard Operating Procedures.
- The increase of data points for assessing work-related injuries increases the number of employees who are getting recognition and compensation for injuries incurred in their line of duty.
- The rate of occupational injuries was at 11 percent in 1971, which declined to 5 percent in 2002 and 2 percent in 2013.

Based on these trends, for the actual state of workplace safety in private sector industries to be established; I recommend that the United States Bureau of Labour Statistics (BLS)directly survey employees and use workers' compensation records to collect occupational injury and illness statistics.

Please read the full technical report and let me know if you would like me to research the subject further or if we can use the result to establish a new innovative mechanism for assessing workplace safety.

Warm regards,
Kosuke Satake,

Title: Workplace Safety Technical Report

Executive Summary

Employers in the United States have made significant progress in recent decades tackling workplace safety issues (Sorensen et al.). According to the Occupational Safety and Health Administration (OSHA), workplace fatalities have decreased by more than 65 percent, while injuries and illnesses have decreased by 67 percent since 1970. The number of worker deaths has decreased from around 38 per day in 1970 to around 12 per day in 2012 (Loeppke et al.).

Management should make employee safety a top priority since they save lives, enhances productivity, and save costs. Continuous safety monitoring and employee involvement in the workplace are essential for overall employee wellness. Any accidents in the sector will result in human life injuries (Loeppke et al.). As a result of the man's injuries, their families will be the first to suffer (Mahan et al.). The families of injured employees struggle to make ends meet since they spend most of their savings on medical bills, and the breadwinner is incapable of working. In addition, the industry will suffer because of the injured worker's absence. Usually, the damage to the industry is minimal or no cost since they will only have to compensate the worker through accident insurance (Katunge et al.). However, the company may suffer significant losses if a major accident may occur in case of human fatalities, machine damage, and finished goods are damaged.

Creating an occupational safety management system (OSMS) will make it easier to protect workers and others from workplace injury and disease. As it monitors your organization, the OSMS can help the organization set health and safety rules, plan effectively, and advise adjustments or corrective actions (Sorensen et al.). The OSMS adheres to company rules and is continually improved to ensure a safe workplace and work systems.

Workplace safety necessitates creating conditions, capacities, and habits that enable the employees to do their jobs effectively while avoiding incidents that could hurt them. Studies have shown that safe working conditions impact employee behavior, which influences productivity (Sorensen et al.). For instance, employees who work in a safe environment are more productive.

Introduction

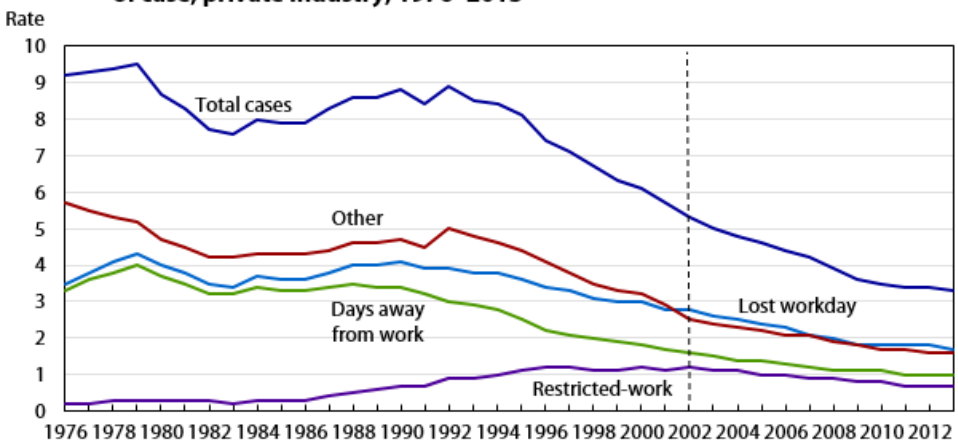
The United States Bureau of Labour Statistics (BLS) has collected data and issued reports on occupational injuries, illnesses, and fatalities for much of its 130-year history. BLS has been working to improve the breadth and accuracy of data on workplace safety. The Occupational Safety and Health Statistics (OSHS) program has issued annual reports on work injuries and illnesses. According to the Survey of Occupational Injuries and Illnesses (SOII), there was 3 percent of work-related injuries and illnesses among private-sector workers in 2013 compared to 5 percent in 2002. BLS is continually upgrading its data gathering procedures to guarantee that data on occupational injuries, illnesses, and fatalities is accurate. There is still a contract between direct surveys conducted among employees on work-related injuries and workers' compensation records.

Methods

The focus of this technical report was on the Survey of Occupational Injuries and Illnesses in the private sector and specific industries within it from 1975 to 2013. The report has survey results gathered on specific accidents or sicknesses, the physical characteristics of the injuries, and the equipment used by employees during the injury process. Lastly, demographic data on the injured, such as their age, ethnicity, race, occupation, gender, and service duration, was also considered when assessing worker safety trends. The technical report uses descriptive statistics and figures to present the state of worker safety.

Findings

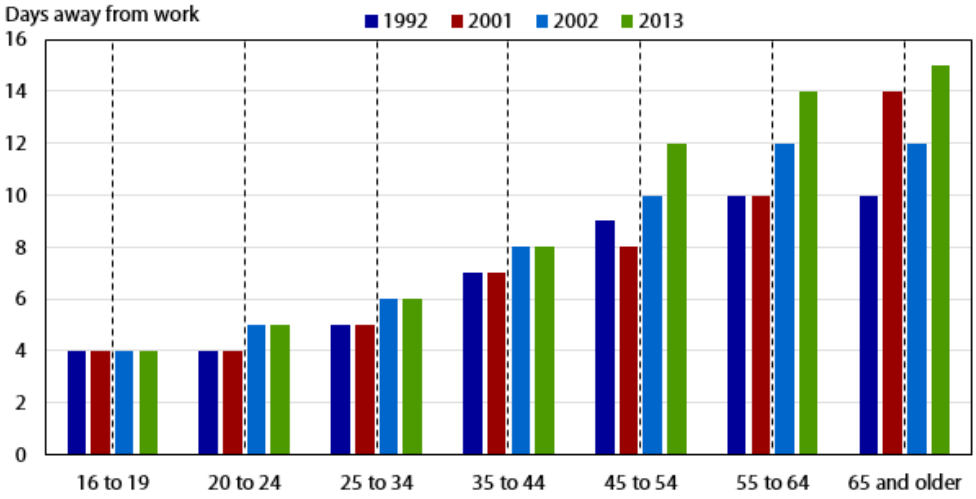
Figure 1. Rate of occupational injuries and illnesses per 100 full-time workers, by type of case, private industry, 1976–2013



Note: Vertical line represents OSHA recordkeeping change in 2002.
Source: U.S. Bureau of Labor Statistics.

Figure I shows data on the incidence rates of occupational injuries and illnesses in the private sector and specific industries from 1975 to 2013. The results show a decline in fatalities as safety protocols are established and adhered to. The results also show a decrease in the number of employees who stay off work because of injuries, and this can be attributed to a catalog increase in Personal Protective Equipment (PPE). Similarly, each task carried out in industries has set out Standard Operating Procedures (SOP). Lastly, the Human Rights Department strictly supervises all worksites to ensure adherence to workplace safety.

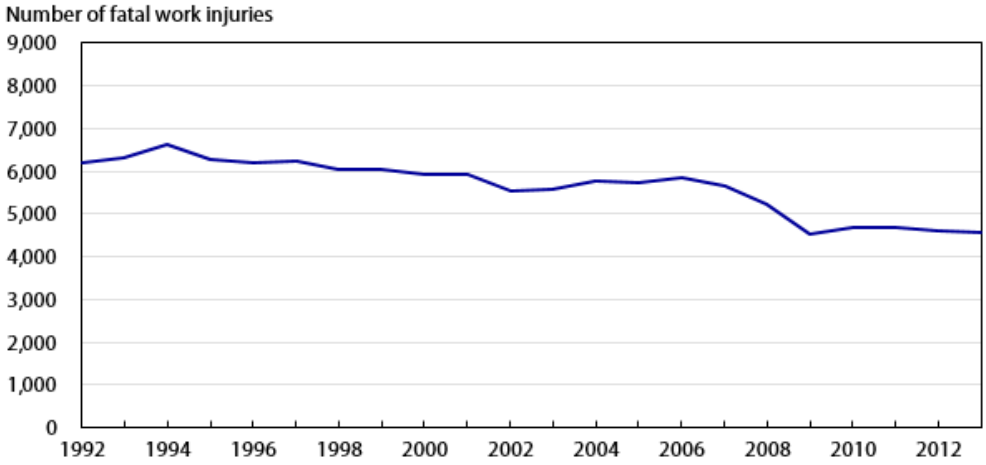
Figure 2. Median number of days away from work per year, by age group



Note: Vertical lines represent OSHA recordkeeping change in 2002.
Source: U.S. Bureau of Labor Statistics.

Figure 2 illustrates redesigning of the Survey of Occupational Injuries and Illnesses (SOII), which was done in 1992 to produce data that had previously eluded Bureau of Labor Statistics (BLS) systematic collection efforts. The survey included workers who had to miss work due to injuries or sickness. The survey also gathered extra information about the circumstances surrounding the specific accident or sickness, including fresh details about what happened and how it happened, the physical characteristics of the injury or illness, and the equipment, materials, instruments, or drugs used. Lastly, the study also gathered extensive demographic data on injured or unwell workers, such as their occupation, age, gender, race or ethnicity, and duration of service. With the continued increase of data points for assessing work-related injuries, it is evident that more employees are getting recognition and compensation for the injury incurred in their line of duty.

Figure 3. Number of fatal work injuries per year, 1992–2013



Note: Data for all years are revised and final. Data from 2001 exclude fatal work injuries from the September 11 terrorist attacks.
Source: U.S. Bureau of Labor Statistics.

According to BLS data, the aggregate number of cases per 100 full-time workers has decreased by nearly half since 1992, from 6,300 in 2003 to 4200 in 2012. And this is part of a much longer-running trend that began in the early 1970s with the establishment of the Occupational Safety and Health Administration. The rate of occupational injury and sickness was 11 per 100 workers when OSHA was established in 1971, but that statistic has been declining ever since, owing to OSHA and other measures to promote workplace safety.

Conclusion and Recommendations

Despite work safety advancements, the BLS continues to look for ways to offer more accurate and comprehensive statistics on workplace injuries and illnesses. It's worth noting that using workers' compensation data to identify SOII undercounts is not sufficient to determine workplace safety in organizations. Therefore, the BLS should use direct employee surveys and workers' compensation records to collect occupational injury and illness statistics.

References

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