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### 25 Years Of Worker Injury, Illness, And Fatality Case Data

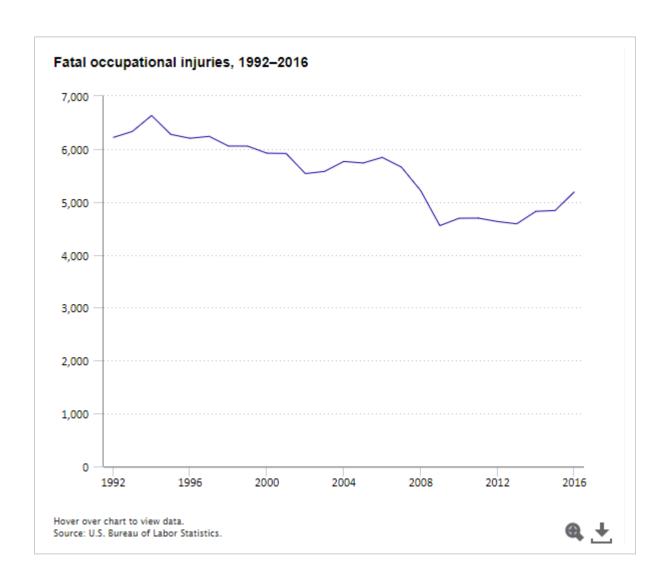
#### Henry Reeve, Shane Stephens, Stephen Pegula, and Ryan Farrell

Since 1972, the Injuries, Illnesses, and Fatalities program has collected data on work-related injuries, illnesses, and fatal injuries. The 25 years of data now available show that workers are incurring fewer injuries and fatalities on the job, but also show that there is still work to do to make workers safer while they are on the job.

### Fatal occupational injuries have decreased 17 percent since 1992

From 1992 to 2016, there were a total of 139,151 fatal occupational injuries in the United States. In 1992, there were 6,217 fatal occupational injuries. In 2016, there were 5,190. This is a decrease of approximately 17 percent over 25 years. Over this period, 1994 had the most fatal occupational injuries: 6,632. The year with the fewest fatal occupational injuries was 2009, with 4,551.

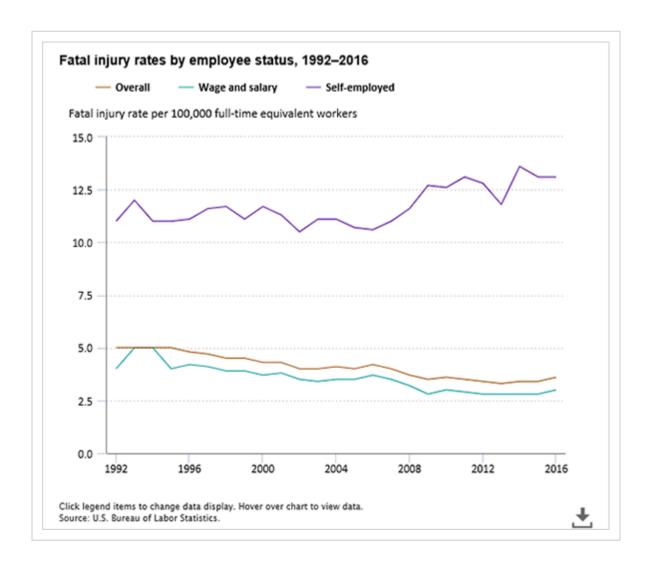
In 2016, there were approximately 14 deaths per day, which means a worker died from a fatal work injury every 102 minutes.



### Self-employed workers are more likely to die from a work injury

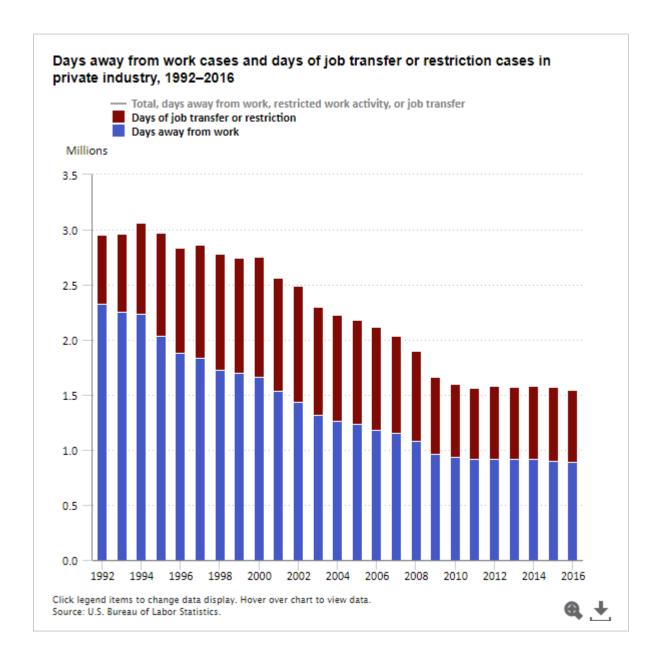
The overall fatal injury rate was 3.6 fatalities (per 100,000 full-time equivalent workers) in 2016 and 3.4 in 2015 and 2014.

In 2016, the fatal injury rate for self-employed workers, 13.1 fatalities per 100,000 full-time equivalent workers, was more than 4 times the rate for wage and salary workers, which was 3.0 fatalities.



# 1.5 million nonfatal injuries or illnesses caused workers to miss work or have duties changed

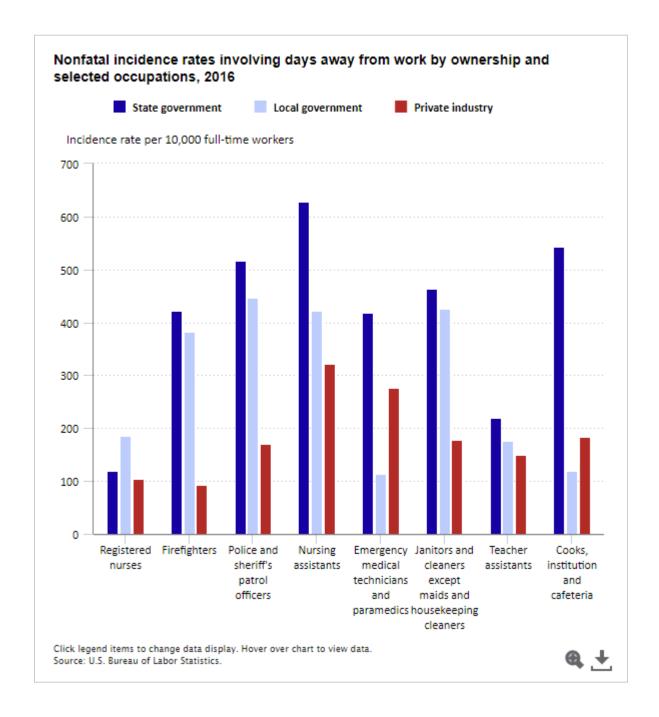
Nonfatal injury and illness cases that involved one or more days away from work, or a job transfer or restriction made up roughly half of all nonfatal injuries in private industry in 2016. The remaining cases were those where workers did not miss any work and were not restricted or transferred. The proportion of job transfer or restriction cases, where the worker is on restricted duty or transferred to another job as a result of the injury, has grown over the past 25 years.



### Different nonfatal incidence rates in private and public sectors

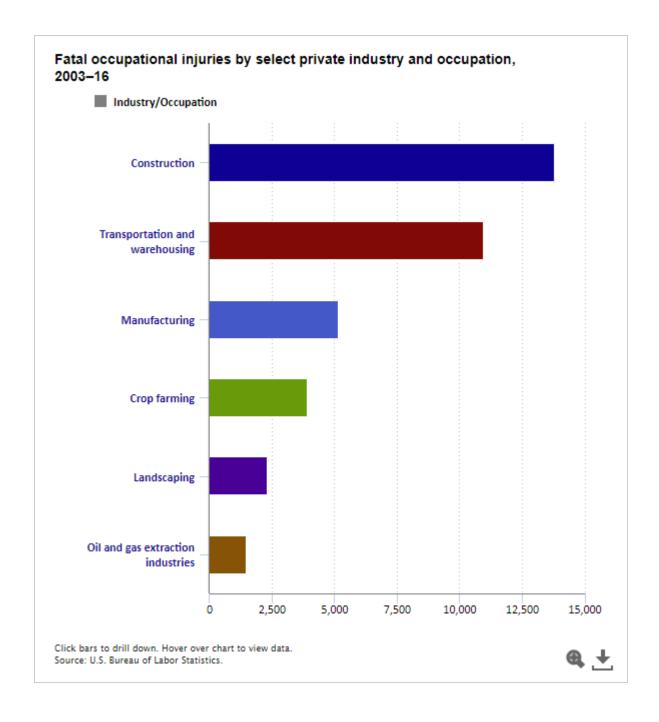
SOII collects data from establishments in the public sector (state and local government) as well as the private sector.

There are significant differences in incidence rates between establishments in the private, state, and local government sectors. It is worth noting that the make-up of industries and occupations for government is different from the private sector and that job duties vary greatly.



### Injury, illness, and fatality data are available by industry and occupation

Looking at both occupation and industry characteristics of fatal workplace injuries provides additional insight. For example, heavy tractor-trailer truck drivers was the occupation with the most fatal occupational injuries for the private manufacturing and the oil and gas extraction industries.



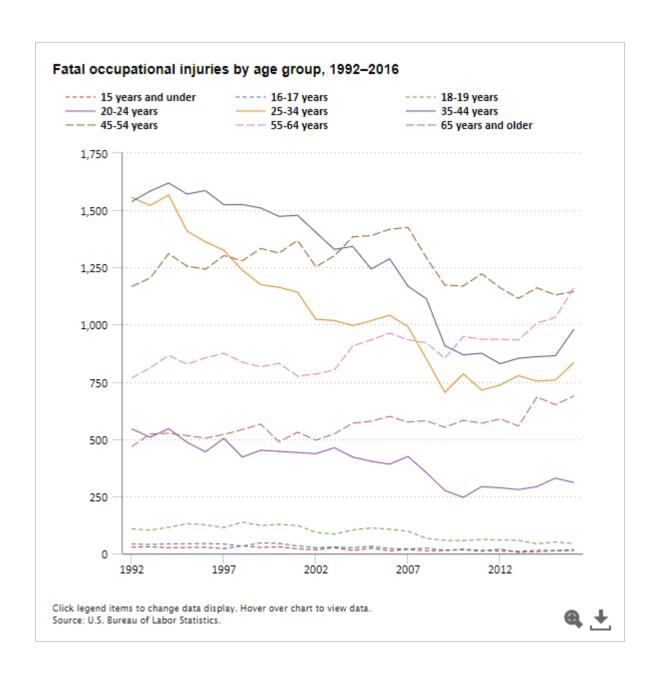


### Deaths for workers age 55 and older increased 50 percent from 1992 to 2016

Fatal occupational injuries declined for workers in the 25 to 34 and 35 to 44 age groups from 1992 to 2016. There was an increase for workers in the 55 to 64 and 65 and older age groups.

The increase in fatal occupational injuries to workers 55 and older was one of the major changes in CFOI data from 1992 to 2016. Workers 55 and older made up approximately 20 percent of injuries in 1992 and 36 percent in 2016.

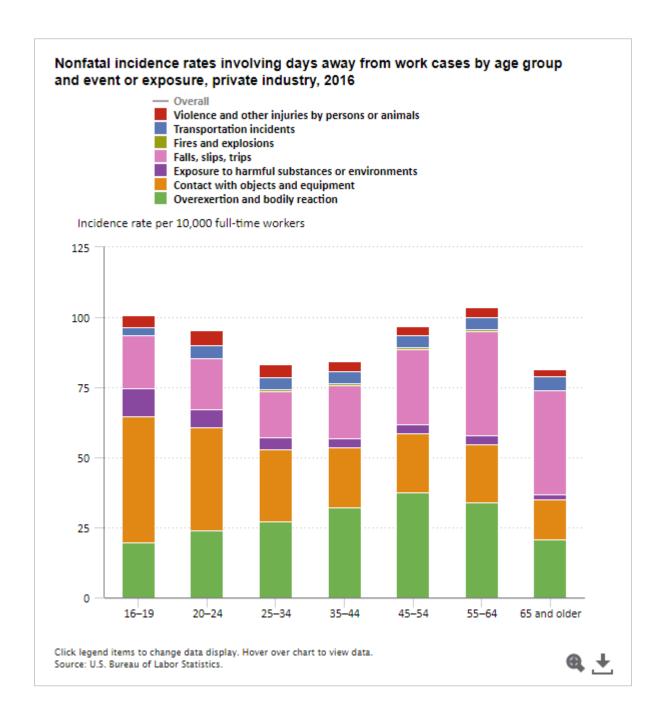
Older workers face a greater risk of being killed at work than workers as a whole. In 2016, the rate of fatal injury for all workers was 3.6 deaths per 100,000 full-time equivalent workers. For workers age 65 and older, that figure was 9.6.



# Older workers have a higher rate of injuries from falls than from contact with equipment

SOII collects demographic information on workers injured or made ill while on the job. Workers age 55 to 64 had a higher risk of injury or illness than workers in other age groups, except workers age 16 to 19.

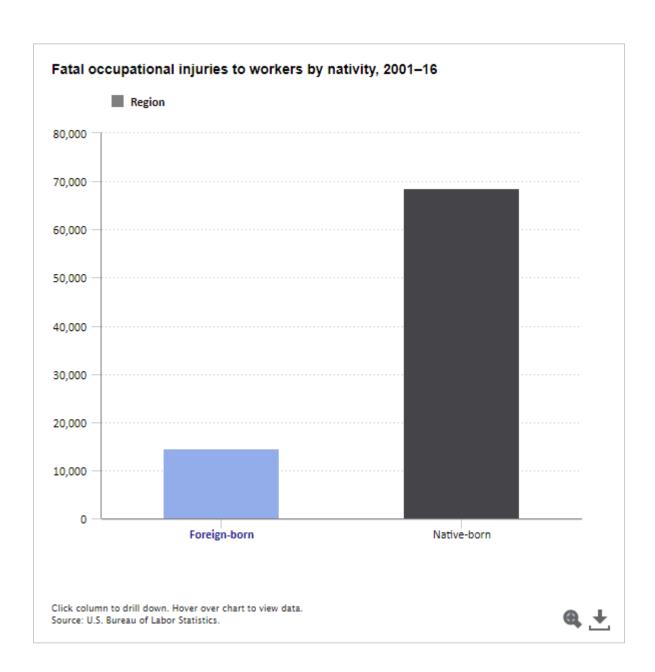
Workers in the 16 to 19 age group had a higher injury rate for contact with objects and equipment than for falls, slips, and trips. The opposite was true for workers age 65 and older. This could be the result of different types of work duties or different types of injuries incurred.



### Almost 15,000 foreign-born workers died from 2001 to 2016

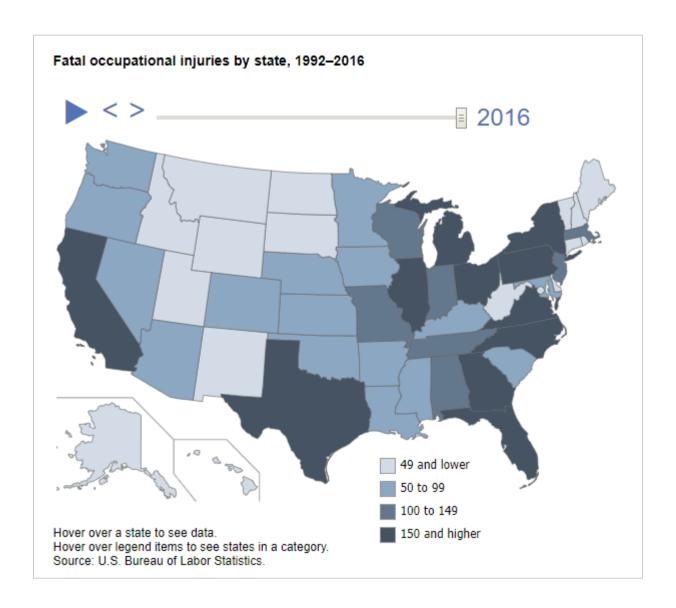
Foreign-born workers consistently represented 16 to 20 percent of fatal occupational injuries since birthplace data were recorded starting in 2001. From 2001 to 2016, there were 14,562 fatal occupational injuries to foreign born workers and 68,665 fatal occupational injuries to native born workers.

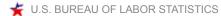
Mexico was the most common birthplace among fatally injured foreign-born workers from 2001 to 2016 with 6,046. The next most frequent countries of birth were Guatemala (545), El Salvador (533), and India (533). Data on race and Hispanic and Latino origin are also available from CFOI.



## Fatal occupational injury data are available for more than 100 geographic areas

Fatal occupational injury data are available for the United States as a whole, all 50 states, the District of Columbia, New York City, Puerto Rico, the Virgin Islands, and Guam. Data are also available for over 50 metropolitan statistical areas (MSAs). These data are available at <a href="https://www.bls.gov/iif/">www.bls.gov/iif/</a>.

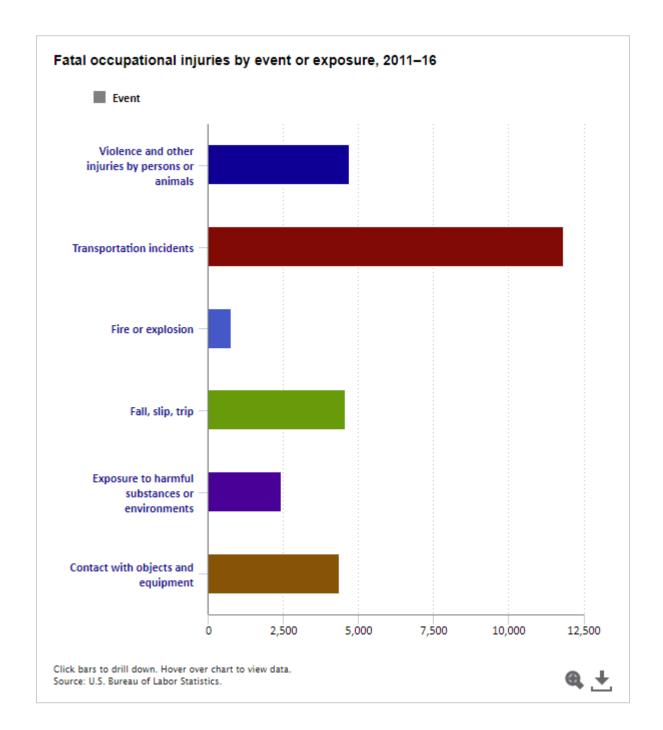




## Roadway incidents were the leading cause of workplace death from 2011 to 2016

Transportation incidents were the most common fatal workplace injury event from 2011 to 2016. Violent events were the second most common event type, followed by falls, slips, and trips.

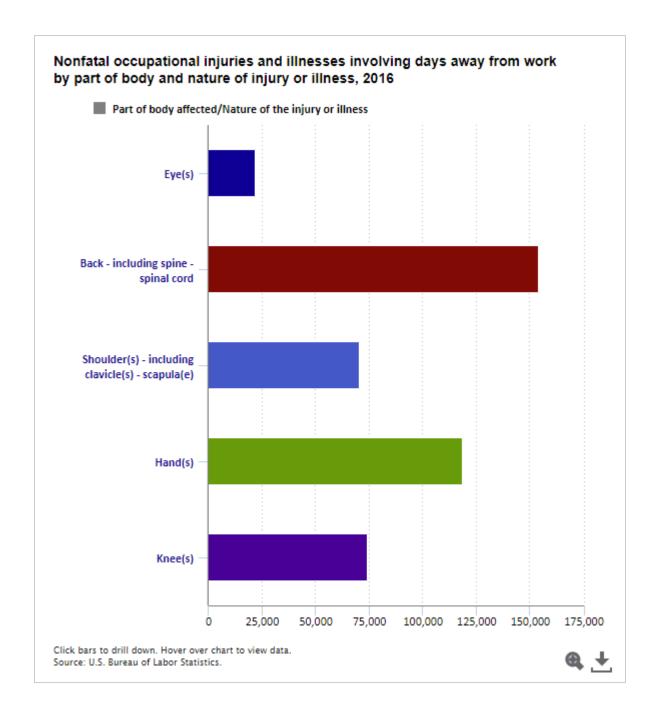
Both the Census of Fatal Occupational Injuries (CFOI) and Survey of Occupational Injuries and Illnesses (SOII) use the Occupational Injury and Illness Classification System (OIICS) to code the type of event leading to an injury, illness, or fatality. OIICS has many different levels of detail. For example, vehicle collisions are the most common type of roadway incidents. Homicides are the most common type of violent event with the vast majority coming from shootings.



### The back was the most frequently injured body part in 2016

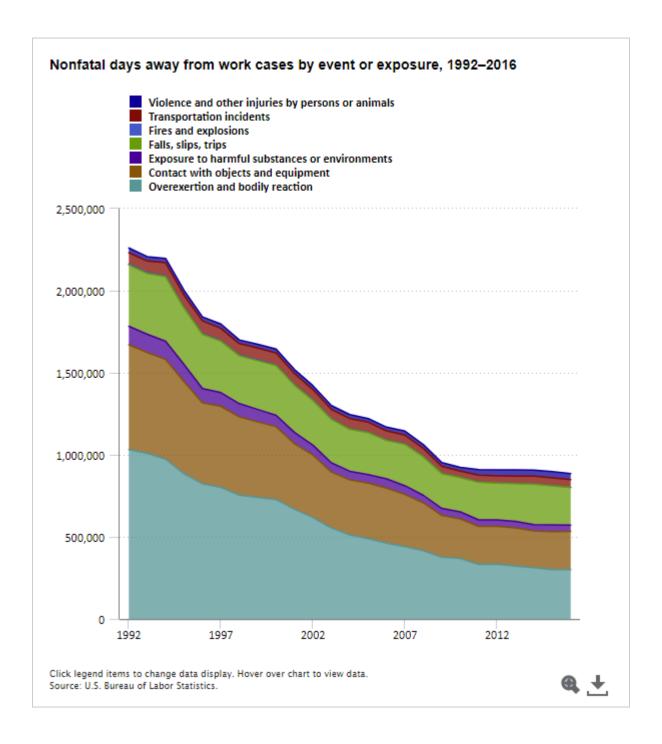
SOII collects data on the nature of injury and the part of body affected for cases involving days away from work.

In 2016, 17 percent of the cases involving days away from work were to the back and 13 percent of cases were to the hand (including injuries to fingers). There were 317,530 cases involving sprains and strains, (36 percent) in 2016. Sprains and strains are the most prevalent type of injury to the back, shoulder, and knee. Of the cases involving the eyes, 37 percent involved swelling, inflammation and/or irritation.



## Overexertion and contact with objects or equipment were the most common nonfatal events

The most frequent events among nonfatal injuries and illnesses resulting in days away from work are overexertion and contact with objects or equipment. Injuries and illnesses resulting from overexertion and bodily reaction had significant declines from 1992 to 2016, dropping from over 1 million cases in 1992 to 300,000 in 2016. The same can be said for contact with objects or equipment, dropping from 638,000 cases in 1992 to 233,000 in 2016.

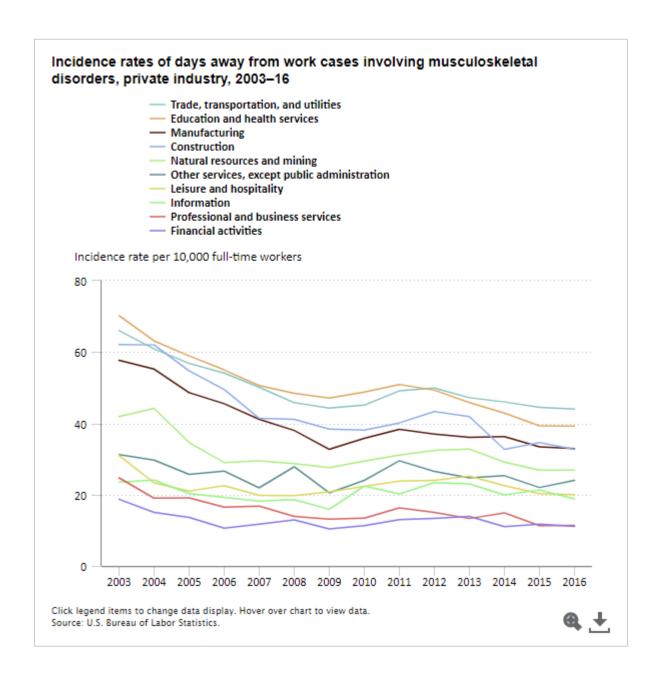




## Musculoskeletal disorders account for 32 percent of private sector days away from work cases

Musculoskeletal disorders (MSDs) include cases that comprise particular natures of injury (such as sprains and strains or carpal syndrome) and events or exposures comprising of repetitive motion or exertion. The full description of nature of injury and event or exposure categories that are used to determine musculoskeletal disorder cases can be found at Occupational Safety and Health Definitions.

The rate of MSDs declined from a rate of 49.6 per 10,000 full-time workers in 2003 to a low of 29.4 in 2016. Still, MSDs account for 32 percent of all cases requiring days away from work in the private sector in 2016. The education and health services and trade, transportation and utilities sectors had high rates over this time period, 70.2 and 60.0 respectively in 2003, and rates of 39.2 and 44.0, respectively in 2016.



#### For more information

Henry Reeve is an economist in the Office of Compensation and Working Conditions, U.S. Bureau of Labor Statistics. Email: reeve.henry@bls.gov. Shane Stephens is an economist in the Office of Compensation and Working Conditions, U.S. Bureau of Labor Statistics. Email: stephens.shane@bls.gov. Stephen Pegula is an economist in the Office of Compensation and Working Conditions, U.S. Bureau of Labor Statistics. Email: pegula.stephen@bls.gov. Ryan Farrell was formerly an economist in the Office of Compensation and Working Conditions, U.S. Bureau of Labor Statistics.

Data in this Spotlight come from the Injuries, Illnesses, and Fatalities program, which provides information on work-related injuries, illnesses, and fatal injuries. This information is collected and published through the Survey of Occupational Injuries and Illnesses (SOII) and the Census of Fatal Occupational Injuries (CFOI).

The Census of Fatal Occupational Injuries is a federal-state cooperative program that has been implemented in all 50 States and the District of Columbia since 1992. Information about each fatal workplace injury is obtained by cross-referencing source records, such as death certificates, workers' compensation reports, and Federal and State agency administrative reports. Additional background information can be found in the CFOI section of the "BLS Handbook of Methods."

The Survey of Occupational Injuries and Illnesses uses employer-reported survey data to estimate rates and counts of nonfatal injuries and illnesses among U.S. workplaces. Business establishments have been providing occupational injury and illness data to SOII since 1972. Additional background can be found in the SOII section of the "Handbook of Methods."

Note: Starting with 2006 data, CFOI implemented a new methodology for fatal work injury rate calculations that used hours worked for fatal work injury rate calculations rather than employment. The change to hours-based rates provides a more accurate indication of worker exposure. For additional information on the fatal work injury rate methodology, please see <a href="https://www.bls.gov/iif/oshnotice10.htm">www.bls.gov/iif/oshnotice10.htm</a>.

Note that the Fatal Work Injury Rate = (Fatal work injuries / Total hours worked by all workers)  $\times$  200,000,000 where 200,000,000 = base for 100,000 full-time equivalent workers (FTEs) working 40 hours per week, 50 weeks per year. The total hours worked are annual average estimates from the Current Population Survey.

See the Employed persons in agriculture and nonagricultural industries by age, sex, and class of worker and Employed persons by detailed industry and age tables for more data on how employment by age has changed.