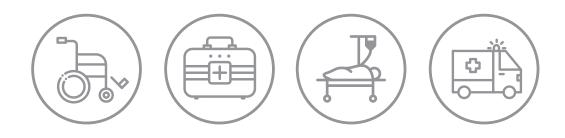


DEATH ON THE JOB THE TOLL OF NEGLECT

A NATIONAL AND STATE-BY-STATE PROFILE OF WORKER SAFETY AND HEALTH IN THE UNITED STATES

28TH EDITION • APRIL 2019





DEATH ON THE JOB

THE TOLL OF NEGLECT

A NATIONAL AND STATE-BY-STATE PROFILE OF WORKER SAFETY AND HEALTH IN THE UNITED STATES

28TH EDITION • APRIL 2019

For more information, contact the AFL-CIO Safety and Health Office at 202-637-5366.

©Copyright AFL-CIO 2019. No portion of this publication may be reproduced by anyone other than an affiliate of the AFL-CIO without express written permission.

CONTENTS

EXECUTIVE SUMMARY	1
THE STATE OF WORKERS' SAFETY AND HEALTH 2019	
JOB FATALITIES, INJURIES AND ILLNESSES	
OSHA ENFORCEMENT AND COVERAGE	15
REGULATORY ACTION, BUDGET AND LEGISLATION	
MINE SAFETY AND HEALTH	
KEY ISSUES IN SAFETY AND HEALTH: STATUS AND PROGRESS	
WORKPLACE VIOLENCE	
CHEMICAL EXPOSURE LIMITS AND STANDARDS	43
WHAT NEEDS TO BE DONE	49
TRUMP ADMINISTRATION'S WORKER SAFETY AND HEALTH RECORD	53
TRUMP ADMINISTRATION'S REGULATORY AGENDAS FOR OSHA AND MSHA .	
NATIONAL SAFETY AND HEALTH OVERVIEW—CHARTS AND G	RAPHS
WORKPLACE FATALITIES	
WORKPLACE FATALITIES (EMPLOYMENT-BASED), 1970–2007	59
WORKPLACE FATALITIES (HOURS-BASED), 2006–2017	60
RATE OF FATAL WORK INJURIES (EMPLOYMENT-BASED), 1992–20	07 61
RATE OF FATAL WORK INJURIES (HOURS-BASED), 2006–2017	
WORKPLACE FATALITY RATES BY INDUSTRY SECTOR, 1970–2002	
WORKPLACE FATALITY RATES BY INDUSTRY SECTOR (EMPLOYMEN	t-based), 2003–2007 64
WORKPLACE FATALITY RATES BY INDUSTRY SECTOR (HOURS-BASE	ed), 2007–2017 65
OCCUPATIONAL FATALITIES BY INDUSTRY SECTOR, 2017	
FATAL OCCUPATIONAL INJURIES IN THE PRIVATE-SECTOR MINING,	QUARRYING, AND OIL AND GAS
EXTRACTION INDUSTRIES, 2003–2017.	
SELECTED OCCUPATIONS WITH HIGH FATALITY RATES, 2017	
DISTRIBUTION OF FATAL INJURY EVENTS BY GENDER OF WORKER,	2017 69
PROFILE OF WORKPLACE HOMICIDES, 2017	
WORK-RELATED UNINTENTIONAL OVERDOSE DEATHS, 2012–2017	′ 71
TOTAL WORKER FATALITY RATES COMPARED WITH AGING WORKEF	R FATALITY RATES, 1992–2017 72
FATAL WORK INJURIES BY RACE, 1998–2017	
NUMBER OF FATAL OCCUPATIONAL INJURIES TO HISPANIC AND LAT	INO WORKERS, 1995–2017 74
RATE OF FATAL OCCUPATIONAL INJURIES TO HISPANIC AND LATING	WORKERS (EMPLOYMENT-BASED),
1995–2007	
RATE OF FATAL OCCUPATIONAL INJURIES TO HISPANIC AND LATING	WORKERS (HOURS-BASED),
2006–2017	
PROFILE OF HISPANIC AND LATINO WORKER FATALITIES, 2017	
PROFILE OF FOREIGN-BORN WORKER FATALITIES, 2017	

WORKPLACE INJURIES AND ILLNESSES

WORKPLACE INJURY AND ILLNESS INCIDENCE RATES, PRIVATE SECTOR, 1973–2017	
WORKPLACE INJURY AND ILLNESS RATES BY INDUSTRY SECTOR, 1973–2002	80
WORKPLACE INJURY AND ILLNESS RATES BY INDUSTRY SECTOR, 2003–2017	81
RATE OF WORKPLACE INJURIES AND ILLNESSES FOR SELECTED INDUSTRIES IN STATE GOVERNMEN	т,
LOCAL GOVERNMENT AND PRIVATE INDUSTRY, 2017	82
INDUSTRIES WITH THE HIGHEST TOTAL NONFATAL INJURY AND ILLNESS RATES, 2017	83
NONFATAL OCCUPATIONAL INJURIES AND ILLNESSES WITH DAYS AWAY FROM WORK BY EVENT OR	
EXPOSURE, PRIVATE INDUSTRY, 2017	84
NUMBER OF INJURY AND ILLNESS CASES IN PRIVATE INDUSTRY WITH DAYS AWAY FROM WORK AMO	NG
HISPANIC AND LATINO WORKERS, 1995–2017	85
WORKPLACE INJURIES AND ILLNESSES TO WOMEN INVOLVING DAYS AWAY FROM WORK, PRIVATE	
INDUSTRY, 2017	86
WORKPLACE INJURIES AND ILLNESSES TO MEN INVOLVING DAYS AWAY FROM WORK, PRIVATE	
INDUSTRY, 2017	87
WORKPLACE VIOLENCE INJURIES	
WORKPLACE VIOLENCE EVENTS LEADING TO INJURIES INVOLVING DAYS AWAY FROM WORK, PRIVAT	E
INDUSTRY, 2017	88
TOTAL INJURY AND ILLNESS RATES COMPARED WITH WORKPLACE VIOLENCE INJURY RATES,	
PRIVATE INDUSTRY, 1992–2017	89
WORKPLACE VIOLENCE RATES FOR INJURIES LEADING TO DAYS AWAY FROM WORK IN SELECTED	
HEALTH CARE INDUSTRIES, PRIVATE INDUSTRY, 2004–2017	
WORKPLACE VIOLENCE RATES IN EDUCATIONAL SERVICES FOR PRIVATE INDUSTRY, STATE AND	
LOCAL GOVERNMENT, 2008–2017	
MUSCULOSKELETAL DISORDERS	
ESTIMATED AND REPORTED CASES OF MSDS, PRIVATE INDUSTRY, 1995–2017	
HIGHEST INCIDENCE RATES OF MSDS BY OCCUPATION, 2017	
HIGHEST INCIDENCE RATES OF MSDS BY INDUSTRY, 2017	
HIGHEST NUMBERS OF MSDS BY INDUSTRY, 2017	
INJURY AND ILLNESS UNDER-REPORTING	
ESTIMATES OF THE TRUE TOLL OF WORKPLACE INJURIES AND ILLNESSES	
OSHA ENFORCEMENT	
FEDERAL OSHA INSPECTION/ENFORCEMENT ACTIVITY, FY 2010–2018	
FEDERAL OSHA AND STATE PLAN OSHA INSPECTION/ENFORCEMENT ACTIVITY, FY 2018	
NUMBER OF FEDERAL OSHA INSPECTIONS BY INDUSTRY (TWO-DIGIT NAICS CODE), FY 2013-2018	
NUMBER OF STATE OSHA INSPECTIONS BY INDUSTRY (TWO-DIGIT NAICS CODE), FY 2013-2018	
INSPECTIONS AND INVESTIGATIONS UNDER OSHA'S ENFORCEMENT WEIGHTING SYSTEM	
YEARS FOR FEDERAL OSHA TO INSPECT EACH WORKPLACE ONCE FY 1991–2018	
AVERAGE TOTAL PENALTY PER OSHA FATALITY INSPECTION, FY 2011–2018	
SIGNIFICANT OSHA ENFORCEMENT CASES BASED ON TOTAL PENALTY ISSUED, FY 2018	

LARGEST-EVER OSHA ENFORCEMENT CASES BASED ON TOTAL PENALTY ISSUED	105
DISPOSITION OF FEDERAL OSHA 11(C) WHISTLEBLOWER COMPLAINTS, FY 2005–2018	107
DISPOSITION OF OSHA STATE PLAN 11(C) WHISTLEBLOWER COMPLAINTS, FY 2009–2018	108
HEALTH AND SAFETY STANDARDS	
MAJOR OSHA HEALTH STANDARDS SINCE 1971	109
MAJOR OSHA SAFETY STANDARDS SINCE 1971	110
IMPACT ON WORKERS' LIVES FROM DELAYS IN RECENT OSHA STANDARDS	112
PERMISSIBLE EXPOSURE LIMITS OF OSHA COMPARED WITH OTHER STANDARDS AND	
RECOMMENDATIONS	113
OSHA 5(A)(1) NON-PEL CHEMICAL EXPOSURES	114
OSHA RESOURCES	
FEDERAL OSHA BUDGET AND PERSONNEL, FY 1980–2019	116
FEDERAL OSHA SAFETY AND HEALTH COMPLIANCE STAFFING, 1975–2018	117
FEDERAL OSHA COMPLIANCE OFFICERS PER MILLION U.S. WORKERS, 1974–2017	118
JOB SAFETY AND HEALTH APPROPRIATIONS, FY 2011–2020	119
FUNDING FOR OSHA WORKER TRAINING PROGRAMS VS. EMPLOYER COMPLIANCE ASSISTANCE	
PROGRAMS, FY 2003–2020	120
NUMBER OF U.S. ESTABLISHMENTS AND EMPLOYEES COVERED PER OSHA FTE STAFF, 1980–2017	121
MAP OF STATE AND LOCAL EMPLOYEES LACKING OSHA COVERAGE, 2017	122
MINE SAFETY AND HEALTH	
PROFILES OF MINE SAFETY AND HEALTH, 2010–2018	123
COAL AND METAL/NONMETAL MINING FATALITY COMPARISONS, 2003–2018	124
COAL MINING FATALITIES BY STATE, 2002–2018	125
METAL AND NONMETAL MINING FATALITIES BY STATE, 2002–2018	
MSHA IMPACT INSPECTIONS, 2018	131
MSHA DISCRIMINATION COMPLAINTS AND TEMPORARY REINSTATEMENTS FILED BY THE DEPARTMENT	
OF LABOR ON BEHALF OF MINERS, 2003–2018	132
STATE COMPARISONS	
COMPARISON OF WORKPLACE FATALITY AND INJURY RATES BY STATE, 2017	135
YEARS NEEDED FOR OSHA TO INSPECT ALL JOB SITES	136
NUMBER OF OSHA INSPECTORS BY STATE COMPARED WITH ILO BENCHMARK NUMBER OF LABOR	
INSPECTORS	137
PROFILE OF WORKPLACE SAFETY AND HEALTH IN THE UNITED STATES	140
STATE-BY-STATE OSHA FATALITY INVESTIGATIONS, FY 2018	144
WORKPLACE SAFETY AND HEALTH STATISTICS BY STATE, 2012–2017	147
WORKPLACE FATALITIES BY STATE, 1998–2017	150
FATALITIES BY STATE AND EVENT OR EXPOSURE, 2017	153
NUMBER AND RATE OF INJURIES AND ILLNESSES BY STATE FOR ALL INDUSTRIES, PRIVATE INDUSTRY	
STATE GOVERNMENT AND LOCAL GOVERNMENT, 2017	156
HISPANIC AND LATINO WORKER FATALITIES BY STATE, 1998–2017	159

	FOREIGN-BORN WORKER FATALITIES BY STATE, 1998–20171	62
STATE	PROFILES (ALABAMA–WYOMING)1	65
SOURC	ES AND METHODOLOGY	19

EXECUTIVE SUMMARY

This 2019 edition of "Death on the Job: The Toll of Neglect" marks the 28th year the AFL-CIO has produced a report on the state of safety and health protections for America's workers.

More than 594,000 workers now can say their lives have been saved since the passage of the Occupational Safety and Health Act of 1970, which promised workers in this country the right to a safe job. The Obama administration had a strong record on improving working conditions—strengthening enforcement, issuing key safety and health standards, and improving anti-retaliation protections and other rights for workers.

With the election of President Trump, the political landscape shifted dramatically, threatening many of these gains. Trump has moved aggressively on his deregulatory agenda, repealing and delaying job safety and other rules, and proposing deep cuts in the budget, and the elimination of worker safety and health training and other programs. There has been no forward action on critical safety and health problems, including workplace violence, silica in mining and exposure to toxic chemicals.

With Democrats now in the majority in the House of Representatives, there are new opportunities to oppose anti-worker attacks, hold the Trump administration accountable and to move forward to win stronger worker safety and health protections.

Nearly 50 years after the passage of the nation's job safety laws, the toll of workplace injury, illness and death remains too high, and too many workers remain at serious risk. There is much more work to be done.

The High Toll of Job Injuries, Illnesses and Deaths

In 2017:

- 275 workers died each day from hazardous working conditions.
- 5,147 workers were killed on the job in the United States.
- An estimated 95,000 workers died from occupational diseases.
- The job fatality rate decreased to 3.5 per 100,000 workers from 3.6 per 100,000 the previous year.
- The job fatality rate increased in mining, transportation and warehousing, health care and social assistance and the federal government, and declined in agriculture, construction and manufacturing.
- Employers reported nearly 3.5 million work-related injuries and illnesses.
- Under-reporting is widespread—the true toll of work-related injuries and illnesses is 7.0 million to 10.5 million each year.

States with the highest fatality rates in 2017 were:

- Alaska (10.2 per 100,000 workers)
- North Dakota (10.1 per 100,000 workers)
- Wyoming (7.7 per 100,000 workers)

- West Virginia (7.4 per 100,000 workers)
- South Dakota (7.3 per 100,000 workers)

Workplace violence remains a serious and growing problem:

- Workplace violence deaths decreased to 807 in 2017, but violence-related injuries increased to nearly 29,000 lost-time injuries.
- Workplace violence is the third-leading cause of workplace death.
- 458 worker deaths were workplace homicides.
- Women workers are at greater risk of violence than men; they suffered two-thirds of the lost-time injuries related to workplace violence.
- There is no federal OSHA standard to protect workers from workplace violence; the Trump administration has sidelined an OSHA workplace violence standard.

Latino and immigrant workers' safety and health has improved over the last decade, but the risk to these workers still is greater than other workers:

- The Latino fatality rate was 3.7 per 100,000 workers, higher than the national average.
- The Latino fatality rate is the same as the previous year, even though the overall national fatality rate declined from 3.6 to 3.5.
- Deaths among all Latino workers increased in 2017: 903 deaths, compared with 879 in 2016. Deaths among Latino immigrant workers declined to 568 from 588.

Older workers are at high risk. In 2017:

- 37% of all worker fatalities occurred in those ages 55 or older, with 1,930 deaths, an increase from 36% and 1,848 deaths in 2016.
- Workers 65 or older have nearly three times the risk of dying on the job as other workers, with a fatality rate of 10.3 per 100,000 workers.

The construction, transportation and agriculture industries (private sector) remain very dangerous:

- 971 construction workers were killed in 2017, the highest number in any sector. The number of construction deaths decreased (from 991); the rate decreased from 10.1 per 100,000 workers in 2016 to 9.5 in 2017.
- 882 transportation and warehousing workers were killed in 2017. The fatality rate increased from 14.3 per 100,000 workers in 2016 to 15.1 in 2017, the second highest of any major industry sector.
- Agriculture, forestry, fishing and hunting was the most dangerous industry sector, with a fatality rate of 23.0 per 100,000 workers; 581 workers were killed in these industries.

The mining and extraction industries remain dangerous; safety and health has improved but the trend may be reversing:

- There were 28 deaths in coal, metal and nonmetal mines in 2017, including a significant increase in coal mine deaths (from eight to 15).
- Preliminary 2018 data report 12 coal mine fatalities and 15 fatalities in metal and nonmetal mining.
- The fatality rate for the overall mining sector, including oil and gas extraction,

increased in 2017 to 12.9 per 100,000 workers, nearly four times the national average.

• There were 81 deaths in oil and gas extraction in 2017, accounting for 72% of the fatal work injuries in the mining sector.

The cost of job injuries and illnesses is enormous—estimated at \$250 billion to \$330 billion a year.

Job Safety Oversight and Enforcement

OSHA resources in FY 2018 still are too few and declining:

- There are only 1,815 inspectors (752 federal and 1,063 state) to inspect the 9.8 million workplaces under the Occupational Safety and Health Act's jurisdiction.
- The number of OSHA inspectors is at the lowest number since the early 1970s.
- Federal OSHA has enough inspectors to inspect workplaces only once every 165 years.
- State OSHA plans have enough inspectors to inspect workplaces once every 108 years.
- There is one inspector for every 79,262 workers.
- The current OSHA budget amounts to \$3.64 to protect each worker.

OSHA enforcement, strengthened under the Obama administration, largely has been maintained by the Trump administration, but penalties in FY 2018 still are too weak:

- The average penalty for a serious violation was \$3,580 for federal OSHA.
- The average penalty for a serious violation was \$1,985 for OSHA state plans.
- The median penalty for killing a worker was \$7,761 for federal OSHA.
- The median penalty for killing a worker was \$2,700 for OSHA state plans.
- Only 99 worker death cases have been criminally prosecuted under the Occupational Safety and Health Act since 1970.

Regulatory Action: Worker Protections Under Attack

The Obama administration produced a number of significant safety and health rules and left a solid legacy of worker protections in place. Key achievements include standards on silica, beryllium, coal dust and enhanced anti-retaliation protections for workers who report injuries. Political opposition delayed many rules, leaving a long, unfinished agenda of hazards that need prompt action: workplace violence, combustible dust, chemical process safety management, infectious diseases and silica in mining.

The Trump administration launched a major assault on regulatory protections. It has moved aggressively to roll back regulations, block new protections and put agency budgets and programs on the chopping block. Since January 2017, the Trump administration has:

- Repealed OSHA's rule clarifying an employer's obligation to keep accurate injury and illness records.
- Repealed a rule that would have required companies to disclose safety and health and labor violations in order to qualify for federal contracts.
- Withdrawn OSHA's walkaround policy that gave nonunion workers the right to have a representative participate in OSHA inspections.
- Repealed the requirement for large employers to electronically report detailed injury and illness information to OSHA.

- Refused to make public employer injury data reported to OSHA, even though similar data has been posted on OSHA's website for years.
- Proposed to eliminate exposure monitoring and medical exams for construction and maritime workers exposed to beryllium.
- Delayed action on a new OSHA standard on workplace violence.
- Proposed to eliminate worker safety and health training programs, cut coal mine enforcement, eliminate the Chemical Safety Board and slash the budget for job safety research.
- Weakened MSHA's mine examination rule, allowing miners to work in hazardous conditions.
- Refused to address worker exposures to methylene chloride, asbestos and other hazards in implementing the new toxic chemicals control law.

Opportunities to Move Forward

With the election of a Democratic majority in Congress, the political environment for safety and health has greatly improved. There are opportunities to move forward on a pro-worker agenda, including:

- Legislation to update and strengthen the Occupational Safety and Health Act and Mine Safety and Health Act.
- Legislation to require OSHA to issue a workplace violence standard.
- Oversight of the Trump administration's policies and programs.
- Blocking rollbacks in safety and health regulations.
- Increasing the budget and staff for job safety agencies.

Much Work Remains to Be Done

Workers need more job safety and health protection, not less. We call on:

- The Trump administration to stop the attack on workers' rights and protections.
- OSHA and MSHA to fully implement new rules on silica, beryllium, injury reporting/anti-retaliation and coal dust.
- OSHA to issue a workplace violence standard for health care and social service workers. Workplace violence is a growing and serious threat—particularly for women workers and workers in health care and social services. Congress should enact legislation to make sure this is done.
- OSHA and MSHA to develop and issue rules on infectious diseases, combustible dust, chemical safety and silica in mining.
- OSHA to increase attention to the serious safety and health problems faced by Latino, immigrant and aging workers.
- Congress to increase funding and staffing at job safety agencies.
- Congress to pass the Protecting America's Workers Act to extend the Occupational Safety and Health Act's coverage to workers currently excluded, strengthen civil and criminal penalties for violations, enhance antidiscrimination protections, and strengthen the rights of workers, unions and victims.

The nation must renew its commitment to protect workers from injury, disease and death, and make this protection a high priority.

THE STATE OF WORKERS' SAFETY AND HEALTH

This 2019 edition of "Death on the Job: The Toll of Neglect" marks the 28th year the AFL-CIO has produced a report on the state of safety and health protections for America's workers. This report features national and state information on workplace fatalities, injuries, illnesses, the number and frequency of workplace inspections, penalties, funding, staffing and public employee coverage under the Occupational Safety and Health Act. It also includes information on the state of mine safety and health.

Nearly 50 years ago, in 1970, Congress enacted the OSH Act, promising workers in this country the right to a safe job. More than 594,000 workers now can say their lives have been saved since the passage of the OSH Act.¹ Since that time, workplace safety and health conditions have improved. But too many workers remain at serious risk of injury, illness or death as chemical plant explosions, major fires, construction collapses and other preventable workplace tragedies continue to occur. Workplace violence is a growing threat. Many other workplace hazards kill and disable thousands of workers each year.

In 2017, 5,147 workers lost their lives on the job as a result of traumatic injuries, according to fatality data from the Bureau of Labor Statistics.² Each day in this country, an average of 14 workers die because of job injuries—women and men who go to work, never to return home to their families and loved ones. This does not include those workers who die from occupational diseases, estimated to be 95,000 each year.³ Chronic occupational diseases receive less attention, because most are not detected until years after workers are exposed to toxic chemicals, and occupational illnesses often are misdiagnosed and poorly tracked. All total, on average 275 workers die each day due to job injuries and illnesses.

In 2017, nearly 3.5 million workers across all industries, including state and local government, had work-related injuries and illnesses that were reported by employers, with 2.8 million injuries and illnesses reported in private industry. Due to limitations in the current injury reporting system and widespread under-reporting of workplace injuries, this number understates the problem. The true toll is estimated to be two to three times greater—or 7.0 million to 10.5 million injuries and illnesses a year.

¹ Calculated based on changes in annual fatality rates and employment since 1970. Fatality rate data for 1970 to 1991 is from National Safety Council Accident Facts, 1994. Fatality rate data for 1992 to 2017 is from the Bureau of Labor Statistics, Census of Fatal Occupational Injuries. Annual employment data is from the Bureau of Labor Statistics Current Population Survey.

² U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2017, released Dec.18, 2018.

³ Takala, J., P. Hämäläinen, K.L. Saarela, L. Yoke Yun, K. Manickam, T. Wee Jin, P. Heng, C. Tjong, L. Guan Kheng, S. Lim and G. Siok Lin (2014), "Global Estimates of the Burden of Injury and Illness at Work in 2012," Journal of Occupational and Environmental Hygiene, 11:5, 326 –337, DOI: 10.1080/15459624.2013.863131.

The cost of these injuries and illnesses is enormous—estimated at \$250 billion to \$330 billion a year.

During its eight years in office, the Obama administration had a strong track record on worker safety and health, appointing dedicated pro-worker advocates to lead the job safety agencies who returned these programs to their core mission of protecting workers. The Obama administration increased the job safety budget, stepped up enforcement and strengthened workers' rights. Landmark regulations to protect workers from deadly silica dust and coal dust were issued, along with long-overdue rules on other serious safety and health hazards, including beryllium and confined space entry in the construction industry.

With the election of President Trump, the political landscape and direction of the job safety agencies shifted dramatically. President Trump ran on a pro-business, deregulatory agenda, promising to cut regulations by 70%. Since taking office in January 2017, the Trump administration has moved aggressively on its deregulatory agenda. Through executive orders, legislative action, and delays and rollbacks in regulations, the Trump administration has sought to repeal or weaken many Obama administration rules. For the first two years of the administration, with Republicans in control of Congress, there was little oversight and only a limited ability to block these regulatory attacks and rollbacks. As a result, important safety and health protections have been repealed or weakened. There has been little action to address hazards like workplace violence that need attention and new regulation.

Job safety and health enforcement at both the Occupational Safety and Health Administration and the Mine Safety and Health Administration largely has been maintained, with some cutbacks in OSHA inspections involving significant cases and complex hazards. At both agencies, the number of inspectors has declined significantly; at OSHA, the number of job safety inspectors is at its lowest level since the 1970s.

President Trump has proposed cuts in in key worker safety and health programs in the budgets for FY 2018, FY 2019 and FY2020, seeking to cut finding for coal mine enforcement; eliminate OSHA's worker safety and health training program and the Chemical Safety Board; and slash the NIOSH job safety research budget by more than 40%. To date, Congress has rejected these proposed cuts.

President Trump nominated corporate officials to head the job safety agencies. David Zatezalo, a coal industry executive from Rhino Industry Partners, was nominated to head the Mine Safety and Health Administration and was confirmed by the Senate on Nov. 15, 2017. Scott Mugno, vice president of safety, sustainability and vehicle maintenance at FedEx Ground, first was nominated to head the Occupational Safety and Health Administration on Nov. 1, 2017, and most recently renominated on Jan. 16, 2019. Due to opposition from Democrats and the slow pace of Senate confirmations, Mugno has yet to be confirmed. Both of these individuals have long experience and involvement with the job safety agencies, and have records of opposing enforcement and regulatory actions.

With the election of a Democratic majority in Congress, the political environment for safety and health has greatly improved. Four months into the 116th Congress, Democrats are moving

aggressively on a pro-worker agenda, introducing progressive legislation and conducting vigorous oversight of the Trump administration's policies and programs. In a divided Congress, it is unlikely that many of these legislative proposals will become law, but in the next two years the foundation can be set for making progress in coming years.

Nearly five decades after the passage of the OSH Act, the toll of workplace injury, disease and death remains too high. There is much more work to be done.

JOB FATALITIES, INJURIES AND ILLNESSES

On average, 14 workers were fatally injured and more than 9,500 workers were injured or made ill each day of 2017. These statistics do not include deaths from chronic occupational diseases, which claim the lives of an estimated 95,000 workers each year.⁴

Job Fatalities

In 2017, there were 5,147 workplace deaths due to traumatic injuries, a slight decrease from the 5,190 deaths reported in 2016.⁵ The rate of fatal job injuries in 2017 also declined slightly from 3.6 per 100,000 workers in 2016 to 3.5 per 100,000 workers in 2017.

The job fatality rate increased in mining, transportation and warehousing, health care and social assistance and the federal government, and declined in agriculture, construction and manufacturing.

Latino workers saw an increase in job deaths in 2017, as did older workers (ages 55 and older). Deaths from workplace violence decreased by 7% (from 866 to 807 deaths) and are now the third-leading cause of job death.

Fatalities by State

Alaska had the highest job fatality rate in 2017, at 10.2 per 100,000 workers, followed by North Dakota (10.1), Wyoming (7.7), West Virginia (7.4), South Dakota (7.3) and Vermont (7.0). New Hampshire, New Jersey and Rhode Island had the lowest state fatality rate (1.6 per 100,000 workers), followed by Connecticut (1.9) and Hawaii (2.2).

From 2016 to 2017, fatality rates increased in 18 states. Tennessee and Missouri experienced a 98% increase, followed by Minnesota (97%), Washington (96%) and Georgia (95%).

Industry, Occupation, Event and Demographic Highlights

In 2017, the construction sector had the largest number of fatal work injuries (971), followed by transportation and warehousing (882) and agriculture, forestry, fishing and hunting (581). Industry sectors with the highest fatality rates were agriculture, forestry, fishing and hunting (23.0 per 100,000); transportation and warehousing (15.1), mining, quarrying, and oil and gas extraction (12.9) and construction (9.5).

⁴ Takala, 2014.

⁵ BLS, CFOI, 2017.

Within the mining and extractive industries in 2017, BLS reported 81 deaths in oil and gas extraction, an increase from the 63 deaths reported in 2016. According to separate statistics reported by the Mine Safety and Health Administration, in 2017 there were 15 deaths in coal mining, an increase over the eight coal mine deaths in 2016, and 13 deaths in metal and nonmetal mining.⁶ Preliminary data from MSHA for 2018 report 12 coal mine fatalities and 15 fatalities in metal and nonmetal mining.

Transportation and material moving occupations had the highest number of fatalities in 2017, with 1,443 deaths, an increase from 1,388 deaths in 2016, followed by construction and extraction occupations with 965 fatal injuries. The occupations at greatest risk of experiencing work-related fatalities were fishers and related fishing workers (99.8 per 100,000); logging workers (84.3 per 100,000); and aircraft pilots and flight engineers (48.6 per 100,000).

Transportation incidents, in particular roadway crashes, continue to be the leading cause of workplace deaths, responsible for 2,077 or 40% of all fatalities in 2017, followed by deaths from falls, slips and trips (887). Workplace violence is now the third-leading cause of job death, with 807 fatalities reported. Deaths due to unintentional overdoses of drugs at work are a growing problem, increasing by 29% from 203 deaths in 2016 to 262 deaths in 2017. This was the fifth consecutive year that such deaths have increased by at least 25%.

In 2017, male workers were at greater risk of death on the job than female workers, with a fatality rate of 5.7 per 100,000 workers, compared with a rate of 0.6 per 100,000 among women. Men accounted for 93% of job fatalities (4,761) and women accounted for 7% (386). Homicides in the workplace continue to be a disproportionate cause of death for women (22%) compared with men (8%).

In response to concerns about the safety and health risks associated with contract work, for the past seven years BLS has reported fatalities that involve workers employed as contractors. In 2017, there were 811 fatalities among contract workers. The job fatality rate for all self-employed workers—a group that lacks OSHA coverage—continues to remain high at 13.1 per 100,000 workers, more than four times the rate among wage and salary workers (2.9 per 100,000).

Hispanic or Latino and Immigrant Worker Fatalities

In 2017, 903 Latino workers died on the job, an increase from 879 deaths in 2016. The fatality rate among Latino workers was 3.7 per 1000,000, the same as in 2016, higher than the overall fatality rate of 3.5 per 100,000 workers.

The states with the greatest number of Latino worker fatalities were Texas (219), California (173) and Florida (81). Immigrant workers constituted 72% of Latino worker deaths in Florida, 68% in California and 57% in Texas.

⁶ Mine Safety and Health Administration, Mine Safety and Health At a Glance: Calendar Year, *available at* <u>www.msha.gov/data-reports/statistics/mine-safety-and-health-glance</u>.

The construction industry was responsible for the greatest number of Latino worker deaths (291), followed by administrative and support and waste management and remediation services (134, with 52% of these deaths in landscaping services), and transportation and warehousing (132, with 77% of these deaths in truck transportation). Latino worker deaths in the construction industry were somewhat higher than in 2016 (283), while the overall number of construction deaths declined.

Events or exposures responsible for Latino worker deaths were largely similar to the causes for all workers, with transportation incidents the leading event (325 deaths), followed by deaths from falls (231), contact with object/equipment (136) and violence (98).⁷

In 2017, 63% of Latino workers who died on the job (568) were born outside of the United States. Fatalities among all foreign-born or immigrant workers continue to be a serious problem. In 2017, there were 927 workplace deaths reported for all immigrant workers; 38% were from Mexico.

The four states with the greatest number of foreign-born worker fatalities in 2017 were California (161), Texas (153), Florida (76) and New York (71). Of the foreign-born workers who were injured fatally at work in 2017, 76% were Latino; 16% were white; 15% were Asian, Native Hawaiian or Pacific Islander; and 6% were black or African American.

The largest number of immigrant worker deaths was reported in the construction industry, at 262 out of 927 total deaths. Thirty-five percent of the foreign-born worker deaths resulted from transportation incidents; 25% from falls, slips and trips; 16% from violent acts; and 14% from contact with objects and equipment.

Aging Workforce Fatalities

People are working longer, and the number of workers ages 55 years and older has increased 124% since 1996. BLS estimates this trend will continue, and that by 2026, one in four workers will be 55 years or older.⁸

In 2017, 37% of all fatalities (1,930 deaths) occurred in workers ages 55 years or older, with 775 of these deaths occurring in workers ages 65 years or older. For workers 65 years or older, the risk of dying on the job is nearly three times greater than the overall work population, with a fatality rate of 10.3 deaths per 100,000 workers. Workers ages 55–64 also have an increased fatality risk, with a fatality rate of 4.6 per 100,000 workers.

Transportation incidents were responsible for 41% of fatalities in workers ages 65 years or older (314 deaths). Workers 65 years or older are at greater risk of fatalities due to falls, slips and trips than the overall worker population. Falls, slips and trips accounted for 28% of all fatalities in workers at least 65 years of age, while the same events accounted for 17% of fatalities among the entire workforce.

⁷ Violence deaths exclude deaths caused by animals or insects.

⁸ Bureau of Labor Statistics, Employment Projections—2016–26, news release, Oct. 24, 2017, *available at www.bls.gov/news.release/pdf/ecopro.pdf*.

Job Injuries and Illnesses

In 2017, private-sector employers reported 2.8 million injuries and illnesses. State and local government employers reported an additional 664,000 injuries and illnesses, for nearly 3.5 million total cases of workers injured or made ill in 2017. The national injury and illness rate for the private sector in 2017 was 2.8 per 100 workers, a decline from the rate reported by BLS for 2016 (2.9). The rate in 2017 for all industries, including state and local government workers, was 3.1 per 100 workers, a decrease from 2016 (3.2).

The health care and social assistance industry accounted for the greatest proportion (21%) of nonfatal workplace injuries and illnesses in private industry in 2017, followed by manufacturing (15%) and retail trade (14%). Workers in the construction industry experienced 7% of all private-sector injuries and illnesses in 2017. More specifically, the highest rate of nonfatal workplace injuries and illnesses occurred in state government nursing and residential care facilities (10.9 per 100 workers), a decrease from 2016 (13.7 per 100,000). Other high-hazard industries include motor home manufacturing (private industry, 10.3), skiing facilities (private industry, 10.2), veterinary services (private industry, 9.8), materials recovery facilities (private industry, 9.8) and iron foundries (private industry, 8.5).

Trade, transportation and utilities accounted for the greatest proportion (32%) of injuries involving days away from work, job transfer or restriction in the private sector, followed by education and health services at 18%, manufacturing at 17% and construction at 8%.

Women workers suffered 39% of lost-time injuries reported in 2017 (339,630 cases). The leading industries for lost-time injuries and illnesses among women were hospitals, nursing and residential care facilities, and food services and drinking places. Nursing, psychiatric and home health aides, building cleaning workers, registered nurses, and laborers and material movers experienced the greatest number of these injuries. Overexertion was the major cause of these injuries, and the major injury type was sprains, strains and tears.

Men suffered 61% of lost-time injuries reported in 2017 (539,840 cases). The leading industries for these injuries were specialty trade contracting, truck transportation, and food service and drinking places. Driver/sales workers and truck drivers, laborers and material movers, maintenance and repair workers, and construction laborers experienced the greatest number of these injuries. Overexertion was the major cause of these injuries, and the major injury type was sprains, strains and tears. These characteristics of lost-time injuries among men and women have been consistent over the past several years.

For all workers, overexertion and bodily reaction (including lifting and repetitive motion) was the leading exposure resulting in injury, responsible for 34% of all lost-time injury cases in private industry, followed by contact with objects (26%), falls, slips and trips (26%), transportation incidents (5%) and violence events (5%).

The median number of days away from work for lost-time injury cases in private industry was nine days; the median days away from work for men was 10 days and for women was seven days. The median number of days away from work in 2017 generally increased with age: Workers ages 65 and older had 14, workers ages 55–64 had 15, workers 45–54 had 12, workers

ages 35–44 had nine, workers ages 25–34 had six, workers ages 20–24 had five and workers ages 16–19 had four. Latino or Hispanic worker injuries accounted for 13.8% of all lost-time injuries in 2017.

Public-Sector Workers

In 2017, state and local public-sector employers reported an injury rate of 4.6 per 100 workers, significantly higher than the reported rate of 2.8 per 100 among private-sector workers. The injury and illness rate for state government workers was 3.6 per 100 workers and 5.0 for local government workers. More than three in four injuries and illnesses reported in the public sector occurred among local government workers.

The incidence rate for injury and illness cases leading to days away from work in state government in 2017 was 143.8 cases per 10,000 full-time workers, lower than the 151.6 cases in 2016. The incidence rate for local government was 161.0, slightly lower than the incident rate involving days away from work in 2016 (161.8).

Certain health care and protective service occupations have incidence rates for injury and illness cases leading to days away from work that far exceed their private-sector counterparts. These include: psychiatric aides, psychiatric technicians, firefighters, emergency medical technicians and paramedics, nursing assistants, police and sheriff's patrol officers, licensed practical and licensed vocational nurses and registered nurses. The incidence rate of psychiatric aides in state government in 2017 (1,160.7 cases per 10,000 full-time workers) was more than seven times greater than the incidence rate for all state government workers (143.8 cases).

Musculoskeletal disorders occur at a higher incidence rate in the public sector than the private sector. In 2017, the incidence rate for state government workers was 38.0 MSDs per 10,000 full-time workers, 33% higher than the private industry rate (28.6). The incidence rate for local government workers was 44.8 MSDs per 10,000 full-time workers, 57% higher than the private-sector rate.

Workplace violence events disproportionately occur among public employees. The incidence rate of injuries caused by workplace violence was more than 745% higher for state government workers (33.8 per 10,000 workers) than the rate for private industry workers (4.0). The incidence rate of violence for local government workers (25.4 per 10,000 workers) was 535% higher than for private industry workers.

Several years ago, OSHA began requiring federal employers to report injuries and illnesses in the same method as the private sector. But the quality of the data on federal government workers remains limited in quality.

Musculoskeletal Disorders

For 2017, BLS reported 282,750 MSD cases resulting in days away from work in the private sector, a continued decrease from last year (285,950). MSDs accounted for 31.2% of all injuries and illnesses involving days away from work, and remain the largest source of injury and illness cases.

In 2017, the MSD incidence rate across all private-sector industries in the United States was 28.6 per 10,000 workers, less than the rate in 2016 (29.4 per 10,000 workers).

Industries with the highest incidence rates of musculoskeletal disorders involving days away from work in 2017 were air transportation (157.9 per 10,000 workers); couriers and messengers (123.2); warehousing and storage (85.9); performing arts and spectator sports (83.2); nursing and residential care facilities (69.6); telecommunications (62.5); and truck transportation (62.3).

The occupations reporting the highest rate of MSDs involving days away from work in 2017 (including private sector, state and local ownerships) were: bus drivers, transit and intercity (206.2 per 10,000 workers); emergency medical technicians and paramedics (187.4); firefighters (167.5); nursing assistants (166.3); highway maintenance workers (164.2); reservation and transportation ticket agents and travel clerks (127.2); telecom equipment installers and repairers, except line installers (119.6); laborers and freight, stock and material movers and handlers (117.6); light truck or delivery services drivers (105.7); and maids and housekeeping cleaners (100.7). The median number of days away from work for MSDs in 2017 was 13 days.

It is important to recognize that the numbers and rates of MSDs reported by BLS represent only a portion of the total MSD problem. The BLS MSD data are limited to cases involving one or more days away from work, the cases for which BLS collects detailed reports. Similar detailed reports are not collected for injuries and illnesses that do not involve lost work time or those that result in job transfer or restriction, but not in time lost from work. Moreover, these figures do not include injuries suffered by public-sector workers or postal workers, nor do they reflect the under-reporting of MSDs by employers. Based on studies and experience, OSHA estimated that MSDs are understated by at least a factor of two—that is, for every MSD reported, there is another work-related MSD that is not recorded or reported.⁹ However, as discussed below, there is extensive evidence that the undercount of work-related injuries and illnesses is even greater. Based on the percentage of days away from work cases involving MSDs in 2017 (31.2%), there were an estimated total of 879,667 MSDs reported by private-sector employers; 471,250 MSD cases that resulted in days away from work, restricted activity or job transfer; and 188,500 MSDs that resulted in restricted activity or job transfer.

Reported Cases Understate Problem

Over the past decade, there has been significant research documenting that the BLS Survey of Occupational Injuries and Illnesses fails to capture a large proportion of work-related injuries and illnesses—one-third to two-thirds of work-related injuries and illnesses are missed by the survey. Studies comparing injuries captured by the BLS survey with injuries reported to workers' compensation or other injury reporting systems have found that the BLS survey missed 33%–

⁹64 F.R. 65981 and 65 F.R. 68758.

69% of work-related injuries.^{10, 11, 12, 13} A 2018 study of injury reporting in the mining industry found a similar result. Two-thirds of the injuries among miners in Illinois that were reported to workers' compensation were not reported to MSHA by mine operators as required by the law.¹⁴ A study that compared state fatality rates in the construction industry with rates of injuries that result in lost-time or job restriction found there was little correlation between the two, and in some cases there was a negative correlation.¹⁵ The study observed that multiple factors impacted the reporting and recording of injuries and concluded that fatality rates are a much more valid measure of risk.

Some of the undercount in the BLS survey is due to injuries excluded from the BLS survey's scope, including injuries among self-employed individuals, and the design of the survey.¹⁶ But other factors, including employees' reluctance to report injuries due to fear of retaliation, incentive programs that penalize workers who report injuries and drug testing programs for workplace injuries suppress reporting.¹⁷ In addition, there are disincentives for employers to report injuries, which include concern about increased workers' compensation costs for increased reports of injuries; fear of being denied government contracts due to high injury rates; concern about being targeted by OSHA for inspection if a high injury rate is reported; and the promise of monetary bonuses for low injury rates.

BLS also has recognized the need to make changes in its program in order to collect more complete and accurate injury and illness statistics. BLS has launched a pilot of a Household Survey on Occupational Injuries and Illnesses to collect information on work-related injuries and illnesses through interviews with workers, with the results expected in 2019.¹⁸ This household survey is intended to be a supplement to the existing employer-based injury and illness survey. A 2018 report from the National Academies of Sciences, Engineering and Medicine on occupational safety and health surveillance strongly endorsed BLS conducting this new

¹² Davis, L., K. Grattan, S. Tak, L. Bullock, A. Ozonoff and L. Boden, "Use of Multiple Data Sources for Surveillance of Work-Related Amputations in Massachusetts, Comparisons with Official Estimates and Implications for National Surveillance," American Journal of Industrial Medicine, Vol. 57, No. 10, (2014).
¹³ Wuellner, S., and D. Bonauto, "Injury Classification Agreement in Linked Bureau of Labor Statistics and Workers' Compensation Data," American Journal of Industrial Medicine, Vol. 57, No. 10, (2014).

¹⁰ Boden, L.I., and A. Ozonoff, "Capture-Recapture Estimates of Nonfatal Workplace Injuries and Illnesses," Annals of Epidemiology, Vol. 18, No. 6 (2008).

¹¹ Rosenman, K.D., A. Kalush, M.J. Reilly, J.C. Gardiner, M. Reeves and Z. Luo, "How Much Work-Related Injury and Illness is Missed by the Current National Surveillance System?," Journal of Occupational and Environmental Medicine, Vol. 48, No. 4, pp. 357–67, April 2006.

¹⁴ Almberg, K.S., L.S. Friedman, D. Swedler and R.A. Cohen, "Mine Safety and Health Administration's Part 50 program does not fully capture chronic disease and injury in the Illinois mining industry," American Journal of Industrial Medicine, Vol. 61, pp. 436–443, (2018).

¹⁵ Mendeloff, J., and R. Burns, "States with low non-fatal injury rates have high fatality rates and vice-versa," Am. J. Ind. Med., 56: 509–519. doi:, *available at <u>10.1002/ajim.22047 (2013).</u>*

¹⁶ Wiatrowski, W.J., "Examining the Completeness of Occupational Injury and Illness Data: An Update on Current Research," Monthly Labor Review, June 2014.

¹⁷ United States Government Accountability Office, "Enhancing OSHA's Records Audit Process Could Improve the Accuracy of Worker Injury and Illness Data," GAO-10-10, October 2009, *available at* <u>www.gao.gov/products/GAO-10-10</u>.

¹⁸ Bureau of Labor Statistics, Research on the Completeness of the Injury and Illness Counts from the Survey of Occupational Injuries and Illnesses, *available at <u>www.bls.gov/iif/undercount.htm</u>.*

household survey.¹⁹ Hopefully, if the pilot is successful, Congress will provide the necessary funding to continue and expand this important work.

Cost of Occupational Injuries and Deaths

The cost of occupational injuries and deaths in the United States is staggering, estimated at \$250 billion to \$330 billion a year, according to two recent studies.

The 2019 Workplace Safety Index, published by Liberty Mutual Insurance, estimated the cost of the most disabling workplace injuries to employers at more than \$55 billion a year—more than \$1 billion per week.²⁰ This analysis, based on 2016 data from Liberty Mutual, BLS and the National Academy of Social Insurance, estimated direct costs to employers (medical and lost-wage payments) of injuries resulting in cases involving five or more days of lost time. If indirect costs also are taken into account, the overall costs are much higher. Based on calculations used in the previous Liberty Mutual Safety Index, the data indicate that businesses pay between \$165 billion and \$330 billion annually in direct and indirect (overtime, training and lost productivity) costs on workers' compensation losses for the most disabling injuries (indirect costs are estimated to be two to five times direct costs).²¹ It is important to note that the safety index excludes a large number of injury cases (those resulting in less than five days of lost time). In addition, Liberty Mutual bases its cost estimates on BLS injury data. Thus, all of the problems of underreporting in the BLS system apply to the Liberty Mutual cost estimates as well.

A 2011 comprehensive study examined a broad range of data sources, including data from the BLS, the Centers for Disease Control and Prevention, the National Council on Compensation Insurance and the Healthcare Cost and Utilization Project, to determine the cost of fatal and nonfatal occupational injuries and illnesses for 2007. This study estimated the medical and indirect (productivity) costs of workplace injuries and illnesses at \$250 billion annually, more than the cost of cancer.²² A follow-up analysis found that workers' compensation covered only 21% of these costs, with 13% borne by private health insurance, 11% by the federal government and 5% by state and local governments. The majority of the costs—50%—were borne by workers and their family members.²³

A 2015 report by OSHA—"Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job"—outlined how work-related injuries have devastating impacts on workers and their families. According to the report, workers who are injured on the job suffer great economic loss.

²⁰ 2019 Liberty Mutual Workplace Safety Index, *available at* <u>https://business.libertymutualgroup.com/business-insurance/Documents/Services/DS200.pdf</u>.
 ²¹ Liberty Mutual Research Institute for Safety, news release, April 16, 2002.

¹⁹ National Academies of Sciences, Engineering, and Medicine, *A Smarter National Surveillance System for Occupational Safety and Health for the 21st Century*, Washington, D.C.: The National Academies Press, 2018.

²² Leigh, J.P., "Economic Burden of Occupational Injury and Illness in the United States," The Milbank

Quarterly, Vol. 89, No. 4, (2011). ²³ Leigh, J.P., and J. Marcin, "Workers' Compensation Benefits and Shifting Costs for Occupational Injuries and Illnesses," Journal of Occupational and Environmental Medicine, Vol. 54, No. 4, (2012).

Even after receiving workers' compensation benefits, injured workers' incomes are, on average, nearly \$31,000 lower over 10 years than if they had not suffered an injury.²⁴

One of the major contributors to the severe loss of income is the gross deficiencies and inequities in the workers' compensation system, which continues to be governed by 50 different state laws. A 2015 multipart series by Pro Publica and National Public Radio exposed the failure of the workers' compensation system to provide fair and timely compensation for workers hurt on the job.²⁵ The series—"Insult to Injury: America's Vanishing Worker Protections"—was based on a yearlong investigation, which found that over the previous decade there had been a systematic effort by insurers and employers to weaken workers' compensation benefits for injured workers. Since 2003, legislators in 33 states have passed legislation reducing benefits or limiting eligibility. The benefits provided to workers vary widely across different states. For example, the maximum compensation for loss of an eye is \$261,525 in Pennsylvania, but only \$27,280 in Alabama. In many states, employers have great control over medical decisions. Workers are not allowed to pick their own doctors, and employers can demand review by "independent medical examiners" picked by employers who can challenge medical determinations regarding the workrelatedness of the condition, the degree of disability and prescribed medical treatment. According to Pro Publica, all of these factors have contributed to the demolition of the workers' compensation system and left injured workers and their families, and society at large, bearing the costs of their injuries.

OSHA ENFORCEMENT AND COVERAGE

Enforcement is a cornerstone of the Occupational Safety and Health Act and always has been a major part of the OSHA program. However, different administrations have placed different levels of emphasis on enforcement. In general, Democratic administrations have favored strong enforcement, supplemented by compliance assistance and voluntary programs, while Republican administrations have placed a greater emphasis on compliance assistance, backed up by enforcement. But all administrations face deficiencies and weaknesses in OSHA's statutory enforcement authority and significant resource constraints that have greatly limited the agency's ability to meet its responsibilities.

At this time, two-plus years into the Trump administration, OSHA still does not have a confirmed assistant secretary, and to date there have not been dramatic changes in OSHA's enforcement program or policies. However, the number of OSHA inspectors onboard has declined due to President Trump's federal hiring freeze and the failure to fill vacant positions. As a result, the overall level of enforcement activity, particularly involving more complicated and time-intensive cases, has declined.

²⁴ U.S. Department of Labor, Occupational Safety and Health Administration, "Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job," 2015, *available at* www.osha.gov/Publications/inequality_michaels_june2015.pdf.

²⁵ Pro Publica and National Public Radio, "Insult to Injury: America's Vanishing Worker Protections," March 2015, *available at <u>www.propublica.org/series/workers-compensation</u>.*

The OSH Act excluded many workers from coverage, including workers covered by other safety and health laws, and state and local public employees in states without a state OSHA plan. Over the years, there have been efforts to expand coverage. But today millions of workers—many state and local public employees—still lack OSHA coverage and are at much greater risk of being injured on the job.

Compliance Staffing and Inspections

Since the Trump administration took office in January 2017, the number of federal OSHA compliance inspectors has declined significantly, and is now at the lowest level since the early 1970s. As of December 2018, OSHA had 752 inspectors (excluding supervisors), down from 764 inspectors in December 2017, and from 815 inspectors in December 2016. This reduction is the result of attrition and a federal hiring freeze imposed during the first year of the Trump administration, which since has been lifted for OSHA, and the failure to fill vacant positions.

Currently, the state OSHA plans have 1,063 inspectors, up from 1,057 inspectors the previous year. There are currently a total of 1,815 federal and state OSHA inspectors responsible for enforcing the safety and health law at more than 9 million workplaces, fewer than the 1,821 inspectors the previous year.²⁶

In FY 2018, federal OSHA inspectors conducted 32,020 inspections, down from 32,396 inspections in FY 2017, and the state OSHA agencies combined conducted 41,066 inspections.

While under the Trump administration, the overall number of federal OSHA inspections has remained relatively constant, the agency is conducting far fewer inspections involving significant cases or hazards that require more intensive, time-consuming inspections. From FY 2016 to FY 2018, the number of inspections for significant cases declined from 131 to 65 (-50%); the number of inspections for ergonomic hazards declined from 69 to 19 (-72%); the number of inspections for workplace violence declined from 49 to 41 (-16%).

The decline in enforcement activity involving significant and complicated cases can be seen in the data from OSHA's enforcement weighting system, a protocol implemented under the Obama administration that gives greater weight to more time-intensive inspections than to shorter-duration routine inspections. In FY 2018, OSHA reported 41,500 enforcement units (EUs) for inspections and investigations, compared with 42,900 EUs in FY 2016, with declines in EUs for significant cases, ergonomics, heat and workplace violence tracking the decline in inspections for these type of cases.

In FY 2018, the majority of federal OSHA inspections took place in the construction industry (52%), followed by manufacturing (21%), transportation and warehousing (4%) and administrative and support and waste management and remediation services (4%). The health care and social assistance sector, which accounted for 21% of private-sector work-related injuries and illnesses, and 15.7% of private-sector employment in 2017, received less than 2% of federal OSHA inspections in FY 2018.

²⁶ This reflects the number of federal inspectors plus the number of inspectors "on board" reflected in the FY 2019 state plan grant applications. It does not include compliance supervisors.

In the OSHA state plans, the construction industry accounted for 40% of inspections and the manufacturing industry accounted for 17%. The state plans, which cover both public- and private-sector workers, conducted more of their inspections in administrative and support and waste management and remediation services (6%), public administration (6%), retail trade (4%), health care and social assistance (4%), and agriculture, forestry, fishing and hunting (3%), than federal OSHA.

At its current staffing and inspection levels, it would take federal OSHA, on average, 165 years to inspect each workplace under its jurisdiction just once. Inspection frequency generally is better in states with OSHA-approved plans, yet is far from satisfactory. In these states, it now would take the state OSHA plans a combined 108 years to inspect each worksite under state jurisdiction once. In 25 states, it would take 150 years or more for OSHA to pay a single visit to each workplace.

The current level of federal and state OSHA inspectors provides one inspector for every 79,262 workers. This compares with the benchmark of one labor inspector for every 10,000 workers recommended by the International Labor Organization for industrialized countries.²⁷ In the states of Arizona, Arkansas, Delaware, Florida, Georgia, Illinois, Kansas, Louisiana, Massachusetts, Mississippi, Missouri, New Mexico, Oklahoma, Pennsylvania, South Dakota, Texas and Wisconsin, the ratio of inspectors to employees is greater than one per 100,000 workers, with Louisiana having the highest ratio at one inspector per 190,772 workers.

Federal OSHA's ability to provide protection to workers has greatly diminished over the years. When the AFL-CIO issued its first "Death on the Job: The Toll of Neglect" report in 1992, federal OSHA could inspect workplaces under its jurisdiction once every 84 years, compared with once every 165 years at the present time. Since the passage of the OSH Act, the number of workplaces and number of workers under OSHA's jurisdiction has nearly doubled, but there are fewer numbers of OSHA staff and OSHA inspectors. In 1975, federal OSHA had a total of 2,435 staff (inspectors and all other OSHA staff) and 1,102 compliance staff (including supervisors) responsible for the safety and health of 85.8 million workers at more than 3.9 million establishments. In FY 2019, there are 1,911 federal OSHA staff responsible for the safety and health of 155.8 million workers at more than 9 million workplaces.

At the peak of federal OSHA staffing in 1980, there were 2,951 total staff and 1,469 federal OSHA inspectors (including supervisors). The ratio of OSHA inspectors per 1 million workers was 14.8. But now, there are only 875 federal OSHA inspectors (including supervisors), or 5.6 inspectors per 1 million workers.

Violations and Penalties

Penalties for OSHA violations have always been relatively low, due to statutory limitations and enforcement policies that prioritize the settlement of cases in order to achieve quicker abatement of hazards, rather than imposing the maximum fines.

²⁷ International Labor Office, Strategies and Practice for Labor Inspection, G.B. 297/ESP/3, Geneva, November 2006. The ILO benchmark for labor inspectors is one inspector per 10,000 workers in industrial market economies.

In recent years, administrative and statutory changes have resulted in an increase in OSHA penalties. A revised penalty policy implemented during the Obama administration in 2010 resulted in a doubling of fines for serious violations. Passage of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, which extended the coverage of the Inflation Adjustment Act to OSHA, further increased penalties for OSHA violations. Under the 2015 law, OSHA was authorized to raise maximum penalties by approximately 80%, the amount of inflation since the last time OSHA penalties were raised in 1990, and to regularly update penalties to account for future inflation.

This statutory increase in federal OSHA penalties took effect Aug. 1, 2016. The latest adjustment, effective Jan. 23, 2019, increased the maximum penalty for serious violations to \$13,260, and for willful and repeat violations to \$132,598.²⁸ State plans also are required to raise their statutory maximum penalties in order to be as effective as the federal OSHA program, but to date, not all states have complied.

In FY 2018, the average penalty for a serious violation for federal OSHA was \$3,580, compared with an average penalty of \$3,553 for serious violations in FY 2017. In the state OSHA plans, the average penalty for a serious violation remained low at \$1,985; in FY 2017, it was \$1,849.

In FY 2018, the trend of lowest and highest average penalties for serious violations continued: Oregon had the lowest average penalty for serious violations at \$587, while California had the highest average penalty at \$7,699 per serious violation.

The number of willful violations cited by federal OSHA in FY 2018 was 341, up from 319 in FY 2017, but still far lower than the 542 willful violations issued during FY 2016, the last full year of the Obama administration. The average penalty per willful violation was \$61,900 in FY 2018 compared with \$65,229 in FY 2017. The average penalty per repeat violation was \$11,501 in FY 2018, similar to the average repeat penalty (\$11,349) in FY 2017. In states with state-run OSHA plans, in FY 2018, there were 156 willful violations issued, with an average penalty of \$41,499 per violation, and 2,177 repeat violations issued, with an average penalty of \$5,088 per violation.

For FY 2018, federal OSHA reported that the agency brought 65 "significant" enforcement cases.²⁹ This is more than the 53 significant cases reported by OSHA for FY 2017, but far fewer than the 131 significant cases for FY 2016.³⁰

While OSHA enforcement in worker fatality cases somewhat improved in recent years, it remains too weak. According to OSHA inspection data, the average total penalty in a fatality case in FY 2018 was just \$14,231 for federal and state OSHA plans combined. However, averages can distort the real picture of fatality penalties in situations in which large cases with very high penalties raise the averages substantially. Using median penalties that capture the point

²⁸ Prior to the passage of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, the maximum penalty for a serious violation was \$7,000 and the maximum penalty for a willful or repeat violation was \$70,000 per violation.

²⁹ OSHA defines a significant enforcement case as one where the investigation results in a total proposed penalty of greater than or equal to \$180,000 or one that involves novel enforcement issues.

³⁰ For the first 10 months of FY 2016, the threshold for a significant case was \$100,000, increased to \$180,000 on Aug. 1, 2016, when the increase in maximum penalties took effect.

where half of the penalties are below and half the penalties are above the median provides a better picture of the typical penalties in cases involving worker deaths.

The median current penalty per fatality investigation conducted in FY 2018 was \$7,761 for federal OSHA and the median current penalty was \$2,700 for the state OSHA plans combined, according to enforcement data provided by OSHA in April 2018. This compares with the respective penalties in FY 2017: \$7,500 for federal OSHA and \$4,000 for the state OSHA plans. These data include enforcement cases that still are under contest, and some cases that still are open.

A state-by-state analysis of fatality investigations shows that penalties in cases involving worker deaths vary widely from state to state. Rhode Island, which had three fatality investigations in FY 2018, had \$0 for both median initial and current penalties in FY 2018. Oregon had the next lowest median current penalty for fatality investigations with \$1,005 in median penalties assessed, followed by Montana (\$2,328), South Carolina (\$2,375), Illinois (\$2,600) and Utah (\$3,000). Delaware had the highest current median penalty (\$51,736), followed Minnesota (\$26,000), Hawaii (\$24,630), Wyoming (\$22,473) and Mississippi (\$18,375).

Enforcement Initiatives and Policies

During the first two years of the Trump administration, in the absence of a confirmed assistant secretary, there has not been a major overhaul or reorientation of OSHA's enforcement program. A number of important enforcement programs and initiatives implemented by the Obama administration, including the Severe Violator Enforcement Program, Temporary Worker Initiative and Severe Injury Reporting Program have continued. However, key policies and practices implemented by the Obama administration to enhance worker rights and improve transparency and disclosure have been rolled back.

Soon after taking office, in April 2017, in response to calls from the business community, the Trump administration withdrew the Obama administration's policy that provided for nonunion workers to designate a walkaround representative to participate on their behalf in OSHA worksite inspections. The policy, set forth in a 2013 letter of interpretation, clarified that under OSHA regulations, a collective bargaining representative or another individual designated by the employees, if the inspector determined that the individual will aid the inspection, could serve as the walkaround representative.³¹ This provided for nonunion workers to designate a union or worker center as their representative for the purpose of participating in the OSHA inspection. Business groups strongly objected to and challenged this policy. In response, the Trump administration withdrew this letter of interpretation, stating it no longer represented OSHA policy.

The Trump administration also backtracked on Obama initiatives to use public disclosure of information to highlight serious safety and health problems. In 2010, OSHA started posting information on every fatality report it received on the home page of its website, to educate and

³¹ Fairfax, Richard E., Deputy Assistant Secretary, Occupational Safety and Health Administration, Letter to Steve Sallman, Health and Safety Specialist, United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, Feb. 21, 2013, *available at* <u>www.osha.gov/laws-regs/standardinterpretations/2013-02-21</u>.

inform the public about the high toll of work-related deaths and the need to prevent them. The information included the name of the worker, the circumstances surrounding the death and the employer. In August 2017, the Trump administration stopped posting these reports. Now, OSHA reports only fatalities it has investigated and, citing privacy concerns, will not release the name of the deceased worker. Worker fatality information no longer is posted on the home page of OSHA's website, which instead displays initiatives OSHA is taking to cooperate with employers. Families of workers killed on the job have protested this change in policy, which diminishes attention to these workplace deaths.

The Obama administration also expanded the use of press releases on significant enforcement cases to focus public attention on employers with serious, willful or repeated violations of the law. OSHA has always issued press releases on important enforcement cases, but under the Obama administration, it was OSHA policy to issue a press release on all enforcement cases with total proposed penalties of greater than \$40,000, and for local OSHA officials to engage in active outreach to the press. The business community strenuously objected to the issuance of these press releases and when the Trump administration took office, the issuance of OSHA press releases on enforcement cases was suspended. Several months later, from public pressure, the agency again issued some press releases for some major enforcement cases, but there no longer is a policy or practice to issue press releases on all significant enforcement cases.

Other Obama administration programs and policies to address high-hazard employers and industries and to respond to changes in the workforce and employment relationships have continued. These include the Severe Violator Enforcement Program, launched in 2010, to focus on and provide enhanced oversight of the most persistent and egregious violators; the Temporary Worker Initiative to help prevent injuries and illnesses among temporary workers by holding both staffing agencies and host employers jointly responsible; and the Severe Injury reporting and Investigation Program.

According to OSHA,138 new cases were added to the log of the Severe Violator Enforcement Program in FY 2018.³² As of the end of FY 2018, more than 600 employers remained in the severe violator program subject to OSHA enforcement.³³

OSHA has continued to conduct the Temporary Worker Initiative to help prevent injuries and illnesses among temporary workers who are employed by staffing agencies but work for different host employers. However, the number of inspections conducted under the TWI have declined significantly. Under OSHA's temporary worker policy, both host employers and staffing agencies may be held jointly responsible for complying with safety and health rules. In FY 2018, according to data provided by OSHA, the agency conducted 153 inspections of host employers as part of the temporary worker initiative and 86 inspections of staffing agencies, far fewer than the 621 inspections of host employers and 187 inspections of staffing agencies conducted in FY 2016, the last full year of the Obama administration.

³²OSHA, Severe Violators Log, accessed April 11, 2019, *available at <u>www.osha.gov/dep/svep_log_03-</u><u>01-19.xlsx</u>.*

³³ OSHA Inspection Data in Response to AFL-CIO Data Request FY 2018.

For CY 2018, OSHA reported that the agency received 12,057 severe injury reports, 9,135 hospitalization reports and 2,922 amputation reports. This was a small increase from the 11,884 severe injury reports received in CY 2017. Twenty-nine percent of the CY 2018 reports received an inspection; 71% of the reports were investigated by employers, similar to CY 2017.³⁴

In conjunction with these special emphasis programs under the Obama administration, OSHA stepped up its enforcement efforts on ergonomic hazards. In FY 2016, there were 13 serious violations for ergonomic hazards under 5(a)(1), six of which were in the poultry industry. In addition, in FY 2016 OSHA issued 96 Hazard Alert Letters (HALs) for ergonomic hazards. These letters are issued in cases where OSHA identifies serious ergonomic hazards, but is not able to meet the legal burden for issuing a general duty citation. Under the Trump administration, enforcement on ergonomics hazards has declined significantly. There were only two cases that resulted in the issuance of 5(a)(1) general duty clause citations in FY 2017. In FY 2018, there were 51 ergonomics inspections cases where OSHA issued 31 Hazard Alert Letters, but no 5(a)(1) citations.

Criminal Enforcement

Throughout OSHA's history, criminal enforcement under the Occupational Safety and Health Act has been rare. According to information provided by the Department of Labor, since the passage of the act in 1970, only 99 cases have been prosecuted under the act, with defendants serving a total of 112 months in jail. During this time, there were approximately 410,000 workplace fatalities, according to National Safety Council and BLS data, about 20% of which were investigated by federal OSHA.^{35, 36}

By comparison, the Environmental Protection Agency reported in FY 2018 that there were 129 criminal enforcement cases initiated under federal environmental laws and 105 defendants charged, resulting in 73 years of jail time and \$86.3 million in fines and restitution. While there were fewer criminal prosecutions by EPA in FY 2018 than during the last year of the Obama administration (FY 2016), there were more cases, fines and jail time in this one year than during OSHA's entire history.³⁷ The aggressive use of criminal penalties for enforcement of environmental laws, and the real potential for jail time for corporate officials, serve as a powerful deterrent.

The criminal penalty provisions of the OSH Act are woefully inadequate. Criminal enforcement is limited to those cases in which a willful violation results in a worker's death or where false statements in required reporting are made. The maximum penalty is six months in jail, making

³⁴ Kapust, Patrick J., Acting Director, Directorate of Enforcement Programs, Occupational Safety and Health Administration, PowerPoint presentation, American Bar Association, Occupational Safety and Health Law Committee Midwinter Meeting, March 2019.

³⁵ "Criminal Referrals by OSHA to DOJ or US Attorneys or Significant Aid to Local Prosecutors (Updated April 8, 2016)" and other information compiled and provided by Office of the Solicitor of Labor. The information for the early years of the statute is incomplete and may not include all cases prosecuted.
³⁶ In addition to cases prosecuted under the Occupational Safety and Health Act and the U.S. federal criminal code (18 U.S.C. 1001), state and local prosecutors have prosecuted employers for deaths and injuries to workers under their state and local laws. There is no complete accounting of these cases.
³⁷ U.S. Environmental Protection Agency, EPA Enforcement Annual Results 2018, *available at* https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=0b9d73f351d648698f63bba3f3b15114.

these cases misdemeanors. Criminal penalties are not available in cases where workers are endangered or seriously injured, but no death occurs. This is in contrast to federal environmental laws, where criminal penalties apply in cases where there is "knowing endangerment," and the law makes such violations felonies. Due to the weak criminal penalties under the OSH Act, the Department of Justice prosecutes few cases under the statute. Instead, in some instances DOJ will prosecute OSHA cases under other federal statutes with stronger criminal provisions if those laws also have been violated.

In response to the OSH Act's severe limitations, over the years there have been a number of initiatives to expand criminal enforcement for safety and health hazards by utilizing other statutes for prosecution. These include the DOJ Worker Endangerment Initiative, launched in 2005 and expanded in 2016, that, focuses on companies that put workers in danger while violating environmental laws, and prosecutes such employers using the much tougher criminal provisions of environmental statutes.^{38, 39, 40} Under this initiative, DOJ has significantly enhanced its criminal prosecutions for worker safety and health, successfully bringing cases that have resulted in convictions and significant jail time for defendants.⁴¹

During the Obama administration, the Department of Labor stepped up criminal enforcement efforts, referring more cases for criminal prosecution to the DOJ and U.S. attorneys. In addition, DOL expanded assistance to local prosecutors in the investigation and prosecution of cases involving worker deaths and injuries. To date, the Trump administration has continued this enhanced criminal enforcement activity, and Secretary of Labor Acosta has committed to pursuing criminal sanctions where appropriate. In FY 2018, DOL referred 11 cases for criminal prosecution, compared with 19 cases in FY 2017.⁴²

While criminal enforcement of job safety violations at the federal level remains quite limited, in a number of states and localities, prosecutors are pursuing criminal charges against employers and individuals in cases involving job deaths and injuries. In Philadelphia, the district attorney successfully prosecuted the general contractor and crane operator for deaths of six individuals in the 2013 Salvation Army building collapse, winning convictions for involuntary manslaughter and jail time. In New York City, the Manhattan district attorney won a manslaughter conviction against the general contractor, Harco Construction, for the 2015 trenching death of a young undocumented immigrant construction worker. The foreman for the excavation company, Sky Materials, was convicted of criminally negligent homicide and reckless endangerment, and sentenced to one to three years in jail. In both of these cases, unions and local safety and health

 ³⁸ Goldsmith, Andrew D., ⁵Worker Endangerment Initiative," PowerPoint presentation, American Bar Association, Occupational Safety and Health Committee, Miami Beach, Florida, February 2009.
 ³⁹ Department of Justice, Office of Public Affairs News Release, "The Departments of Justice and Labor Announce Expansion of Worker Endangerment Initiative to Address Environmental and Worker Safety Violations," Dec. 17, 2015, *available at www.justice.gov/opa/pr/departments-justice-and-labor-announce-expansion-worker-endangerment-initiative-address*.

⁴⁰ Memorandum of Understanding between the U.S. Departments of Labor and Justice on Criminal Prosecutions of Worker Safety Laws, Dec. 17, 2015, *available at* www.justice.gov/enrd/file/800526/download.

⁴¹ "Frontline: A Dangerous Business Revisited," March 2008, *available at* www.pbs.org/wgbh/pages/frontline/mcwane/penalty/initiative.html.

⁴² Information on criminal referrals for FY 2018 provided to the AFL-CIO by the Office of the Solicitor of Labor.

activists worked with prosecutors to provide assistance and to educate the community about the job safety crimes.

Voluntary Programs

Voluntary programs have always been part of OSHA's programs, but the emphasis placed on voluntary initiatives has varied under different administrations. Under the Obama administration, strong enforcement was the priority, with voluntary programs supplementing enforcement efforts. Currently, the Trump administration has indicated it intends to place a greater emphasis on voluntary programs, while maintaining OSHA's enforcement program.

The major voluntary programs conducted by OSHA are the Voluntary Protection Program, a program that recognizes companies with a high level of safety and health performance, and the Alliance program, under which OSHA partners with trade associations, professional groups and others to carry out safety and health initiatives targeted at particular industries or hazards. In FY 2018, OSHA formed 24 new alliances, up from 17 in FY 2017 and 20 in FY 2016. The total number of active alliances in FY 2018 is 245. OSHA approved 59 new VPP sites in FY 2018, down from 78 in FY 2017 and the same as in FY 2016, bringing the total number of federal OSHA VPP sites at the end of FY 2018 to 1,386.⁴³

Coverage

The current OSHA law still does not cover 8 million state and local government employees in 24 states and the District of Columbia, although these workers encounter the same hazards as private-sector workers, and in many states have a higher rate of injury than their private-sector counterparts.^{44, 45}

Similarly, millions who work in the transportation and agriculture industries and at Department of Energy contract facilities lack full protection under the OSH Act. These workers theoretically are covered by other laws, which in practice have failed to provide equivalent protection.

In 2013, OSHA coverage was extended to flight attendants when the Federal Aviation Administration rescinded a longstanding policy and ceded jurisdiction to OSHA on a number of key safety and health issues, in response to the FAA Modernization and Reform Act of 2012 (PL 112-95). This policy action was the culmination of decades of effort by the flight attendant unions to secure OSHA protections for flight attendants. Specifically, FAA issued a new policy that extended OSHA regulations and jurisdiction on hazard communication, bloodborne

⁴³ OSHA Directorate of Cooperative and State Programs.

⁴⁴ Under the OSH Act, states may operate their own OSHA programs. Twenty-one states and one territory have state OSHA programs covering both public- and private-sector workers. Connecticut, Illinois, Maine, New Jersey and New York have state programs covering state and local employees only. Maine's state program went into effect Aug. 5, 2015.

⁴⁵ Some states provide safety and health protection to public employees under state laws that are not OSHA-approved plans. In 2014, the commonwealth of Massachusetts enacted legislation establishing legally binding safety and health protections for public employees, but this law has not been submitted for federal OSHA approval.

pathogens, hearing conservation, recordkeeping, and access to employee exposure and medical records for cabin crews.⁴⁶

Whistleblower Protection

One of OSHA's key responsibilities is to enforce the anti-retaliation provisions under section 11(c) of the Occupational Safety and Health Act. In addition, OSHA has the responsibility to enforce the whistleblower provisions of 21 other statutes, ranging from the Federal Rail Safety Act to the Sarbanes-Oxley finance law. Many of these statutes deal with safety and health matters, but others do not.

Under the Obama administration, the Department of Labor made the protection of a "worker's voice" a priority initiative. As part of this effort, OSHA took a number of actions to strengthen the Whistleblower Protection Program to protect workers who raise job safety issues and exercise other rights from employer retaliation.

The Obama administration elevated the whistleblower program, creating a new separate Directorate of Whistleblower Protection Programs at OSHA. (Previously, the program had been part of OSHA's enforcement directorate.) To improve the timeliness and consistency of case handling, the agency updated and revised its investigators' manual and trained staff on policies and procedures.

The Obama administration also established a new Whistleblower Protection Advisory Committee composed of representatives from labor, management and the public, charged with overseeing and providing advice and guidance to OSHA on its whistleblower protection program. Unfortunately, the Trump administration has terminated this advisory committee, eliminating oversight on this important program.

The Obama administration created a separate budget line item for the whistleblower program and sought increased funding and staffing for the program. For FY 2018, the budget for the program was \$17.5 million, with 127 staff authorized, but only 114 staff on board, a significant decrease from the 135 positions in FY 2016. Currently, in FY 2019, the number of authorized whistleblower positions is 126, with a budget of \$17.5 million.

For FY 2020, the Trump administration has proposed an increase in funding and staffing for the whistleblower program, requesting \$131 million and 131 positions. This is still fewer than the number of positions (135) during the last full year of the Obama administration. Moreover, in its FY 2020 budget request, the Trump administration has proposed to reorganize the whistleblower program, eliminating the supervisory personnel for the program in the regional offices, and centralizing management and supervision for the program at OSHA headquarters in Washington, D.C. There are serious concerns that such a centralization will make it harder for whistleblower investigators in the field, who already are stretched thin, to carry out their work.

⁴⁶ Department of Transportation, Federal Aviation Administration, Occupational Safety and Health Standards for Cabin Crew Members, Aug. 21, 2013, *available at <u>www.osha.gov/faa/faa_osha.pdf</u>.*

OSHA whistleblower program data for FY 2018 show that the number of cases received and completed by the agency declined from FY 2017. In FY 2018 OSHA received 3,007 cases and completed 2,924 cases. This compares with 3,303 cases received and 3,348 cases completed in FY 2017. In FY 2018, 62% of the cases received (1,870 out of 3,007) were 11(c) complaints. Workers also filed large numbers of whistleblower cases under the Federal Rail Safety Act (336), the Surface Transportation Act (322) and the Sarbanes-Oxley Act (155).⁴⁷

While the number of whistleblower cases filed under the Trump administration has declined, due to the cutbacks in whistleblower staff the backlog in cases has grown and continues to be a serious problem.

At the end of FY 2018, there were 2,540 pending cases; 1,530 of these were 11(c) cases. The average time to complete cases was 283 days in FY 2018, down from an average of 292 days in FY 2017. For OSHA 11(c) cases, the average time to complete cases was 271 days in FY 2018, an increase from 260 days in FY 2017. The long amount of time to resolve cases is particularly problematic under the OSH Act and those other statutes where there is no opportunity for preliminary reinstatement for workers while the case is being resolved, nor a separate right of action for the complainant to pursue the case on his or her own. During this time, workers are in limbo, with no recourse or redress for discriminatory actions. Other whistleblower statutes provide these rights.

In FY 2018, 739 cases were found to be meritorious, with \$27.7 million in remedies (back pay, damages, etc.). This compares with 846 merit cases and \$29.3 million in damages in FY 2017. The biggest average awards in FY 2018 were for cases brought under the Sarbanes-Oxley Act (\$322,099) and the Federal Rail Safety Act (\$90,629). For the 11(c) program, damage awards were much smaller. In FY 2018, there were 510 meritorious 11(c) cases, with damages averaging \$7,758 per case.

OSHA also has addressed the issue of injury reporting through its whistleblower program, in particular programs and policies that retaliate against workers or discourage workers from reporting injuries. In recent years, these employer programs and policies have grown in a wide range of industries. Under OSHA regulations, reporting work-related injuries is a protected activity, and employers are prohibited from retaliating against workers who report injuries. The Federal Rail Safety Act, for which OSHA enforces the whistleblower provisions, also includes specific provisions that prohibit retaliation against workers who report injuries.

OSHA whistleblower enforcement data confirms that retaliation against workers who report job injuries is a significant problem. In FY 2018, 451 out of 2,965 discrimination cases involved retaliation for injury reporting. OSHA 11(c) cases accounted for 316 of these claims, of which 115 (36%) were found to have merit. Claims under the Federal Rail Safety Act accounted for 127 of the injury reporting retaliation cases, of which 14 cases (11%) were meritorious.

⁴⁷ Occupational Safety and Health Administration, Whistleblower Investigation Data, Report Period: 10/1/17 to 9/30/18.

To address the problems of retaliation related to injury reporting, in March 2012 OSHA issued a policy memorandum to provide guidance to the field.⁴⁸ The memo outlined the types of employer safety incentive and disincentive policies and practices that could constitute illegal retaliation under Section 11(c) and other whistleblower statutes, and the steps investigators should take in responding to complaints of employer retaliation for injury reporting. To date, the memo remains in effect.

In addition, OSHA issued an electronic injury reporting rule in May 2016 that included provisions prohibiting retaliation against workers for reporting injuries and making such actions a regulatory violation subject to citation and penalties (29 CFR 1904.35). The anti-retaliation provisions became effective in December 2016 and remain in effect. However, in October 2018, OSHA issued an enforcement memo that limited the scope of these provisions as they apply to workplace safety incentive programs and post-incident drug testing, placing the burden on workers to demonstrate actual retaliation in individual cases, rather than creating a presumption that certain types of programs were impermissible.⁴⁹ This new policy interpretation will greatly limit the utility of the anti-retaliation provisions in prohibiting policies and practices that discourage the reporting of injuries.

In FY 2018, OSHA issued 17 citations for violations of the 1904.35 provisions, with the U.S. Postal Service receiving 10 of these citations. Employer groups have filed legal challenges to the anti-retaliation provisions of the injury reporting rule, but this litigation was held in abeyance while the Trump administration reconsidered other aspects of the injury reporting regulation. That litigation has been reactivated, and the challenge will be considered by the U.S. District Court for the Western District of Oklahoma this year.

Even with improvements in the OSHA whistleblower program in recent years, problems and deficiencies remain. The biggest problems stem from deficiencies in the OSH Act itself. The anti-retaliation provisions of the law were adopted 49 years ago and are weak and outdated compared with more recently adopted statutes. The OSH Act provides only 30 days to file a discrimination complaint, compared with 180 days provided by a number of other laws. If a worker fails to file a complaint within this time, he or she simply is out of luck.

The OSH Act also has extremely limited procedures for the enforcement of discrimination cases. If there is no agreement or settlement of the findings, the secretary of labor must bring cases in U.S. District Court. Most other statutes provide for an administrative proceeding. The formal procedures of the OSH Act mean meritorious cases may be dropped simply because the solicitor of labor does not have the resources to pursue them. Moreover, unlike other statutes, such as the Mine Safety and Health Act and the Surface Transportation Assistance Act, the OSH Act does not allow a complainant the right to pursue the case on his or own if the secretary fails to act within a designated timeframe or declines to act at all. And the OSH Act does not provide for

⁴⁸ Richard E. Fairfax, Deputy Assistant Secretary, Memorandum for Regional Administrators, Whistleblower Program Managers, "Employer Safety Incentive and Disincentive Policies and Practices," March 12, 2012.

⁴⁹ Kim Stille, Acting Director of Enforcement, Memorandum for Regional Administrators and State Designees, "Clarification of OSHA's Position on Workplace Safety Incentive Programs and Post-Incident Drug Testing Under 29 CFR 1904.35(b)(1)(iv)," Oct. 11, 2018, *available at* <u>www.osha.gov/laws-regs/standardinterpretations/2018-10-11</u>.

preliminary reinstatement, as other statutes such as the Mine Safety and Health Act do, which means that workers who are retaliated against for exercising their job safety rights have no remedy while final action on their case is pending. These deficiencies in the whistleblower program only can be remedied through legislative improvements in the OSH Act.

REGULATORY ACTION, BUDGET AND LEGISLATION

During its eight years in office, the Obama administration issued many important new OSHA standards and regulations to protect workers from serious workplace hazards and to expand workers' rights. The key achievements include standards on silica, beryllium and confined space entry in construction, and rules to require prompt reports of severe injuries to OSHA, electronic reporting of injury data and enhanced anti-retaliation protections for workers who report injuries.

Unfortunately, due to industry and political opposition, many of these protections were delayed and took years to issue. OSHA's standards on silica and beryllium both took 19 years, finally issued in the last year of the administration. For many other serious hazards, rules were not completed or barely initiated. As a result, at the end of the Obama administration, there was a long unfinished agenda of hazards needing action, including combustible dust, chemical process safety management, infectious diseases and workplace violence.

The Trump Administration's Regulatory Record

Deregulation was a major plank in President Trump's platform and since taking office in January 2017, the Trump administration has moved aggressively on its deregulatory agenda. Through executive orders, legislative action and delays and rollbacks in regulations, the Trump administration has sought to repeal or weaken many Obama administration rules and fundamentally to change the government's role in protecting workers and the public through regulatory safeguards.

Soon after taking office, President Trump issued two significant executive orders to set the foundation for the administration's deregulatory agenda. Executive Order 13771, "Reducing Regulation and Controlling Regulatory Costs," issued Jan. 30, 2017, requires the elimination of two regulations for every new regulation promulgated. The order prohibits agencies from instituting new protections unless they offset the costs by removing existing protections from the books, putting workers and the public in greater danger. OMB issued guidance to the agencies on implementing the order, but it still is very unclear as to how this regulatory accounting actually will work. Public Citizen, joined by the Communications Workers of America (CWA) and the Natural Resources Defense Council, filed a legal challenge to the order in the U.S. Court of Appeals for the District of Columbia Circuit, but the court has declined to rule on the matter in the absence of a concrete action applying the order and a demonstration of harm.

Another executive order—EO 13777—"Enforcing the Regulatory Reform Agenda," issued Feb. 24, 2017, requires agencies to appoint a regulatory reform officer and to establish a regulatory reform task force for the purpose of identifying regulations that should be repealed, replaced or modified. Agencies had 90 days to identify regulations for rollback or modification.

Early in the administration, President Trump worked with congressional Republicans to use the Congressional Review Act to repeal many rules issued at the end of the Obama administration. The Congressional Review Act provides Congress the opportunity to review and repeal recently issued final rules under fast track procedures that only require a simple majority vote. Previously, the CRA was used successfully only once, in 2001 at the beginning of the Bush administration, to repeal OSHA's ergonomics standard issued by the Clinton administration near the end of its second term.

In the first four months of the Trump administration, 14 final rules issued by the Obama administration were repealed under the CRA. Two of these were worker safety and health rules. H.J.Res. 37, signed on March 27, 2017, repealed a rule to implement the Obama executive order "Fair Pay and Safe Workplaces," which would have enhanced reporting and oversight of federal contractors to improve compliance with workplace safety and labor laws. H.J.Res. 83, signed on April 3, 2017, repealed OSHA's rule that clarified employers' obligation to keep accurate injury and illness records. This means OSHA only will be able to hold employers accountable for accurately reporting workplace injuries within six months of an inspection, making it impossible for OSHA to enforce long-term systemic failures of employers to record workplace injuries.

Other significant safety and health rules issued during the Obama administration that escaped repeal under the CRA were delayed or targeted for weakening. The effective date of OSHA's final beryllium standard was delayed until May 20, 2017, and enforcement of the standard delayed until May 11, 2018. The Trump administration then moved to weaken the beryllium standard for the construction and maritime industries, proposing in June 2017 to revoke many of the rule's requirements, including key exposure monitoring and medical surveillance requirements. While these requirements currently remain on the books, OSHA has refused to enforce them, informing employers there is no obligation to comply. According to OSHA's latest regulatory agenda, final action to revoke the exposure monitoring and medical surveillance requirements for beryllium in construction and maritime is scheduled for June 2019.

Enforcement of OSHA's landmark silica standard in the construction industry was delayed for three months until Sept. 23, 2017. Due to strong pressure from the building and construction trades unions, the administration did not move to weaken the rule and continued to defend it from legal challenges in federal court. In December 2017, the U.S. Court of Appeals for the District of Columbia issued a decision strongly upholding the rule, rejecting all of the industry arguments. The court also found merit in the unions' arguments that the medical removal provisions of the rule should be strengthened and ordered OSHA to reconsider this issue. The OSHA silica standard is now in effect and being enforced in the construction industry and general industry.

The Trump administration also delayed and weakened OSHA's electronic injury reporting rule. This rule, as issued in May 2016, required employers in higher-risk industries to submit annual summaries of annual injury and illness information to OSHA and for larger employers (those with 250 or more employees) to submit detailed information from the OSHA injury logs (Form 300) and from reports of individual injuries (Form 301). The rule also strengthened anti-retaliation protections for workers who report injuries. The summary injury and illness reports are similar to those OSHA has collected from employers since 1996. The more detailed injury

and illness reports required in the 2016 rule would provide data on the types of injuries and their cause, similar to the data on injuries in the mining industry that has been collected by MSHA for decades.

The anti-retaliation protections of the injury reporting rule went into effect in December 2016, and after a delay, the requirements for reporting the summary injury and illness information to OSHA went into effect in December 2017.

However, in July 2018 the administration proposed to revoke the provisions of the rule that required large establishments (with 250 or more employees) to report detailed injury data annually to OSHA. A final rule revoking this requirement was issued on Jan. 25, 2019.

In addition, the administration has refused to make public the summary injury information received from employers in 2017, even though courts previously have ruled that this type of information must be released to the public under the Freedom of Information Act. OSHA has made similar information publicly available on its website for many years.

The revocation of the detailed injury reporting requirements and OSHA's refusal to release the summary injury data collected under the rule have been challenged by Public Citizen, with decisions in these cases expected in the coming year.

In addition to OSHA, other agencies have moved to weaken worker safety and health protections. In September 2018, the Wage and Hour Division at DOL proposed to repeal child labor protections for 16- and 17-year-olds working in health care that restricted the operation of powered patient-lifting devices. At the U.S. Department of Agriculture, the Food Safety Inspection Service has moved to relax inspection procedures in the poultry and pork industries, and allow greatly increased line speeds that will greatly increase workers' risk for ergonomic injuries.

The Trump administration also has abandoned, suspended or delayed all work on the development and issuance of new regulations on major safety and health hazards, many of which have been in process for years. In its first regulatory agenda issued in July 2017, the administration withdrew nearly a dozen rules from the agenda. New standards on combustible dust, backover injuries, noise in construction, welding, injury and illness prevention programs, styrene, bromopropane, PELs and chemical management were abandoned. The administration has also put new rules on other critical safety and health hazards, including infectious diseases and process safety management, on inactive status on the long-term agenda, leaving future action undetermined and uncertain.

New standards to address injuries and deaths on communications towers and to update rules on emergency preparedness remain on OSHA's regulatory agenda. A small business review was conducted on the communication tower rule in 2018, and a similar review is now in process on the draft emergency preparedness rule. No dates have been set for issuing formal proposals on either of these rules.

A standard on workplace violence prevention for the health care and social service sectors also remains on the agenda, but is moving at a snail's pace. A small business review originally slated to begin in January 2019 has yet to occur. Meanwhile, as reviewed in detail below, workplace violence continues to be a serious and growing safety and problem that needs prompt attention and action.

In summary, the Trump administration is dedicated to pursuing a deregulatory agenda to roll back or repeal existing protections. Action on new standards is extremely limited and moving slowly. At the current pace, there will be no significant proposed or final new safety and health rules issued by the end of the Trump administration's term in January 2021. Real progress will only come as a result of congressional action or litigation to force the administration to issue much-needed rules, or when there is a change of administration.

Job Safety Budget

Funding for the nation's job safety and health programs historically has been limited, particularly when compared with the scope of responsibilities of the job safety agencies and the extent of the problems that need to be addressed. Democratic administrations and Democratic majorities in Congress generally have sought to increase funding for job safety agencies, while Republican administrations and Republican majorities in Congress have sought to cut funding.

During its time in office, the Obama administration made funding for the job safety agencies particularly the enforcement programs—a priority, moving in the early years of the administration to restore funding for the agencies from cuts during the Bush administration.

After the Republicans took control of the House of Representatives in 2011, the budgets for the job safety agencies were targeted. Following the government shutdown and sequester in 2013, the budgets for OSHA, MSHA and NIOSH were cut. OSHA funding was reduced from \$564.8 million in FY 2012 to \$535.2 million in FY 2013, and MSHA funding was reduced from \$372.5 million to \$353.8 million.

In FY 2014, as a result of a budget agreement, funding levels were increased to \$552.2 million for OSHA and \$375.9 million for MSHA. But since that time, funding for these agencies largely has remained stagnant, with both agencies experiencing cutbacks in staff and program activity.

Unfortunately, NIOSH did not receive the same ongoing support for funding under the Obama administration as OSHA and MSHA. While increased funding for NIOSH was requested and received in FY 2010, in subsequent requests the administration proposed cuts to NIOSH's budget.

Specifically, beginning with the FY 2012 budget request, and every year thereafter, the Obama administration proposed approximately \$50 million in cuts for NIOSH through the elimination of programs for agriculture, fishing, and logging safety and health research, and the Educational Research Center program to train occupational safety and health professionals. As a result of strong opposition to these cuts by the entire safety and health community, along with labor and business groups, Congress rejected these proposals and maintained NIOSH's funding. Currently, NIOSH's budget for FY 2019 stands at \$336.2 million.

Since taking office, all three of President Trump's budget proposals (for FY 2018, FY 2019 and FY 2020) have targeted key worker safety and health programs for cutbacks or elimination. Each of the president's budgets proposed to eliminate OSHA's Susan Harwood worker safety and health training program—the only compliance assistance program targeted primarily to workers—and shift the money to compliance assistance for employers, including increases for the Voluntary Protection Program. The Trump administration also proposed to cut the budget for coal mine enforcement and slash NIOSH's research budget by more than 40%, eliminating all external research, including research for construction and firefighter safety and health. In addition in FY 2019, the administration proposed to move NIOSH to the National Institutes of Health and absorb the program into other NIH programs. The administration also proposed to eliminate the Chemical Safety Board, the independent agency responsible for investigating chemical accidents and making recommendations to prevent them in the future.

In FY 2018 and 2019, Congress rejected these cuts, and the proposal to move NIOSH to NIH.

Currently, for FY 2019, funding for the job safety and health agencies stands at \$557.8 million for OSHA; \$373.8 million for MSHA; \$336.2 million for NIOSH; and \$12 million for the Chemical Safety Board. The FY 2019 funding bill included small increases for OSHA (\$1 million for federal enforcement, \$2.3 million for state enforcement and \$3.5 million for federal compliance assistance programs); NIOSH (\$1.3 million); and the Chemical Safety Board (\$1 million).

As noted, for FY 2020, President Trump has proposed similar cuts for the job safety agencies. For OSHA, the administration has proposed \$557.5 million in overall funding, elimination of the worker safety and health training program, and some increases in the federal OSHA enforcement program (\$2.8 million additional funding), whistleblower program (\$1.1 million), and safety and health statistics program (\$5.7 million).

For MSHA, \$376 million in overall funding is proposed, along with a proposed reorganization to combine MSHA enforcement programs for coal mining, and metal and nonmetal mining, which have to date been separate. There are concerns this consolidation will reduce the expertise in and effectiveness of the current mine safety enforcement programs.

For NIOSH, in FY 2020, the Trump administration has proposed even greater program cuts that would reduce funding from \$336.2 million to \$190 million, eliminating funding for all external research. And once again, the president's budget proposes to eliminate the Chemical Safety Board.

With the Democrats now in the majority in the House of Representatives, it is almost certain that these proposed cuts will be rejected again. Hopefully, with the change in Congress, it now may be possible to increase the funding for OSHA, MSHA, NIOSH and other job safety agencies to provide additional resources to address the significant safety and health problems facing workers.

Legislation

During President Trump's first two years in office, with Republicans holding majorities in Congress, the political environment for working people was very challenging. In addition to the repeal of more than a dozen rules under the Congressional Review Act, Republicans pushed forward a wide range of bills to roll back and limit workers' rights and protections.

Among these bills were a large number of "regulatory reform" measures that would make it more difficult, if not impossible, for agencies to issue needed safeguards, posing a direct and serious threat to worker safety and health. These included the Regulations from the Executive in Need of Scrutiny (REINS) Act that have would set up Congress as the gatekeeper for regulations, and mandate that Congress vote affirmatively to approve all major rules before they went into effect, and the Regulatory Accountability Act that would have upended 40 years of law to make costs to businesses, not the protection of workers and the public, the primary consideration. During the 115th Congress, the House passed these and numerous other anti-regulatory bills. However, due to strong opposition from Democrats in the Senate, none of the measures gained sufficient support (i.e., 60 votes) to overcome a filibuster. None of these anti-regulatory bills became law.

In 2019, in the 116th Congress, with the Democrats now in the majority in the House of Representatives, the political environment is much improved. Democrats can set the agenda in the House, move progressive legislation, conduct vigorous and meaningful oversight of the Trump administration and block anti-worker initiatives proposed by the administration or congressional Republicans.

In their first hundred days in office, House Democrats have moved assertively on a pro-worker agenda to improve protections, rights and opportunities for working Americans and their families, and have introduced a number of bills to strengthen safety and health protections for workers.

The Protecting America's Workers Act (H.R. 1074) would expand OSHA coverage, strengthen enforcement and enhance whistleblower protections. The bill also would restore OSHA's authority to enforce injury recordkeeping and reporting requirements, which was restricted when Republicans overturned an OSHA rule under the Congressional Review Act in 2017. A separate measure (H.J.Res. 44) also has been introduced to disapprove OSHA's recent rule revoking the detailed injury reporting requirements of OSHA's 2016 injury tracking rule, which, if enacted, would restore these requirements.

The Workplace Violence Prevention for Health Care and Social Service Workers Act (H.R. 1309, S. 851) would require OSHA to issue a workplace violence standard to protect workers in these industries. It would mandate that employers establish workplace prevention plans to identify and correct workplace violence risks and hazards, train workers and establish systems for reporting threats and assaults. The House Education and Labor Committee already has held a hearing on this bill, and action is expected in this session of Congress.

Legislation—the Transit Worker and Pedestrian Protection Act (H.R. 1139, S. 436)—has also been introduced requiring the Department of Transportation to issue rules to protect bus drivers

and other transit workers from violence and other safety and health risks. Legislation to strengthen mine safety protections, introduced in recent Congresses—the Robert C. Byrd Mine Safety Protection Act—is expected to be reintroduced soon in the 116th Congress.

Legislation to extend the September 11th Victims Compensation Fund to compensate responders and other individuals suffering from 9/11 diseases also has been introduced. The VCF, first established after the 9/11 attacks in 2001, was reopened for five years in 2010 when Congress passed the James Zadroga 9/11 Health and Compensation Act. In 2015 Congress made the 9/11 health program permanent, but only extended the VCF for an additional five years. Now the VCF is running out of money, benefits to victims have been cut and the VCF is scheduled to shut down in 2020. Meanwhile, thousands of responders and survivors are sick, with more expected to develop 9/11 diseases in the coming years. The Never Forget the Heroes: Permanent Authorization of the September 11th Victim Compensation Fund Act (H.R.1327, S. 546) would extend the VCF until 2090. The legislation has strong bipartisan support, and hopefully will be enacted in this session of the Congress to ensure all individuals who become sick or die due to 9/11 illnesses receive the compensation they need and deserve.

MINE SAFETY AND HEALTH

During the eight years of the Obama administration, the state of mine safety and health in the United States saw tremendous improvements. The administration began with the April 2010 Upper Big Branch mining disaster—the worst coal mine disaster in the United States in 40 years that killed 29 miners—and ended in 2016 with the safest year in mining history.

The UBB explosion and subsequent investigations highlighted major deficiencies in MSHA's oversight, and the poor state of safety and health and a lack of compliance not only at UBB, but also at many of the nation's mines. The Obama administration took aggressive action following the UBB explosion, criminally prosecuting both the company and individuals for violations that led to the deaths. Don Blankenship, the CEO of Massey Energy—the owner of the UBB mine—was found guilty of conspiracy to violate mine safety standards and was sentenced to and served one year in jail.⁵⁰

Following the UBB explosion, MSHA launched a series of initiatives to strengthen enforcement programs and regulations that significantly improved safety and health conditions at the nation's mines. These included impact inspections to target mines with poor safety records and an enforcement program to address mines with patterns of violations.

New mine safety and health standards were issued, including rules on rock-dusting to prevent mine explosions, proximity detection systems on continuous mining machines in underground coal mines and pre-shift examination of mines. The most significant MSHA rule issued by the

⁵⁰Department of Justice, U.S. Attorney's Office, Southern District of West Virginia, "Blankenship sentenced to a year in Federal prison," April 6, 2016, *available at <u>www.justice.gov/usao-sdwv/pr/blankenship-sentenced-year-federal-prison</u>.*

Obama administration was the coal dust rule promulgated in April 2014, which cut permissible exposure to coal dust to reduce the risk of black lung disease.

Under the Obama administration, MSHA also undertook a major initiative—Miners' Voice—to encourage miners to exercise their rights under the Mine Act, educating miners about their rights and stepping up enforcement of anti-retaliation protections.

The Trump administration has taken a less aggressive approach to oversight of safety and health at the nation's mines. President Trump appointed a mining executive as MSHA assistant secretary. David Zatezalo, formerly CEO of Rhino Resources Partners, was confirmed by the Senate in November 2017 on a party-line vote. Rhino Resources has a long history with MSHA, and received two pattern of violation notices from MSHA in recent years for failure to correct repeated and ongoing violations. Zatezalo has stated he is committed to strong enforcement of mine safety laws. Since the Trump administration took office, MSHA largely has maintained its enforcement programs while expanding voluntary programs for mine employers. However, at the urging of the mining industry, MSHA has moved to roll back important regulations.

Immediately upon taking office, the Trump administration took action to delay and weaken MSHA's rule that required mine examinations at metal and nonmetal mines. This rule, issued in January 2017, extended to metal and nonmetal mines requirements already in place in coal mines that mine operators conduct mine inspections and correct identified hazards before miners begin their shift. The administration delayed the effective date of the rule until June 2, 2018, and then weakened the rule, allowing mine operators to conduct inspections after miners begin work and eliminating the requirement that hazards identified and immediately corrected be recorded. The weakening changes, finalized on April 9, 2018, have been challenged by the mining unions, and a decision from the court is expected in the coming months.

The Trump administration has suspended work on new MSHA rules on silica and proximity detection systems for mobile mining equipment. Both of these rules, which have been under development for years, have been placed on the long-term regulatory agenda, with future action undetermined. Both of these hazards pose serious and growing risks to miners.

Recently, the National Institute for Occupational Safety and Health reported the largest cluster of black lung disease (coal workers pneumoconiosis) among active coal miners that had been identified in years. More than 400 cases of advanced progressive massive fibrosis (PMF) were reported from just three clinics in Appalachia from 2013 to 2017.⁵¹ In central Appalachia (Kentucky, Virginia and West Virginia), 20.6% of long-tenured miners have CWP; the national prevalence of CWP in miners with 25 years or more of tenure now exceeds 10%.⁵² The current conjecture is that exposure to silica from mining coal seams containing high concentration of quartz is a major factor in causing this increase in disabling lung disease. The MSHA silica standard still allows exposures of up to 100 ug/m³. The standard was set to be lowered following

⁵¹Blackley, D.J., L.E. Reynolds, C. Short, et al., "Progressive Massive Fibrosis in Coal Miners From 3 Clinics in Virginia," Journal of the American Medical Association, 2018;319(5):500–501.

 ⁵² Blackley, D.J., C.N. Halldin, A.S. Laney, "Continued Increase in Prevalence of Coal Workers' Pneumoconiosis in the United States, 1970–2017," American Journal of Public Health 108, No. 9 (Sept. 1, 2018): pp. 1220–1222. DOI: 10.2105/AJPH.2018.304517.

the issuance of the new OSHA silica rule, which reduced permissible exposures to 50 μ /m³ for industries under OSHA's jurisdiction. However, the Trump administration suspended the rulemaking for the MSHA silica standard and has refused to take action even in the face of the alarming increase in PMF.

Injuries and deaths from machinery and power haulage equipment that would be addressed by a standard on proximity detection also continue to be a serious problem. In the proposed standard on proximity detection for mobile mining equipment issued by MSHA in September 2015, the agency reported that from 1984 to 2014, there were 42 preventable fatalities and 179 injuries in coal hauling caused by machines and scoops (80 FR 53073). Preliminary data from MSHA for 2018 reports five fatalities in power haulage operations in coal mining, demonstrating that this remains a serious problem, and that a new proximity detection standard is needed.⁵³

The Trump administration has initiated an examination of MSHA's 2014 coal dust rule to evaluate the effectiveness of the rule. Initially, this review was to include an assessment of whether the rule should be modified to be less burdensome on industry. But due to strong objections to any action to roll back the rule, the review and request for public comments is focused on the effectiveness of the rule in preventing adverse health effects and the most effective control measures for reducing exposures.⁵⁴

Monitoring data reported by MSHA and coal operators shows that since the coal dust standard was issued, coal dust levels have declined significantly, and that in each of the last three years (2016–2018) 99% of all samples were in compliance with the new standard.⁵⁵

Thus far, the Trump administration largely has maintained MSHA's enforcement programs and policies, but there has been a decline in some enforcement activities. Preliminary data from MSHA shows that in 2018, overall enforcement for coal mines was similar to enforcement activities in CY 2017, and that compared with CY 2016, the number of citations and orders issued and penalties assed has increased. In 2018, there were 46,854 coal mine citations, with \$30.8 million in penalties assessed. This compares with 40,508 citations issued and \$25.9 million in penalties assessed in 2016. However, in metal and nonmetal mining, in 2018, there was a marked reduction in enforcement activity from 2016 and 2017. The number of citations in metal and nonmetal mining in 2018 (50,945) declined by 10% compared with CY 2016 (56,522), and the amount of penalties assessed declined from \$26.1 million in 2016 to \$22.7 million in 2018.⁵⁶

https://arlweb.msha.gov/Stats/Part50/WQ/2018/MIWQ%20Report%20CY%202018%20Q4.pdf.

⁵⁴ Mine Safety and Health Administration 30 CFR Parts 70, 71, 72, 75 and 90. Retrospective Study of Respirable Coal Mine Dust Rule, Request for Information. 83 Fed. Reg. 31710, July 9, 2018. ⁵⁵Zatezalo, David G., Assistant Secretary of Labor, Mine Safety and Health Administration. MSHA: 2018 in Review and a Look Ahead, PowerPoint presentation, SME Annual Conference & Expo Coal and Energy Luncheon, Denver, Feb. 26, 2019, available at

www.msha.gov/sites/default/files/events/SME%20presentation%202-26-19.pdf.

⁵³ Mine Safety and Health Administration. Mine Injury and Worktime, Quarterly January–December 2018 (Preliminary), available at

⁵⁶ Mine Safety and Health Administration, Mine Safety at a Glance: 4/1/19.

In 2018, the number of impact inspections for high-hazard mines declined significantly in both coal mines (32 inspections in 2018 compared with 123 in 2017 and 128 in 2016) and metal and nonmetal mines (37 inspections in 2018 compared with 45 inspections in 2017 compared with 61 in 2016). In 2018, there were no mines placed on the potential pattern of violations list, as was the case in 2017 and 2016. Since the POV program was initiated in 2010, the number of mines on the POV list has declined significantly—from 51 placed on the list in 2010, demonstrating that this program has been effective in reducing repeated serious violations by mining operators.

For FY 2020, the Trump administration has proposed a budget that would provide \$252.6 million for mine enforcement, reorganizing the MSHA enforcement to combine the coal mine enforcement and metal and nonmetal enforcement into one program. This compares with \$254.5 million in current total funding for coal mine and metal and nonmetal enforcement programs in FY 2019. MSHA has justified this reorganization in order to use resources more efficiently and to direct more resources to metal and nonmetal mining, which is growing, while coal mine activity continues to decline. As noted earlier, there are concerns that this consolidation will reduce the expertise in and effectiveness of the current mine safety enforcement programs.

In 2018, there was also a decline in MSHA's enforcement activity for miners' discrimination complaints. In 2018, MSHA filed 26 discrimination complaints on behalf of miners and sought reinstatement for 16 miners, down from down from 31 complaints and 16 reinstatements in 2017 and 45 complaints and 21 reinstatements in 2016. It is not clear why the number of cases declined.

There is concern that the Trump administration is limiting miners' rights under the Mine Act. In July 2017, the administration launched a training assistance initiative in response to an increase in coal mine fatalities and injuries among less experienced miners. Under this initiative, MSHA inspectors visit mines to provide training and assistance to less-experienced miners. During these visits, MSHA inspectors leave their credentials at the office and have no authority to enforce mine safety violations that are identified. Moreover, during these visits, miners' representatives are not permitted to walk around with the MSHA inspector as is provided under section 103(f) of the Mine Act. Thus the knowledge and experience of these trained representatives is ignored.

The last year of the Obama administration was the safest on record for the mining industry, with record low fatalities and injuries reported. In the first year of the Trump administration (2017), overall mining fatalities increased from 25 to 28 deaths. Coal mine fatalities jumped from eight to 15 deaths, while metal and nonmetal fatalities declined from 17 to 13 deaths. Preliminary data from MSHA for 2018 reports 27 overall fatalities in mining, with a decline in coal mine deaths from 2017 to 12 deaths, and an increase in metal and nonmetal deaths to 15. The increase in coal mine deaths in 2017 and metal and nonmetal deaths in 2018 should serve as a warning that strong safety and health protections for miners must be maintained. Any rollbacks or weakening of protections will put miners in danger and lead to more unnecessary deaths and injuries.

KEY ISSUES IN SAFETY AND HEALTH: STATUS AND PROGRESS

There are a large number of safety and health hazards and issues in need of attention. But there are several issues that pose broad and growing threats to workers that warrant special focus and action.

Workplace Violence

Workplace violence is a major problem that is getting worse for workers in the United States. It is the third-leading cause of death on the job and the fifth-leading cause of nonfatal injury with days away from work in private industry. In 2017, one in every six work-related deaths was attributed to workplace violence for a total of 807—more than from equipment or fires and explosions. This is down from 866 in 2016 and a significant increase from 703 in 2015.

During the Obama administration, OSHA enhanced enforcement on workplace violence using the general duty clause of the OSH Act, updated guidance documents and committed to developing a workplace violence standard. But the Trump administration has failed to act. New legislation, the Workplace Violence Prevention for Health Care and Social Service Workers Act (H.R. 1309, S. 851), would require federal OSHA to promulgate a standard to protect these workers at especially high risk of violence on the job. A recent court decision supports the need for an OSHA standard, recognizing workplace violence as a serious hazard that can be controlled, and that workers need protection from this growing threat.

Homicides and Suicides

Homicides account for the majority of workplace violence deaths: 458 in 2017, compared with 500 in 2016 and 417 in 2015. Eighty-three of these homicides were among women workers, a proportion that has increased since last year despite a slight overall decline in total workplace homicides. In 2017, workplace homicide was the second-leading cause of job death for women workers, accounting for 22% of their work-related fatalities (roadway incidents was first). Domestic violence in the workplace has become a worsening problem; women were three times more likely to be killed by a relative or domestic partner at work than men.

White workers experienced 48% of workplace homicides and Hispanic or Latino workers experienced 15% of homicides. Homicides among black workers and Asian workers were disproportionate related to overall employment: Black workers experienced 25% of workplace homicides, while representing only 12% of total employment, and Asian workers experienced 10% of homicides, while representing 6% of total employment. Overall, homicides were responsible for 31% of all work-related deaths among Asian workers (44 out of 144 deaths), 21% among black workers (113 out of 530 deaths), 8% among Latino workers (68 out of 903 deaths) and 6% among white workers (220 out of 3,449 deaths).

Workplace homicides largely occur in transportation, law enforcement and retail, with motor vehicle operators (49 deaths), law enforcement personnel (46 deaths) and supervisors of sales workers (46 deaths) the leading occupations. The leading source of death from workplace homicide was assault by an assailant or suspect (235 deaths). Firearms were the primary source involved in workplace homicides, responsible for 355 workplace deaths.

Two hundred and seventy-five workers committed suicide at work in 2017; 2016 experienced the largest number of work-related suicides since BLS began reporting this data in 1992 (291 deaths), a 27% increase from the previous year. The last major increase in workplace suicides was just as the recession hit in 2008, when workplace suicides increased by 33%. Hopelessness, uncertainty and toxic work environments that include increased work pressures, workplace bullying and lack of control most likely have contributed to this growing problem. One study published by NIOSH examined U.S. workplace suicides from 2003 to 2010.⁵⁷ In that time period, 1,719 people died by workplace suicide. According to the study results, workplace suicides were highest for men, workers ages 65 to 74 years, those in protective service occupations and those in farming, fishing and forestry.

Nonfatal, Serious Injuries

The majority of nonfatal injuries from violence occur in health care, social assistance and educational services. The Bureau of Labor Statistics reported that in private industry, nearly 29,000 workplace violence incidents led to injuries involving days away from work in 2017. These attacks are serious, under-reported and often leave workers physically and emotionally scarred for life. Women workers experience two-thirds of these serious injuries.

Even as the reported overall U.S. injury and illness rate has steadily declined since 1992—by 71% overall—the injury rate for workplace violence decreased until the late 1990s, then increased to 4.0 per 10,000 workers. All of these numbers and rates only reflect injuries that led to days away from work, not all violence-related injuries reported or all that occur.

Health care workers are twice as likely to suffer a workplace violence injury as other occupations, and workers in psychiatric settings are at especially great risk, with a workplace violence injury rate of 181.1 per 10,000 workers—the highest ever recorded for this industry. Work-related violence is increasing in other areas, too. In 2017, transit and intercity bus drivers and school or special client bus drivers experienced serious violence injuries at rates of 17.0 and 9.2 per 10,000 workers, respectively. Since 2008, the rate of workplace violence injuries has increased 127% in private-sector educational services, 233% in state government and 118% in local government.

Health Care and Social Assistance

Workers in the health care and social service industries are particularly affected. The nature of their frontline work—direct contact with patients and clients—makes these workers at great risk for job-related violence. There were 27 homicides among workers in health care and social assistance in 2017, compared with 29 in 2016 and 15 in 2015.

In 2017, the health care and social assistance sector accounted for 68% of lost-time injuries from workplace violence (excluding violence form animal and insects). Workers in nursing and residential care facilities experienced the greatest number of injuries from violence, followed by those in hospitals, social assistance and educational services. Nursing, psychiatric and home health aides, registered nurses and personal care aides were the occupations at greatest risk of

⁵⁷ Tiesman, H.M., S. Konda, D. Hartley, C. Chamont Menendez, M. Ridenour and S. Hendricks, "Suicide in U.S. Workplaces, 2003–2010: A Comparison With Non-Workplace Suicides," Vol. 48, Issue 6, pp. 674–682, June 2015, *available at <u>www.ajpmonline.org/article/S0749-3797(14)00722-3/abstract</u>.*

injuries from violence, and patients were responsible for 49% of reported injuries related to violence.

In 2017, the private-sector rate of workplace violence in health care and social assistance was 14.7 per 10,000 workers, an increase of 67% since 2007. During the same decade, workplace violence rates for hospitals increased 130%–201% for psychiatric hospitals in particular. Since 2007, the rate of violence in nursing and residential care facilities has increased 54%, in home health services 184%, and in social assistance 28%, although this difference has fluctuated over time and last year was much higher at 118%. Home-based services such as home health, client management and social services have been playing a larger role in physical and mental care.

Public-sector workers are at even greater risk from workplace violence. In 2017, state government health care and social service workers were *nearly nine times* more likely to be assaulted than private-sector health care workers (128.9 vs. 14.7 per 10,000 workers). In state government, psychiatric aides experienced injuries caused by violence at a rate of 693.4 per 10,000 workers; psychiatric technicians at 591.4 per 10,000 workers; nursing, psychiatric and home health aides at 339.9 per 10,000 workers; health care support occupations at 256.0 per 10,000 workers; and nursing assistants at 155.2 per 10,000 workers. Survey results released in 2012 by the Merit Systems Protection Board reported that one in eight federal government employees witnessed workplace violence.⁵⁸ The majority of these accounts came from the Veterans Administration, where 23% of employees said they had witnessed at least one act of violence at work over a two-year period.

This violence against health care and social service workers is foreseeable and preventable. With the expected job growth in the health care and social assistance sectors, workplace violence events will continue to rise without safeguards in place. Workplace controls are more necessary than ever to address this systemic and serious issue, and reduce the prevalence and severity of violence in the workplace.

OSHA Guidelines and Enforcement

During the Obama administration, in the absence of a federal standard, OSHA enhanced its efforts to address the growing problem of workplace violence through guidelines and enforcement initiatives using the general duty clause (Section 5(a)(1) of the OSH Act).

In April 2015, OSHA updated its "Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers,"⁵⁹ a comprehensive document outlining the contents of violence prevention programs using hazard assessments and the hierarchy of controls. Earlier, OSHA issued several guidance documents for other high-risk populations, including "Recommendations for Workplace Violence Prevention Programs in Late-Night Retail Establishments," and a fact

⁵⁸ U.S. Merit Systems Protection Board, "Employee Perceptions of Federal Workplace Violence: A Report to the President and the Congress of the United States," 2012, *available at* <u>www.mspb.gov/netsearch/viewdocs.aspx?docnumber=759001&version=761840&application=ACROBAT.</u>
 ⁵⁹ U.S. Department of Labor, OSHA, "Guidelines for Preventing Workplace Violence for

⁵⁹ U.S. Department of Labor, OSHA, "Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers," April 2015, *available at*

www.osha.gov/Publications/osha3148.pdf.

sheet, "Preventing Violence against Taxi and For-Hire Drivers."60,61

In 2011, OSHA issued a directive, "Enforcement Procedures for Investigating or Inspecting Incidents of Workplace Violence," which established uniform procedures for OSHA field staff when responding to incidents and complaints of workplace violence and conducting inspections in industries with a high risk of workplace violence, including health care and social service settings and late-night retail establishments.⁶² In January 2017, the agency issued a new directive, "Enforcement Procedures and Scheduling for Occupational Exposure to Workplace Violence." This directive clarifies the different types of health care settings where workplace violence incidents are reasonably foreseeable; expands the OSHA recognized high-risk industries to include corrections and taxi driving; and provides more resources and guidance to OSHA inspectors.⁶³

In 2016, federal OSHA Region VIII (Billings, Bismarck, Sioux Falls, Denver and Englewood) instituted a regional emphasis program in residential mental intellectual and developmental disability facilities (NAICS 623210), focused on workplace violence hazards.⁶⁴ This program was renewed in 2017 and in 2018.

OSHA's enhanced enforcement efforts resulted in a sharp increase in the number of workplace violence inspections conducted and citations for general duty clause violations during the Obama administration. To date, the Trump administration has continued these programs, but there has been a decline in the number of workplace violence inspections conducted and citations issued.

In FY 2018, OSHA conducted 78 workplace violence inspections—12 of these were fatality investigations, and OSHA issued a serious violation in one of the inspections that resulted in a penalty of \$12,934 and repeat violations in two of the inspections that each resulted in a penalty of \$71,137.

In FY 2017, OSHA conducted 85 workplace violence inspections—four of these were fatality investigations, and OSHA issued serious violations in 25 of the inspections that resulted in a current median penalty of \$8,556.

In FY 2016, OSHA conducted 126 workplace violence inspections—15 of these were fatality investigations, and OSHA issued serious violations in 50 of the inspections that resulted in a current median penalty of \$5,000.

⁶⁰ U.S. Department of Labor, OSHA, "Recommendations for Workplace Violence Prevention Programs in Late-Night Retail Establishments," OSHA 3153-12R, 2009, *available at* www.osha.gov/Publications/osha3153.pdf.

⁶¹ U.S. Department of Labor, OSHA, "Preventing Violence against Taxi and For-Hire Drivers," April 2010, *available at <u>www.osha.gov/Publications/taxi-driver-violence-factsheet.pdf</u>.*

⁶² U.S. Department of Labor, OSHA, "Enforcement Procedures for Investigating or Inspecting Workplace Violence," CPL 02-01-052, Sept. 8, 2011.

⁶³ U.S. Department of Labor, OSHA, "Enforcement Procedures and Scheduling for Occupational Exposure to Workplace Violence," CPL 02-01-058, Jan. 10, 2017.

⁶⁴ U.S. Department of Labor, OSHA, "Regional Notice 17-09 (CPL04-01)," Oct. 1, 2016, *available at* <u>www.osha.gov/dep/leps/RegionVIII/reg8_fy2017_17-09_workplace_violence.pdf</u>.

This compares with 85 inspections in FY 2015, 90 inspections in FY 2014 and five inspections in FY 2013.

Where there are workplace violence hazards, but OSHA may not issue a general duty clause citation, the agency can issue a Hazard Alert Letter—a voluntary measure that warns employers about the dangers of workplace violence and identifies corrective actions. OSHA issued HALs in 60 investigations in FY 2018, 65 in FY 2017, 87 in FY 2016, 18 in FY 2015 and seven investigations total in FY 2014 and FY 2013.

The need for enhanced efforts by OSHA to address workplace violence was underscored by a March 2016 report by the U.S. Government Accountability Office. The report, "Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence," examined the magnitude of the problem, existing workplace violence prevention programs and policies, state and local ordinances and the need for these programs and policies, including the need for an OSHA workplace violence prevention standard for health care and social service workers. The report found that workplace violence is a serious and growing concern for 15 million health care workers, and is preventable through violence prevention programs.⁶⁵ The GAO recommended that OSHA improve workplace violence citation training for its inspectors, follow up on Hazard Alert Letters, assess current efforts and determine whether the agency should take regulatory action.

A recent decision by the Occupational Safety and Health Review Commission affirmed OSHA's authority to enforce against workplace violence hazards under the general duty clause. In March 2019, OSHRC issued a 3-0 decision in Secretary of Labor v. Integra Health Management Inc., finding that workplace violence is a serious and recognized hazard that can be feasibly controlled and mitigated.⁶⁶ This case involved the death of a young woman caseworker stabbed by a homebased client in 2012. Following an investigation, OSHA cited Integra for a serious violation of Section 5(a)(1) of the Occupational Safety and Health Act, the general duty clause, for exposing employees to "the hazard of being physically assaulted by members with a history of violent behavior," and for failing to report the employee's death in a timely manner to OSHA. OSHA sought a total of \$10,500 in penalties. In 2015, an administrative law judge upheld the citations, but the employer appealed the case to the full review commission, where it was pending since July 2015. The AFL-CIO and several unions filed briefs in support of OSHA's citations against Integra, citing OSHA's clear authority over enforcing violence prevention in the workplace and experience in workplace violence recognition and abatement measures, as well as industry recognition of the problem.⁶⁷

While this ruling will assist OSHA in enforcing against workplace violence hazards, OSHA's authority to use the general duty clause is limited. Securing a general duty clause citation

 ⁶⁵ U.S. Government Accountability Office, "Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence," March 2016, *available at <u>www.gao.gov/products/GAO-16-11</u>.
 ⁶⁶ U.S. Occupational Safety and Health Review Commission, Secretary of Labor v. Integra Health Management, Inc., OSHRC Docket No. 13-1124, March 4, 2019, <i>available at <u>www.oshrc.gov/assets/1/18/Integra_Health_Management, Inc._Docket_13-1124_Combined_post.pdf?8328</u>.*

⁶⁷ Brief of the American Federation of Labor and Congress of Industrial Organizations as *Amicus Curiae* in Support of Complainant, Secretary Of Labor, OSHRC Docket No. 13-1124, Dec. 18, 2015.

requires a higher burden than having an enforceable standard that outlines for the employer the requirements specific to workplace violence.

OSHA under the Trump administration has taken very limited action on workplace violence, despite the severity of the issue and the ability to mitigate it in specific settings. In FY 2018, the agency only issued one serious and two repeat violations for workplace violence, compared with 25 in FY 2017 and 50 in FY 2016. Even though OSHA's number of fatality investigations for workplace violence increased, the total number of workplace violence inspections by the agency has decreased since the beginning of the Trump administration.

Federal Regulatory Action

In response to the growing threat from workplace violence, there have been increased efforts to secure workplace violence protections through mandatory regulations. In July 2016, a coalition of unions petitioned OSHA to develop a federal workplace violence standard for health care and social assistance workers.⁶⁸ Another union petition was filed seeking a standard in the health care sector. In response to the petitions, OSHA issued a request for information to seek input and information on a workplace violence standard, and in early January 2017 held a public meeting of interested stakeholders. At the meeting, the Obama administration announced that OSHA was accepting the petitions and would develop and promulgate a workplace violence standard for health care in the process for federal OSHA to protect workers.

However, the Trump administration has failed to move forward on the development of the workplace violence standard. In July 2017, in its first regulatory agenda, the administration moved the standard to "long-term" status, with future action on the standard undetermined. In Fall 2017, the workplace violence standard for the health care and social service sectors was put back on the agenda, but it is moving at a snail's pace. A small business review originally slated to begin in January 2019 has yet to occur, and the administration has declined to provide any information on when a proposed or final standard will be issued.

In February 2019, Rep. Joe Courtney (D-Conn.) and Sen. Tammy Baldwin (D-Wis.) introduced legislation—The Workplace Violence Prevention for Health Care and Social Service Workers Act (H.R. 1309, S. 851)—to help protect these workers. The bill requires OSHA to issue a federal workplace violence prevention standard, requiring employers in the health care and social service sectors to develop and implement a plan to identify and control workplace violence hazards. The bill ensures that front-line workers have input in the plan, helping employers identify commonsense measures like alarm devices, lighting, security, and surveillance and monitoring systems to reduce the risk of violent assaults and injuries. The legislation would ensure OSHA protections against violence for all coverage in their state. The bill incorporates important elements from OSHA's current "Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers."

⁶⁸ "Labor Organizations Petitioning the U.S. Department of Labor for an OSHA Workplace Violence Prevention Standard for Healthcare and Social Assistance," July 12, 2016, *available at* <u>www.safetyandhealthmagazine.com/ext/resources/document-downloads/unions-petition.pdf</u>.

The House Education and Labor Committee held a hearing on the bill shortly after introduction, and action on the legislation by the committee and the full House of Representatives is expected this year.

State Regulations and Legislation

A number of states have taken action to adopt laws, standards and policies on workplace violence, which vary widely. In December 2016, the California Department of Industrial Relations filed its final workplace violence standard with the California secretary of state, with an effective date of April 1, 2017.⁶⁹ This comprehensive standard, issued in response to a legislative mandate, protects health care workers in the public and private sectors from workplace violence. It was developed through consensus rulemaking, and it is a good model for a comprehensive regulatory approach to combat workplace violence. In response to a 2014 petition from a teacher, the California Occupational Safety and Health Standards Board tasked an advisory committee to examine workplace violence prevention in *all* California workplaces, which currently is going through the state process to develop a workplace violence standard for all of general industry.

New York passed a comprehensive workplace violence standard in 2006, but it only covers the public sector.⁷⁰ Public employers are required to develop and implement programs to prevent and minimize workplace violence. Connecticut, Illinois, Maryland, New Jersey and Washington have adopted some form of legislation specifically focused on health care settings. The Maryland legislation, which was implemented on Oct. 1, 2014, addresses all workplace injuries in health care facilities by means of an overall safety program, which includes workplace violence hazards. The measure requires public and private health care employers to establish a safety committee consisting of management and employees, and it requires the committee to establish a safety program that consists of: 1) a written policy; 2) an annual comprehensive risk assessment and recommendations for injury prevention; 3) a process for reporting, responding to and tracking incidents of workplace injuries; and 4) regular safety and health training.

State and local ordinances are an important piece in addressing workplace policies and practices related to workplace violence, but workers need a strong, comprehensive OSHA standard to address this growing national problem.

Chemical Exposure Limits and Standards

Occupational exposure to toxic substances poses a significant and unreasonable risk to millions of workers and is a major cause of acute and chronic disease in the United States. Occupational diseases caused by chemical exposures are responsible for more than 50,000 deaths and 190,000 illnesses each year, including cancers and other lung, kidney, skin, heart, stomach, brain, nerve

 ⁶⁹ "Workplace Violence Prevention in Health Care," General safety orders, New Section: 3342," effective April 1, 2017, *available at <u>www.dir.ca.gov/oshsb/Workplace-Violence-Prevention-in-Health-Care.html</u>.
 ⁷⁰ "Public Employer Workplace Violence Prevention Programs," 12 NYCRR PART 800.6, effective June 7,*

^{2006,} available at https://labor.ny.gov/workerprotection/safetyhealth/PDFs/PESH/WPV/Workplace%20Violence%20Preventi

on%20Regulations.pdf.

and reproductive diseases.^{71,72} Many of these diseases are chronic, serious and disabling for millions of workers, and impair their professional and personal lives; this problem largely goes under-reported, and its effects are understated. The costs of fatal and nonfatal occupational illnesses from chemical exposures create an enormous burden on the U.S. public health system.⁷³

Workers face particular risks from chemical exposures. They make chemicals or are otherwise exposed early in the chemical life cycle, often at the highest exposures, for long durations, when little to no hazard information is known; are a conduit for bringing chemicals home to their families via clothing, equipment, skin and hair; and dispose of chemicals and sort through chemical-containing waste. It is not inevitable that workers develop diseases because of their work with chemicals. Where proper controls are installed or safer alternatives are used, exposures can be controlled and diseases prevented.

OSHA has issued standards on some major chemical hazards, including benzene, asbestos and lead, that have significantly reduced exposures and disease. But relatively few chemical standards have been issued, and most chemicals hazards are unregulated.

A law passed in 2016 created a key opportunity through EPA to improve the federal process for assessing chemical toxicity and strengthening worker protections from chemical exposure. However, the Trump administration and the chemical corporations have derailed EPA's efforts to fulfill its legislative mandate and protect workers and the public from dangerous chemical exposures.

History: OSHA and Chemicals

One of the Occupational Safety and Health Administration's primary responsibilities is to set standards to protect workers from toxic substances. Since Congress enacted the Occupational Safety and Health Act in 1970, OSHA has issued comprehensive health standards for only 18 individual chemicals and one separate rule for 14 carcinogens. OSHA issued most of its chemical standards in its first two decades, and only after the chemical had been making workers sick for a long time. The most recent were silica in 2016 and beryllium at the beginning of 2017. Today there are approximately 84,000 chemicals in commerce, most of them unregulated.⁷⁴

The OSHA permissible exposure limits in place under 29 CFR 1910.1000 that govern exposure for approximately 400 toxic substances were adopted in 1971 and codified the American Conference of Government Industrial Hygienists' Threshold Limit Values from 1968.⁷⁵ Most of

 ⁷¹ Wilson, M.P., D.A. Chia and B.C. Ehlers, "Green Chemistry in California: A Framework for Leadership in Chemicals Policy and Innovation," California Policy Research Center, University of California, 2006.
 ⁷² Takala, J., P. Hämäläinen, K.L. Saarela, L. Yoke Yun, K. Manickam, T. Wee Jin, P. Heng, C. Tjong, L. Guan Kheng, S. Lim and G. Siok Lin (2014), "Global Estimates of the Burden of Injury and Illness at Work in 2012," Journal of Occupational and Environmental Hygiene, 11:5, 326–337, DOI: 10.1080/15459624.2013.863131.

⁷³ Leigh, J.P., "Economic Burden of Occupational Injury and Illness in the United States," The Milbank Quarterly, Vol. 89, No. 4, 2011.

⁷⁴ Roundtable on Environmental Health Sciences, Research, and Medicine, Board on Population Health and Public Health Practice, Institute of Medicine, Washington, D.C., Oct. 2, 2014, *available at* <u>www.nap.edu/catalog/18710/identifying-and-reducing-environmental-health-risks-of-chemicals-in-our-society</u>.

⁷⁵ OSHA, Annotated PELs, available at <u>www.osha.gov/dsg/annotated-pels/</u>.

these limits were set by ACGIH in the 1940s and 1950s, based upon the scientific evidence then available. Many chemicals now recognized as hazardous were not covered by the 1968 limits, and many of the others with PELs are woefully outdated. In 1989, OSHA attempted to update these limits, but the revised rule was overturned by the courts because the agency failed to make the risk and feasibility determinations as required by the OSH Act.

Several years ago, the American Industrial Hygiene Association, major industry groups and labor attempted to reach agreement on a new approach to update permissible exposure limits through a shorter process that would allow quick adoption of new limits that were agreed upon by consensus. Unfortunately, those efforts stalled when small business groups objected to an expedited process that would apply to a large number of chemicals, and the Bush administration refused to take a leadership role in developing and advancing an improved process for setting updated exposure limits.

In October 2013, OSHA made an annotated comparison list of the legal and recommended exposure limits for chemical substances as a tool to assist in the assessment and control of exposures. The agency tables compare OSHA PELs for general industry, the California Division of Occupational Safety and Health PELs, National Institute for Occupational Safety and Health-recommended exposure limits and American Conference of Governmental Industrial Hygienist threshold limit values.⁷⁶ At the same time, the agency unveiled a web-based toolkit to assist employers and workers to identify safer chemicals that can be used in place of more hazardous ones. However, this is only guidance information, and since it was posted, there have been no signals for increased action on enforcement in this area. In October 2014, OSHA issued a Request for Information requesting comments on approaches to improving the management of chemical exposures and updating permissible exposure limits. The agency's intent of this RFI was never clear and OSHA's work remains stalled on chemicals. In the most recent unified regulatory agenda—issued on Dec. 14, 2017—the Trump administration removed all chemical regulatory activity for OSHA in the near future, including the development of standards on styrene and bromopropane, and updates in PELs.⁷⁷

OSHA's system for addressing toxic substances is broken. Its standard-setting process has become unduly burdensome and lengthy, and the agency is not under strict timelines to establish protections from chemicals. The result of all of this is that OSHA does not regulate many serious chemical hazards at all, or some chemicals are subject to weak and out-of-date requirements, and people remain unprotected from chemical hazards at work.

Even where OSHA has regulated chemicals, OSHA protections alone are not sufficient to protect workers from dangerous chemicals. Many workers in the United States are not covered by the OSH Act. Currently, 8 million public-sector workers, including many firefighters and teachers; 15 million self-employed workers; 350,000 workers in the mining industry; and many agricultural workers on small farms are not afforded safety and health protections under the OSH Act. Even where OSHA has coverage, OSHA is staffed with so few resources that it would take federal OSHA inspectors 165 years to visit every workplace in the country once. Unions have

⁷⁶ www.osha.gov/pls/oshaweb/owadisp.show document?p table=NEWS RELEASES&p id=24990.

⁷⁷ Current Regulatory Plan and the Unified Agenda of Regulatory and Deregulatory Actions, *available at* <u>www.reginfo.gov/public/do/eAgendaMain</u>.

some ability to bring in OSHA to help investigate a chemical issue at work, but access to OSHA for unorganized workers, especially as it relates to chemical exposures, is much more difficult— and OSHA has not had a lot of success bringing forward enforcement cases on any unregulated chemical exposure in a union or nonunion setting.

Some states, including California and Washington, have done a better job updating exposure limits, and as a result, workers in those states have much better protection against exposure to toxic substances. California recently resumed activity on chemicals through its Health Effects Advisory Committee, prioritizing chemicals for which to establish PELs.⁷⁸

EPA: Opportunity for Progress

The Toxic Substance Control Act passed by Congress in 1976 aimed to protect the public from dangerous chemical exposures and prevent disease by giving the Environmental Protection Agency authority to regulate chemicals throughout the environment and chemicals being newly manufactured. Lawmakers intended the original law to be a gap-filling statute, giving EPA co-existing and compatible authority with other agencies over chemical exposures. But court decisions thwarted EPA's efforts to regulate even the most dangerous chemicals, including asbestos, and left TSCA toothless and ineffective in protecting people from exposure to chemicals.

In 2016, Congress passed the Frank R. Lautenberg Chemical Safety for the 21st Century Act (LSCA), a bipartisan effort to update and address the deficiencies of the original TSCA. This update assigned EPA a specific mandate to include workers as a potentially vulnerable subpopulation at particular risk to disease from chemicals, and gave authority to EPA to eliminate or reduce that risk, through regulation or bans, for chemicals that have been in use for decades and for chemicals new to the market. Further, the revised act gives EPA authority to prioritize and evaluate chemicals that pose a danger to human health or the environment where: 1) other agencies cannot or will not adequately regulate a substance, or 2) the substance is already regulated, albeit ineffectively, by another agency, such as OSHA. Importantly, EPA must prioritize and assess unregulated or inadequately regulated chemicals on a strict timeline in order to protect people and prevent disease.

Soon after the law was passed, EPA was required to identify 10 priority chemicals to expedite through the risk evaluation and risk management processes since the agency already had done extensive work on these chemicals throughout the years. In December 2017, EPA identified these as:

1,4-Dioxane 1-Bromopropane Asbestos Carbon Tetrachloride Cyclic Aliphatic Bromide Cluster (Hexabromocyclododecane or HBCD) Methylene Chloride⁷⁹ N-Methylpyrrolidone (NMP)

⁷⁸ www.dir.ca.gov/dosh/DoshReg/5155Meetings.html.

⁷⁹ Michaels, David, Letter to Jim Jones, Assistant Administrator, Office of Chemical Safety and Pollution Prevention, April 6, 2016, *available at <u>http://src.bna.com/hU4</u>*.

Pigment Violet 29 (Anthra[2,1,9-def:6,5,10-d'e'f]diisoquinoline-1,3,8,10(2H,9H)-tetrone) Tetrachloroethylene (PERC) Trichloroethylene (TCE)

In Spring 2018, EPA proposed its next round of 20 high-priority and 20 low-priority chemicals—once finalized, the high-priority chemicals will be further assessed through risk evaluation and risk management under TSCA. EPA must consult with other agencies throughout the process regarding relevant exposures, controls and regulatory action.

Before LSCA, EPA helped prevent chemical exposures in workplaces by requiring worker protections for new chemicals or new uses, including engineering and work practice controls such as ventilation requirements and changing processes, and some exposure limits. Under LSCA, EPA has authority that OSHA does not have, such as the ability to: 1) regulate, enforce or compel data from manufacturers; 2) ban a chemical; and 3) require substitution with a safer chemical or process.

TSCA Under the Trump Administration

Seven months after Congress passed LSCA, the Trump administration took office. While the Obama administration's EPA had been meeting strict deadlines outlined in the law, the Trump administration has delayed issuing chemical assessments, weakened the protections proposed by the previous administration and narrowed the scope of uses that the agency will assess. The law, specifically requires EPA to examine all uses of a chemical in its lifecycle and to make decisions based on health reasons only—not cost or impact on business—and to do so under strict timelines.

Since the Trump administration took office, EPA has weakened the two major framework rules on the methods for prioritizing and assessing chemicals, compared with the proposals issued under the Obama administration. These framework rules will set the stage for all future implementation of the new chemical law. The agency released scoping documents for its 10 priority chemicals that totally ignored major occupational uses and scenarios and shifted its responsibility to OSHA, despite EPA's responsibility under the law to address worker exposures throughout a chemical lifecycle.

For example, in its scoping document for asbestos, EPA removed legacy uses of asbestos from its regulatory scope, even though these uses are the major cause of occupational and public asbestos exposure in the United States today—they may be legacy uses, but are not legacy exposures. The agency has made slow progress on regulating the 10 priority chemicals listed above. To date, the agency only has released a draft risk evaluation for one of these chemicals—Pigment Violet 29. EPA recently issued a ban on consumer uses of methylene chloride, but not industrial uses. The agency is behind on deadlines for releasing the draft risk evaluations for the remaining 10 priority chemicals.

The amended law gave EPA more authority to put in place more protections on new chemicals coming onto the market. Under the Trump administration, EPA so far has emphasized voluntary approaches by employers rather than using its enforcement authority to require employers to implement engineering controls as chemicals move through the supply and use chain.

Specifically, EPA now allows employers to rely on warning statements in Safety Data Sheets that instruct workers to wear personal protective equipment, rather than issue enforceable orders to the company that require the use of more effective controls. An effort by a coalition of chemical companies, called the New Chemicals Coalition, attempted to push EPA's longstanding authority on establishing workplace protections for new chemicals and new uses of chemicals onto OSHA, an agency with no ability to regulate chemicals not introduced yet to the market. EPA's claim that existing general OSHA standards will protect workers misses the mark.

Since 2011, OSHA only has issued 26 general duty clause citations for airborne exposures of (existing, not new) chemicals—there is no OSHA PEL for 19 of these, and for the remaining seven there is only a PEL with no requirements for exposure monitoring or medical surveillance. In the rare case that general duty clause citations have been issued, four major conditions have been true:

- The cases involved clinical health effects experienced by workers at the cited facility, consistent with "serious physical harm";
- The majority of cases were symptoms with acute onset (minutes to hours) following inhalation that were anticipated to worsen with continued harmful exposure;
- The cases involved occupational exposures to a relatively well-studied chemical/chemical class at very high levels consistent with "recognized hazard"; and
- Violations were issued because evidence documented workers at the facility were physically harmed by a hazardous exposure to the chemical inhaled during workplace operations and not because airborne exposure exceeded an occupational exposure limit.

OSHA does not have the ability to adequately regulate chemical exposures in the workplace, and virtually has no ability to regulate new chemicals—a major reason Congress gave EPA the authority and responsibility to do so under LSCA.

President Trump has filled high positions within the agencies with people closely tied to the chemical industry—at least one of whom actively worked for the chemical industry to derail LSCA implementation (Nancy Beck). President Trump also nominated a toxicologist (Michael Dourson) with a lifetime career paid by the chemical industry to push for higher chemical exposure levels than deemed acceptable by state and federal public health agencies. With pressure from environmental, labor and public health groups, Dourson was not confirmed. Subsequently, President Trump nominated Alexandra Dunn, an environmental lawyer and professor with experience at the state and local level to head the EPA toxic chemical program. Dunn, who was confirmed by the Senate in January 2019, has promised to fully and faithfully implement the toxic chemical reform law, but to date, the regulations and policies issued under her leadership have failed to do so.

The passage of the LSCA is a key opportunity to protect workers and the public from acute and chronic chemical exposures. Despite political setbacks and a current administration closely tied with the chemical industry, unions, public health professionals and other advocates are working to hold EPA to its legislative mandate and to enhance coordination between EPA and OSHA for effective chemical regulation. Working people deserve to be protected from dangerous chemicals and the enormous public health burden of work-related disease.

WHAT NEEDS TO BE DONE

There has been significant progress made toward improving safety and health, and protecting workers from job injuries, illnesses and deaths. The Obama administration issued important regulations on silica, coal dust and other hazards, strengthened enforcement and expanded worker rights. These initiatives have made workplaces safer and saved lives.

But with President Trump in office, this progress is threatened. The Trump administration has carried out an all-out assault on regulations, targeting job safety rules on beryllium, mine examinations and injury reporting, and cutting agency budgets and staff.

With the Democrats now in the majority in the House of Representatives, there is greater opportunity to oppose these anti-worker attacks, hold the Trump administration accountable and push forward to win stronger worker protections.

Continued action is needed to defend the important gains that have been won from legal and political attacks, including OSHA's beryllium standard and injury reporting/anti-retaliation rule.

After years of starvation budgets, funding and staffing for the job safety agencies must be substantially increased to protect workers, and address ongoing and emerging safety and health problems.

OSHA's standard on electronic injury reporting must be defended and implemented, with the data collected made publicly available. The new anti-retaliation protections for workers who report injuries must be fully enforced.

Workplace violence is a growing and serious threat, particularly to women workers and in the health care and social services sector. OSHA must develop and issue a workplace violence standard and Congress should pass the Workplace Violence Prevention for Health Care and Social Service Workers Act to make sure this is done.

Standards also are needed for infectious diseases and combustible dust; standards for chemical hazards are obsolete and must be updated.

EPA must fully implement the new toxic chemicals reform law, taking action to address both the risks to the public and to workers.

Initiatives to address the safety and health risks posed by changes in the workforce and employment arrangements must continue. The serious safety and health problems, and increased risk of fatalities and injuries faced by Latino and immigrant workers, should be given increased attention, and efforts to protect temporary and contract workers enhanced.

At MSHA, initiatives to focus increased attention on mines with a record of repeated violations and stronger enforcement action against mines with patterns of violations must continue. The new coal dust rule must be fully maintained and enforced, and the promised rules on silica and proximity detection for mobile equipment must be issued. Congress must strengthen job safety laws to prevent tragedies like the Massey Upper Big Branch mining disaster. Improvements in the Mine Safety and Health Act are needed to give MSHA more authority to shut down dangerous mines and to enhance enforcement against repeat violators.

The Occupational Safety and Health Act now is nearly 49 years old and is out of date. Congress should pass the Protecting America's Workers Act to extend the law's coverage to workers currently excluded, strengthen civil and criminal penalties for violations, and strengthen the rights of workers, unions and victims. Improvements to update and strengthen the Occupational Safety and Health Act's anti-retaliation provisions are particularly needed so workers can report job hazards and injuries, and exercise safety and health rights without fear.

The nation must renew its commitment to protect workers from injury, disease and death, and make this a high priority. We must demand that employers meet their responsibilities to protect workers and hold them accountable if they put workers in danger. Only then can the promise of safe jobs for all of America's workers be fulfilled.

TRUMP ADMINISTRATION'S

WORKER SAFETY AND HEALTH RECORD

Trump Administration's Worker Safety and Health Record

Rollbacks and Repeals

Repealed OSHA rule requiring employers to keep accurate injury records (H.J. Res 83).

Repealed Fair Pay and Safe Workplaces rule to hold federal contractors accountable for obeying safety and labor laws (H.J. Res 37).

Issued Executive Order 13771 requiring that for every new protection, two existing safeguards must be repealed.

Issued Executive Order 13777 requiring agencies to identify regulations that are burdensome to industry that should be repealed or modified.

Proposed FY 2020 budget that would slash the Department of Labor's budget by 10%; cut coal mine enforcement and eliminate worker safety and health training programs; eliminate the Chemical Safety Board; and cut NIOSH's job safety research by \$146 million.

Delaying and Weakening Protections

Proposed to weaken OSHA's new beryllium standard for workers in construction and maritime, after delaying the effective date and enforcement of the rule in all sectors.

Delayed enforcement of OSHA's silica standard in construction for 90 days until Sept. 23, 2017, and full enforcement until Oct. 23, 2017, allowing continued high exposures to deadly silica dust.

Revoked requirement for large employers to report detailed injury data to OSHA after delaying requirement for all employers to submit summary injury data to the agency.

Delayed action on new OSHA standards on workplace violence and emergency planning.

Abandoned work on more than a dozen new OSHA rules including rules on styrene, combustible dust and noise in construction. Suspended work on new OSHA standards on infectious diseases and process safety management.

Withdrew OSHA's walkaround policy that gave nonunion workers the right to have a representative participate in OSHA inspections.

Reviewing MSHA's coal dust standard to determine whether it should be modified to be less burdensome on industry.

Weakened key provisions of MSHA's mine examination rule for metal and nonmetal mines after delaying the rule for months.

Abandoned work on new MSHA rules for civil penalties and refuge alternatives in coal mines, and suspended work on new standards on silica and proximity detection systems for mobile mining equipment.

Proposed to revoke child labor protections for 16- and 17- year-olds working in healthcare that restricted the operation of powered patient lifitng devices.

Delayed EPA's RMP rule to prevent chemical accidents for nearly two years, and then proposed to roll back most of the requirements, putting workers, the public and first responders in danger.

Refused to address worker exposures to methylene chloride, asbestos and other hazards in implementing the new toxic chemicals control law.

Limiting Access to Information and Input

Stopped posting information on all worker fatalities reported to OSHA.

Refused to make public employer injury data reported to OSHA, even though similar data has been posted on OSHA's website for years.

Disbanded OSHA's Federal Advisory Council on Occupational Safety and Health Safety and Health (FACOSH) and Whistleblower Protection Advisory Committee (WPAC).

Trump Administ	Trump Administration's OSHA Regulatory Agenda, Fall 2017 ^{1,2}	, Fall 2017 ^{1,2}
Regulatory Actions	Long-Term Actions	Withdrawn from (Spring 2017) Agenda
Crane Operator Qualification in Construction—NPRM 11/17	Process Safety Management and Chemical Safety	Combustible Dust
Injury Tracking (Delay)—Final Rule 11/24/17	Emergency Preparedness and Response	Bromopropane (1-BP) standard
Injury Tracking (Proposed Rollback)—NPRM 12/17	Workplace Violence in Health Care and Social Services	Chemicals Management and PELs
Cranes and Derricks in Construction: Exemption Railroad Roadway Work—NPRM 12/17	Infectious Disease	Backover Injuries
Powered Industrial Truck Update—RFI 1/18	MSD Column	Bloodborne Pathogens: 610 Review
Standards Improvement Project IV—Final 2/18	Update to Hazard Communication	Noise in Construction
Technical Corrections to 16 OSHA Standard—Final Rule 2/18	Shipyards Subpart E: Scaffolds, Ladders and Other Working Surfaces	Styrene
Communications Towers—Complete SBREFA 3/18	Tree Care Standard	Injury and Illness Prevention Programs
Mechanical Power Press Update—RFI 3/18		Subpart Q (Welding) Update
Lockout/Tagout Update—RFI 5/18		Updating Requirements for Hearing Protection Devices
Puerto Rico State Plan—NPRM 6/18		Revocation of Obsolete PELs
Agency Practice Concerning OSHA Access to Employee Medical Records—Final Rule 6/18		
Update Blood Lead Level Removal—ANPRM 7/18		
Amendments to the Cranes and Derricks in Construction Standard—NPRM 9/18		
Beryllium: Delay and Proposed Weakening (Construction and Maritime)—Final Rule 9/18		
Quantitative Fit Testing: Respiratory Protection—Final Rule 9/18		

Trump Admini	Trump Administration's MSHA Regulatory Agenda, Fall 2017 ^{1,2}	ia, Fall 2017 ^{1,2}
Regulatory Actions	Long-Term Actions	Withdrawn from (Spring 2017) Agenda
Retrospective Review Coal Dust Standard—RFI 12/17	Respirable Crystaline Silica	Criteria and Procedures for Assessment of Civil Penalties
Underground Mines Diesel Exhaust—RFI (Reopen Comment Period) 1/9/18	Proximity Detection: Mobile Mining Equipment	Refuge Alternatives Underground Coal Mines
Alternatives to Petitions for Modification—RFI 4/18		Preventing Coal Mine Accidents—RFI, Response to UBB
Refuge Alternatives for Underground Coal Mines—Final Rule 4/18		
Mine Examination—Metal/Nonmetal Mines (Weakening)—Final Rule 6/18		

¹lssued on Dec. 14, 2017.

²The dates on the regulatory agenda are projections set by the administration and may not have occurred by this date.

NATIONAL SAFETY AND HEALTH OVERVIEW

Workplace Fatalities 1970–2007^{1,2}

Year	Work Deaths	Employment (000) ³	Fatality Rate ⁴	
1970	13,800	77,700	18	
1971	13,700	78,500	17	
1972	14,000	81,300	17	
1973	14,300	84,300	17	
1974	13,500	86,200	16	
1975	13,000	85,200	15	
1976	12,500	88,100	14	
1977	12,900	91,500	14	
1978	13,100	95,500	14	
1979	13,000	98,300	13	
1980	13,200	98,800	13	
1981	12,500	99,800	13	
1982	11,900	98,800	12	
1983	11,700	100,100	12	
1984	11,500	104,300	11	
1985	11,500	106,400	11	
1986	11,100	108,900	10	
1987	11,300	111,700	10	
1988	10,800	114,300	9	
1989	10,400	116,700	9	
1990	10,500	117,400	9	
1991	9,900	116,400	9	
1992 ²	6,217	117,000	5.2	
1993	6,331	118,700	5.2	
1994	6,632	122,400	5.3	
1995	6,275	126,200	4.9	
1996	6,202	127,997	4.8	
1997	6,238	130,810	4.8	
1998	6,055	132,684	4.5	
1999	6,054	134,666	4.5	
2000	5,920	136,377	4.3	
2001	5,915 ⁵	136,252	4.3	
2002	5,534	137,700	4.0	
2003	5,575	138,928	4.0	
2004	5,764	140,411	4.1	
2005	5,734	142,894	4.0	
2006	5,840	145,501	4.0	
2007	5,657	147,215	3.8	

(Employment-Based Fatality Rates)

¹Fatality information for 1971 to 1991 from National Safety Council Accident Facts, 1994.

²Fatality information for 1992 to 2007 is from the Bureau of Labor Statistics, Census of Fatal Occupational Injuries. In 1994, the National Safety Council changed its reporting fatalities and adopted the BLS count. The earlier NSC numbers are based on an estimate; the BLS method for workplace numbers are based on an actual census.

³Employment is an annual average of employed civilians 16 years of age and older from the Current Population Survey, adjusted to include data for resident and armed forces from the Department of Defense.

⁴Deaths per 100,000 workers are based on annual average of employed civilians 16 years of age and older from 1992 to 2007. In 2008, CFOI switched from an employment-based fatality rate to an hours-based fatality rate calculation. Employment-based fatality rates should not be compared with hours-based fatality rates. ⁵Excludes fatalities from the events of September 11, 2001.

Workplace Fatalities 2006–2017¹ (Hours-Based Fatality Rates)

Year	Work Deaths	Total Hours Worked (Millions) ²	Fatality Rate ³
2006	5,840	271,815	4.2
2007	5,657	275,043	4.0
2008	5,214	271,958	3.7
2009	4,551	254,771	3.5
2010	4,690	255,948	3.6
2011	4,693	258,293	3.5
2012	4,628	264,374	3.4
2013	4,585	268,127	3.3
2014	4,821	272,663	3.4
2015	4,836	277,470	3.4
2016	5,190	283,101	3.6
2017	5,147	285,977	3.5

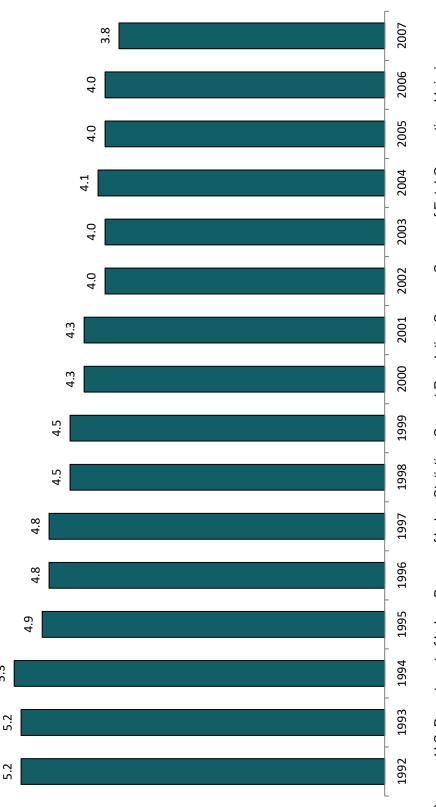
¹Fatality information is from the U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

²The total hours worked figures are annual average estimates of total persons at work multiplied by average hours for civilians, 16 years of age and older, from the Current Population Survey, U.S. Bureau of Labor Statistics.

³Deaths per 100,000 workers. In 2008, CFOI switched to an hours-based fatality rate calculation from an employment-based calculation used from 1992 to 2007. Fatality rates for 2006 and 2007 were calculated by CFOI using both approaches during the transition to hours-based rates beginning exclusively in 2008. Hours-based fatality rates should not be compared directly with the employment-based rates CFOI calculated for 1992 to 2007.

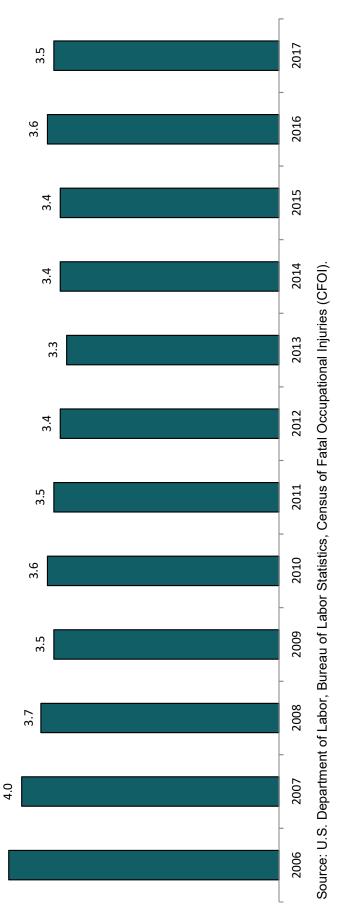
Rate of Fatal Work Injuries Per 100,000 Workers, 1992–2007¹ (Employment-Based Rates)

5.3



Sources: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, Census of Fatal Occupational Injuries; U.S. Bureau of the Census; and U.S. Department of Defense. ¹Incidence rate represents the number of fatalities per 100,000 workers. Fatality rate is an employment-based calculation using employment figures that are annual average estimates of employed civilians, 16 years of age and older, from the Current Population Survey, U.S. Bureau of of Labor Statistics. In 2008, CFOI switched to an hours-based fatality rate calculation. Employment-based fatality rates should not be compared directly with hours-based rates.

Rate of Fatal Work Injuries Per 100,000 Workers, 2006–2017¹ (Hours-Based Rates)



¹incidence rate represents the number of fatalities per 100,000 workers. Fatality rate is an hours-based calculation using total hours worked figures that are annual average estimates of total hours at work multiplied by average hours for civilians, 16 years of age and older, from the Current Population Survey (CPS). Hours-based fatality rates should not be compared directly with the employment-based rates CFOI calculated for 1992 to 2007.

4.2

Workplace Fatality Rates by Industry Sector, 1970–2002^{1,2}

Year	All Ind.	Mfg.	Const.	Mining	Gov't	Agri.	Trans/Util.	Ret. Trade	Service	Finance
1970	18.0	6	69	100	13	7 9	N/A	N/A	A/N	N/A
1971	17.0	თ	68	83	13	63	N/A	N/A	N/A	N/A
1972	17.0	თ	68	100	13	58	N/A	N/A	N/A	N/A
1973	17.0	თ	56	83	14	58	38	ω	11	N/A
1974	16.0	∞	53	71	13	54	35	7	10	N/A
1975	15.0	ი	52	63	12	58	33	7	10	N/A
1976	14.0	6	45	63	11	54	31	7	б	N/A
1977	14.0	6	47	63	11	51	32	9	8	N/A
1978	14.0	б	48	56	11	52	29	7	7	N/A
1979	13.0	ø	46	56	10	54	30	9	8	N/A
1980	13.0	ø	45	50	11	56	28	9	7	N/A
1981	13.0	7	42	55	10	54	31	5	7	N/A
1982	12.0	9	40	50	11	52	26	5	9	N/A
1983	12.0	9	39	50	10	52	28	5	7	N/A
1984	11.0	9	39	50	0	49	29	5	7	N/A
1985	11.0	9	40	40	ø	49	27	5	9	N/A
1986	10.0	5	37	38	ø	55	29	4	5	N/A
1987	10.0	5	33	38	0	53	26	5	9	N/A
1988	10.0	9	34	38	0	48	26	4	£	N/A
1989	0.6	9	32	43	10	40	25	4	ъ 2	N/A
1990	0.0	5	33	43	10	42	20	4	4	N/A
1991	8.0	4	31	43	11	44	18	ო	4	N/A
1992	5.2	4	14	27	4	24	13	4	7	2
1993	5.2	4	14	26	ო	26	13	4	2	2
1994	5.3	4	15	27	ო	24	13	4	с	1
1995	4.9	ი	15	25	4	22	12	ო	2	2
1996	4.8		13.9	26.8	3.0	22.2	13.1	3.1	2.2	1.5
1997	4.8	3.6	14.1	25.0	3.2	23.4	13.2	3.0	2.0	1.2
1998	4.5	3.3	14.5	23.6	3.0	23.3	11.8	2.6	2.0	1.1
1999	4.5	3.6	14.0	21.5	2.8	24.1	12.7	2.3	1.9	1.2
2000	4.3	3.3	12.9	30.0	2.8	20.9	11.8	2.7	2.0	0.0
2001	4.3	3.2	13.3	30.0	3.1	22.8	11.2	2.4	1.9	1.0
2002	4.0	3.1	12.2	23.5	2.7	22.7	11.3	2.1	1.7	1.0
¹ Data for 1970. Occupational li are based on a	–1991 is from th njuries. In 1994, in estimate: the	e National Safel the National Sa RI S numbers an	ty Council, Accic fety Council cha re based on an a	¹ Data for 1970–1991 is from the National Safety Council, Accident Facts, 1994. Occupational Injuries. In 1994, the National Safety Council changed its reporting are based on an estimate: the BI S numbers are based on an actual census. Be	. Fatality inform: ופ method for w ≏מיוחחות with 20	ation for 1992–; orkplace fatalitie M3_CFOI bega	¹ Data for 1970–1991 is from the National Safety Council, Accident Facts, 1994. Fatality information for 1992–2002 is from the Bureau of Labor Statistics, Census of Fatal Occupational Injuries. In 1994, the National Safety Council changed its reporting method for workplace fatalities and adopted the BLS count. The earlier NSC numbers are based on an estimate: the BLS numbers are based on an actual census. Beginning with 2003. CFOI began using the North American Industry Classification for	tureau of Labor { BLS count. Th American Indust	Statistics, Censu e earlier NSC nu Irv Classificatior	us of Fatal umbers n for
industries. Prio	It to 2003, CFOI	industries. Prior to 2003, CFOI used the Standard	ard Industrial CI	assification syste	egiining with zh	ntial differences	Industrial Classification system. The substantial differences between these systems result in breaks in series for	stems result in l	breaks in series	for
industry data.										
⁴ Deaths per 100,000 workers	00,000 workers.									

Workplace Fatality Rates by Industry Sector, 2003–2007^{1,2} (Employment-Based Rates)

Industry Sector	2003	2004	2005	2006	2007
All Industries	4.0	4.1	4.0	4.0	3.8
Agriculture, Forestry, Fishing and Hunting	31.2	30.5	32.5	30.0	27.9
Mining	26.9	28.3	25.6	28.1	25.1
Construction	11.7	12.0	11.1	10.9	10.5
Manufacturing	2.5	2.8	2.4	2.8	2.5
Wholesale Trade	4.2	4.5	4.6	4.9	4.7
Retail Trade	2.1	2.3	2.4	2.2	2.1
Transportation and Warehousing	17.5	18.0	17.7	16.8	16.9
Utilities	3.7	6.1	3.6	6.3	4.0
Information	1.8	1.7	2.0	2.0	2.3
Finance, Insurance, Real Estate	1.4	1.2	1.0	1.2	1.2
Professional and Administrative	3.3	3.3	3.5	3.2	3.1
Educational and Health Services	0.8	0.8	0.8	0.9	0.7
Leisure and Hospitality	2.4	2.2	1.8	2.3	2.2
Other Services, Except Public Administration	2.8	3.0	3.0	2.6	2.5
Government	2.5	2.5	2.4	2.4	2.5

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Deaths per 100,000 workers.

²Fatality rate is an employment-based calculation using employment figures that are annual average estimates of employed civilians, 16 years of age and older, from the Current Population Survery. In 2008, CFOI switched to an hours-based fatality rate calculation. Employment-based fatality rates should not be compared directly with hours-based rates.

Note: Beginning with the 2003 reference year, both CFOI and the Survey of Occupational Injuries and Illnesses began using the 2002 North American Industry Classification System (NAICS) for industries. Prior to 2003, the surveys used the Standard Industrial Classification (SIC) system. The substantial differences between these systems result in breaks in series for industry data.

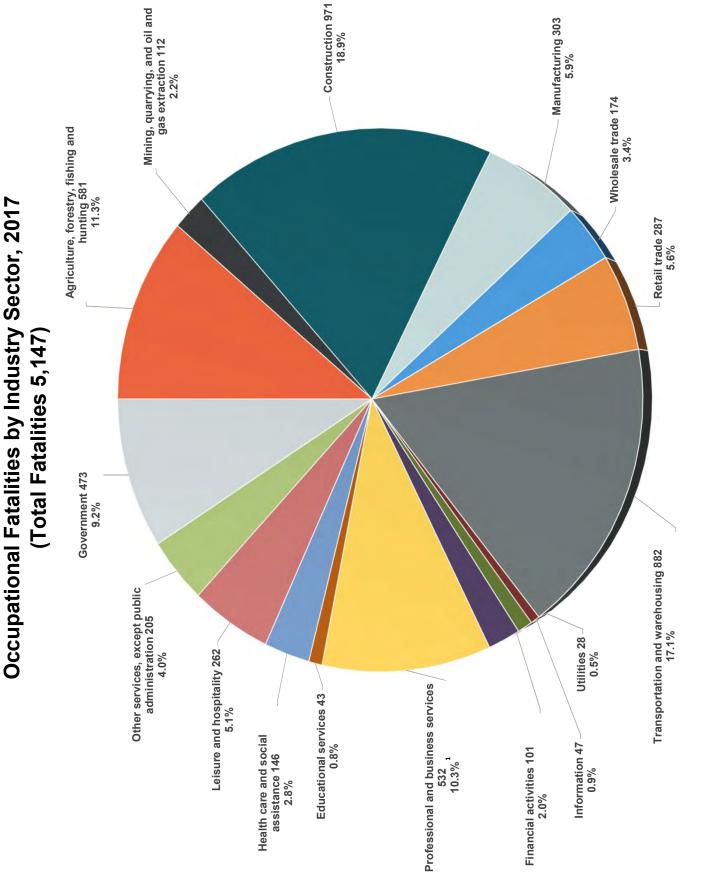
Workplace Fatality Rates by Industry Sector, 2007–2017^{1,2} (Hours-Based Rates)

Industry Sector	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
All Industries	4.0	3.7	3.5	3.6	3.5	3.4	3.3	3.4	3.4	3.6	3.5
Agriculture, Forestry, Fishing and Hunting	27.0	30.4	27.2	27.9	24.9	22.8	23.2	25.6	22.8	23.2	23.0
Mining, Quarrying, and Oil and Gas Extraction	21.4	18.1	12.4	19.8	15.9	15.9	12.4	14.2	11.4	10.1	12.9
Construction	10.8	9.7	9.6	9.8	9.1	9.6	9.7	9.8	10.1	10.1	9.5
Manufacturing	2.4	2.5	2.3	2.3	2.2	2.2	2.1	2.3	2.3	2.0	1.9
Wholesale Trade	4.5	4.4	5.0	4.9	4.9	5.4	5.3	5.1	4.7	4.8	4.8
Retail Trade	2.4	2.0	2.2	2.2	1.9	1.9	1.9	1.9	1.8	1.9	2.0
Transportation and Warehousing	16.5	14.9	13.3	13.7	15.3	14.6	14	14.1	13.8	14.3	15.1
Utilities	5.7	3.9	1.7	2.8	4.2	2.5	2.6	1.7	2.2	2.8	2.6
Information	2.3	1.5	1.1	1.5	1.9	1.5	1.5	1.2	1.5	1.7	1.6
Financial Activities	1.2	1.1	1.2	1.3	1.1	0.9	0.9	1.2	0.9	1.2	1.0
Professional and Business Services	3.3	2.8	3.1	2.6	2.9	2.7	2.8	2.7	3.0	3.1	3.0
Educational and Health Services	0.8	0.7	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.8
Leisure and Hospitality	2.5	2.2	2.2	2.3	2.2	2.2	1.9	2.0	2.0	2.6	2.2
Other Services, Except Public Administration	2.7	2.6	2.8	3.0	3.0	2.7	2.7	2.7	3.0	3.2	2.9
Government	2.3	2.4	1.9	2.2	2.2	2.0	2.0	1.9	1.9	2.2	2.0

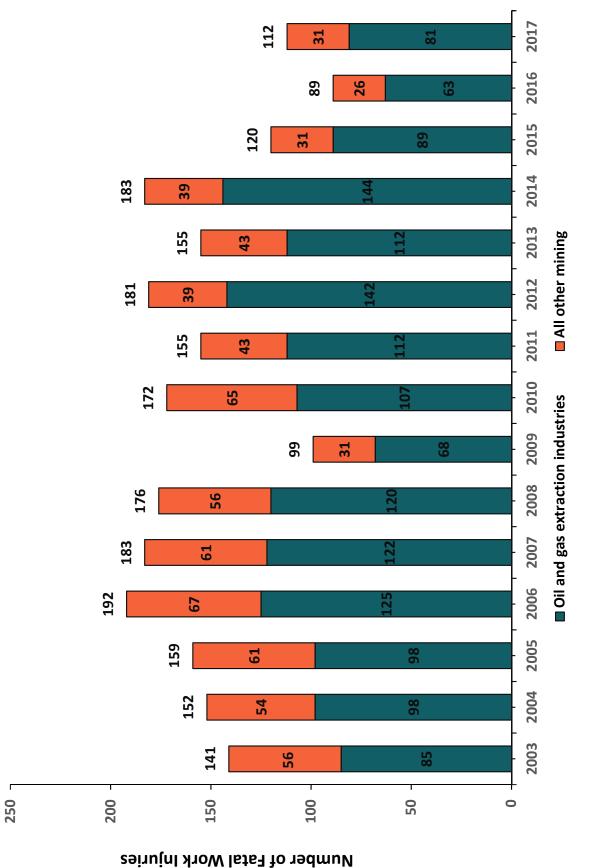
Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Deaths per 100,000 workers.

based rates. Fatality rate is an hours-based calculation using total hours worked figures that are annual average estimates of total persons at work multiplied by average hours for civilians, 16 years of and older, from the Current Population Survey. Hours-based fatality rates should not be compared directly with employment-based rates that CFOI calculated for 1992 to 2007. ²In 2008, CFOI switched to an hours-based fatality rate calculation from an employment-based calculation. Fatality rates for 2007 were calculated using both approaches during the transition to hours-



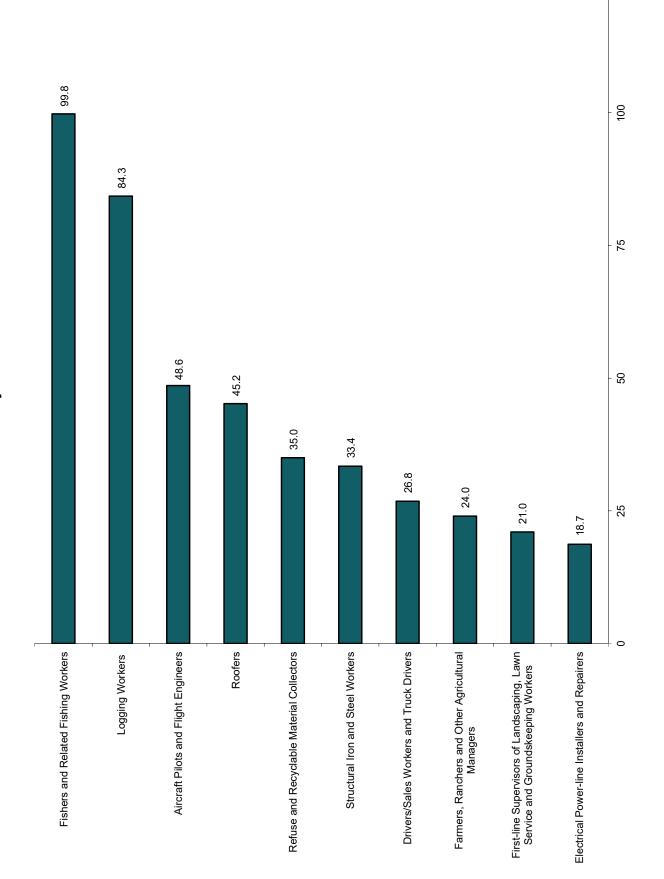
Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries. ¹Landscaping services accounted for 214 of these deaths. Fatal Occupational Injuries in the Private-Sector Mining, Quarrying, and Oil and Gas Extraction Industries, 2003–2017



Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor.

Note: Oil and gas extraction industries include oil and gas extraction (NAICS 21111), drilling oil and gas wells (NAICS 21311), and support activities for oil and gas operations (NAICS 21312).

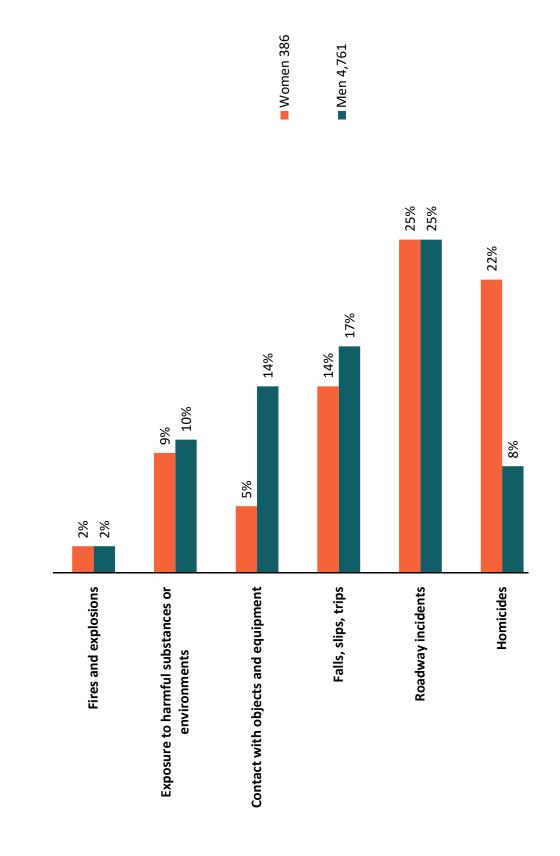
Selected Occupations with High Fatality Rates, 2017 (Per 100,000 Workers) National Fatality Rate = 3.5



Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

125

Distribution of Fatal Injury Events by Gender of Worker, 2017



Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

Profile of Workplace Homicides, 2017

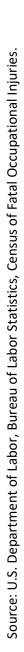
Characteristic	Subcharacteristics	Deaths
Total Homicides ¹		458
Gender	Men	375
Gender	Women	83
Employee Status	Wage and salary workers	356
	Self employed	102
	White	220
Race	Black	113
	Hispanic or Latino	68
	Assailant, suspect	235
	Co-worker or work associate	77
Leading Primary Source	Other client or customer	51
	Relative or domestic partner of injured or ill worker	28
Leading Secondary Source	Firearm	355
	Knives	39
	Tending a retail establishment	126
Leading Worker Activity	Protective service activities	88
	Vehicular and transportation operations	58
	Public building	181
Leading Location	Street or highway	76
	Employer's parking lot/garage	51
	Motor vehicle operators	49
Leading Occupations	Law enforcement workers	46
	Supervisors of sales workers	46
	Retail trade	98
Leading Industries	Accomodations and food services	62
	Local government ²	51
	Transportation and warehousing ³	41

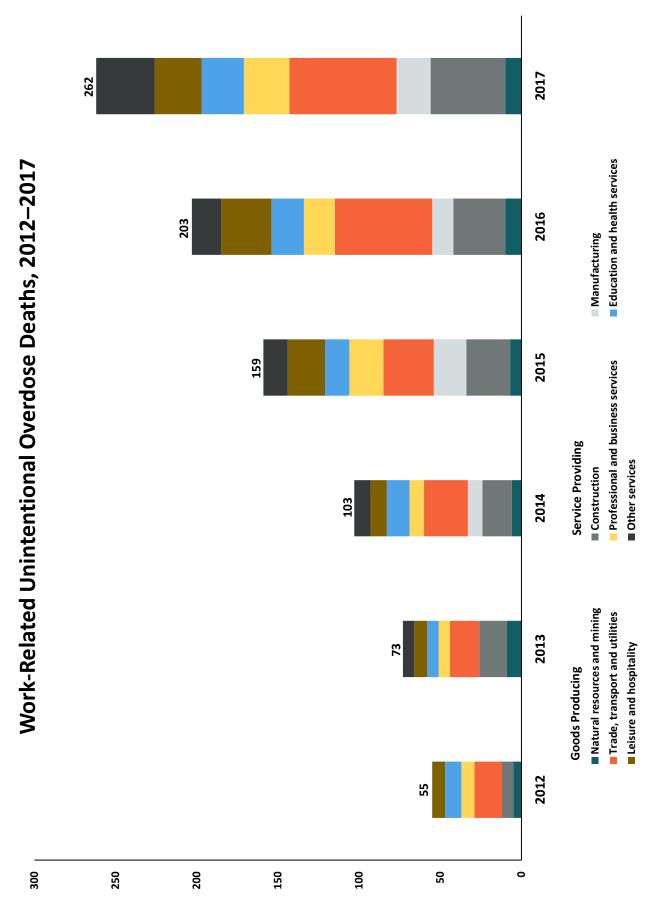
Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

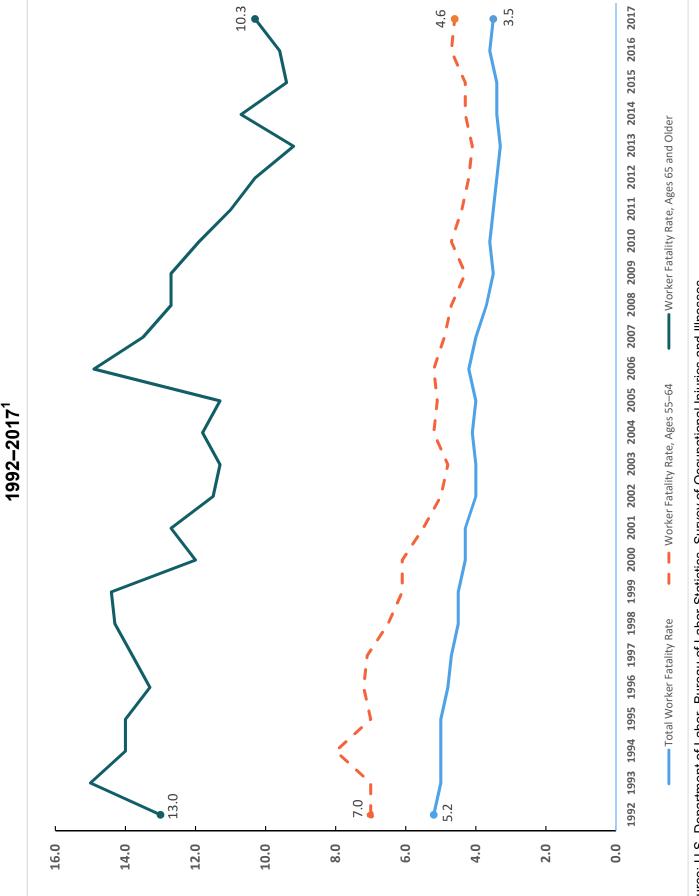
¹This does not include 275 workplace suicides.

²Police protection accounted for 39 of these deaths.

³Taxi service accounted for 18 of these deaths







Total Worker Fatality Rates Compared with Aging Worker Fatality Rates,

Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

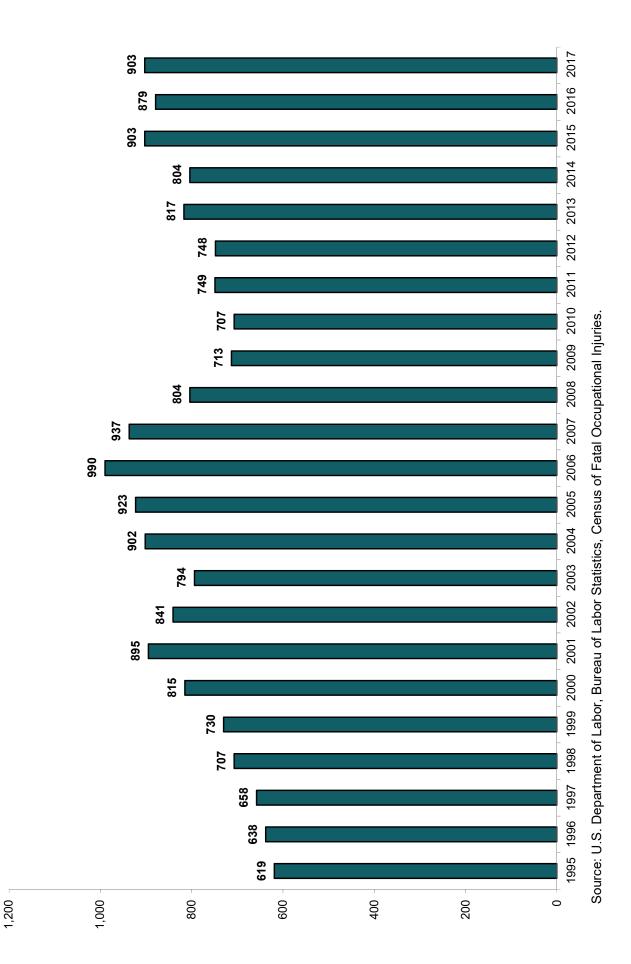
Fatal Work Injuries by Race, 1998–2017

	1998	1999		2000 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 ²
Total Fatalities	6,055	6,055 6,054 5,920		5,915	5,534 5,575		5,764	5,734	5,840	5,657	5,214 4	4,551 4	4,690 4	4,693	4,628	4,585	4,821	4,836	5,190	5,147
White	4,478	4,410	4,244	4,410 4,244 4,175	3,926	3,988	4,066	3,977	4,019	3,867	3,663	3,204 3	3,363 3	3,323	3,177	3,125	3,332	3,241	3,481	3,449
Black or African American	583	616	575	565	491	543	546	584	565	609	533	421	412	440	486	439	475	495	587	530
Hispanic or Latino	207	730	815	<u> 3</u> 62	841	794	902	923	066	937	804	713	707	749	748	817	804	903	879	903
Asian or Pacific Islander	148	180	185	182	140	158	180	163	159	172	152	148	149	124	154	132	142	123	167	161
American Indian or Alaskan Native	28	54	33	48	40	42	28	50	46	29	32	33	32	30	37	35	34	36	38	38
Other Races/Not Reported	111	64	68	50	96	50	42	37	61	43	30	32	27	27	26	37	34	38	38	57

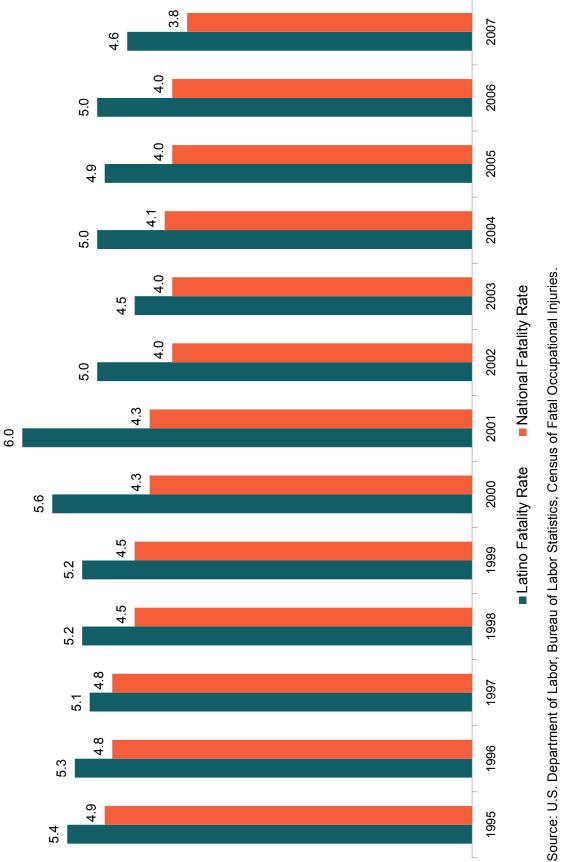
Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

 $^1\mathrm{Excludes}$ fatalities from the September 11 terrorist attacks. $^2\mathrm{Multiple}$ races reported for nine fatalities in 2017.





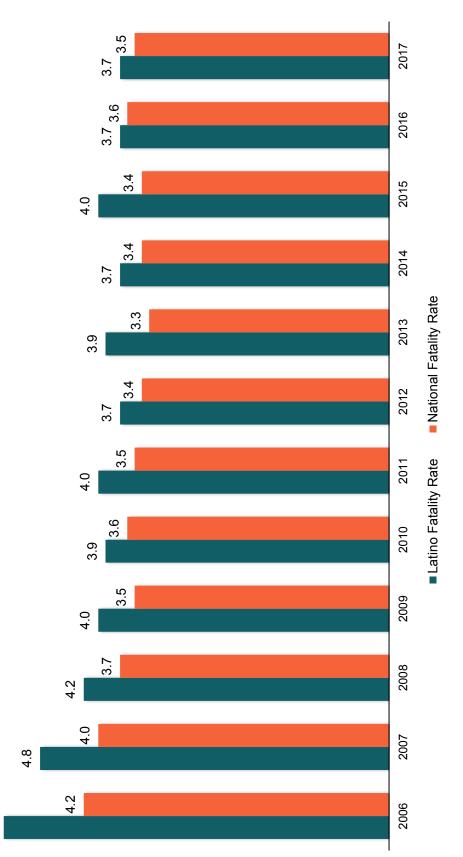
Rate¹ of Fatal Occupational Injuries to Hispanic and Latino Workers, 1995–2007 (Employment-Based Rates)



¹Incidence rate represents the number of fatalities per 100,000 workers. Fatality rate is an employment-based calculation. In 2008, CFOI switched to an hours-based fatality rate calculation. Employment-based fatality rates should not be compared directly with hours-based rates.

Rate of Fatal Occupational Injuries to Hispanic and Latino Workers, 2006–2017¹ (Hours-Based Rates)

5.3



Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Incidence rate represents the number of fatalities per 100,000 workers. In 2008, CFOI switched to an hours-based calculation from an employment-based calculation it used from 1992 to 2007. Fatality rate is an hours-based calculation using total hours worked figures that are annual average estimates of total persons at work multiplied by average hours for civilians, 16 years of age and older, from the Current Population Survey. Fatality rates for 2006 and 2007 were calculated by CFOI using both employment-based and hours-based calculations during the transition to hours-based rates beginning exclusively in 2008.

Profile of Hispanic and Latino Worker Fatalities, 2017

Characteristic	Subcharacteristics	Deaths
Total Fatalities		903
Country of Birth	Foreign-born	568
	Native-born	335
	Mexico	352
Leading Birthplace Countries	United States	335
	Guatemala	53
Employee Status	Wage and salary workers	774
	Self employed	129
Gender	Men	862
Gender	Women	41
	Construction trades workers	258
Leading Occupations	Motor vehicle operators ¹	156
Leading Occupations	Grounds maintenance workers	61
	Agricultural workers	52
	Construction	291
Leading Industries	Administration and support and waste management and remediation services ²	134
	Transportation and warehousing ³	132
	Transportation incidents	325
Leading Event or Exposure	Fall, slip, trip	231
	Contact with object/equipment	136
	Violence ⁴	98

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Heavy and tractor-trailer truck drivers accounted for 128 of these deaths.

²Landscaping services accounted for 70 of these deaths.

³Truck transportation accounted for 102 of these deaths.

⁴Excludes animal- and insect-related incidents.

Profile of Foreign-Born Worker Fatalities, 2017

Characteristic	Subcharacteristics	Number
Total Fatalities		927
	Mexico	355
Leading Birthplace Countries	Guatemala	54
	El Salvador	51
	India	43
Employee Status	Wage and salary workers	738
	Self employed	189
Gender	Men	885
	Women	42
	Construction trades workers	232
	Motor vehicle operators ¹	184
Leading Occupations	Grounds maintenance workers	56
	Agricultural workers	49
	Material moving workers	42
	Construction	262
	Transportation and warehousing ²	177
Leading Industries	Administrative and support and waste management and remediation services ³	111
	Agriculture, forestry, fishing and hunting	75
	Transportation incidents	324
Leading Event or Exposure	Fall, slip, trip	234
	Violence ⁴	150
	Contact with object/equipment	132

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Heavy and tractor-trailer truck drivers accounted for 137 of these deaths.

²Truck transportation accounted for 122 of these deaths.

³Landscaping services accounted for 63 of these deaths.

⁴Excludes animal- and insect-related incidents.

Workplace Injury and Illness Incidence Rates, Private Sector, 1973–2017 (Per 100 Workers)

		Cases	s with Days Away from Wo Restriction	
Year	Total Case Rate	Total	Cases with Days Away	Cases with Job
			from Work	Transfer or Restriction ¹
1973	11.0	3.4	N/A	N/A
1974	10.4	3.5	N/A	N/A
1975	9.1	3.3	N/A	N/A
1976	9.2	3.5	3.3	0.2
1977	9.3	3.8	3.6	0.2
1978	9.4	4.1	3.8	0.3
1979	9.5	4.3	4.0	0.3
1980	8.7	4.0	3.7	0.3
1981	8.3	3.8	3.5	0.3
1982	7.7	3.5	3.2	0.3
1983	7.6	3.4	3.2	0.3
1984	8.0	3.7	3.4	0.3
1985	7.9	3.6	3.3	0.3
1986	7.9	3.6	3.3	0.3
1987	8.3	3.8	3.4	0.4
1988	8.6	4.0	3.5	0.5
1989	8.6	4.0	3.4	0.6
1990	8.8	4.1	3.4	0.7
1991	8.4	3.9	3.2	0.7
1992	8.9	3.9	3.0	0.8
1993	8.5	3.8	2.9	0.9
1994	8.4	3.8	2.8	1.0
1995	8.1	3.6	2.5	1.1
1996	7.4	3.4	2.2	1.1
1997	7.1	3.3	2.1	1.2
1998	6.7	3.1	2.0	1.2
1999	6.3	3.0	1.9	1.2
2000	6.1	3.0	1.8	1.2
2001	5.7	2.8	1.7	1.1
2002	5.3	2.8	1.6	1.2
2003	5.0	2.6	1.5	1.1
2004	4.8	2.5	1.4	1.1
2005	4.6	2.4	1.4	1.0
2006	4.4	2.3	1.3	1.0
2007	4.2	2.1	1.2	0.9
2008	3.9	2.0	1.1	0.9
2009	3.6	2.0	1.1	0.8
2010	3.5	1.8	1.1	0.8
2011	3.5	1.8	1.1	0.7
2012	3.4	1.8	1.0	0.7
2013	3.3	1.7	1.0	0.7
2014	3.2	1.7	1.0	0.7
2015	3.0	1.6	0.9	0.7
2016	2.9	1.6	0.9	0.7
2017	2.8	1.5	0.9	0.7

Source: Department of Labor, Bureau of Labor Statistics.

¹Through 2001, this column includes cases involving restricted activity only.

Workplace Injury and Illness Rates by Industry Sector, 1973–2002¹ Per 100 Full-Time Workers

Vear All hd. Mfg. Const. Mining Finance Agri. Trans./Uli Trade Service 1975 11.0 15.3 19.8 12.5 2.4 11.6 10.3 8.6 5.5 1975 9.1 13.0 16.0 11.0 2.2 8.5 5.3 1975 9.1 13.2 16.0 11.0 2.2 8.5 5.3 1976 9.3 13.2 16.0 11.0 2.2 8.5 5.3 1977 9.3 13.2 16.0 11.0 2.2 8.5 5.5 1976 9.4 13.2 16.0 11.6 10.1 7.5 5.5 1977 9.4 13.2 16.0 11.6 11.1 7.7 5.5 1987 8.3 11.5 11.6 11.1 8.6 7.7 5.5 1986 7.7 13.3 16.5 14.4 8.5 7.7 5.5 <					Ĕ	Total Case Rate	9			
110 15.3 19.8 12.5 2.4 11.6 10.3 8.6 9.1 13.0 15.5 10.9 12.5 2.4 9.9 10.5 8.4 9.2 13.2 15.5 10.9 2.0 11.0 2.0 11.5 9.7 7.7 9.4 13.2 15.5 10.9 2.0 11.6 9.7 7.7 9.4 13.2 15.5 10.9 2.0 11.6 9.7 7.7 9.4 13.2 15.5 10.9 2.0 11.6 9.7 7.7 9.5 13.2 15.5 10.2 11.4 2.0 11.6 7.9 7.7 10.2 14.6 8.4 2.0 11.9 12.3 7.6 7.9 10.6 15.5 8.4 2.0 11.4 8.6 7.7 7.9 10.6 14.7 8.8 2.0 11.4 8.6 7.4 7.9 10.6 15.2 8.4 10.6 11.4 8.6 7.4 7.9 11.6 <th>Year</th> <th>All Ind.</th> <th>Mfg.</th> <th>Const.</th> <th>Mining</th> <th>Finance</th> <th>Agri.</th> <th>Trans./Util.</th> <th>0</th> <th>Service</th>	Year	All Ind.	Mfg.	Const.	Mining	Finance	Agri.	Trans./Util.	0	Service
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1973	11.0	15.3	19.8	12.5	2.4	11.6	10.3	\sim	6.2
9.1 130 16.0 11.0 22 8.5 9.4 7.3 9.2 13.2 15.5 11.0 2.0 11.5 9.7 7.7 9.5 13.2 15.5 11.0 2.0 11.5 9.7 7.7 9.5 13.2 15.5 11.4 2.1 11.7 10.2 9.8 7.7 9.5 13.3 16.2 11.4 2.1 11.7 10.2 9.8 7.7 9.5 13.3 16.2 11.4 2.1 11.7 10.2 9.8 7.7 7.7 10.2 14.6 9.7 17.7 10.2 9.4 7.3 7.7 10.2 14.6 10.5 2.0 11.9 12.7 10.7 7.7 10.2 14.7 8.4 2.0 11.9 12.8 7.4 7.9 10.4 15.2 7.4 2.0 11.2 8.8 7.4 7.9 10.6 15.2 7.4 2.0 11.2 8.8 7.4 8.8 13.1	1974		14.6		10.2	2.4	9.9	10.5	8.4	5.8
92 132 153 110 20 110 20 110 98 75 93 131 155 110 20 115 91 77 94 132 160 115 111 101 88 77 95 133 165 114 21 117 102 88 77 95 133 165 116 116 116 117 102 88 73 76 100 146 86 114 21 1114 21 71 73 76 100 148 84 20 113 86 74 74 77 79 106 155 84 20 114 86 74 79 106 155 84 20 114 86 74 79 106 155 84 20 114 86 74 79 106 155 84 20 114 86 74 88	1975		13.0		11.0	2.2	8.5	9.4	7.3	5.4
9.3 13.1 15.5 10.9 2.0 11.5 9.7 7.7 9.4 13.2 16.2 11.4 2.1 11.6 10.1 7.9 9.5 12.3 16.2 11.4 2.1 11.6 10.1 7.9 7.7 11.5 15.1 11.6 10.1 2.0 11.9 9.4 7.4 7.7 10.2 14.6 10.5 2.0 11.9 12.3 9.0 7.3 7.7 10.2 14.6 8.8 2.0 11.9 12.3 9.0 7.4 7.9 10.6 15.2 8.4 2.0 11.9 12.3 9.0 7.4 7.9 10.6 15.2 8.4 2.0 11.1 9.4 7.4 7.9 10.6 15.2 8.4 2.0 11.1 8.8 7.4 7.9 10.6 15.2 8.4 2.0 11.1 8.8 7.4 7.9 10.6 15.2 8.4 2.0 11.1 8.8 7.4 <	1976		13.2		11.0	2.0	11.0	9.8	7.5	5.3
9.4 13.2 16.0 11.5 2.1 11.6 10.1 7.9 7.7 10.2 15.7 11.4 2.1 11.7 10.2 8.0 7.7 10.2 15.7 11.2 15.7 11.2 15.7 11.2 17.7 7.7 10.2 14.6 10.5 2.0 11.9 12.3 9.4 7.4 7.6 10.0 14.8 8.4 2.0 11.9 12.3 9.4 7.4 7.9 10.6 15.5 8.4 2.0 11.9 8.5 7.7 7.9 10.6 15.2 8.4 2.0 11.2 8.8 7.7 7.9 10.6 15.2 8.4 2.0 11.2 8.8 7.7 8.6 13.1 14.5 8.8 2.0 11.2 8.6 7.4 8.8 12.7 13.1 14.2 8.8 7.7 8.7 7.4 8.8 12.7 13.1 14.2 8.8 7.6 7.4 7.4 8.8	1977		13.1		10.9	2.0	11.5	9.7	7.7	5.5
9.5 13.3 16.2 11.4 2.1 11.7 10.2 8.0 7.7 10.2 15.1 11.6 10.5 11.6 10.2 8.0 7.7 10.2 14.6 10.5 11.6 1.9 12.3 9.4 7.4 7.7 10.2 14.6 10.5 2.0 11.9 12.3 9.4 7.4 7.7 10.6 15.5 9.7 1.9 12.0 11.8 8.5 7.2 7.9 10.6 15.5 9.7 1.9 12.0 11.8 8.5 7.2 7.9 10.6 15.2 7.4 2.0 11.1 8.8 7.4 7.9 10.6 15.2 7.4 2.0 11.2 8.8 7.4 8.6 13.1 14.7 8.8 2.0 11.2 8.8 7.4 8.6 13.1 14.7 8.8 2.0 11.2 8.8 7.4 8.8 12.7 14.3 8.8 2.0 11.6 9.6 7.4	1978	9.4	13.2		11.5	2.1		10.1	7.9	5.5
8.7 12.2 15.7 11.2 15.1 11.6 15.1 11.6 15.1 11.6 12.3 9.4 7.4 7.7 7.0 10.0 14.6 8.7 1.9 12.3 9.0 7.3 7.7 10.0 14.6 8.7 1.9 12.3 9.0 7.3 7.0 10.6 15.5 9.7 1.9 12.0 11.8 8.5 7.2 7.9 10.6 15.2 8.4 2.0 11.4 8.6 7.4 8.6 13.1 14.7 8.8 2.0 11.2 8.8 7.2 8.6 13.1 14.6 8.8 2.0 11.2 8.8 7.6 8.8 13.2 14.2 8.8 2.0 11.2 8.8 7.6 8.8 12.7 13.0 7.4 2.0 11.2 8.8 7.4 8.8 12.5 13.1 14.2 8.8 2.0 11.6 <t< th=""><th>1979</th><th>9.5</th><th>13.3</th><th></th><th>11.4</th><th>2.1</th><th></th><th>10.2</th><th>8.0</th><th>5.5</th></t<>	1979	9.5	13.3		11.4	2.1		10.2	8.0	5.5
8.3 11.5 15.1 11.6 1.9 12.3 9.0 7.3 7.7 10.2 14.6 10.5 2.0 11.8 8.5 7.2 7.6 10.0 14.8 8.4 2.0 11.9 12.3 9.0 7.3 7.9 10.6 15.5 9.7 1.9 12.0 8.8 7.2 7.9 10.6 15.5 8.4 2.0 11.4 8.8 7.2 7.9 10.6 15.2 7.4 2.0 11.2 8.8 7.4 8.6 13.1 14.5 8.8 2.0 11.1 8.8 7.7 8.6 13.1 14.5 8.8 2.0 11.2 8.8 7.4 8.8 13.1 14.3 8.8 2.0 11.2 8.8 7.4 8.4 12.5 13.0 7.4 2.0 11.2 8.8 7.6 8.8 12.1 14.2 8.8 2.9 11.6 9.7 8.4 8.4 12.5 13.0 <	1980	8.7	12.2		•	2.0	•	9.4	7.4	5.2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1981	8.3	11.5			1.9		9.0	7.3	5.0
7.610.014.88.42.011.98.2 7.0 7.9 10.615.59.71.912.08.8 7.2 7.9 10.615.58.42.011.48.6 7.4 7.9 10.615.2 8.4 2.011.48.6 7.4 7.9 10.615.2 8.4 2.011.48.6 7.4 7.9 10.614.7 8.5 2.0 11.2 8.8 7.2 8.6 13.114.6 8.8 8.5 2.0 11.2 8.6 7.4 8.6 13.114.3 8.5 2.0 11.2 8.6 7.4 8.8 13.214.2 8.8 2.0 10.9 9.2 8.4 7.6 8.8 13.214.2 8.8 2.0 11.2 8.6 7.4 8.8 12.713.0 7.4 2.4 11.6 9.6 7.6 8.8 12.112.2 11.2 8.8 2.9 11.6 9.7 8.4 12.213.1 7.4 2.8 7.6 7.9 8.4 12.6 11.8 7.4 2.7 9.7 9.7 8.4 10.6 9.9 8.7 9.7 9.7 9.7 8.4 12.7 11.8 7.3 9.7 9.7 9.7 8.7 9.7 9.7 9.7 9.7 9.7 9.7 6.1 7.9 7.9 7.9 7.9 7	1982	7.7	10.2			2.0	•	8.5	7.2	4.9
8.010.615.59.71.912.08.87.27.910.415.2 8.4 2.0 11.4 8.6 7.4 7.910.615.2 8.4 2.0 11.4 8.6 7.4 8.311.9 14.7 8.5 2.0 11.2 8.8 7.7 8.613.1 14.7 8.5 2.0 11.2 8.8 7.7 8.613.1 14.7 8.5 2.0 11.2 8.7 8.613.1 14.3 8.5 2.0 11.2 8.7 8.613.1 14.3 8.5 2.0 11.2 8.7 8.8 13.2 14.3 8.5 2.0 11.2 8.7 8.8 13.2 14.2 8.8 2.9 11.6 9.6 8.4 12.7 13.0 7.4 2.6 9.7 8.7 8.4 12.7 11.6 9.6 7.4 7.6 8.4 12.7 11.6 9.9 9.7 7.6 8.4 12.7 11.8 6.3 2.7 9.7 8.4 12.7 11.6 9.9 9.7 7.6 8.4 12.7 11.8 6.3 2.7 9.7 8.4 12.7 11.6 9.7 9.7 7.6 8.4 12.7 10.6 9.7 9.7 7.6 8.7 8.7 9.7 9.7 9.7 7.7 6.1 9.7 8.7 8.7 8.7 <	1983	7.6	10.0			2.0		8.2	7.0	5.1
7.9 10.4 15.2 8.4 2.0 11.4 8.6 7.4 7.9 10.6 15.2 7.4 2.0 11.2 8.5 7.7 8.6 13.1 14.7 8.5 2.0 11.2 8.4 7.4 8.6 13.1 14.7 8.5 2.0 11.2 8.4 7.4 8.6 13.1 14.7 8.5 2.0 11.2 8.4 7.4 8.6 13.1 14.3 8.5 2.0 11.2 8.4 7.4 8.8 13.2 14.2 8.3 2.2 11.2 8.4 7.4 8.6 12.5 13.1 7.4 2.4 11.6 9.6 7.9 8.6 12.2 11.8 6.3 2.9 11.6 9.6 7.9 8.4 12.2 11.8 6.3 2.9 11.6 9.6 7.9 8.4 12.2 11.8 6.3 2.9 11.6 9.6 7.9 8.1 11.6 9.9 5.4 2.7 9.7 9.7 9.7 8.4 12.2 11.6 9.9 5.9 7.9 9.7 9.7 8.1 11.6 9.9 7.4 8.7 9.7 9.7 9.7 8.1 10.6 9.9 5.9 7.9 9.7 9.7 9.7 6.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 6.7 9.7 9.7 9.7 <td< th=""><th>1984</th><th>8.0</th><th>10.6</th><th></th><th></th><th>1.9</th><th></th><th>8.8</th><th>7.2</th><th>5.2</th></td<>	1984	8.0	10.6			1.9		8.8	7.2	5.2
7.910.615.27.42.011.28.27.78.613.114.78.52.011.28.27.78.613.114.68.82.010.98.97.68.613.114.68.82.010.98.97.68.813.114.28.82.010.99.28.47.48.813.214.28.82.010.99.28.47.48.813.214.28.32.411.69.67.98.912.513.17.42.410.89.37.68.412.713.07.42.911.69.67.98.412.711.610.66.32.710.09.37.68.412.711.610.66.32.710.09.37.68.412.711.610.66.32.710.09.37.68.111.610.66.32.710.09.37.66.79.79.78.84.91.97.99.76.76.110.39.55.92.69.77.99.76.76.110.39.55.92.79.79.76.76.86.19.08.32.411.27.97.97.96.19.79.79.79.79.76.76.7 <t< th=""><th>1985</th><th>7.9</th><th>10.4</th><th></th><th></th><th>2.0</th><th>11.4</th><th>8.6</th><th>7.4</th><th>5.4</th></t<>	1985	7.9	10.4			2.0	11.4	8.6	7.4	5.4
8.311.9 14.7 8.52.011.28.4 7.4 8.613.114.68.82.010.98.9 7.6 8.613.114.68.82.010.98.9 7.6 8.813.214.28.82.010.99.28.08.813.214.28.82.010.99.28.08.813.214.28.32.411.69.6 7.9 8.412.713.0 7.4 2.411.69.18.48.612.112.213.1 7.3 2.911.19.3 7.6 8.412.213.17.32.911.19.3 7.6 7.9 8.412.211.8 6.3 2.911.1 9.1 8.4 7.6 8.111.69.9 5.4 2.911.1 9.7 9.7 9.7 9.7 7.4 10.6 9.9 5.4 2.4 11.6 9.7 9.7 9.7 9.7 6.7 9.7 8.8 4.9 1.9 7.9 9.7 9.7 9.7 9.7 6.7 9.7 8.4 7.4 7.9 9.7 9.7 9.7 9.7 6.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 6.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 6.7 8.7 8.7	1986	7.9	10.6			2.0		8.2	7.7	5.3
86 13.1 14.6 8.8 2.0 10.9 8.9 7.6 8.6 13.1 14.5 8.8 2.0 10.9 8.9 7.6 8.8 13.2 14.2 8.8 2.0 10.9 8.9 7.6 8.8 13.2 14.2 8.3 2.4 11.6 9.6 7.9 8.8 12.7 13.0 7.4 2.4 11.6 9.6 7.9 8.9 12.7 13.0 7.4 2.4 10.8 9.3 7.6 8.9 12.1 12.2 13.1 7.3 2.9 11.6 9.6 7.9 8.1 11.6 10.6 6.3 2.7 10.0 9.3 7.6 8.1 11.6 10.6 6.2 2.6 9.7 9.1 7.5 8.1 11.6 9.6 6.3 5.4 2.4 8.7 6.8 7.4 10.6 9.2 8.7 8.7 8.7 6.8 6.7 8.1 10.3 9.6 5.4 2.4	1987	8.3	11.9			2.0	11.2	8.4	7.4	5.5
8.6 13.1 14.3 8.5 2.0 10.9 9.2 8.0 8.8 13.2 14.2 8.3 2.4 11.6 9.6 7.9 8.4 12.7 13.0 7.4 2.4 11.6 9.6 7.9 8.6 12.1 12.5 13.1 7.3 2.9 11.6 9.6 7.9 8.6 12.1 12.2 13.1 7.3 2.9 11.6 9.6 7.9 8.4 12.2 11.16 10.6 6.3 2.9 11.6 9.1 8.4 8.1 11.6 9.9 5.4 2.9 11.2 9.3 7.6 8.1 11.6 9.9 5.4 2.9 11.2 9.7 9.1 7.5 7.1 10.6 9.9 5.4 2.2 8.7 8.7 8.7 8.7 7.1 10.3 9.5 5.9 2.2 8.7 8.7 8.7 6.7 6.1 9.0 8.8 4.9 1.9 7.9 7.7 6.7 6.1 9.0 8.3 4.7 1.9 7.3 6.5 6.7 6.1 9.0 8.3 4.7 1.9 7.3 6.5 6.7 6.1 8.3 4.7 1.9 7.3 6.5 6.7 6.1 6.7 8.7 8.7 8.7 8.7 6.9 5.7 8.1 7.9 7.1 6.9 7.3 6.7 6.1 7.7 <th>1988</th> <th>8.6</th> <th>13.1</th> <th></th> <th></th> <th>2.0</th> <th>0</th> <th>8.9</th> <th>7.6</th> <th>5.4</th>	1988	8.6	13.1			2.0	0	8.9	7.6	5.4
8.8 13.2 14.2 8.3 2.4 11.6 9.6 7.9 8.4 12.7 13.0 7.4 2.4 10.8 9.3 7.6 8.9 12.5 13.1 7.3 2.9 11.6 9.6 7.9 8.6 12.1 12.2 13.0 7.4 2.4 10.8 9.3 7.6 8.4 12.7 12.2 11.8 6.3 2.9 11.6 9.1 8.4 8.4 12.2 11.8 6.3 2.9 11.2 9.5 8.1 8.4 12.2 11.8 6.3 2.9 11.2 9.5 8.1 7.4 10.6 9.9 5.4 2.4 8.7 8.1 7.5 7.1 10.3 9.5 5.4 2.2 8.7 9.7 9.1 7.5 6.7 9.1 10.6 6.2 2.6 9.7 8.7 6.7 6.7 9.7 8.7 8.7 8.7 8.7 6.7 6.7 6.1 9.0 8.3	1989	8.6	13.1			2.0	10.9	9.2	8.0	5.5
8.4 12.7 13.0 7.4 2.4 10.8 9.3 7.6 8.9 12.5 13.1 7.3 2.9 11.6 9.1 8.4 8.6 12.1 12.2 13.1 7.3 2.9 11.6 9.1 8.4 8.6 12.1 12.2 13.1 7.3 2.9 11.6 9.1 8.4 8.1 12.2 11.8 6.3 2.9 11.2 9.5 8.1 8.1 11.6 10.6 6.3 2.7 10.0 9.3 7.9 7.4 10.6 9.9 5.4 2.4 8.7 6.8 8.1 7.1 10.3 9.5 5.4 2.4 8.7 6.8 8.1 7.1 10.3 9.5 5.9 5.4 2.4 8.7 6.8 6.7 9.7 8.8 4.4 1.8 7.3 6.5 6.7 6.1 9.0 8.3 4.4 1.8 7.3 6.6 5.9 5.6 5.3 7.3 6.4 <	1990	8.8	13.2			2.4	11.6	9.6	7.9	6.0
8.912.513.17.32.911.69.1 8.4 8.612.112.2 6.8 2.9 11.2 9.5 8.1 8.412.2 11.2 6.8 2.9 11.2 9.5 8.1 8.1 11.2 12.2 6.8 2.9 11.2 9.5 8.1 8.1 11.6 10.6 6.3 2.7 10.0 9.3 7.9 7.4 10.6 9.9 5.4 2.4 8.7 8.7 6.8 7.1 10.3 9.5 5.4 2.4 8.7 8.7 6.8 7.1 10.3 9.5 5.9 2.2 8.4 8.7 6.8 6.7 9.7 8.8 4.9 1.9 7.9 7.3 6.7 6.1 9.0 8.3 4.7 1.9 7.9 7.3 6.5 5.7 8.1 7.9 7.9 7.3 6.5 6.7 5.7 8.1 7.9 7.1 6.9 5.6 5.7 8.1 7.9 7.1 6.9 5.9 5.7 8.1 7.9 7.1 6.9 5.9 5.7 8.7 6.1 6.9 5.9 5.7 7.1 6.9 5.9 5.9 5.7 7.1 6.9 5.9 5.9 5.7 7.1 6.9 5.9 5.9 5.7 7.1 6.9 5.9 5.9 5.7 7.1 6.1 5.9 <	1991	8.4	12.7			2.4	10.8	9.3	7.6	6.2
8.6 12.1 12.2 6.8 2.9 11.2 9.5 8.1 8.4 12.2 11.8 6.3 2.7 10.0 9.3 7.9 8.1 11.6 10.6 6.3 2.7 10.0 9.3 7.9 8.1 11.6 10.6 9.9 5.4 2.4 8.7 9.1 7.5 7.4 10.6 9.9 5.4 2.4 8.7 9.1 7.5 7.1 10.3 9.5 5.9 2.4 8.7 8.7 6.8 7.1 10.3 9.5 5.9 2.2 8.4 8.7 6.7 6.7 9.7 8.8 4.9 1.9 7.9 7.3 6.5 6.1 9.0 8.3 4.4 1.8 7.3 6.5 6.1 5.7 8.1 7.9 7.1 1.9 7.3 6.1 5.3 5.3 7.3 6.1 7.3 6.1 6.9 5.9 5.9 5.3 7.1 6.4 6.1 6.9 5.3 <th>1992</th> <th>8.9</th> <th>12.5</th> <th>13.1</th> <th></th> <th>2.9</th> <th>11.6</th> <th>9.1</th> <th>8.4</th> <th>7.1</th>	1992	8.9	12.5	13.1		2.9	11.6	9.1	8.4	7.1
8.4 12.2 11.8 6.3 2.7 10.0 9.3 7.9 8.1 11.6 10.6 6.2 2.6 9.7 9.1 7.5 7.4 10.6 6.2 2.6 9.7 9.1 7.5 7.1 10.6 9.9 5.4 2.4 8.7 8.7 6.8 7.1 10.3 9.5 5.9 5.4 2.4 8.7 6.8 7.1 10.3 9.5 5.9 2.2 8.4 8.7 6.7 6.7 9.7 8.8 4.9 1.9 7.9 7.3 6.6 6.1 9.0 8.3 4.7 1.9 7.9 7.3 6.6 6.1 9.0 8.3 4.7 1.9 7.1 6.9 5.9 5.7 8.1 7.9 7.1 6.9 5.9 5.9 5.7 8.1 7.9 7.1 6.9 5.9 5.9 5.7 8.1 7.9 7.1 6.9 5.9 5.9 5.7 8.1 7.9 7.1 6.9 5.9 5.9 5.3 7.2 7.1 6.1 6.9 5.9 5.9 5.3 7.2 7.1 6.9 5.9 5.9 5.3 7.2 6.1 6.1 5.3 5.9 5.3 7.2 6.1 6.1 5.3 5.9	1993	8.6	12.1	12.2		2.9		9.5	8.1	6.7
8.1 11.6 10.6 6.2 2.6 9.7 9.1 7.5 7.4 10.6 9.9 5.4 2.4 8.7 8.7 6.8 7.1 10.3 9.5 5.9 2.2 8.4 8.7 6.8 7.1 10.3 9.5 5.9 2.2 8.4 8.7 6.8 6.7 9.7 8.8 4.9 1.9 7.9 7.3 6.5 6.1 9.0 8.3 4.7 1.8 7.3 6.1 6.6 6.1 9.0 8.3 4.7 1.9 7.3 6.1 6.1 6.1 9.0 8.3 4.7 1.9 7.3 6.9 5.9 5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.9 5.7 8.1 7.9 6.9 5.9 5.9 5.9 5.7 7.1 6.9 6.9 5.6 5.9 5.3 7.2 7.1 6.9 5.6 5.9 5.3 7.2 7.1 6.4 6.1 5.3	1994	8.4	12.2	11.8		2.7	10.0	9.3	7.9	6.5
7.4 10.6 9.9 5.4 2.4 8.7 8.7 6.8 7.1 10.3 9.5 5.9 5.4 2.2 8.4 8.7 6.8 6.7 9.7 8.8 4.9 1.9 7.3 6.5 6.7 6.7 9.2 8.8 4.9 1.9 7.3 6.6 6.1 9.2 8.8 4.4 1.8 7.3 6.1 6.1 9.0 8.3 4.7 1.9 7.3 6.9 5.9 5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.9 5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.9 5.7 7.1 4.0 1.8 7.3 6.9 5.6 5.3 7.2 7.1 6.1 5.3 5.6	1995	8.1	11.6	10.6		2.6	9.7	9.1	7.5	6.4
7.1 10.3 9.5 5.9 2.2 8.4 8.2 6.7 6.7 9.7 9.7 8.8 4.9 1.9 7.9 7.3 6.5 6.3 9.2 8.8 4.9 1.9 7.9 7.3 6.5 6.1 9.0 8.3 4.4 1.8 7.3 7.3 6.1 6.1 9.0 8.3 4.7 1.9 7.1 6.9 5.9 5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.6 5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.3 5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.6	1996	7.4	10.6	9.9		2.4	8.7	8.7	6.8	6.0
6.7 9.7 8.8 4.9 1.9 7.9 7.3 6.5 6.3 9.2 8.6 4.4 1.8 7.3 7.3 6.1 6.1 9.0 8.3 4.7 1.9 7.3 7.3 6.1 6.1 9.0 8.3 4.7 1.9 7.1 6.9 5.9 5.7 8.1 7.9 4.0 1.8 7.1 6.9 5.0 5.3 7.2 7.1 4.0 1.8 7.3 6.9 5.9 5.3 7.2 7.1 6.4 6.1 5.3 5.6 5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.3	1997	7.1	10.3	9.5		2.2	8.4	8.2	6.7	5.6
6.3 9.2 8.6 4.4 1.8 7.3 6.1 4. 6.1 9.0 8.3 4.7 1.9 7.1 6.9 5.9 4. 5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.9 4. 5.3 7.2 7.1 6.9 5.9 4.0 4.0 1.8 7.3 6.9 5.6 4. 5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.3 4.	1998	6.7	9.7	8.8		1.9	7.9	7.3	6.5	5.2
6.1 9.0 8.3 4.7 1.9 7.1 6.9 5.9 4. 5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.6 4. 5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.3 4.	1999	6.3	9.2	8.6		1.8	7.3	7.3	6.1	
5.7 8.1 7.9 4.0 1.8 7.3 6.9 5.6 4. 5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.3 4.	2000	6.1	0.6	8.3		1.9	7.1	6.9	5.9	
5.3 7.2 7.1 4.0 1.7 6.4 6.1 5.3 4.	2001	5.7	8.1	7.9		1.8	7.3	6.9	5.6	
	2002	5.3	7.2	7.1		1.7	6.4	6.1	5.3	

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Beginning with the 2003 reference year, the Survey of Occupational Injuries and Illnesses began using the North American Industry Classification System for industries. Prior to 2003, the survey used the Standard Industrial Classification system. The substantial differences between these systems result in breaks in series for industry data.

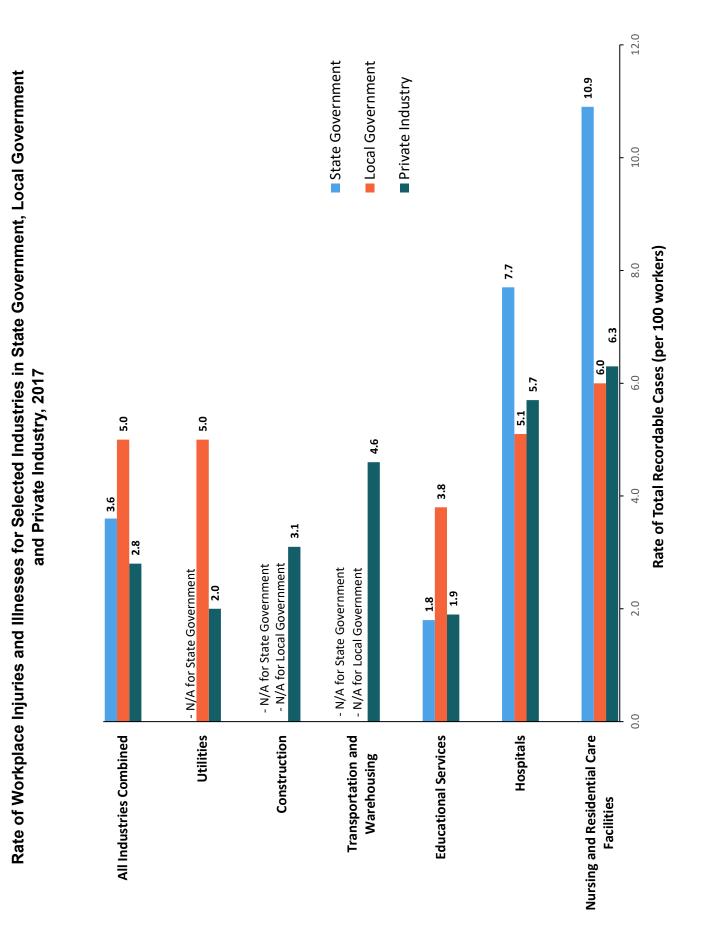
Workplace Injury and Illness Rates by Industry Sector, 2003–2017^{1,2}

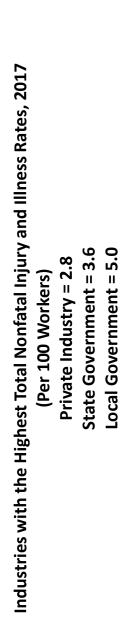
	2003	2004	2005	2006	2007	2008 ³	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total case rate, private industry	5.0	4.8	4.6	4.4	4.2	3.9	3.6	3.5	3.5	3.4	3.3	3.2	3.0	2.9	2.8
State and local government	•	•		ı		6.3	5.8	5.7	5.7	5.6	5.2	5	5.1	4.7	4.6
State government	ı	ı	ı	ı	ı	4.7	4.6	4.6	4.6	4.4	3.9	4.1	3.7	3.7	3.6
Local government	ı	ı	ı	ı	ı	7.0	6.3	6.1	6.1	6.1	5.7	5.4	5.6	5.0	5.0
Natural resources and mining	5.1	5.3	5.1	4.9	4.4	4.1	4.0	3.7	4.0	3.8	3.9	3.8	3.7	4.2	3.6
Agriculture, forestry, fishing and hunting	6.2	6.4	6.1	6.0	5.4	5.3	5.3	4.8	5.5	5.5	5.7	5.5	5.7	6.1	5.0
Mining, quarrying, and oil and gas extraction	3.3	3.8	3.6	3.5	3.1	2.9	2.4	2.3	2.2	2.1	2.0	2	1.4	1.5	1.5
	0 0	7 3	C 3	0		1	, ,	0	0 0	1 7	0	2 0	5	, ,	, ,
Construction (local gov.)	o.o	t. '	°. '	°. '	t '	1 2.7	13.0	6 .2	9.7	3.7 10.2	7 .9	9 .0	0 0	9.7 1.6	- '
Manufacturing	6.8	6.8	6.3	6.0	5.6	5.0	4.3	4.4	4.4	4.3	4.0	4	3.8	3.6	3.5
Trade, transportation and utilities	5.5	5.5	5.2	5.0	4.9	4.4	4.1	4.1	3.9	3.9	3.8	3.6	3.6	3.4	3.4
Wholesale trade	4.7	4.5	4.5	4.1	4.0	3.7	3.3	3.4	3.2	3.3	3.1	2.9	3.1	2.8	2.8
Retail trade	5.3	5.3	5.0	4.9	4.8	4.4	4.2	4.1	3.9	4.0	3.8	3.6	3.5	3.3	3.3
Transportation and warehousing	7.8	7.3	7.0	6.5	6.4	5.7	5.2	5.2	5.0	4.9	4.7	4.8	4.5	4.6	4.6
Utilities	4.4	5.2	4.6	4.1	4.0	3.5	3.3	3.1	3.5	2.8	2.1	2.4	2.2	2.1	2.0
Information	2.2	2.0	2.1	1.9	2.0	2.0	1.9	1.8	1.6	1.4	1.5	1.4	1.3	1.3	1.3
Financial activities	1.7	1.6	1.7	1.5	1.4	1.5	1.5	1.3	1.4	1.3	1.3	1.2	1.1	1.1	1.0
Professional and business services	2.5	2.4	2.4	2.1	2.1	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.4	1.4	1.3
Educational and health services	6.0	5.8	5.5	5.4	5.2	5.0	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.8
Hospitals (private)	8.7	8.3	8.1	8.1	7.7	7.6	7.3	7.0	6.8	6.6	6.4	6.2	6.0	5.9	5.7
Hospitals (state gov.)	ı	ı	ı	ı	ı	11.9	11.0	11.8	9.2	9.2	7.7	8.7	8.1	8.2	7.7
Nursing and Residential Care (private)	10.1	9.7	9.1	8.9	8.8	8.4	8.4	8.3	7.8	7.6	7.3	7.1	6.8	6.4	6.3
Nursing and Residential Care (state gov.)	I	I	ı	I	ı	12.5	ı	15.1	13.1	13.6	13.7	12.6	12.0	13.7	10.9
Leisure and hospitality	5.1	4.7	4.7	4.6	4.5	4.2	3.9	3.9	4.0	3.9	3.8	3.6	3.5	3.4	3.4
Other services, except public administration	3.4	3.2	3.2	2.9	3.1	3.1	2.9	2.7	2.6	2.5	2.5	2.5	2.3	2.3	2.1
															Ī

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Total recordable cases per 100 workers.

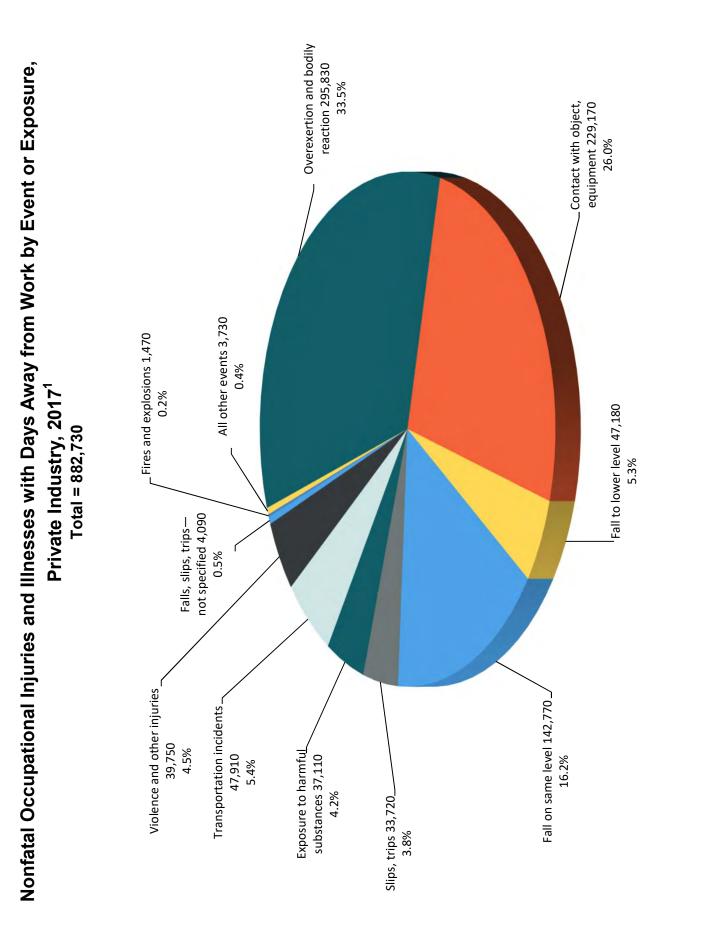
²Private industry, unless otherwise noted. ³Beginning in 2008, the Bureau of Labor Statistics provided national public-sector estimates for state and local government workers.







Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.



Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

Number of Injury and Illness Cases in Private Industry with Days Away from Work Among Hispanic and Latino Workers, 1995–2017¹

Year	Number of Hispanic and Latino Worker Cases	Percent of Total Injury and Illness Cases
1995	191,665	9.4
1996	169,300	9.0
1997	187,221	10.2
1998	179,399	10.4
1999	182,896	10.7
2000	186,029	11.2
2001	191,959	12.5
2002 ²	180,419	12.6
2003 ³	161,330	12.3
2004 ³	164,390	13.1
2005 ³	163,440	13.2
2006 ³	159,440	13.5
2007 ³	157,320	13.6
2008 ³	145,870	13.5
2009 ³	125,790	13.0
2010 ³	122,970	13.2
2011 ³	117,210	12.9
2012 ³	118,940	13.1
2013 ³	124,330	13.6
2014 ³	124,280	13.6
2015 ³	125,360	13.9
2016 ³	127,490	14.3
2017 ³	122,220	13.8

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Days away from work include those that result in days away from work with or without restricted work activity. They do not include cases involving only restricted work activity.

²Days away from work cases include those that result in days away from work with or without job transfer or restriction. ³Classification of workers by race and ethnicity was revised in 2003 to conform to other government data. One result of this revision is that individuals may be categorized in more than one race or ethnic group. Cases reflected here are for those who reported Hispanic or Latino only and Hispanic or Latino and other race. Race and ethnicity data reporting is not mandatory in the BLS Survey of Occupational Injuries and Illnesses. As a result, 30-40% of cases do not report race and ethnicity.

Workplace Injuries and Illnesses to Women Involving Days Away from Work, Private Industry, 2017

Characteristic	Subcharacteristics	Number
Total Number of Injuries and Illnesses with Days Away from Work		339,630
	Hospitals	39,420
Leading Industries	Ambulatory health care services	26,860
	Food service and drinking places	17,250
	Nursing, psychiatric and home health aides	36,410
Leading Occupations	Building cleaning workers	22,370
	Registered nurses	18,510
	Laborers and material movers	18,250
	Sprains, strains, tears	126,470
Leading Nature	Soreness, pain, hurt, unspecified	60,160
	Bruises, contusions	39,160
	Overexertion and bodily reaction	113,240
Leading Event or Exposure	Falls, slips, trips	106,220
1	Contact with objects and equipment	66,310
	Bodily motion or position of injured, ill worker	50,690
Leading Source	Floors ¹	49,190
	Containers, nonpressurized	29,360
Median Days Away from	Total cases	8
Work	Women	7

Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

¹This category accounts for floors only. Floors, walkways and ground surfaces combined accounted for 80,480 injuries and illnesses involving days away from work for women.

Workplace Injuries and Illnesses to Men Involving Days Away from Work, Private Industry, 2017

Characteristic	Subcharacteristics	Number
Total Number of Injuries and Illnesses with Days Away from Work		539,840
	Specialty trade contractors	52,780
Leading Industries	Truck transportation	29,730
	Food service and drinking places	27,150
	Driver/sales workers and truck drivers	71,990
Leading Occupations	Laborers and material movers	52,980
	Maintence and repair workers	22,450
	Construction laborers	20,680
	Sprains, strains, tears	183,120
Leading Nature	Soreness, pain, hurt, unspecified	82,830
	Cuts, lacerations	55,870
	Overexertion and bodily reaction	181,730
Leading Event or Exposure	Contact with objects and equipment	162,170
F	Falls, slips, trips	120,640
	Bodily motion or position of injured, ill worker	79,140
Leading Source	Containers, nonpressurized	44,210
	Floors ¹	25,670
Median Days Away from	Total cases	8
Work	Men	10

Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

¹This category accounts for floors only. Floors, walkways and ground surfaces combined accounted for 63,460 injuries and illnesses involving days away from work for men.

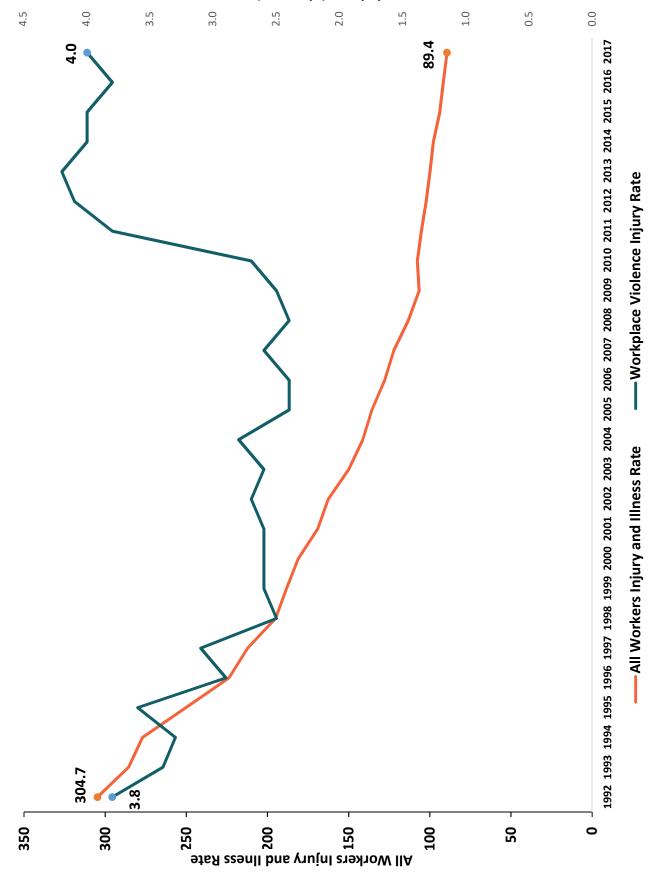
Number of Workplace Violence Events Leading to Injuries Involving Days Away from Work, Private Industry, 2017¹

Characteristic	Subcharacteristics	Number
Total Events		28,870
Gender	Women	18,890
Gender	Men	9,930
	White	8,870
Race	Black	4,190
	Hispanic or Latino	1,930
	Nursing and residential care facilities	8,640
Leading Industries	Hospitals	6,590
	Social assistance	2,370
	Educational services	1,780
	Nursing, psychiatric and home health aides	6,180
Leading Occupations	Registered nurses	2,470
	Personal care aides	2,390
	Sprains, strains, tears	8,160
Leading Nature of Injury	Soreness, pain	6,290
	Bruises, contusions	5,150
	Patient	14,200
Leading Source	Other client or customer	5,920
	Student	2,650
	Overall, all injuries and illnesses	8
Median Days Away from	Intentional injury by person	5
Work	Injury by person—unintentional or intent unknown	8

Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

¹Violence events in private industry include intentional injury by person and injury by person—unintentional or intent unknown, and exclude animal- and insect-related incidents.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

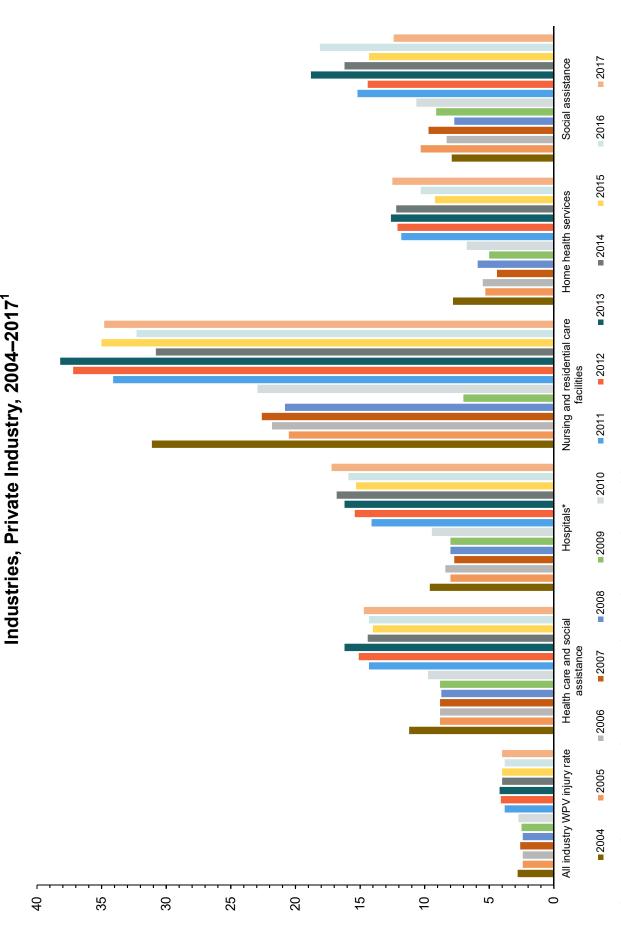


Total Injury and Illness Rates Compared with Workplace Violence Injury Rates, Private Industry,

1992–2017¹

Workplace Violence امانا المعروفين ا

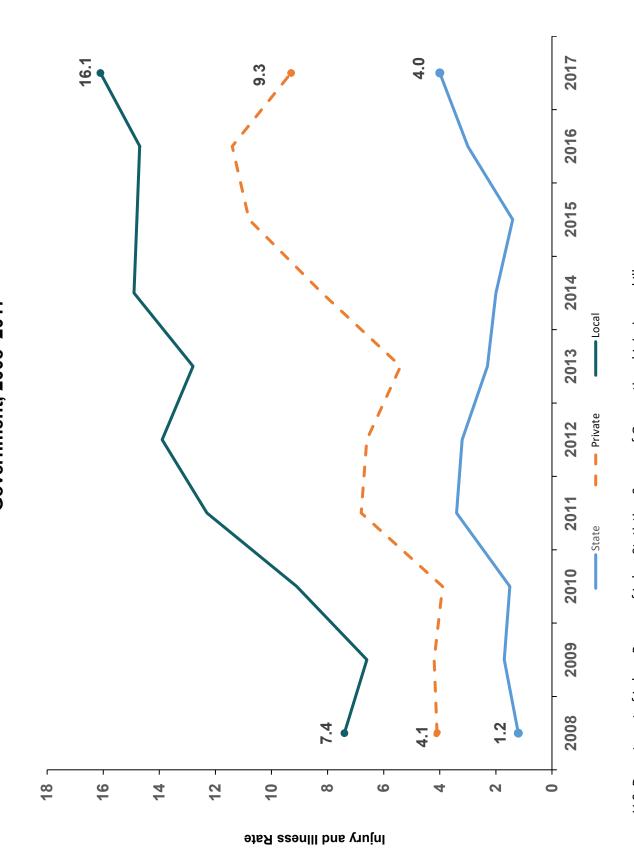
Workplace Violence (WPV) Rates for Injuries Leading to Days Away from Work in Selected Health Care



Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

¹Rate per 10,000 workers. *The subcategory "psychiatric and substance abuse hospitals" had a workplace violence injury rate of 181.1 per 10,000 workers in 2017; 123.6 in 2016; 133.4 in 2015; 170.2 in 2014; 134.6 in 11.7 in 2012; 117.6 in 2011; 77.0 in 2010; 77.9 in 2009; 70.2 in 2007; and 84.3 in 2006. Data not available for 2005 and 2004.





Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses. ¹Rate of injuries and illnesses leading to days away from work, per 10,000 workers.

Estimated and Reported Cases of Musculoskeletal Disorders, Private Industry, 1995–2017^{1,2}

		MSD Cases with Davs	MSD Cases with	MSDs Involving	
	Total MSD	Away from Work, Job	Job Transfer or	Days Away from	Percent of Cases
Year	Cases ¹	Transfer or Restriction ^{1,3}	Restriction ^{1,4}	Work ⁵	Involving MSDs
1995	2,242,211	1,013,486	317,539	695,800	34.1%
1996	2,146,182	974,380	327,025	647,355	34.4%
1997	2,101,795	980,240	353,888	626,352	34.2%
1998	2,025,598	950,999	358,455	592,544	34.2%
1999	1,951,862	938,038	355,698	582,340	34.2%
2000	1,960,585	954,979	377,165	577,814	34.7%
2001	1,773,304	870,094	347,310	522,500	34.0%
2002	1,598,204	848,062	359,788	487,915	34.0%
2003	1,440,516	759,627	325,380	435,180	33.0%
2004	1,362,336	712,000	309,024	402,700	32.0%
2005	1,264,260	655,440	285,030	375,540	30.0%
2006	1,233,791	638,609	281,192	357,160	30.2%
2007	1,152,778	586,368	252,634	333,760	28.8%
2008	1,086,653	558,835	241,844	317,440	29.4%
2009	963,644	490,216	206,506	283,800	29.4%
2010	934,337	487,421	202,795	284,340	30.5%
2011	1,018,397	534,697	214,966	309,940	34.1%
2012	1,032,811	539,793	225,515	314,470	34.7%
2013	1,015,212	522,988	215,348	307,640	33.5%
2014	955,072	507,382	208,922	298,460	32.3%
2015	954,501	509,067	222,717	286,350	31.7%
2016	921,394	508,355	222,405	285,950	31.8%
2017	879,667	471,250	188,500	282,750	31.2%

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Total MSD cases, MSD days away, job transfer or restriction cases, and MSD job transfer or restriction cases are estimated based upon the percentage of MSD cases reported by BLS for the total days away from work cases involving MSD in private industry.

² These figures are based on employer-reported cases of MSDs provided to BLS. The number of cases shown here does not reflect the impact of under-reporting, which would significantly increase the true toll of MSDs occurring among workers. OSHA has estimated that for every reported MSD, two MSDs go unreported.

³Through 2001, this column was titled Total MSD Lost Workday Cases. The new title reflects the change in the recordkeeping standard that went into effect Jan. 1, 2002. Lost workday cases were defined as those that involve days away from work, days of restricted work activity, or both. They do not include cases involving only restricted work activity.

¹Through 2001, this column was titled MSD Cases with Days of Restricted Activity. The new title reflects the change in the recordkeeping standard that went into effect Jan. 1, 2002.

^Dbays away from work cases include those that result in days away from work without job transfer or restriction. They do not include cases involving only restricted work activity. Prior to 2002, days away from work cases included those that resulted in days away from work with restricted activity.

Highest Rates of Musculoskeletal Disorders by Occupation, 2017^{1,2}

Occupation	Incidence Rate	Number of MSDs ³
Bus drivers, transit and intercity	206.2	2,540
Emergency medical technicians and paramedics	187.4	4,310
Firefighters	167.5	5,860
Nursing assistants	166.3	18,090
Highway maintenance workers	164.2	2,060
Reservation and transportation ticket agents and travel clerks	127.2	1,510
Telecommunications equipment installers and repairers, except line installers	119.6	2,470
Laborers and freight, stock and material movers, handlers	117.6	24,800
Light truck or delivery services drivers	105.7	8,680
Maids and housekeeping cleaners	100.7	6,760

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹MSDs leading to days away from work with or without job transfer or restriction.

²Includes cases where the nature of injury is sprains, tears; back pain, hurt back; soreness, pain, hurt except back; carpal tunnel syndrome; hernia; musculoskeletal system and connective tissue diseases and disorders; and when the event or exposure leading to the injury or illness is bodily reaction/bending, climbing, crawling, reaching, twisting, overexertion or repetition. Cases of Raynaud's phenomenon, tarsal tunnel syndrome and herniated spinal discs are not included. Although these cases may be considered MSDs, the survey classifies these cases in categories that also include non-MSD cases.

³Includes total number in private industry, state and local government.

Highest Incidence Rates of Musculoskeletal Disorders by Industry, 2017

Industry (NAICS Code) ¹	Incidence Rate ²	Number of Total Cases
000 All Private Industry ³	28.6	282,750
481 Air transportation	157.9	6,430
492 Couriers and messengers	123.2	5,910
493 Warehousing and storage	85.9	8,190
711 Performing arts and spectator sports	83.2	2,470
623 Nursing and residential care facilities	69.6	17,940
517 Telecommunications	62.5	4,670
484 Truck transportation	62.3	9,580
444 Building material and garden supply stores	62.2	6,430
424 Merchant wholesalers — nondurable goods	59.8	12,000
562 Waste management and remediation services	59.4	2,430
622 Hospitals	55.6	21,990
454 Nonstore retailers	51.4	2,490
445 Food and beverage stores	51.1	11,180
312 Beverage and tobacco product manufacturing	49.2	1,610
316 Leather and allied product manufacturing	48.7	130
442 Furniture and home furnishings stores	48.0	1,680
336 Transportation equipment manufacturing	45.6	7,550
327 Nonmetallic mineral product manufacturing	45.3	1,930
111 Crop production ⁴	40.7	1,640
311 Food manufacturing	40.4	6,390
721 Accommodation	39.7	6,250
331 Primary metal manufacturing	39.6	1,560
212 Mining (except oil and gas)	38.3	800
452 General merchandise stores	38.1	8,450
488 Support activities for transportation	36.3	2,310
337 Furniture and related product manufacturing	35.5	1,370
238 Specialty trade contractors	35.2	13,980
321 Wood product manufacturing	34.7	1,400
487 Scenic and sightseeing transportation	33.3	80
482 Rail Transportation	32.8	720

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Does not include state or local government.

²Rates of MSDs leading to days away from work, per 10,000 workers.

³All private industry MSDs led to a median of 13 days away from work.

⁴Excludes farms with fewer than 11 employees.

Highest Numbers of Musculoskeletal Disorders by Industry	, 2017
--	--------

Industry (NAICS Code) ¹	Number of Total Cases	Incidence Rate ²
000 All Private Industry ³	282,750	28.6
622 Hospitals	21,990	55.6
623 Nursing and residential care facilities	17,940	69.6
238 Specialty trade contractors	13,980	35.2
424 Merchant wholesalers — nondurable goods	12,000	59.8
621 Ambulatory health care services	11,500	20.5
445 Food and beverage stores	11,180	51.1
722 Food services and drinking places	9,750	13.6
484 Truck transportation	9,580	62.3
561 Administrative and support services	9,570	20.0
423 Merchant wholesalers — durable goods	9,000	31.6
452 General merchandise stores	8,450	28.1
493 Warehousing and storage	8,190	85.9
444 Building material and garden equipment and		
supply dealers	6,430	62.2
481 Air transportation	6,430	157.9
311 Food manufacturing	6,390	40.4
721 Accomodation	6,250	39.7
492 Couriers and messengers	5,910	123.2
624 Social assistance	5,600	25.6
441 Motor vehicle and parts dealers	5,290	27.9
517 Telecommunications	4,670	62.5
332 Fabricated metal product manufacturing	4,400	30.6
541 Professional and technical services	4,300	5.2
236 Construction of buildings	4,200	29.4
811 Repair and maintenance	3,900	32.4
531 Real estate	3,730	26.6
713 Amusements, gambling and recreation	2,640	26.5
454 Nonstore retailers	2,470	51.4
711 Performing arts and spectator sports	2,470	83.2
562 Waste management and remediation services	2,430	59.4
611 Educational services	2,410	12.1

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Does not include state or local government.

²Rates of MSDs leading to days away from work, per 10,000 workers.

³All private industry MSDs led to a median of 13 days away from work.

Estimates of the True Toll of Workplace Injuries and Illnesses

	Estimated 2017 Figures Accounting for Impact of Undercounting Injuries and Illnesses ¹	2017 Data Reported by Bureau of Labor Statistics
Total Number of Nonfatal Injuries and Illnesses in Private Industry	8.4 million	2.8 million
Total Nonfatal Injury and Illness Case Rate in Private Industry (cases per 100 workers)	8.4	2.8
Total Number of Injuries and Illnesses Involving Days Away from Work in Private Industry	2.65 million	882,730
Case Rate for Nonfatal Injuries and Illnesses Involving Days Away from Work (cases per 100 workers) in Private Industry	2.7	0.9
Total Number of Musculoskeletal Disorders—Cases Involving Days Away from Work in Private Industry	848,250	282,750
Total Number of Estimated Cases of Musculoskeletal Disorders in Private Industry	2,639,001	879,667

Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹ A detailed comparison of individual injury and illness reports from various reporting systems found that only one in three workplace injuries and illnesses was reported on the OSHA Log and captured by the Bureau of Labor Statistics survey. This study did not address the number of injuries and illnesses that are not reported to any reporting system in the first place. Thus, this study represents a conservative estimate of underreporting of the true toll of injuries and illnesses. For more details on the study, see the paper by Rosenman, et al., "How Much Work-Related Injury and illness is Missed by the Current National Surveillance System?," Journal of Occupational and Environmental Medicine, 48(4): 357–365, April 2006.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Inspections Safety Health	41,018 34,353 6,665	40,625 33,338 7,287	40,950 33,598 7,352	39,178 31,920 7,258	36,167 29,343 6,824	35,822 28,903 6,917	31,948 25,704 6,244	32,396 26,607 5,789	32,020 26,453 5,567
Complaints Programmed	8,036 24,752	8,762 23,319	9,568 23,082	9,503 22,170	9,577 19,207	9,037 16,527	8,870 12,731	8,254 14,396	7,510 13,980
Construction Maritime Manufacturing Other	24,441 300 7,921 8,356	22,624 340 8,566 9,094	22,507 386 8,399 9,654	20,430 411 7,945 10,392	18,223 370 7,602 9,972	17,549 357 8,051 9,863	15,610 297 7,450 8,591	16,921 292 7,043 8,140	16, 729 274 6,863 8,154
Average Case Hours/Inspections Safety Health	19.0 33.8	20.4 33.9	20.3 34.6	22.5 40.1	22.0 45.2	22.3 39.7	21.0 33.4	20.21 33.58	19.26 32.00
Violations – Total Wilful Repeat Serious	96,610 1,513 2,749 74,721	81,861 572 3,029 59,547	78,760 424 3,031 57,155	78,037 316 3,119 58,234	67,556 2,955 49,416	65,044 527 3,088 47,934	59,856 524 3,146 42,984	51,273 319 2,771 36,802	50,910 341 2,593 36,645
6 Other FTA	2 17,298 327	18,436 270	18,038 107	- 16,260 77	14,597 155	13,016 107	11,895 152	- 11,300 81	11,265 65
Penalties – Total (\$) Willful Repeat Serious Unclassified Other FTA	181,391,692 81,906,139 12,007,280 78,632,344 1,700 5,018,568 3,825,661	178,289,800 22,737,340 21,076,053 125,459,324 317,775 7,299,625 1,399,683	168,842,092 15,053,400 21,884,028 123,274,497 1,200 7,829,960 797,507	149,994,488 12,484,996 19,563,867 110,326,980 6,855,744 762,901	143,535,247 17,474,793 20,407,958 97,427,404 6,500,117 1,724,976	156,525,585 21,581,025 24,042,251 102,971,432 4,200 7,222,074 704,143	162,872,470 21,794,276 27,277,061 103,234,454 8,537,920 2,028,758	196,837,526 20,808,006 31,447,412 130,767,703 12,183,280 1,631,125	196,598,571 21,108,034 29,823,210 131,173,038 5,432 12,926,576 1,561,970
Average Penalty/	1,878	2,178	2,144	1,922	2,125	2,406	2,721	3,839	3,862
Violation (\$) Willful Repeat Serious	54,135 4,368 1,052	39,751 6,958 2,107	35,503 7,220 2,157	39,509 6,272 1,895	40,357 6,909 1,972	40,951 7,786 2,148	41,592 8,670 2,402	65,229 11,349 3,553	61,900 11,501 3,580
Unclassified Other FTA	850 290 11,699	45,396 396 5,184	1,200 434 7,453	- 422 9,908	0 445 11,129	4,200 555 6,581	- 718 13,347	- 1,078 20,137	5,432 1,148 24,030
Percent Inspections with Citations Contested (%)	8.0%	10.8%	11.4%	6.0%	6.6%	7.4%	8.3%	8.5%	8.3%

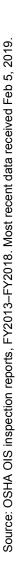
Federal OSHA Inspection/Enforcement Activity, FY 2010–2018

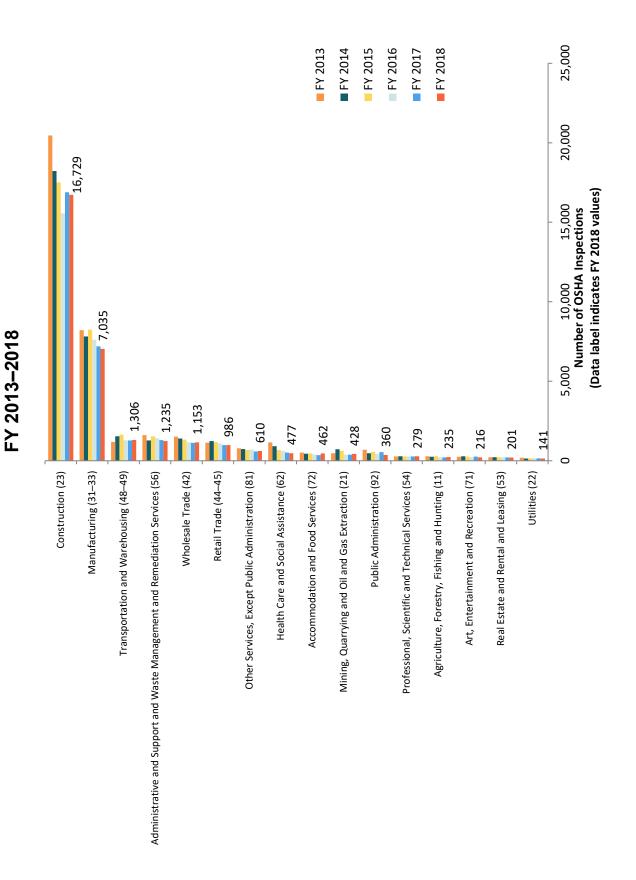
Sources: OSHA IMIS Inspection Reports, FY 2010–FY 2013, and OIS Federal Inspection Reports, FY 2012–FY 2018.

Federal OSHA and State Plan OSHA Inspection/Enforcement Activity, FY 2018

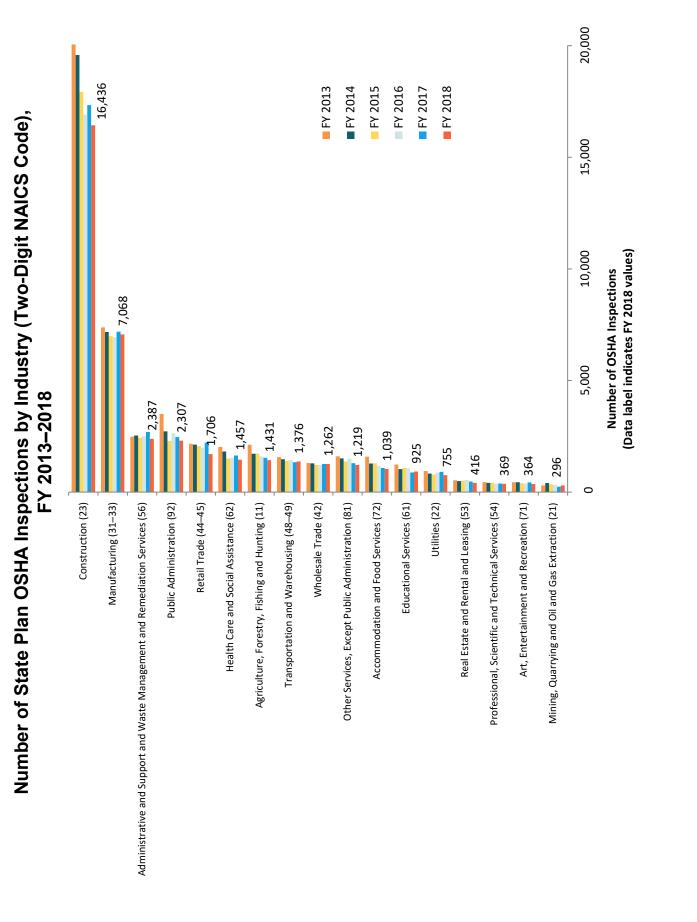
	FEDERAL OSHA	<u>STATE PLAN OSHA</u>
Inspections	32,020	41,066
Safety	26,453	31,703
Health	5,567	9,363
Complaints	7,510	9,326
Programmed	13,980	17,801
Construction	16,729	16,518
Maritime	274	102
Manufacturing	6,863	7,042
Other	8,154	17,404
Average Case Hours/Inspection		
Safety	19.26	22.38
Health	32.00	27.80
Violations – Total	50,910	84,316
Willful	341	156
Repeat	2,593	2,177
Serious	36,645	41,946
Unclassified	1	20
Other	11,265	39,858
FTA	65	159
Penalties – Total (\$)	196,598,571	115,090,871
Willful	21,108,034	6,473,883
Repeat	29,823,210	11,075,823
Serious	131,173,038	83,268,254
Unclassified	5,432	82,986
Other	12,926,576	11,680,422
FTA	1,561,970	2,509,503
Average Penalty/Violation (\$)	3,862	1,365
Willful	61,900	41,499
Repeat	11,501	5,088
Serious	3,580	1,985
Unclassified	5,432	4,149
Other		4,149 293
FTA	1,148	
FIA	24,030	15,783
Percent Inspections with Citations Contested	8.3%	17.3%

Source: Occupational Safety and Health Administration, OIS Federal Inspection Reports.





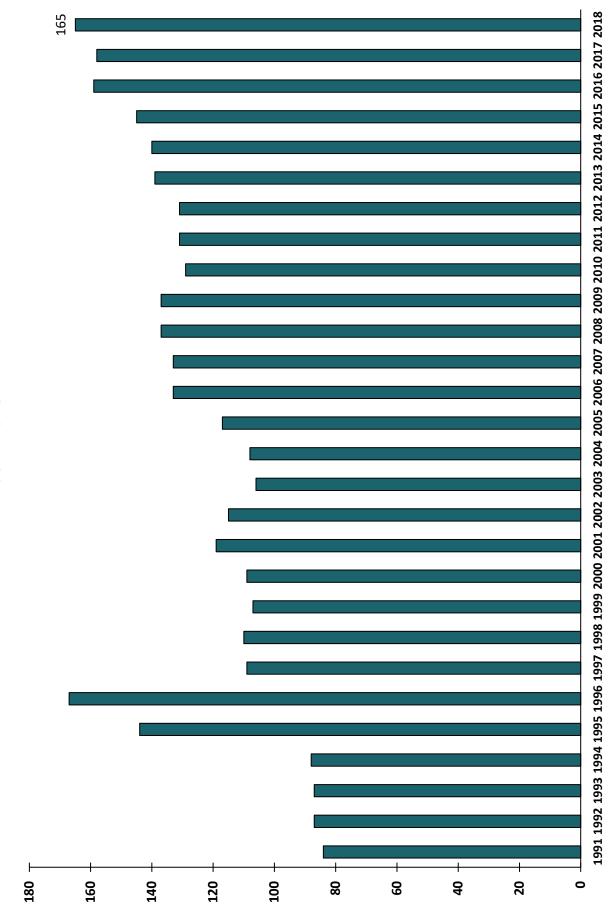
Number of Federal OSHA Inspections by Industry (Two-Digit NAICS Code),





Inspections an	d Investigations U Weighting S		HA's Enf	forceme	nt
		FY 2016	FY 2017	FY 2018	% Change FY 2016–2018
Total Inspections		31,948	32,396	32,020	0%
Total Enforcement Units		42,900	41,591	41,500	-3%
	With Inspecti	ions			
Significant Case	Number of Inspections	131	53	65	-50%
EU Value: 8	Number of EUs	1,048	424	520	-50%
Process Safety Management	Number of Inspections	234	140	232	-1%
EU Value: 7	Number of EUs	1,638	980	1,624	-1%
5a1 Ergonomics	Number of Inspections	69	44	19	-72%
EU Value: 5	Number of EUs	345	220	95	-72%
5a1 Heat	Number of Inspections	187	74	95	-49%
EU Value: 4	Number of EUs	748	296	380	-49%
Fatality/Catastrophe	Number of Inspections	866	825	910	5%
EU Value: 3	Number of EUs	2,598	2,475	2,730	5%
5a1 Non-PEL Overexposure	Number of Inspections	20	5	14	-30%
EU Value: 3	Number of EUs	60	15	42	-30%
5a1 Workplace Violence	Number of Inspections	49	40	41	-16%
EU Value: 3	Number of EUs	147	120	123	-16%
Federal Agencies	Number of Inspections	657	768	620	-6%
EU Value: 2	Number of EUs	1,314	1,536	1,240	-6%
Combustible Dust	Number of Inspections	491	419	397	-19%
EU Value: 2	Number of EUs	982	838	794	-19%
Personal Sampling	Number of Inspections	1,582	1,459	1,270	-20%
EU Value: 2	Number of EUs	3,164	2,918	2,540	-20%
All Other Inspections	Number of Inspections	27,662	28,569	28,357	3%
EU Value: 1	Number of EUs	27,662	28,569	28,357	3%
	Without Inspec	ctions			
Phone/Fax	Number of Complaints	21,738	21,243	19,338	-11%
EU Value: 1/9	Number of EUs	2,410	2,355	2,144	-11%
Rapid Response	Number of Investigations	7,088	7,645	8,244	16%
EU Value: 1/9	Number of EUs	784	845	911	16%

Source: Occupational Safety and Health Administration, OIS Federal Inspection Reports.



Years for Federal OSHA to Inspect Each Workplace Once FY 1991-2018^{1,2}

	Number of Fatality Inspections	Total Current	Average Total Penalty Per
Fiscal Year	Conducted	Penalties (\$)	Inspection (\$)
FY 2011	754	10 454 640	10 514
Federal States State Plan States	754 680	12,451,612 9,803,145	16,514 14,416
Nationwide	1,434	22,254,757	15,519
Nationwide	1,404	22,234,737	10,010
<u>FY 2012¹</u>			
Federal States	945	9,270,422	9,810
State Plan States	599	4,713,458	7,869
Nationwide	1,544	13,983,880	9,057
<u>FY 2013</u>			
Federal States	797	7,744,931	9,718
State Plan States	635	6,131,773	9,656
Nationwide	1,432	13,876,704	9,751
<u>FY 2014</u>		44 040 054	
Federal States	900	11,912,254	13,236
State Plan States	697	6,393,686 18,305,940	9,173
Nationwide	1,597	16,303,940	11,463
<u>FY 2015</u>			
Federal States	967	11,412,315	11,802
State Plan States	842	5,358,100	6,364
Nationwide	1,809	16,770,415	9,271
<u>FY 2016</u>			
Federal States	945	13,941,452	14,753
State Plan States	583	6,363,471	10,915
Nationwide	1,528	20,304,923	13,289
<u>FY 2017</u>			
Ft 2017 Federal States	906	17,351,501	19,152
State Plan States	790	7,389,944	9,354
Nationwide	1,696	24,741,445	14,588
	.,	,,	,000
<u>FY 2018</u>			
Federal States	873	14,608,527	16,734
State Plan States	732	8,232,798	11,247
Nationwide	1,605	22,841,324	14,231

Source: OSHA IMIS Fatality Inspection Reports, FY 2011–2015, and OSHA OIS Fatality Inspection Reports, FY 2013–2018.

¹OSHA OIS Fatality Inspection Report for FY 2012 may include inspections that did not involve a fatality.

Significant OSHA Enforcement Cases Based on Total Penalty Issued, FY 2018 ¹									
Company Name	State	Inspection Number(s)	Date Citations Issued	Total Initial Penalty Issued	Current Penalty Issued				
Didion Milling Inc. ²	WI	1236533	11/17/17	\$1,837,861	\$1,837,861				
First Marine LLC HUTCO Inc. Thermal Control and Fabrication Inc.	КY	1292252 1304227 1292344 1292350 1305198	7/17/18	\$1,431,049	\$693,491				
Dudley Lumber Company Inc. East Alabama Lumber Company Inc.	AL	1235518 1237205 1247940	11/17/17	\$973,399	\$415,475				
Marshall Pottery Inc.	ТХ	1226618 1231190	10/11/17	\$944,366	\$545,160				
City Redevelopment LLC ³	NV	1292767	6/20/18	\$630,000	\$630,000				
H.B./Fuller Company dba Adhesive System Inc. ⁴	IL	1291440 1301657	7/25/18	\$590,335	\$587,564				
Alexander Tank Company	тх	1293079 1291102	7/24/18	\$519,950	\$169,953				
German Pellet Texas LLC	тх	1272047 1272065	4/17/18	\$516,446	\$305,884				
Nox US LLC	ОН	1244737 1248648	12/21/17	\$514,236	\$270,000				
Gavilon Grain LLC	KS	1285649 1286170	6/28/18	\$507,374	\$507,374				
Manuel Galladro's Construction Services	IL	1257385 1261444 1262666 1268516 1270984 1279312	2/20/18	\$496,944	\$287,093				
Dollar Tree Stores Inc. ³	VA	1308029	9/26/18	\$479,418	\$281,600				
Douglas Stephen Plastics Inc.	NJ	1267353 1268998	3/20/18	\$435,679	\$435,679				
Sperry & Rice LLC	ОН	1296462 1298240	8/16/18	\$400,775	\$400,775				
USA Compression Partners LLC GBW Railcar Services LLC	тх	1306452 1306379	9/27/2018	\$388,020	\$148,741				

Source: Occupational Safety and Health Administration.

¹On Aug. 1, 2016, as a result of OSHA's new penalty structure, OSHA raised the threshold for significant enforcement cases from cases resulting in a total proposed penalty of more than \$100,000 to cases with a total proposed penalty of more than \$180,000. In FY 2018, OSHA brought 78 federal and 17 state significant enforcement cases; two of these were against federal agencies.

²This significant case involved an egregious violation.

³This significant case was issued under an OSHA state plan, which may have different criteria for a significant case, but this case exceeds the federal threshold for a significant case.

⁴dba = "doing business as"

Largest-Ever OSHA Enforcement Cases Based on Total Penalty Issued

	Inspection		Total Penalty	
Company Name	Number(s)	Date Citations Issued	Issued	Penalty Amount Paid ¹
BP Products North America	311962674 308314640	10/29/2009	\$81,340,000	\$50,610,000 \$14,567,000
BP Products North America	308314640 308314988	9/21/2005	\$21,361,500	\$205,000 (Formal settlements)
IMC Fertilizer/Angus Chemical	107607863 107607871	10/31/1991	\$11,550,000	\$10,000,000
Imperial Suger	310988712 311522858	7/25/2008	\$8,777,500	\$6,050,000 (Formal settlement)
O&G Industries Inc.	109179937 314295460	8/3/2010	\$8,347,000	\$1,000,000 (Formal settlement)
Samsung Guam Inc.	107329740 106196801	9/21/1995	\$8,260,000	\$1,829,000 (Formal settlement)
CITGO Petroleum	110416880	8/29/1991	\$8,155,000	\$5,800,000
Dayton Tire	109061648	4/18/1994	\$7,490,000	\$7,490,000
USX (aka U.S. Steel Corp.)	100504950 018252858 102873288	10/26/1989 11/2/1989	\$7,275,300	\$3,268,845 (Formal settlement)
Keystone Construction Maintenance	109179952 314295445	8/3/2010	\$6,623,000	\$250,000* (Formal settlement)
Phillips 66/Fish Engineering	106612443 107365751	4/19/1990	\$6,395,200	\$410,000 (Formal settlement)
Hercules Inc.	108662420 100490705	9/8/1993	\$6,328,000	\$100,000 (ALJ decision)
Arcadian	102281292 102281128	1/27/1993	\$5,085,000	\$5,085,000
E. Smalis Painting	108753690	6/31/1994	\$5,008,500	\$1,092,750 (OSHRC decision)
John Morrell	101456325	10/28/1988	\$4,330,000	\$990,000 (Formal settlement)
Bath Iron Works	101450336 101450294	11/4/1987	\$4,175,940	\$650,000 (Formal settlement)

Largest-Ever OSHA Enforcement Cases Based on Total Penalty Issued

	lacacotica		Total Develty	
Company Name	Number(s)	Date Citations Issued	local Ferrary Issued	Penalty Amount Paid ¹
Fraser Paper	102749868 102750395	9/17/1991	\$3,982,500	\$1,286,233 (Formal settlement)
Decoster Egg Farms (aka Maine Contract Farming LLC)	122375512	7/12/1996	\$3,555,500	\$1,887,500 (Formal settlement)
Arco Chemical Co.	110318540	1/3/1999	\$3,481,300	\$3,481,300
Sunfield, Inc.	1117773 1128049	6/29/2016	\$3,426,900	Violations under contest
The Budd Company	18252510	12/12/1989	\$3,345,600	\$1,528,000 (Formal settlement)
McCrory Stores	113919278	11/7/1991	\$3,188,000	\$500,000 (ALJ decision)
IBP	100059591	5/11/1998	\$3,133,100	\$532,030 (OSHRC decision)
BP North America Inc. and BP Husky Refining LLC	311611081	3/8/2010	\$3,042,000	\$3,042,000
Shell Oil Chemical Co.	103342093	11/22/1994	\$3,017,000	\$3,017,000
Union Carbide	110398310	9/12/1991	\$2,803,500	\$1,496,500 (Formal settlement)
Ajin USA Alliance Total Solutions LLC Joynus Staffing Group	1156866 1165706 1165707	12/12/2016	\$2,565,621	Violations under contest
Dover Greens LLC (dba as Olivet Management LLC)	945519	3/31/2014	\$2,359,000	\$700,000 (Formal settlement)
Republic Steel	942971 942968	3/31/2014	\$2,086,000	\$240,614
Aluminum Shapes LLC	1206035	7/20/2017	\$1,922,895	Violations under contest

Source: Occupational Safety and Health Administration.

¹Penalty amount paid information comes from March 26, 2012, posting by Celeste Monforton on the Pump Handle blog at www:scienceblogs.com/thepumphandle/2012/03/26/federal-osha-penalties-101-a-l/ and from www.osha.gov/pls/imis/InspectionNr.html.

*Settlement called for Keystone Construction Maintenance also to pay 5% of its annual revenue above a set amount for each of the seven years following the settlement.

¹Cases completed include cases received and backlog cases.

					-	compiain		IOUS	
Year	Received	Completed ¹	Total Merit	Merit	Settled	Settled Other	Dismissed	Withdrawn	Total Determinations
2005	1,194	1,160	294	23	224	47	092	146	1,200
2006	1,195	1,229	293	14	213	66	787	196	1,276
2007	1,301	1,167	262	14	190	58	766	176	1,204
2008	1,381	1,255	261	14	202	45	830	227	1,318
2009	1,267	1,168	287	22	210	55	726	187	1,200
2010	1,402	1,144	334	24	244	66	672	177	1,183
2011	1,668	1,234	411	23	314	74	694	177	1,282
2012	1,745	1,653	400	18	294	88	977	340	1,717
2013	1,708	1,827	611	41	369	201	921	415	1,947
2014	1,751	1,794	483	13	309	161	957	426	1,866
2015	2,031	1,952	560	18	362	180	962	459	1,975
2016	2,030	2,035	581	29	342	210	1,043	472	2,096
2017	1,932	1,876	538	15	303	220	877	502	1,917
2018	1,870	1,740	510	20	269	221	870	377	1,757
L	(-			C	

Source: Federal Occupational Safety and Health Administration, Directorate of Whistleblower Protection Programs.

Disposition of Federal OSHA 11(c) Whistleblower Complaints, FY 2005–2018

Complaint Determinations

Ficral	Cacoc	Cases				Complain	Complaint Determinations	ions	
Year	Received	Completed ¹	Total Merit	Merit Finding	Settled	Settled Other	Dismissed	Withdrawn	Total Determinations
2009	1,043	882	158	31	94	33	654	121	933
2010	1,167	954	160	24	107	29	612	132	904
2011	1,462	839	168	24	125	19	626	135	929
2012	1,457	766	174	20	133	21	443	112	729
2013	1,192	1,059	248	58	139	51	655	215	1,118
2014	1,157	965	221	46	125	50	606	198	1,025
2015	1,060	1,120	219	27	145	47	606	300	1,125
2016	1,143	1,031	169	25	95	49	646	216	1,031
2017	1,183	1,222	259	66	115	78	766	206	1,231
2018	1,347	1,376	244	47	91	106	871	261	1,376

Disposition of OSHA State Plan 11(c) Whistleblower Complaints, FY 2009–2018

Source: Occupational Safety and Health Administration, Directorate of Cooperative and State Programs.

¹Cases completed include cases received and backlog cases.

Major OSHA Health Standards Since 1971

Star	ıdard	Year Final Standard Issued
1.	Asbestos	1972
2.	Fourteen Carcinogens	1974
3.	Vinyl Chloride	1974
4.	Coke Oven Emissions	1976
5.	Benzene (vacated)	1978
6.	DBCP	1978
7.	Arsenic	1978
8.	Cotton Dust	1978
9.	Acrylonitrile	1978
10.	Lead	1978
11.	Cancer Policy	1980
12.	Access to Medical Records	1980
13.	Hearing Conservation	1981
14.	Hazard Communication	1983
15.	Ethylene Oxide	1984
16.	Asbestos (revised)	1986
17.	Field Sanitation	1987
18.	Benzene (revised)	1987
19.	Formaldehyde	1987
20.	Access to Medical Records (modified)	1988
21.	Permissible Exposure Limits (PELs) Update (vacated)	1989
22.	Chemical Exposure in Laboratories	1990
23.	Bloodborne Pathogens	1991
24.	4,4'-methylenedianiline	1992
25.	Cadmium	1992
26.	Asbestos (partial response to court remand)	1992
27.	Formaldehyde (response to court remand)	1992
28.	Lead (construction)	1993
29.	Asbestos (response to court remand)	1994
30.	1,3-Butadiene	1996
31.	Methylene Chloride	1998
32.	Respiratory Protection	1998
33.	Ergonomics (revoked under the Congressional Review Act)	2000
34.	Bloodborne Pathogens – Needlestick Injuries	2001
35.	Hexavalent Chromium (response to court order)	2006
36.	Hazard Communication – Globally Harmonized System	2012
37.	Crystalline Silica	2016
38.	Beryllium	2017

Source: Code of Federal Regulations.

Major OSHA Safety Standards Since 1971

Sta	ndard	Year Final Standard Issued
1.	Cranes/Derricks (load indicators)	1972
2.	Roll-over Protective Structures (construction)	1972
3.	Power Transmission and Distribution	1972
4.	Scaffolding, Pump Jack Scaffolding and Roof Catch Platform	1972
5.	Lavatories for Industrial Employment	1973
6.	Trucks, Cranes, Derricks and Indoor General Storage	1973
7.	Temporary Flooring – Skeleton Steel Construction	1974
8.	Mechanical Power Presses	1974
9.	Telecommunications	1975
10.	Roll-over Protective Structures of Agricultural Tractors	1975
11.	Industrial Slings	1975
12.	Guarding of Farm Field Equipment, Farmstead Equipment and Cotton Gins	1976
13.	Ground-Fault Protection	1976
14.	Commercial Diving Operations	1977
15.	Servicing Multi-Piece Rim Wheels	1980
16.	Fire Protection	1980
17.	Guarding of Low-Pitched Roof Perimeters	1980
18.	Design Safety Standards for Electrical Standards	1981
19.	Latch-Open Devices	1982
20.	Marine Terminals	1983
21.	Servicing of Single-Piece and Multi-Piece Rim Wheels	1984
22.	Electrical Safety in Construction (Part 1926)	1986
23.	General Environmental Controls – TAGS (Part 1910)	1986
24.	Marine Terminals – Servicing Single-Piece Rim Wheels (Part 1917)	1987
25.	Grain Handling Facilities (Part 1910)	1987
26.	Safety Testing of Certification of Certain Workplace Equipment and Materials	1988
27.	Crane or Derrick Suspended Personnel Platforms (Part 1926)	1988
28.	Concrete and Masonry Construction (Part 1926)	1988
	Mechanical Power Presses (modified)	1988
	Powered Platforms (Part 1910)	1989
31.	Underground Construction (Part 1926)	1989
32.		1989
33.		1989
34.		1989
35.		1990
36.	5 1	1990
37.	Electrical Safety Work Practices (Part 1910)	1990
38.	Welding, Cutting and Brazing (Part 1910) (revision)	1990
39.		1992
40.	Confined Spaces (general industry)	1993

Major OSHA Safety Standards Since 1971

Year Final Standard Issued

41.	Fall Protection	1994
42.	Electrical Power Generation	1994
43.	Personal Protective Equipment	1994
44.	Logging Operations	1995
45.	Scaffolds	1996
46.	PPE for Shipyards	1996
47.	Longshoring and Marine Terminals	1997
48.	Powered Industrial Truck Operator Training	1998
49.	Steel Erection	2001
50.	Electrical Equipment Installation	2007
51.	Employer Payment for Personal Protective Equipment	2007
52.	Cranes and Derricks in Construction	2010
53.	General Working Conditions for Shipyard Employment	2011
54.	Electric Power Generation, Transmission and Distribution	2014
55.	Confined Spaces (construction)	2015
56.	Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems) (Part 1910)	2016

Source: Code of Federal Regulations.

Standard

Impact on Workers' Lives from Delays in Recent OSHA Standards

Hazard/Issue	Year Rulemaking Initiated	Year Rulemaking Completed	Years Elapsed Since Rulemaking Initiated	Lives Lost Per Year of Delay	Lives Lost Over Entire Rulemaking Period
Cranes and Derricks ¹	2002	2010	8	22	176
Hexavalent Chromium ²	1993	2006	13	40 to 145	520 to 1,885
Silica ³	1997	2016	19	642	12,198
Beryllium ⁴	1998	2017	19	06	1,710

In 2002, OSHA initiated negotiated rulemaking on the cranes and derricks standard. The negotiated rulemaking committee recommended a draft rule in 2004. The proposed rule was issued in 2008 and the final rule promulgated in 2010. According to OSHA, the cranes and derricks standard also will prevent 175 injuries per year. Fatalities and injuries prevented per year by the new standard were obtained from OSHA's preamble to the final rule for cranes and derricks published in the Federal Register on Aug. 9, 2010.

from occurring annually. Lung cancer and silicosis deaths and illnesses avoided per year by the new standard were obtained from OSHA's preamble to the final rule published in the Federal chromium on the regulatory agenda for normal rulemaking. OSHA failed to issue a proposed rule. Lawsuits in 1997 and in 2002 seeking to compel rulemaking resulted in a court-ordered timetable to issue a final standard by Jan. 18, 2006. According to OSHA, the standard also will prevent 209 to 1,045 cases of dermatitis and 1,140 cases of nasal perforations/ulcerations ²In 1993, a petition for an Emergency Temporary Standard for the carcinogen hexavalent chromium was submitted to OSHA. In 1994, OSHA denied the ETS petition but put hexavalent Register on Feb. 28, 2006.

12866. OMB review of proposed rules is required to be completed within 120 days under the EO, but due to political pressure from industries opposed to the new rule, the draft proposed rule was held by OMB for two and one-half years. The proposed rule finally was issued on Sept. 12, 2013; the final rule was issued on March 25, 2016. According to the preamble of the final rule, Work on the standard was reactivated in 2009, and on Feb. 14, 2011, the draft proposed standard was submitted to the Office of Management and Budget for review under Executive Order ³In 1997, silica was put on OSHA's regulatory agenda. In 2003, a draft silica standard underwent a Small Business Regulatory Enforcement Fairness Act review, but the rule then stalled. reducing the permissible exposure limit for silica to 50 µg/m³ will prevent 642 deaths and 918 cases of silica-related disease each year (81 FR 16285).

⁴In 1998, beryllium was put on OSHA's regulatory agenda. A petition for an Emergency Temporary Standard for the carcinogen beryllium was submitted to OSHA in 1999 and again in 2001. In 2002, OSHA denied the petition for an ETS but kept beryllium on the regulatory agenda for normal rulemaking. In 2002, OSHA issued a Request for Information. In 2012, the United Steelworkers and Materion Brush jointly submitted a draft standard to OSHA. OSHA published the proposed rule in 2015 and the final rule on Jan. 9, 2017. According to the preamble of the final rule, reducing the permissible exposure limit for beryllium to 0.2 µg/m³ will prevent 90 deaths and 46 cases of chronic beryllium disease each year (82 FR 2597). On June 27, 2017, the Trump administration proposed to repeal the exposure monitoring, medical surveillance and other ancillary provisions of the beryllium standard for construction and maritime workers, and has not enforced these requirements.

Chemical ²	OSHA PEL	Cal/OSHA PEL	ACGIH TLV	NIOSH REL	Units
Acrylamide ³	0.3	0.03	0.03	0.03	mg/m ³
Ammonia	50	25	25	25	ppm
Asphalt fume ³	-	5.0	0.5	5.0 (s)	mg/m ³
Benzene ³	1.0	1.0	0.5	0.1	ppm
1-Bromopropane ⁴	-	5.0	0.1	-	ppm
n-Butanol	100	50 (c)	20	50 (c)	ppm
Carbon disulfide⁵	20	1.0	1.0	1.0	ppm
Carbon monoxide ⁵	50	25	25	35	ppm
Chlorobenzene	75	10	10	-	ppm
Chlorodiphenyl (54% chlorine) (PCB)	0.5	0.5	0.5	0.001	mg/m ³
Cobalt metal, dust and fume	0.1	0.02	0.02	0.05	mg/m ³
Dimethyl sulfate ^{3,5}	1.00	0.1	0.1	0.1	ppm
2-Ethoxyethanol (EGEE)	200	5.0	5.0	0.5	ppm
Ethyl acrylate ³	25	5.0	5.0	-	ppm
Formaldehyde ⁴	0.75	0.75	0.1	0.016	ppm
Gasoline ³	-	300	300	-	ppm
Glutaraldehyde⁵	-	0.05 (c)	0.05 (c)	0.2 (c)	ppm
Manganese compounds	5.0 (c)	0.2	0.02	1.0	mg/m ³
Methylene bisphenyl isocyanate (MDI)	0.02 (c)	0.005	0.005	0.005	ppm
Styrene	100	50	20	50	ppm
Tetrachloroethylene (Perchloroethylene/PERC) ^{3,4,5}	100	25	25	-	ppm
Toluene⁵	200	10	20	100	ppm
Toluene-2,4-Diisocyanate (TDI) ³	0.02 (c)	0.005	0.001	-	ppm
Triethylamine	25	1.0 (c)	0.5	-	ppm
Welding fume ³	-	5.0	-	-	mg/m ³

Permissible Exposure Limits of OSHA Compared with Other Standards and Recommendations¹

¹(c) Ceiling level; (s) Short-term exposure limit.

²More available at www.osha.gov/dsg/annotated-pels/, OSHA Permissible Exposure Limits – Annotated Tables.

³NIOSH denotes carcinogenicity of chemicals according to Appendix A: www.cdc.gov/niosh/npg/nengapdxa.html. NIOSH does not always assign an exposure limit for carcinogens and instead, recommends reducing exposure to the lowest feasible level.

⁴Designated or proposed by EPA as a high-priority chemical for regulation under the amended Toxic Substances Control Act.

⁵Chemicals identified by OSHA for updating permissible exposure limits but subsequently dropped from the agency's regulatory agenda.

5(a)(1) Citation for Airborne Chemical Exposures Since 2011–2018—Federal OSHA and State Plan Cases	Measured

			011100 20 11-20 10 11 CACI AI OOI 17 AILA OKAKO I AILI OASOS	411 O doco	
Date Issued,				Measured	
Insp. #, State	Workplace Operation	SHA PEL)	Health Effects	Exposure	Reference OEL
Feb, 14, 2011	Spray painting in	VM&P Naptha	Lung, skin irritation, chemical	5,900 mg/m ³	1,800 mg/m ³ (C) REL
313878563, FL	construction	(No PEL)	pneumonia		NIOSH
April 8, 2011	Construction work in	Hydrogen sulfide	Lung, eye irritation, CNS,		100 ppm
314468745, MO	sewer manhole	(10 ppm, 8 hour)	dizziness, coma	edirect read)	IDLH NIOSH
July 7, 2011	Home furniture	1-Bromopropane	Liver damage, neurotoxicity,		25 ppm AEL
315638304, NC	manufacture	(No PEL)	fetal		EPA
Aug. 2, 2011	Operating propane	Carbon monoxide	Nausea, dizziness, cyanosis	278 ppm	No reference
315447078, NC	forklift	(50 ppm, 8 hour)		irect read)	(200 ppm-C NIOSH
Aug. 10, 2011	Operating forklift	Carbon monoxide	Nausea, dizziness, cyanosis	2,622 ppm	200 ppm (C) REL
315685123, NC		(50 ppm, 8 hour)		(assume direct read) NIOSH	NIOSH
Aug. 12, 2011	Applying adhesive in	Ethyl cyanoacrylate	Respiratory illness,	0.5 ppm	0.20 ppm TLV
314677188, NJ	glass manufacturing	(No PEL)	sensitization	8 hours	ACGIH
Aug. 25, 2011	By furnace at steel	Carbon monoxide	Nausea, dizziness, cyanosis	492 ppm	200 ppm (C) REL
313138430, WI	foundry	(50 ppm, 8 hour)		(assume direct read) NIOSH	NIOSH
Sept. 7, 2011	Spray finishing auto body HDIH ¹	HDIH ¹	Nausea, dizziness, cyanosis	2.34 mg/m ³	1 mg/m ³ STEL
29490, CO		(No PEL)			MSDS
Oct. 7, 2011	Mixing and gluing	y ceramic fibers	Respiratory irritation, lung	ers/cc	0.5 f/cc REG
315121244, WI	ceramic fibers	(No PEL)	cancer, mesothelioma	8 hours	HTIW
Nov. 7, 2011	Spray finishing auto body HDIH ¹	HIDH ¹	Respiratory irritation, chemical	1.23 mg/m ³	1mg/m ³ STEL
62933, FL		(No PEL)	asthma		MSDS
Feb. 28, 2012	Roofer heating asphalt	Asphalt fumes	Eye, upper respiratory	0.93 mg/m ³	5 mg/m ³ REL
315359471. FL	kettle	(No PEL)	irritation, cancer	8 hours	NIOSH
March 6, 2012	Spraying glue	1-Bromopropane	Liver damage, neurotoxicity,		25 ppm AEL
316337708, NC			fetal	8 hour TWA	EPA
March 16, 2012	Operating forklift	Carbon monoxide	Nausea, dizziness, cyanosis	600 ppm	200 ppm (C) REL
316436021, NC		(50 ppm, 8 hour)		(assume direct read) NIOSH	NIOSH
May 12, 2012	g molds in steel	DMEA ²	Headache, nausea, blurred	u	3 ppm
110849, WI	foundry	(No PEL)	vision, increased heart rate		MSDS
May 24, 2012	Operating forklift	Carbon monoxide	Nausea, dizziness, cyanosis	300 ppm	200 ppm (C) REL
316528181, NC		(50 ppm, 8 hour)		irect read)	NIOSH
April 2, 2013	Pouring food flavor	Diacetyl	Lung damage, bronchiolitis		0.02 STEL
890719, NJ	chemical	(No PEL)	obliterans		ACGIH
Аргіі 19, 2013 702499 ТХ	Spraying powder coat on TGIC ³	TGIC ³	Respiratory illness, sensitization_male	/m³	0.05 mg/m ³ TLV
XT (00170)		(INO FEL)			AUGIN

	Since	∋ 2011–2018—Fedei	Since 2011–2018—Federal OSHA and State Plan Cases	an Cases	
Date Issued,				Measured	
Insp. #, State	Workplace Operation	Chemical (OSHA PEL) Health Effects	Health Effects	Exposure	Reference OEL
June 18, 2013	Animal surgery	Isoflurance	Reproductive, CNS, liver,	2.3 ppm	2 ppm (C) REL
315840883, NV		(No Pel)	kidney	(assume 60 minutes) NIOSH	NIOSH
Sept. 19, 2013	Manual work with	Styrene	Respiratory, skin and eye	65.2 ppm	50 ppm REL
897143, WI	fiberalass molds	(100 ppm PEL)	irritation. CNS. liver	10 hours	NIOSH
Sept. 30, 2013 899582, FL	Disinfecting endoscopy equipment	Glutaraldehyde (no PEL)	Respiratory illness, skin and eye irritation,	15 minutes)	0.05 ppm (C) TLV ACGIH
Feb. 3, 2014	Foam lamination for car seats	2,6-TDI ⁴	Respiratory illness, asthma,	0.08 mg/m ³	0.036 mg/m ³ TLV
925263, TX		(No PEL)	sensitizer	8 hours	ACGIH
March 21, 2014	Destruction of old	TNT ⁵	Respiratory, liver, kidneys	/m³	0.1 mg/m ³ TLV
947716, NV	munitions	(1.5 mg/m3 8 hour)	CNS, eyes, skin		ACGIH
Oct. 24, 2014	Animal Surgery	Isoflurance	Reproductive, CNS, liver,	REL	2ppm (C) REL
317376770, NV		(No Pel)	kidney	sted)	NIOSH
Dec. 1, 2015	Fragrance manufacturing Diacetyl (No PEI	Diacetyl	Lung damage, bronchiolitis	80.1 ppm	0.02 STEL
1068107, NJ		(No PEL)	obliterans	15 minutes	ACGIH
April 13, 2015	Fragrance manufacturing Diacetyl (No PEI	Diacetyl	Lung damage, bronchiolitis	5.8969 ppm	0.02 ppm STEL
1055558, NJ		(No PEL)	obliterans	15 minutes	ACGIH
Jan. 17, 2017 1125064, PA	Travel trailer & camper manufacturing	TGIC ³ (No PEL)	Respiratory illness, sensitization, male reproduction	0.866 mg/m ³ 8 hour TWA	0.05 mg/m³ TLV ACGIH 0.025 ma/m³ Mfa STEL
Feb. 26, 2018 1260141, PA	Degreasing	1-Bromopropane (No PEL)	Nervous system damage, cancer, eye and respiratory irritation	88.53 ppm 8 hour TWA	0.1ppm TLV ACGIH 5.0ppm PEL CAL/OSHA

5(a)(1) Citation for Airborne Chemical Exposures Since 2011–2018—Federal OSHA and State Plan Cases

Source: Occupational Health and Safety Administration.

¹HDIH is hexamethylene diisocyante homopolmer.

²DMEA is dimethylethylamine.

³TGIC is 1,3,5- triglycidyl isocyanurate, aka 1,3,5-triglycidl-s-trizainetrione.

⁴2,6–TDI is toluene diisocyanate.

⁵TNT is 2,4,6–Trinitrotoluene.

Federal OSHA Budget and Personnel FY 1980–2019

Fiscal Year	Budget	Positions
	(in dollars – \$)	(Staff Full-Time Equivalent Employment)
1980	186,394,000	2,951
1985	219,652,000	2,239
1990	267,147,000	2,425
1991	285,190,000	2,466
1992	296,540,000	2,473
1993	288,251,000	2,368
1994	296,428,000	2,295
1995	311,660,000	2,196
1996	303,810,000	2,069
1997	324,955,000	2,118
1998	336,480,000	2,171
1999	354,129,000	2,154
2000	381,620,000	2,259
2001	425,886,000	2,370
2002	443,651,000	2,313
2003	453,256,000	2,313
2004	457,500,000	2,236
2005	464,224,000	2,208
2006	472,427,000	2,165
2007	486,925,000	2,165
2008	486,001,000	2,118
2009	513,042,000	2,147
2010	558,620,000	2,335
2011	558,619,000	2,335
2012	564,788,000	2,305
2013 ¹	535,546,000	2,226
2014	552,247,000	2,238
2015	552,787,000	2,224
2016	552,787,000	2,173
2017	552,787,000	2,011
2018	552,787,000	1,953
2019	557,533,000	1,911

Source: Occupational Safety and Health Administration.

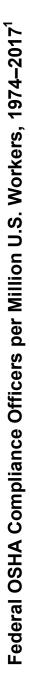
¹The FY 2013 funding levels reflect budget cuts mandated by the sequester.

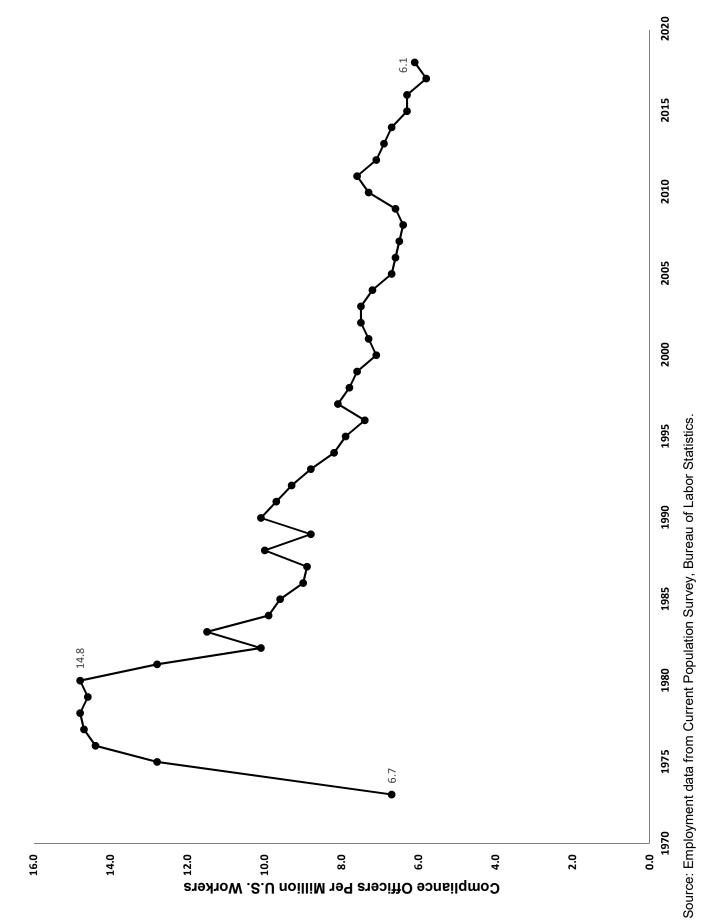
Federal OSHA Safety and Health Compliance Staffing, 1975–2018

Year	Total Number of Federal OSHA Compliance Officers ¹	Employment (000) ²	OSHA Compliance Officers Per Million Workers
1975	1,102	85,846	12.8
1976	1,281	88,752	14.4
1977	1,353	92,017	14.7
1978	1,422	96,048	14.8
1979	1,441	98,824	14.6
1980	1,469	99,302	14.8
1981	1,287	100,397	12.8
1982	1,003	99,526	10.1
1983	1,160	100,834	11.5
1984	1,040	105,005	9.9
1985	1,027	107,150	9.6
1986	975	109,597	9.0
1987	999	112,440	8.9
1988	1,153	114,968	10.0
1989	1,038	117,342	8.8
1990	1,203	118,793	10.1
1991	1,137	117,718	9.7
1992	1,106	118,492	9.3
1993	1,055	120,259	8.8
1994	1,006	123,060	8.2
1995	986	124,900	7.9
1996	932	126,708	7.4
1997	1,049	129,558	8.1
1998	1,029	131,463	7.8
1999	1,013	133,488	7.6
2000	972	136,891	7.1
2001	1,001	136,933	7.3
2002	1,017	136,485	7.5
2003	1,038	137,736	7.5
2004	1,006	139,252	7.2
2005	956	141,730	6.7
2006	948	144,427	6.6
2007	948	146,047	6.5
2008	936	145,362	6.4
2009	929	139,877	6.6
2010	1,016	139,064	7.3
2011	1,059	139,869	7.6
2012	1,006	142,469	7.1
2013	994	143,929	6.9
2014	986	146,305	6.7
2015	943	148,834	6.3
2016	952	151,436	6.3
	896		
2017		153,337	5.8
2018	825	155,761	5.6

¹Compliance officers for 1973 to 1989 from Twentieth Century OSHA Enforcement Data, A Review and Explanation of the Major Trends, U.S. Department of Labor, 2002; Compliance officers for 1990 to 2018 from OSHA Directorate of Enforcement Programs. Compliance officer totals include safety and industrial hygiene CSHOs and supervisory safety and industrial hygiene CSHOs.

²Employment is an annual average of employed civilians, 16 years of age and older, from the Current Population Survey (CPS), Bureau of Labor Statistics.





¹Compliance officers from U.S. Department of Labor, OSHA Directorate of Enforcement Programs, includes CSHOs and their supervisors.

Appropriations	20
ealth A	11-2020
and H	FY 20
Safety	
q	

CATEGORY	FY 2011	FY 2012	FΥ 2013 ³	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019 Request	FY 2019	FY 2020 Request
OSHA (in thousands of dollars)											
TOTAL	558,619	564,788	535,246	552,247	552,787	552,787	552,787	552,787	549,033	557,787	557,533
Safety and Health Standards	20,288	19,962	18,918	20,000	20,000	20,000	18,000	18,000	17,878	18,000	18,000
Federal Enforcement	208,146	207,753	207,928	207,785	208,000	208,000	208,000	208,000	212,735	209,000	212,780
Whistleblower Protection	14,806	15,873	15,043	17,000	17,500	17,500	17,500	17,500	17,381	17,500	18,624
State Enforcement	104,393	104,196	98,746	100,000	100,850	100,850	100,850	100,850	100,165	102,350	102,350
Technical Support	25,868	25,820	24,344	24,344	24,469	24,469	24,469	24,469	23,766	24,469	24,469
Federal Compliance Assistance	73,383	76,355	61,444	69,433	68,433	68,433	70,981	70,981	75,619	73,481	73,914
State Compliance Assistance	54,688	57,890	54,862	57,775	57,775	57,775	59,500	59,500	59,096	59,500	59,500
Training Grants	10,729	10,709	10,149	10,687	10,537	10,537	10,537	10,537	0	10,537	0
Safety and Health Statistics	34,805	34,739	32,922	34,250	34,250	34,250	32,900	32,900	32,677	32,900	38,400
Executive Administration	11,513	11,491	10,890	10,973	10,973	10,973	10,050	10,050	9,716	10,050	9,496
MSHA (in thousands of dollars)											
TOTAL	361,844 ²	372,524	353,768	375,887	375,887	375,887	373,816	373,816	375,906	373,816	376,043
Coal Enforcement	160,639	164,500	158,713	167,859	167,859	167,859	160,000	160,000	156,136	160,000	0
Metal/Nonmetal Enforcement	87,644	89,063	86,121	91,697	91,697	91,967	94,500	94,500	96,975	94,500	0
Mine Safety and Health											050 6105
Entorcement	4,352	1		1		1					202,040
Standards Development	6,221	4,765	4,547	5,416	5,416	5,416	4,500	4,500	5,345	4,500	5,382
Assessments	38,148	7,103	7,036	6,976	6,976	6,976	6,627	6,627	7,394	6,627	7,445
Education Policy and Development	31,031	38,325	31,898	36,320	36,320	36,320	39,320	39,320	38,297	39,320	38,559
Technical Support	15,906	33,613	32,050	33,791	33,791	33,791	35,041	35,041	33,848	35,041	34,079
Program Administration	18,173	16,998	15,974	15,838	15,838	15,838	15,838	15,838	15,958	15,838	16,355
Program Evaluation and			007 27	000 21	000 4 1					000 4 1	
Intormation Resources		18,157	11,429	066' <i>1</i> I.	1 1, 990	17,990	11, 990	11,990	21,403	066' <i>1</i> I.	21,083
NIOSH (in thousands of dollars)											
TOTAL ¹	302,171	292,588	292,588	332,363 ⁴	334,863	339,121	335,200	335,200	200,000	336,300	190,000

Sources: Budget of the U.S. Government, FY 2011–FY 2012, and U.S. Department of Labor Congressional Budget Justification, FY 2011–FY 2020.

¹Does not include \$55 million in mandatory funding for the Energy Employees Occupational Injury Compensation Program or mandatory funding for the 9/11 Health Program. ²Includes \$6.5 million for addressing the backlog of contested cases, of which up to \$3 million may be transferred to the DOL's Office of Solicitor.

 $^3 \mathrm{The}$ FY 2013 funding levels reflect the budget cuts mandated by the budget sequester.

⁴In FY 2014 and subsequent years, administrative costs previously allocated to the CDC budget were transferred to the NIOSH budget.

⁵In the FY 2020 proposed budget, President Trump proposed to combine the MSHA Coal Enforcement and Metal/Nonmetal Enforcement programs into one Mine Safety and Health Enforcement program.

Funding for OSHA Worker Safety Training Programs vs. Employer Compliance Assistance Programs, FY 2003–2020 (\$ in thousands)

Fiscal Year	Worker Safety and Health Training	Employer Compliance Assistance
FISCAI TEAI		(Federal and State)
FY 2003 Enacted	\$11,175	\$115,300
FY 2004 Request	\$4,000	\$120,000
FY 2004 Enacted	\$11,100	\$120,000
FY 2004 Rescission	\$10,500	\$119,200
FY 2005 Request	\$4,000	\$125,200
FY 2005 Enacted	\$10,500	\$124,200
FY 2006 Request	\$0	\$124,200
FY 2006 Enacted	\$10,100	\$125,900
FY 2007 Request	\$0	\$129,900
FY 2007 Enacted	\$10,100	\$126,000
FY 2008 Request	\$0	\$134,100
FY 2008 Enacted	\$9,900	\$123,800
FY 2009 Request	\$0	\$131,100
FY 2009 Enacted	\$10,000	\$127,200
FY 2010 Request	\$10,000	\$128,175
FY 2010 Enacted	\$10,750	\$128,200
FY 2011 Request	\$11,000	\$126,100
FY 2011 Enacted	\$10,729	\$128,200
FY 2012 Request	\$12,000	\$129,800
FY 2012 Enacted	\$10,700	\$134,200
FY 2013 Request	\$10,700	\$131,000
FY 2013 Enacted ¹	\$10,150	\$116,300
FY 2014 Request	\$10,700	\$133,200
FY 2014 Enacted	\$10,700	\$127,200
FY 2015 Request	\$10,700	\$128,200
FY 2015 Enacted	\$10,500	\$126,200
FY 2016 Request	\$10,700	\$130,800
FY 2016 Enacted	\$10,537	\$126,558
FY 2017 Request	\$10,537	\$132,558
FY 2017 Enacted	\$10,537	\$130,481
FY 2018 Request	\$0	\$130,016
FY 2018 Enacted	\$10,537	\$130,481
FY 2019 Request	\$0	\$134,715
FY 2019 Enacted	\$10,537	\$133,481
FY 2020 Request	\$0	\$133,414

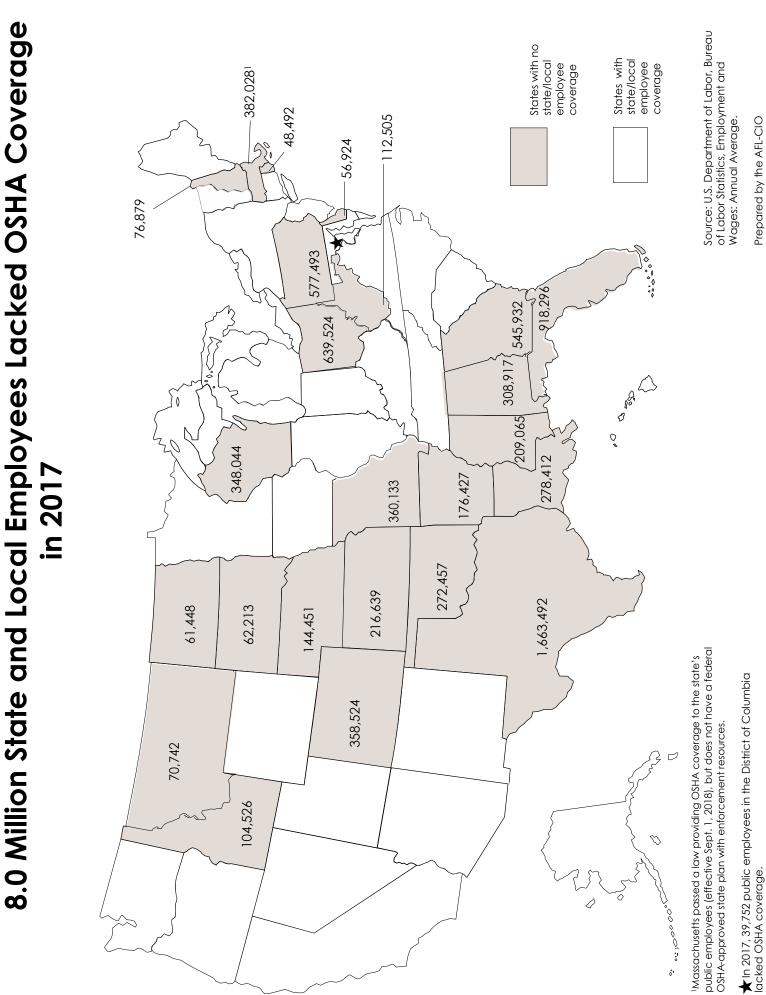
Source: Department of Labor, Occupational Safety and Health Administration, Annual Congressional Budget Justification.

¹FY 2013 funding levels reflect the budget cuts mandated by the sequester.

Number of U.S. Establishments and Employees Covered Per OSHA Full-Time Equivalent (FTE) Staff, 1980–2017

Fiscal Year	Annual Average Employment ¹	Annual Average Establishments ¹	OSHA Full-Time Equivalent (FTE) Staff ²	Employees Covered Per OSHA FTE	Establishments Covered Per OSHA FTE
1980	73,395,500	4,544,800	2,951	24,871	1,540
1985	96,314,200	5,305,400	2,239	43,017	2,370
1990	108,657,200	6,076,400	2,425	44,807	2,506
1995	115,487,841	7,040,677	2,196	52,590	3,206
2000	129,877,063	7,879,116	2,259	57,493	3,488
2005	131,571,623	8,571,144	2,208	59,589	3,882
2010	127,820,442	8,993,109	2,335	54,741	3,851
2011	129,411,095	9,072,796	2,335	55,422	3,886
2012	131,696,378	9,121,868	2,305	57,135	3,957
2013	133,968,434	9,205,888	2,226	60,183	4,136
2014	136,613,609	9,361,354	2,238	61,043	4,183
2015	139,491,699	9,522,775	2,224	62,721	4,282
2016	141,870,066	9,716,618	2,173	65,288	4,472
2017	143,859,855	9,835,104	2,011	71,536	4,891

¹U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages, Annual Averages (Total Covered). ²U.S. Department of Labor, Occupational Safety and Health Administration.



Prepared by the AFL-CIO

Profiles of Mine Safety and Health 2010–2018

Coal Mines

	2010	2011	2012	2013	2014 ³	2015 ³	2016 ³	2017 ³	2018 ³
Number of coal mines	1,944	1,972	1,871	1,704	1,633	1,459	1,289	1,216	1,191
Number of miners	135,500	143,940	138,338	123,446	116,318	102,871	81,875	83,053	82,694
Fatalities	48	20	20	20	16	12	8	15	12
Fatal injury rate ¹	0.0384	0.0148	0.0159	0.0176	0.0149	0.0131	0.0115	0.0200	0.0156
All injury rate ¹	3.43	3.43	3.21	3.15	3.15	2.93	2.91	3.18	2.85
States with coal mining	26	26	26	26	26	26	26	25	26
Coal production (millions of tons)	1,086	1,095	1,018	984	1,000	897	728	770	756
Citations and orders issued ²	96,814	93,057	78,836	63,166	62,452	49,322	40,508	46,764	46,854

Metal and Nonmetal Mines

	2010	2011	2012	2013	2014 ³	2015 ³	2016 ³	2017 ³	2018 ³
Number of									
metal/nonmetal mines	12,339	12,206	12,227	12,101	11,990	11,862	11,815	11,875	11,845
Number of miners	225,676	238,428	250,664	251,433	250,576	247,269	237,203	238,187	248,747
Fatalities	23	16	16	22	30	17	17	13	15
Fatal injury rate ¹	0.0129	0.0083	0.0079	0.0108	0.0147	0.0084	0.0088	0.0066	0.0073
All injury rate ¹	2.37	2.28	2.20	2.14	2.11	2.03	1.94	1.78	1.73
States with M/NM mining	50	50	50	50	50	50	50	50	50
Citations and orders									
issued ²	74,095	63,280	60,074	54,952	58,599	58,374	56,519	57,852	50,945

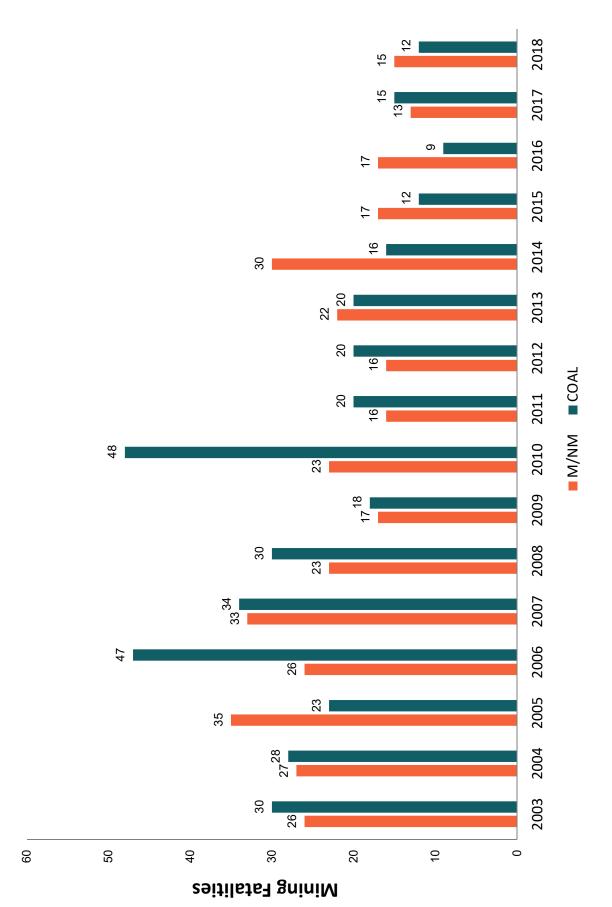
Source: U.S. Department of Labor, Mine Safety and Health Administration.

¹All reported injuries per 200,000 employee hours.

²Citations and orders are those not vacated.

³Includes operator and contractor employees.

Coal and Metal/Nonmetal Mining Fatality Comparisons, 2003–2018



Source: U.S. Department of Labor, Mine Safety and Health Administration.

Coal Mining Fatalities by State, 2002–2018

State	2002	2003	2004	2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2013 2014 2015 2016 2017 2018	2017	2018
Alabama	1	1	2	4	2	З	2	з	2		з	1	1	1	1	1	1
Alaska																	
Arizona					1					1							
Arkansas																	
California																	
Colorado						1				٦	1					1	
Connecticut																	
Delaware																	
Florida																	
Georgia																	
Hawaii																	
Idaho																	
Illinois		с					-	2	2		-	4	-	ы	٢		
Indiana	1	٢	1			3	1		1		1	1	1				2
lowa																	
Kansas																	
Kentucky	10	10	6	8	16	2	8	9	7	8	4	2	2	2	2	2	1
Louisiana								1									
Maine																	
Maryland					-	2											
Massachusetts																	
Michigan																	

Coal Mining Fatalities by State, 2002–2018

State	2002	2003	2003 2004	2005	2006 2007		2008 2009 2010 2011 2012	2009	2010	2011	2012	2013	2014	2015	2016	2017 2018	2018
Minnesota																	
Mississippi																	
Missouri																	
Montana					1				1				1			1	
Nebraska																	
Nevada																	
New Hampshire																	
New Jersey																	
New Mexico	-					1											
New York																	
North Carolina																	
North Dakota																	
Ohio				1						2	1	1					
Oklahoma				1		1											
Oregon																	
Pennsylvania	с	1	-	4	-	-	5	~				7		с	4	-	S
Puerto Rico																	
Rhode Island																	
South Carolina																	
South Dakota																	
Tennessee			1					1			1						
Texas						۲	٢										

Coal Mining Fatalities by State, 2002–2018

State	2002	2003	2004	2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Utah	-		2		-	10						-	1				
Vermont																	
Virginia	4	3	3		٦		2	1		-	1		2	1			
Washington																	-
West Virginia	9	6	12	4	23	6	6	8	35	9	7	9	5	2	4	8	4
Wisconsin																	
Wyoming	۲	2		٢			ſ			-		2	2			٢	
Total	28	30	28	23	47	34	30	18	48	20	20	20	16	12	8	15	12

Source: U.S. Department of Labor, Mine Safety and Health Administration.

Metal and Nonmetal Mining Fatalities by State, 2002–2018

State	2002	2002 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alabama		2		-					-		-					-	~
Alaska					2	ю				2							
Arizona	4			2	-	2	2	1	2		-	1	1		1	-	
Arkansas	1	1				2		1							1		
California		2			7	ю	2	-	2		-	2		-		-	
Colorado	2	1		2								2					
Connecticut																	
Delaware																	
Florida	4			2	1				1	1	2		1	1	1		
Georgia	~	-	-				-	-	-			2		-	-	-	
Hawaii																	
Idaho	~								-	7			~			-	
Illinois	2	1											1			1	
Indiana	-		2		-	1							1				
lowa			1				2	1		1			1	1	1	-	1
Kansas		-					-		2			4	-				
Kentucky		1		3	1		-	2			-	4	1		1		
Louisiana					-	1		1				1	1				
Maine																	
Maryland	~								-		-						
Massachusetts					-									-			
Michigan	~	-	2	-	ю										-		~
Minnesota				-	ю	2			~	2							

Metal and Nonmetal Mining Fatalities by State, 2002–2018

State	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mississippi				2											2		
Missouri	З		2	1		7	2	2				2	2	2			
Montana				1		-				1	2		1				1
Nebraska	1			1		-					-			1			
Nevada	2	2	4	3		2	3	1	2	1	1	2	2	3	1	2	2
New Hampshire		1				-								1			
New Jersey		1		1													
New Mexico	2	1	1	2			1	1				1				1	1
New York	1		1				1		1	1	3		2				1
North Carolina		1	1			-				1	-				1	1	
North Dakota														1			1
Ohio		2		2		2				+			1	1			
Oklahoma			2						з		-						
Oregon	2	1	2	1	1	-										1	
Pennsylvania			2	1	2		2	1		1		1	2	1			1
Puerto Rico	1				+	-		1									
Rhode Island																	
South Carolina	-	2	-	-									2				
South Dakota	1																
Tennessee	ю	-	-	-	2	-		-	-			-			-		
Texas	4	2	с	7	.	7	ო	7	2			-	5	~	2	-	З
Utah							-		~	~			2		~		-
Vermont																	

Metal and Nonmetal Mining Fatalities by State, 2002–2018

Ctato		2002	1000	2005	2006	2007	8000	2000	2010	2011	2012	2012	2011	2015	13 2004 2005 2005 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	2017	2018
Oldic	7007	2002	1001	2007	2002	1007	2000	2003	20104		7 . 7	21.04	1	2124	2010	107	20107
Virginia				-	-	-							2	1	+		1
Washington	、	~		~					Ļ						Ţ		
West Virginia						-											
Wisconsin				-			-										
Wyoming	5		.	~		-											
Total	42	26	27	35	26	33	23	17	23	16	16	22	30	17	17 17 13		15

Source: U.S. Department of Labor, Mine Safety and Health Administration.

Coal 6 1 4 1 1 1 3 2 32 32 60 9 77 34 22 29 0 1 3 2 32 10 0 0 0 2 0 3 6 39 425 21 44 9 5 10 3 6 0 1 1 2 11 35% 44% 12% 45% 10% 21% 0% 0% 22% 36% 564 35% 44% 12% 45% 10% 21% 0% 0% 22% 36% 564 55% 45% 0% 21% 0% 0% 22% 36% 564 52 3 2 2 1 3 2 3 3 5 3 2 2 2 1 1 1 1 <t< th=""><th>JAN</th><th>FEB</th><th>MAR</th><th>N APR</th><th>MSHA Im</th><th>HA Impact Inspections, 2018¹</th><th>pection: JUL</th><th>s, 2018¹ Aug</th><th>SEPT</th><th>OCT</th><th>NON</th><th>DEC</th><th>Year Totals</th></t<>	JAN	FEB	MAR	N APR	MSHA Im	HA Impact Inspections, 2018 ¹	pection: JUL	s, 2018¹ Aug	SEPT	OCT	NON	DEC	Year Totals
						Coal							
9 77 34 22 29 29 0 60 60 39 39 0 0 0 0 2 0 3 0 1 2 39 4 9 5 10 3 6 0 1 1 2 44% 12% 15% 45% 10% 21% 0% 0 1 14 44% 12% 15% 45% 10% 21% 0% 0% 25% 36% 44% 12% 15% 45% 10% 21% 0% 0% 25% 36% 4 12% 12% 45% 10% 21% 0% 25% 36% 18 23 25 26 0 0 1 1 1 33 2 2 2 0 21 5 5 5 4 1 1 2 2<		9	F	4	L	L	٢	£	0	1	8	2	32
0 0 0 2 0 3 0 1 2 4 9 5 10 3 6 0 11 14 14 44% 12% 15% 45% 10% 21% 0% 0% 22% 36% 44% 12% 15% 45% 10% 21% 0% 0% 22% 36% 13 22 2 1 3 0 6 6 5 5 13 2 2 1 3 0 6 6 5 5 18 23 5 26 0 21 15 10 36 18 23 5 26 0 21 15 1 1 10 16 2 26 0 0 1 1 1 1 10 10 1 0 0 0 1 1		60	თ	17	34	22	29	29	0	0	50	39	425
4 9 5 10 3 6 0 11 14 44% 12% 15% 45% 10% 21% 0% 0% 14 14 44% 12% 15% 45% 10% 21% 0% 0% 22% 36% 13 2 2 1 3 0 6 6 2 5 5 13 2 2 1 3 0 6 6 2 5 5 18 23 23 5 26 0 21 16 36 17 18 23 23 5 26 0 16 16 36 16 <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>0</td> <td>£</td> <td>0</td> <td>0</td> <td>٦</td> <td>7</td> <td>11</td>		0	0	0	0	2	0	£	0	0	٦	7	11
44% 12% 15% 45% 10% 21% 0% 0% 22% 36% 36% 3 2 2 1 3 0 6 2 36% 36% 3 2 2 1 3 0 6 6 2 5 13 2 2 1 3 0 6 6 2 5 5 18 23 23 5 26 0 21 155 10 36 4 1 0 0 0 0 155 10 36 10 17 16 2 9 0 6 21 5 10 55% 74% 76% 35% 0% 29% 10% 28% 10		21	4	6	5	10	£	9	0	0	11	14	96
Metal/Normetal 3 2 2 1 3 0 6 6 2 5 18 23 23 5 26 0 21 155 10 36 4 1 0 0 0 0 11 1 1 10 17 16 2 9 0 6 21 5 10 55% 74% 70% 40% 35% 0% 29% 14% 50% 28%	17%	35%	44%	12%	15%	45%	10%	21%	%0	%0	22%	36%	564
3 2 2 1 3 0 6 6 5 5 5 18 23 23 5 26 0 21 155 10 36 4 1 0 0 0 0 11 1 1 10 17 16 2 9 0 6 21 5 10 55% 74% 70% 40% 35% 0% 29% 14% 50% 28%					4	Metal/No	nmetal						
18 23 23 5 26 0 21 155 10 36 4 1 0 0 0 0 1 1 1 10 17 16 2 9 0 6 21 5 10 55% 74% 70% 40% 35% 0% 29% 14% 50% 28%		ъ	ŝ	2	2	L	£	0	9	9	2	5	37
4 1 0 0 0 0 1		52	18	23	23	5	26	0	21	155	10	36	384
10 17 16 2 9 0 6 21 5 10 55% 74% 70% 40% 35% 0% 29% 14% 50% 28%			4	Ţ	0	0	0	0	0	-	1	٢	6
55% 74% 70% 40% 35% 0% 29% 14% 50% 28%		10	10	17	16	2	6	0	9	21	5	10	108
	13%	19%	55%	74%	70%	40%	35%	%0	29%	14%	50%	28%	538

Source: Mine Safety and Health Administration.

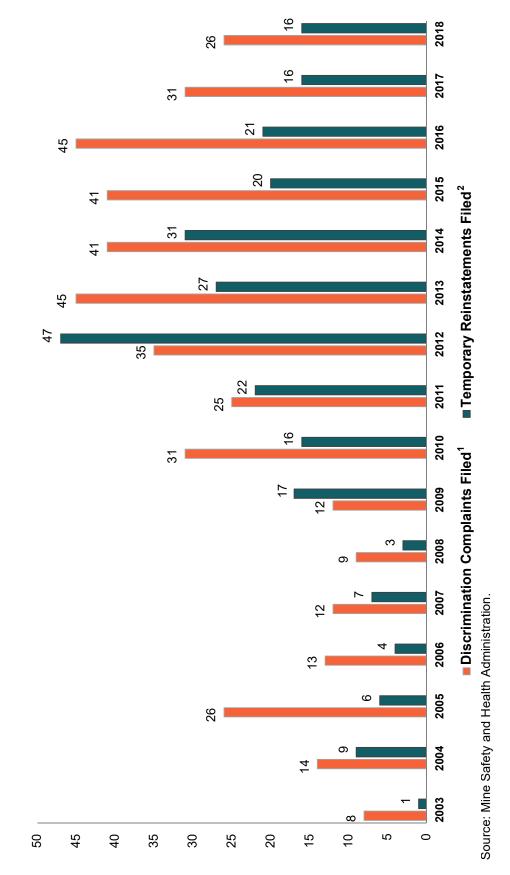
¹Impact inspections were initiated after the April 2010 explosion at the Upper Big Branch Mine. The inspections are conducted at mines with a poor compliance history with MSHA standards, high numbers of injuries, illnesses or fatalities, and other indicators of unsafe mines.

²MSHA can issue orders to mine operators that require them to withdraw miners from affected areas of the mine for failure to abate violations, for "unwarrantable failure" (reckless disregard, intentional misconduct) to correct significant and substantial violations, and where imminent danger exists. Miners remain withdrawn from the affected area until the violation(s) are abated.

³A Significant and Substantial (S&S) citation is a violation of a mandatory MSHA standard in which the hazard resulting from the violation has a reasonable likelihood of resulting in an injury of a reasonably serious nature.

131

MSHA Discrimination Complaints and Temporary Reinstatements Filed by the Department of Labor on Behalf of Miners, 2003–2018



¹Under Section 105(c)(2) of the Federal Mine Safety and Health Act, any miner who thinks he or she has been discharged, interfered with or discriminated against for exercising his or her rights under the act may file a discrimination complaint.

²If the Mine Safety and Health Administration finds that a miner's discrimination complaint is "not frivolously brought," MSHA will ask the Federal Mine Safety and Health Review Commission to order immediate reinstatement of the miner while the discrimination case is pending.

STATE COMPARISONS

Comparison of Workplace Fatality and Injury Rates by State, 2017

State	Fatality Rate ¹	Injury and Illness Rates ^{2,4}	State	Fatality Rate ¹	Injury and Illness Rates ^{2,4}	State	Fatality Rate ¹	Injury and Illness Rates ²	State	Fatality Rate ¹	Injury and Illness Rates ²⁴
Alabama	4.3	2.5	Indiana	4.5	3.3	Nebraska	3.6	3.0	South Carolina	4.2	2.5
Alaska	10.2	3.8	lowa	4.7	3.5	Nevada	2.4	3.7	South Dakota ⁴	7.3	N/A
Arizona	3.0	2.9	Kansas	5.2	3.0	New Hampshire ⁴	1.6	N/A	Tennessee	4.4	2.9
Arkansas	6.1	2.5	Kentucky	3.8	3.1	New Jersey	1.6	2.6	Texas	4.3	2.2
California	2.2	3.2	Louisiana	6.3	1.9	New Mexico	4.7	2.7	Utah	2.9	3.0
Colorado ⁴	2.8	N/A	Maine	2.7	4.8	New York	3.5	2.2	Vermont	7.0	4.6
Connecticut	1.9	3.2	Maryland	3.0	2.6	North Carolina	3.9	2.3	Virginia	2.9	2.4
Delaware	2.4	2.3	Massachusetts	3.2	2.7	North Dakota ⁴	10.1	N/A	Washington	2.5	4.0
Florida ⁴	3.3	N/A	Michigan	3.4	3.1	Ohio	3.3	2.6	West Virginia	7.4	2.9
Georgia	4.1	2.6	Minnesota	3.5	3.2	Oklahoma ^³	5.5	N/A	Wisconsin	3.5	3.6
Hawaii	2.2	3.8	Mississippi ⁴	6.2	N/A	Oregon	3.2	3.8	Wyoming	7.7	3.5
ldaho ⁴	4.8	N/A	Missouri	4.4	2.6	Pennsylvania	3.0	3.1	National	3 K	а с
Illinois	2.8	2.6	Montana	6.9	4.3	Rhode Island ⁴	1.6	N/A	Average	2) 1

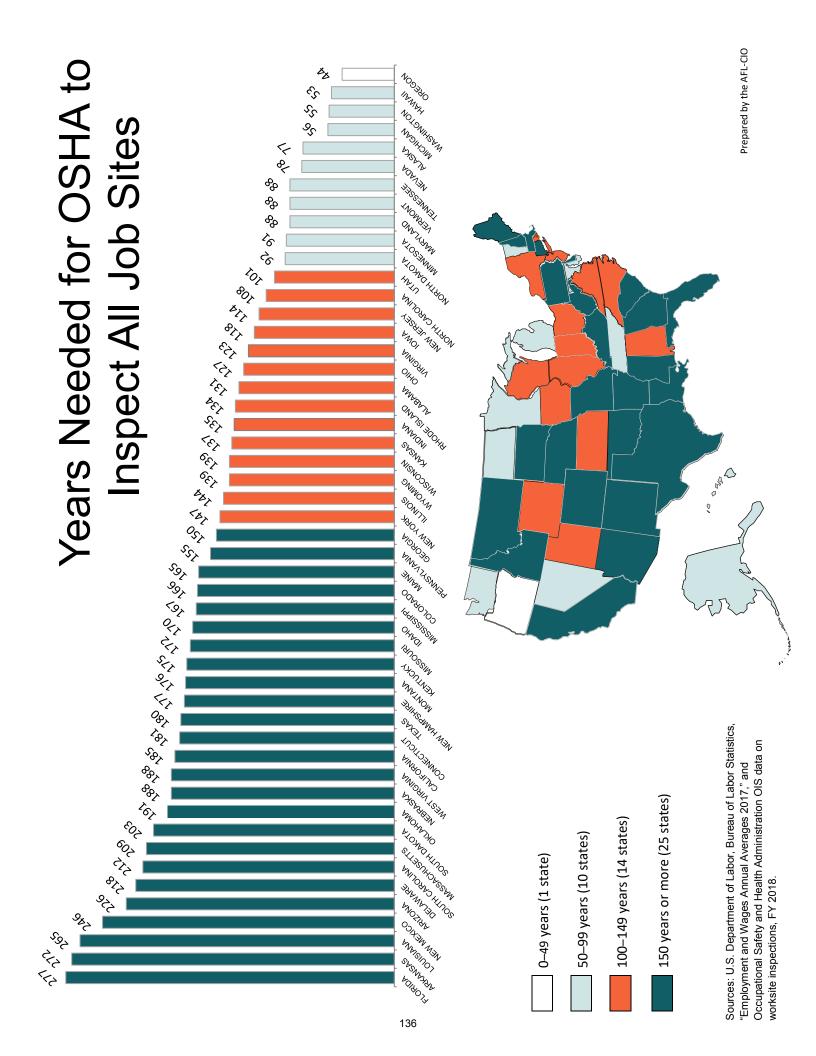
Orange: States with a fatality rate above the national average and reported injury and illness rate below the national average.

¹ The state fatality rates are calculated by the Bureau of Labor Statistics deaths per 100,000 workers.

² Bureau of Labor Statistics, rate of total cases per 100 workers. Number and rate are for private sector only and the total includes Guam, Puerto Rico and the Virgin Islands.

³ A detailed comparison of the individual injury and illness reports from various reporting systems found that only one in three workplace injuries and illnesses was reported on the OSHA Log and captured by the Bureau of Labor Statistics survey. This study did not address the number of injuries and illnesses that are not reported to any reporting system in the first place. Thus, this study represents a conservative estimate of under-reporting of the true toll of injuries and illnesses. For more details on the study, see the paper by Rosenman, et al., "How Much Work-Related Injury and Illness is Missed by the Current National Surveillance System?," Journal of Occupational and Environmental Medicine, 48(4): 357–365. April 2006.

⁴ Not all states participate in the Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses. Participation is voluntary, even in states where the fatality rate may be high.



Number of OSHA Inspectors by State Compared with ILO Benchmark Number of Labor Inspectors¹

Actual Number of CSHA Number of Labor Inspectors Inspectors $1,936,819$ Actual Number of OSHA Number of Labor Inspectors Inspectors 24 Number of Labor Number of Employees1 Federal State 0 194 2 Number of Employees1 Federal State 0 194 2 1,936,819 24 0 144 275 2 1,200,542 7 0 120 275 2 1,200,542 7 0 120 275 2 1,200,542 7 0 144 276 2 1,200,542 7 0 120 2 2 1,509,616 13 4 167 2 2 1,669,616 13 4 0 44 2 2 1,669,616 13 4 0 2 2 2 2 1,669,616 13 4 0 44 2 2 2 2 2 2						
mat 1936.819 24 0 194 1 a 322.136 3 9 32 32 32 na $2,747.633$ 2 14 275 32 na $2,747.633$ 7 0 120 32 nas $1,700.542$ 7 0 120 32 nas $1,700.542$ 7 0 120 32 nas $1,700.542$ 7 0 120 32 nas $1,700.702$ 6 228 $1,702$ 120 nat $1,600.700$ 27 0 261 120 nat $1,600.700$ 27 0 44 167 167 nat $4,346.63$ 58 40 0 44 167 167 nat $5,436.63$ 58 0 $6,54.83$ 31 16 167 167 nat $5,346.433$ 30 15 665 </th <th>State</th> <th>Number of Employees¹</th> <th>Actual Num Inspec Federal</th> <th>ber of OSHA ctors^{2,3} State</th> <th></th> <th>Ratio of OSHA Inspectors/Number of Employees</th>	State	Number of Employees ¹	Actual Num Inspec Federal	ber of OSHA ctors ^{2,3} State		Ratio of OSHA Inspectors/Number of Employees
a 322,136 3 9 32 na 2,747,638 2 14 275 read 1,700,542 7 0 1,200 read 1,701,702 6 228 1,702 read 1,701,702 6 260 7 0 read 1,701,702 6 228 1,702 1 read 1,60,616 13 4 167 1 read 1,60,616 13 4 167 1 read 1,60,770 277 0 261 1 read 1,60,770 277 0 261 1 read 1,60,770 277 0 261 1 read 1,60,770 27 0 261 1 read 1,60,770 27 0 261 1 read 1,60,770 27 0 261 1 read 1,61,61,61 <td< th=""><th>Alabama</th><th>1,936,819</th><th>24</th><th>0</th><th>194</th><th>1/80,701</th></td<>	Alabama	1,936,819	24	0	194	1/80,701
na 2.747.638 2 14 275 isas 1,200.542 7 0 120 isas 1,7019,702 6 226 7 0 isate 1,669,616 13 4 1,702 167 etticut 1,669,616 13 4 0 261 261 vale 8,494,623 58 0 849 276 263 etticut 1,665 3 16 716 276 gal 4,364 52 5 5 53 302 ii 5,934,549 52 5 5 302 21 val 5,034,549 52 5 5 5 5 5 ii 5,034,549 52 5 5	Alaska	322,136	с	6	32	1/26,845
sease 1_200,542 7 0 120 ornia 17,019,702 6 228 1,702 ado 2609,770 27 0 261 ecticut 1,669,616 13 4 167 167 ecticut 1,669,616 13 4 0 44 167 ecticut 1,669,616 13 4 0 44 167 167 attra 8,494,623 58 0 849 167 167 171 attra 706,820 8 16 71 65 593 171 163 171 bit 5934,549 52 5 36 71 163 171 bit 3,018,177 2 36 302 154 154 <th>Arizona</th> <th>2,747,638</th> <th>2</th> <th>14</th> <th>275</th> <th>1/171,727</th>	Arizona	2,747,638	2	14	275	1/171,727
mila 17,019,702 6 226 1,702 ado 2,609,770 27 0 261 ado 2,609,770 27 0 261 ecticut 1,669,616 13 4 167 167 ecticut 1,669,616 13 4 167 261 vare 441,873 4 0 444 167 167 vare 8,494,623 58 0 849 261 262 261 261 261 261 261 261 261 261 261 261 261 261 261 261 261 261 <th>Arkansas</th> <th>1,200,542</th> <th>7</th> <th>0</th> <th>120</th> <th>1/171,506</th>	Arkansas	1,200,542	7	0	120	1/171,506
ado 2,609,770 27 0 261 261 ecticut 1,669,616 13 4 167 1 vare 4,41,873 4 0 44 167 1 vare 441,873 4 0 44 167 1 1 vare 8,494,623 58 0 849 14 1	California	17,019,702	9	228	1,702	1/72,734
ecticut 1,669,616 13 4 167 167 vare 441,873 4 0 44 167 la 8,494,623 58 0 849 1 la 8,494,623 58 0 849 1 jai 1,346,453 40 0 849 1 jai 1,346,453 30 15 849 1 jai 1,540,455 3 15 1 1 o 5,334,549 52 5 5 5 1 o 3,018,177 2 36 7 1 1 o 5,334,549 52 5 5 5 5 1 o 3,018,177 2 2 3 1 5 1 1 o 3,018,177 2 2 3 1 1 1 1 1 1 1 1 1 1 1	Colorado	2,609,770	27	0	261	1/96,658
wate 41,873 4 0 44 la 8,494,623 58 0 849 la 8,494,623 58 0 849 gla 4,346,453 40 0 435 li 654,185 3 15 65 li 654,185 3 15 65 li 71 2 3 15 li 706,820 8 0 71 1 li 716,135 52 5 593 1 li 3,018,177 2 36 302 1 li 1,37,633 2 2 137 1 li 1,37,633 2 2 1 1 li	Connecticut	1,669,616	13	4	167	1/98,213
ada 8,494,623 58 0 849 gla 4,346,453 40 0 435 gla 4,346,453 40 0 435 gla 654,185 3 15 65 r 706,820 8 0 71 r 730,131 2 20 137 r 1,371,633 9 0 137 as 1,374,455 0 137 14 as 1,374,455 0 14 17 as 1,907,721 10 <th>Delaware</th> <th>441,873</th> <th>4</th> <th>0</th> <th>44</th> <th>1/110,468</th>	Delaware	441,873	4	0	44	1/110,468
gia 4,346,453 40 0 436 ii 654,185 3 15 65 i 654,185 3 15 65 i 706,820 8 0 71 65 is 5,934,549 52 5 5 53 is 3,018,177 2 36 71 71 na 3,018,177 2 36 593 71 na 1,540,435 2 20 154 71 as 1,371,633 9 0 137 74 as 1,374,455 10	Florida	8,494,623	58	0	849	1/146,459
ii 654,185 3 15 65 65 i 706,820 8 0 71 1 is 5,934,549 52 5 593 1 is 5,934,549 52 5 593 1 is 5,934,549 52 5 593 1 is 3,018,177 2 36 302 1 is 1,540,435 2 36 154 1 is 1,371,633 9 0 137 1 1 is 1,371,633 9 0 137 1 1 1 is 1,874,455 0 34 1 1 1 1 1 is 609,271	Georgia	4,346,453	40	0	435	1/108,661
71 71 15 5,934,549 52 5 593 15 5,934,549 52 5 593 16 3,018,177 2 36 302 16 3,018,177 2 36 302 16 1,540,435 2 36 302 17 2 20 154 154 17 2 20 302 154 17 2 20 302 154 17 30 30 30 154 154 1874,455 0 34 187 187 187 1874,455 0 34 187 187 187 1907,721 10 34 187 187 187 10 0 34 35 187 187 10 10 10 10 161 171 11 10 10 135 161 171 11 10 10 10 161 161 171 <th< th=""><th>Hawaii</th><th>654,185</th><th>3</th><th>15</th><th>65</th><th>1/36,344</th></th<>	Hawaii	654,185	3	15	65	1/36,344
is 5,934,549 52 5 593 na 3,018,177 2 36 302 na 1,540,435 2 36 302 as 1,540,435 2 20 154 as 1,371,633 9 0 137 as 1,907,721 10 0 191 as 3 3 3 3 as 3 3 3 3	Idaho	706,820	8	0	71	1/88,353
na 3,018,177 2 36 302 as 1,540,435 2 20 154 as 1,540,435 2 20 154 as 1,371,633 9 0 137 as 1,874,455 0 34 187 as 1,907,721 10 0 191 as 569,271 8 3 61 as 354 333 3 3	Illinois	5,934,549	52	5	593	1/104,115
as 1,540,435 2 20 154 as 1,371,633 9 0 137 as 1,371,633 9 0 137 locky 1,874,455 0 34 187 locky 1,874,455 0 34 187 siana 1,907,721 10 0 191 siana 1,907,721 10 26 265 achusetts 3543383 32 0 354	Indiana	3,018,177	2	36	302	1/79,426
s 1,371,633 9 0 137 ky 1,874,455 0 34 187 else 1,874,455 0 34 187 and 1,907,721 10 0 191 and 2,653,569 6 49 265 chisetts 3,543,383 32 0	lowa	1,540,435	2	20	154	1/70,020
ky 1,874,455 0 34 187 and 1,907,721 10 0 191 and 609,271 8 3 61 ind 2,653,569 6 49 265 chisetts 3,543,383 32 0	Kansas	1,371,633	6	0	137	1/152,404
ana 1,907,721 10 0 191 and 609,271 8 3 61 nd 2,653,569 6 49 265 chisetts 3543383 32 0	Kentucky	1,874,455	0	34	187	1/55,131
609,271 8 3 61 nd 2,653,569 6 49 265 chisetts 3.543,383 32 0 354	Louisiana	1,907,721	10	0	191	1/190,772
2,653,569 6 49 265 3,543,383 32 0 354	Maine	609,271	8	З	61	1/55,388
3 543 383 32 0 354	Maryland	2,653,569	9	49	265	1/48,247
	Massachusetts	3,543,383	32	0	354	1/110,731

Number of OSHA Inspectors by State Compared with ILO Benchmark Number of Labor Inspectors¹

ees ¹ Federal 2 0 111 11 24 24 6 6 110 10 111 11	Actual Number of OSHA Inspectors ^{2,3}	Actual Number of OSHA Number of Labor Inspectors Inspectors ^{2,3} Needed to Meet ILO	Ratio of OSHA Inspectors/Number of
gan4,294,711gan4,294,711ssota2,856,105ssippi1,128,498ssippi1,128,498ouri2,781,242ouri2,781,242ana459,431ana459,431ana459,431ana459,431ana459,431ana459,431ana459,431ana459,431ana459,431ana459,431ana459,431aska972,764aska972,764baska4,006,799aska9,276,868Ampshire653,487Jersey4,006,799baska4,006,799barbehire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire9,276,868Anapshire4,14,038Anapshire9,276,868Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,407Anapshire1,883,	Ť	Benchmark ⁴	Employees
ssota 2,856,105 1 ssippi 1,128,498 1 buri 2,781,242 1 buri 2,781,242 1 buri 2,781,242 1 ana 459,431 1 are 459,431 1 aska 972,764 1 aska 9,26,151 1 aska 1,326,151 1 da 1,326,151 1 da 1,326,151 1 drampshire 65,3487 6 drampshire 6,330,606 1 drampshire 1,330,606 1 drampshire 1,330,606 1 drampshire 1,330,606 1 drampshire 1,330,606 1 drampshire 5,364,626 1		429	1/71,579
ssippi 1,128,498 ouri 2,781,242 ouri 2,781,242 ana 459,431 ana 459,431 aska 972,764 aska 972,764 aska 972,764 aska 9,26,151 da 1,326,151 Hampshire 653,487 Jersey 4,006,799 Jersey 4,006,799 Nexico 810,516 Mexico 810,516 Vork 9,276,868 Orth 9,276,868 Nexico 810,516 Nexico 1,833,407 Ona 1,581,198 Indota 1,583,407 Indota 1,583,407 Sylvania 5,799,123 Indota 477,362 Indota 2,035,341 Indota 2,035,341		286	1/73,233
Duri 2,781,242 ana 459,431 ana 459,431 aska 972,764 aska 972,764 aska 972,764 aska 1,326,151 Hampshire 653,487 Jersey 4,006,799 Jersey 4,006,799 Nexico 810,516 Vork 9,276,868 York 9,276,868 Nexico 810,516 York 9,276,868 York 1,833,407 Yor 5,799,123 Yor 5,799,123 Yor 1,883,407 Yor 5,799,123 Yor Yor Yor Yor Yor Yor Yor		113	1/102,591
ana 459,431 aska 972,764 aska 972,764 da 1,326,151 Hampshire 653,487 Jersey 4,006,799 Jersey 4,006,799 Jersey 9,276,868 Vork 9,276,868 Nexico 414,038 Oakota 4,14,038 Oakota 1,583,407 Oakota 1,583,407 On 1,583,407 Sylvania 5,799,123 Sylvania 2,035,341 Oakota 2,035,341 Oakota 2,035,341		278	1/115,885
aska 972,764 da 1,326,151 Hampshire 653,487 Hampshire 653,487 Jersey 4,006,799 Jersey 4,006,799 Mexico 810,516 York 9,276,868 York 9,276,868 York 9,276,868 York 1,330,606 York 1,330,606 York 1,330,606 York 1,530,606 York 1,530,606 York 1,530,606 York 1,581,108 Yor 1,581,108 Yor 1,583,407 Yor 1,599,1233		46	1/76,572
da 1,326,151 Hampshire 653,487 Hampshire 653,487 Jersey 4,006,799 Jersey 4,006,799 Mexico 810,516 Wexico 810,516 Vork 9,276,868 Carolina 4,330,606 I Dakota 414,038 I Dakota 1,581,198 I Dakota 1,583,407 Sylvania 5,799,123 e Island 477,362 I Dakota 2,035,341		97	1/97,276
Hampshire 653,487 Jersey 4,006,799 Jersey 4,006,799 Mexico 810,516 Vork 9,276,868 York 9,276,868 York 9,276,868 York 9,276,868 York 9,276,868 York 9,276,868 York 14,038 Oakota 414,038 Indexota 1,5364,626 Oma 1,581,198 Indexota 1,583,407 Sylvania 5,799,123 Indexota 2,035,341 Indexota 2,035,341 Indexota 422,489		133	1/36,838
Jersey 4,006,799 Mexico 810,516 Mexico 810,516 Mexico 810,516 York 9,276,868 York 9,276,868 Carolina 4,330,606 Dakota 4,14,038 Dakota 1,581,198 Noma 1,581,198 Noma 1,581,198 Sylvania 5,799,123 Sylvania 5,799,123 Sylvania 2,035,341 O Dakota 2,035,341		65	1/81,686
Mexico 810,516 York 9,276,868 York 9,276,868 Carolina 4,330,606 Carolina 4,330,606 Dakota 4,330,606 Dakota 4,330,606 Dakota 1,581,198 noma 1,581,198 n 1,883,407 Sylvania 5,799,123 elsland 477,362 n Carolina 2,035,341 n Dakota 422,489		401	1/78,565
York 9,276,868 Carolina 4,330,606 Dakota 4,330,606 Dakota 414,038 Dakota 1,581,198 noma 1,581,198 noma 1,581,198 Sylvania 5,799,123 elsland 477,362 n Carolina 2,035,341 n Dakota 422,489		81	1/101,315
Carolina 4,330,606 Dakota 414,038 Dakota 5,364,626 5,364,626 1,581,198 oma 1,581,198 on 1,581,198 on 1,581,198 on 1,581,198 on 1,883,407 on 1,733 on 477,362 on 2,035,341 on 2,035,341 on 422,489		928	1/97,651
Dakota 414,038 <th< th=""><th></th><th>433</th><th>1/44,645</th></th<>		433	1/44,645
5,364,626 noma 1,581,198 n 1,581,198 n 1,883,407 sylvania 5,799,123 sylvania 5,799,123 e Island 477,362 n Carolina 2,035,341 n Dakota 422,489		41	1/59,148
1,581,198 1,883,407 5,799,123 477,362 a 2,035,341 a 2,035,341		536	1/99,345
1,883,407 5,799,123 477,362 a 2,035,341 422,489		158	1/121,631
5,799,123 477,362 a 2,035,341 422,489		188	1/23,841
477,362 a 2,035,341 422,489		580	1/118,349
a 2,035,341 422,489		48	1/79,560
422,489		204	1/70,184
		42	1/140,830
Tennessee 2,930,932 3	2 3 34	293	1/79,214
Texas 12,014,802 85		1,201	1/141,351

Number of OSHA Inspectors by State Compared with ILO Benchmark Number of Labor Inspectors¹

	Ni umbor of Emulation	Actual Numl Inspec	I Number of OSHA Inspectors ^{2,3}	Actual Number of OSHA Number of Labor Inspectors Inspectors ^{2,3} Needed to Meet ILO	Ratio of OSHA Inspectors/Number of
State Utah	1.430.588		State 18		Linpicyces 1/79.477
Vermont	309,442	0	7	31	1/44,206
Virginia	3,838,368	3	44	384	1/81,667
Washington	3,290,209	3	116	329	1/27,649
West Virginia	683,807	8	0	68	1/85,476
Wisconsin	2,850,145	28	0	285	1/101,791
Wyoming	269,586	0	6	27	1/44,931
Totals ⁵	143,859,855	1,8	1,815 ⁶	14,386	1/79,262

¹U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages.

Cooperative and State Programs and includes "on board" safety and health CSHOs from the FY 2019 State Plan Grant Applications as of July 1, 2018. The number of "on board" CSHOs may not accurately reflect the true number of CSHOs actually hired and conducting enforcement inspections due to possible budgetary issues in any ²Includes only safety and industrial hygiene Compliance Safety and Health Officers who conduct workplace inspections and does not include supervisory CSHOs. Federal CSHOs provided by OSHA's Directorate of Enforcement Programs, CSHO Count By State as of December 2018. State plan CSHOs provided by OSHA's Directorate of particular state.

³Under the OSHAct, states may operate their own OSHA programs. Twenty-one states and one territory have state OSHA programs covering both public- and privatesector workers. Connecticut, Illinois, Maine, New Jersey and New York have state programs covering state and local employees only. ⁴The ILO benchmark for labor inspectors is one inspector per 10,000 workers in industrial market economies. International Labor Organization, International Labor Office. Strategies and Practice for Labor Inspection. G.B.297/ESP/3. Geneva, November 2006.

⁵Totals include employees and inspectors from the District of Columbia, Puerto Rico and the Virgin Islands.

⁶Total number of inspectors includes 752 federal OSHA inspectors and 1,062 state OSHA inspectors, including one inspector in Guam, two in the Virgin Islands and 39 in Puerto Rico. Profile of Workplace Safety and Health in the United States

Munter Rank Number Rank Number Rank Rank Feder Ame Alabama 83 31 31 32.900 2.5 3.596 18 2 0 131 Alabama 83 10.2 50 7.500 3.8 1,676 41 3 9 7 00.6° Alabama 30 30 15 56.300 2.9 1,140 47 2 14 2 7 2 Alabama 376 2.2 5 3.872 5 7 0 7 2 7 Alabama 376 2.2 5 3.872 5 7 9 7 2 7 7 Alabama 365 3.1 0.1 2.7 0.0 2.7 0.0 275 0 7 2 7 7 9 7 Alaba 2.6 1.1 N/A 2.7 3.10 27	State		Fatalities 2017 ¹		Injuries/Illne 2017 ²	ıries/Illnesses 2017 ²	Penalties FY 2018 ³	ties 18 ³	Inspectors ^{4,5}	tors ^{4,5}	Years to Inspect Each Workplace	State or Federal
Habama831.33.13.2,9002.53.598182.400Habaka3310.2507.5003.81.67641399Habaka903.01556,3002.91.140472147Habakas903.01556,3002.91.140472147Hababas3766.14122,0002.53.8725707Hababas3762.2557.69911622870Coloration372.81.9780323.769176228Coloration3762.81.9780327.699176228Coloration3762.87.97.5993.77.6991762Coloration3762.877.93.73.72702Coloration372.87.93.73.73.73.72702Coloration372.973.73.73.73.72702Coloration372.933.73.73.73.7342Coloration392.933.73.034242Coloration3932.93<		Number	Rate	Rank ⁷	Number	Rate	Average (\$)	Rank [®]	Federal	State	Once°	Program
Haska 33102507.5003.81.6764.1399 Arizona 903.01556.3002.91.140472147 Arizona 766.14.12.2,0002.53.8725707 Ariansas 766.14.122,0002.53.8725707 Colorato 772.811NuANA2.775322707 Colorato 772.811NuA2.7753227070 Colorato 772.811NuA2.7753227022 Colorato 772.811NuA2.7753.9967027 Colorato 772.81072.83.996232702 Colorato 102.476.9002.33.996232700 Delaware 1944.12.976.902.63.5120131212 Delaware 2.972.83.9962.33.9963141016 Delaware 2.972.93.9162.63.611312121410 Delaware 2.972.93.9163.91214101616161616	Alabama	83	4.3	31	32,900	2.5	3,598	18	24	0	131	Federal
Arizona903.01566.3002.91.1404721414Arizona766.14122.0002.53.8725707Arianas3762.25365.6003.27.699162870Colorato772.8110N/AN/AN/A2.775322707Colorato772.8110N/AN/A2.775322707Colorato772.8110N/AN/A2.775322707Colorato3572.87.6003.23.99634707Colorato2.93.32.0N/AN/A3.6531162870Colorato2.93.32.0N/AN/A3.6531162870Colorato2.93.32.0N/A3.65311628707Colorato2.93.32.0N/A3.65311587707Colorato2.93.32.0N/A3.6531158707Colorato2.93.32.03.83.6902.97707Colorato2.92.93.83.6902.93.72.071616	Alaska	33	10.2	50	7,500	3.8	1,676	41	3	6	22	State
Akanase766.14122,0002.53,872570California3762.25362,6003.27,699162.82Colorado772.811N/AN/A2,7753227702Colorado772.811437,6003.23,1082771340Colorado772.8170.63.23,1082771340Delaware102.476,9002.33,9963400Delaware102.4703.7,8002.33,9963400Delaware1902.47003.7,9963.7,9963400Delaware2993.32002.33,99634000Delaware1944.12.978,0002.63,571204000Howari2093.32002.933,69631500Howari2012.978,0003.83,6962.4000Howari2012.93102.9315000Howari2012.83102.9315020100Howari102.93<	Arizona	06	3.0	15	56,300	2.9	1,140	47	2	14	226	State
California3762.25362,6003.27,69916228Colorado772.811NUAN/A2.775322707Colorato351.9437,6003.23,108271347Connecticut351.943,76003.23,996347Delaware1002.476,9002.33,996340Polaware1944.129978,2002.63,571209400Howari2993320N/AN/A3,653115800Howari2002120121678,200383,693293150Howari2012125515,700383,65324800Howari201213216783,653248000Howari2134.83871,5003.83,64324800Howari1384.53571,5003.31,2784423616Howari724.7363.31,278442361616Howari724.7363.31,278342362016Howari724.7363.31,27836	Arkansas	76	6.1	41	22,000	2.5	3,872	5	7	0	272	Federal
Colorado772.811N/AN/A2.77532270Connecticut351.9437,6003.23,108271347Delaware102.476,9002.33,9963407Delaware102.476,9002.33,9963407Delaware102.476,9002.33,9963407Delaware1944.120776,9002.33,996340Delaware1944.12978,2002.67,503115807Delaware2092.2515,7003.83,653115807Delaware202.2515,7003.83,653115807Delawari202.2515,7003.83,65324807Delawari202.2515,7003.83,65324807Delawari202.871,5003.87.63,61516557Delawari724.5357.1,5003.31,278442557Delawari724.7363.71,278442557Delawari72539 <th>California</th> <th>376</th> <th>2.2</th> <th>5</th> <th>362,600</th> <th>3.2</th> <th>7,699</th> <th>-</th> <th>9</th> <th>228</th> <th>185</th> <th>State</th>	California	376	2.2	5	362,600	3.2	7,699	-	9	228	185	State
ecticut351.9437,6003.23,108271344ware102.476,9002.33,9963402date2993.320N/AN/A3,653115802date1944.12978,2002.63,571204002diation2002.2515,7003.83,653115802diation2012.2515,7003.83,653204000diation2022.2515,7003.83,65324802diation20321621678,0002.63,65324802diation201222515,7003.83,6502931515diation20222371,5003.83,615165255567diation1632.871,5003.31,2784425677diation724.73603.52,6463322077diation725393.52,6463322777diation72539233.03.677777diation7253923<	Colorado	77	2.8	11	N/A	N/A	2,775	32	27	0	166	Federal
ware102.476,9002.33,9963400data2993.3200N/AN/A3,653115800data1944.129978,2002.63,571204000gia1944.129978,2002.63,571204000via2002.2515,7003.83,653293150via2002.2515,7003.83,653293150via2002.2515,7003.83,653293150via1632.811108,2002.63,615165255via1384.53571,5003.31,278442367via1384.53571,5003.31,278442367via724.73638,1003.52,646332207via725.2392.63.017907via725.2393.03.03.001790via725.2393.03.03.00790		35	1.9	4	37,600	3.2	3,108	27	13	4	181	Federal ⁵
Jat2993.3200N/AN/A3,65311580gia1944.12978,2002.63,57120400in202.2515,7003.83,06929315in202.2515,7003.83,06929315in202.2515,7003.83,06929315in374.838N/AN/A3,4232480in1632.811108,2002.63,61516525in1384.53571,5003.31,27844236in724.73638,1003.52,64633220in725.23928,2003.03.6001790	Delaware	10	2.4	7	6,900	2.3	3,996	3	4	0	218	Federal
gia1944.12978,2002.63,57120400ii202.2515,7003.83,69529315b374.838N/AN/A3,42324807b1632.811108,2002.63,615165255h1534.53571,5002.63,615165255h724.73633,1003.51,27844236a725.23938,1003.52,6463322636a725.23928,2003.03,60017907	Florida	299	3.3	20	N/A	N/A	3,653	11	58	0	277	Federal
ii202.2515,7003.83,06929315b374.838N/AN/A3,4232480i1632.811108,2002.63,615165255i1384.53571,5003.31,278442367i724.73638,1003.52,646332367i725.23928,2003.03.6001790	Georgia	194	4.1	29	78,200	2.6	3,571	20	40	0	150	Federal
o 37 4.8 38 N/A N/A 3,423 24 8 0 is 163 2.8 11 108,200 2.6 3,615 16 52 5 na 138 4.5 35 71,500 3.3 1,278 44 2 36 na 72 4.7 36 38,100 3.5 2,646 33 2 36 as 72 5.2 39 3.5 2,646 33 2 20	Hawaii	20	2.2	5	15,700	3.8	3,069	29	3	15	53	State
is 163 2.8 11 108,200 2.6 3,615 16 52 5 na 138 4.5 35 71,500 3.3 1,278 44 2 36 na 72 4.7 36 38,100 3.5 2,646 33 2 20 as 72 5.2 39 28,200 3.0 3,600 17 9 0	Idaho	37	4.8	38	N/A	N/A	3,423	24	8	0	170	Federal
na 138 4.5 35 71,500 3.3 1,278 44 2 36 72 4.7 36 38,100 3.5 2,646 33 2 20 as 72 5.2 39 28,200 3.0 3,600 17 9 0	Illinois	163	2.8	11	108,200	2.6	3,615	16	52	5	144	Federal ⁵
72 4.7 36 38,100 3.5 2,646 33 2 20 as 72 5.2 39 28,200 3.0 3,600 17 9 0	Indiana	138	4.5	35	71,500	3.3	1,278	44	2	36	135	State
72 5.2 39 28,200 3.0 3,600 17 9 0	Iowa	72	4.7	36	38,100	3.5	2,646	33	2	20	118	State
	Kansas	72	5.2	39	28,200	3.0	3,600	17	6	0	137	Federal

Profile of Workplace Safety and Health in the United States

Number Rate Rank ⁷ Kentucky 70 3.8 27 Kentucky 70 3.8 27 Louisiana 117 6.3 43 Louisiana 117 6.3 43 Maine 18 2.7 10 Maryland 87 3.0 15 Maryland 87 3.0 15 Maryland 87 3.0 15 Maryland 108 3.2 18 Michigan 153 3.4 22 Michigan 153 3.4 23 Michigan 153 3.4 23 Michigan 125 4.4 33 Mississippi 90 6.2 42 Mississippi 32 6.9 44 Mississippi 33 3.6 26 Montana 32 6.9 44 Newhampshire 32 2.4 7	k ⁷ Number 41,200 25,400 19,100	Rate					1
70 3.8 117 6.3 117 6.3 18 2.7 87 3.0 87 3.0 18 2.7 18 2.7 18 2.7 18 3.0 18 3.0 103 3.2 103 3.2 104 3.5 105 4.4 125 4.4 32 6.9 35 3.6 35 3.6 35 3.6 35 3.6 35 4.4 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 2.4 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 <th></th> <th></th> <th>Average (\$)</th> <th>Rank⁸</th> <th>Federal State</th> <th>e Once</th> <th>Program</th>			Average (\$)	Rank ⁸	Federal State	e Once	Program
117 6.3 18 2.7 87 3.0 87 3.0 153 3.4 153 3.4 153 3.4 101 3.5 101 3.5 101 3.5 102 4.4 125 4.4 32 6.9 332 3.6 35 3.4 101 3.5 32 6.9 33 3.6 35 3.6 36 3.6 37 3.6 38	25,	3.1	3,542	21	0 34	4 175	State
18 2.7 87 3.0 87 3.0 87 3.0 108 3.2 153 3.4 153 3.4 101 3.5 101 3.5 101 3.5 101 3.5 102 4.4 125 4.4 32 6.9 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 2.4 35 2.4 35 3.6 36 3.6 37 3.6 38 3.6 37 3.6 38 3.6 37 3.6 38 3.6 37 3.6 38 3.6 38 3.6 37 </th <th>19,</th> <th>1.9</th> <th>3,811</th> <th>8</th> <th>10 0</th> <th>265</th> <th>Federal</th>	19,	1.9	3,811	8	10 0	265	Federal
87 3.0 setts 108 3.2 153 3.4 153 3.4 153 3.4 101 3.5 101 3.5 101 3.5 102 4.4 125 4.4 32 6.9 35 3.6 35 3.6 35 3.6 35 3.6 35 2.4 35 2.4 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 36 3.6 37 3.6 38 3.6 37 3.6 38 3.6 37 3.6 38 3.6 37 3.6 38 3.6 38 3.6 38 3.6 38 3.6 38 3.6 38 3.6 39 3.6 31 1.6		4.8	3,440	22	8 3	165	Federal ⁵
setts 108 3.2 153 3.4 3.4 101 3.5 3.4 101 3.5 4.4 125 4.4 3.5 32 6.9 6.9 35 3.6 3.6 35 3.6 3.6 35 3.6 3.6 35 3.5 3.6 35 3.5 3.6 35 3.6 3.6 35 3.6 3.6 35 3.6 3.6 35 3.6 3.6 36 3.7 3.6 37 3.6 3.6 37 3.6 3.6 37 3.7 3.6 37 3.7 3.6 37 3.7 3.6 38 3.1 1.6	46,600	2.6	681	49	6 49	88	State
153 3.4 101 3.5 101 3.5 101 3.5 101 3.5 125 4.4 125 6.9 32 6.9 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 35 3.6 36 3.6 37 3.6 38 3.6 37 3.6 37 3.6 38 3.6 39 3.6 31 1.6	65,100	2.7	3,597	19	32 0	209	Federal
i 101 3.5 i 90 6.2 125 4.4 32 6.9 35 3.6 35 2.4 35 2.4 35 2.4 35 3.6 35 2.4 35 2.4 35 3.6 35 3.6 35 3.6 35 1.1 16 1.1	93,900	3.1	1,179	46	2 58	8 56	State
pi 90 6.2 125 4.4 32 6.9 32 5.9 35 3.6 35 3.6 37 3.6 37 3.6 37 3.6 37 3.6 37 3.6 37 3.6 37 3.6 37 3.6 37 3.6 37 3.6 13 1.6 11 1.6	63,300	3.2	987	48	0 39	91	State
125 4.4 32 6.9 35 3.6 35 3.6 32 2.4 32 2.4 11 1.6	N/A	N/A	3,246	26	11 0	167	Federal
32 6.9 35 3.6 32 2.4 11 1.6	50,600	2.6	3,630	15	24 0	172	Federal
35 3.6 32 2.4 11 1.6	12,700	4.3	2,082	36	6 0	176	Federal
32 2.4 11 1.6	20,500	3.0	3,650	12	10 0	188	Federal
11 1.6	35,700	3.7	1,980	37	1 35	5 78	State
	N/A	N/A	3,849	6	8 0	177	Federal
New Jersey 69 1.6 1	71,700	2.6	3,818	7	40 11	1 114	Federal ⁵
New Mexico 44 4.7 36	14,300	2.7	1,924	39	0 8	246	State
New York 313 3.5 23	138,600	2.2	3,723	6	63 32	2 147	Federal ⁵

Profile of Workplace Safety and Health in the United States

State	_	Fatalities 2017 ¹		Injuries/Illnesses 2017 ²	Inesses 7 ²	Penalties FY 2018 ³	ties 18 ³	Inspectors ^{4,5}	ors ^{4,5}	Years to Inspect Each Workplace	State or Federal
	Number	Rate	Rank ⁷	Number	Rate	Average (\$)	Rank [®]	Federal	State	Once°	Program
North Carolina	183	3.9	28	20,700	2.3	1,772	40	2	95	108	State
North Dakota	38	10.1	49	A/N	N/A	3,683	10	7	0	92	Federal
Ohio	174	3.3	20	101,500	2.6	4,129	2	54	0	127	Federal
Oklahoma	16	5.5	40	Y/N	N/A	3,070	28	13	0	191	Federal
Oregon	09	3.2	18	46,500	3.8	287	50	3	76	44	State
Pennsylvania	172	3.0	15	132,500	3.1	3,634	14	49	0	155	Federal
Rhode Island	8	1.6	1	Υ/N	N/A	3,008	30	9	0	134	Federal
South Carolina	88	4.2	30	34,800	2.5	1,217	45	1	28	212	State
South Dakota	30	7.3	46	N/A	N/A	2,958	31	3	0	203	Federal
Tennessee	128	4.4	33	60,100	2.9	1,472	42	3	34	88	State
Texas	534	4.3	31	183,400	2.2	3,423	23	85	0	180	Federal
Utah	43	2.9	13	29,600	3.0	1,315	43	0	18	101	State
Vermont	22	7.0	45	9,100	4.6	2,627	34	0	7	88	State
Virginia	118	2.9	13	60,200	2.4	2,357	35	3	44	123	State
Washington	84	2.5	6	86,600	4.0	1,940	38	3	116	55	State
West Virginia	51	7.4	47	13,100	2.9	3,640	13	ω	0	188	Federal

States
United
the
_
fety and Health
and
Safety
orkplace
ž
of Wo
Ò
Profile d

State	-	Fatalities 2017 ¹	0	Injuries/Illne 2017 ²	ıries/Illnesses 2017 ²	Penalties FY 2018 ³	ties 18 ³	Inspectors ^{4,5}	tors ^{4,5}	Years to Inspect Each Workplace	State or Federal
	Number	Rate	Rank ⁷	Number	Rate	Average (\$)	Rank ^s	Federal State	State	Once	Program
Wisconsin	106	3.5	23	71,900	3.6	3,910	4	28	0	139	Federal
Wyoming	20	7.7	48	6,000	3.5	3,340	25	0	6	139	State
Total or National Average:	5,147	3.5		2.8 Million	2.8	2,729 ⁹		1,815 ¹⁰	5 ¹⁰	134 ¹¹	

The state fatality rates are calculated by BLS as deaths per 100,000 workers.

²Bureau of Labor Statistics, rate of total cases per 100 workers. Number and rate are for private sector only and include Guam, Puerto Rico and the Virgin Islands.

³U.S. Department of Labor, OSHA, OIS Inspection Reports, FY 2018. Penalties shown are average current penalty per serious citation for conditions creating a substantial probability of death or serious physical harm to workers. For Connecticut, Illinois, Maine, New Jersey and New York, averages are based only on federal penalty data.

and includes "on board" safety and health CSHOs from the FY 2019 State Plan Grant Applications as of July 1, 2018. The number of "on board" CSHOs may not accurately reflect the true number provided by OSHA's Directorate of Enforcement Programs, CSHO Count By State as of December 2018. State plan CSHOs provided by OSHA's Directorate of Cooperative and State Programs ⁴Includes only safety and industrial hygiene Compliance Safety and Health Officers (CSHOs) who conduct workplace inspections and does not include supervisory CSHOs. Federal CSHOs of CSHOs actually hired and conducting enforcement inspections due to possible budgetary issues in any particular state.

³Under the OSHAct, states may operate their own OSHA programs. Twenty-one states and one territory have state OSHA programs covering both public- and private-sector workers. Connecticut, llinois, Maine, New Jersey and New York have state programs covering state and local employees only. ³Years to inspect is based on the number of establishments in 2017 and the number of OSHA inspections in FY 2018. The number of establishments in OSHA's jurisdiction includes private-sector establishments (except mining) and federal establishments. For any state with a plan that covers public-sector employees, state and local establishments also are included Rankings are based on best-to-worst fatality rate (1-best, 50-worst).

⁸Rankings are based on highest-to-lowest average penalty (\$) per serious violation (1-highest, 50-lowest).

³National average is the per citation average for federal OSHA serious penalties and state OSHA plan states' serious penalties combined. Federal serious penalties average \$3,580 per citation;

^oTotal number of inspectors includes 752 federal OSHA inspectors and 1,063 state OSHA inspectors, including one inspector in Guam, two in the Virgin Islands and 39 in Puerto Rico. state plan OSHA states average \$1,985 per citation.

¹Frequency of all covered establishments for all states combined. Average inspection frequency of covered establishments for federal OSHA states is once every 165 years; inspection frequency of establishments for state OSHA plan states is once every 108 years. States with their own OSHA program for public employees only (Connecticut, Illinois, Maine, New Jersey and New York) are considered federal states for these averages. Federal, state and national average include the District of Columbia, Puerto Rico and the Virgin Islands.

, FY 2018
Investigations,
Fatality
OSHA
State-by-State

Number of OSHA Fatality attality state Number of OSHA Fatality investigation Average Total Investigation Median Initial Investigation Median Investigation Median Investigation <							
Investigations Total Penalities Penality Persiden (b) Median Initial itate Conducted (s) Investigation (s) Penality (s) na 21 432,718 20,606 17,125 Penality (s) a 18 73,000 6,600 13,200 13,200 a 18 79,463 9,970 9,728 17,760 a 18 179,463 9,970 9,728 17,760 a 18 179,463 9,497 9,163 17,760 a 18 179,463 9,170 9,738 17,760 a 12 101,960 8,497 9,163 17,760 a 92 1,42,773 47,591 51,736 12,934 a 92 14,2,773 47,591 51,736 12,934 a 92 14,460 15,1736 12,934 12,934 a 93 15,440 15,144 12,934 12,934 a		Number of OSHA Fatality		Average Total		Median	State or
na 21 432,718 20,606 17,125 n 4 26,400 6,600 13,200 a 18 38,515 2,140 7,200 a 18 38,515 2,140 7,200 as 18 179,463 9,970 9,728 nia 186 3,475,655 18,686 17,760 as 186 3,475,655 18,686 17,760 ob 23 638,573 27,764 9,163 ob 23 638,573 27,764 9,163 ob 23 643,19 1,42,773 47,591 51,736 are 3 142,773 47,591 51,736 51,736 are 9 2148,406 15,744 12,934 51,736 are 9 21,443,406 15,744 12,934 51,736 are 9 2142,773 21,446 12,934 51,736 are 9 33,3157	State	Investigations Conducted	Total Penalties (\$)	Penalty Per Investigation (\$)	Median Initial Penalty ¹ (\$)	Current Penalty ¹ (\$)	Federal Program
14 $26,400$ $6,600$ $13,200$ $33,515$ $2,140$ $7,200$ $33,515$ $2,140$ $7,200$ $33,515$ $2,140$ $7,200$ $3,223,232$ $33,515$ $2,140$ $7,200$ $3,223,232$ $3,27,565$ $18,686$ $17,760$ $9,728$ $17,760$ $9,728$ $17,760$ $3,475,655$ $18,686$ $17,760$ $9,701$ $3,475,655$ $18,686$ $17,760$ $9,701$ $3,475,655$ $17,760$ $9,701$ $3,27,764$ $9,163$ $21,736$ $21,640$ $21,640$ $21,640$ $21,640$ $21,640$ $21,640$ $21,640$ $21,640$ <th< th=""><th>Alabama</th><th>21</th><th>432,718</th><th>20,606</th><th>17,125</th><th>12,934</th><th>Federal</th></th<>	Alabama	21	432,718	20,606	17,125	12,934	Federal
a1838,5152,1407,200ass18179,4639,9709,728ass183,475,65518,68617,760and3,475,65518,68617,7609,701and1863,475,65518,6869,103and23638,57327,7649,701and12101,9608,4979,701and32638,77347,59151,736and921,448,40615,74412,934and921,448,40615,74412,934and921,448,40615,74412,934and921,448,40615,74412,934and921,448,40615,44612,934and921,448,40615,44612,934and93214,28623,81025,350and93327,6758,4028,407and93327,6758,40215,934and93327,6758,40215,934and93337,6758,40217,600and93337,6758,40217,600and93337,6758,40217,600and93335,63617,90017,800and9310,70917,90017,800and9310,70917,90017,800and93335,63610,709and9310,00017,800and9321,047 </th <th>Alaska</th> <th>4</th> <th>26,400</th> <th>6,600</th> <th>13,200</th> <th>13,200</th> <th>State</th>	Alaska	4	26,400	6,600	13,200	13,200	State
sas 18 179,463 9,970 9,728 nia 186 3,475,655 18,686 17,760 9,713 do 23 638,573 27,764 9,163 9,701 9,701 do 23 638,573 27,764 9,163 9,701 9,701 do 23 142,773 47,591 51,736 9,701 9,701 are 92 1,448,406 15,744 12,934 12,934 12,934 are 92 1,448,406 15,744 12,934 12,934 12,934 a 42 648,719 15,744 12,934 12,934 12,934 a 42 648,719 15,744 12,934 12,934 12,934 a 12 9,6264 8,022 8,402 4,200 12,934 a 14,8406 15,746 12,934 12,934 12,934 12,934 a 12 9,214,26 8,402 8,402 8,402 <th>Arizona</th> <th>18</th> <th>38,515</th> <th>2,140</th> <th>7,200</th> <th>4,825</th> <th>State</th>	Arizona	18	38,515	2,140	7,200	4,825	State
nia186 $3,475,655$ 18,686 $17,760$ $17,760$ do23 $638,573$ $27,764$ $9,163$ $9,701$ do23 $142,773$ $47,591$ $51,736$ $9,701$ are3 $142,773$ $47,591$ $51,736$ $9,701$ are3 $142,773$ $47,591$ $51,736$ $9,701$ are 92 $1,448,406$ $15,744$ $12,934$ 7 are 92 $1,448,406$ $15,744$ $12,934$ 7 are 92 $1,448,406$ $15,746$ $12,934$ 7 are 92 $1,448,406$ $15,744$ $12,934$ 7 are $93,717$ $14,922$ $8,402$ $8,407$ $9,701$ are $93,717$ $7,149$ $7,000$ $7,000$ are 24 $257,010$ $10,709$ $17,690$ $17,690$ are $133,157$ $7,149$ $7,000$ $17,690$ are 24 $257,010$ $10,709$ $17,690$ $17,690$ are 24 $257,010$ $10,709$ $17,690$ $17,690$ are 24 $235,353$ $8,084$ $9,701$ are 116 $316,710$ $21,640$	Arkansas	18	179,463	9,970	9,728	7,500	Federal
do 23 $638,573$ $27,764$ $9,163$ $9,701$ acticut 12 $101,960$ $8,497$ $9,701$ $51,736$ are 3 $142,773$ $47,591$ $51,736$ $51,736$ are 3 $142,773$ $47,591$ $51,736$ $51,736$ are 92 $1,448,406$ $15,446$ $12,934$ $12,934$ are 9 $9,6719$ $15,446$ $12,934$ $12,934$ are 9 $9,6719$ $15,446$ $12,934$ $12,934$ are 9 $9,214,286$ $23,810$ $25,350$ $8,407$ 10 $9,022$ $8,022$ $8,407$ $8,407$ $12,934$ 10 $9,02264$ $8,022$ $8,407$ $7,000$ $12,934$ 10 $9,127,010$ $10,709$ $10,709$ $12,934$ $11,640$ 10 $234,575$ $50,348$ $11,640$ $11,640$ $11,640$ 10 24 $257,010$ $10,709$ $17,900$ $17,900$ $17,900$ 11 1232 $335,636$ $15,256$ $50,348$ $11,640$ $12,640$ 110 1232 $335,636$ $15,256$ $8,038$ $9,701$ 110 $12,323$ $8,084$ $9,701$ $9,701$ 110 $12,326$ $335,315$ $21,647$ $4,325$ 110 $12,1050$ $21,647$ $13,640$ $12,640$ $12,640$ $1110,500$ $32,816$ $23,616$ $3,836$ $12,640$ $1110,500$ $32,816$ $32,622$ <th< th=""><th>California</th><th>186</th><th>3,475,655</th><th>18,686</th><th>17,760</th><th>17,535</th><th>State</th></th<>	California	186	3,475,655	18,686	17,760	17,535	State
cticut12101,9608,4979,7019,701are3142,77347,59151,73651,736ar921,448,40615,74412,9341a921,448,40615,74412,9341a92214,28623,81025,3501a99196,2648,0228,4071a9919,0128,4024,2001a9933,1577,1497,0001a9933,1577,1497,0001a9933,1577,1497,0001a99910,7096,7911a99910,7096,7911b9910,70910,70910,7001a910,70910,70910,70910,700b910,70910,70910,70910,700b910,70010,70910,70010,700b910,70010,70010,70010,700b910,70010,70010,70010,700b910,70010,70010,70010,700b910,70010,70010,70010,700b910,70010,70010,70010,700b910,70010,70010,700b910,70010,70010,700b9<	Colorado	23	638,573	27,764	9,163	6,652	Federal
are3 $142,773$ $47,591$ $51,736$ $51,736$ a92 $1,448,406$ $15,744$ $51,736$ $15,344$ $12,934$ a92 $1,448,406$ $15,446$ $12,934$ $12,934$ $12,934$ a9 $214,286$ $23,810$ $25,350$ $34,07$ $34,0$	Connecticut	12	101,960	8,497	9,701	6,849	Federal ²
a92 $1,448,406$ $15,744$ $12,934$ 1ia42 $648,719$ $15,446$ $12,934$ 1ia9 $214,286$ $23,810$ $25,350$ 1ib9 $214,286$ $23,810$ $25,350$ 1ib 12 $96,264$ $8,022$ $8,407$ $8,407$ ib 12 $96,264$ $8,022$ $8,407$ $8,407$ ib 12 $327,675$ $8,402$ $4,200$ $7,000$ a 12 $323,157$ $7,149$ $7,000$ $7,000$ a 13 $654,522$ $50,348$ $11,640$ $7,000$ a 13 $654,522$ $50,348$ $11,640$ $7,000$ b 22 $335,636$ $15,256$ $8,034$ $11,640$ b 13 $654,522$ $50,348$ $11,640$ $7,000$ b 13 $654,522$ $50,348$ $11,640$ $7,000$ b 13 $657,100$ $17,900$ $17,800$ $17,800$ b 13 $654,522$ $50,348$ $11,640$ $17,800$ b 12 $335,636$ $15,256$ $12,640$ $17,800$ b 16 $335,636$ $15,256$ $12,640$ $12,640$ b 16 $11,10,300$ $59,662$ $12,640$ $12,640$ b $11,10,300$ $35,816$ $7,000$ $12,640$ b $11,10,300$ $35,816$ $12,640$ $12,640$ b $11,10,300$ $35,816$ $12,650$ $12,640$ </th <th>Delaware</th> <th>3</th> <th>142,773</th> <th>47,591</th> <th>51,736</th> <th>51,736</th> <th>Federal</th>	Delaware	3	142,773	47,591	51,736	51,736	Federal
a42 $648,719$ $15,446$ $12,934$ 1a9214,286 $23,810$ $25,350$ 1b9214,286 $8,022$ $8,407$ 8,407a1296,264 $8,022$ $8,407$ 1,700a339 $327,675$ $8,402$ $4,200$ 1a24 $257,010$ $10,709$ $6,791$ 1a13 $654,522$ $50,348$ $11,640$ 1s13 $654,523$ $335,636$ $15,256$ $8,038$ $9,701$ s1 $32,335$ $8,084$ $9,701$ 1s1 $32,335$ $8,084$ $9,701$ 1and15 $315,710$ $21,047$ $4,325$ 1and16 $15,256$ $12,360$ $12,640$ 1and1 $11,1050$ $3,888$ $7,000$ 1s $315,101$ $14,385$ $14,325$ $12,640$ 1and $11,1050$ $3,816$ $26,650$ $18,375$ $18,375$ $18,375$	Florida	92	1,448,406	15,744	12,934	9,097	Federal
(1) (2) <th< th=""><th>Georgia</th><th>42</th><th>648,719</th><th>15,446</th><th>12,934</th><th>12,934</th><th>Federal</th></th<>	Georgia	42	648,719	15,446	12,934	12,934	Federal
(1) (12) $(96,264)$ $(8,022)$ $(8,407)$ $(8,407)$ (1) (3) $(327,675)$ $(8,402)$ $(8,400)$ $(4,200)$ (1) (3) $(334,157)$ $(7,149)$ $(7,000)$ $(7,000)$ (1) (24) $(257,010)$ $(10,709)$ $(7,010)$ $(7,010)$ (1) (24) $(257,010)$ $(10,709)$ $(7,010)$ $(7,010)$ (1) (22) $(257,010)$ $(17,900)$ $(17,800)$ $(17,800)$ (1) (22) $(358,000)$ $(17,900)$ $(17,800)$ $(17,800)$ (1) (22) $(335,636)$ $(17,900)$ $(17,800)$ $(17,800)$ (1) $(12,10)$ $(17,900)$ $(17,800)$ $(12,640)$ $(12,640)$ (1) $(12,10,50)$ $(21,047)$ $(21,640)$ $(12,640)$ (1) $(12,10,50)$ $(21,047)$ $(21,640)$ $(12,640)$ (1) $(11,030)$ $(21,047)$ $(21,640)$ $(12,640)$ (1) $(11,030)$ $(35,816)$ $(12,640)$ $(12,640)$ (2) $(21,047)$ $(21,640)$ $(21,640)$ $(21,640)$ (2) $(21,047)$ $(21,640)$ $(21,640)$ $(21,640)$ (2) $(21,040)$ $(31,61)$ $(31,610)$ $(31,640)$ $(31,640)$ (2) $(21,040)$ $(21,047)$ $(21,640)$ $(21,640)$ $(21,640)$ (2) $(21,040)$ $(21,040)$ $(21,640)$ $(21,640)$ $(21,640)$ $(21,640)$ (2) $(21,640)$ $(21,$	Hawaii	6	214,286	23,810	25,350	24,630	State
a39327,6758,4024,200a48343,1577,1497,000a48343,1577,1497,000b24257,01010,7096,791b24257,01010,7096,791b13654,52250,34811,640b13654,52250,34811,640b335,63617,90017,80017,800chua22335,63615,2568,038ana22335,63615,2568,038nd15335,63615,2568,038nd15335,63615,2568,038nd15335,63615,2568,038nd15335,63615,2568,038nd15315,71021,0474,325nd15315,71021,0474,325nd15315,71021,0474,325nd15315,71021,0474,325nd16311,110,3003,8887,000solar311,110,30035,81626,650solar311,110,30035,81626,650solar311,110,30035,81626,650solar311,110,30035,81626,650solar311,110,30035,81618,375solar311,813518,375solar311,813518,375	Idaho	12	96,264	8,022	8,407	7,880	Federal
a 48 $343,157$ $7,149$ $7,000$ b 24 $257,010$ $10,709$ $6,791$ $7,000$ s $11,6$ $257,010$ $10,709$ $6,791$ $50,348$ $11,640$ s 13 $654,522$ $50,348$ $11,640$ $7,000$ s 12 $358,000$ $17,900$ $17,800$ $17,800$ s 20 $358,000$ $17,900$ $17,800$ $17,800$ s 14 22 $335,636$ $15,256$ $8,038$ $9,701$ ana 22 $335,636$ $15,256$ $8,038$ $9,701$ ana 15 $22,335$ $8,084$ $9,701$ $14,325$ oh $15,256$ $12,047$ $4,325$ $12,640$ and $17,1050$ $29,562$ $12,640$ $12,640$ and $11,10,300$ $35,816$ $7,000$ $12,640$ solar $11,10,300$ $35,816$ $26,650$ $18,375$ sippi 11 $158,237$ $14,385$ $18,375$	Illinois	39	327,675	8,402	4,200	2,600	Federal ²
s 24 $257,010$ $10,709$ $6,791$ $6,791$ s 13 $654,522$ $50,348$ $11,640$ $11,640$ ky 20 $358,000$ $17,900$ $17,800$ $17,800$ ky 20 $335,636$ $15,256$ $8,038$ $9,701$ ana 22 $335,636$ $15,256$ $8,038$ $9,701$ nd 15 $315,710$ $21,047$ $4,325$ nd 15 $315,710$ $21,047$ $4,325$ nd 15 $29,562$ $12,640$ nd 44 $171,050$ $3,888$ $7,000$ ota 31 $1,110,300$ $35,816$ $26,650$ $sippi$ 11 $158,237$ $14,385$ $18,375$	Indiana	48	343,157	7,149	7,000	7,000	State
s13654,52250,34811,6401ky20358,00017,90017,8001end22335,63615,2568,0389,701and2335,63615,2568,0389,701nd15315,71021,0474,3259,701nd15315,71021,0474,3251nd15315,71021,0474,3251nd15315,71021,0474,3251nd15315,71021,0474,3251nd15315,71021,0474,3251nd171,050315,71029,56212,6401on44171,0503,8887,0001sota311,110,30035,81626,6501sota11158,23714,38518,3751	Iowa	24	257,010	10,709	6,791	6,164	State
ky20358,00017,90017,8001ana22335,63615,2568,0388ana22335,63615,2568,0388nd432,3358,0849,7018nd15315,71021,0474,3258nd15591,23629,56212,6408an44171,0503,8887,0008ota311,110,30035,81626,6508sola311,58,23714,38518,3758	Kansas	13	654,522	50,348	11,640	9,472	Federal
ana22335,63615,2568,03881432,3358,0849,7011115315,71021,0474,3251115315,71021,0474,3251120591,23629,56212,6401144171,0503,8887,00011311,110,30035,81626,6501111158,23714,38518,3751	Kentucky	20	358,000	17,900	17,800	17,800	State
4 32,335 8,084 9,701 9,701 nd 15 315,710 21,047 4,325 4,325 chusetts 20 591,236 29,562 12,640 700 an 44 171,050 3,888 7,000 7000 7000 sota 31 1,110,300 35,816 26,650 5 5 5 5 sota 31 1,110,300 35,816 26,650 5	Louisiana	22	335,636	15,256	8,038	6,182	Federal
15 315,710 21,047 4,325 etts 20 591,236 29,562 12,640 44 171,050 3,888 7,000 7,000 31 1,110,300 35,816 26,650 18,375 11 158,237 14,385 18,375 18,375	Maine	4	32,335	8,084	9,701	8,407	Federal ²
etts 20 591,236 29,562 12,640 44 171,050 3,888 7,000 31 1,110,300 35,816 26,650 11 158,237 14,385 18,375	Maryland	15	315,710	21,047	4,325	4,450	State
44 171,050 3,888 7,000 31 1,110,300 35,816 26,650 11 158,237 14,385 18,375	Massachusetts	20	591,236	29,562	12,640	8,892	Federal
31 1,110,300 35,816 26,650 11 158,237 14,385 18,375	Michigan	44	171,050	3,888	7,000	7,000	State
11 158,237 14,385 18,375	Minnesota	31	1,110,300	35,816	26,650	26,000	State
	Mississippi	11	158,237	14,385	18,375	18,375	Federal

, FY 2018
Investigations,
Fatality
OSHA
State-by-State

	Number of OSHA Fatalitv		Average Total		Median	State or
State	Investigations Conducted	Total Penalties (\$)	Penalty Per Investigation (\$)	Median Initial Penalty ¹ (\$)	Current Penalty ¹ (\$)	Federal Program
Missouri	24	402,054	16,752	12,288	9,377	Federal
Montana	3	8,028	2,676	3,880	2,328	Federal
Nebraska	15	190,180	12,679	9,239	7,000	Federal
Nevada	6	77,800	8,644	8,000	8,000	State
New Hampshire	2	124,351	17,764	16,814	15,521	Federal
New Jersey	25	260,947	10,438	8,316	7,760	Federal ²
New Mexico	14	33,033	2,359	3,625	3,050	State
New York	62	762,872	12,304	4,761	3,929	Federal ²
North Carolina	73	399,270	5,469	7,000	7,000	State
North Dakota	4	65,714	16,429	12,934	11,467	Federal
Ohio	61	1,507,060	24,706	12,934	9,054	Federal
Oklahoma	34	485,168	14,270	13,494	9,054	Federal
Oregon	32	72,660	2,271	1,075	1,005	State
Pennsylvania	53	1,019,613	19,238	14,967	12,934	Federal
Rhode Island	3	0	0	0	0	Federal
South Carolina	31	62,774	2,025	4,250	2,375	State
South Dakota	6	33,960	5,660	8,149	5,600	Federal
Tennessee	42	407,765	9,709	9,500	8,175	State
Texas	167	2,688,654	16,100	9,959	7,300	Federal
Utah	17	66,600	3,918	3,000	3,000	State
Vermont	5	62,927	12,585	20,992	4,500	State
Virginia	53	466,740	8,806	20,016	13,823	State
Washington	24	188,450	7,852	7,450	7,450	State
West Virginia	21	270,790	12,895	12,934	12,934	Federal

State	Number of OSHA Fatality Investigations Conducted	Total Penalties (\$)	Average Total Penalty Per Investigation (\$)	Median Initial Penalty ¹ (\$)	Median Current Penalty ¹ (\$)	State or Federal Program
Wisconsin	26	312,346	12,013	11,505	7,525	Federal
Wyoming	9	44,946	7,491	34,539	22,473	State
National Median State Plan States				3,500	2,700	
National Median Federal States				10,348	7,761	
Total or National Average ³	1,605	22,841,325	14,231			

State-by-State OSHA Fatality Investigations, FY 2018

Source: OSHA OIS Fatality Inspection Reports, issued March 26, 2019.

¹National median penalties include investigations conducted in American Samoa, Puerto Rico, the District of Columbia, Virgin Islands, Northern Mariana Islands and Guam. ²Under the OSH Act, states may operate their own OSHA programs. Connecticut, Illinois, Maine, New Jersey and New York have state programs covering state and local employees only; for these five states, only federal data are listed. Twenty-one states and one territory have state OSHA programs covering both public- and private-sector workers; for these 21 states, only state data are listed.

OSHA average is \$11,247 per fatality investigation. Total investigations, total penalties and national average penalty per investigation includes four investigations in the District of Columbia, 12 in Puerto Rico, zero in the Virgin Islands, zero in the Northern Mariana Islands, one in American Samoa and two in Guam. ³National fatality investigations for all federal OSHA and state OSHA plan states combined. Federal OSHA average is \$16,734 per fatality investigation; state plan

Workplace Safety and Health Statistics by State, 2012–2017

		ű	Fatality Rates ¹	Rates	_			Injur	y/Illne.	Injury/IIIness Rates ^z	es			A	rerage Pt	Average Penalties(\$) ³	\$) ³	
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017	FY13	FY14	FY15	FY16	FY17	FY18
Alabama	4.3	4.0	4.0	3.7	5.2	4.3	3.3	3.3	2.9	3.0	2.7	2.5	1,803	2,016	2,311	2,582	3,583	3,598
Alaska	8.9	7.9	7.8	4.1	10.6	10.2	4.6	4.3	3.9	3.9	3.6	3.8	889	823	808	1,079	1,288	1,676
Arizona	2.3	3.5	3.1	2.4	2.6	3.0	3.2	3.3	3.0	2.9	2.9	2.9	891	935	096	1,002	1,083	1,140
Arkansas	5.4	5.6	5.7	5.8	5.3	6.1	3.2	3.0	2.6	2.6	2.4	2.5	2,569	2,329	2,221	2,480	3,254	3,872
California	2.3	2.4	2.0	2.2	2.2	2.2	3.5	3.5	3.4	3.3	3.3	3.2	6,422	5,733	6,543	7,131	7,326	7,699
Colorado	3.5	2.7	3.3	2.9	3.0	2.8	N/A	N/A	N/A	N/A	N/A	N/A	1,649	1,564	1,821	2,044	2,725	2,775
Connecticut	2.1	1.8	2.1	2.6	1.6	1.9	3.9	3.8	3.5	3.2	3.3	3.2	1,735	1,794	1,896	2,142	2,824	3,108
Delaware	3.1	2.6	2.8	1.9	2.6	2.4	2.8	2.7	2.6	2.6	2.6	2.3	2,406	1,985	2,745	2,878	4,701	3,996
Florida	2.7	2.8	2.7	3.1	3.6	3.3	N/A	N/A	N/A	N/A	N/A	N/A	1,821	2,181	2,365	2,451	3,681	3,653
Georgia	2.5	2.8	3.6	4.3	3.9	4.1	2.8	2.8	2.9	2.7	2.7	2.6	2,061	2,127	2,248	2,392	3,805	3,571
Hawaii	3.4	1.6	5.0	2.6	2.4	2.2	3.8	3.7	3.7	3.4	3.5	3.8	964	1,279	1,214	1,604	2,129	3,069
Idaho	2.7	4.3	4.7	4.8	4.1	4.8	N/A	N/A	N/A	N/A	N/A	N/A	1,449	1,639	1,973	2,485	3,202	3,423
Illinois	2.5	3.1	2.9	2.9	2.9	2.8	3.2	3.2	2.8	2.9	2.7	2.6	1,876	1,980	2,258	2,380	3,571	3,615
Indiana	4.2	4.4	4.4	3.9	4.5	4.5	3.9	3.6	3.8	3.7	3.4	3.3	1,054	957	782	1,000	1,235	1,278
Iowa	6.6	4.7	6.0	3.9	4.8	4.7	4.5	4.5	3.9	3.7	3.7	3.5	790	901	997	1,488	1,362	2,646
Kansas	5.7	4.2	5.5	4.4	5.2	5.2	3.6	3.5	3.4	3.0	3.3	3.0	1,971	2,017	2,055	2,144	3,016	3,600
Kentucky	4.9	4.7	4.5	5.5	5.0	3.8	4.1	4.0	3.7	3.5	3.2	3.1	3,254	2,828	2,607	3,295	3,333	3,542
Louisiana	6.4	6.3	6.3	5.8	5.0	6.3	2.3	2.2	2.0	1.9	1.9	1.9	1,765	2,201	2,334	2,847	3,811	3,811
Maine	3.2	3.1	2.9	2.5	2.4	2.7	5.6	5.3	5.3	4.8	4.7	4.8	2,083	2,013	2,025	2,508	4,303	3,440
Maryland	2.6	2.7	2.6	2.4	3.2	3.0	3.1	3.0	3.1	2.9	2.8	2.6	685	746	715	650	640	681
Massachusetts	1.4	1.8	1.7	2.1	3.3	3.2	3.1	2.9	2.7	2.7	2.6	2.7	1,929	2,104	2,092	2,484	3,752	3,597
Michigan	3.4	3.3	3.3	3.1	3.5	3.4	4.0	3.7	3.6	3.3	3.3	3.1	542	585	612	763	1,131	1,179
Minnesota	2.6	2.6	2.3	2.7	3.4	3.5	3.8	3.7	3.6	3.5	3.3	3.2	768	752	806	832	993	987

Workplace Safety and Health Statistics by State, 2012–2017

			atality	Fatality Rates ¹	£			Injur	Injury/Illness	ss Rates ²	es²			A A	Average Pe	Penalties(\$) ³	\$) ³	
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017	FΥ13	FY14	FY15	FΥ16	FY17	FY18
Mississippi	5.5	6.2	7.1	6.8	6.3	6.2	N/A	N/A	N/A	N/A	N/A	N/A	1,515	1,726	2,054	2,440	3,306	3,246
Missouri	3.3	4.3	3.9	4.3	4.3	4.4	3.3	3.2	3.2	3.0	2.8	2.6	1,931	1,877	2,103	2,466	3,645	3,630
Montana	7.3	5.8	4.9	7.5	7.9	6.9	5.0	4.7	4.5	4.3	4.2	4.3	1,983	1,938	1,751	1,803	2,149	2,082
Nebraska	5.2	4.0	5.8	5.4	6.3	3.6	3.9	3.8	3.5	3.4	3.4	3.0	2,565	2,569	2,727	2,891	3,903	3,650
Nevada	3.6	3.0	3.1	3.5	4.2	2.4	4.1	4.0	4.0	3.8	3.7	3.7	2,133	2,244	1,059	1,157	1,133	1,980
New Hampshire	2.2	2.1	2.6	2.7	3.2	1.6	N/A	N/A	N/A	N/A	N/A	N/A	2,243	2,113	2,169	2,425	3,370	3,849
New Jersey	2.4	2.6	2.1	2.3	2.4	1.6	3.1	2.9	2.9	2.7	2.6	2.6	2,151	2,176	2,441	2,533	4,205	3,818
New Mexico	4.8	6.7	6.7	4.1	4.9	4.7	3.9	3.2	3.2	3.1	3.2	2.7	866	879	803	1,140	1,025	1,924
New York	2.4	2.1	2.8	2.7	3.1	3.5	2.5	2.4	2.5	2.4	2.3	2.2	2,016	1,907	2,109	2,492	3,707	3,723
North Carolina	3.5	2.5	3.1	3.4	3.7	3.9	2.9	2.7	2.7	2.6	2.5	2.3	966	1,250	1,091	1,582	1,594	1,772
North Dakota	17.7	14.9	9.8	12.5	7.0	10.1	N/A	N/A	N/A	N/A	N/A	N/A	3,045	2,659	3,028	2,723	3,582	3,683
Ohio	3.1	3.0	3.6	3.9	3.1	3.3	3.2	2.9	2.9	2.8	2.7	2.6	2,156	2,299	2,462	2,679	3,907	4,129
Oklahoma	6.1	5.8	6.2	5.5	5.6	5.5	3.6	N/A	N/A	N/A	N/A	N/A	1,872	1,880	2,062	2,017	3,299	3,070
Oregon	2.6	2.9	3.9	2.6	3.9	3.2	3.9	4.1	3.9	3.7	4.0	3.8	363	364	422	570	547	282
Pennsylvania	3.4	3.2	3.1	3.0	2.8	3.0	3.9	3.9	3.7	3.5	3.3	3.1	1,916	1,796	2,075	2,484	3,454	3,634
Rhode Island	1.7	2.1	2.1	1.2	1.8	1.6	N/A	N/A	N/A	N/A	N/A	N/A	2,023	1,895	1,910	2,077	3,215	3,008
South Carolina	3.5	3.9	3.3	5.6	4.4	4.2	3.0	2.9	2.8	2.5	2.5	2.5	492	521	570	790	1,042	1,217
South Dakota	6.7	4.7	7.2	4.9	7.5	7.3	N/A	N/A	N/A	N/A	N/A	N/A	2,346	2,309	2,712	2,419	4,176	2,958
Tennessee	3.8	3.6	4.8	3.7	4.3	4.4	3.5	3.3	3.2	3.1	2.9	2.9	727	687	1,441	1,566	1,510	1,472
Texas	4.8	4.4	4.5	4.5	4.4	4.3	2.7	2.6	2.4	2.3	2.2	2.2	2,187	2,154	2,098	2,397	3,481	3,423
Utah	3.0	2.9	4.2	3.2	3.2	2.9	3.4	3.4	3.2	3.5	2.9	3.0	1,053	1,173	1,234	1,322	1,315	1,315
Vermont	3.5	2.2	3.2	2.9	3.2	7.0	5.0	5.2	5.0	4.6	4.6	4.6	1,008	889	1,038	1,201	1,698	2,627
Virginia	3.8	3.2	2.8	2.8	4.0	2.9	2.7	2.6	2.7	2.4	2.5	2.4	726	660	893	1,504	1,871	2,357

Workplace Safety and Health Statistics by State, 2012–2017

			atality	Fatality Rates	÷			Injur	y/Illne	Injury/Illness Rates ²	es²			A	Average Penalties(\$) ³	enalties(\$) ³	
	2012	2013	2014	2012 2013 2014 2015 2016 20'	2016		2012	2013	2014	2015	2016	2017	17 2012 2013 2014 2015 2016 2017 FY13	FY14	FY14 FY15	FY16	FY17	FY18
Washington	2.2	1.7	2.7	1.7 2.7 2.1 2.4	2.4	2.5	4.8	4.8	4.8 4.8 4.6 4.4	4.4	4.3	4.0	791	896	1,089	2,118	1,866	1,940
West Virginia	6.9	8.6	5.2	5.0	6.6	7.4	4.1	3.7	4.0 3.2		3.2	2.9	1,798	1,685	1,801	1,916	3,102	3,640
Wisconsin	4.0	4.0 3.5	3.5	3.5 3.5	3.6	3.5	4.0	4.0	4.0 4.0 3.9 3.6	3.6	3.7	3.6	2,207	2,121	2,277	2,573	4,068	3,910
Wyoming	12.2	9.5	13.1	12.2 9.5 13.1 12.0 12.3	12.3	7.7	3.5 3.4		3.5	3.5 3.3 3.4	3.4	3.5	1,777	1,911	2,824	2,732	2,188	3,340
National Average ⁴	3.4	3.3	3.4	3.4	3.6	3.5	3.4	3.3	3.2	3.0	2.9	2.8	\$1,489 \$1,972	\$1,972	\$2,148	\$2,087	\$2,633	\$2,729

¹Bureau of Labor Statistics, rate per 100,000 workers.

²Bureau of Labor Statistics; rate of total cases per 100 workers. Number and rate are for private sector only and national average includes Guam, Puerto Rico and the Virgin Islands.

³U.S. Department of Labor, OSHA IMIS Inspection Reports, National by Region for 18(B) State (only) and/or National by Region for Federal (only), FY 2012 through FY 2015, and OIS inspection reports for FY 2012 through FY 2018. Pealties shown are average per serious citation for conditions creating a substantial probability of death or serious physical harm to workers. For Connecticut, Illinois, New Jersey, New York and Maine—states that operate their own state plan for public employees only—averages are based only on federal data.

⁴National average is the per citation average for federal OSHA serious penalties and state OSHA plan states' serious penalties combined. Federal serious penalties average \$3,580 per citation; state plan OSHA states average \$1,985 per citation. Workplace Fatalities by State, 1998–2017

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Alabama	135	123	103	138	102	124	133	128	100	108	107	75	92	75	84	78	75	70	100	83
Alaska	43	42	53	64	42	28	42	29	45	30	33	17	39	39	31	32	30	14	35	33
Arizona	74	70	118	87	101	80	84	66	112	97	100	76	77	69	60	95	88	69	77	90
Arkansas	86	76	106	68	80	87	70	80	78	89	85	75	88	93	63	63	67	74	68	76
California	626	602	553	515	478	459	467	465	537	461	465	409	326	390	375	396	344	388	376	376
Colorado	77	106	117	139	123	102	117	125	137	126	105	83	85	92	82	65	84	75	81	77
Connecticut	57	38	55	41	39	36	54	46	38	38	28	34	49	37	36	29	35	44	28	35
Delaware	11	14	13	10	11	0	10	11	15	10	11	7	8	10	14	11	12	ω	12	10
Florida	384	345	329	368	354	347	422	406	360	363	291	245	225	226	218	239	228	272	309	299
Georgia	202	229	195	237	197	199	232	200	201	193	182	110	108	111	101	117	152	180	171	194
Hawaii	12	32	20	41	24	21	25	15	30	23	19	13	19	26	20	11	31	18	29	20
Idaho	51	43	35	45	39	43	38	35	38	31	36	27	33	37	19	30	34	36	30	37
Illinois	216	208	206	231	190	200	208	194	207	185	193	158	206	177	146	176	164	172	171	163
Indiana	155	171	159	152	136	132	153	157	148	127	143	125	118	125	115	127	130	115	137	138
lowa	68	80	71	62	57	76	82	90	71	89	93	80	77	93	97	72	91	60	76	72
Kansas	98	87	85	94	89	78	80	81	85	101	73	76	85	78	76	55	73	60	74	72
Kentucky	117	120	132	105	146	145	143	122	147	112	106	101	69	93	91	86	82	66	92	70
Louisiana	159	141	143	117	103	95	121	111	118	139	135	140	111	111	116	114	120	112	95	117
Maine	26	32	26	23	30	23	16	15	20	21	24	16	20	26	19	19	19	15	18	18
Maryland	78	82	84	64	102	92	81	95	106	82	60	65	71	71	72	79	74	69	92	87
Massachusetts	44	83	70	54	46	78	72	75	66	75	68	64	54	68	44	57	55	69	109	108
Michigan	179	182	156	175	152	152	127	110	157	120	123	94	146	141	137	135	143	134	162	153

Workplace Fatalities by State, 1998–2017

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Minnesota	88	72	68	76	81	72	80	87	78	72	65	61	70	60	70	69	62	74	92	101
Mississippi	113	128	125	111	94	102	88	112	96	93	80	67	68	63	63	68	75	77	71	90
Missouri	145	165	148	145	175	154	165	185	167	156	148	142	106	132	88	118	106	117	124	125
Montana	58	49	42	58	51	39	39	50	45	54	40	52	36	49	34	28	28	36	38	32
Nebraska	56	66	59	57	83	51	46	36	57	63	53	57	54	39	48	39	55	50	60	35
Nevada	60	58	51	40	47	52	61	57	49	71	41	24	38	38	42	42	40	44	54	32
New Hampshire	23	14	13	6	19	19	15	18	13	14	7	6	6	6	14	14	17	18	22	11
New Jersey	103	104	115	129	129	104	129	112	88	106	92	<u> 66</u>	81	99	92	102	87	97	101	69
New Mexico	48	39	35	59	63	46	57	44	59	52	31	42	38	52	39	54	53	35	41	44
New York	243	241	233	220	240	227	254	239	234	220	213	185	182	206	202	178	241	236	272	313
North Carolina	228	222	234	203	169	182	183	165	168	167	161	129	139	148	146	109	137	150	174	183
North Dakota	24	22	34	25	25	26	24	22	31	25	28	25	30	44	65	56	38	47	28	38
Ohio	186	222	207	209	202	206	202	168	193	165	168	137	161	155	161	149	185	202	164	174
Oklahoma	75	66	82	115	92	100	91	95	91	104	102	82	94	86	97	92	98	91	92	91
Oregon	72	69	52	44	63	75	60	65	87	69	55	66	47	58	43	49	69	44	72	60
Pennsylvania	235	221	199	225	188	208	230	224	240	220	241	168	221	186	194	183	179	173	163	172
Rhode Island	12	11	7	17	ω	18	7	9	10	5	9	7	6	7	8	10	10	9	ი	8
South Carolina	111	139	115	91	107	115	113	132	95	122	87	73	69	81	63	75	64	117	96	88
South Dakota	28	46	35	35	36	28	24	31	37	22	30	24	36	31	31	20	29	21	31	30
Tennessee	150	154	160	136	140	137	145	139	153	154	135	111	138	120	101	95	127	112	122	128
Texas	523	468	572	536	417	491	440	495	489	528	463	482	461	433	536	508	531	527	545	534

Utah 67 54 61 65 52 54 50 54 60 78 64 Vermont 16 14 15 6 11 14 7 7 14 10 10 10 Vermont 16 14 15 6 11 14 7 7 14 10 10 10 Vermont 177 154 148 146 142 155 171 186 165 146 16 10 <th></th> <th></th> <th></th> <th>7007 F010</th> <th>1107</th> <th>71.07</th> <th>2013</th> <th>2014</th> <th>2015 21</th> <th>2016 201</th>				7007 F010	1107	71.07	2013	2014	2015 21	2016 201
16 14 15 6 11 14 7 7 14 10 10 10 177 154 148 146 142 155 171 186 165 146 156 ton 113 88 75 102 86 83 98 87 90 84 ginia 57 57 46 63 40 51 58 46 79 61 53 ginia 57 105 107 110 91 103 94 125 91 104 77 ginia 33 32 36 40 33 37 43 46 36 83 33 33	54 50			48 41	39	39	37	54	42 4	44 43
177 154 148 146 142 155 171 186 165 146 156 113 88 75 102 86 83 98 85 87 90 84 57 57 46 63 40 51 58 46 79 61 53 97 105 107 110 91 103 94 125 91 104 77 33 32 36 40 33 37 43 46 36 48 33				12 12	8	11	7	10	6	10 22
113 88 75 102 86 83 98 85 87 90 84 57 57 46 63 40 51 58 46 79 61 53 97 105 107 110 91 103 94 125 91 104 77 33 32 36 40 33 37 43 46 36 48 33	155 171			119 107	127	149	128	116	106 1	153 118
57 57 46 63 40 51 58 46 79 61 53 97 105 107 110 91 103 94 125 91 104 77 33 32 36 40 33 37 43 46 36 48 33	83 98			76 104	60	67	56	88	70 7	78 84
n 97 105 107 110 91 103 94 125 91 104 77 33 32 36 40 33 37 43 46 36 48 33	51 58		53 41	1 95	43	49	61	38	35 4	47 51
33 32 36 40 33 37 43 46 36 48	103 94			94 91	89	114	97	66	104 1	105 106
	37 43			19 33	32	35	26	37	34 3	34 20
Total^{1,2,3} 6,055 6,054 5,920 5,915 5,534 5,575 5,764 5,734 5,840 5,657 5,214 4.	5,534 5,575 5,764 5,73	5,840 5,657		4,551 4,690	4,690 4,693 4,628 4,585	4,628		4,821 4	,836 5,	4,836 5,190 5,147

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹In 2017, 31 fatal injuries occurred in Puerto Rico, and zero occurred in Guam and the U.S. Virgin Islands. These are not reflected in the U.S. total. ²Totals include fatalities that occurred in the District of Columbia. In 2017, D.C. had 13 fatalities.

³States cannot always be assigned to fatality cases. For example, some fatalities occur at sea outside of specific state jurisdictions. In 2017, four fatal injuries occurred within the territorial boundaries of the United States, but a state of incident could not be determined.

Fatalities by State and Event or Exposure, 2017

Hatter bateTotal fatalitiesAssautts and bulent actsTransportation facantExposure to kenvicomentsExposure to buleExposure to bulkExposure to<								
at 53 5 34 13 6 13 a 33 6 18 13 6 13 a 33 6 18 12 6 13 as 76 9 20 37 12 10 as 376 66 139 4 82 10 bio 77 11 38 3 14 14 bio 10 4 14 4 14 bio 10 4 38 3 14 14 bio 10 4 38 3 14 14 bio 10 14 14 14 14 14 bio 10 4 38 14 14 14 bio 10 10 14 14 14 14 bio 10 10<	State	Total Fatalities	Assaults and Violent Acts	Transportation Incidents	Fires and Explosions	Falls	Exposure to Harmful Substances or Environments	Contact with Objects and Equipment
33 6 18 6 as 76 9 37 12 as 76 9 47 12 as 76 9 47 10 as 76 9 47 10 as 77 11 38 3 14 bit 10 4 4 82 bit 10 4 4 4 bit 299 43 107 7 62 at 194 37 4 17 7 67 at 193 2 4 4 at 16 7 62 7 67 at 16 2 4 4 5 at 16 17 2 4 4 5	Alabama	83	5	34	-	13	7	21
90 20 37 12 as 76 9 47 10 as 76 9 47 10 as 77 11 38 3 14 bit 77 11 38 3 14 bit 10 4 5 8 14 bit 10 4 14 4 bit 10 4 4 4 cold 10 4 4 4 cold 10 4 4 4 cold 10 4 4 4 so 107 7 27 27 27 so 37 4 17 4 4 so 107 5 4 4 so 107 7 27 27	Alaska	33	6	18	-	6	1	1
as 76 9 47 10 ia 376 66 139 4 82 14 ib 77 11 38 3 14 82 14 ititut 35 8 14 35 14 82 14 ititut 35 8 14 35 14 35 14	Arizona	90	20	37	-	12	8	6
ia 376 66 139 4 82 14 Jo 77 11 38 3 14 8 14 8 iticut 35 8 14 4 4 4 riticut 35 8 14 4 4 4 of Columbia 10 4 4 4 4 4 of Columbia 13 2 4 4 4 of Columbia 13 2 2 4 4 4 of Columbia 13 2 4 4 4 a 194 30 96 5 5 5 a 16 17 10 5 5 5 a 13 10 5 5 5 5 a 13 15 2	Arkansas	76	6	47	!	10	З	7
it 11 38 3 14 iticut 35 8 14 4 iticut 35 8 14 4 - re 10 4 14 4 4 re 10 4 2 4 4 of columbia 13 2 4 4 a 194 30 96 27 62 7 a 194 30 96 4 4 7 a 163 20 61 7 27 27 4 i 138 28 50 1 20 27 27 i 138 28 50 1 27 27 27 i 138 28 50 1 27 27 27 i	California	376	66	139	4	82	29	52
iticut 35 8 14 4 re 10 4 3 4 re 10 4 3 3 of columbia 13 2 4 softcolumbia 13 2 4 a 194 30 96 27 62 a 194 30 96 27 62 7 a 194 37 4 17 7 62 7 a 194 37 4 17 7 62 7 a 163 20 61 7 27 62 7 a 163 20 61 7 27 27 27 a 163 28 50 1 8 27 27 a 17 27 12 27 <	Colorado	77	11	38	3	14	3	8
re 10 4 3 3 of Columbia 13 2 4 4 290 43 107 7 62 4 290 43 107 7 62 7 a 194 30 96 27 62 a 136 32 10 7 62 7 62 15 37 4 17 7 27 27 7 163 200 61 7 7 20 4 7 138 28 50 1 7 20 7 1 138 28 50 1 7 20 7 1 10 72 12 42 7 20 1 20 10 70 8 7 1 1 1 1 1 10 13 3	Connecticut	35	8	14	1	4	5	3
of Columbia 13 2 4 4 299 43 107 7 62 7 62 a 194 30 96 27 62 7 a 194 30 96 27 67 7 a 194 30 0 0 57 7 a 137 4 17 57 7 7 163 20 61 7 27 27 27 7 17 72 138 28 50 1 20 7 17 72 12 42 7 27 1 20 18 117 20 1 1 1 1 1 1 1 10 11 20 1 1 1 1 1 1 1 1 1	Delaware	10	4	-	-	3	-	-
a 299 43 107 7 62 a 194 30 96 27 62 20 37 4 11 27 5 37 4 17 5 5 163 20 61 7 27 4 17 163 20 61 7 27 7 18 138 28 50 1 8 7 1 18 72 12 42 1 8 7 1 <th>District of Columbia</th> <th>13</th> <th>-</th> <th>2</th> <th>-</th> <th>4</th> <th>-</th> <th>4</th>	District of Columbia	13	-	2	-	4	-	4
a 194 30 96 27 27 20 3 10 5 5 5 37 4 17 5 4 5 163 20 37 4 17 5 4 163 20 61 7 27 4 7 5 7 138 28 50 17 - 7 27 27 5 7 138 72 12 42 2 5 5 7 7 14 70 8 28 - 12 13 12 13 10 17 20 14 7 13 13 14 10 8 3 28 - 12 13 14 14 14 14 14 14 14 14 14 14 14 14 15 <td< th=""><th>Florida</th><th>299</th><th>43</th><th>107</th><th>7</th><th>62</th><th>48</th><th>31</th></td<>	Florida	299	43	107	7	62	48	31
20 3 10 5 37 4 17 5 37 4 17 4 163 20 61 7 27 183 20 61 7 27 138 28 50 1 20 72 6 40 1 8 72 12 42 2 5 14 70 8 28 1 8 17 20 8 1 1 1 18 3 9 1 1 16 87 15 29 1 1	Georgia	194	30	96	ł	27	13	25
37 4 17 4 163 20 61 7 27 4 163 28 61 7 27 27 138 28 50 1 20 8 72 6 40 1 20 8 72 12 42 2 5 5 wy 70 8 28 12 12 ma 117 20 49 7 13 13 ma 18 3 9 18 13	Hawaii	20	3	10	-	5	1	1
163 20 61 7 27 27 138 28 50 1 20 27 72 72 6 40 1 20 72 72 12 42 2 5 ky 70 8 28 12 13 na 117 20 49 7 13 1 na 117 20 49 13 1 na 18 3 9 - 13 1 na 18 3 9 - 13 1 <	Idaho	37	4	17	1	4	1	10
a 138 28 50 1 20 72 6 40 1 8 20 s 72 12 42 2 5 s 72 12 42 2 5 six 70 8 28 2 5 six 70 8 28 2 12 six 70 8 28 12 12 ana 117 20 49 7 13 ana 18 3 9 - - 13 and 87 15 29 1 18 - -	Illinois	163	20	61	7	27	22	23
72 6 40 1 8 s 72 12 42 5 ky 70 8 28 5 ind 117 20 49 7 13 and 117 20 49 7 13 ind 87 15 29 1	Indiana	138	28	50	4	20	16	21
s 72 12 42 2 5 ky 70 8 28 12 5 ana 117 20 49 7 13 1 ana 117 20 49 7 13 1 ana 117 20 49 7 13 1 ana 15 29 13 1 1 and 87 15 29 1 18 1	lowa	72	9	40	۲	8	1	16
Ky 70 8 28 12 and 117 20 49 7 13 Ind 18 3 9 13 Ind 87 15 29 1 18	Kansas	72	12	42	2	5	ł	6
ana 117 20 49 7 13 18 3 9 nd 87 15 29 1 18	Kentucky	70	8	28	1	12	7	12
18 3 9 nd 87 15 29 1 18	Louisiana	117	20	49	7	13	16	11
87 15 29 1 18	Maine	18	3	9	-		3	-
	Maryland	87	15	29	1	18	14	10

Fatalities by State and Event or Exposure, 2017

State	Total Fatalities	Assaults and Violent Acts	Transportation Incidents	Fires and Explosions	Falls	Exposure to Harmful Substances or Environments	Contact with Objects and Equipment
Massachusetts	108	15	36	1	21	31	4
Michigan	153	41	43	7	27	11	23
Minnesota	101	14	46	5	14	5	16
Mississippi	90	10	55	-	10	8	7
Missouri	125	31	46	8	13	11	16
Montana	32	5	12	2	5	-	7
Nebraska	35	2	20	1	4	1	7
Nevada	32	8	13	-	7	3	1
New Hampshire	11	ł	1	۲	1	1	5
New Jersey	69	10	25	3	12	10	6
New Mexico	44	7	28	ł	1	1	4
New York	313	53	78	9	103	41	30
North Carolina	183	27	73	9	28	23	26
North Dakota	38	ł	26	~	ł	ю	ъ
Ohio	174	32	52	4	31	28	24
Oklahoma	91	12	47	ł	13	ω	6
Oregon	60	9	29	ł	6	4	13
Pennsylvania	172	27	61	5	19	26	34
Rhode Island	8	-		1		-	1
South Carolina	88	12	42	-	12	6	12
South Dakota	30	2	17	-	6	2	3

Fatalities by State and Event or Exposure, 2017

State	Total Fatalities	Assaults and Violent Acts	Transportation Incidents	Fires and Explosions	Falls	Exposure to Harmful Substances or Environments	Contact with Objects and Equipment
Tennessee	128	20	57	-	21	12	18
Texas	534	73	234	6	93	49	74
Utah	43	7	18		3	5	10
Vermont	22	3	10	1	-	3	3
Virginia	118	26	41	I	20	14	15
Washington	84	13	30	ł	26	ę	10
West Virginia	51		19	4	11	8	9
Wisconsin	106	20	35	7	18	9	20
Wyoming	20	4	11	+	1	1	3
Total ^{1,2}	5,147	807	2,077	123	887	531	695

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Zero fatal injuries occurred in Guam and 31 fatal injuries occurred in Puerto Rico, but are not reflected in the U.S. total.

²States and events or exposures cannot always be assigned to fatality cases. Also, some fatalities occur outside of specific state jurisdictions, such as at sea.

Note: State totals include other events and exposures, such as bodily reaction. Dashes indicate no data reported or data that do not meet BLS publication criteria.

Number and Rate of Injuries and Illnesses by State for All Industries, Private Industry, State Government and Local Government, 2017

	z	lumber of In	Number of Injuries/Illnesses			Rate of Injur	Rate of Injuries/Illnesses ¹	
State	All Industries	Private Industry	State Government	Local Government	All Industries	Private Industry	State Government	Local Government
Alabama	38,500	32,900	N/A	N/A	2.4	2.5	N/A	N/A
Alaska	9,200	7,500	300	1,500	3.9	3.8	1.7	5.8
Arizona	67,200	56,300	1,500	9,400	3.0	2.9	2.4	5.3
Arkansas	28,300	22,000	2,600	3,700	2.7	2.5	4.2	3.9
California	466,600	362,600	18,400	85,600	3.6	3.2	4.7	6.8
Colorado	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Connecticut	46,500	37,600	2,200	6,700	3.6	3.2	4.4	7.2
Delaware	8,800	6,900	006	1,000	2.5	2.3	3.3	4.3
Florida	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Georgia	93,600	78,200	N/A	N/A	2.7	2.6	N/A	N/A
Hawaii	18,000	15,700	1,100	1,200	3.7	3.8	2.2	5.5
Idaho	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Illinois	132,400	108,200	3,000	21,200	2.9	2.6	3.0	4.9
Indiana	83,500	71,500	2,000	9,900	3.5	3.3	2.3	5.2
lowa	45,800	38,100	1,400	6,400	3.6	3.5	3.4	5.2
Kansas	33,900	28,200	N/A	5,300	3.2	3.0	N/A	4.7
Kentucky	50,100	41,200	2,100	6,800	3.3	3.1	3.1	5.3
Louisiana	34,900	25,400	2,000	7,500	2.2	1.9	3.0	4.3
Maine	22,100	19,100	800	2,200	4.8	4.8	4.7	5.4
Maryland	62,600	46,600	4,100	11,900	3.0	2.6	4.5	6.6
Massachusetts	73,300	65,100	3,700	N/A	2.7	2.7	4.0	N/A

Number and Rate of Injuries and Illnesses by State for All Industries, Private Industry, State Government and Local Government, 2017

			variation of million and the second			vale or injur	Rate of Injuries/Illnesses	
	All Industries	Private Industry	State Government	Local Government	All Industries	Private Industry	State Government	Local Government
Michigan 109	109,300	93,900	3,500	11,900	3.3	3.1	2.9	5.0
Minnesota 72	72,500	63,300	1,600	7,600	3.3	3.2	2.3	4.4
Mississippi	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Missouri 64	64,200	50,600	N/A	7,700	2.8	2.6	N/A	3.8
Montana 15	15,000	12,700	600	1,700	4.4	4.3	3.3	5.7
Nebraska 23	23,600	20,500	N/A	2,300	3.0	3.0	N/A	2.8
Nevada 40	40,600	35,700	1,000	3,900	3.8	3.7	2.9	5.1
New Hampshire	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New Jersey 92	92,200	71,700	4,200	16,300	2.9	2.6	4.1	5.6
New Mexico 19	19,800	14,300	1,400	4,100	3.1	2.7	3.1	9
New York 203	203,100	138,600	14,000	50,600	2.8	2.2	6.1	6.3
North Carolina 90	90,000	70,700	3,600	15,700	2.5	2.3	2.6	4.3
North Dakota	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ohio 116	116,800	101,500	2,800	12,500	2.7	2.6	2.1	3.5
Oklahoma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oregon 54	54,100	46,500	1,900	5,700	3.8	3.8	2.9	4.4
Pennsylvania 141	141,900	132,500	N/A	N/A	3.1	3.1	N/A	N/A
Rhode Island	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
South Carolina 45	45,400	34,800	2,400	8,200	2.8	2.5	3.3	4.6
South Dakota	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tennessee 71	71,100	60,100	1,500	9,500	3.0	2.9	2.0	4.2

Number and Rate of Injuries and Illnesses by State for All Industries, Private Industry, State Government and Local Government, 2017

	N	Number of Inj	ber of Injuries/Illnesses			Rate of Injuri	Rate of Injuries/IIInesses ¹	
State	All Industries	Private Industry	State Government	Local Government	All Industries	Private Industry	State Government	Local Government
Texas	230,500	183,400	N/A	N/A	2.3	2.2	N/A	N/A
Utah	33,600	29,600	1,500	2,500	3.0	3.0	3.1	3.1
Vermont	10,400	9,100	N/A	1,100	4.5	4.6	3.8	5.3
Virginia	77,100	60,200	2,300	13,700	2.6	2.4	2.8	4.6
Washington	104,500	86,600	4,400	13,500	4.2	4.0	3.7	6.2
West Virginia	16,800	13,100	1,200	2,500	3.1	2.9	3.1	4.2
Wisconsin	82,400	71,900	2,000	8,500	3.7	3.6	2.9	4.6
Wyoming	7,900	6,000	400	1,500	3.7	3.5	3.7	4.4
Total or National Average ²	3.5 Million	2.8 Million	143,900	520,400	3.1	2.8	3.6	5.0

Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

¹Rate of total cases of injuries and illnesses per 100 workers.

²Total number of injuries and illnesses and national average rate of injuries and illnesses includes the District of Columbia, Guam, Puerto Rico and the Virgin Islands.

Hispanic and Latino Worker Fatalities by State, 1998–2017¹

5 8 6 9 6 5 5 5 6 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 <th>State</th> <th>1998</th> <th>1999</th> <th>2000</th> <th>2001</th> <th>2002</th> <th>2003</th> <th>2004</th> <th>2005</th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th>	State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
at	Alabama	I	ł	ł	I	5	ø	9	6	9	5	5	:	5	ς	5	9	1	с	5	8
integrit 27 26 34 28 36 36 36 36 36 36 36 36 31 18 21 isse - 8 9 - 5 9 5 8 3 5 9 - 6 9 10 11 10 11 10	Alaska	I	ł	I	I	I	I	1	с	5	1	I	1	1	5	5	с	1	1	:	1
sess - 8 9 - 5 9 5 9 - 6 7 3 6 9 10 41 mine 174 216 172 188 176 164 188 190 231 179 160 171 191 137 194 130 178 148 ado 15 19 27 26 13 21 14 18 20 231 149 178 148 148 148 149 150 17 19 22 21 141 188 141	Arizona	27	26	26	34	28	17	25	36	36	26	30	22	18	21	16	25	31	18	21	30
mine 174 216 172 184 186 179 180 171 173 130 178 136 130 178 136 <th>Arkansas</th> <th>I</th> <th>8</th> <th>6</th> <th>I</th> <th>5</th> <th>o</th> <th>5</th> <th>œ</th> <th>З</th> <th>5</th> <th>6</th> <th>:</th> <th>9</th> <th>7</th> <th>с</th> <th>9</th> <th>6</th> <th>10</th> <th>4</th> <th>9</th>	Arkansas	I	8	6	I	5	o	5	œ	З	5	6	:	9	7	с	9	6	10	4	9
ado 15 19 27 56 16 25 19 18 30 21 17 19 22 21 14 18 20 23 effectut 10 12 9 7 10 5 7 6 5 3 3 4 5 7 6 5 3 3 4 effectut 10 12 9 7 4 7 4 5 7 6 5 3 3 4 5 7 6 7 3 3 4 5 3 4 6 66 7 8 4 </th <th>California</th> <th>174</th> <th>216</th> <th>172</th> <th>188</th> <th>176</th> <th>164</th> <th>188</th> <th>190</th> <th>231</th> <th>179</th> <th>180</th> <th>161</th> <th>142</th> <th>154</th> <th>137</th> <th>194</th> <th>130</th> <th>178</th> <th>148</th> <th>173</th>	California	174	216	172	188	176	164	188	190	231	179	180	161	142	154	137	194	130	178	148	173
ectiont 10 12 9 7 10 5 7 4 5 7 6 5 3 8 4 acretiont 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 1	Colorado	15	19	27	25	16	25	25	19	18	30	21	17	19	22	21	14	18	20	23	29
erece </th <th>Connecticut</th> <th>10</th> <th>1</th> <th>12</th> <th>6</th> <th>7</th> <th>1</th> <th>10</th> <th>5</th> <th>7</th> <th>4</th> <th>7</th> <th>4</th> <th>5</th> <th>7</th> <th>9</th> <th>5</th> <th>ъ</th> <th>8</th> <th>4</th> <th>4</th>	Connecticut	10	1	12	6	7	1	10	5	7	4	7	4	5	7	9	5	ъ	8	4	4
is 68 75 84 96 10 11 73 49 38 53 54 66 76 78 91 jia 19 17 26 36 16 26 25 35 35 28 10 16 14 21 26 16 78 16 16 14 21 26 16 78 16 16 16 16 26 16 78 16<	Delaware	I	ł	ł	ł	1	I	1	1	I	ł	I	1	1	I	1	3	3	1	1	ł
int 10 17 26 36 16 25 35 28 26 10 14 10 14 21 26 16 int <td< th=""><th>Florida</th><th>58</th><th>68</th><th>75</th><th>84</th><th>98</th><th>06</th><th>119</th><th>113</th><th>95</th><th>111</th><th>73</th><th>49</th><th>38</th><th>53</th><th>54</th><th>68</th><th>60</th><th>78</th><th>91</th><th>81</th></td<>	Florida	58	68	75	84	98	06	119	113	95	111	73	49	38	53	54	68	60	78	91	81
iii .	Georgia	19	17	26	36	16	26	29	25	35	28	26	10	16	14	10	14	21	26	16	24
· ·	Hawaii	I	ł	ł	1	1	ł	ł	1	I	4	I	ł	1	I	1	I	4	3	I	ł
int 17 21 17 30 27 29 23 30 27 25 16 25 19 26 16 19 27 na 8 9 7 7 5 7 14 3 3 8 8 8 13 6 3 na 7 7 7 14 3 3 8 8 8 13 6 3 3 na 4 6 8 5 3 4 3 4 4 4 10 8 6 10 12 7 4 4 10 8 5 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 10 10 10 1 4 10 10	Idaho	I	6	5	I	6	З	9	3	7	ł	5	4	5	ł	1	6	5	5	9	8
na 7 7 5 7 7 14 3 3 8 8 8 13 6 3 na 7 4 6 3 3 8 8 8 8 13 6 3 as 7 3 13 6 3 4 7 as 15 5 5 4 11 10 4 5 3 4 10 8 6 10 12 7 as 6 7 6 7 3 14 10 12 12 12 12 12 12 12 12 12 12 14 10 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14<	Illinois	17	21	17	30	27	22	29	23	30	27	25	16	25	25	19	26	16	19	27	17
as - - - - 4 - 8 5 3 4 - 3 4 as 15 5 6 5 4 11 10 4 5 9 8 4 10 8 6 10 12 7 cky 3 6 7 8 4 10 8 6 10 12 7 liana 8 10 11 5 11 7 8 5 7 7 and 8 5 7	Indiana	I	ł	ł	œ	6	7	7	5	7	7	14	ю	ю	ω	ω	ω	13	9	ю	8
s 15 5 5 6 5 4 11 10 4 5 9 8 4 10 8 6 10 12 7 xy 3 6 7 3 3 6 8 5 7 7 ana 5 5 9 8 10 11 5 11 7 8 13 15 8 9 10 ana 14 9 8 10 11 5 11 7 8 13 15 8 9 10 10 ana 14 9 8 10 11 7 8 9 10 1	lowa	I	1		1	-	1	7	1	I	4	9	8	5	3	4	I	ю	1	4	1
ity 3 6 7 3 3 5 7 ana 5 5 9 8 10 11 5 11 7 8 13 15 8 9 10 ana 14 9 8 10 11 5 11 7 8 13 15 8 9 10 and 14 <	Kansas	15	5	5	9	5	4	11	10	4	£	б	ω	4	10	ω	9	10	12	7	12
ana 9 8 10 11 5 11 7 8 13 15 8 9 10 and 14 10 11 17 8 22 7 10 3 12 8 15 15 8 9 14 and 10 11 17 8 22 7 10 3 12 8 9 14	Kentucky	I	1	1	1	1	З	ł	9	7	9	7	З	1	3	9	I	8	5	7	1
nd 14 - - - 14 - - 10 11 17 8 22 7 10 3 12 8 9 14	Louisiana	I	ł	5	5	1	1	6	8	10	11	5	11	7	8	13	15	8	6	10	12
6 10 11 17 8 22 7 10 3 12 8 15 15 8 9 14	Maine	I	ł	ł	ł	14	ł	ł	ł	ł	ł	I	1	1	I	ł	I	ł	1	I	ł
	Maryland	I	ł	9	I	10	11	17	80	22	7	10	3	12	8	15	15	ω	6	14	21

Hispanic and Latino Worker Fatalities by State, 1998–2017¹

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Massachusetts	ł	6	ł	9	5	9	6	9	7	1	10	5	7	11	ю	с	2	4	10	14
Michigan	9	12	9	7	7	4	9	ω	12	7	ø	4	10	4	4	ς	9	12	7	10
Minnesota	I	:	5	I	ł	5	с	9	4	:	I	1	ю	1	:	I	4	1	9	5
Mississippi	I	I	5	11	5	ł	4	з	З	7	7	4	5	I	ł	I	1	7	I	з
Missouri	I	I	I	8	1	6	4	ł	4	7	4	6	3	4	1	5	5	7	5	4
Montana	I	I	ł	5	1	I	1	4	3	3	I	3	3	1	ł	I	1	1	1	1
Nebraska	I	1	1	ł	6	3	4	ł	I	4	5	1	3	3	5	3	6	4	1	4
Nevada	9	6	10	10	8	10	17	6	12	12	13	6	6	8	8	6	8	13	14	6
New Hampshire	I	ł	ł	ł	1	I	1	ł	I	ł		1	ł	I	1	I	ł	-	I	1
New Jersey	12	17	23	25	33	24	34	30	28	23	25	25	20	26	15	20	31	22	26	11
New Mexico	17	13	6	27	21	6	12	19	30	21	10	16	17	23	22	20	22	13	16	11
New York	34	42	55	45	43	36	45	34	57	41	33	35	29	30	39	32	50	51	47	43
North Carolina	14	12	22	20	25	21	26	27	23	14	20	12	13	21	13	16	19	17	19	20
North Dakota	I	I	ł	ł	ł	I	ł	1	I	ł	I	4	5	ю	12	I	1	4	1	I
Ohio	5	:	5	9	ł	15	5	5	ω	9	4	4	ω	-	ω	2	ю	1	10	15
Oklahoma	5	:	1	16	œ	ε	13	ω	ω	13	6	7	17	10	7	18	16	17	10	16
Oregon	10	ł	6	5	1	7	4	6	11	6	I	8	6	6	ł	6	8	5	12	5
Pennsylvania	7	8	16	10	12	10	9	11	14	16	11	10	13	14	13	4	13	17	7	6
Rhode Island	I	I	ł	ł	ł	I	1	ł	I	ł	-	1	1	3	ł	I	-	-	I	ł
South Carolina	I	7	12	0	7	18	13	10	10	7	∞	10	10	10	4	7	9	10	ი	б

Hispanic and Latino Worker Fatalities by State, 1998–2017¹

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
South Dakota	I	I	ł	I	1	1	1	1	1	1	ю	1	1	1	1	I	1	1	ю	1
Tennessee	1	5	12	5	7	∞	റ	5	14	œ	6	œ	œ	ര	6	6	9	10	1	œ
Texas	175	151	190	170	147	163	150	200	174	211	148	185	165	171	201	192	206	220	211	219
Utah	6	5	9	8	9	11	5	4	9	10	9	8	4	e	9	5	2	4	10	9
Vermont	1					I	1	1	ł	1	I	1	1	, -	ł	1	1	1	ł	ł
Virginia	9	12	5	12	15	13	13	24	13	18	16	~	6	4	15	22	6	6	20	12
Washington	17	1	13	13	15	5	14	~	~	10	œ	7	14	ъ	12	4	ω	14	13	ი
West Virginia	1	1	1	1	:	1	:	4	1	:	1	1	:	1	:	1	1	1	1	:
Wisconsin	I	1	I	8	ł	з	1	6	с	5	1	5	4	4	7	7	5	7	4	7
Wyoming	I	ł	5	5	8	ł	3	1	I	8	I	1	1	I	3	I	3	4	4	3
Totals ^{2,3}	707	730	815	891	840	794	902	923	066	937	804	713	707	749	748	817	804	903	879	903

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹Latino includes both foreign-born and native-born. The foreign-born are persons residing in the United States who were not U.S. citizens at birth. That is, they were born outside the United States or one of its outlying areas such as Puerto Rico or Guam, to parents neither of whom was a U.S. citizen. The foreign-born population includes legally admitted immigrants, refugees, temporary residents such as tuenoras and temporary workers, and undocumented immigrants. The survey data, however, do not separately identify the number of persons in these categories.

²Total includes fatalities that occurred in the District of Columbia. In 2017, D.C. had four Hispanic or Latino fatalities.

³States cannot always be assigned fatality cases. For example, some fatalities occur at sea outside of specific state jurisdictions, or the state is otherwise undetermined.

Note: Dashes indicate no data reported or data that do not meet BLS publication criteria.

Foreign-Born Worker Fatalities by State, 1998–2017¹

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Alabama	1	ł	ł	ł	5	ю	9	10	ł	5	ю	7	10	5	ω	7	5	4	5	10
Alaska	1	I	1	ი	I	1	7	5	4	4	ε	ł	9	7	4	ł	2	2	ł	ю
Arizona	23	21	19	29	22	15	21	31	27	18	21	14	15	15	16	19	22	18	25	20
Arkansas	!	2	ი	ł	I	ł	4	ł	ł	6	7	з	12	5	4	ω	11	12	ω	7
California	111	223	195	208	170	146	174	203	229	182	145	146	145	164	153	176	137	162	151	161
Colorado	12	15	11	23	11	22	21	11	21	24	14	16	13	16	14	6	13	12	16	19
Connecticut	13	5	14	20	7	7	15	7	10	4	ł	З	10	ი	8	ω	ω	14	6	9
Delaware	1	ł	ł	ł	ł	ł	ł	ł	5	1	ł	1	1	5	4	4	ю	-	2	2
Florida	65	69	91	96	106	109	123	119	119	121	86	62	55	67	64	74	72	93	104	76
Georgia	22	14	28	57	20	34	24	31	35	28	27	4	4	18	16	13	31	31	31	33
Hawaii	!	1	9	11	ω	4	6	4	11	6	4	з	4	7	7	2	8	4	4	7
Idaho	!	5	5	ł	ω	з	4	З	7	3	5	3	9	з	~	5	6	4	9	11
Illinois	29	31	28	52	37	42	44	36	37	34	34	23	42	38	28	31	27	24	30	33
Indiana	ω	5	7	11	11	ი	10	13	12	6	13	5	ω	ø	11	16	15	10	6	13
lowa	!	ł	1	ł	I	1	5	ł	ł	7	7	ω	ო	2	7	4	ю	ю	9	2
Kansas	ω	I	5	5	7	9	10	12	4	5	10	5	4	თ	ω	9	7	7	4	11
Kentucky	1	I	1	ł	ω	I	с	7	10	5	7	9	ł	4	9	9	6	ω	ø	ю
Louisiana	7	I	7	6	I	I	ю	10	11	7	5	6	9	7	16	15	10	10	15	12
Maine	5	1	1	ł	15	1	ł	ł	ł	ł	ł	ł	с	1	-	2	!	-	-	4
Maryland	6	15	12	8	16	21	24	26	34	18	15	10	16	12	20	21	17	16	19	25

Foreign-Born Worker Fatalities by State, 1998–2017¹

State	1998	1999	2000 2001	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Massachusetts	9	16	5	7	14	14	22	22	-	18	16	13	15	16	7	16	10	15	18	19
Michigan	2	24	18	15	15	16	11	12	19	14	10	8	17	10	12	12	15	16	13	10
Minnesota	:	1	ł	1	5	5	4	10	9	1	ł	ł	5	-	5	2	4	4	ω	7
Mississippi	1	ł	ł	9	5	ł	ю	8	ł	6	5	ю	9	4	2	ю	ю	10	S	ю
Missouri	1	10	7	9	7	5	6	9	6	12	8	6	4	ł	ł	19	10	1	9	7
Montana	1	1	ł	ł	I	1	ł	ł	4	з	ł	5	;	~	4	ю	ł	2	ю	ю
Nebraska	1	1	ł	ł	12	1	З	ł	ł	5	9	4	ю	ю	7	4	ω	2	5	З
Nevada	7	ი	ი	12	13	ი	15	8	6	11	11	ł	6	13	11	5	6	14	16	6
New Hampshire	1	ł	ł	ł	I	с	ł	1	1	1	ł	ł	;	ł	-	ł	-	-	ł	з
New Jersey	26	25	31	37	41	41	39	47	34	36	40	41	20	40	27	31	30	38	39	16
New Mexico	8	1	ł	15	9	4	6	7	10	8	5	5	8	10	10	8	13	7	8	ł
New York	66	67	91	75	80	73	74	79	06	66	71	57	63	57	65	60	66	69	62	71
North Carolina	13	17	7	22	26	26	25	29	27	21	25	22	18	29	21	21	22	26	28	23
North Dakota	1	1	ł	1	1	4	ł	ł	ł	ł	ł	ł	з	з	12	-	!	9	-	-
Ohio	ω	6	12	7	13	18	10	11	13	ω	10	10	13	8	19	13	12	22	10	18
Oklahoma	1	ł	ł	13	15	7	11	1	ł	14	5	7	13	10	7	17	10	16	13	21
Oregon	5	11	ł	ł	9	5	9	8	6	7	I	10	10	9	2	11	ω	4	12	7
Pennsylvania	6	11	16	16	13	15	19	24	23	28	25	22	34	28	19	11	18	17	12	10
Rhode Island	1	ł	ł	ł	I	4	ł	ł	ł	ł	ł	ł	ł	ł	4	ł	2	-	-	ł
South Carolina	9	7	16	12	8	18	18	13	11	10	8	8	13	11	4	7	8	13	12	8
													Ī	ľ						

Foreign-Born Worker Fatalities by State, 1998–2017¹

	State	1998	1999	1999 2000 2001	2001	2002 2003		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	South Dakota	1	1	1	ł	ł	1	!	!	1	ł	ł	1	1	1	1	3	-	1	3	-
	Tennessee	ł	1	5	ł	7	15	12	14	23	12	19	13	17	12	11	15	6	11	12	20
	Texas	111	100	115	122	110	121	101	135	112	153	104	125	117	115	107	134	124	156	156	153
	Utah	5	8	6	8	9	12	4	8	5	8	12	4	8	5	4	6	10	5	11	3
	Vermont	1	ł	1	ł	ł	ł	1	!	1	1	ł	1	ł	1	1	1	1	-	1	1
	Virginia	10	18	17	22	20	22	41	33	17	31	18	21	12	19	25	22	19	11	34	20
	Washington	19	7	13	17	19	9	21	6	12	23	15	6	11	12	15	8	13	10	13	15
	West Virginia	1	1	ł	ł	ł	1	!		1	3	ł	ł	ł	1	2	2	1	1	3	2
	Wisconsin	1	7	1	9	ł	5	5	6	1	5	ł	4	ł	6	13	8	7	13	7	7
164	Wyoming	1	ł	ł	ł	ł	1	ł	ł	4	7	ł	1	1	5	4	3	4	2	З	7
	Totals ^{2,3}	654	811	849	994	929	890	979	1,035	1,046	1,009	835	740	798	843	824	879	846	943	970	927

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

¹The foreign-born are persons residing in the United States who were not U.S. citizens at birth. That is, they were born outside the United States or one of its outlying areas such as Puerto Rico or Guam, to parents neither of whom was a U.S. citizen. The foreign-born population includes legally admitted immigrants, refugees, temporary residents such as students and temporary workers, and undocumented immigrants. The survey data, however, do not separately identify the number of persons in these categories.

²Totals include fatalities that may have occurred in the District of Columbia. In 2017, D.C. had five foreign-born fatalities.

³States cannot always be assigned fatality cases. For example, some fatalities occur at sea outside of specific state jurisdictions, or the state is otherwise undetermined.

Note: Dashes indicate no data reported or data that do not meet BLS publication criteria.

STATE PROFILES

ALABAMA



Worker Safety and Health

*	}
Number of employees: ¹	1,936,819
Number of establishments: ¹	124,881
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	308,917
Number of workplace fatalities, 2017: ³	83
Rate per 100,000 workers: ⁴	4.3
National rate:	3.5
Ranking of state fatality rate, 2017:5	31
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	32,900
Rate per 100 workers:	2.5
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	17,600
Rate per 100 workers:	1.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	24
Length of time it would take for OSHA to inspect each workplace once:	131
Number of workplace safety and health inspections conducted, FY 2018: ⁹	913
Construction:	431
Non-construction:	482
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,598
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$20,606
National average:	\$14,231
$\begin{array}{c} \mathbf{S}_{1} \\ \mathbf{S}_{2} \\ \mathbf{S}_{2} \\ \mathbf{I}_{1} \\ \mathbf{I}_{2} \\ \mathbf{I}_{1} \\ \mathbf{I}_{2} \\ \mathbf{I}_{1} \\ \mathbf{I}_{2} \\ \mathbf{I}_{1} \\ \mathbf{I}_{2} \\ \mathbf{I}_{1} \\ \mathbf{I}_{1$	—— Alabama ···· National
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

Prepared by AFL-CIO Safety and Health, April 2019

ALASKA



Worker Safety and Health

-	and the former of the second sec
Number of employees:1	322,136
Number of establishments: ¹	21,789
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	33
Rate per 100,000 workers: ⁴	10.2
National rate:	3.5
Ranking of state fatality rate, 2017:5	50
Total cases of workplace injuries and illnesses, private industry,	2017: ⁶ 7,500
Rate per 100 workers:	3.8
National rate:	2.8
Total injury and illness cases with days away from work, job trans	sfer or
restriction, private industry, 2017: ⁷	3,700
Rate per 100 workers: National rate:	1.9 1.5
	1.0
Number of workplace safety and health inspectors, FY 2019: ⁸	22
Length of time it would take for OSHA to inspect each workplace	e once: 77
Number of workplace safety and health inspections conducted, F	FY 2018: ⁹ 282
Construction:	75
Non-construction:	207
Avg. penalty assessed for serious violations of the OSH Act, FY	2018: ⁹ \$1,676
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average:	\$6,600 \$14,231
14 ₇	· · · · · ·
5 12 - 11.5 11.1	
	10.6 10.2
	Alaska
$\begin{array}{c} 12 \\ 10 \\ 10 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \\ 12 \\ 10.6 \\ 11.5 \\ 11.1 \\ 8.9 \\ 7.9 \\ 7.8 \\ 5.6 \\ 5.6 \\ 5.6 \\ 4.1 \\ 4 \\ 10 \\ 4 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 $	····◆··· National
0 2007 2008 2009 2010 2011 2012 2013 2014 201	5 2016 2017

Prepared by AFL-CIO Safety and Health, April 2019

ARIZONA Worker Safety and Health	*
Number of employees:1	
Number of establishments:1	
State or federal OSHA program: ²	

Number of workplace fatalities, 2017:3 Rate per 100,000 workers:⁴ National rate:

National rate:

Ranking of state fatality rate, 2017:5	15
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶ Rate per 100 workers:	56,300 2.9
National rate:	2.8
Total initial and illusors appear with doub successform would job the sefer on	

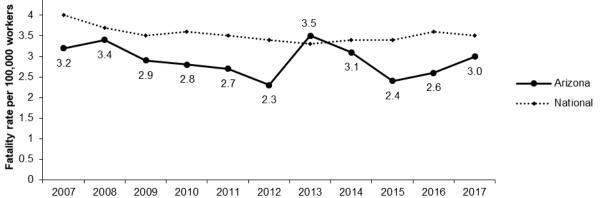
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017:7	
Rate per 100 workers:	

Number of workplace safety and health inspectors, FY 2019:8	
Length of time it would take for OSHA to inspect each workplace once:	

Number of workplace safety and health inspections conducted, FY 2018:9 Construction: Non-construction:

Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$1,140
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$4,748





2,747,638

157,531

State

90

3.0

3.5

28,900 1.5

1.5

16 226

698

234

464



ARKANSAS Worker Safety and Health

Number of employees: ¹	1,200,542
Number of establishments: ¹	89,291
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	176,427
Number of workplace fatalities, 2017: ³	76
Rate per 100,000 workers: ⁴	6.1
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	41
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	22,000
Rate per 100 workers:	2.5
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	10,400
Rate per 100 workers:	1.2
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	7
Length of time it would take for OSHA to inspect each workplace once:	272
Number of workplace safety and health inspections conducted, FY 2018: ⁹	317
Construction:	162
Non-construction:	155
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,872
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$9,970
National average:	\$14,231
$ \begin{array}{c} 9 \\ 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ 0 \end{array} \right) \begin{array}{c} 6.8 \\ 6.4 \\ 5.4 \\ 5.6 \\ 5.7 \\ 5.8 \\ 5.3 \\ 6.1 \\ 5.4 \\ 5.6 \\ 5.7 \\ 5.8 \\ 5.3 \\ 6.1 $	—●— Arkansas ····• National
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

Prepared by AFL-CIO Safety and Health, April 2019

Worker Safety and Health Number of employees: ¹ Number of establishments: ¹ State or federal OSHA program: ²	17,019,702 1,515,798 State
Number of workplace fatalities, 2017: ³	376
Rate per 100,000 workers: ⁴	2.2
National rate:	3.5
Ranking of state fatality rate, 2017:5	5
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	362,600
Rate per 100 workers:	3.2
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	219,300
Rate per 100 workers:	2.0
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	234
Length of time it would take for OSHA to inspect each workplace once:	185
Number of workplace safety and health inspections conducted, FY 2018: ⁹	8,192
Construction:	2,496
Non-construction:	5,696
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9 National average: Avg. total penalty per fatality investigation, FY 2018:10 National average: 	\$7,699 \$2,729 \$18,686 \$14,231
$\begin{array}{c} 4.5 \\ 4 \\ 3.5 \\ 3 \\ 2.5 \\ 2.6 \\ 2.8 \\ 2.6 \\ 2.8 \\ 2.6 \\ 2.4 \\ 2.1 \\ 2.4 \\ 2.3 \\ 2.4 \\ 2.3 \\ 2.4 \\ 2.0 \\ 2.0 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.2 \\ 2.1 \\ 2.0$	—●— Califomia • National

Prepared by AFL-CIO Safety and Health, April 2019

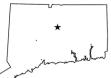
COLORADO



Worker Safety and Health

Worker Galety and Health	
Number of employees: ¹	2,609,770
Number of establishments: ¹	198,720
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	358,524
Number of workplace fatalities, 2017: ³	77
Rate per 100,000 workers: ⁴	2.8
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	11
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	27
Length of time it would take for OSHA to inspect each workplace once:	166
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,186
Construction:	770
Non-construction:	416
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9 National average: Avg. total penalty per fatality investigation, FY 2018:10 National average: 	\$2,775 \$2,729 \$27,764 \$14,231
$\begin{array}{c} \mathbf{s}_{\mathbf{s}} \\ \mathbf{s}_{s$	—● Colorado ◆… National

CONNECTICUT



Worker Safety and Health

	and the second se	
Number of	employees:1	1,669,616
	establishments: ¹	118,612
	deral OSHA program: ²	Federal
		reuerai
Number of	workplace fatalities, 2017: ³	35
	ate per 100,000 workers: ⁴	1.9
N	ational rate:	3.5
Ranking of	state fatality rate, 2017: ⁵	4
	s of workplace injuries and illnesses, private industry, 2017: ⁶	37,600
	ate per 100 workers:	3.2
N	ational rate:	2.8
-		
	and illness cases with days away from work, job transfer or	
	private industry, 2017: ⁷	22,200
	ate per 100 workers:	1.9
N	ational rate:	1.5
		47
	workplace safety and health inspectors, FY 2019:8	17
Length of t	ime it would take for OSHA to inspect each workplace once:	181
Number of	workplace safety and health inspections conducted, FY 2018:9	825
	onstruction:	340
	on-construction:	485
IN		400
Avg. penal	ty assessed for serious violations of the OSH Act, FY 2018:9	\$3,108
01	ational average:	\$2,729
	penalty per fatality investigation, FY 2018:10	\$8,497
	ational average:	\$14,231
4.5 _T		÷ · · ;— • ·
s 4 -	*****	
5 3.5 -	3.0	
4 - 3.5 - 3 - 2.5 - 2.5 - 1.5 - 1.5 - 1.5 - 2.0 - 1.5 -	2.6	
8 2.5 -	2.1 2.0 2.2 2.1 2.1	Connecticut
b 2 -		
a a 1.5 -		····+ National
- 1 ality		
. - 2.0 .		
0 +		
2	2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

DELAWARE

Worker Safety and Health

worker Safety and Health	
Number of employees: ¹	441,873
Number of establishments: ¹	31,962
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	56,924
Number of workplace fatalities, 2017: ³	10
Rate per 100,000 workers: ⁴	2.4
National rate:	3.5
Ranking of state fatality rate, 2017:5	7
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	6,900
Rate per 100 workers:	2.3
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	3,700
Rate per 100 workers:	1.2
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	4
Length of time it would take for OSHA to inspect each workplace once:	218
Number of workplace safety and health inspections conducted, FY 2018:9	145
Construction:	93
Non-construction:	52
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 4.5 1 	\$3,996 \$2,729 \$47,591 \$14,231
H H H H H H H H	—●— Delaware ····• National

DISTRICT OF COLUMBIA Worker Safety and Health	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$
Number of employees: ¹	763,847
Number of establishments: ¹	39,939
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	39,752
Number of workplace fatalities, 2017: ³	13
Rate per 100,000 workers: ⁴	3.4
National rate:	3.5
Ranking of state fatality rate, 2017:5	N/A
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	6,400
Rate per 100 workers:	1.5
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	3,200
Rate per 100 workers:	0.7
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	N/A
Length of time it would take for OSHA to inspect each workplace once:	257
Number of workplace safety and health inspections conducted, FY 2018: ⁹	155
Construction:	132
Non-construction:	23
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,513
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$12,334
National average:	\$14,231
7.3 7.3 6 6 5 4 3 2.9 5.2 4.3 5.2 3.6 5.2 3.6 3.6 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4	—●— District of Columbia ····• National

FLORIDA Worker Safety and Health	
Number of employees: ¹	8,494,623
Number of establishments: ¹	673,498
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	918,296
Number of workplace fatalities, 2017: ³	299
Rate per 100,000 workers: ⁴	3.3
National rate:	3.5
Ranking of state fatality rate, 2017:5	20
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	58
Length of time it would take for OSHA to inspect each workplace once:	277
Number of workplace safety and health inspections conducted, FY 2018: ⁹	2,414
Construction:	1,338
Non-construction:	1,076
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,653
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$15,744
National average:	\$14,231
$\begin{array}{c} 4.5 \\ 4 \\ 3.5 \\ 3 \\ 2.5 \\ 2 \\ 1.5 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	—●— Florida ····• National

GEORGIA

Worker Safety and Health

* .

worker Safety and Health	
Number of employees: ¹	4,346,453
Number of establishments: ¹	273,853
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	545,932
Number of workplace fatalities, 2017: ³	194
Rate per 100,000 workers: ⁴	4.1
National rate:	3.5
Ranking of state fatality rate, 2017:5	29
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	78,200
Rate per 100 workers:	2.6
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	40,700
Rate per 100 workers:	1.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	40
Length of time it would take for OSHA to inspect each workplace once:	150
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,777
Construction:	853
Non-construction:	924
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹ National average: Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average: 4.3	\$3,571 \$2,729 \$15,446 \$14,231
S A A A A A A A A	—●— Georgia ····•♦··· National

HAWAII



Worker Safety and Health

Number of employees: ¹	654,185
Number of establishments: ¹	41,078
State or federal OSHA program: ²	State
State of federal OSHA program.	Oldie
Number of workplace fatalities, 2017: ³	20
Rate per 100,000 workers: ⁴	2.2
National rate:	3.5
National fate.	5.5
Ranking of state fatality rate, 2017:⁵	5
Total appage of workplace injurice and illnessee, private inductor, 2017-6	15 700
Total cases of workplace injuries and illnesses, private industry, 2017:6	15,700
Rate per 100 workers: National rate:	3.8 2.8
National fate.	2.0
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	9,600
Rate per 100 workers:	2.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	18
Length of time it would take for OSHA to inspect each workplace once:	53
Number of workplace safety and health inspections conducted, FY 2018:9	779
Construction:	460
Non-construction:	319
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$3,069
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$23,810
National average:	\$14,231
⁵] Å ^{5.0}	
4.5 - 4.2	
3.5 - •	******
	—● — Hawaii
	→ ···· National
2.1 V	2.2
1.6	
4 3.5 3.5 2.4 2.4 2.1 3.2 3.4 3.4 2.6 2.0 000 000 2.5 2.4 2.4 2.1 1.6	
u 0.5 -	
0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2010	6 2017
	, 2017

IDAHO Worker Safety and Health

Worker Safety and Health	
Number of employees: ¹ Number of establishments: ¹ State or federal OSHA program: ² Number of state and local public employees not covered by the O	* 706,820 61,174 61,174 Federal 104,526
Number of workplace fatalities, 2017: ³ Rate per 100,000 workers: ⁴ National rate:	37 4.8 3.5
Ranking of state fatality rate, 2017:5	38
Total cases of workplace injuries and illnesses, private industry, 2 Rate per 100 workers: National rate:	017: ⁶ N/A N/A 2.8
Total injury and illness cases with days away from work, job trans restriction, private industry, 2017: ⁷ Rate per 100 workers: National rate:	fer or N/A N/A 1.5
Number of workplace safety and health inspectors, FY 2019: ⁸ Length of time it would take for OSHA to inspect each workplace	once: 170
Number of workplace safety and health inspections conducted, F Construction: Non-construction:	Y 2018: ⁹ 346 187 159
 Avg. penalty assessed for serious violations of the OSH Act, FY 2 National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	2018: ⁹ \$3,423 \$2,729 \$8,022 \$14,231
6 5 4 3 2 1 0 2007 2008 2009 2010 2011 2012 2013 2014	4.8 4.8 4.1 for the second sec

ILLINOIS	
Worker Safety and Health	
Number of employees: ¹	5,934,549
Number of establishments: ¹	362,259
State or federal OSHA program: ²	Federal
Number of workplace fatalities, 2017: ³	163
Rate per 100,000 workers: ⁴	2.8
National rate:	3.5
Ranking of state fatality rate, 2017:5	11
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	108,200
Rate per 100 workers:	2.6
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	59,400
Rate per 100 workers:	1.4
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	57
Length of time it would take for OSHA to inspect each workplace once:	144
Number of workplace safety and health inspections conducted, FY 2018: ⁹	2,512
Construction:	1,247
Non-construction:	1,265
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9 National average: Avg. total penalty per fatality investigation, FY 2018:10 National average: 	\$3,615 \$2,729 \$8,402 \$14,231
$\begin{array}{c} 4.5 \\ 4 \\ 3.5 \\ 3 \\ 2.9$	— Illinois National

INDIANA	
Worker Safety and Health	
Number of employees: ¹	3,018,177
Number of establishments: ¹	164,727
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	138
Rate per 100,000 workers: ⁴	4.5
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	35
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	71,500
Rate per 100 workers:	3.3
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	36,800
Rate per 100 workers:	1.7
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	38
Length of time it would take for OSHA to inspect each workplace once:	135
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,221
Construction:	588
Non-construction:	633
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$1,278 \$2,729 \$7,149 \$14,231
Example 1 Example 1 Examp	— ● Indiana ····• National
0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

	<u>}</u> .		. <
alth		*	, ,

IOWA

Number of employees: ¹	1,540,435
Number of establishments: ¹	101,609
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	72
Rate per 100,000 workers: ⁴	4.7
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	36
Total cases of workplace injuries and illnesses, private industry, 2017:6	38,100
Rate per 100 workers:	3.5
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	19,600
Rate per 100 workers:	1.8
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	22 118
Length of time it would take for OSHA to inspect each workplace once:	118
Number of workplace safety and health inspections conducted, FY 2018:9	863
Construction:	393
Non-construction:	470
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$2,646
National average:	\$2,729 \$10,709
Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average:	\$10,709 \$14,231
National average.	φ1 4 ,201
6.3 6.6	
5.5 5.9 5.6 6.0 6.0	
	Iowa
6 - 0.0 6 - 0.	····+ National
, rate	
0	
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

KANSAS



Worker Safety and Health

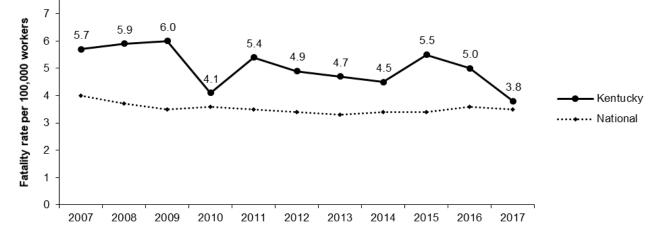
Number of employees: ¹	1,371,633
Number of establishments: ¹	88,815
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Ac	t: 216,639
Number of workplace fatalities, 2017: ³	72
Rate per 100,000 workers: ⁴	5.2
National rate:	3.5
Ranking of state fatality rate, 2017:5	39
Total cases of workplace injuries and illnesses, private industry, 2017:6	28,200
Rate per 100 workers:	3.0
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	45.400
restriction, private industry, 2017: ⁷ Rate per 100 workers:	15,400 1.6
National rate:	1.5
	1.0
Number of workplace safety and health inspectors, FY 2019: ⁸	9
Length of time it would take for OSHA to inspect each workplace once:	137
Number of workplace safety and health inspections conducted, FY 2018 Construction:	3: ⁹ 619 324
Non-construction:	295
	233
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$3,600
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$50,348
National average:	\$14,231
7 - 6.8 6.5	
5.8 5.9 5.7 5.9	
5 .3 5 .7 5 .5 5 .7 5 .5	2 5.2
	,●
	— Kansas
6 6 5.9 5.7 5.5 5.5	·····• National
0 +	
2007 2008 2009 2010 2011 2012 2013 2014 2015 20	16 2017

KENTUCKY

★

Worker	Safetv	and	Health	
	Juilty	ana	I I VAILII	

9	
Number of employees:1	1,874,455
Number of establishments: ¹	121,431
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	70
Rate per 100,000 workers: ⁴	3.8
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	27
Total cases of workplace injuries and illnesses, private industry, 2017:6	41,200
Rate per 100 workers:	3.1
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	21,300
Rate per 100 workers:	1.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	34
Length of time it would take for OSHA to inspect each workplace once:	175
Number of workplace safety and health inspections conducted, FY 2018:9	693
Construction:	200
Non-construction:	493
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$3,542
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$17,900
National average:	\$14,231



LOUISIANA Worker Safety and Health

worker Safety and Health	
Number of employees: ¹	1,907,721
Number of establishments: ¹	130,466
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	278,412
	,
Number of workplace fatalities, 2017: ³	117
Rate per 100,000 workers:⁴	6.3
National rate:	3.5
Ranking of state fatality rate, 2017:5	43
Total cases of workplace injuries and illnesses, private industry, 2017:6	25,400
Rate per 100 workers:	23,400
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	12,500
Rate per 100 workers:	0.9
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	10
Length of time it would take for OSHA to inspect each workplace once:	265
Number of workplace safety and health inspections conducted, FY 2018:9	474
Construction:	235
Non-construction:	239
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$3,811
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$15,256
National average:	\$14,231
9 8.0	
6.2 6.3 6.4 6.3 6.3 6.3	
8 7.3 7.3 7.3 6.2 6.3 6.4 6.3 6.3 9000000 6 6.2 6.3 6.4 6.3 6.3 6.3 1 1 1 1 1 1 1 1 1	
	Louisiana
eg _	····◆··· National
0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

MAINE

Worker Safety and Health

Worker Safety and Health	
Number of employees: ¹	609,271
Number of establishments: ¹	53,934
State or federal OSHA program: ²	Federal
Number of workplace fatalities, 2017: ³	18
Rate per 100,000 workers: ⁴	2.7
National rate:	3.5
Ranking of state fatality rate, 2017:5	10
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	19,100
Rate per 100 workers:	4.8
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	10,600
Rate per 100 workers:	2.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	11
Length of time it would take for OSHA to inspect each workplace once:	165
Number of workplace safety and health inspections conducted, FY 2018: ⁹	327
Construction:	104
Non-construction:	223
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹ National average: Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average: 4.5 1	\$3,440 \$2,729 \$8,084 \$14,231
$\begin{array}{c} 4.5 \\ 4 \\ 3.5 \\ 3 \\ 3.5 \\ 3.5 \\ 3.1 \\ 2.5 \\ 1.5 \\ 1.5 \\ 1.5 \\ 0 \\ 2007 \\ 2008 \\ 2009 \\ 2010 \\ 2011 \\ 2011 \\ 2012 \\ 2013 \\ 2014 \\ 2015 \\ 2016 \\ 2017 \\$	Maine ····• National

MARYLAND



Worker Safety and Health	
Number of employees: ¹	2,653,569
Number of establishments: ¹	172,188
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	87
Rate per 100,000 workers: ⁴	3.0
National rate:	3.5
Ranking of state fatality rate, 2017:5	15
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	46,600
Rate per 100 workers:	2.6
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	27,900
Rate per 100 workers:	1.5
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	55
Length of time it would take for OSHA to inspect each workplace once:	88
Number of workplace safety and health inspections conducted, FY 2018:9	1,951
Construction:	1,507
Non-construction:	444
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$681
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$21,047
National average:	\$14,231
S 4 3 5 3 5 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 5 3 3 3 3 3 3 3 3 3 3	3.0 — Maryland National

MASSACHUSETTS



Worker Safety and Health

Number of employees: ¹	3,543,383
Number of establishments: ¹	252,761
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	382,028
Number of workplace fatalities, 2017: ³	108
Rate per 100,000 workers: ⁴	3.2
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	18
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	65,100
Rate per 100 workers:	2.7
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	36,700
Rate per 100 workers:	1.5
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	32
Length of time it would take for OSHA to inspect each workplace once:	209
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,176
Construction:	717
Non-construction:	459
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9 National average: Avg. total penalty per fatality investigation, FY 2018:10 National average: 	\$3,597 \$2,729 \$29,562 \$14,231
$\begin{array}{c} 4.5 \\ 4.5 \\ 3.5 \\ 000 \\ 001 \\ 2.5 \\ 2.3 \\ 2.2 \\ 2.3 \\ 2.2 \\ 2.2 \\ 1.8 \\ 1.4 \\ 1.4 \\ 1.4 \\ 1.7 \\ 1.4 \\ 2.012 \\ 2013 \\ 2014 \\ 2015 \\ 2016 \\ 2017 \\ 2016 \\ 2016 \\ 2017 \\ 2016 \\ 2017 \\ 2016 \\ 2017 \\ 2016 \\ 2017 \\ 2016 \\ 2016$	—●— Massachusetts ····• National

MICHIGAN	
Worker Safety and Health	
Number of employees: ¹	4,294,711
Number of establishments: ¹	244,908
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	153
Rate per 100,000 workers: ⁴	3.4
National rate:	3.5
Ranking of state fatality rate, 2017:5	22
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	93,900
Rate per 100 workers:	3.1
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	46,900
Rate per 100 workers:	1.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	60
Length of time it would take for OSHA to inspect each workplace once:	56
Number of workplace safety and health inspections conducted, FY 2018: ⁹	4,393
Construction:	2,336
Non-construction:	2,057
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$1,179
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$3,888
National average:	\$14,231
Signal for the second 	—●— Michigan ····•♦··· National

MINNESOTA Worker Safety and Health	
Number of employees: ¹	2,856,105
Number of establishments: ¹	167,815
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	101
Rate per 100,000 workers: ⁴	3.5
National rate:	3.5
Ranking of state fatality rate, 2017:5	23
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	63,300
Rate per 100 workers:	3.2
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	31,800
Rate per 100 workers:	1.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	39
Length of time it would take for OSHA to inspect each workplace once:	91
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,851
Construction:	607
Non-construction:	1,244
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹ National average: Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average: $\begin{pmatrix} 4.5 \\ 4 \\ 3.5 \\ 8 \\ 3.5 \\ 3.4 \end{bmatrix}$	\$987 \$2,729 \$35,816 \$14,231
S S S S S S S S	—●— Minnesota ····• National
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

MISSISSIPPI

Worker Safety and Health

State or federal OSHA program: ² Fe	9,498 9,073 deral 9,065
Number of state and local public employees not covered by the OSH Act: 209	
Number of workplace fatalities, 2017: ³	90
Rate per 100,000 workers: ⁴	6.2
National rate:	3.5
Ranking of state fatality rate, 2017:5	42
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	11
Length of time it would take for OSHA to inspect each workplace once:	167
Number of workplace safety and health inspections conducted, FY 2018: ⁹	421
Construction:	172
Non-construction:	249
National average:\$2Avg. total penalty per fatality investigation, FY 2018:10\$14	9,246 2,729 -,385 -,231
S S S S S S S S	ssippi

MISSOURI

Worker Safety and Health

MISSOURI	
Worker Safety and Health	
Number of employees: ¹	2,781,242
Number of establishments: ¹	205,150
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	360,133
Number of workplace fatalities, 2017: ³	125
Rate per 100,000 workers: ⁴	4.4
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	33
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	50,600
Rate per 100 workers:	2.6
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	24,700
Rate per 100 workers:	1.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	24
Length of time it would take for OSHA to inspect each workplace once:	172
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,144
Construction:	675
Non-construction:	469
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$3,630 \$2,729 \$16,752 \$14,231
$\begin{array}{c} & & & & & & & & & & & & & & & & & & &$	—● Missouri ····• National

MONTANA



Worker Safety and Health

Number of employees: ¹	459,431
Number of establishments: ¹	48,777
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	70,742
Number of workplace fatalities, 2017: ³	32
Rate per 100,000 workers: ⁴	6.9
National rate:	3.5
Ranking of state fatality rate, 2017:5	44
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	12,700
Rate per 100 workers:	4.3
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	6,000
Rate per 100 workers:	2.0
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	6
Length of time it would take for OSHA to inspect each workplace once:	176
Number of workplace safety and health inspections conducted, FY 2018: ⁹	269
Construction:	130
Non-construction:	139
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$2,082 \$2,729 \$3,880 \$14,231
$ \begin{bmatrix} 14 \\ 12 \\ 10 \\ 8 \\ 6 \\ 4 \\ 2 \\ 0 \end{bmatrix} $	—●— Montana ····•♦··· National
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

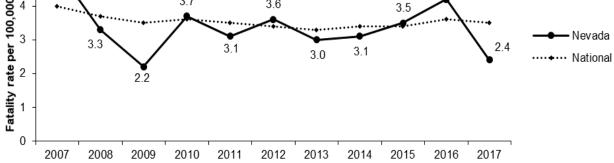
NEBRASKA



Worker Safety and Health

Number of employees: ¹	972,764
Number of establishments: ¹	72,292
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	144,451
Number of workplace fatalities, 2017: ³	35
Rate per 100,000 workers: ⁴	3.6
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	26
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	20,500
Rate per 100 workers:	3.0
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	10,600
Rate per 100 workers:	1.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	10
Length of time it would take for OSHA to inspect each workplace once:	188
Number of workplace safety and health inspections conducted, FY 2018: ⁹	370
Construction:	199
Non-construction:	171
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$3,650 \$2,729 \$12,679 \$14,231
$ \begin{array}{c} & & & & & & & & & & & & & & & & & & &$	— — Nebraska ····• National

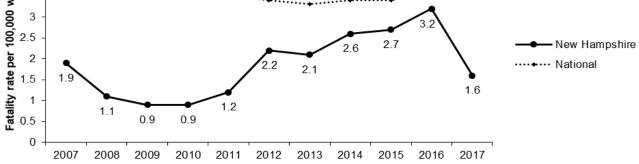
Worker Safety and Health * Number of employees:1 1,326,1 Number of establishments:1 79,5 State or federal OSHA program:2 State	85
Number of establishments: ¹ 79,5	85
	sto.
State or federal OSHA program: ² Sta	ale
	32
	2.4 3.5
Ranking of state fatality rate, 2017: ⁵	7
Total cases of workplace injuries and illnesses, private industry, 2017:6 35,7	00
	3.7
National rate: 2	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷ 18,9 Rate per 100 workers: 2	00 2.0
•	1.5
Number of workplace safety and health inspectors, FY 2019:8	36
Length of time it would take for OSHA to inspect each workplace once:	78
Number of workplace safety and health inspections conducted, FY 2018. ⁹ 1,0	
	00 16
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9\$1,9National average:\$2,7	
Avg. total penalty per fatality investigation, FY 2018:10\$8,6	44
National average: \$14,2	31
<u>¢</u>] 5.1	
5 .1 6 .1 6 .1 7 .1 7 .3.6 7 .1 7 .1	



NEW HAMPSHIRE

Worker Safety and Health

worker Salety and Health	
Number of employees: ¹	653,487
Number of establishments: ¹	51,894
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	76,879
Number of workplace fatalities, 2017: ³	11
Rate per 100,000 workers: ⁴	1.6
National rate:	3.5
Ranking of state fatality rate, 2017:5	1
Total cases of workplace injuries and illnesses, private industry, 2017:6	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	8
Length of time it would take for OSHA to inspect each workplace once:	177
Number of workplace safety and health inspections conducted, FY 2018: ⁹	281
Construction:	157
Non-construction:	124
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$3,849
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$17,764
National average:	\$14,231
4.5 •	
Sig 4 - *·····	
§ 3.5 -	

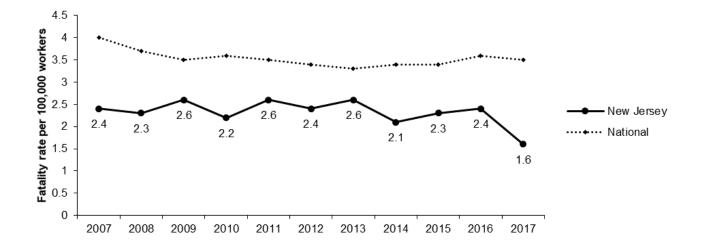


NEW JERSEY



Worker Safety and Health

Number of employees: ¹	4,006,799
Number of establishments: ¹	265,159
State or federal OSHA program: ²	Federal
Number of workplace fatalities, 2017: ³	69
Rate per 100,000 workers: ⁴	1.6
National rate:	3.5
Ranking of state fatality rate, 2017:5	1
Total cases of workplace injuries and illnesses, private industry, 2017:6	71,700
Rate per 100 workers:	2.6
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	42,100
Rate per 100 workers:	1.5
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	51
Length of time it would take for OSHA to inspect each workplace once:	114
Number of workplace safety and health inspections conducted, FY 2018:9	2,326
Construction:	959
Non-construction:	1,367
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$3,818
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$10,438
National average:	\$14,231



NEW MEXICO	
Worker Safety and Health	
Number of employees: ¹	810,516
Number of establishments: ¹	58,104
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	44
Rate per 100,000 workers: ⁴	4.7
National rate:	3.5
Ranking of state fatality rate, 2017:5	36
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	14,300
Rate per 100 workers:	2.7
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	6,700
Rate per 100 workers:	1.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	8
Length of time it would take for OSHA to inspect each workplace once:	246
Number of workplace safety and health inspections conducted, FY 2018: ⁹	236
Construction:	65
Non-construction:	171
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$1,924 \$2,729 \$2,359 \$14,231
8 7 6 6 6 7 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7	—●— New Mexico ····•◆··· National

NEW YORK	
Worker Safety and Health	
Number of employees: ¹	9,276,868
Number of establishments: ¹	637,802
State or federal OSHA program: ²	Federal
Number of workplace fatalities, 2017: ³	313
Rate per 100,000 workers: ⁴	3.5
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	23
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	138,600
Rate per 100 workers:	2.2
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	78,400
Rate per 100 workers:	1.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	95
Length of time it would take for OSHA to inspect each workplace once:	147
Number of workplace safety and health inspections conducted, FY 2018: ⁹	4,345
Construction:	1,891
Non-construction:	2,454
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹ National average: Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average:	\$3,723 \$2,729 \$12,304 \$14,231
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

NORTH CAROLINA



Worker Safety and Health	2
Number of employees: ¹	4,330,606
Number of establishments: ¹	273,334
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	183
Rate per 100,000 workers: ⁴	3.9
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	28
Total cases of workplace injuries and illnesses, private industry, 2017:6	70,700
Rate per 100 workers: National rate:	2.3
National rate.	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷ Rate per 100 workers:	38,400 1.3
National rate:	1.5
Number of workslope active and backte increastors. EV 2010.8	07
Number of workplace safety and health inspectors, FY 2019: ⁸ Length of time it would take for OSHA to inspect each workplace once:	97 108
Number of workplace safety and health inspections conducted, FY 2018: ⁹ Construction:	2,532 1,236
Non-construction:	1,296
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$1,772
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018:10	\$5,469
National average:	\$14,231
4.5	
3.7 3.5 3.9	
S S S S S S S S	

 Eatality rate per 100,00
 1 - 2.1
 1 - 1.1
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 1 - 1.5
 North Carolina 2.5 ····• National

NORTH DAKOTA



Number of employees: ¹	414,038
Number of establishments: ¹	31,917
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	61,448
Number of workplace fatalities, 2017: ³	38
Rate per 100,000 workers: ⁴	10.1
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	49
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	7
Length of time it would take for OSHA to inspect each workplace once:	92
Number of workplace safety and health inspections conducted, FY 2018: ⁹	330
Construction:	171
Non-construction:	159
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$3,683 \$2,729 \$16,429 \$14,231
$\begin{array}{c} 20.0 \\ 18.0 \\ 16.0 \\ 12.0 \\ 10.0 \\ 8.0 \\ 6.0 \\ 4.0 \\ 2.0 \\ 0.0 \end{array} \xrightarrow{7.9} 8.5 \xrightarrow{17.7} 9.8 \\ 5.5 \\ 7.0 \\ 0.0 \\ 2007 \\ 2008 \\ 2009 \\ 2010 \\ 2011 \\ 2012 \\ 2013 \\ 2014 \\ 2015 \\ 2014 \\ 2015 \\ 2016 \\ 2016 \\ 2017 \end{array}$	—● North Dakota ····• National

OHIO



Worker Safety and Health

					Juicty	unui	iculti		*	}	
Number of								المنر	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		5,364,626
Number of											296,022
State or fee											Federal
Number of	state and I	ocal pu	blic en	nployee	es not o	covered	d by the	OSH	Act:		639,524
Number of	workplace	fatalitie	es. 201	7: ³							174
	ate per 100										3.3
	ational rate										3.5
Ranking of	state fatali	ty rate,	2017: ^₅	5							20
Total cases	s of workpla	ace inju	iries ar	nd illne:	sses, p	rivate i	ndustry	/, 2017	.6		101,500
	ate per 100	-			<i>*</i> •						2.6
Na	ational rate	(1									2.8
Total injury	and illness	s cases	with d	avs aw	av fron	n work.	job tra	nsfer o	or		
restriction,				,	,		,				49,000
Ra	ate per 100) worke	rs:								1.3
Na	ational rate										1.5
Number of	workplace	safetv	and he	alth ine	snector	s FY 2	010·8				54
Length of ti	•	-			•			ce once	e:		127
U					·		·				
Number of		-	and he	alth ins	spectio	ns con	ducted	, FY 20	18: ⁹		2,232
	onstruction										1,112
N	on-construe	ction:									1,120
Avg. penalt			rious v	iolatior	ns of th	e OSH	Act, F	Y 2018	:9		\$4,129
	ational ave	-			-	4 0 40					\$2,729
Avg. total p			investi	gation,	FY 20	18: ¹⁰					\$24,706
	ational ave	rage:									\$14,231
4.5 د								3.9			
4 -	*******	••••••••		••••			3.6	~		•••••	
8 3.5 -		••••	-		•••••	~		•••••		_	
000 3 - 0	3.2 2.9	\checkmark	3.2	3.1	3.1	3.0			3.1	3.3	
5	9	2.8									Ohio
2 - 1.5 -											····+ National
1 - 1											
atalit											
u 0.5 -	, <u>,</u>										
	2008 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	

OKLAHOMA



Г

Worker Safety and Health

Number of employees: ¹	1,581,198
Number of establishments: ¹	110,316
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	272,457
Number of workplace fatalities, 2017: ³	91
Rate per 100,000 workers: ⁴	5.5
National rate:	3.5
Ranking of state fatality rate, 2017:5	40
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	13
Length of time it would take for OSHA to inspect each workplace once:	191
Number of workplace safety and health inspections conducted, FY 2018: ⁹	554
Construction:	255
Non-construction:	299
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,070
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$14,270
National average:	\$14,231
$\begin{bmatrix} 7 \\ 6 \\ 5 \\ - \\ 4 \\ - \\ 1 \\ 1 \end{bmatrix} = \begin{bmatrix} 6.2 & 6.4 & 6.3 & 6.1 & 5.8 & 6.2 \\ 5.3 & 5.5 & 5.5 & 5.6 & 5.5 \\ - & & & & & & & & \\ 5.5 & 5.5 & 5.6 & 5.5 & 5.6 & 5.5 \\ - & & & & & & & & & \\ - & & & & & & &$	—●— Oklahoma ····• National
0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	



OREGON
Worker Safety and Health

Number of employees: ¹	1,883,407
Number of establishments: ¹	149,973
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	60
Rate per 100,000 workers: ⁴	3.2
National rate:	3.5
Ranking of state fatality rate, 2017:5	18
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	46,500
Rate per 100 workers:	3.8
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	27,000
Rate per 100 workers:	2.2
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	79
Length of time it would take for OSHA to inspect each workplace once:	44
Number of workplace safety and health inspections conducted, FY 2018:9	3,411
Construction:	1,221
Non-construction:	2,190
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$587
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$2,271
National average:	\$14,231
4.5 _–	
§ 3.5 3.6	, D
	2
8 2.5 - 2.9 2 .6 2.6	Oregon
2 2 -	····+··· National
$\begin{array}{c} 3.9 \\ 3.5 \\ 3.6 \\ 3.1 \\ 2.9 \\ 2.6 \\$	
≩ 1 -	
10.5 -	
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 20	17

PENNSYLVANIA



*	>
Number of employees: ¹	5,799,123
Number of establishments: ¹	354,024
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	577,493
Number of workplace fatalities, 2017: ³	172
Rate per 100,000 workers: ⁴	3.0
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	15
Total cases of workplace injuries and illnesses, private industry, 2017:6	132,500
Rate per 100 workers:	3.1
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	71,000
Rate per 100 workers:	1.7
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	49
Length of time it would take for OSHA to inspect each workplace once:	155
Number of workplace safety and health inspections conducted, FY 2018:9	2,210
Construction:	1,052
Non-construction:	1,158
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,634
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$19,238 \$14,221
National average:	\$14,231
4 .5 4.1 4.0	
$\begin{array}{c} \mathbf{x}_{4,0} \\ \mathbf{x}_{5,0} $	
3 .5 3 .0 3 .6 3 .4 3 .4 3 .4 3 .4	
8 3.0 - 3.4 3.4 3.2 3.1 3.0 2.8 3.0	
b 2.0 -	Pennsylvania
± ₩ 1.5 -	····◆··· National
≥ <u>≥</u> 1.0 -	
- 2.0 a	
0.0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

RHODE ISLAND

Worker Safety and Health

2

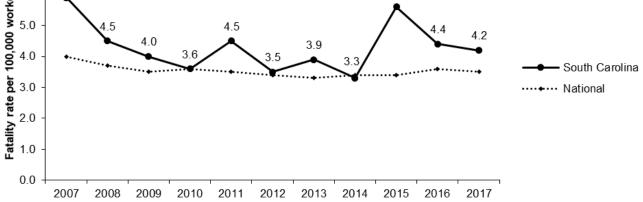
Worker Safety and Health	
Number of employees:1	477,362 37,355 Federal 48,492
Number of workplace fatalities, 2017: ³ Rate per 100,000 workers: ⁴ National rate:	8 1.6 3.5
Ranking of state fatality rate, 2017:5	1
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶ Rate per 100 workers: National rate:	N/A N/A 2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷ Rate per 100 workers: National rate:	N/A N/A 1.5
Number of workplace safety and health inspectors, FY 2019: ⁸ Length of time it would take for OSHA to inspect each workplace once:	6 134
Number of workplace safety and health inspections conducted, FY 2018:9 Construction: Non-construction:	275 167 108
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$3,008 \$2,729 \$0 \$14,231
$\begin{array}{c} 4.5 \\ 4.0 \\ 3.5 \\ 3.0 \\ 2.5 \\ 2.0 \\ 1.5 \\ 1.0 \\ 0.5 \\ 0.0 \end{array}$	—●— Rhode Island ····• National
2001 2000 2000 2010 2011 2012 2010 2014 2010 2010	

Prepared by AFL-CIO Safety and Health, April 2019

-

SOUTH CAROLINA

SUUTH CAROLINA	
Worker Safety and Health	
Number of employees: ¹	2,035,341
Number of establishments: ¹	129,036
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	88
Rate per 100,000 workers: ⁴	4.2
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	30
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	34,800
Rate per 100 workers:	2.5
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	19,500
Rate per 100 workers:	1.4
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	29
Length of time it would take for OSHA to inspect each workplace once:	212
Number of workplace safety and health inspections conducted, FY 2018: ⁹	609
Construction:	322
Non-construction:	287
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9 National average: Avg. total penalty per fatality investigation, FY 2018:10 National average: 	\$1,217 \$2,729 \$2,025 \$14,231
$\begin{bmatrix} 7.0\\ 8.0\\ 5.0 \end{bmatrix} = \begin{bmatrix} 5.9\\ 4.5 \end{bmatrix} \begin{bmatrix} 5.6\\ 4.5 \end{bmatrix} \begin{bmatrix} 5.6\\ 4.5 \end{bmatrix}$	



SOUTH DAKOTA



Worker Safety and Health

Number of employees: ¹	422,489
Number of establishments: ¹	32,279
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	62,213
Number of workplace fatalities, 2017: ³	30
Rate per 100,000 workers: ⁴	7.3
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	46
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	N/A
Rate per 100 workers:	N/A
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	N/A
Rate per 100 workers:	N/A
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	3
Length of time it would take for OSHA to inspect each workplace once:	203
Number of workplace safety and health inspections conducted, FY 2018: ⁹	155
Construction:	108
Non-construction:	47
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$2,958 \$2,729 \$5,660 \$14,231
$H_{A}^{(0,0)} = H_{A}^{(0,0)} = H_{A}^{(0,0)$	— ● —South Dakota ····• National

TENNESSEE



Worker Safety and Health

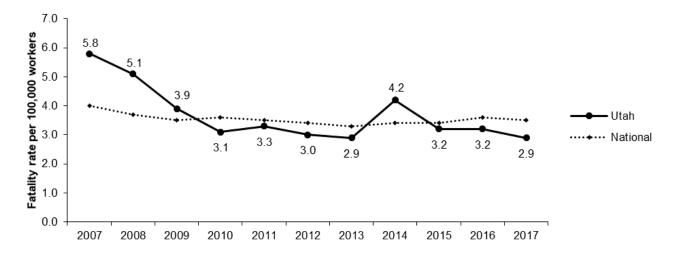
Number of employees: ¹	2,930,932
Number of establishments: ¹	156,905
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	128
Rate per 100,000 workers: ⁴	4.4
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	33
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	60,100
Rate per 100 workers:	2.9
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	32,800
Rate per 100 workers:	1.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	37
Length of time it would take for OSHA to inspect each workplace once:	88
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,788
Construction:	479
Non-construction:	1,309
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹ National average: Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average: 5.3 5.1 5.4 4.8 4.8 4.3 4.4 4.3 4.4	\$1,472 \$2,729 \$9,709 \$14,231
5.0 4.0 3.0 5.0 4.5 4.5 4.5 4.5 4.5 4.8 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.5 4.3 4.4 4.5 4.5 4.5 4.5 4.5 4.5 4.5	

TEXAS

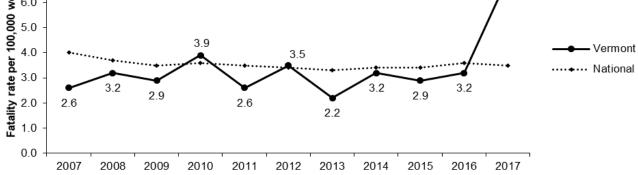
Worker Safety and Health

Worker Safety and Health		
Number of employees: ¹	12,014,802	
Number of establishments: ¹	677,345	
State or federal OSHA program: ²	Federal	
Number of state and local public employees not covered by the OSH Act:	1,663,492	
Number of workplace fatalities, 2017: ³	534	
Rate per 100,000 workers: ⁴	4.3	
National rate:	3.5	
Ranking of state fatality rate, 2017:5	31	
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	183,400	
Rate per 100 workers:	2.2	
National rate:	2.8	
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	103,100	
Rate per 100 workers:	1.2	
National rate:	1.5	
Number of workplace safety and health inspectors, FY 2019: ⁸	85	
Length of time it would take for OSHA to inspect each workplace once:	180	
Number of workplace safety and health inspections conducted, FY 2018: ⁹	3,688	
Construction:	2,040	
Non-construction:	1,648	
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹ National average: Avg. total penalty per fatality investigation, FY 2018: ¹⁰ National average: 6.0 5.0 4.8 4.4 4.6 4.4 4.6 4.4 4.5 4.5 4.5 4.5 4.4 4.5 4.5 4.4 4.5 4.5 4.4 4.3	\$3,423 \$2,729 \$16,100 \$14,231	
5.0 4.8 4.4 4.6 4.4 4.8 4.4 4.5 4.5 4.4 4.3	── Texas	
4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	····• National	

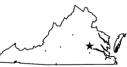
UTAH	
Worker Safety and Health	
Number of employees: ¹	1,430,588
Number of establishments: ¹	98,903
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	43
Rate per 100,000 workers:⁴	2.9
National rate:	3.5
Ranking of state fatality rate, 2017:5	13
Total cases of workplace injuries and illnesses, private industry, 2017:6	29,600
Rate per 100 workers:	3.0
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	13,400
Rate per 100 workers:	1.4
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	18
Length of time it would take for OSHA to inspect each workplace once:	101
Number of workplace safety and health inspections conducted, FY 2018:9	981
Construction:	434
Non-construction:	547
Avg. penalty assessed for serious violations of the OSH Act, FY 2018.9	\$1,315
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$3,918 \$14,221
National average:	\$14,231



VERMONT	
Worker Safety and Health	
Number of employees: ¹ Number of establishments: ¹ State or federal OSHA program: ² Number of state and local public employees not covered by the OSH Act:	309,442 25,525 State
Number of workplace fatalities, 2017: ³ Rate per 100,000 workers: ⁴ National rate:	22 7.0 3.5
Ranking of state fatality rate, 2017:5	45
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶ Rate per 100 workers: National rate:	9,100 4.6 2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷ Rate per 100 workers: National rate:	4,300 2.2 1.5
Number of workplace safety and health inspectors, FY 2019: ⁸ Length of time it would take for OSHA to inspect each workplace once:	7 88
Number of workplace safety and health inspections conducted, FY 2018: ⁹ Construction: Non-construction:	290 119 171
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$2,627 \$2,729 \$12,585 \$14,231
8.0 7.0 6.0 -	



VIRGINIA



Worker Safety and Health

Number of employees:1	3,838,368
Number of establishments: ¹	270,073
State or federal OSHA program: ²	State
	Cidio
Number of workplace fatalities, 2017: ³	118
Rate per 100,000 workers: ⁴	2.9
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	13
Total cases of workplace injuries and illnesses, private industry,	2017: ⁶ 60,200
Rate per 100 workers:	2.4
National rate:	2.8
Total injury and illness cases with days away from work, job trans	sfer or
restriction, private industry, 2017: ⁷	32,000
Rate per 100 workers:	1.3
National rate:	1.5
Number of workplace actaty and backh increators FV 2010.8	47
Number of workplace safety and health inspectors, FY 2019: ⁸	47 once: 123
Length of time it would take for OSHA to inspect each workplace	011ce. 125
Number of workplace safety and health inspections conducted, F	² Y 2018: ⁹ 2,197
Construction:	1,121
Non-construction:	1,076
	,
Avg. penalty assessed for serious violations of the OSH Act, FY	
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$8,806
National average:	\$14,231
4.5 7 4 4	
4.1	4.0
	\square
xy 3.5 3.7	
8 3.0 - 3.3 3.4 3.2	\checkmark
2 2.5 - 2.8 2.8	2.8 2.9 Virginia
a 2.0 -	····+··· National
9 1.5 -	
1.0 -	
3.5 3.7 3.7 3.7 3.3 3.4 3.4 3.4 3.2 2.8 2.8 2.8 2.8 2.8 2.8	

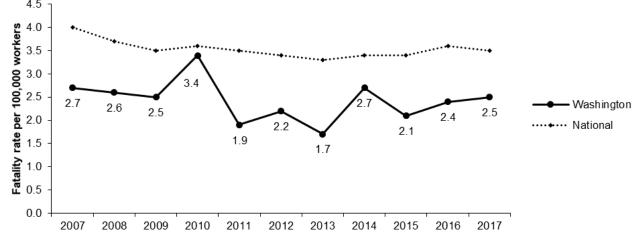


WASHINGTON



Worker Safety and Health

Number of employees:1	3,290,209
Number of establishments: ¹	242,082
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	84
Rate per 100,000 workers: ⁴	2.5
National rate:	3.5
Ranking of state fatality rate, 2017:5	9
Total cases of workplace injuries and illnesses, private industry, 2017:6	86,600
Rate per 100 workers:	4.0
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or	
restriction, private industry, 2017: ⁷	49,300
Rate per 100 workers:	2.3
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019:8	119
Length of time it would take for OSHA to inspect each workplace once:	55
Number of workplace safety and health inspections conducted, FY 2018:9	4,370
Construction:	1,839
Non-construction:	2,531
Avg. penalty assessed for serious violations of the OSH Act, FY 2018:9	\$1,940
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$7,852
National average:	\$14,231
4.5 _T	



WEST VIRGINIA



Worker Safety and Health

Number of employees:1	683,807
Number of establishments:1	50,303
State or federal OSHA program:2	Federal
Number of state and local public employees not covered by the OSH Act:	112,505
Number of workplace fatalities, 2017: ³	51
Rate per 100,000 workers: ⁴	7.4
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	47
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	13,100
Rate per 100 workers:	2.9
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	6,500
Rate per 100 workers:	1.5
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	8
Length of time it would take for OSHA to inspect each workplace once:	188
Number of workplace safety and health inspections conducted, FY 2018: ⁹	251
Construction:	113
Non-construction:	138
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 	\$3,640 \$2,729 \$12,895 \$14,231
$ \begin{array}{c} 16.0 \\ 14.0 \\ 12.0 \\ 10.0 \\ 8.0 \\ 6.0 \\ 4.0 \\ 2.0 \\ 0.0 \end{array} $	— — West Virginia ····• National

WISCONSIN



Worker Safety and Health

Number of employees: ¹	2,850,145
Number of establishments: ¹	171,716
State or federal OSHA program: ²	Federal
Number of state and local public employees not covered by the OSH Act:	348,044
Number of workplace fatalities, 2017: ³	106
Rate per 100,000 workers: ⁴	3.5
National rate:	3.5
Ranking of state fatality rate, 2017:5	23
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	71,900
Rate per 100 workers:	3.6
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	37,000
Rate per 100 workers:	1.9
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	28
Length of time it would take for OSHA to inspect each workplace once:	139
Number of workplace safety and health inspections conducted, FY 2018: ⁹	1,192
Construction:	598
Non-construction:	594
Avg. penalty assessed for serious violations of the OSH Act, FY 2018: ⁹	\$3,910
National average:	\$2,729
Avg. total penalty per fatality investigation, FY 2018: ¹⁰	\$12,013
National average:	\$14,231
$\begin{array}{c} 4.5 \\ 4.0 \\ 3.5 \\ 3.5 \\ 3.0 \\ 2.5 \\ 1.0 \\ 1.5 \\ 1.0 \\ 0.5 \end{array}$	— • • Wisconsin ···· • • • • National
0.0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	

WYOMING	
Worker Safety and Health	
Number of employees: ¹	269,586
Number of establishments: ¹	26,125
State or federal OSHA program: ²	State
Number of workplace fatalities, 2017: ³	20
Rate per 100,000 workers: ⁴	7.7
National rate:	3.5
Ranking of state fatality rate, 2017: ⁵	48
Total cases of workplace injuries and illnesses, private industry, 2017: ⁶	6,000
Rate per 100 workers:	3.5
National rate:	2.8
Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2017: ⁷	2,700
Rate per 100 workers:	1.6
National rate:	1.5
Number of workplace safety and health inspectors, FY 2019: ⁸	6
Length of time it would take for OSHA to inspect each workplace once:	139
Number of workplace safety and health inspections conducted, FY 2018: ⁹	187
Construction:	98
Non-construction:	89
 Avg. penalty assessed for serious violations of the OSH Act, FY 2018:⁹ National average: Avg. total penalty per fatality investigation, FY 2018:¹⁰ National average: 18.0 - 17.1 	\$3,340 \$2,729 \$7,491 \$14,231
$\begin{array}{c} 18.0 \\ 14.0 \\ 12.0 \\ 10.0 \\ 10.0 \\ 4.0 \\ 2.0 \\ 0.0 \\ 2007 \\ 2008 \\ 2009 \\ 2010 \\ 2011 \\ 2011 \\ 2012 \\ 2013 \\ 2014 \\ 2015 \\ 2016 \\ 2016 \\ 2017 \\ 2016 $	—● Wyoming ····◆··· National

STATE PROFILES FOOTNOTES

¹U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages: Annual Averages, 2017. ²Under §18 of the Occupational Safety and Health Act, a state may elect to run its own occupational safety and health program, provided it is as effective as the federal program. One condition of operating a state plan is that the program must cover state and local employees who otherwise are not covered by the OSH Act. Currently, 21 states and one territory administer their own OSHA programs for both publicand private-sector workers. Connecticut, Illinois, Maine, New Jersey, New York and the Virgin Islands have state programs for public employees only.

³U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2017, released Dec. 18, 2018.

⁴Ibid.

⁵Ranking based on best to worst (1=best; 50=worst).

⁶U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses, 2017 private sector only, released Nov. 8, 2018.

⁷U.S. Department of Labor, Bureau of Labor Statistics, State Data, Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work, Job Transfer or Restriction, 2017 private sector only, released Nov. 8, 2018.

⁸U.S. Department of Labor, OSHA. Federal Compliance Safety and Health Officer Totals by State, as of December 2018; data received Feb. 28, 2019. State plan state Compliance Safety and Health Officers "on board" from FY 2019 State Plan Grant Applications, as of July 1, 2018; data received March 1, 2019. ⁹U.S. Department of Labor, OSHA. Inspection data provided by the Directorate of Enforcement Programs, OIS Inspection Report; and the Directorate of Cooperative and State Programs, OIS State by Year for 18(b) State (only).

¹⁰U.S. Department of Labor, OSHA, FY 2018. Fatality inspection penalty data provided by the Directorate of Enforcement Programs, OIS Inspection Report; and the Directorate of Cooperative and State Programs, OIS State by Year for 18(b) State (only). Average penalties may appear very high if there was an enforcement case in that state with a substantial penalty. For example, in 2016, one willful fatality case in Alabama resulted in total penalties of \$2.5 million, which resulted in an average penalty for the state of \$85,832 in FY 2016. In FY 2015, the average penalty for a fatality case in Alabama was \$8,781.

SOURCES AND METHODOLOGY

Employment and Establishment Data: Employment and Wages, Annual Averages, 2017, Bureau of Labor Statistics, U.S. Department of Labor.

Coverage of State and Local Employees: OSHA coverage of state and local employees depends on whether the state has adopted and runs its own OSHA program. States that run their own OSHA programs are required, as a condition of gaining federal approval, to cover state and local employees. The OSH Act does not cover public employees in the 24 states that do not run their own OSHA programs. Statistics on the number of state and local employees are from Employment and Wages, Annual Averages, 2017, Bureau of Labor Statistics, U.S. Department of Labor.

Workplace Fatality Information: Census of Fatal Occupational Injuries, 2017, Bureau of Labor Statistics, U.S. Department of Labor. Rate reflects fatalities per 100,000 workers.

Private-Sector Injury and Illness Data: Survey of Occupational Injuries and Illnesses, 2017, Bureau of Labor Statistics, U.S. Department of Labor. Rates reflect injuries and illnesses per 100 workers.

Inspector Information: The number of federal OSHA inspectors comes from OSHA's Directorate of Enforcement Programs records and reflects the number of inspectors, excluding supervisors and discrimination complaint inspectors. For the state-by-state profiles, we include the number of inspectors for the state in which the area office is located. Inspector data for state plan states come from OSHA's Directorate of Cooperative and State Programs, and reflects the number of "on board" inspectors included in the states' FY 2019 state plan grant applications. The number of "on board" inspectors may not accurately reflect the true number of inspectors that are hired and in place conducting enforcement inspectors due to possible budgetary and staffing changes in individual states. National total for inspectors includes inspectors from Puerto Rico and the Virgin Islands.

Inspection Information: The number of inspections comes from the OIS (OSHA Information System). OSHA provided federal and state inspection information for FY 2018.

Penalty Information: Data on average penalties comes from the above-referenced OIS reports. We present the average penalty data as individual state penalties, federal OSHA state penalties, state plan OSHA state penalties and a national average of penalties. We calculate the average penalty numbers by dividing the total cost for serious penalties by the total number of serious violations. The national average includes penalty data from the District of Columbia and U.S. territories and protectorates: American Samoa, Guam, the Marshall Islands, Puerto Rico and the Virgin Islands.

The Length of Time It Would Take for OSHA to Inspect Each Establishment Once: This information is calculated separately for each federal OSHA state, each state plan OSHA state, the average for federal OSHA states, the average for state plan OSHA states and the national average for all states for one-time inspections. We obtain establishment data from Employment and Wages, Annual Averages, 2017, at <u>https://www.bls.gov/cew/cewbultncur.htm</u>.

For individual federal OSHA states, we divide the total number of private-industry (except mines) plus federal establishments by the number of inspections per federal OSHA state.

For individual state plan OSHA states, and for Connecticut, Illinois, Maine, New Jersey and New York, we divide the total number of private-industry (except mines) plus federal, state and local establishments by the number of federal inspections plus the number of 18(b) state inspections per state. (Federal OSHA conducts a limited number of inspections in state plan states, presumably in federal facilities and maritime operations, for which state OSHA programs are not responsible. We include these inspections and establishments in the state profiles). The national average includes inspection data from American Samoa, the District of Columbia, Guam, the Marshall Islands, Puerto Rico and the Virgin Islands.

For the average of federal or state plans to inspect establishments one time, we add the total number of establishments for individual federal or state plan states together and then divide by the total number of federal or state inspections, respectively. For this calculation, we consider Connecticut, Illinois, Maine, New Jersey and New York as federal states.

For the national average for one-time inspections, we divide the total number of establishments for both federal states and state plan states by the total number of federal and state inspections.

NOTES: Due to the revised recordkeeping rule, which became effective Jan. 1, 2002, the estimates from the 2002 BLS Survey of Occupational Injuries and Illnesses are not comparable with those from previous years. Among the changes that could affect comparisons are: Changes to the list of low-hazard industries exempt from recordkeeping; employers are no longer required to record all illnesses regardless of severity; a new category of injuries/illnesses diagnosed by a physician or health care professional; changes to the definition of first aid; and days away from work are recorded as calendar days.

Beginning with the 2003 reference year, both the Census of Fatal Occupational Injuries and the Survey of Occupational Injuries and Illnesses began using the 2002 North American Industry Classification System for industries and the Standard Occupation Classification system for occupations. Prior to 2003, the surveys used the Standard Industrial Classification system and the Bureau of the Census occupational classification system. The substantial differences between these systems result in breaks in series for industry and occupational data. Therefore, this report makes no comparisons of industry and occupation data from BLS for years beginning with 2003 and beyond with industry and occupation data reported by BLS prior to 2003.



815 16th St., NW, Washington, DC 20006 202-637-5000

> RICHARD L. TRUMKA President

ELIZABETH H. SHULER Secretary-Treasurer

TEFERE A. GEBRE Executive Vice President