# DEATH ON THE JOB

## The Toll of Neglect

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

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## CONTENTS

# EXECUTIVE SUMMARY

This 2018 edition of "Death on the Job: The Toll of Neglect" marks the 27th year the AFL-CIO has produced a report on the state of safety and health protections for America's workers.

More than 559,000 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, and many of these gains are threatened. President 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.

These are challenging times for working people and their unions, and the prospects for worker safety and health protections are uncertain. What is clear, however, is that 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 2016:

- 150 workers died each day from hazardous working conditions.
- 5,190 workers were killed on the job in the United States—an increase from the 4,836 deaths the previous year.
- An additional 50,000 to 60,000 workers died from occupational diseases.
- The job fatality rate increased to 3.6 per 100,000 workers from 3.4 per 100,000 workers.
- Service-providing industries saw the largest increase in the job fatality rate, while the rate declined in manufacturing and mining and was unchanged in construction—all industries that receive the greatest OSHA or MSHA oversight.
- Employers reported nearly 3.7 million work-related injuries and illnesses.
- Underreporting is widespread—the true toll of work-related injuries and illnesses is 7.4 million to 11.1 million each year.

States with the highest fatality rates in 2016 were:

- Wyoming (12.3 per 100,000 workers)
- Alaska (10.6 per 100,000 workers)
- Montana (7.9 per 100,000 workers)
- South Dakota (7.5 per 100,000 workers)
- North Dakota (7.0 per 100,000 workers)

Workplace violence deaths increased significantly in 2016:

- Workplace violence is now the second-leading cause of workplace death.

- 866 worker deaths were caused by violence, an increase from 703.
- 500 worker deaths were workplace homicides.
- Violence was responsible for more than 27,000 lost-time injuries.
- 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, but the risk to these workers still is greater than other workers:

- The Latino fatality rate was 3.7 per 100,000 workers, down from 4.0 per 100,000. This is still higher than the national average (3.6).
- Deaths among Latino workers decreased in 2016; 879 deaths, compared with 903 in 2015. Deaths among Latino immigrant workers declined to 588 from 605.
- A decrease in fatalities among immigrant workers from Mexico accounted for much of the decline in Latino worker deaths.

Older workers are at high risk. In 2016:

- 36% of all worker fatalities occurred in those ages 55 or older, with 1,848 deaths.
- Workers 65 or older have more than 2.5 times the risk of dying on the job as other workers, with a fatality rate of 9.6 per 100,000 workers.

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

- 991 construction workers were killed in 2016, the highest number in any sector. The number of construction deaths increased (from 937), but the rate was unchanged at 10.1 per 100,000 workers.
- 825 transportation and warehousing workers were killed in 2016. The fatality rate was 14.3 per 100,000 workers, the second highest of any major industry sector.
- Agriculture, forestry, fishing and hunting was the most dangerous industry sector, with a fatality rate of 23.2 per 100,000 workers; 593 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 25 deaths in coal, metal and nonmetal mines in 2016, a record low.
- Preliminary 2017 data show a significant increase in coal mine deaths (from eight to 15), and increases in coal mine fatality and injury rates.
- The fatality rate for the overall mining sector, including oil and gas extraction, was 10.1 per 100,000 workers, nearly three times the national average.
- There were 63 deaths in oil and gas extraction in 2016, the lowest since BLS started reporting this data in 2003, accounting for 71% of the fatal work injuries in the mining sector.

The cost of job injuries and illnesses is enormous—estimated at $250 billion to $360 billion a year.

## Job Safety Oversight and Enforcement

OSHA resources in FY 2017 still are too few and declining:

- There are only 1,821 inspectors (764 federal and 1,057 state) to inspect the 9 million workplaces under the Occupational Safety and Health Act's jurisdiction.
- Federal OSHA has enough inspectors to inspect workplaces only once every 158 years.
- State OSHA plans have enough inspectors to inspect workplaces once every 102 years.
- There is one inspector for every 77,908 workers.
- The current OSHA budget amounts to $3.61 to protect the safety and health of each worker in America.

OSHA enforcement, strengthened under the Obama administration, largely has been maintained by the Trump administration, but penalties in FY 2017 still are too weak:

- The average penalty for a serious violation was $3,553 for federal OSHA.
- The average penalty for a serious violation was $1,849 for OSHA state plans.
- The median penalty for killing a worker was $7,500 for federal OSHA.
- The median penalty for killing a worker was $4,000 for OSHA state plans.
- Only 96 worker death cases have been criminally prosecuted under the Occupational Safety and Health Act since 1970.

## Regulatory Action

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 has an aggressive deregulatory agenda that threatens these hard-won gains and future progress.

## Workers' Safety and Health Protections are in Danger

The Trump administration and the Republican majority in Congress launched a major assault on regulatory protections. They have 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:

- Issued Executive Order 13771 that requires two existing safeguards be repealed for every new regulatory protection issued.
- 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.

- Proposed to slash the Department of Labor's budget by 21%, eliminate worker safety and health training programs, eliminate the Chemical Safety Board and cut job safety research by $135 million.
- Proposed to weaken OSHA's new beryllium standard for workers in construction and maritime, after delaying the effective date and enforcement in all sectors.
- Weakened MSHA's mine examination rule for metal and nonmetal mines and delayed the implementation until June 2, 2018.
- Reviewed MSHA's coal dust standard to determine whether it should be modified to be less burdensome on industry.
- Delayed the requirement for employers to submit summary injury data to OSHA and announced the intention to revise or revoke other parts of the electronic injury reporting/anti-retaliation rule.
- Abandoned work on more than a dozen new OSHA and MSHA rules, including styrene, combustible dust and noise in construction.
- Suspended work on new OSHA standards on workplace violence, infectious diseases and process safety management, and MSHA's standard on silica in construction.
- Withdrew OSHA's walkaround policy that gave nonunion workers the right to have a representative participate in OSHA inspections.

## 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 defend and fully implement new rules on silica, beryllium, injury reporting/anti-retaliation and coal dust.
- OSHA and MSHA to complete and issue rules on infectious diseases, combustible dust, chemical safety and silica in mining.
- OSHA to keep its promise to develop a workplace violence standard. Workplace violence is a growing and serious threat—particularly to women workers and workers in health care and social services.
- OSHA to increase attention to the serious safety and health problems faced by Latino, immigrant and aging workers.
- The Trump administration and Congress to increase, not cut, funding and staffing at job safety agencies.
- Congress to stop "regulatory reform" legislation that would require the repeal of existing rules and make it more difficult, if not impossible, to issue new regulatory safeguards.
- 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 2018 edition of "Death on the Job: The Toll of Neglect" marks the 27th year the AFL-CIO has produced a report on the state of safety and health protections for America's workers. This report features state and national 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.

More than four decades ago, in 1970, Congress enacted the OSH Act, promising workers in this country the right to a safe job. More than 579,000 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 2016, 5,190 workers lost their lives on the job as a result of traumatic injuries, according to final fatality data from the Bureau of Labor Statistics, a significant increase from the previous year. 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 50,000–60,000 each year. Chronic occupational diseases receive less attention, because most are not detected for years after workers are exposed to toxic chemicals, and occupational illnesses often are misdiagnosed and poorly tracked. All total, on average at least 150 workers die each day due to job injuries and illnesses.

In 2016, nearly 3.7 million workers across all industries, including state and local government, had work-related injuries and illnesses that were reported by employers, with 2.9 million injuries and illnesses reported in private industry. Due to limitations in the current injury reporting system and widespread underreporting of workplace injuries, this number understates the problem. The true toll is estimated to be two to three times greater—or 7.4 million to 11.1 million injuries and illnesses a year.

The cost of these injuries and illnesses is enormous—estimated at $250 billion to $360 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

[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 2015 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.

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.

Opposition by business groups and the Republican majority in Congress thwarted action on a number of initiatives. But at the end of eight years, the Obama administration had put in place important protections, policies and programs that made jobs safer, reduced injuries and illnesses, and saved workers' lives.

With the election of President Trump and Republicans maintaining their majorities in Congress, the political landscape shifted dramatically. President Trump ran on a pro-business, deregulatory agenda, promising to cut regulations by 70%. Since taking office at the end of January 2017, he has acted on that promise, issuing a number of executive orders to roll back or review existing regulations, including one order that requires that for any new regulatory protection issued, an agency must remove two safeguards from the books. He signed more than a dozen bills overturning regulations issued by the Obama administration, including two major worker safety rules.

The Trump administration has moved to weaken recently issued rules on beryllium and mine examinations and has delayed or abandoned the development of new protections, including regulations on workplace violence, infectious diseases, silica in mining and combustible dust.

At the same time, Congress is pushing forward with numerous "regulatory reform" bills that would require review and culling of existing rules, make costs the primary consideration in adopting regulations, and making it virtually impossible to issue new protections.

President Trump's budget in both FY 2018 and FY 2019 targeted key worker safety and health programs, proposing to cut finding for coal mine enforcement and to eliminate OSHA's worker safety and health training program and the Chemical Safety Board and to slash the NIOSH job safety research budget by 40%.

President Trump nominated corporate officials to head the job safety agencies—David Zatezalo, a coal industry executive from Rhino Industry Partners, to head the Mine Safety and Health Administration, and Scott Mugno, vice president of safety, sustainability and vehicle maintenance at FedEx Ground, to head the Occupational Safety and Health Administration. Both of these individuals have long experience and involvement with the job safety agencies, and have records of opposing enforcement and regulatory actions.

These are challenging times for working people and their unions, and the future prospects for safety and health protections are uncertain.

What is clear, however, is that the toll of workplace injury, disease and death remains too high. Workers in the United States need more safety and health protection, not less. More than four decades after the passage of the OSH Act, there is much more work to be done.

# JOB FATALITIES, INJURIES AND ILLNESSES

On average, 14 workers were fatally injured and more than 10,000 workers were injured or made ill each day of 2016. These statistics do not include deaths from chronic occupational diseases, which claim the lives of an estimated 50,000–60,000 workers each year.

## Job Fatalities

In 2016, there were 5,190 workplace deaths due to traumatic injuries, a significant increase over the 4,836 deaths reported in 2015.[2] The rate of fatal job injuries in 2016 also increased to 3.6 per 100,000 workers from 3.4 per 100,000 workers in 2015.

The biggest increase in job fatalities was in the service-providing industries, where the number of job fatalities increased by 13% (from 2,399 to 2,702 deaths). The job fatality rate declined in mining and manufacturing and was unchanged in construction, all industries that receive the greatest oversight from OSHA and MSHA. But in all other sectors, the fatality rate increased.

Deaths from workplace violence increased by 23% (from 703 to 866 deaths) and are now the second-leading cause of job death. Asian and black workers also saw a significant increase in job deaths in 2016, as did older workers (ages 55 and older).

### *Fatalities by State*

Wyoming had the highest job fatality rate in 2016, at 12.3 per 100,000 workers, followed by Alaska (10.6), Montana (7.9), South Dakota (7.5) and North Dakota (7.0). Connecticut had the lowest state fatality rate (1.6 per 100,000 workers), followed by Rhode Island (1.8), California (2.2), Maine (2.4), New Jersey (2.4) and Washington (2.4).

From 2015 to 2016, fatality rates increased in 31 states. Alaska experienced a 159% increase, followed by Massachusetts (57%), South Dakota (53%), Oregon (50%) and Rhode Island (50%).

### *Industry, Occupation, Event and Demographic Highlights*

In 2016, the construction sector had the largest number of fatal work injuries (991), followed by transportation and warehousing (825) and agriculture, forestry, fishing and hunting (593). Industry sectors with the highest fatality rates were agriculture, forestry, fishing and hunting (23.2 per 100,000); transportation and warehousing (14.3), mining, quarrying, and oil and gas extraction (10.1) and construction (10.1).

Within the mining and extractive industries in 2016, BLS reported 63 deaths in oil and gas extraction—the lowest since BLS has been reporting this data. According to separate statistics reported by the Mine Safety and Health Administration, in 2016 there were eight deaths in coal mining and 17 deaths in metal and nonmetal mining, the safest year in mining history. Preliminary data for 2017 show a significant increase in coal mine fatalities, with 15 deaths, and a decline in metal and nonmetal fatalities, with 13 deaths.

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[2]U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2016. Released Dec.19, 2017.

Transportation and material moving occupations had the highest number of fatalities, with 1,388 deaths, followed by construction and extraction occupations with 970 fatal injuries. The occupations at greatest risk of experiencing work-related fatalities were the same as the previous year: logging workers (135.9 per 100,000); fishers and related fishing workers (86.0 per 100,000); and aircraft pilots and flight engineers (55.5 per 100,000).

Transportation incidents, in particular roadway crashes, continue to be the leading cause of workplace deaths, responsible for 2,083 or 40% of all fatalities in 2016. Workplace violence is now the second leading cause of job death, with 866 fatalities reported, followed by deaths from falls, slips and trips (849).

In 2016, male workers were at greater risk of death on the job than female workers, with a fatality rate of 5.8 per 100,000 workers, compared with a rate of 0.6 per 100,000 among women. Men accounted for 93% of job fatalities (4,803) and women accounted for 7% (387). Homicides in the workplace continue to be a disproportionate cause of death for women (24%) compared with men (9%).

In response to concerns about the safety and health risks associated with contract work, for the past six years BLS has reported fatalities that involve workers employed as contractors. In 2016, there were 856 fatalities among contract workers. This number has continued to increase since 2011, when BLS first reported 542 fatalities incurred by 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 (3.0 per 100,000).

### *Hispanic or Latino and Immigrant Worker Fatalities*

In 2016, the fatality rate among Latino workers was 3.7 per 100,000 workers, slightly higher than the overall job fatality rate of 3.6 per 100,000 workers. In 2016, 879 Latino workers died on the job, a decrease from 903 deaths in 2015. The fatality rate among Latino workers declined significantly from 4.0 per 100,000 workers in 2015, while the fatality rates among all other race and ethnic groups increased. A significant decrease in workplace fatalities among immigrant workers from Mexico was responsible for the decline in Latino worker deaths.

The states with the greatest number of Latino worker fatalities were Texas (221), California (148) and Florida (91). Immigrant workers constituted 80% of Latino worker deaths in Florida, 64% in California and 54% in Texas.

The construction industry was responsible for the greatest number of Latino worker deaths (283), followed by transportation and warehousing (108, with 75% of these deaths in truck transportation), and administrative and support and waste management and remediation services (112, with 62% of these deaths in landscaping services). Latino worker deaths in the construction industry were the same in 2016 as in 2015 (283), while the overall number of construction deaths increased.

Events or exposures responsible for Latino worker deaths were largely similar to the causes for all workers, with transportation incidents the leading event (312 deaths), followed by deaths from falls (215), contact with object/equipment (132) and violence (117).

In 2016, 67% of Latino workers who died on the job (588) were born outside of the United States. Fatalities among all foreign-born or immigrant workers continue to be a serious problem. In 2016, there were 970 workplace deaths reported for all immigrant workers; 37% were from Mexico.

The four states with the greatest number of foreign-born worker fatalities in 2016 were Texas (156), California (151), Florida (104) and New York (62). Of the foreign-born workers who were injured fatally at work in 2016, 61% were Latino; 17% were white; 15% were Asian, Native Hawaiian or Pacific Islander; and 6% were black or African American.

The largest numbers of immigrant worker deaths were reported in the construction industry, at 270 out of 970 total deaths. Thirty-three percent of the foreign-born worker deaths resulted from transportation incidents; 24% from falls, slips and trips; 20% from violent acts; and 13% from contact with objects and equipment.

### *Aging Workforce Fatalities*

People are working longer, and the number of workers ages 65 years and older has increased 158% since 1990. BLS estimates this trend will continue, and that by 2020, one in four workers will be 55 years or older.[3]

In 2016, 36% of all fatalities (1,848 deaths) occurred in workers ages 55 years or older, with 688 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 more than two and one half times greater than the overall work population, with a fatality rate of 9.6 deaths per 100,000 workers. Workers ages 55–64 also have an increased fatality risk, with a fatality rate of 4.7 per 100,000 workers.

Transportation incidents were responsible for 44% of fatalities in workers ages 65 years or older (302 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 25% of all fatalities in workers at least 65 years of age, while the same events accounted for 16% of fatalities among the entire workforce.

## Job Injuries and Illnesses

In 2016, private-sector employers reported 2.9 million injuries and illnesses. State and local government employers reported an additional 675,200 injuries and illnesses, for nearly 3.7 million total cases of workers injured or made ill in 2016. The national injury and illness rate for the private sector in 2016 was 2.9 per 100 workers, a decline from the rate reported by BLS for 2015 (3.0). The rate in 2016 for all industries, including state and local government workers, was 3.2 per 100 workers, a decrease from 2015 (3.3).

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[3]The Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections, "Labor force projections to 2020: a more slowly growing workforce," January 2012, *available at* www.bls.gov/opub/mlr/2012/01/art3full.pdf.

The health care and social assistance industry accounted for the greatest proportion (21%) of nonfatal workplace injuries and illnesses in private industry in 2016, followed by manufacturing (16%) and retail trade (14%). Workers in the construction industry experienced 7% of all private-sector injuries and illnesses in 2016. More specifically, the highest rate of nonfatal workplace injuries and illnesses occurred in state government nursing and residential care facilities (13.7 per 100 workers), an increase from 2015 and 2014 and a return to its 2013 rate. Other high-hazard industries include veterinary services (private industry, 12.3), truss manufacturing (private industry, 10.2), police protection (local government, 10.2), fire protection (local government, 9.5), and heavy and civil engineering construction (local government, 9.1).

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 19%, manufacturing at 17% and construction at 8%.

Women workers suffered 38% of lost-time injuries reported in 2016 (337,390 cases). The leading industries for lost-time injuries and illnesses among women were nursing and residential care facilities, hospitals, and food services and drinking places. Nursing, psychiatric and home health aides, building cleaning workers, registered nurses and retail salespersons 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 62% of lost-time injuries reported in 2016 (549,920 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, and maintenance, construction laborers and other production workers 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 falls, slips and trips (26%), contact with objects (26%) and violence events (7%).

The median number of days away from work for lost-time injury cases in private industry was eight days, the same as the year before; the median days away from work for men was nine days. The median number of days away from work in 2016 increased with age: Workers ages 65 and older had 14, workers ages 55–64 and ages 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 14.3% of all lost-time injuries in 2016.

### *Public-Sector Workers*

In 2016, state and local public-sector employers reported an injury rate of 4.7 per 100 workers, significantly higher than the reported rate of 2.9 per 100 among private-sector workers. The injury and illness rate for state government workers was 3.7 per 100 workers and 5.0 for local

government workers. 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 2016 was 151.6 cases per 10,000 full-time workers, slightly more than the 149.2 cases in 2015. The incidence rate for local government was 161.8, lower than the incident rate involving days away from work in 2015 (177.5).

State correctional officers and local sheriff's patrol officers continue to be at great risk of work-related injuries and illnesses. Correctional officers experienced 17% of the total state government cases of injuries and illnesses in 2016, with an incidence rate of 450.8 cases per 10,000 workers. Sheriff's patrol officers experienced 15% of all cases of the total local government cases of injuries and illnesses in 2016, with an incidence rate of 515.9 cases per 10,000 workers.

Musculoskeletal disorders (MSDs) occur at a higher incidence rate in the public sector than the private sector. In 2016, the incidence rate for state government workers was 40.3 MSDs per 10,000 full-time workers, 37% higher than the private industry rate (29.4). The incidence rate for local government workers was 44.7 MSDs per 10,000 full-time workers, 52% 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 861% higher for state government workers (36.5 per 10,000 workers) than the rate for private industry workers (3.8). The incidence rate of violence for local government workers (21.8 per 10,000 workers) was 474% 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 data on federal government workers remains publicly unavailable.

### *Musculoskeletal Disorders*

For 2016, BLS reported 285,950 MSD cases resulting in days away from work in the private sector, a continued decrease from last year (286,350). MSDs accounted for 31.8% of all injuries and illnesses involving days away from work, and remain the largest source of injury and illness cases.

The occupations reporting the highest rate of MSDs involving days away from work in 2016 were: Firefighters (181.9 per 10,000 workers); nursing assistants (181.1); bus drivers, transit and intercity (173.3); emergency medical technicians and paramedics (167.3); laborers and freight, stock and material movers and handlers (122.8); maids and housekeeping cleaners (107.2); light truck or delivery services drivers (103.7); and heavy and tractor-trailer truck drivers (101.5). The median number of days away from work for MSDs in 2016 was 12 days.

Industries with the highest incidence rates of musculoskeletal disorders involving days away from work in 2016 were air transportation (176.8 per 10,000 workers); couriers and messengers

(127.0); warehousing and storage (79.6); nursing and residential care facilities (76.0); leather and allied product manufacturing (73.3); and truck transportation (71.7).

In 2016, the MSD incidence rate across all private-sector industries in the United States was 29.4 per 10,000 workers, less than the rate in 2015 (29.8 per 10,000 workers).

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 underreporting 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.[4] 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 2016 (31.8%), there were an estimated total of 921,394 MSDs reported by private-sector employers; 508,355 MSD cases that resulted in days away from work, restricted activity or job transfer; and 222,405 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 33–69% of work-related injuries.[5, 6, 7, 8] 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.[9]

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.[10] But

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[4]64 F.R. 65981 and 65 F.R. 68758.
[5]Boden, L.I., and A. Ozonoff, "Capture-Recapture Estimates of Nonfatal Workplace Injuries and Illnesses," *Annals of Epidemiology*, Vol. 18, No. 6 (2008).
[6]Rosenman, K.D., Kalush, A., Reilly, M.J., Gardiner, J.C., Reeves, M., and Luo, Z., "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.
[7]Davis, L., Grattan, K., Tak, S., Bullock, L., Ozonoff, A., and Boden, L., "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).
[8]Wuellner, S., and Bonauto, D., "Injury Classification Agreement in Linked Bureau of Labor Statistics and Workers' Compensation Data," *American Journal of Industrial Medicine,* Vol. 57, No. 10, (2014).
[9]Almberg K.S., Friedman L.S., Swedler D., and Cohen R.A., "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).
[10]Wiatrowski, W.J., "Examining the Completeness of Occupational Injury and Illness Data: An Update on

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.[11] 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.

As discussed later in this report, under the Obama administration there were major efforts to address barriers to injury reporting through OSHA's whistleblower program, policy guidance on employer safety incentive and disincentive policies and practices, and amending the injury recordkeeping rule to make retaliation for injury reporting a regulatory violation. These initiatives, if maintained and fully implemented, should help reduce barriers to reporting and lead to more complete and accurate information on the extent and scope of workplace injuries and illnesses.

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.[12] This household survey is intended to be a supplement to the existing employer-based injury and illness survey. A new report from the National Academies of Sciences, Engineering and Medicine on occupational safety and health surveillance strongly endorsed BLS conducting this new household survey.[13] 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 $360 billion a year, according to two recent studies.

The 2017 Workplace Safety Index, published by Liberty Mutual Insurance, estimated the cost of disabling workplace injuries to employers at $60 billion a year—more than $1 billion per week.[14] This analysis, based on 2014 BLS data, estimated direct costs to employers (medical and lost wage payments) of injuries resulting in cases involving six 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

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Current Research," *Monthly Labor Review*, June 2014.

[11]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* www.gao.gov/products/GAO-10-10.

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

[13]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.

[14]2017 Liberty Mutual Workplace Safety Index., *available at* www.libertymutualgroup.com/about-liberty-mutual-site/news-site/Pages/2017-Liberty-Mutual-Workplace-Safety-Index.aspx.

$180 billion and $360 billion annually in direct and indirect (overtime, training and lost productivity) costs on workers' compensation losses (indirect costs are estimated to be two to five times direct costs).[15] It is important to note that 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.[16] 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.[17]

A 2015 report by the 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. 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.[18]

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.[19] The series—"Insult to Injury: America's Vanishing Worker Protections"—was based on a yearlong investigation, which found that over the last decade there has 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 work-relatedness 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

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[15]Liberty Mutual Research Institute for Safety, News Release, April 16, 2002.
[16]Leigh, J.P., "Economic Burden of Occupational Injury and Illness in the United States," *The Milbank Quarterly*, Vol. 89, No. 4, (2011).
[17]Leigh, J.P., and Marcin, J., "Workers' Compensation Benefits and Shifting Costs for Occupational Injuries and Illnesses," *Journal of Occupational and Environmental Medicine*, Vol. 54, No. 4, (2012).
[18]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.dol.gov/osha/report/20150304-inequality.pdf.
[19]Pro Publica and National Public Radio, "Insult to Injury: America's Vanishing Worker Protections," March 2015, *available at* www.propublica.org/series/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 significant resource constraints that have greatly limited OSHA's ability to meet its responsibilities.

Under the Obama administration, strong OSHA enforcement was a priority. The administration increased the inspection staff—which had declined in numbers during the Bush administration—and instituted new enforcement initiatives and policies. Due to subsequent congressional Republican budget cuts, additional inspectors were lost, leaving OSHA with fewer inspectors today than the agency had in 2009.

It is clear that OSHA lacks sufficient resources to adequately protect workers. A combination of few OSHA inspectors and low penalties makes the threat of an OSHA inspection hollow for too many employers. Further cutbacks in enforcement programs will threaten workers' safety and health.

At this time, OSHA still does not have a confirmed assistant secretary, and there have not been dramatic changes in OSHA's enforcement program or policies. The number of OSHA inspectors onboard has declined due to President Trump's federal hiring freeze, but the enforcement program has continued. The Trump administration has indicated that it intends to enhance OSHA's voluntary programs and has sought additional resources for this purpose. But the administration's specific plans for OSHA's enforcement and voluntary programs are not known.

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. As of January 2018, OSHA had 764 inspectors, down from 815 inspectors in FY 2017. This reduction is the result of attrition and a federal hiring freeze imposed by the Trump administration.

Currently, the state OSHA plans have 1,057 inspectors, up from 1,023 inspectors the previous year. There are currently a total of 1,821 federal and state OSHA inspectors responsible for

enforcing the safety and health law at more than 9 million workplaces, fewer than the 1,838 inspectors the previous year.[20]

In FY 2017, federal OSHA inspectors conducted 32,396 inspections, and the state OSHA agencies combined conducted 43,593 inspections.[21]

The majority of federal OSHA inspections took place in the construction industry (52%), followed by manufacturing (22%), 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 14% of private-sector employment in 2016, received less than 2% of federal OSHA inspections in FY 2017.

In the OSHA state plans, the construction industry accounted for 40% of inspections and the manufacturing industry accounted for 16%. But the state plans, which cover both public- and private-sector workers, conducted more of their inspections in administrative support and waste management (6%), public administration (6%), retail trade (5%), agriculture, forestry, fishing and hunting (4%), and health care and social assistance (4%), than federal OSHA.

At its current staffing and inspection levels, it would take federal OSHA, on average, 158 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 102 years to inspect each worksite under state jurisdiction once. In 22 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 77,908 workers. This compares with the benchmark of one labor inspector for every 10,000 workers recommended by the International Labor Organization for industrialized countries.[22] In the states of Arizona, Arkansas, Delaware, Florida, Georgia, Louisiana, Massachusetts, Mississippi, Missouri, Nebraska, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, West Virginia and Wisconsin, the ratio of inspectors to employees is greater than one per 100,000 workers, with South Dakota having the highest ratio at one inspector per 210,230 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

[20]This reflects the number of federal inspectors plus the number of inspectors "on board" reflected in the FY 2018 state plan grant applications. It does not include compliance supervisors.
[21]In FY 2016, OSHA created a new inspection weighting protocol under which time-intensive inspections involving complicated hazards like ergonomics, workplace violence and chemical process safety management are given greater weight than shorter-duration, routine inspections. This was done to increase the focus on quality inspections rather than the number of inspections conducted. In FY 2017, OSHA reported 41,591 "enforcement units" (EUs) conducted, compared with 42,900 EUs in FY 2016.
[22]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.

every 158 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 inspectors responsible for the safety and health of 67.8 million workers at more than 3.9 million establishments. In FY 2018, there are 1,953 federal OSHA staff responsible for the safety and health of 139 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. By now, there are only 896 federal OSHA inspectors (including supervisors), or 5.8 inspectors per 1 million workers.

## Violations and Penalties

Penalties for OSHA violations increased during the Obama administration. A 2010 revised penalty policy resulted in a doubling of fines for serious violations. In November 2015, OSHA penalties were increased further when Congress passed the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, which extended the coverage of the Inflation Adjustment Act to OSHA, one of a few agencies not previously covered. Under the new 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. 2, 2018, increased the maximum penalty for serious violations to $12,934, and for willful and repeat violations to $129,336.[23] State plans also are required to raise their statutory maximum penalties in order to be as effective as the federal OSHA program, and several already have done so.

Fiscal year 2017 was the first full year to reflect the statutory inflation adjusted increase in penalties. In FY 2017, the average penalty for a serious violation for federal OSHA was $3,553, compared with an average penalty of $2,402 for serious violations in FY 2016. In the state OSHA plans, the average penalty for a serious violation remained low at $1,849 in FY 2017; it was $1,747 in FY 2016. In FY 2017, the trend of lowest and highest average penalties for serious violations continued: Oregon had the lowest average penalty for serious violations at $547, while California had the highest average penalty at $7,326 per serious violation.

The number of willful violations cited by federal OSHA decreased significantly from 542 in FY 2016 to 319 in FY 2017. The average penalty per willful violation increased from $41,592 in FY 2016 to $65,229 in FY 2017, reflecting the statutory increase in maximum penalty levels. The average penalty per repeat violation increased from $8,670 in FY 2016 to $11,349 in FY 2017. In states with state-run OSHA plans, in FY 2017, there were 180 willful violations issued, with

[23] 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.

an average penalty of $45,102 per violation, and 1,754 repeat violations issued, with an average penalty of $4,837 per violation.

For FY 2017, federal OSHA reported that the agency brought 47 "significant" enforcement cases. In FY 2017, the threshold for a significant enforcement case was $180,000 in total proposed penalties. This is far fewer than the 123 significant cases reported by OSHA for FY 2016. 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.

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 2017 was just $16,809 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 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 2017 was $7,500 for federal OSHA and the median current penalty was $4,000 for the state OSHA plans combined, according to enforcement data provided by OSHA in April 2017. These are somewhat more than the respective penalties in FY 2016: $6,500 for federal OSHA and $2,500 for the state OSHA plans. These data include enforcement cases that still are under contest, and some cases that are still 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 five fatality investigations in FY 2017, and Montana, which had eight investigations, both had $0 for both median initial and current penalties in FY 2017. Utah had the next lowest median current penalty for fatality investigations with $1,500 in penalties assessed, followed by Oregon ($2,000), Colorado ($2,716), North Dakota ($2,807) and Maryland ($2,888). Minnesota had the highest current median penalty ($25,000) followed by California ($21,485), South Dakota ($17,746), Alaska ($16,000) and Missouri ($14,239).

## Enforcement Initiatives and Policies

During the Obama administration, OSHA implemented a number of important enforcement programs and policies to address high-hazard employers and industries, and to respond to changes in the workforce and employment relationships. These included 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 new special emphasis programs on amputation hazards, poultry processing and the auto parts industry.

The agency established new oversight and enforcement procedures to implement OSHA's 2015 regulation on severe injury reports (hospitalizations, amputations and the loss of an eye). Some reports received onsite inspections and others rapid response investigations, which required

employers to investigate injuries, correct identified hazards and report findings and actions to OSHA. This initiative greatly expanded OSHA's reach to workplaces with serious workplace hazards.

The Obama administration also updated its policy on who could serve as an employee walkaround representative on OSHA inspections. Section 8(e) of the OSH Act provides a right for a representative of employees to have an opportunity to participate in an inspection. Under OSHA regulations, that individual may be an employee who is the collective bargaining representative or another individual designated by the employees where the inspector determines that the individual will aid the inspection. In 2013, the agency issued a letter of interpretation stating that nonunion workers could designate a walkaround representative who was not an employee of the company, such as a union or a worker center, where the inspector determined it would aid the inspection.[24]

Business groups strongly objected to and challenged OSHA's policy to allow nonunion workers the right to have a representative participate in OSHA inspections. Shortly after taking office, in April 2017, the Trump administration withdrew the letter of interpretation that provided this right to nonunion workers.[25]

The Obama administration also undertook several 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 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 is no longer 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

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[24]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* www.osha.gov/laws-regs/standardinterpretations/2013-02-21.

[25] Galassi, Thomas, Director Enforcement Programs, U.S. Department of Labor, OSHA. Memorandum for Regional Administrators. Rescission of Feb. 21, 2013, letter to Mr. Steve Sallman and Update to the OSHA Field Operations Manual, April 12, 2017.

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.

As of this time, in the absence of a confirmed assistant secretary, there have not been major changes to other OSHA enforcement policy initiatives and programs, which largely remain in place and continue to be implemented.

According to OSHA, there were 138 new cases added to the log of the Severe Violator Enforcement Program in FY 2017.[26] There have been 1,031 total cumulative cases in the SVEP program since its initiation in 2013. As of Feb. 13, 2018, there were 523 cases on the SVEP log, subject to enhanced oversight.[27] Twenty five percent of these cases (132 cases) involved fatalities. More than 60% of these cases involved smaller employers with between one and 25 workers.

For CY 2017, OSHA reported that the agency received 11,884 severe injury reports, 8,724 hospitalization reports and 2,866 amputation reports. This was an increase from the 8,100 severe injury reports received in CY 2016. Thirty percent of the CY 2017 reports received an inspection; 70% of the reports were investigated by employers.[28]

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. 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 2017, according to data provided by OSHA, the agency conducted 175 inspections of host employers as part of the temporary worker initiative and 117 inspections of staffing agencies, far fewer than the 621 inspections of host employers and 187 inspections of staffing agencies conducted in FY 2016.

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 have been only two cases that resulted in the issuance of 5(a)(1) general duty clause citations. In FY 2017, there were 51 ergonomics inspections cases where OSHA issued Hazard Alert Letters.

## 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

[26]OSHA Inspection Data in Response to AFL-CIO Data Request 2017–2018.
[27]Galassi, Thomas, Director, Directorate of Enforcement Programs, U.S. Department of Labor, OSHA. PowerPoint Presentation, American Bar Association, Occupational Safety and Health Law Committee, 2018 Midwinter Meeting.
[28]Galassi, 2018.

passage of the act in 1970, only 96 cases have been prosecuted under the act, with defendants serving a total of 110 months in jail. During this time, there were approximately 405,000 workplace fatalities, according to National Safety Council and BLS data, about 20% of which were investigated by federal OSHA.[29, 30]

By comparison, the Environmental Protection Agency reported in FY 2017 that there were 115 criminal enforcement cases initiated under federal environmental laws and 139 defendants charged, resulting in 153 years of jail time and $3 billion in fines and restitution. While there were fewer criminal prosecutions by EPA in FY 2017 than in recent years, there were more cases, fines and jail time in this one year than during OSHA's entire history.[31] 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 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, in 2005 the DOJ launched a Worker Endangerment Initiative. This initiative 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. Under the initiative, DOJ prosecuted numerous companies for environmental violations that led to the deaths or serious injury of workers, including British Petroleum for a 2005 explosion at a Texas refinery that killed 15 workers, and W.R. Grace for knowing endangerment of workers exposed to asbestos-contaminated vermiculite in Libby, Montana. These prosecutions resulted in many convictions and significant jail time for defendants.[32,33]

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[29]"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.
[30]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.
[31]U.S. Environmental Protection Agency. *See* www.epa.gov/enforcement/enforcement-annual-results-numbers-glance-fiscal-year-2017.
[32]"Frontline: A Dangerous Business Revisited," March 2008, *available at* www.pbs.org/wgbh/pages/frontline/mcwane/penalty/initiative.html.
[33]Goldsmith, Andrew D., Worker Endangerment Initiative, PowerPoint Presentation, American Bar Association, Occupational Safety and Health Committee, Miami Beach, Florida, February 2009.

In December 2015, DOL and DOJ expanded the Worker Endangerment Initiative and entered into a formal memorandum of understanding to improve coordination on cases involving potential criminal prosecution for worker safety.[34, 35] Under the MOU, the DOJ's Environment and Natural Resources Divisions and the U.S. attorney's offices work with OSHA and other DOL agencies to investigate and prosecute worker endangerment violations, utilizing all available statutes. Under this initiative, DOJ significantly enhanced its criminal enforcement for worker safety and health.

During the Obama administration, DOL 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 2017, DOL referred 19 cases for criminal prosecution, compared with seven cases in FY 2016 and 12 cases in FY 2015.

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 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 a strong 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

[34]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.

[35]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.

2017, OSHA formed 17 new alliances, down from 20 in FY 2016. The total number of active alliances in FY 2017 is 233. OSHA approved 78 new VPP sites in FY 2017, up from 59 in FY 2016, bringing the total number of federal OSHA VPP sites at the end of FY 2017 to 1,407.[36]

## 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.[37, 38]

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 pathogens, hearing conservation, recordkeeping, and access to employee exposure and medical records for cabin crews.[39]

## 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.

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[36]OSHA Directorate of Cooperative and State Programs.

[37]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.

[38]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.

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

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 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. The administration also created a separate budget line item for the whistleblower program and sought increased funding and staffing for the program. For FY 2017, the budget for the program was $17.5 million, with 124 staff assigned, a decrease from the 135 positions in FY 2016.

Unfortunately, the Trump administration has not maintained the same commitment to the whistleblower protection program. While funding for the program remained level at $17.5 million in FY 2018, the number of whistleblower staff declined to 121 positions from 135 positions in FY 2016. No increase is being requested for FY 2019. Moreover, the Trump administration has proposed to terminate the recently established WPAC, eliminating oversight on this important program.

OSHA data for FY 2017 show a similar number of whistleblower cases received and completed as in FY 2016. In FY 2017, OSHA received 3,303 cases, compared with 3,355 in FY 2016. In FY 2017, 58% of the cases received (1,932 out of 3,303) were 11(c) complaints. Workers also filed large numbers of whistleblower cases under the Surface Transportation Act (424), the Federal Rail Safety Act (293) and the Sarbanes-Oxley Act (186).[40]

During the Obama administration, from FY 2009 to FY 2016, there was a large increase (55%) in the number of whistleblower cases received by OSHA, with the majority of the increase in 11(c) cases filed under the OSH Act.[41]

Due to the increase in the number of filed cases, the backlog in cases has grown and continues to be a serious problem. At the end of FY 2017, there were 2,451 pending cases;1,408 of these were 11(c) cases. The average time to complete cases was 292 days in FY 2017, up from an average of 275 days in FY 2016. For OSHA 11(c) cases, the average time to complete cases was 260 days in FY 2017, an increase from 252 days in FY 2016. 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.

[40]Occupational Safety and Health Administration, Whistleblower Investigation Data, Report Period: 10/01/2016 to 09/30/2017.
[41]Occupational Safety and Health Administration, Whistleblower Investigation Data, FY 2007–2017, *available at* www.whistleblowers.gov/factsheets_page/statistics.

In FY 2017, 846 cases were found to be meritorious, with $29.3 million in remedies (back pay, damages, etc.). This compares with 880 merit cases and $39.1 million in damages in FY 2016. The biggest average awards in FY 2017 were for cases brought under the Sarbanes-Oxley Act ($291,455), the Federal Rail Safety Act ($76,860) and Consumer Financial Protection Act ($74,472). For the 11(c) program, damage awards were much smaller. In FY 2017, there were 538 meritorious 11(c) cases, with damages averaging $10,544 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 2017, 503 out of 3,348 discrimination cases involved retaliation for injury reporting. OSHA 11(c) cases accounted for 347 of these claims, of which 122 (35%) were found to have merit. Claims under the Federal Rail Safety Act accounted for 147 of the injury reporting retaliation cases, of which 43 cases (29%) were meritorious.

To address the problems of retaliation related to injury reporting, in March 2012 OSHA issued a policy memorandum to provide guidance to the field.[42] 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. The anti-retaliation provisions became effective in December 2016 and remain in effect, but to date there has been little if any enforcement of these provisions by the Trump administration. Employer groups have filed legal challenges to the injury reporting rule, but this litigation has been held in abeyance while OSHA reconsiders some provisions of the regulation.

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 47 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.

[42]Richard E. Fairfax, Deputy Assistant Secretary, Memorandum for Regional Administrators, Whistleblower Program Managers, “Employer Safety Incentive and Disincentive Policies and Practices,” March 12, 2012.

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 that 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 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 would work. Public Citizen, joined by the Communication Workers of America 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 only used once successfully, 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 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, 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 will only 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 revoke many of the rule's requirements, including key exposure monitoring and medical surveillance requirements for workers in the construction and maritime industries.

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 fully in effect and being enforced in the construction industry, and is scheduled to be effective in most of general industry in June 2018.

The Trump administration also has moved to delay and weaken OSHA's electronic injury reporting rule. This rule, issued in May 2016, requires 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 that OSHA has collected from employers since 1996. The more detailed injury and illness reports provide data on the types of injuries and their cause, similar to data that has been collected by MSHA on injuries in the mining industry for decades.

The anti-retaliation protections of the injury reporting rule went into effect in December 2016, but the Trump administration delayed the requirements for reporting the summary injury and illness information to OSHA until December 2017 and has announced its intention to revoke the requirements for reporting the detailed injury data to OSHA. 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 proposed rule to roll back the reporting requirements for detailed injury data is expected to be issued shortly. Industry groups still are pushing the Trump administration to repeal the entire rule, which would leave OSHA with no workplace-specific information to target enforcement and compliance assistance efforts.

The Trump administration also has abandoned or suspended 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 put new rules on other critical safety and health hazards, including workplace violence, infectious diseases, process safety management and emergency preparedness, on inactive status on the long-term agenda, leaving future action undetermined and uncertain.

The only new rule that appears to be a possibility is a rule to address injuries and deaths on communications towers. A small business review was slated to begin on the communication tower rule in March 2018, but to date that has not occurred.

In summary, the Trump administration is dedicated to pursuing a deregulatory agenda to roll back or repeal existing protections. Action on new standards is unlikely and only will come as a result of litigation or congressional action to force the administration to issue much-needed rules.

## 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. 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.

During the first year of the Obama administration, OSHA and MSHA received significant increases in their respective budgets. For FY 2010, the omnibus appropriations bill enacted by the Democratic-controlled Congress provided $559 million in funding for OSHA, $357 million for MSHA and $302 million for NIOSH. This compared with FY 2009 levels of $513 million for OSHA, $347 million for MSHA and $290 million for NIOSH. In subsequent years there were additional increases sought and received for OSHA and MSHA.

When Republicans took control of the House of Representatives in 2011, they targeted budgets for the job safety agencies. Following the government shutdown and sequester in 2013, OSHA's budget was reduced from $565 million to $535 million. In FY 2014, OSHA funding was partially restored to a level of $552 million. Since then OSHA's budget has been essentially frozen at this level. The current OSHA budget amounts to $3.61 to protect the safety and health of each worker in United States.

In FY 2013, MSHA's budget also was cut as a result of the budget sequester, from $373 million to $354 million. In FY 2014, MSHA's funding was increased to $376 million, but reduced in FY 2017 to the current level of $374 million, with reductions in funding for coal mine enforcement.

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, and labor and business groups, Congress rejected these proposals and maintained NIOSH's funding. Currently, NIOSH's budget for FY 2018 stands at $335 million.

President Trump's budget proposals in both FY 2018 and FY 2019 targeted key worker safety and health programs for cutbacks or elimination. In both years, the administration proposed to eliminate OSHA's Susan Harwood worker safety and health program—the only compliance assistance program targeted primarily to workers—and shift the money to compliance assistance for employers. The administration proposed increases for the Voluntary Protection Program. In FY 2019, the Trump administration is seeking $4.6 million to fund 32 new compliance assistance positions. The administration also is seeking a $4.7 million increase to fund 42 enforcement positions to address the erosion in the OSHA enforcement program.

For MSHA, the FY 2019 Trump budget proposed a $3.9 million cut in the coal enforcement program, while seeking an increase in funding for metal and nonmetal enforcement ($2.5 million) and standards development ($0.8 million).

At NIOSH, the Trump administration proposed to cut NIOSH funding by 40% ($135.2 million), eliminating programs for agriculture, fishing, and logging safety and health research, the

Educational Research Center program and all external research funded by NIOSH, including funding for construction and firefighter safety and health. On top of these cuts, the administration proposed dismantling the NIOSH program by moving it from the Centers for Disease Control to the National Institutes for Health, with the intention of folding the agency into other existing institutes. The budget proposes to leave the World Trade Center Health Program—which provides critical medical surveillance and treatment to 9/11 responders and survivors—at CDC, even though the legislation authorizing the program requires that it be administered by NIOSH.

The final omnibus funding bill passed by Congress in March 2018 rejected all of these proposed cuts to safety and health programs. As noted, these same proposed cutbacks and others are included in President Trump's FY 2019 budget request. Hopefully Congress will reject them once again, but even a status quo budget for FY 2019 would leave OSHA, MSHA, NIOSH and other job safety agencies with inadequate resources to address the significant safety and health problems facing workers.

## Legislation

With President Trump in the White House and Republicans holding majorities in Congress, the political environment for working people in the 115th Congress is challenging. In addition to the repeal of more than a dozen rules under the Congressional Review Act, Republicans have pushed forward a wide range of bills to roll back and limit workers' rights and protections.

The primary legislative threat to worker safety and health and other public protections has been a large number of "regulatory reform" bills that would make it more difficult, if not impossible, for agencies to issue needed safeguards. The Regulations from the Executive in Need of Scrutiny (REINS) Act (H.R. 26, S. 21) 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. The Regulatory Accountability Act of 2017 (H.R. 5, S. 951) would upend 40 years of law to make costs to businesses, not the protection of workers and the public, the primary consideration. The Small Business Regulatory Flexibility Improvements Act of 2017 (H.R. 33) would add a host of new analytical requirements to the regulatory process, further delaying needed safeguards. The Searching for and Cutting Regulations that are Unnecessarily Burdensome (SCRUB) Act (H.R. 998) would establish a new "regulatory review" commission charged with identifying duplicative or "obsolete" regulations to repeal, with the goal of achieving a 15% reduction in the cumulative cost of regulations.

The House moved quickly in 2017 to pass all of these bills and other anti-regulatory legislation, largely along party lines. In the Senate, action has been much slower, since Democratic opposition to these bills has been strong, and none of the measures has gained sufficient support (i.e., 60 votes) to overcome a filibuster. To date, the Regulatory Accountability Act (S. 951) and REINS Act (S. 21) have been reported out of committee, but have not been acted on by the full Senate. Currently, the Regulatory Accountability Act has received the support of only one Democrat (Sen. Heidi Heitkamp of North Dakota) and the REINS Act has no Democratic support. At this time, passage of either of these bills seems unlikely.

In the past several sessions of Congress, legislation to strengthen the OSH Act and the Mine Safety and Health Act has been introduced. The Protecting America's Workers Act (H.R. 914, S.

2621) would expand OSHA coverage, strengthen enforcement and enhance whistleblower protections. The Robert C. Byrd Mine Safety Protection Act of 2017 (H.R. 1903, S. 854) proposes to revamp the provisions for patterns of violations, enhance criminal and civil penalties, provide MSHA subpoena power and other enforcement tools, and strengthen miners' whistleblower protections. Recently, legislation was introduced to mandate that OSHA issue a standard to protect health care workers from workplace violence (H.R. 5223) since the Trump administration has suspended work on this important rule. But with Republicans in control of Congress, none of these bills has been acted upon.

Legislation (H.R. 1444, S. 1878) to mandate OSHA's Voluntary Protection Program also has been introduced. While the legislation claims to codify the existing VPP program, the criteria in the bill are less stringent than those required by OSHA. For example, the bill does not require that unions or workers be party to the voluntary agreement, a requirement that has been part of the program since 1982. Supporters of the legislation have pushed to build co-sponsors in this Congress. However, the bill is not supported by the AFL-CIO and many unions, since it does not meet the standards of the existing VPP program. Moreover, the legislation is not needed for the operation of the program. It is the unions' view that Congress should focus its efforts on needed improvements in the OSH Act that only can be achieved through legislative action.

## 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 (UBB) 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.[43,44]

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.

[43]Department 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* www.justice.gov/usao-sdwv/pr/blankenship-sentenced-year-federal-prison.

[44] Blankenship was released from federal prison in May 2017 is now a Republican candidate for the U.S. Senate in West Virginia.

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 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, are likely to be challenged by the mining unions.

The Trump administration also has announced it intends to re-examine MSHA's 2014 coal dust rule to evaluate the effectiveness of the rule and whether it should be modified to be less burdensome on industry. This action is particularly alarming since the National Institute for Occupational Safety and Health recently reported the largest cluster of black lung disease 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.[45] Moreover, exposure monitoring data reported at the end of the Obama administration by MSHA and coal operators showed that since the coal dust standard was issued, coal dust levels declined significantly, and that 99% of all samples were in compliance with the new standard.[46]

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

[46] Mine Safety and Health Administration, Respirable Coal Mine Dust Samples Since Implementation (8/1/14–9/30/16), *available at* www.msha.gov/sites/default/files/Data_Reports/Charts/Respirable_Coal_Mine_Dust_Samples_Since_Implementation__1-5-17.pdf.

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.

Thus far, the Trump administration largely has maintained MSHA's enforcement programs and policies, but there have been declines in some enforcement activities. Preliminary data from MSHA shows that in 2017, overall enforcement for coal and nonmetal mines was similar to enforcement in 2016. There was an increase in the number of citations and orders issued, but a reduction in the penalties assessed. [47]

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

In 2017, there also were declines in MSHA's enforcement activity for miners' discrimination complaints. In 2017, MSHA filed 31 discrimination complaints on behalf of miners and sought reinstatement for 16 miners, down from 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. For FY 2019, the Trump administration has proposed a budget that cuts coal enforcement by $4 million and seeks a $2.5 million increase in metal and nonmetal mining enforcement.

The last year of the Obama administration was the safest on record for the mining industry, with record low fatalities and injuries reported. But mining remains a highly hazardous industry where constant vigilance and oversight is required.

In the first year of the Trump administration, 2017, coal mine fatalities and injuries increased. Coal mine fatalities jumped from eight to 15 deaths. The increase in deaths and injuries should serve as a warning that strong safety and health protections for miners must be maintained. Any

[47] Mine Safety and Health Administration, Mine Safety at a Glance: www.msha.gov/data-reports/statistics/mine-safety-and-health-glance.

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 now the second-leading cause of death on the job and the fourth-leading cause of nonfatal injury with days away from work in private industry, superseding transportation incidents from 2015. In 2016, one in every six work-related deaths was attributed to workplace violence; 866 workers died from work-related violence, a significant increase from 703 workers in 2015.

Currently, there is no federal OSHA standard to protect workers against workplace violence. 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.

Future action on this serious workplace hazard is uncertain. Enforcement on workplace violence under the general duty clause is being challenged by employers and the Trump administration has sidelined OSHA's workplace violence standard, leaving workers with inadequate protection from this growing threat.

#### *Homicides and Suicides*

Homicides accounted for the majority of workplace violence deaths: 500 in 2016, a 20% increase from 2015. Sixty-one of these homicides were among women workers and workplace homicide was the leading cause of job death for women workers, accounting for 24% of their work-related fatalities. Domestic violence in the workplace has become a worsening problem; women were nearly six times more likely to be killed by a relative or domestic partner at work than men.

Black workers were at greatest risk of workplace homicide in 2016, experiencing 26% of all such deaths (128 out of 500), while representing only 12% of total employment (hours worked). Homicides among Asian (non-Hispanic) workers also were disproportionate related to overall employment: Asian workers experienced 10% of homicides, while representing 6% of employment. Overall, homicides were responsible for 33% of all work-related deaths among Asian (non-Hispanic) workers (52 out of 160 deaths), compared with 22% among black workers (128 out of 587 deaths), 8% among Latino workers (69 out of 879 deaths) and 7% among white workers (241 out of 3,481 deaths).

Workplace homicides largely occur in retail establishments and transportation operations, with retail sales workers (63 deaths), law enforcement personnel (62), supervisors of sales workers (52 deaths) and motor vehicle operators (49 deaths) as the leading occupations. The leading

source of death from workplace homicide was assault by an assailant or suspect (253 deaths), and co-workers were responsible for 66 homicide deaths in 2016. Firearms were the primary source involved in workplace homicides, responsible for 396 workplace deaths.

Two hundred and ninety-one workers committed suicide at work in 2016, a 27% increase from the previous year and the largest number of work-related suicides since BLS began reporting this data in 1992. 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.[48] 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*

Workplace violence is a major problem that is getting worse; it is now the fourth-leading cause of nonfatal injury with days away from work in private industry, superseding transportation incidents since 2015. Even as the reported overall U.S. injury and illness rate has steadily declined since 1992—by 70% overall, the injury rate for workplace violence decreased until the late 1990s, then increased to the same rate as it was in 1992—3.8 per 10,000 workers. All of these rates only reflect injuries that led to days away from work, not all violence-related injuries reported or all that occur.

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, more than 27,000 workplace violence incidents led to injuries involving days away from work in 2016. These attacks are serious, underreported and often leave workers physically and emotionally scarred for life. Women workers experience two-thirds of these serious injuries.

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. Work-related violence is increasing in other areas, too. In 2016, workplace violence injuries in educational services increased 6% since the previous year and 178% since 2008; and the rate of violence-related injuries among teacher assistants increased nearly 12-fold—from 9.6 per 10,000 workers in 2015 to 112.7 in 2016.

### *Health Care and Social Assistance*

Workers in the health care and social service industries are particularly affected. The nature of the work makes these workers at great risk for job-related violence, but this type of violence is foreseeable and preventable. The number of homicides among workers in health care and social assistance nearly doubled in 2016: 29 workers were victims of homicide in the workplace, compared with 15 in 2015.

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

In 2016, the health care and social assistance sector accounted for 54% of lost-time injuries from workplace violence. Nursing and residential care facilities experienced the greatest number of injuries from violence, followed by hospitals, social assistance and educational services. Nursing, psychiatric and home health aides, personal care aides and registered nurses were the occupations at greatest risk of injuries from violence, and patients were responsible for 49% of reported injuries related to violence.

In 2016, the private-sector rate of workplace violence in health care and social assistance was 14.3 per 10,000 workers, an increase of 63% since 2006. During the same decade, workplace violence rates for hospitals increased 89%—47% for psychiatric hospitals in particular. Since 2006, the rate of violence in nursing and residential care facilities increased 49%, in home health services 87%, and in social assistance 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 2016, state government health care and social service workers were *10* times more likely to be injured by an assault than private-sector health care workers (142.8 vs. 14.3, per 10,000 workers). In state government, psychiatric aides experienced injuries caused by violence at a rate of 743.8 per 10,000 workers; psychiatric technicians at 507.8 per 10,000 workers; nursing, psychiatric and home health aides at 370.0 per 10,000 workers; health care support occupations at 285.8 per 10,000 workers; and nursing assistants at 156.2 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.[49] 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.

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 before to address this systemic and serious issue, and reduce the prevalence and severity of violence in the workplace.

### *OSHA 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 enforcement initiatives using the general duty clause (section 5(a)(1) of the OSH Act).

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.[50] In January 2017, the agency issued a new directive,

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[49]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* www.mspb.gov/netsearch/viewdocs.aspx?docnumber=759001&version=761840&application=ACROBAT.

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

"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.[51]

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.[52] This program was renewed in 2017.

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.

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.

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 be able to issue a general duty clause citation, the agency can issue a Hazard Alert Letter to warn employers about the dangers of workplace violence and identify corrective actions. OSHA issued HALs in 65 investigations 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.[53] The GAO recommended

[51]U.S. Department of Labor, OSHA, "Enforcement Procedures and Scheduling for Occupational Exposure to Workplace Violence," CPL 02-01-058, Jan. 10, 2017.
[52]U.S. Department of Labor, OSHA, "Regional Notice 17-09 (CPL04-01)," Oct. 1, 2016, *available at* www.osha.gov/dep/leps/RegionVIII/reg8_fy2017_17-09_workplace_violence.pdf.
[53]U.S. Government Accountability Office, "Additional Efforts Needed to Help Protect Health Care Workers

that OSHA improve workplace violence citation training for its inspectors, follow up on Hazard Alert Letters (HALs), assess current efforts and determine whether the agency should take regulatory action.

A pending court ruling could affect OSHA's ability to use the general duty clause to cite employers for workplace violence violations. Currently, the Occupational Safety and Health Review Commission is considering a case—Integra Health Management Inc.—where the employer has challenged OSHA's authority to utilize the general duty clause to enforce against workplace violence hazards. This case involves the death of a young woman caseworker stabbed by a 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 has appealed the case to the full review commission, where it has been 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.[54]

The Review Commission has not yet issued a ruling in the case. With Republicans now in the majority on the three-member panel the outcome is uncertain, but any decision is certain to be appealed. If the commission and the courts rule that the general duty clause does not cover workplace violence hazards, OSHA will have no authority to enforce against this serious workplace hazard unless and until the agency issues a workplace violence standard.

### *Regulatory Action and Guidance*

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.[55] 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 and social assistance, a critical first step in the process for federal OSHA to protect workers.

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from Workplace Violence," March 2016, *available at* www.gao.gov/products/GAO-16-11.

[54]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.

[55]"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* www.safetyandhealthmagazine.com/ext/resources/document-downloads/unions-petition.pdf.

However, the Trump administration has suspended work on 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. Since then, the administration has declined to provide any information on its intention to proceed with a workplace violence standard, leaving workers at serious risk from this growing workplace threat.

In recent years, OSHA has issued a number of guidance documents to address workplace violence, including "Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers," issued in April 2015, a comprehensive document outlining the contents of violence prevention programs using hazard assessments and the hierarchy of controls.[56] Other guidance documents have been issued for other high-risk populations, including "Recommendations for Workplace Violence Prevention Programs in Late-Night Retail Establishments," and a fact sheet, "Preventing Violence against Taxi and For-Hire Drivers."[57,58] But guidance documents alone are not sufficient to address this serious workplace hazard.

### *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.[59] 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 is currently 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.[60] 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

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[56]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.
[57]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.
[58]U.S. Department of Labor, OSHA, "Preventing Violence against Taxi and For-Hire Drivers," April 2010, *available at* www.osha.gov/Publications/taxi-driver-violence-factsheet.pdf.
[59]"Workplace Violence Prevention in Health Care," General safety orders, New Section: 3342," effective April 1, 2017, *available at* www.dir.ca.gov/oshsb/Workplace-Violence-Prevention-in-Health-Care.html.
[60]"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%20Prevention%20Regulations.pdf.

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 and reproductive diseases.[61] Many of these diseases are chronic, serious and disabling for millions of workers, and impair their professional and personal lives; this problem largely goes underreported 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.[62]

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 (OSH 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

[61]Wilson, M.P., Chia, D.A., Ehlers, B.C., "Green Chemistry in California: A Framework for Leadership in Chemicals Policy and Innovation," California Policy Research Center, University of California, 2006.
[62]Leigh, J.P., "Economic Burden of Occupational Injury and Illness in the United States," The Milbank Quarterly, Vol. 89, No. 4, 2011.

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.[63]

The OSHA permissible exposure limits (PELs) 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.[64] Most of 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.[65] 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 has been posted, there are no signals for increased action on enforcement in this area. In October 2014, OSHA issued an RFI requesting comments on approaches to improving the management of chemical exposures and updating permissible exposure limits (PELs). The agency's intent of this RFI was never clear and OSHA's work remains stalled on chemicals in 2018. 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, bromopropane and updates in PELs.[66]

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

[63]Roundtable on Environmental Health Sciences, Research, and Medicine; Board on Population Health and Public Health Practice; Institute of Medicine, Washington, D.C., *available at* National Academies Press (US); 2014 Oct 2.
[64]OSHA, Annotated PELs, *available at* www.osha.gov/dsg/annotated-pels/.
[65]www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=24990.
[66]Current Regulatory Plan and the Unified Agenda of Regulatory and Deregulatory Actions, *available at* www.reginfo.gov/public/do/eAgendaMain.

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 158 years to visit every workplace in the country once. Unions have 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—union or nonunion.

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.[67]

### *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.

Going forward, EPA must actively work on 20 high-priority chemicals at a time, moving through the risk evaluation and risk management stages. EPA must consult with other agencies

[67] www.dir.ca.gov/dosh/DoshReg/5155Meetings.html.

throughout the process regarding relevant exposures, controls and regulatory action. Most immediately, LSCA requires EPA 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 Chloride[68]
N-Methylpyrrolidone (NMP)
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)

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, however, 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 is behind on deadlines outlined in the law on releasing scoping documents and assessments for public comment. The agency also has narrowed the scope of uses for its 10 priority chemicals that it designated under the Obama administration, even though the agency is required to examine all uses that pose an unreasonable risk to the environment and human (including worker) health. As noted above, asbestos is one of these chemicals. Under the Trump administration, EPA recently 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. EPA also is expected to roll back proposed bans for particularly dangerous chemicals, such as methylene chloride, issued under the Obama

[68]Michaels, David, Letter to Jim Jones, Assistant Administrator, Office of Chemical Safety and Pollution Prevention, April 6, 2016, available at http://src.bna.com/hU4.

administration. All of these changes in EPA's toxics office are a departure from the same work performed under the Obama administration and from the law itself.

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, Congress did not confirm Dourson. A recent 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.

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 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 now, with President Trump in office and Republicans in the majority in Congress, this progress is threatened by rollbacks in worker safety rights and protections, budget cuts and weakened enforcement. Workers safety and health is in danger.

First and foremost, 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.

Efforts to cut the job safety budget must be strongly opposed. OSHA's budget already is meager, and the agency's capacity to provide effective oversight is extremely limited. Further cutbacks would severely harm the agency's enforcement program. Without effective enforcement, employers are more likely to cut corners and reduce their safety and health efforts, leading to more injuries and deaths.

We must push forward. The toll of workplace injuries, illnesses and deaths is too high; and many job safety and health hazards remain unaddressed.

Workplace violence is a growing and serious threat, particularly to women workers and in the health care and social services sector. OSHA must keep its promise to develop a workplace violence standard and enhance enforcement under the general duty clause. Standards also are needed for infectious diseases and combustible dust; standards for chemical hazards are obsolete and must be updated.

OSHA's new standard on electronic injury reporting must be fully implemented and the new anti-retaliation protections for workers who report injuries fully enforced. OSHA must continue to address the widespread problem of injury underreporting, and employer policies and practices that discourage the reporting of injuries through discipline or other means.

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 more than 47 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 2019 budget that would slash the Department of Labor’s budget by 21%, cutting coal mine enforcement and eliminating worker safety and health training programs; eliminate the Chemical Safety Board; and cut NIOSH’s job safety research by $135 million.

## Delaying and Weakening Protections

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

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.

Delayed the requirement for employers to submit summary injury data to OSHA and announced the intention to revise or revoke other parts of the electronic injury reporting/anti-retaliation rule.

Delayed MSHA’s mine examination rule for metal and nonmetal mines until June 2, 2018, and weakened key provisions in the rule.

Delayed EPA’s RMP rule to prevent chemical accidents for nearly two years, until Feb. 19, 2019, putting workers, the public and first responders in danger.

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 workplace violence, infectious diseases, process safety management and emergency preparedness.

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.

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

## Limiting Access to Information and Input

Stopped posting information on all worker fatalities reported to OSHA.

Stopped issuing press releases on many significant OSHA enforcement cases.

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 Administration's OSHA Regulatory Agenda 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 01/18 | MSD Column | Bloodborne Pathogens: 610 Review |
| Standards Improvement Project IV—Final 02/18 | Update to Hazard Communication | Noise in Construction |
| Technical Corrections to 16 OSHA Standard—Final Rule 02/18 | Shipyards Subpart E: Scaffolds, Ladders and Other Working Surfaces | Styrene |
| Communications Towers—Complete SBREFA 03/18 | Tree Care Standard | Injury and Illness Prevention Programs |
| Mechanical Power Press Update—RFI 03/18 | | Subpart Q (Welding) Update |
| Mechanical Power Press Update—RFI 03/18 | | Updating Requirements for Hearing Protection Devices |
| Lockout/Tagout Update—RFI 05/18 | | Revocation of Obsolete PELs |
| Puerto Rico State Plan—NPRM 06/18 | | |
| Agency Practice Concerning OSHA Access to Employee Medical Records—Final Rule 06/18 | | |
| Update Blood Lead Level Removal—ANPRM 07/18 | | |
| Amendments to the Cranes and Derricks in Construction Standard—NPRM 09/18 | | |
| Beryllium: Delay and Proposed Weakening (Construction and Maritime)—Final Rule 09/18 | | |
| Quantitative Fit Testing: Respiratory Protection—Final Rule 09/18 | | |

| Trump Administration's MSHA Regulatory Agenda 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) 01/09/18 | Proximity Detection: Mobile Mining Equipment | Refuge Alternatives Underground Coal Mines |
| Alternatives to Petitions for Modification—RFI 04/18 | | Preventing Coal Mine Accidents—RFI, Response to UBB |
| Refuge Alternatives for Underground Coal Mines—Final Rule 04/18 | | |
| Mine Examination- Metal/Non-Metal Mines (Weakening)—Final Rule 06/18 | | |

[1]Issued on Dec. 14, 2017.

[2]The 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]

## (Employment-Based Fatality Rates)

| 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 |

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

[2]Fatality information for 1992 to 2007 is from the Bureau of Labor Statistics, Census of Fatal Occupational Injuries (CFOI). 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.

[3]Employment 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.

[4]Deaths 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.

[5]Excludes fatalities from the events of September 11, 2001.

# Workplace Fatalities 2006−2016[1]

## (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 |

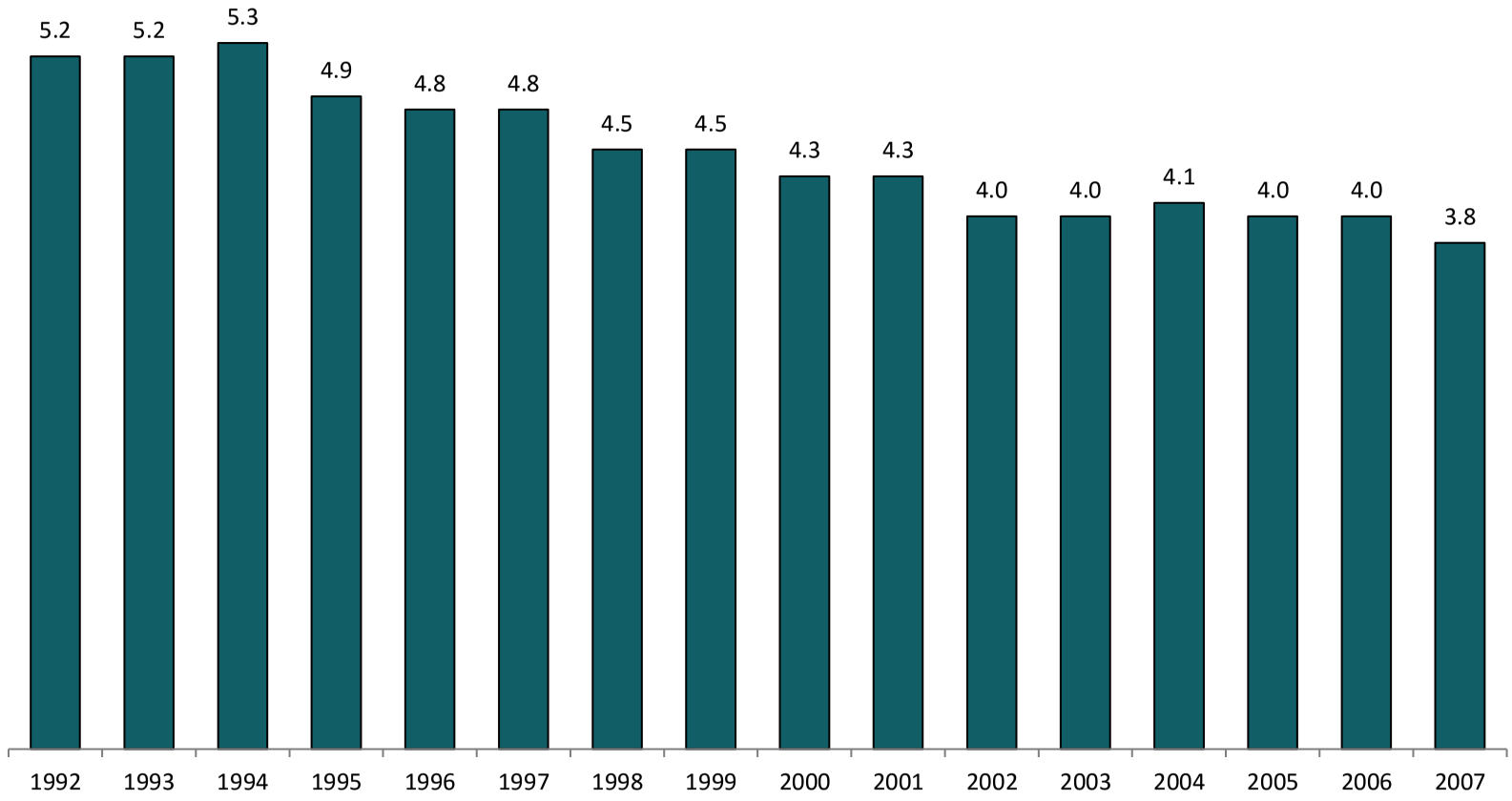
[1]Fatality information is from the U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries (CFOI).

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

[3]Deaths 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. 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, 1992–2007[1]

**(Employment-Based Rates)**

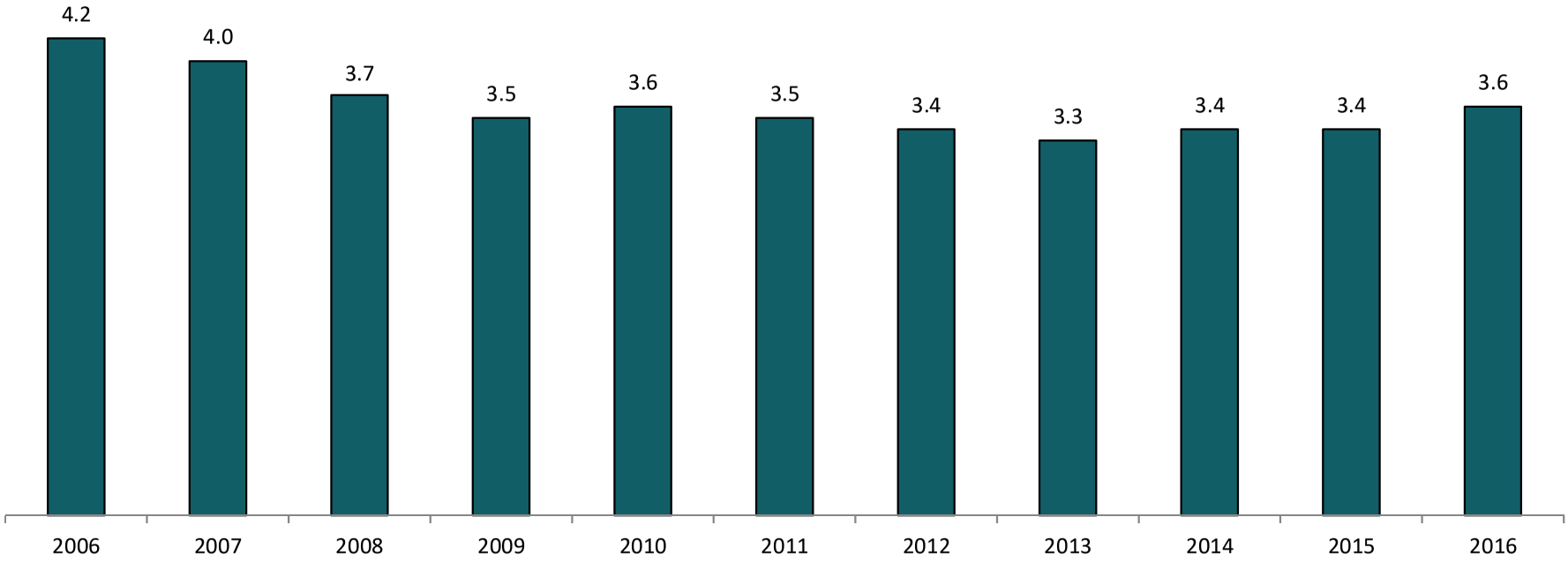



Sources: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, Census of Fatal Occupational Injuries; U.S. Bureau of the Census; and U.S. Department of Defense.

[1]Incidence 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 (CPS). 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, 2006–2016[1]

**(Hours-Based Rates)**




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

[1]incidence 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.

# 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 | 9 | 69 | 100 | 13 | 64 | N/A | N/A | N/A | N/A |
| **1971** | 17.0 | 9 | 68 | 83 | 13 | 63 | N/A | N/A | N/A | N/A |
| **1972** | 17.0 | 9 | 68 | 100 | 13 | 58 | N/A | N/A | N/A | N/A |
| **1973** | 17.0 | 9 | 56 | 83 | 14 | 58 | 38 | 8 | 11 | N/A |
| **1974** | 16.0 | 8 | 53 | 71 | 13 | 54 | 35 | 7 | 10 | N/A |
| **1975** | 15.0 | 9 | 52 | 63 | 12 | 58 | 33 | 7 | 10 | N/A |
| **1976** | 14.0 | 9 | 45 | 63 | 11 | 54 | 31 | 7 | 9 | N/A |
| **1977** | 14.0 | 9 | 47 | 63 | 11 | 51 | 32 | 6 | 8 | N/A |
| **1978** | 14.0 | 9 | 48 | 56 | 11 | 52 | 29 | 7 | 7 | N/A |
| **1979** | 13.0 | 8 | 46 | 56 | 10 | 54 | 30 | 6 | 8 | N/A |
| **1980** | 13.0 | 8 | 45 | 50 | 11 | 56 | 28 | 6 | 7 | N/A |
| **1981** | 13.0 | 7 | 42 | 55 | 10 | 54 | 31 | 5 | 7 | N/A |
| **1982** | 12.0 | 6 | 40 | 50 | 11 | 52 | 26 | 5 | 6 | N/A |
| **1983** | 12.0 | 6 | 39 | 50 | 10 | 52 | 28 | 5 | 7 | N/A |
| **1984** | 11.0 | 6 | 39 | 50 | 9 | 49 | 29 | 5 | 7 | N/A |
| **1985** | 11.0 | 6 | 40 | 40 | 8 | 49 | 27 | 5 | 6 | N/A |
| **1986** | 10.0 | 5 | 37 | 38 | 8 | 55 | 29 | 4 | 5 | N/A |
| **1987** | 10.0 | 5 | 33 | 38 | 9 | 53 | 26 | 5 | 6 | N/A |
| **1988** | 10.0 | 6 | 34 | 38 | 9 | 48 | 26 | 4 | 5 | N/A |
| **1989** | 9.0 | 6 | 32 | 43 | 10 | 40 | 25 | 4 | 5 | N/A |
| **1990** | 9.0 | 5 | 33 | 43 | 10 | 42 | 20 | 4 | 4 | N/A |
| **1991** | 8.0 | 4 | 31 | 43 | 11 | 44 | 18 | 3 | 4 | N/A |
| **1992** | 5.2 | 4 | 14 | 27 | 4 | 24 | 13 | 4 | 2 | 2 |
| **1993** | 5.2 | 4 | 14 | 26 | 3 | 26 | 13 | 4 | 2 | 2 |
| **1994** | 5.3 | 4 | 15 | 27 | 3 | 24 | 13 | 4 | 3 | 1 |
| **1995** | 4.9 | 3 | 15 | 25 | 4 | 22 | 12 | 3 | 2 | 2 |
| **1996** | 4.8 | 3.5 | 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 | 0.9 |
| **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 1970–1991 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 (CFOI). 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 (NAICS) for industries. Prior to 2003, CFOI used the Standard Industrial Classification (SIC) system. The substantial differences between these systems result in breaks in series for industry data.

[2] Deaths per 100,000 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.

[1]Deaths per 100,000 workers.

[2]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 Survery (CPS). 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, 2007–2016[1,2]

**(Hours-Based Rates)**

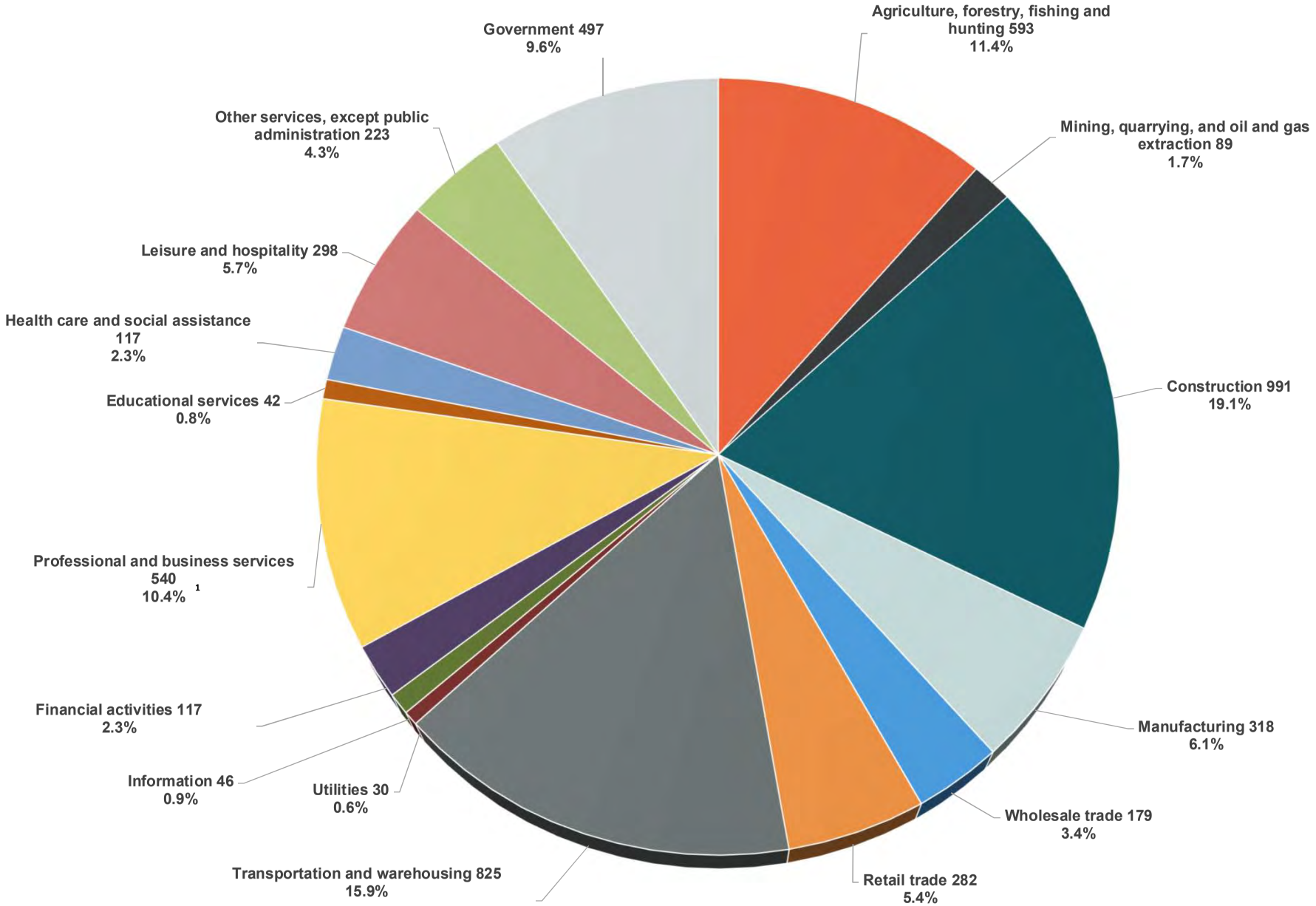
| Industry Sector | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|
| **All Industries** | **4.0** | **3.7** | **3.5** | **3.6** | **3.5** | **3.4** | **3.3** | **3.4** | **3.4** | **3.6** |
| **Agriculture, Forestry, Fishing and Hunting** | 27.0 | 30.4 | 27.2 | 27.9 | 24.9 | 22.8 | 23.2 | 25.6 | 22.8 | 23.2 |
| **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 |
| **Construction** | 10.8 | 9.7 | 9.9 | 9.8 | 9.1 | 9.9 | 9.7 | 9.8 | 10.1 | 10.1 |
| **Manufacturing** | 2.4 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.3 | 2.3 | 2.0 |
| **Wholesale Trade** | 4.5 | 4.4 | 5.0 | 4.9 | 4.9 | 5.4 | 5.3 | 5.1 | 4.7 | 4.8 |
| **Retail Trade** | 2.4 | 2.0 | 2.2 | 2.2 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 |
| **Transportation and Warehousing** | 16.5 | 14.9 | 13.3 | 13.7 | 15.3 | 14.6 | 14.0 | 14.1 | 13.8 | 14.3 |
| **Utilities** | 5.7 | 3.9 | 1.7 | 2.8 | 4.2 | 2.5 | 2.6 | 1.7 | 2.2 | 2.8 |
| **Information** | 2.3 | 1.5 | 1.1 | 1.5 | 1.9 | 1.5 | 1.5 | 1.2 | 1.5 | 1.7 |
| **Financial Activities** | 1.2 | 1.1 | 1.2 | 1.3 | 1.1 | 0.9 | 0.9 | 1.2 | 0.9 | 1.2 |
| **Professional and Business Services** | 3.3 | 2.8 | 3.1 | 2.6 | 2.9 | 2.7 | 2.8 | 2.7 | 3.0 | 3.1 |
| **Educational and Health Services** | 0.8 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| **Leisure and Hospitality** | 2.5 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 1.9 | 2.0 | 2.0 | 2.6 |
| **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 |
| **Government** | 2.3 | 2.4 | 1.9 | 2.2 | 2.2 | 2.0 | 2.0 | 1.9 | 1.9 | 2.2 |

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

[1]Deaths per 100,000 workers.

[2]In 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-based rates. Fatality rate is an hours-based calculation using total hours worked figures that are annual average estimates of total 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 employment-based rates that CFOI calculated for 1992 to 2007.

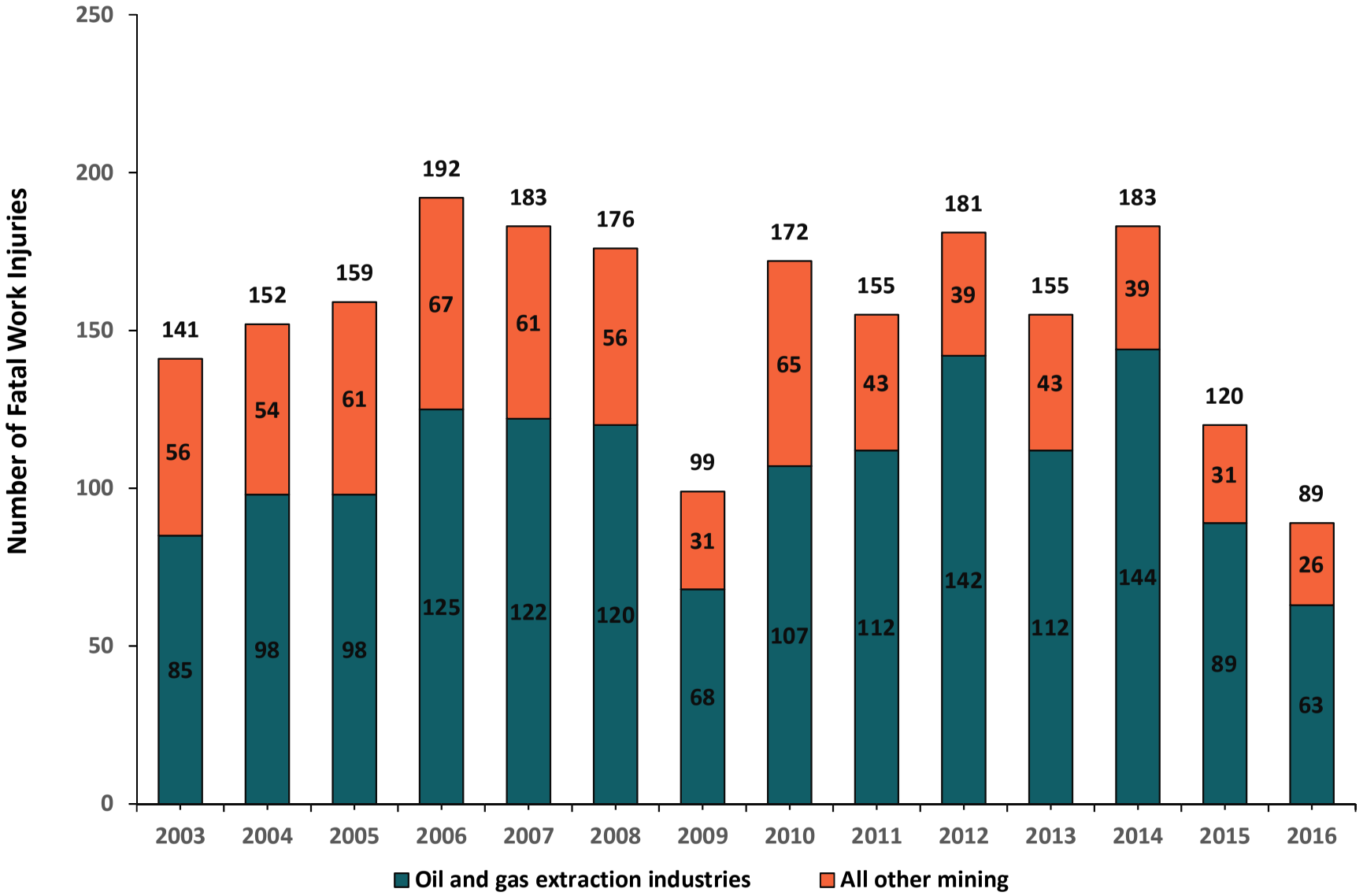
# Occupational Fatalities by Industry Sector, 2016
# (Total Fatalities 5,190)




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

[1]Landscaping services accounted for 208 of these deaths.

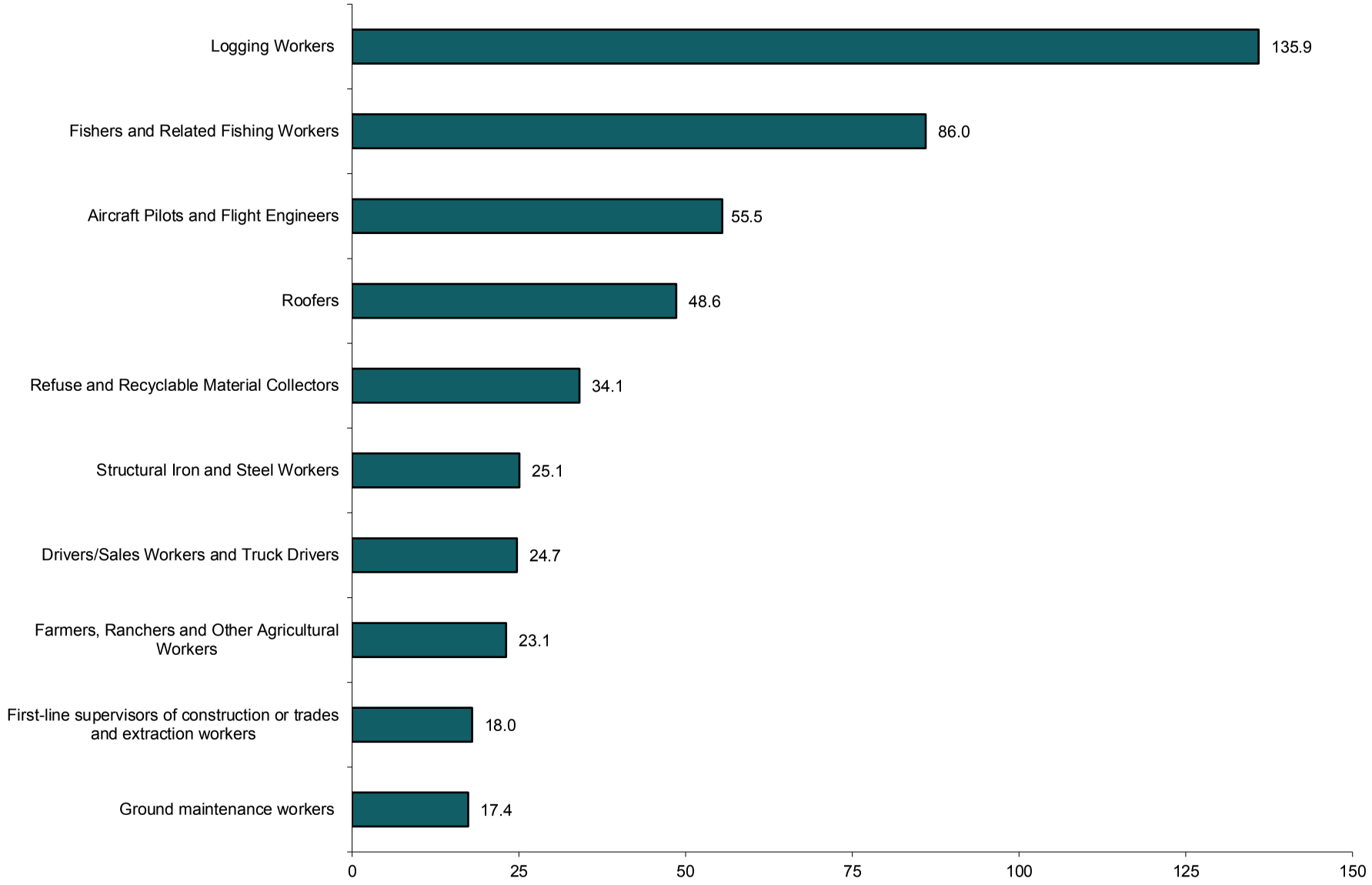
## Fatal Occupational Injuries in the Private-Sector Mining, Quarrying, and Oil and Gas Extraction Industries, 2003–2016




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

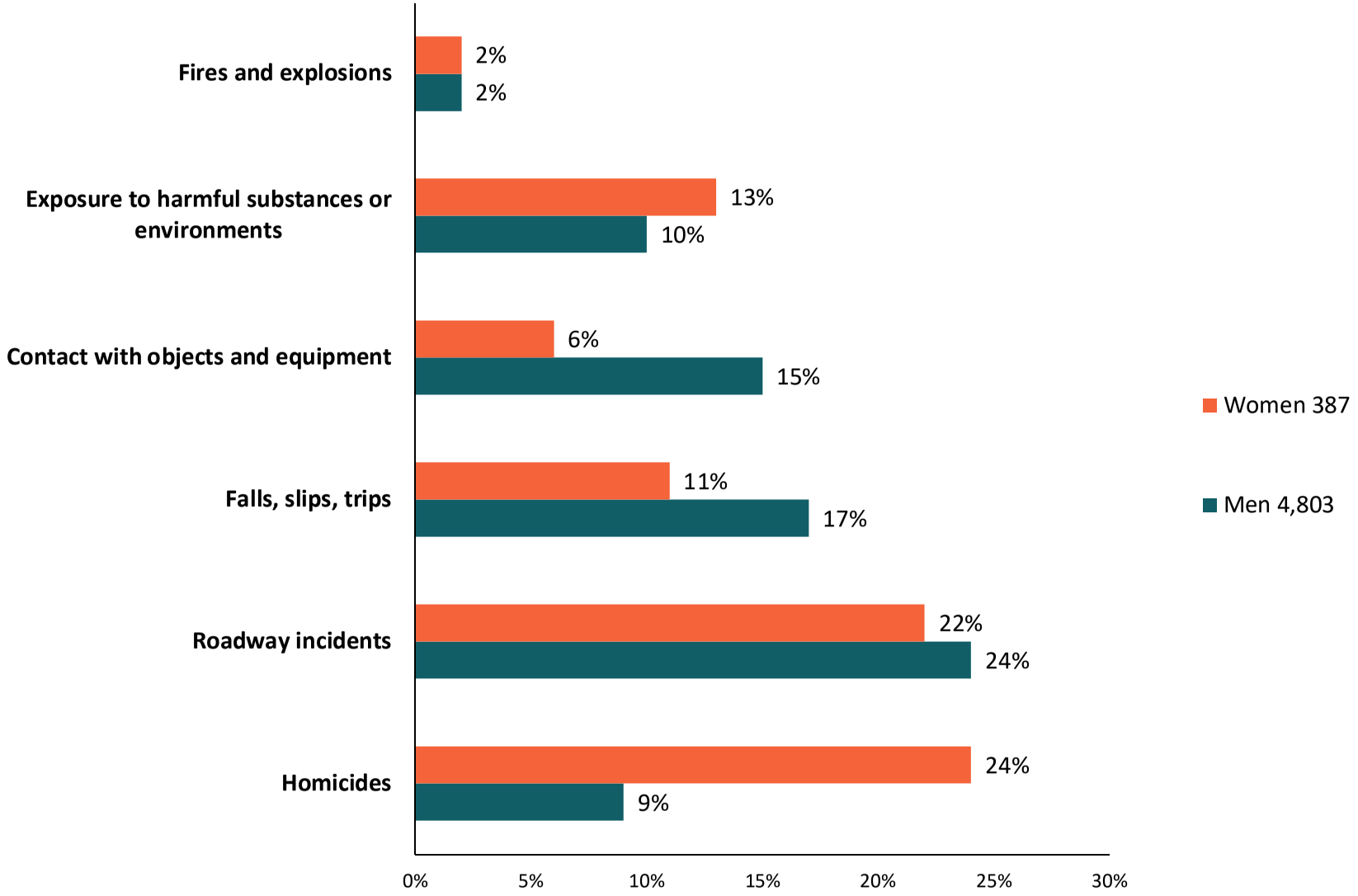
*Note: Oil and gas extraction industries include oil and gas extraction (NAICS 21111), drilling oil and gas wells (NAICS 21311), and support activities for oil and gas operations (NAICS 21312).*

# Selected Occupations With High Fatality Rates, 2016
**(Per 100,000 Workers)**
**National Fatality Rate = 3.6**




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

## Distribution of Fatal Injury Events by Gender of Worker, 2016




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

# Profile of Workplace Homicides, 2016

| Characteristic | Subcharacteristics | Deaths |
|---|---|---|
| Total Homicides[1] | | 500 |
| Gender | Men | 409 |
| | Women | 91 |
| Employee Status | Wage and salary workers | 384 |
| | Self employed | 116 |
| Race | White | 241 |
| | Black | 128 |
| | Latino | 69 |
| Leading Primary Source | Assailant, suspect | 253 |
| | Co-worker or work associate | 66 |
| | Relative or domestic partner | 43 |
| | Other client or customer | 40 |
| Leading Secondary Source | Firearm | 396 |
| | Knives | 34 |
| Leading Worker Activity | Tending a retail establishment | 155 |
| | Protective service activities | 114 |
| | Vehicular and transportation operations | 58 |
| Leading Location | Public building | 193 |
| | Street or highway | 80 |
| | Private residence | 63 |
| Leading Occupations | Retail sales workers | 63 |
| | Law enforcement workers | 62 |
| | Supervisors of sales workers | 52 |
| Leading Industries | Retail trade | 120 |
| | Local government[2] | 71 |
| | Accomodations and food services | 61 |
| | Transportation and warehousing[3] | 39 |

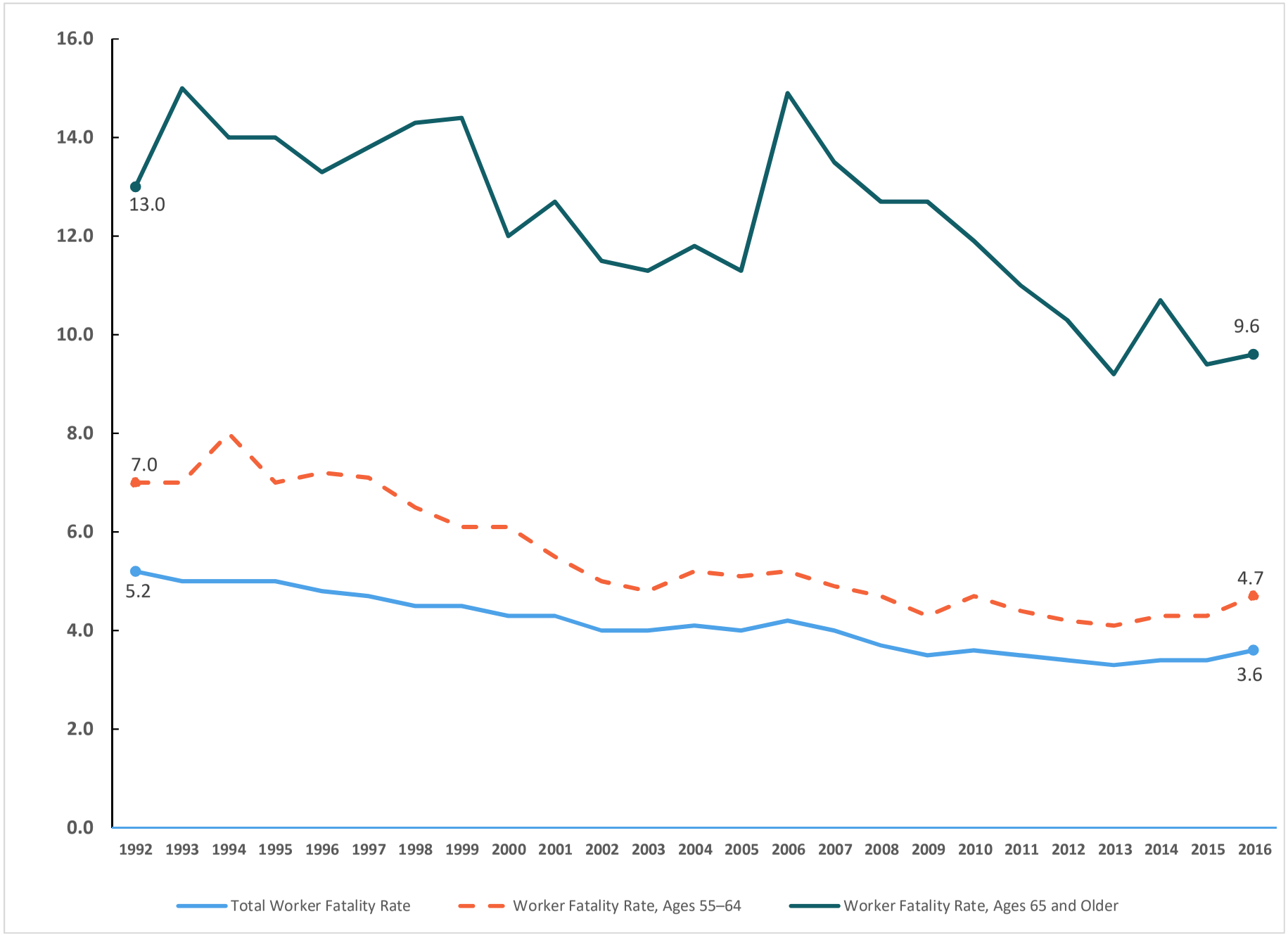
Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

[1]This does not include 291 workplace suicides.

[2]Police protection accounted for 57 of these deaths.

[3]Taxi service accounted for 26 of these deaths.

## Total Worker Fatality Rates Compared with Aging Worker Fatality Rates, 1992–2016[1]




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

[1]All rates per 100,000 workers.

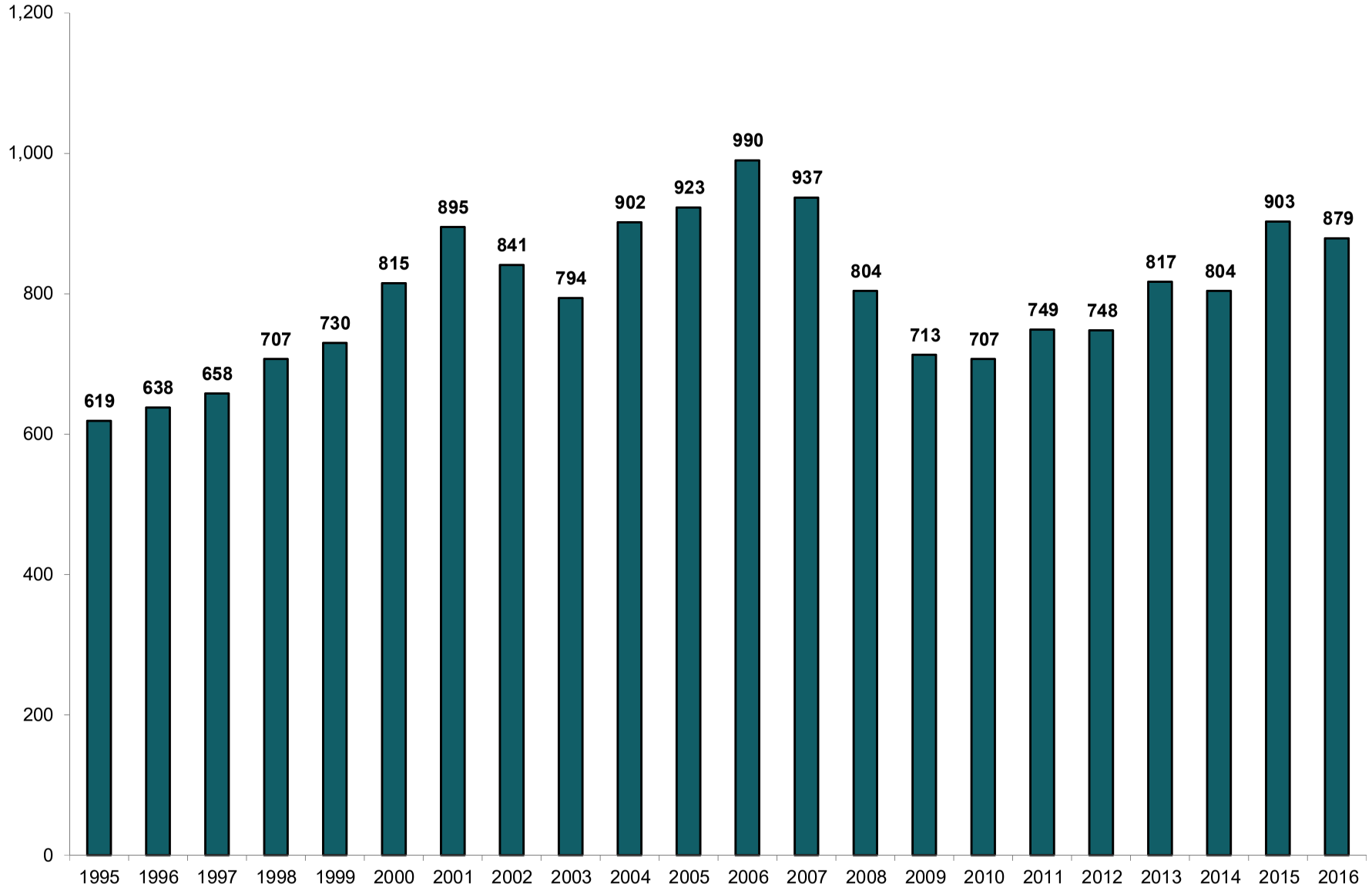
# Fatal Work Injuries by Race, 1996–2016

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001[1] | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Fatalities** | 6,202 | 6,238 | 6,055 | 6,054 | 5,920 | 5,915 | 5,534 | 5,575 | 5,764 | 5,734 | 5,840 | 5,657 | 5,214 | 4,551 | 4,690 | 4,693 | 4,628 | 4,585 | 4,821 | 4,836 | 5,190 |
| White | 4,586 | 4,576 | 4,478 | 4,410 | 4,244 | 4,175 | 3,926 | 3,988 | 4,066 | 3,977 | 4,019 | 3,867 | 3,663 | 3,204 | 3,363 | 3,323 | 3,177 | 3,125 | 3,332 | 3,241 | 3,481 |
| Black or African American | 615 | 661 | 583 | 616 | 575 | 565 | 491 | 543 | 546 | 584 | 565 | 609 | 533 | 421 | 412 | 440 | 486 | 439 | 475 | 495 | 587 |
| Hispanic or Latino | 638 | 658 | 707 | 730 | 815 | 895 | 841 | 794 | 902 | 923 | 990 | 937 | 804 | 713 | 707 | 749 | 748 | 817 | 804 | 903 | 879 |
| Asian or Pacific Islander | 170 | 195 | 148 | 180 | 185 | 182 | 140 | 158 | 180 | 163 | 159 | 172 | 152 | 148 | 149 | 124 | 154 | 132 | 142 | 123 | 167 |
| American Indian or Alaskan Native | 35 | 34 | 28 | 54 | 33 | 48 | 40 | 42 | 28 | 50 | 46 | 29 | 32 | 33 | 32 | 30 | 37 | 35 | 34 | 36 | 38 |
| Other Races/Not Reported | 158 | 114 | 111 | 64 | 68 | 50 | 96 | 50 | 42 | 37 | 61 | 43 | 30 | 32 | 27 | 27 | 26 | 37 | 34 | 38 | 38 |

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

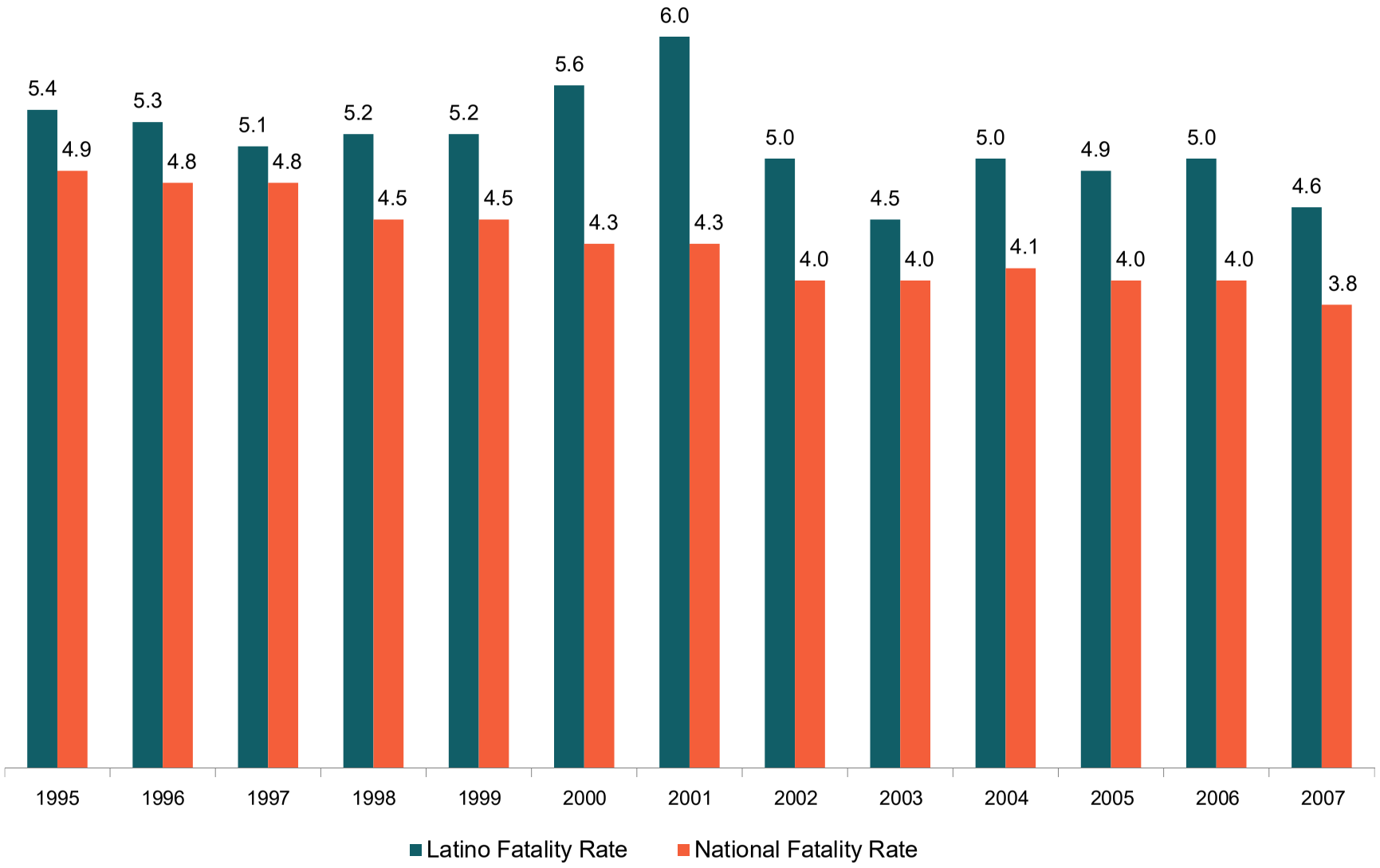
[1]Excludes fatalities from the September 11 terrorist attacks.

## Number of Fatal Occupational Injuries to Hispanic and Latino Workers 1995–2016




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

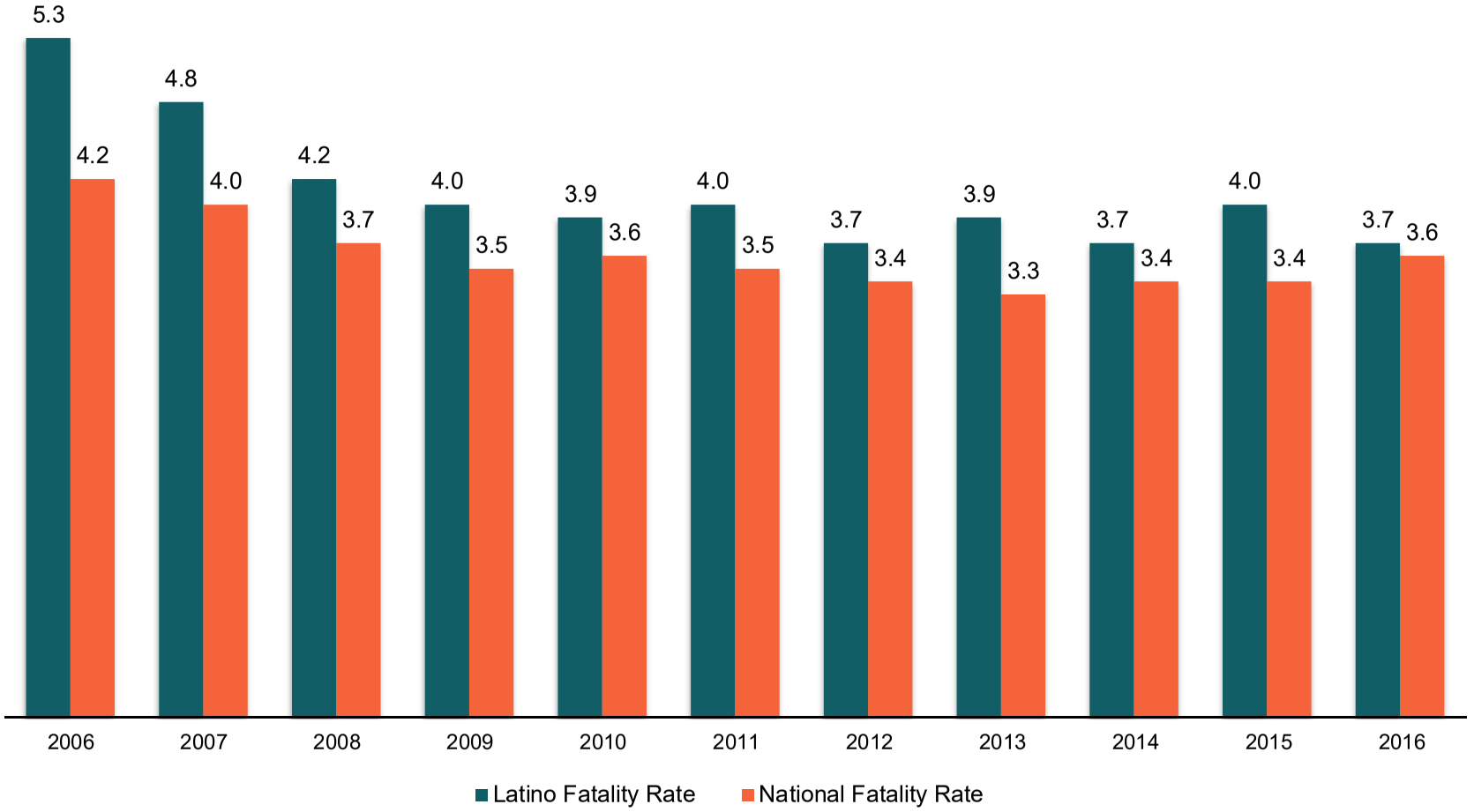
# Rate[1] of Fatal Occupational Injuries to Hispanic and Latino Workers, 1995–2007
**(Employment-Based Rates)**




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

[1]Incidence 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, 2006–2016[1]
### (Hours-Based Rates)




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

[1]Incidence 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 at work multiplied by average hours for civilians, 16 years of age and older, from the Current Population Survey (CPS). 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, 2016

| Characteristic | Subcharacteristics | Deaths |
|---|---|---|
| Total Fatalities | | 879 |
| Country of Birth | Foreign-born | 588 |
| | Native-born | 291 |
| Leading Birthplace Countries | Mexico | 358 |
| | United States | 291 |
| | Guatemala | 47 |
| Employee Status | Wage and salary workers | 758 |
| | Self employed | 121 |
| Gender | Men | 837 |
| | Women | 42 |
| Leading Occupations | Construction trades workers | 242 |
| | Motor vehicle operators[1] | 135 |
| | Agricultural workers | 66 |
| | Grounds maintenance workers | 59 |
| Leading Industries | Construction | 283 |
| | Administration and support and waste management and remediation services[2] | 112 |
| | Transportation and warehousing[3] | 108 |
| Leading Event or Exposure | Transportation incidents | 312 |
| | Fall, slip, trip | 215 |
| | Contact with object/equipment | 132 |
| | Violence[4] | 110 |

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

[1]Heavy and tractor-trailer truck drivers accounted for 107 of these deaths.

[2]Landscaping services accounted for 62 of these deaths.

[3]Truck transportation accounted for 81 of these deaths.

[4]Excludes animal- and insect-related incidents.

# Profile of Foreign-Born Worker Fatalities, 2016

| Characteristic | Subcharacteristics | Number |
|---|---|---|
| Total Fatalities | | 970 |
| Leading Birthplace Countries | Mexico | 362 |
| | Guatemala | 48 |
| | El Salvador | 42 |
| | India | 42 |
| Employee Status | Wage and salary workers | 795 |
| | Self employed | 175 |
| Gender | Men | 921 |
| | Women | 49 |
| Leading Occupations | Construction trades workers | 231 |
| | Motor vehicle operators[1] | 185 |
| | Agricultural workers | 58 |
| | Grounds maintenance workers | 55 |
| | Material moving workers | 38 |
| Leading Industries | Construction | 270 |
| | Transportation and warehousing[2] | 156 |
| | Administrative and support and waste management and remediation services[3] | 94 |
| | Retail trade | 91 |
| Leading Event or Exposure | Transportation incidents | 319 |
| | Fall, slip, trip | 236 |
| | Violence[4] | 192 |
| | Contact with object/equipment | 124 |

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

[1]Heavy and tractor-trailer truck drivers accounted for 135 of these deaths.

[2]Truck transportation accounted for 112 of these deaths.

[3]Landscaping services accounted for 55 of these deaths.

[4]Excludes animal- and insect-related incidents.

# Workplace Injury and Illness Incidence Rates, Private Sector, 1973–2016 (Per 100 Workers)

| Year | Total Case Rate | Cases with Days Away from Work, Job Transfer or Restriction | | |
|---|---|---|---|---|
| | | Total | Cases with Days Away from Work | Cases with Job 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 |

Source: Department of Labor, Bureau of Labor Statistics.

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

# Workplace Injury and Illness Rates by Industry Sector, 1973–2002[1]

**Per 100 Full-Time Workers**

| Year | Total Case Rate All Ind. | Total Case Rate Mfg. | Total Case Rate Const. | Total Case Rate Mining | Total Case Rate Finance | Total Case Rate Agri. | Total Case Rate Trans./Util. | Total Case Rate Trade | Total Case Rate Service |
|---|---|---|---|---|---|---|---|---|---|
| **1973** | 11.0 | 15.3 | 19.8 | 12.5 | 2.4 | 11.6 | 10.3 | 8.6 | 6.2 |
| **1974** | 10.4 | 14.6 | 18.3 | 10.2 | 2.4 | 9.9 | 10.5 | 8.4 | 5.8 |
| **1975** | 9.1 | 13.0 | 16.0 | 11.0 | 2.2 | 8.5 | 9.4 | 7.3 | 5.4 |
| **1976** | 9.2 | 13.2 | 15.3 | 11.0 | 2.0 | 11.0 | 9.8 | 7.5 | 5.3 |
| **1977** | 9.3 | 13.1 | 15.5 | 10.9 | 2.0 | 11.5 | 9.7 | 7.7 | 5.5 |
| **1978** | 9.4 | 13.2 | 16.0 | 11.5 | 2.1 | 11.6 | 10.1 | 7.9 | 5.5 |
| **1979** | 9.5 | 13.3 | 16.2 | 11.4 | 2.1 | 11.7 | 10.2 | 8.0 | 5.5 |
| **1980** | 8.7 | 12.2 | 15.7 | 11.2 | 2.0 | 11.9 | 9.4 | 7.4 | 5.2 |
| **1981** | 8.3 | 11.5 | 15.1 | 11.6 | 1.9 | 12.3 | 9.0 | 7.3 | 5.0 |
| **1982** | 7.7 | 10.2 | 14.6 | 10.5 | 2.0 | 11.8 | 8.5 | 7.2 | 4.9 |
| **1983** | 7.6 | 10.0 | 14.8 | 8.4 | 2.0 | 11.9 | 8.2 | 7.0 | 5.1 |
| **1984** | 8.0 | 10.6 | 15.5 | 9.7 | 1.9 | 12.0 | 8.8 | 7.2 | 5.2 |
| **1985** | 7.9 | 10.4 | 15.2 | 8.4 | 2.0 | 11.4 | 8.6 | 7.4 | 5.4 |
| **1986** | 7.9 | 10.6 | 15.2 | 7.4 | 2.0 | 11.2 | 8.2 | 7.7 | 5.3 |
| **1987** | 8.3 | 11.9 | 14.7 | 8.5 | 2.0 | 11.2 | 8.4 | 7.4 | 5.5 |
| **1988** | 8.6 | 13.1 | 14.6 | 8.8 | 2.0 | 10.9 | 8.9 | 7.6 | 5.4 |
| **1989** | 8.6 | 13.1 | 14.3 | 8.5 | 2.0 | 10.9 | 9.2 | 8.0 | 5.5 |
| **1990** | 8.8 | 13.2 | 14.2 | 8.3 | 2.4 | 11.6 | 9.6 | 7.9 | 6.0 |
| **1991** | 8.4 | 12.7 | 13.0 | 7.4 | 2.4 | 10.8 | 9.3 | 7.6 | 6.2 |
| **1992** | 8.9 | 12.5 | 13.1 | 7.3 | 2.9 | 11.6 | 9.1 | 8.4 | 7.1 |
| **1993** | 8.6 | 12.1 | 12.2 | 6.8 | 2.9 | 11.2 | 9.5 | 8.1 | 6.7 |
| **1994** | 8.4 | 12.2 | 11.8 | 6.3 | 2.7 | 10.0 | 9.3 | 7.9 | 6.5 |
| **1995** | 8.1 | 11.6 | 10.6 | 6.2 | 2.6 | 9.7 | 9.1 | 7.5 | 6.4 |
| **1996** | 7.4 | 10.6 | 9.9 | 5.4 | 2.4 | 8.7 | 8.7 | 6.8 | 6.0 |
| **1997** | 7.1 | 10.3 | 9.5 | 5.9 | 2.2 | 8.4 | 8.2 | 6.7 | 5.6 |
| **1998** | 6.7 | 9.7 | 8.8 | 4.9 | 1.9 | 7.9 | 7.3 | 6.5 | 5.2 |
| **1999** | 6.3 | 9.2 | 8.6 | 4.4 | 1.8 | 7.3 | 7.3 | 6.1 | 4.9 |
| **2000** | 6.1 | 9.0 | 8.3 | 4.7 | 1.9 | 7.1 | 6.9 | 5.9 | 4.9 |
| **2001** | 5.7 | 8.1 | 7.9 | 4.0 | 1.8 | 7.3 | 6.9 | 5.6 | 4.6 |
| **2002** | 5.3 | 7.2 | 7.1 | 4.0 | 1.7 | 6.4 | 6.1 | 5.3 | 4.6 |

Source: U.S. Department of Labor, Bureau of Labor Statistics, Incidence Rates of Nonfatal Occupational Injuries and Illnesses by Industry Division, 1973–2002.

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

# Workplace Injury and Illness Rates by Industry Sector, 2003–2016[1,2]

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008[3] | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **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** |
| **State and local government** | **-** | **-** | **-** | **-** | **-** | **6.3** | **5.8** | **5.7** | **5.7** | **5.6** | **5.2** | **5.0** | **5.1** | **4.7** |
| State government | - | - | - | - | - | 4.7 | 4.6 | 4.6 | 4.6 | 4.4 | 3.9 | 4.1 | 3.7 | 3.7 |
| Local government | - | - | - | - | - | 7.0 | 6.3 | 6.1 | 6.1 | 6.1 | 5.7 | 5.4 | 5.6 | 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** |
| 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 |
| 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 | 2.0 | 1.4 | 1.5 |
| **Construction** | **6.8** | **6.4** | **6.3** | **5.9** | **5.4** | **4.7** | **4.3** | **4.0** | **3.9** | **3.7** | **3.8** | **3.6** | **3.5** | **3.2** |
| Construction (local gov.) | - | - | - | - | - | 12.7 | 13.0 | 9.5 | 8.7 | 10.2 | 7.9 | 8.6 | 8.0 | 9.1 |
| **Manufacturing** | **6.8** | **6.8** | **6.3** | **6.0** | **5.6** | **5.0** | **4.3** | **4.4** | **4.4** | **4.3** | **4.0** | **4.0** | **3.8** | **3.6** |
| **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** |
| 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 |
| 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 |
| 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 |
| 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 |
| **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** |
| **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** |
| **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** |
| **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** |
| 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 |
| Hospitals (state gov.) | - | - | - | - | - | 11.9 | 11.0 | 11.8 | 9.2 | 9.2 | 7.7 | 8.7 | 8.1 | 8.2 |
| 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 |
| Nursing and Residential Care (state gov.) | - | - | - | - | - | 12.5 | - | 15.1 | 13.1 | 13.6 | 13.7 | 12.6 | 12.0 | 13.7 |
| **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** |
| **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** |

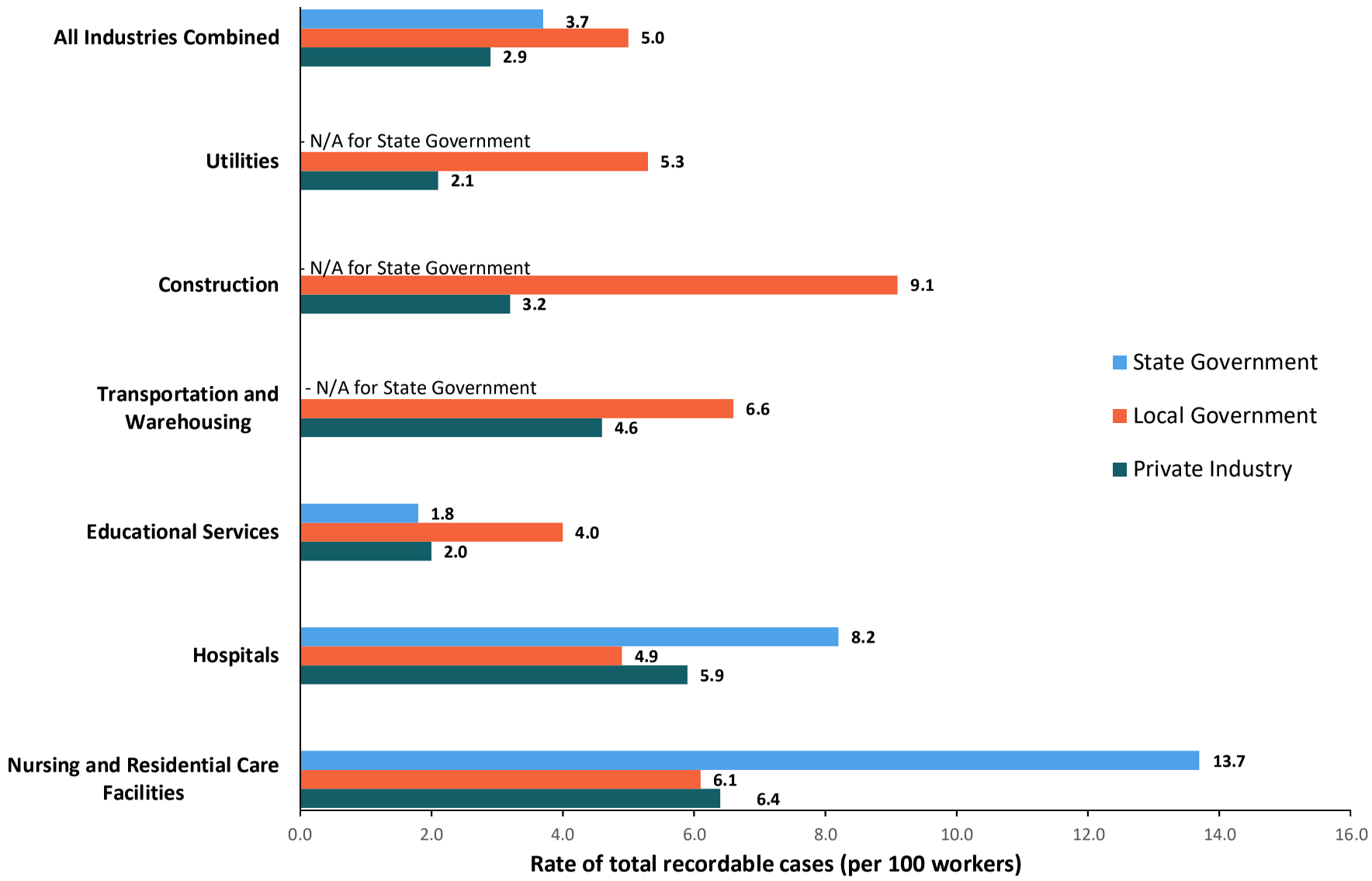
Source: U.S. Department of Labor, Bureau of Labor Statistics.

[1]Total recordable cases per 100 workers.

[2]Private industry, unless otherwise noted.

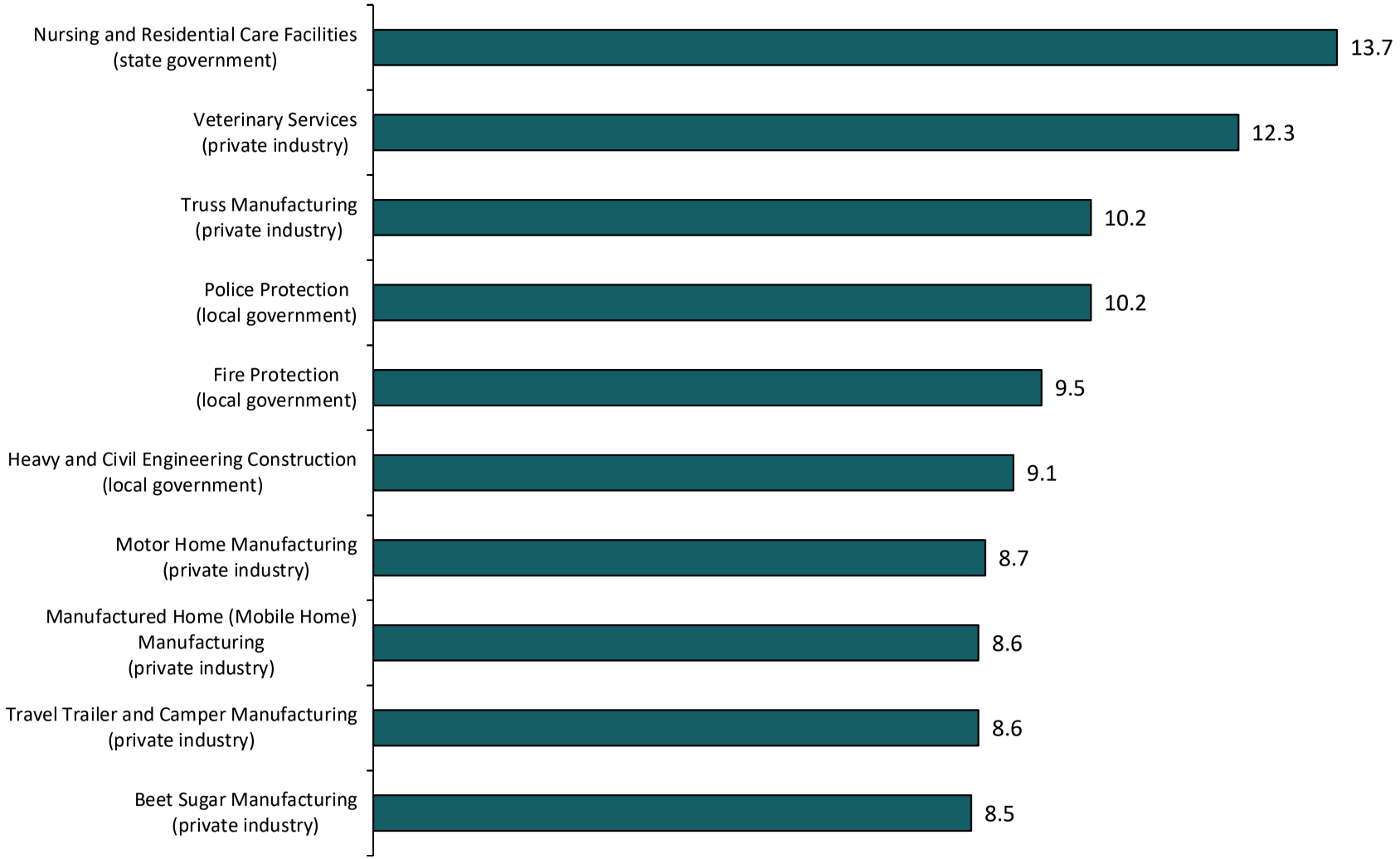
[3]Beginning with 2008, the Bureau of Labor Statistics provided national public-sector estimates for state and local government workers.

## Rate of Workplace Injuries and Illnesses for Selected Industries in State Government, Local Government and Private Industry, 2016




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

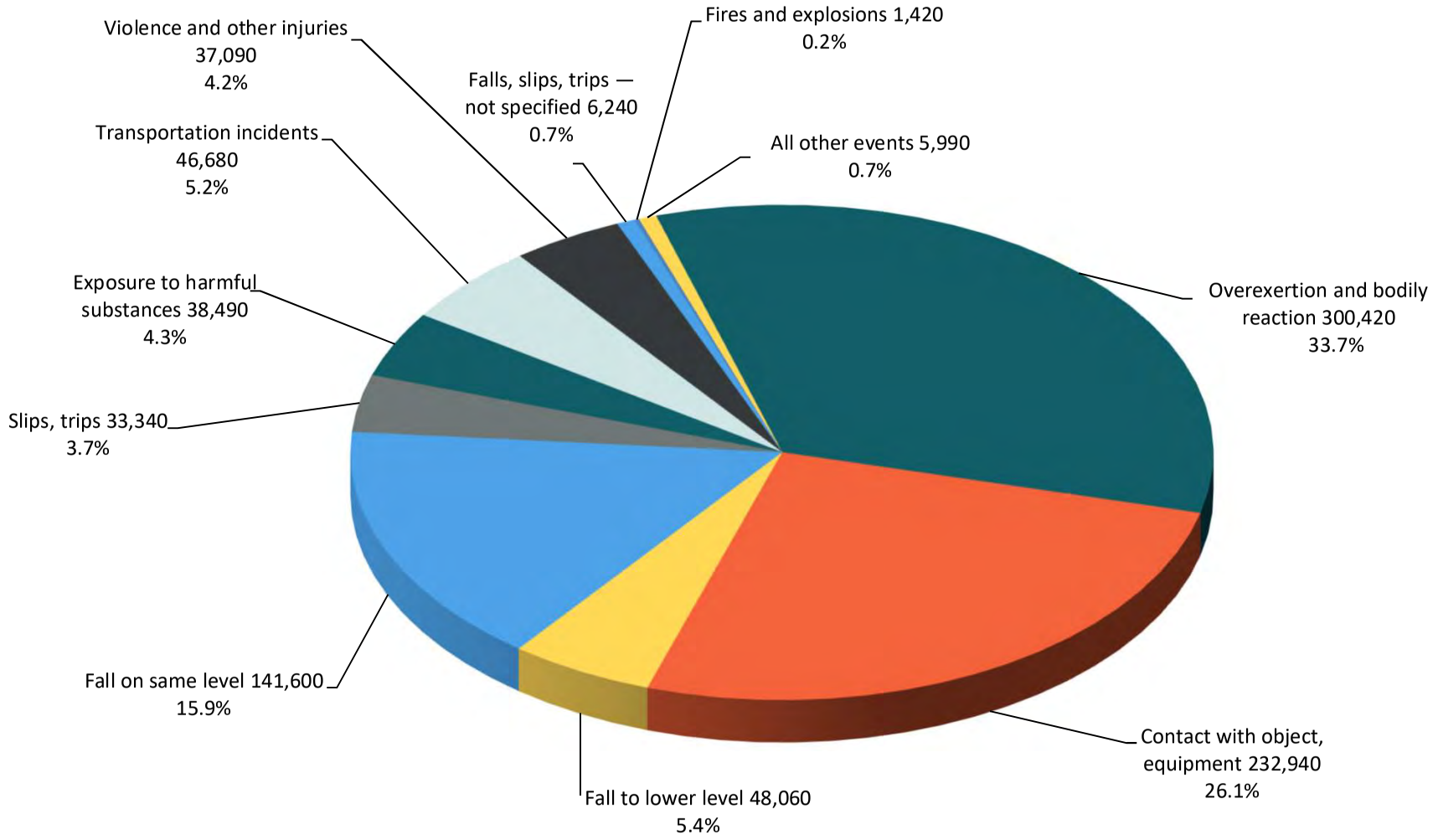
## Industries with the Highest Total Nonfatal Injury and Illness Rates, 2016
## (Per 100 Workers)
## Private Industry = 2.9
## State Government = 3.7
## Local Government = 5.0




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

# Nonfatal Occupational Injuries and Illnesses with Days Away from Work by Event or Exposure, Private Industry, 2016[1]

**Total = 892,270**




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[1] Among Hispanic and Latino Workers, 1995–2016

| 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 |

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

[1]Days 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.

[2]Days away from work cases include those that result in days away from work with or without job transfer or restriction.

[3]Classification 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, 2016

| Characteristic | Subcharacteristics | Number |
|---|---|---|
| Total Number of Injuries and Illnesses with Days Away from Work | | 337,390 |
| Leading Industries | Nursing and residential care facilities | 41,310 |
| | Hospitals | 39,850 |
| | Food service and drinking places | 28,550 |
| Leading Occupations | Nursing, psychiatric and home health aides | 37,750 |
| | Building cleaning workers | 22,310 |
| | Registered nurses | 18,040 |
| | Retail salespersons | 14,250 |
| Leading Nature | Sprains, strains, tears | 127,030 |
| | Soreness, pain, hurt, unspecified | 61,340 |
| | Bruises, contusions | 38,070 |
| Leading Event or Exposure | Overexertion and bodily reaction | 113,190 |
| | Falls, slips, trips | 106,130 |
| | Contact with objects and equipment | 63,190 |
| Leading Source | Bodily motion or position of injured, ill worker | 50,290 |
| | Floors[1] | 48,200 |
| | Patient | 36,740 |
| Median Days Away from Work | Total cases | 8 |
| | Women | 7 |

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

[1]This category accounts for floors only. Floors, walkways and ground surfaces combined accounted for 79,430 injuries and illnesses involving days away from work for women.

# Workplace Injuries and Illnesses to Men Involving Days Away from Work, Private Industry, 2016

| Characteristic | Subcharacteristics | Number |
|---|---|---|
| Total Number of Injuries and Illnesses with Days Away from Work | | 549,920 |
| Leading Industries | Specialty trade contractors | 55,330 |
| | Truck transportation | 30,290 |
| | Food service and drinking places | 28,180 |
| Leading Occupations | Driver/sales workers and truck drivers | 72,450 |
| | Laborers and material movers, hand | 53,740 |
| | Construction laborers | 21,830 |
| | Miscellaneous production workers | 20,570 |
| Leading Nature | Sprains, strains, tears | 188,450 |
| | Soreness, pain, hurt, unspecified | 80,910 |
| | Cuts, lacerations | 59,850 |
| Leading Event or Exposure | Overexertion and bodily reaction | 185,750 |
| | Contact with objects and equipment | 168,500 |
| | Falls, slips, trips | 121,990 |
| Leading Source | Bodily motion or position of injured, ill worker | 77,510 |
| | Containers, nonpressurized | 44,710 |
| | Floors[1] | 25,760 |
| Median Days Away from Work | Total cases | 8 |
| | Men | 9 |

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

[1]This category accounts for floors only. Floors, walkways and ground surfaces combined accounted for 66,430 injuries and illnesses involving days away from work for men.

## Workplace Violence Events Leading to Injuries Involving Days Away from Work, Private Industry, 2016[1]

| Characteristic | Subcharacteristics | Number |
|---|---|---|
| Total Events | | 27,450 |
| Gender | Women | 18,550 |
| | Men | 8,820 |
| Race | White | 9,000 |
| | Black | 4,620 |
| | Latino | 1,440 |
| Leading Industries | Nursing and residential care facilities | 7,890 |
| | Hospitals | 5,880 |
| | Social assistance | 3,650 |
| | Educational services | 2,100 |
| Leading Occupations | Nursing, psychiatric and home health aides | 5,490 |
| | Personal care aides | 2,720 |
| | Registered nurses | 2,200 |
| Leading Nature of Injury | Sprains, strains, tears | 7,640 |
| | Soreness, pain | 6,050 |
| | Bruises, contusions | 4,760 |
| Leading Source | Patient | 13,380 |
| | Other client or customer | 5,670 |
| | Student | 3,270 |
| Median Days Away from Work | Overall, all injuries and illnesses | 8 |
| | Intentional injury by person | 5 |
| | Injury by person—unintentional or intent unknown | 5 |

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

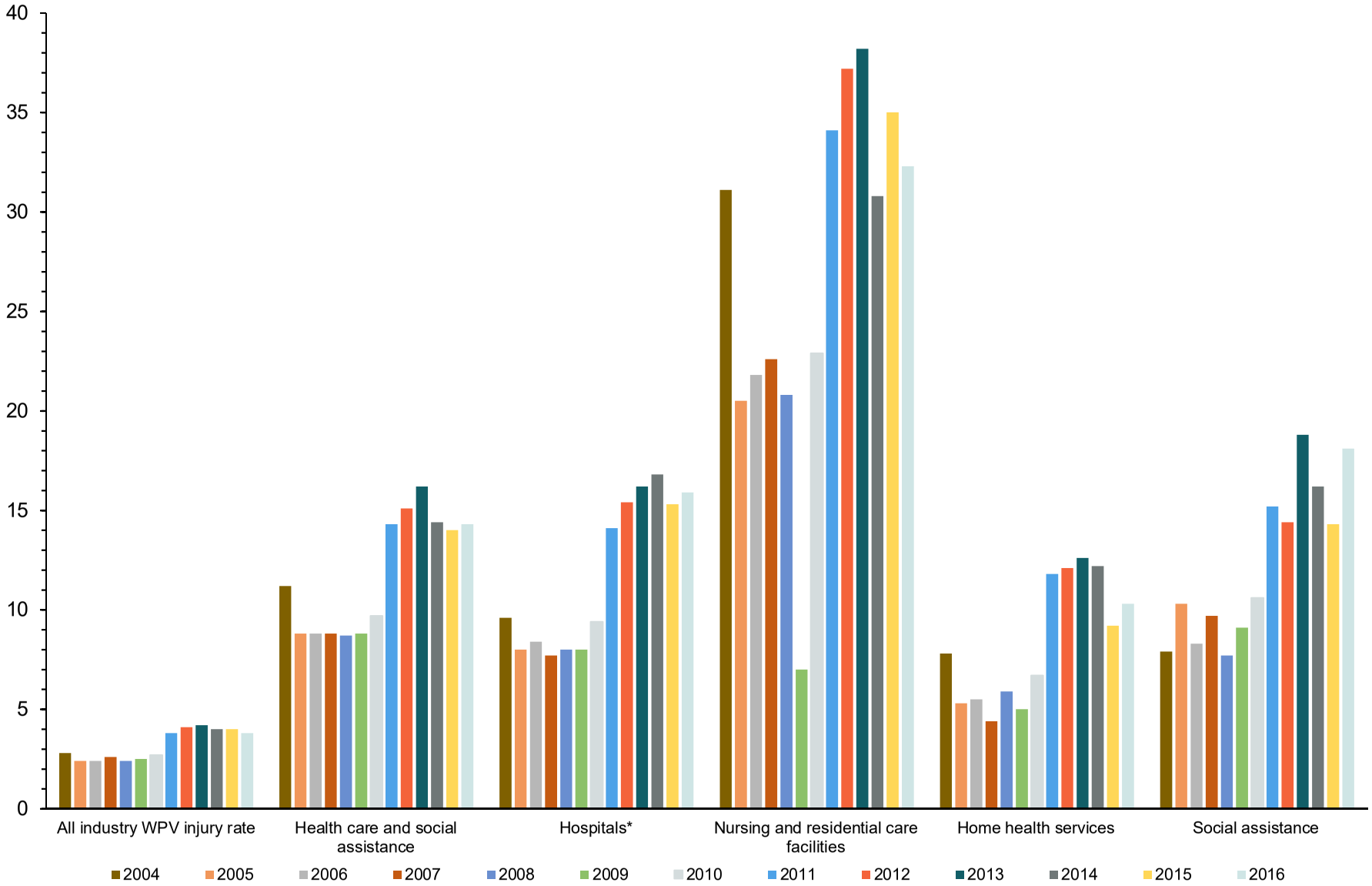
[1]Violence events in private industry include intentional injury by person and injury by person—unintentional or intent unknown, and exclude animal- and insect-related indicents.

## Total Injury and Illness Rates Compared with Workplace Violence Injury Rates, Private Industry, 1992–2016[1]


Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses, 1992–2016.

[1]Rate of injuries and illnesses leading to days away from work, per 10,000 workers.

## Workplace Violence (WPV) Rates for Injuries Leading to Days Away from Work in Selected Health Care Industries, Private Industry, 2004–2016[1]

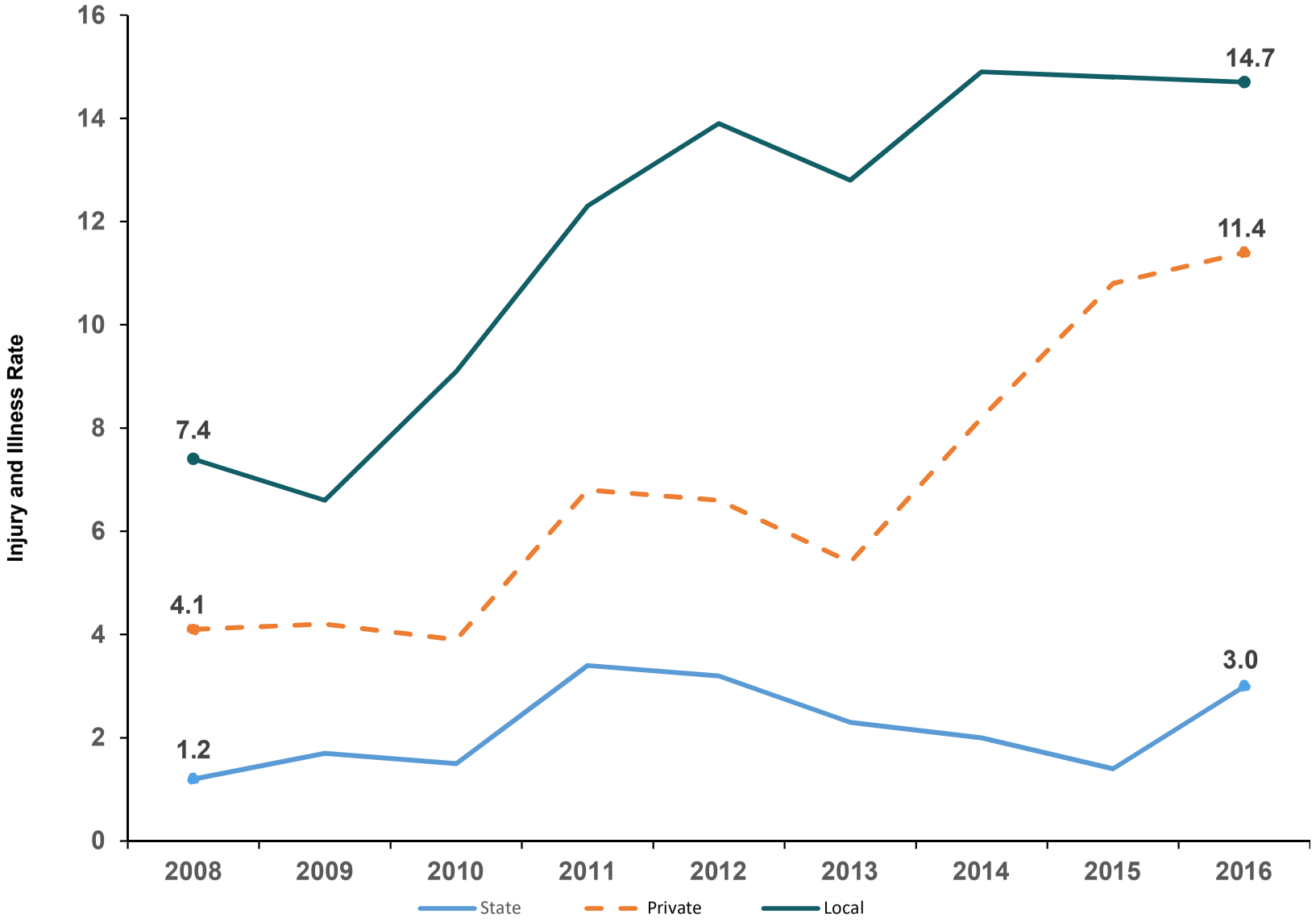



Source: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses, 2004–2016.

[1]Rate per 10,000 workers.

*The subcategory "psychiatric and substance abuse hospitals" had a workplace violence injury rate of 123.6 per 10,000 workers in 2016; 133.4 in 2015; 170.2 in 2014; 134.6 in 2013; 111.7 in 2012; 117.6 in 2011; 77.0 in 2010; 77.9 in 2009; 70.2 in 2008; 60.1 in 2007; and 84.3 in 2006.

## Workplace Violence Rates in Educational Services for Private Industy, State and Local Government, 2008–2016[1]




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

[1]Rate of injuries and illnesses leading to days away from work, per 10,000 workers.

# Estimated and Reported Cases of Musculoskeletal Disorders, Private Industry, 1994–2016[1,2]

| Year | Total MSD Cases[1] | MSD Cases with Days Away from Work, Job Transfer or Restriction[1,3] | MSD Cases with Job Transfer or Restriction[1,4] | MSDs Involving Days Away from Work[5] | Percent of Cases Involving MSDs |
|---|---|---|---|---|---|
| **1994** | 2,287,212 | 1,034,618 | 278,647 | 755,600 | 33.8% |
| **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% |

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

[1]Total 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 underreporting, which would significantly increase the true toll of MSDs occurring among workers. OSHA has estimated that for every reported MSD, two MSDs go unreported.

[3]Through 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.

[4]Through 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.

[5]Days 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, 2016[1,2]

| Occupation[3] | Incidence Rate | Number of MSDs[4] |
|---|---|---|
| Firefighters | 181.9 | 5,860 |
| Nursing assistants | 181.1 | 19,560 |
| Bus drivers, transit and intercity | 173.3 | 2,080 |
| Emergency medical technicians and paramedics | 167.3 | 3,530 |
| Laborers and freight, stock and material movers, handlers | 122.8 | 24,810 |
| Maids and housekeeping cleaners | 107.2 | 7,180 |
| Light truck or delivery services drivers | 103.7 | 8,320 |
| Heavy and tractor-trailer truck drivers | 101.5 | 16,160 |
| Police and sheriffs patrol officers | 97.3 | 5,810 |
| Bus and truck mechanics and diesel engine specialists | 93.3 | 2,230 |

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

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

[2]Includes 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.

[3]These 10 occupations had at least 0.1% of total employment.

[4]Includes total number in private industry, state and local government.

# Highest Incidence Rates of Musculoskeletal Disorders by Industry, 2016

| Industry (NAICS Code)[1] | Incidence Rate[2] | Number of Total Cases | Median Days Away from Work |
|---|---|---|---|
| 000 All Private Industry | 29.4 | 285,950 | 12 |
| 481 Air transportation | 176.8 | 6,930 | 27 |
| 492 Couriers and messengers | 127.0 | 5,890 | 43 |
| 493 Warehousing and storage | 79.6 | 6,710 | 24 |
| 623 Nursing and residential care facilities | 76.0 | 19,430 | 5 |
| 316 Leather and allied product manufacturing | 73.3 | 200 | 5 |
| 484 Truck transportation | 71.7 | 11,030 | 19 |
| 711 Performing arts and spectator sports | 66.1 | 1,790 | 14 |
| 444 Building material and garden supply stores | 64.6 | 6,700 | 11 |
| 622 Hospitals | 60.5 | 23,510 | 8 |
| 424 Merchant wholesalers — nondurable goods | 57.0 | 11,250 | 12 |
| 442 Furniture and home furnishings stores | 53.9 | 1,990 | 8 |
| 485 Transit and ground passenger transportation | 52.2 | 1,810 | 16 |
| 312 Beverage and tobacco product manufacturing | 50.7 | 1,100 | 27 |
| 488 Support activities for transportation | 49.9 | 3,030 | 23 |
| 445 Food and beverage stores | 49.4 | 10,920 | 12 |
| 321 Wood product manufacturing | 48.1 | 1,900 | 7 |
| 712 Museums, historical sites, zoos and parks | 44.0 | 470 | 5 |
| 336 Transportation equipment manufacturing | 43.0 | 7,080 | 23 |
| 337 Furniture and related product manufacturing | 42.3 | 1,650 | 11 |
| 111 Crop production[3] | 41.2 | 1,560 | 12 |
| 311 Food manufacturing | 41.1 | 6,420 | 11 |
| 721 Accommodation | 40.2 | 6,090 | 9 |
| 562 Waste management and remediation services | 40.0 | 1,610 | 14 |
| 532 Rental and leasing services | 39.9 | 2,040 | 10 |
| 212 Mining (except oil and gas) | 38.8 | 770 | 40 |
| 327 Nonmetallic mineral product manufacturing | 38.8 | 1,600 | 15 |
| 238 Specialty trade contractors | 38.3 | 15,000 | 10 |
| 452 General merchandise stores | 38.0 | 8,640 | 8 |
| 326 Plastic and rubber products manufacturing | 36.9 | 2,600 | 11 |
| 314 Textile product mills | 33.9 | 380 | 13 |

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

[1]Does not include state or local government.

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

[3]Excludes farms with fewer than 11 employees.

# Highest Numbers of Musculoskeletal Disorders by Industry, 2016

| Industry (NAICS Code)[1] | Number of Total Cases | Incidence Rate[2] | Median Days Away from Work |
|---|---|---|---|
| 000 All Private Industry | 285,950 | 29.4 | 12 |
| 622 Hospitals | 23,510 | 60.5 | 8 |
| 623 Nursing and residential care facilities | 19,430 | 76.0 | 5 |
| 238 Specialty trade contractors | 15,000 | 38.3 | 10 |
| 424 Merchant wholesalers — nondurable goods | 11,250 | 57 | 12 |
| 484 Truck transportation | 11,030 | 71.7 | 19 |
| 445 Food and beverage stores | 10,920 | 49.4 | 12 |
| 621 Ambulatory health care services | 10,920 | 20 | 11 |
| 561 Administrative and support services | 10,090 | 21.4 | 11 |
| 452 General merchandise stores | 8,640 | 38 | 8 |
| 722 Food services and drinking places | 8,590 | 12.3 | 11 |
| 423 Merchant wholesalers — durable goods | 7,470 | 26 | 13 |
| 336 Transportation equipment manufacturing | 7,080 | 43 | 23 |
| 481 Air transportation | 6,930 | 176.8 | 27 |
| 493 Warehousing and storage | 6,710 | 79.6 | 24 |
| 444 Building material and garden equipment and supply dealers | 6,700 | 64.6 | 11 |
| 311 Food manufacturing | 6,420 | 41.1 | 11 |
| 721 Accomodation | 6,090 | 40.2 | 9 |
| 492 Couriers and messengers | 5,890 | 127 | 43 |
| 441 Motor vehicle and parts dealers | 5,880 | 31.5 | 12 |
| 624 Social assistance | 5,860 | 27.7 | 8 |
| 332 Fabricated metal product manufacturing | 4,610 | 31.9 | 11 |
| 541 Professional and technical services | 4,250 | 5.2 | 12 |
| 531 Real estate | 4,180 | 30.9 | 24 |
| 811 Repair and maintenance | 3,950 | 32.8 | 14 |
| 517 Telecommunications | 3,450 | 44 | 40 |
| 236 Construction of buildings | 3,410 | 24.7 | 8 |
| 333 Machinery manufacturing | 3,260 | 29.4 | 14 |
| 488 Support activities for transportation | 3,030 | 49.9 | 23 |
| 713 Amusements gambling and recreation | 2,770 | 29.0 | 6 |
| 611 Educational services | 2,740 | 14.4 | 10 |
| 812 Personal and laundry services | 2,700 | 25.7 | 30 |

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

[1]Does not include state or local government.

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

# Estimates of the True Toll of Workplace Injuries and Illnesses

| | Estimated 2016 Figures Accounting for Impact of Undercounting Injuries and Illnesses[1] | 2016 Data Reported by Bureau of Labor Statistics (BLS) |
|---|---|---|
| **Total Number of Nonfatal Injuries and Illnesses in Private Industry** | **8.7 million** | **2.9 million** |
| **Total Nonfatal Injury and Illness Case Rate in Private Industry (cases per 100 workers)** | **8.7** | **2.9** |
| **Total Number of Injuries and Illnesses Involving Days Away from Work in Private Industry** | **2.7 million** | **892,270** |
| **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** | **857,850** | **285,950** |
| **Total Number of Estimated Cases of Musculoskeletal Disorders in Private Industry** | **2,764,182** | **921,394** |

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 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.

## Federal OSHA Inspection/Enforcement Activity, FY 2010–2017

| | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 |
|---|---|---|---|---|---|---|---|---|
| **Inspections** | 41,018 | 40,625 | 40,950 | 39,178 | 36,167 | 35,822 | 31,948 | 32,396 |
| Safety | 34,353 | 33,338 | 33,598 | 31,920 | 29,343 | 28,903 | 25,704 | 26,607 |
| Health | 6,665 | 7,287 | 7,352 | 7,258 | 6,824 | 6,917 | 6,244 | 5,789 |
| | | | | | | | | |
| Complaints | 8,036 | 8,762 | 9,568 | 9,503 | 9,577 | 9,037 | 8,870 | 8,254 |
| Programmed | 24,752 | 23,319 | 23,082 | 22,170 | 19,207 | 16,527 | 12,731 | 14,396 |
| | | | | | | | | |
| Construction | 24,441 | 22,624 | 22,507 | 20,430 | 18,223 | 17,549 | 15,610 | 16,921 |
| Maritime | 300 | 340 | 386 | 411 | 370 | 357 | 297 | 292 |
| Manufacturing | 7,921 | 8,566 | 8,399 | 7,945 | 7,602 | 8,051 | 7,450 | 7,043 |
| Other | 8,356 | 9,094 | 9,654 | 10,392 | 9,972 | 9,863 | 8,591 | 8,140 |
| | | | | | | | | |
| **Average Case Hours/Inspections** | | | | | | | | |
| Safety | 19.0 | 20.4 | 20.3 | 22.5 | 22.0 | 22.3 | 21.0 | 20.21 |
| Health | 33.8 | 33.9 | 34.6 | 40.1 | 45.2 | 39.7 | 33.4 | 33.58 |
| | | | | | | | | |
| **Violations – Total** | 96,610 | 81,861 | 78,760 | 78,037 | 67,556 | 65,044 | 59,856 | 51,273 |
| Willful | 1,513 | 572 | 424 | 316 | 433 | 527 | 524 | 319 |
| Repeat | 2,749 | 3,029 | 3,031 | 3,119 | 2,954 | 3,088 | 3,146 | 2,771 |
| Serious | 74,721 | 59,547 | 57,155 | 58,234 | 49,416 | 47,934 | 42,984 | 36,802 |
| Unclassified | 2 | 7 | 1 | - | 1 | 1 | 1 | - |
| Other | 17,298 | 18,436 | 18,038 | 16,260 | 14,597 | 13,016 | 11,895 | 11,300 |
| FTA | 327 | 270 | 107 | 77 | 155 | 107 | 152 | 81 |
| | | | | | | | | |
| **Penalties – Total ($)** | 181,391,692 | 178,289,800 | 168,842,092 | 149,994,488 | 143,535,247 | 156,525,585 | 162,872,470 | 196,837,526 |
| Willful | 81,906,139 | 22,737,340 | 15,053,400 | 12,484,996 | 17,474,793 | 21,581,025 | 21,794,276 | 20,808,006 |
| Repeat | 12,007,280 | 21,076,053 | 21,884,028 | 19,563,867 | 20,407,958 | 24,042,251 | 27,277,061 | 31,447,412 |
| Serious | 78,632,344 | 125,459,324 | 123,274,497 | 110,326,980 | 97,427,404 | 102,971,432 | 103,234,454 | 130,767,703 |
| Unclassified | 1,700 | 317,775 | 1,200 | - | 0 | 4,200 | - | - |
| Other | 5,018,568 | 7,299,625 | 7,829,960 | 6,855,744 | 6,500,117 | 7,222,074 | 8,537,920 | 12,183,280 |
| FTA | 3,825,661 | 1,399,683 | 797,507 | 762,901 | 1,724,976 | 704,143 | 2,028,758 | 1,631,125 |
| | | | | | | | | |
| **Average Penalty/ Violation ($)** | 1,878 | 2,178 | 2,144 | 1,922 | 2,125 | 2,406 | 2,721 | 3,839 |
| Willful | 54,135 | 39,751 | 35,503 | 39,509 | 40,357 | 40,951 | 41,592 | 65,229 |
| Repeat | 4,368 | 6,958 | 7,220 | 6,272 | 6,909 | 7,786 | 8,670 | 11,349 |
| Serious | 1,052 | 2,107 | 2,157 | 1,895 | 1,972 | 2,148 | 2,402 | 3,553 |
| Unclassified | 850 | 45,396 | 1,200 | - | 0 | 4,200 | - | - |
| Other | 290 | 396 | 434 | 422 | 445 | 555 | 718 | 1,078 |
| FTA | 11,699 | 5,184 | 7,453 | 9,908 | 11,129 | 6,581 | 13,347 | 20,137 |
| | | | | | | | | |
| **Percent Inspections with Citations Contested (%)** | 8.0% | 10.8% | 11.4% | 6.0% | 6.6% | 7.4% | 8.3% | 8.5% |

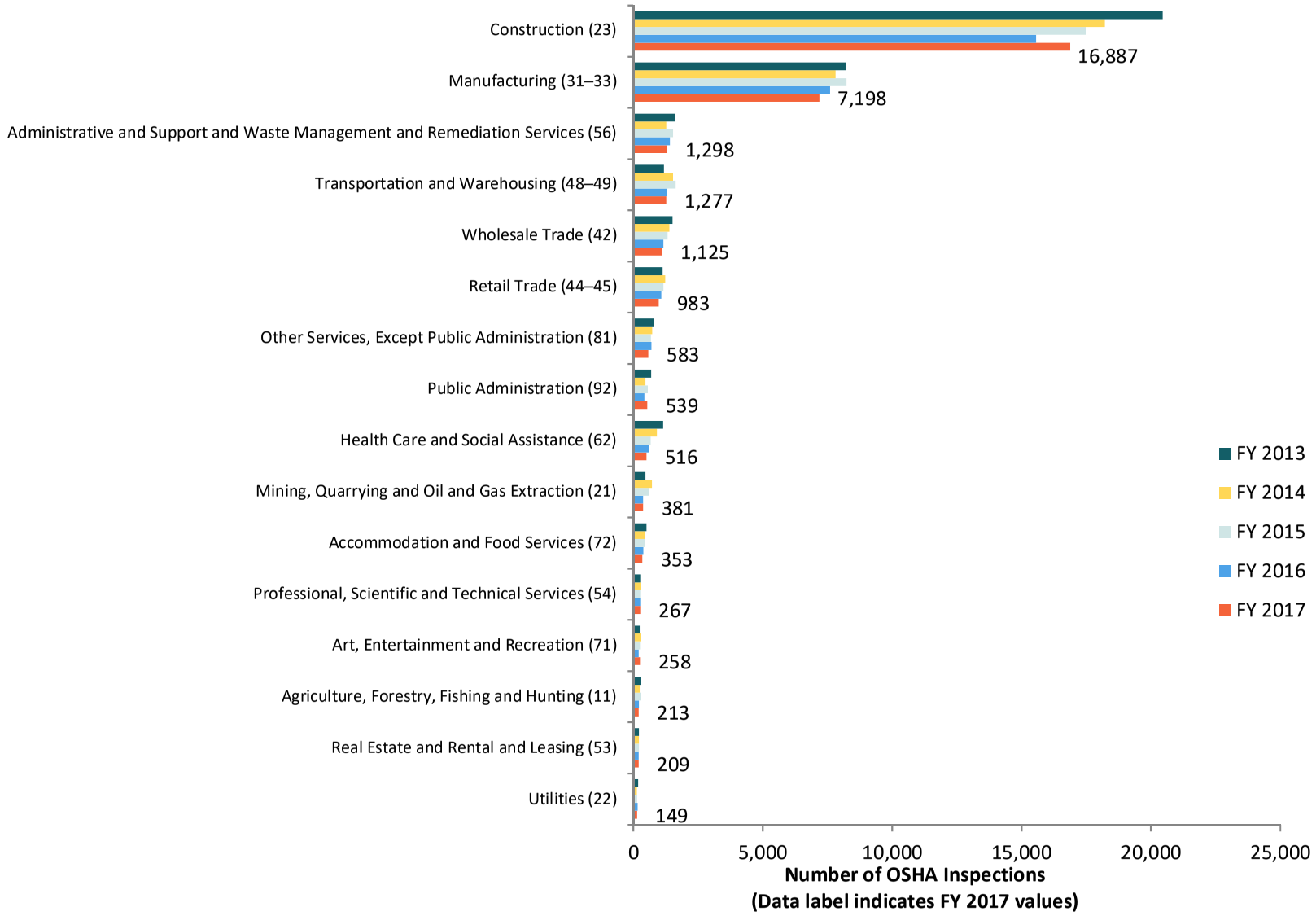
Sources: OSHA IMIS Inspection Reports, FY 2010–FY 2013, and OIS Federal Inspection Reports, FY 2012–FY 2017.

# Federal OSHA and State Plan OSHA Inspection/Enforcement Activity, FY 2017

| | FEDERAL OSHA | STATE PLAN OSHA |
|---|---|---|
| **Inspections** | 32,396 | 43,593 |
| Safety | 26,607 | 33,525 |
| Health | 5,789 | 10,068 |
| | | |
| Complaints | 8,254 | 9,716 |
| Programmed | 14,396 | 19,566 |
| | | |
| Construction | 16,921 | 17,393 |
| Maritime | 292 | 105 |
| Manufacturing | 7,043 | 7,151 |
| Other | 8,140 | 18,944 |
| | | |
| **Average Case Hours/Inspection** | | |
| Safety | 20.21 | 21.09 |
| Health | 33.58 | 27.08 |
| | | |
| **Violations – Total** | 51,273 | 88,405 |
| Willful | 319 | 180 |
| Repeat | 2,771 | 1,754 |
| Serious | 36,802 | 43,228 |
| Unclassified | — | 51 |
| Other | 11,300 | 42,984 |
| FTA | 81 | 208 |
| | | |
| **Penalties – Total ($)** | 196,837,526 | 113,956,116 |
| Willful | 20,808,006 | 8,118,308 |
| Repeat | 31,447,412 | 8,484,686 |
| Serious | 130,767,703 | 79,943,532 |
| Unclassified | — | 252,796 |
| Other | 12,183,280 | 11,685,561 |
| FTA | 1,631,125 | 5,471,234 |
| | | |
| **Average Penalty/Violation ($)** | 3,839 | 1,289 |
| Willful | 65,229 | 45,102 |
| Repeat | 11,349 | 4,837 |
| Serious | 3,553 | 1,849 |
| Unclassified | — | 4,957 |
| Other | 1,078 | 272 |
| FTA | 20,137 | 26,304 |
| | | |
| **Percent Inspections with Citations Contested** | 8.5% | 15.1% |

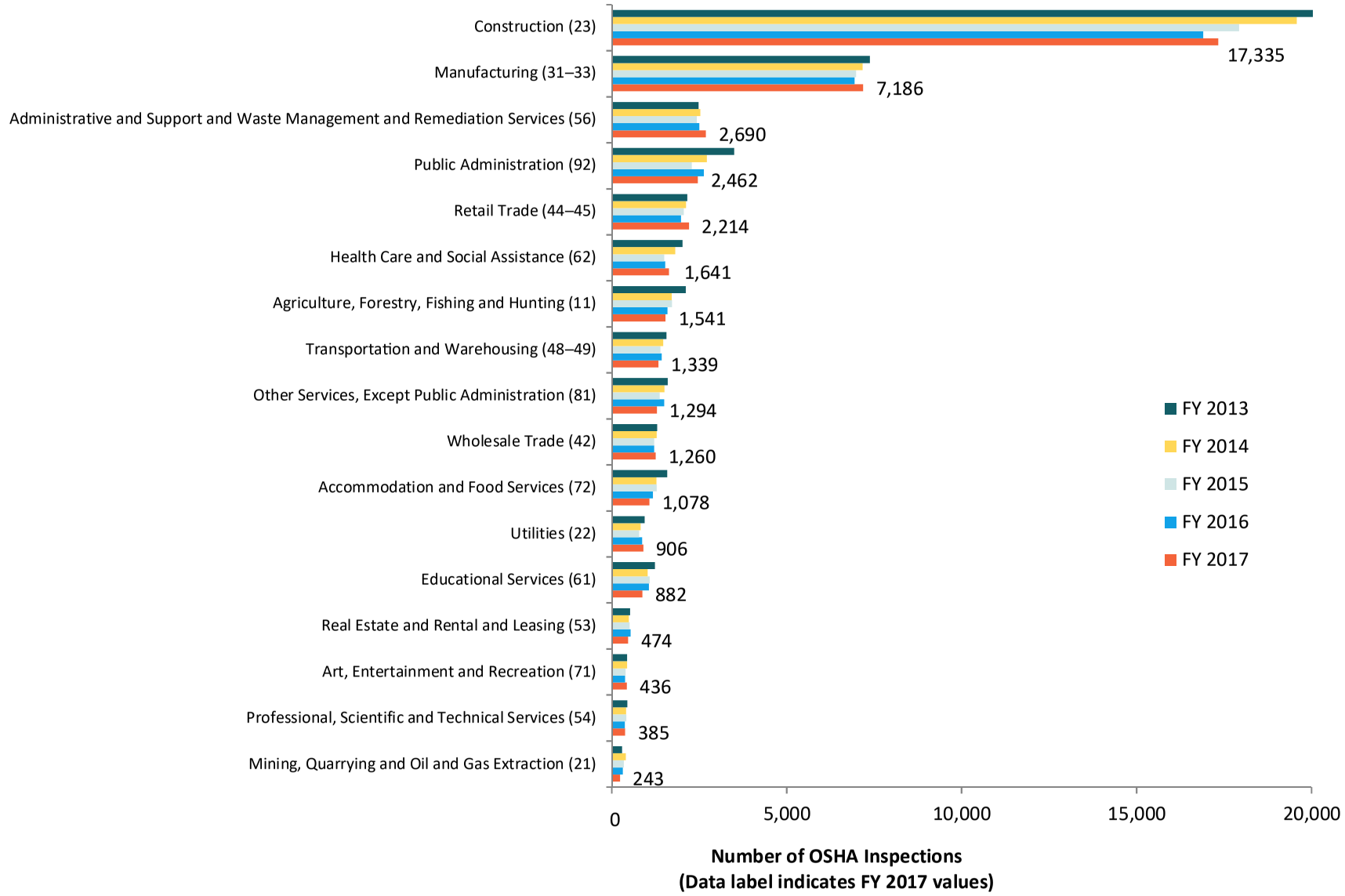
Source: Occupational Safety and Health Administration, OIS Federal Inspection Reports.

# Number of Federal OSHA Inspections by Industry (Two-Digit NAICS Code), FY 2013–2017



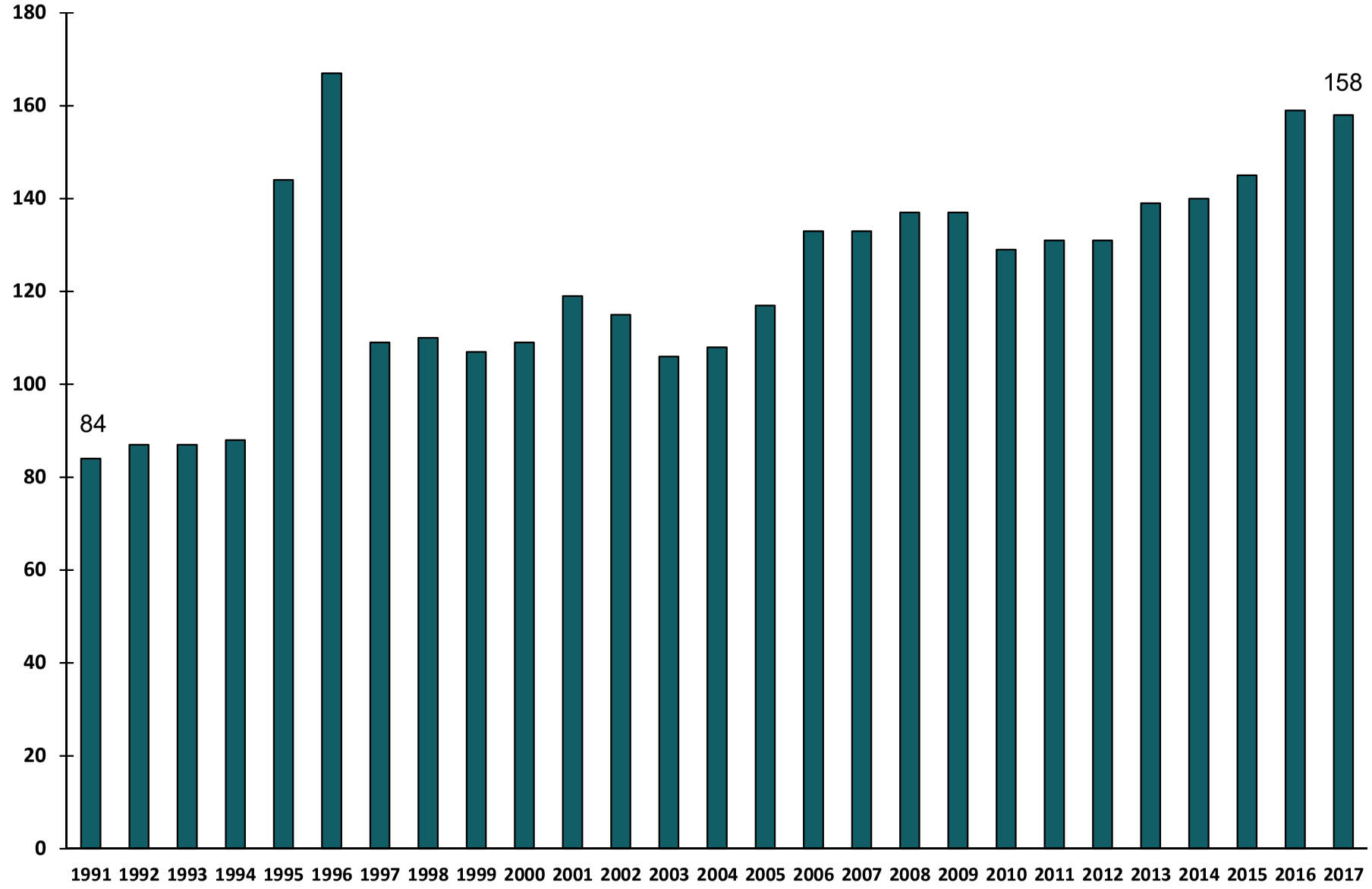

Source: OSHA OIS inspection reports, FY2013–FY2017. Most recent data received Jan. 29, 2018.

## Number of State Plan OSHA Inspections by Industry (Two-Digit NAICS Code), FY 2013–2017




Source: OSHA IMIS inspection reports, FY2013–FY2015, and OIS inspection reports, FY2014–FY2017. Most recent data received Jan. 29, 2018.

# Years for Federal OSHA to Inspect Each Workplace Once FY 1991–2017[1,2]




[1]Years to inspect is based on the number of establishments and the number of OSHA inspections for each fiscal year.

[2]FY 1995–1996 inspections declined significantly during the Clinton administration's "Reinventing Government" initiative.

# Average Total Penalty per OSHA Fatality Inspection, FY 2010–2017

| Fiscal Year | Number of Fatality Inspections Conducted | Total Current Penalties ($) | Average Total Penalty Per Inspection ($) |
|---|---|---|---|
| **FY 2010** | | | |
| Federal States | 805 | 19,258,617 | 23,924 |
| State Plan States | 620 | 5,116,007 | 8,252 |
| Nationwide | 1,425 | 24,374,624 | 17,105 |
| **FY 2011** | | | |
| Federal States | 754 | 12,451,612 | 16,514 |
| State Plan States | 680 | 9,803,145 | 14,416 |
| Nationwide | 1,434 | 22,254,757 | 15,519 |
| **FY 2012**[1] | | | |
| 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 |
| **FY 2013** | | | |
| 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 |
| **FY 2014** | | | |
| Federal States | 900 | 11,912,254 | 13,236 |
| State Plan States | 697 | 6,393,686 | 9,173 |
| Nationwide | 1,597 | 18,305,940 | 11,463 |
| **FY 2015** | | | |
| 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 |
| **FY 2016** | | | |
| 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 |
| **FY 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 |

Source: OSHA IMIS Fatality Inspection Reports, FY 2010–2015, and OSHA OIS Fatality Inspection Reports, FY 2013–2017.

[1]OSHA 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 2017[1]

| Company Name | State | Inspection Number(s) | Date Citations Issued | Total Penalty Issued |
|---|---|---|---|---|
| Ajin USA<br>Alliance Total Solutions LLC<br>Joynus Staffing Group | AL | 1156866<br>1165706<br>1165707 | 12/12/2016 | $2,565,621 |
| Aluminum Shapes LLC[2] | NJ | 1206035 | 7/20/2017 | $1,922,895 |
| Great White Construction Inc.[2] | FL | 1207831<br>1207836 | 8/1/2017 | $1,523,710 |
| Atlantic Drain Services Company Inc.[2] | MA | 1186266 | 4/11/2017 | $1,475,813 |
| Cecilio Murrieta[3] | CA | 1173676 | 10/7/2016 | $1,130,000 |
| The Goodyear Tire and Rubber Company[3] | VA | 1172502 | 2/9/2017 | $986,600 |
| The Goodyear Tire and Rubber Company[3] | VA | 1143317 | 10/7/2016 | $847,200 |
| Amsted Rail Company Inc. | OH | 1202344<br>1212977 | 6/27/2017 | $610,034 |
| Autoneum North America | OH | 1200864 | 5/4/2017 | $569,463 |
| Milark Industries[2] | OH | 1148580<br>1158976<br>1158983 | 10/21/2016 | $536,249 |
| BigTex Trailers (dba CM Truck Beds)[4] | OK | 1162509<br>1162442 | 2/27/2017 | $535,361 |
| Prinz Grain & Feed | NE | 1149329<br>1149541 | 11/3/2016 | $526,633 |
| Trade Fair Supermarkets | NY | 1229795<br>1223309<br>1225933 | 9/29/2017 | $505,928 |
| BWAY Corporation | IL | 1214707<br>1221402<br>1236792<br>1236802 | 6/21/2017<br>9/12/2017 | $503,380 |
| Laboratory Tops Inc. (dba Durcon Inc.)[4] | TX | 1183671<br>1187531 | 4/12/2017 | $460,424 |

Source: Occupational Safety and Health Administration.

[1]On 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 2017, federal OSHA brought 49 significant enforcement cases; four of these were against federal agencies.

[2]This significant case involved an egregious violation.

[3]This 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.

[4]dba = "doing business as"

# Largest-Ever OSHA Enforcement Cases Based on Total Penalty Issued

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

# Largest-Ever OSHA Enforcement Cases Based on Total Penalty Issued

| Company Name | Inspection Number(s) | Date Citations Issued | Total Penalty Issued | Penalty Amount Paid[1] |
|---|---|---|---|---|
| Fraser Paper | 102749868<br>102750395 | 9/17/1991 | $3,982,500 | $1,286,233<br>(Formal settlement) |
| Decoster Egg Farms (aka Maine Contract Farming LLC) | 122375512 | 7/12/1996 | $3,555,500 | $1,887,500<br>(Formal settlement) |
| Arco Chemical Co. | 110318540 | 1/3/1999 | $3,481,300 | $3,481,300 |
| Sunfield, Inc. | 1117773<br>1128049 | 6/29/2016 | $3,426,900 | Violations under contest |
| The Budd Company | 18252510 | 12/12/1989 | $3,345,600 | $1,528,000<br>(Formal settlement) |
| McCrory Stores | 113919278 | 11/7/1991 | $3,188,000 | $500,000<br>(ALJ decision) |
| IBP | 100059591 | 5/11/1998 | $3,133,100 | $532,030<br>(OSHRC decision) |
| BP North America Inc. and<br>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<br>(Formal settlement) |
| Ajin USA<br>Alliance Total Solutions LLC<br>Joynus Staffing Group | 1156866<br>1165706<br>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<br>(Formal settlement) |
| Republic Steel | 942971<br>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.

[1]Penalty 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.

## Disposition of Federal OSHA 11(c) Whistleblower Complaints, FY 2006–2017

| Fiscal Year | Cases Received | Cases Completed[1] | Complaint Determinations | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Total Merit | Merit | Settled | Settled Other | Dismissed | Withdrawn | Total Determinations |
| 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 |

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

[1]Cases completed include cases received and backlog cases.

# Disposition of OSHA State Plan 11(c) Whistleblower Complaints, FY 2009–2017

| Fiscal Year | Cases Received | Cases Completed[1] | Complaint Determinations | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |

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

[1]Cases completed include cases received and backlog cases.

# Major OSHA Health Standards Since 1971

| | Standard | 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

| Standard | 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 |
| 29. Mechanical Power Presses (modified) | 1988 |
| 30. Powered Platforms (Part 1910) | 1989 |
| 31. Underground Construction (Part 1926) | 1989 |
| 32. Hazardous Waste Operations (Part 1910) (mandated by Congress) | 1989 |
| 33. Excavations (Part 1926) | 1989 |
| 34. Control of Hazardous Energy Sources (lockout/tagout) (Part 1910) | 1989 |
| 35. Stairways and Ladders (Part 1926) | 1990 |
| 36. Concrete and Masonry Lift-Slab Operations | 1990 |
| 37. Electrical Safety Work Practices (Part 1910) | 1990 |
| 38. Welding, Cutting and Brazing (Part 1910) (revision) | 1990 |
| 39. Chemical Process Safety | 1992 |
| 40. Confined Spaces (general industry) | 1993 |

# Major OSHA Safety Standards Since 1971

| Standard | 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.

# 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 | 90 | 1,710 |

[1]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.

[2]In 1993, a petition for an Emergency Temporary Standard (ETS) for the carcinogen hexavalent chromium was submitted to OSHA. In 1994, OSHA denied the ETS petition but put hexavalent 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 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 Register on Feb. 28, 2006.

[3]In 1997, silica was put on OSHA's regulatory agenda. In 2003, a draft silica standard underwent a Small Business Regulatory Enforcement Fairness Act (SBREFA) review, but the rule then stalled. 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 (OMB) for review under Executive Order 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, reducing the permissible exposure limit for silica to 50 $\mu g/m^3$ will prevent 642 deaths and 918 cases of silica-related disease each year (81 FR 16285).

[4]In 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 $\mu g/m^3$ will prevent 90 deaths and 46 cases of chronic beryllium disease each year (82 FR 2597).

# Permissible Exposure Limits of OSHA Compared with Other Standards and Recommendations[1]

| 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 disulfide[5]** | 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 | 0.05 | 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** | 0.75 | 0.75 | 0.1 | 0.016 | ppm |
| **Gasoline[3]** | - | 300 | 300 | - | ppm |
| **Glutaraldehyde[5]** | - | 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 |
| **Toluene[5]** | 200 | 10 | 20 | 100 | ppm |
| **Toluene-2,4-Diisocyanate (TDI)** | 0.02 (c) | 0.005 | 0.001 | - | ppm |
| **Triethylamine** | 25 | 1.0 (c) | 0.5 | - | ppm |
| **Welding fume[3]** | - | 5.0 | - | - | $mg/m^3$ |

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

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

[3]NIOSH denotes carcinogenicity of chemical according to Appendix A: www.cdc.gov/niosh/npg/nengapdxa.html.

[4]Designated by EPA as a priority chemical for regulation under the amended Toxic Substances Control Act.

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

# Federal OSHA Budget and Personnel
# FY 1980–2018

| Fiscal Year | Budget (in dollars – $) | Positions (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 |

Source: Occupational Safety and Health Administration.

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

# Federal OSHA Safety and Health Compliance Staffing, 1975–2017

| 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 |
| **2017** | 896 | 153,337 | 5.8 |

[1]Compliance 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 2017 from OSHA Directorate of Enforcement Programs. Compliance officer totals include safety and industrial hygiene CSHOs and supervisory safety and industrial hygiene CSHOs.

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

## Federal OSHA Compliance Officers per Million U.S. Workers, 1974–2017[1]


Source: Employment data from Current Population Survey, Bureau of Labor Statistics.

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

# Job Safety and Health Appropriations
# FY 2010–2019

| CATEGORY | FY 2010 | FY 2011 | FY 2012 | FY 2013[3] | FY 2014 | FY 2015 | FY 2016 | FY 2017 | *FY 2018 Request* | FY 2018 | *FY 2019 Request* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **OSHA (in thousands of dollars)** | | | | | | | | | | | |
| TOTAL | 558,620 | 558,619 | 564,788 | 535,246 | 552,247 | 552,787 | 552,787 | 552,787 | *543,257* | 552,787 | *549,033* |
| Safety and Health Standards | 19,569 | 20,288 | 19,962 | 18,918 | 20,000 | 20,000 | 20,000 | 18,000 | *18,176* | 18,000 | *17,878* |
| Federal Enforcement | 223,399 | 208,146 | 207,753 | 207,928 | 207,785 | 208,000 | 208,000 | 208,000 | *207,465* | 208,000 | *212,735* |
| Whistleblower Protection | | 14,806 | 15,873 | 15,043 | 17,000 | 17,500 | 17,500 | 17,500 | *17,383* | 17,500 | *17,381* |
| State Enforcement | 104,393 | 104,393 | 104,196 | 98,746 | 100,000 | 100,850 | 100,850 | 100,850 | *100,658* | 100,850 | *100,165* |
| Technical Support | 25,920 | 25,868 | 25,820 | 24,344 | 24,344 | 24,469 | 24,469 | 24,469 | *24,281* | 24,469 | *23,766* |
| Federal Compliance Assistance | 73,380 | 73,383 | 76,355 | 61,444 | 69,433 | 68,433 | 68,433 | 70,981 | *72,351* | 70,981 | *75,619* |
| State Compliance Assistance | 54,798 | 54,688 | 57,890 | 54,862 | 57,775 | 57,775 | 57,775 | 59,500 | *57,665* | 59,500 | *59,096* |
| Training Grants | 10,750 | 10,729 | 10,709 | 10,149 | 10,687 | 10,537 | 10,537 | 10,537 | *0* | 10,537 | *0* |
| Safety and Health Statistics | 34,875 | 34,805 | 34,739 | 32,922 | 34,250 | 34,250 | 34,250 | 32,900 | *34,326* | 32,900 | *32,677* |
| Executive Administration | 11,536 | 11,513 | 11,491 | 10,890 | 10,973 | 10,973 | 10,973 | 10,050 | *10,952* | 10,050 | *9,716* |
| **MSHA (in thousands of dollars)** | | | | | | | | | | | |
| TOTAL | 357,293 | 361,844[2] | 372,524 | 353,768 | 375,887 | 375,887 | 375,887 | 373,816 | *375,172* | 373,816 | *375,906* |
| Coal Enforcement | 158,662 | 160,639 | 164,500 | 158,713 | 167,859 | 167,859 | 167,859 | 160,000 | *157,026* | 160,000 | *156,136* |
| Metal/Nonmetal Enforcement | 85,422 | 87,644 | 89,063 | 86,121 | 91,697 | 91,697 | 91,967 | 94,500 | *97,875* | 94,500 | *96,975* |
| Standards Development | 3,481 | 4,352 | 4,765 | 4,547 | 5,416 | 5,416 | 5,416 | 4,500 | *5,460* | 4,500 | *5,345* |
| Assessments | 6,233 | 6,221 | 7,103 | 7,036 | 6,976 | 6,976 | 6,976 | 6,627 | *7,457* | 6,627 | *7,394* |
| Education Policy and Development | 38,605 | 38,148 | 38,325 | 31,898 | 36,320 | 36,320 | 36,320 | 39,320 | *37,365* | 39,320 | *38,297* |
| Technical Support | 30,642 | 31,031 | 33,613 | 32,050 | 33,791 | 33,791 | 33,791 | 35,041 | *34,330* | 35,041 | *33,848* |
| Program Administration | 17,391 | 15,906 | 16,998 | 15,974 | 15,838 | 15,838 | 15,838 | 15,838 | *19,169* | 15,838 | *15,958* |
| Program Eval. and Info Resources | 16,857 | 18,173 | 18,157 | 17,429 | 17,990 | 17,990 | 17,990 | 17,990 | *16,490* | 17,990 | *21,953* |
| **NIOSH (in thousands of dollars)** | | | | | | | | | | | |
| TOTAL[1] | 302,448 | 302,171 | 292,588 | 292,588 | 332,363[4] | 334,863 | 339,121 | 335,200 | *200,000* | 335,200 | *200,000*[5] |

Sources: Budget of the U.S. Government, FY 2010–FY 2019, and U.S. Department of Labor Congressional Budget Justification, FY 2010–FY 2019.

[1]Does not include $55 million in mandatory funding for the Energy Employees Occupational Injury Compensation Program or mandatory funding for the 9/11 Health Program.

[2]Includes $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]The FY 2013 funding levels reflect the budget cuts mandated by the budget sequester.

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

[5]The president proposed to move NIOSH from CDC to NIH and consolidate NIOSH into other NIH institutes, and eliminate Education Research Centers, agricultural, forestry and fishing research centers, and other NIOSH research. Under the proposal, the World Trade Center Health Program—which NIOSH also administers—would stay in CDC.

# Funding for OSHA Worker Safety Training Programs vs. Employer Compliance Assistance Programs, FY 2003–2019 ($ in thousands)

| Fiscal Year | Worker Safety and Health Training | Employer Compliance Assistance (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 |

Source: Department of Labor, Occupational Safety and Health Administration, Congressional Budget Justification, FY 2004–FY 2019.

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

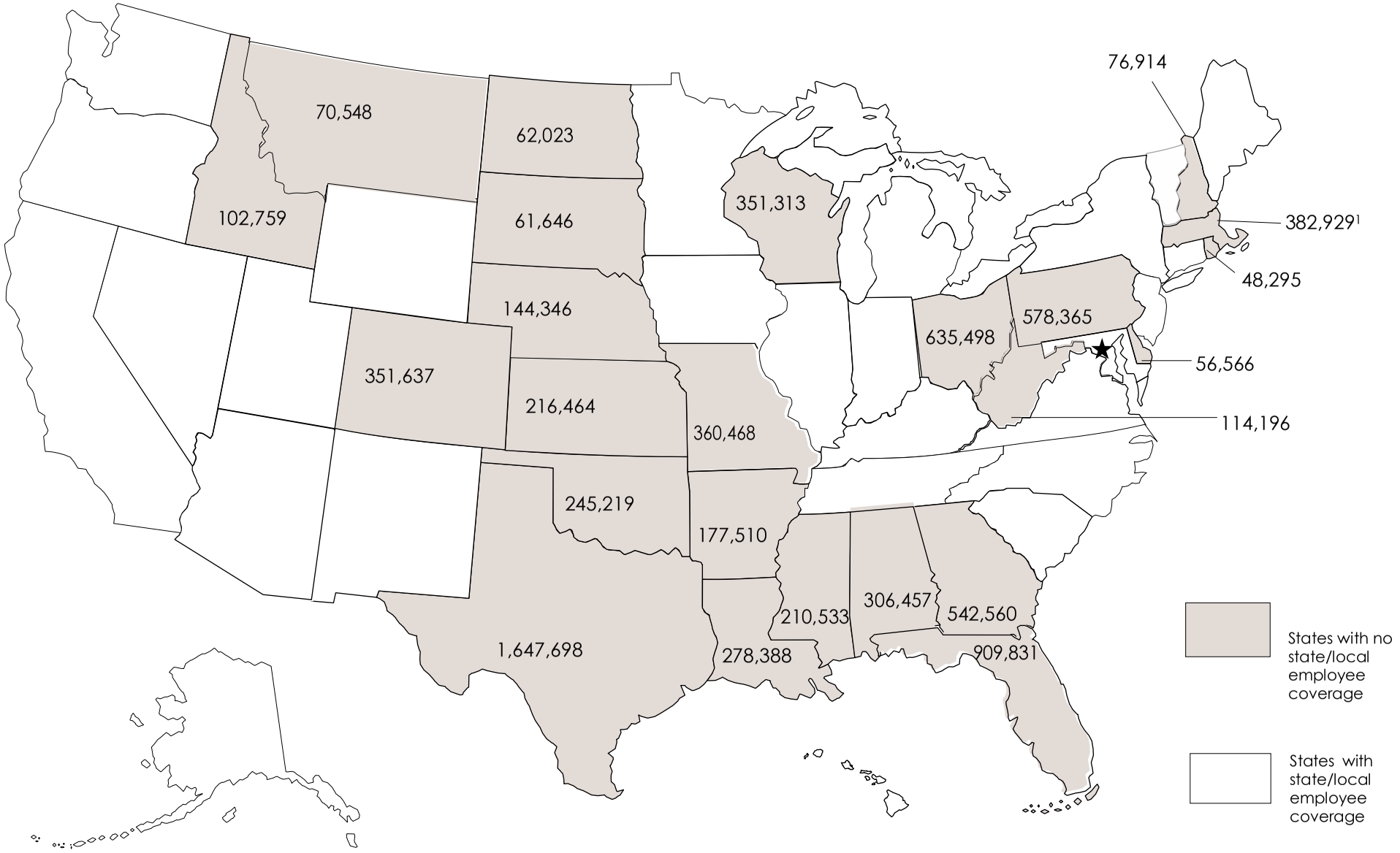
# Number of U.S. Establishments and Employees Covered per OSHA Full-Time Equivalent (FTE) Staff, 1980–2016

| 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 |
| **2006** | 133,833,834 | 8,784,027 | 2,165 | 61,817 | 4,057 |
| **2007** | 135,366,106 | 8,971,897 | 2,165 | 62,525 | 4,144 |
| **2008** | 134,805,659 | 9,082,049 | 2,118 | 63,648 | 4,288 |
| **2009** | 128,607,842 | 9,003,197 | 2,147 | 59,901 | 4,193 |
| **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 | 65,228 | 4,472 |

[1]U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages, Annual Averages (Total Covered).

[2]U.S. Department of Labor, Occupational Safety and Health Administration (OSHA).

# 8.0 Million State and Local Employees Lacked OSHA Coverage in 2016




[1]Massachusetts passed a law providing OSHA coverage to the state's public employees (effective Sept. 1, 2018), but does not have a federal OSHA-approved state plan with enforcement resources.

★In 2016, 39,011 public employees in the District of Columbia lacked OSHA coverage.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages: Annual Average.

Prepared by the AFL-CIO

# Profiles of Mine Safety and Health
# 2009–2017
## Coal Mines

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014[3] | 2015[3] | 2016[3] | 2017[3] |
|---|---|---|---|---|---|---|---|---|---|
| **Number of coal mines** | 2,076 | 1,944 | 1,972 | 1,871 | 1,704 | 1,633 | 1,459 | 1,289 | 1,208 |
| **Number of miners** | 134,089 | 135,500 | 143,940 | 138,338 | 123,446 | 116,318 | 102,871 | 81,875 | 82,843 |
| **Fatalities** | 18 | 48 | 20 | 20 | 20 | 16 | 12 | 8 | 15 |
| **Fatal injury rate[1]** | 0.0148 | 0.0384 | 0.0148 | 0.0159 | 0.0176 | 0.0149 | 0.0131 | 0.0115 | 0.0202 |
| **All injury rate[1]** | 3.69 | 3.43 | 3.43 | 3.21 | 3.15 | 3.15 | 2.93 | 2.91 | 3.16 |
| **States with coal mining** | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 25 |
| **Coal production (millions of tons)** | 1,075 | 1,086 | 1,095 | 1,018 | 984 | 1,000 | 897 | 728 | 774 |
| **Citations and orders issued[2]** | 102,057 | 96,814 | 93,057 | 78,848 | 63,182 | 52,483 | 49,338 | 40,541 | 46,896 |

## Metal and Nonmetal Mines

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014[3] | 2015[3] | 2016[3] | 2017[3] |
|---|---|---|---|---|---|---|---|---|---|
| **Number of metal/nonmetal mines** | 12,555 | 12,339 | 12,206 | 12,227 | 12,101 | 11,990 | 11,862 | 11,815 | 11,807 |
| **Number of miners** | 221,631 | 225,676 | 238,428 | 250,664 | 251,433 | 250,576 | 247,269 | 237,203 | 236,622 |
| **Fatalities** | 17 | 23 | 16 | 16 | 22 | 30 | 17 | 17 | 13 |
| **Fatal injury rate[1]** | 0.0098 | 0.0129 | 0.0083 | 0.0079 | 0.0108 | 0.0147 | 0.0084 | 0.0088 | 0.0067 |
| **All injury rate[1]** | 2.54 | 2.37 | 2.28 | 2.20 | 2.14 | 2.11 | 2.03 | 1.94 | 1.76 |
| **States with M/NM mining** | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| **Citations and orders issued[2]** | 71,361 | 74,095 | 63,280 | 60,073 | 54,953 | 58,629 | 58,395 | 56,534 | 58,255 |

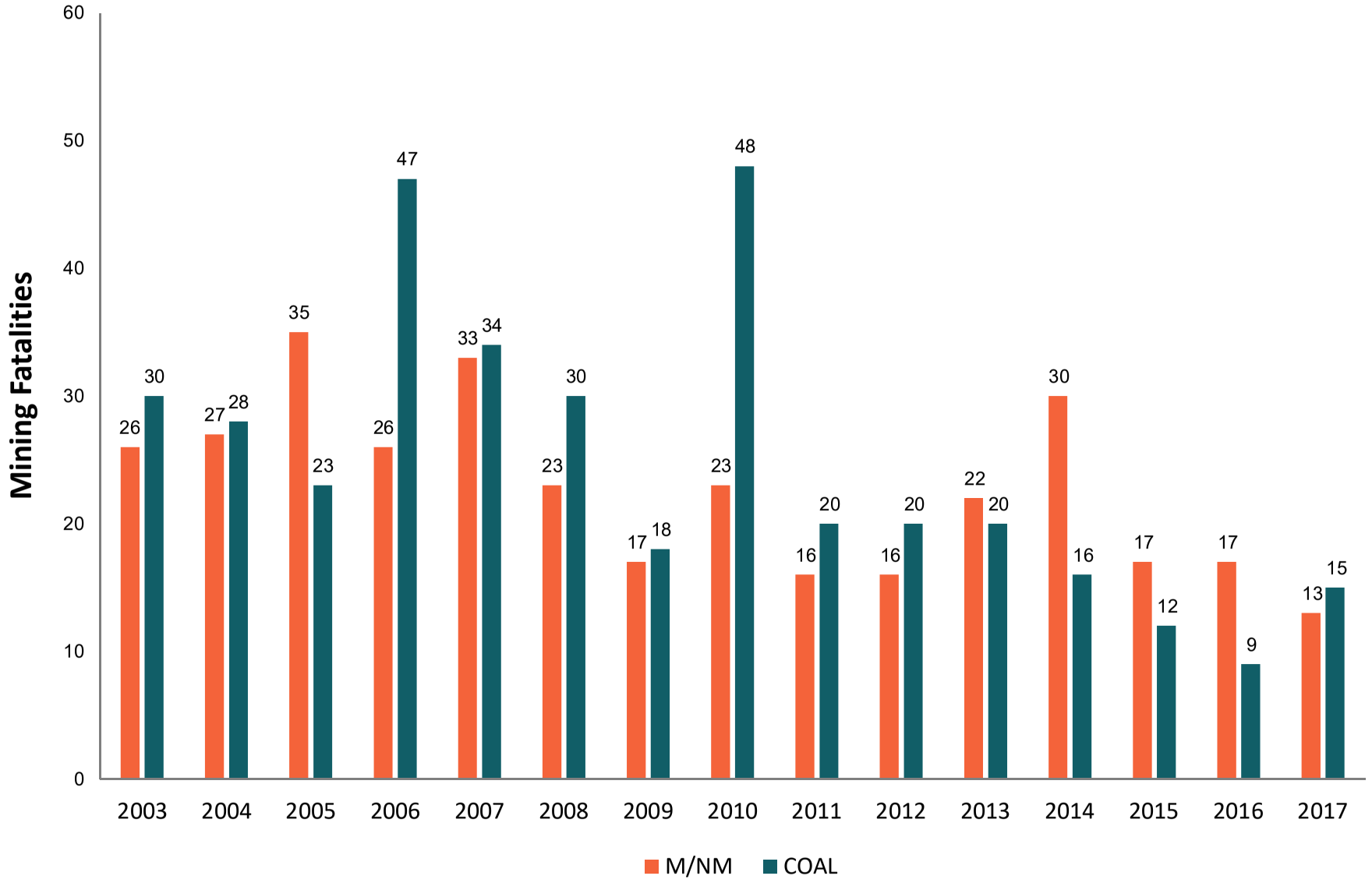
Source: U.S. Department of Labor, Mine Safety and Health Administration (MSHA).

[1]All reported injuries per 200,000 employee hours.

[2]Citations and orders are those not vacated.

[3]Includes operator and contractor employees.

## Coal and Metal/Nonmetal Mining Fatality Comparisons, 2003–2017




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

# Coal Mining Fatalities by State, 2002–2017

| State | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1 | 1 | 2 | 4 | 2 | 3 | 2 | 3 | 2 | | 3 | 1 | 1 | 1 | 1 | 1 |
| Alaska | | | | | | | | | | | | | | | | |
| Arizona | | | | | 1 | | | | | 1 | | | | | | |
| Arkansas | | | | | | | | | | | | | | | | |
| California | | | | | | | | | | | | | | | | |
| Colorado | | | | | | 1 | | | | 1 | 1 | | | | | 1 |
| Connecticut | | | | | | | | | | | | | | | | |
| Delaware | | | | | | | | | | | | | | | | |
| Florida | | | | | | | | | | | | | | | | |
| Georgia | | | | | | | | | | | | | | | | |
| Hawaii | | | | | | | | | | | | | | | | |
| Idaho | | | | | | | | | | | | | | | | |
| Illinois | | 3 | | | | | 1 | 2 | 2 | | 1 | 4 | 1 | 3 | 1 | |
| Indiana | 1 | 1 | 1 | | | 3 | 1 | | 1 | | 1 | 1 | 1 | | | |
| Iowa | | | | | | | | | | | | | | | | |
| Kansas | | | | | | | | | | | | | | | | |
| Kentucky | 10 | 10 | 6 | 8 | 16 | 2 | 8 | 6 | 7 | 8 | 4 | 2 | 2 | 2 | 2 | 2 |
| Louisiana | | | | | | | | 1 | | | | | | | | |
| Maine | | | | | | | | | | | | | | | | |
| Maryland | | | | | 1 | 2 | | | | | | | | | | |
| Massachusetts | | | | | | | | | | | | | | | | |

# Coal Mining Fatalities by State, 2002–2017

| State | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Michigan | | | | | | | | | | | | | | | | |
| Minnesota | | | | | | | | | | | | | | | | |
| Mississippi | | | | | | | | | | | | | | | | |
| Missouri | | | | | | | | | | | | | | | | |
| Montana | | | | | 1 | | | | 1 | | | | 1 | | | 1 |
| Nebraska | | | | | | | | | | | | | | | | |
| Nevada | | | | | | | | | | | | | | | | |
| New Hampshire | | | | | | | | | | | | | | | | |
| New Jersey | | | | | | | | | | | | | | | | |
| New Mexico | 1 | | | | | 1 | | | | | | | | | | |
| New York | | | | | | | | | | | | | | | | |
| North Carolina | | | | | | | | | | | | | | | | |
| North Dakota | | | | | | | | | | | | | | | | |
| Ohio | | | | 1 | | | | | | 2 | 1 | 1 | | | | |
| Oklahoma | | | | 1 | | 1 | | | | | | | | | | |
| Oregon | | | | | | | | | | | | | | | | |
| Pennsylvania | 3 | 1 | 1 | 4 | 1 | 1 | 5 | 1 | | | | 2 | | 3 | 1 | 1 |
| Puerto Rico | | | | | | | | | | | | | | | | |
| Rhode Island | | | | | | | | | | | | | | | | |
| South Carolina | | | | | | | | | | | | | | | | |
| South Dakota | | | | | | | | | | | | | | | | |

## Coal Mining Fatalities by State, 2002–2017

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

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

# Metal and Nonmetal Mining Fatalities by State, 2002–2017

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

# Metal and Nonmetal Mining Fatalities by State, 2002–2017

| State | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Minnesota | | | | 1 | 3 | 2 | | | 1 | 2 | | | | | | |
| Mississippi | | | | 2 | | | | | | | | | | | 2 | |
| Missouri | 3 | | 2 | 1 | | 2 | 2 | 2 | | | | 2 | 2 | 2 | | |
| Montana | | | | 1 | | 1 | | | | 1 | 2 | | 1 | | | |
| Nebraska | 1 | | | 1 | | 1 | | | | | 1 | | | 1 | | |
| Nevada | 2 | 2 | 4 | 3 | | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 1 | 2 |
| New Hampshire | | 1 | | | | 1 | | | | | | | | 1 | | |
| New Jersey | | 1 | | 1 | | | | | | | | | | | | |
| New Mexico | 2 | 1 | 1 | 2 | | | 1 | 1 | | | | 1 | | | | 1 |
| New York | 1 | | 1 | | | | 1 | | 1 | 1 | 3 | | 2 | | | |
| North Carolina | | 1 | 1 | | | 1 | | | | 1 | 1 | | | | 1 | 1 |
| North Dakota | | | | | | | | | | | | | | 1 | | |
| Ohio | | 2 | | 2 | | 2 | | | | 1 | | | 1 | 1 | | |
| Oklahoma | | | 2 | | | | | | 3 | | 1 | | | | | |
| Oregon | 2 | 1 | 2 | 1 | 1 | 1 | | | | | | | | | | 1 |
| Pennsylvania | | | 2 | 1 | 2 | | 2 | 1 | | 1 | | 1 | 2 | 1 | | |
| Puerto Rico | 1 | | | | 1 | 1 | | 1 | | | | | | | | |
| Rhode Island | | | | | | | | | | | | | | | | |
| South Carolina | 1 | 2 | 1 | 1 | | | | | | | | | 2 | | | |
| South Dakota | 1 | | | | | | | | | | | | | | | |
| Tennessee | 3 | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | | | 1 | | | 1 | |
| Texas | 4 | 2 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | | | 1 | 5 | 1 | 2 | 1 |

## Metal and Nonmetal Mining Fatalities by State, 2002–2017

| State | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Utah | | | | | 1 | | 1 | | 1 | 1 | | | 2 | | 1 | |
| Vermont | | | | | | | | | | | | | | | | |
| Virginia | | | | 1 | 1 | 1 | | | | | | | 2 | 1 | 1 | |
| Washington | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | | | | | 1 | |
| West Virginia | | | | | | 1 | | | | | | | | | | |
| Wisconsin | | | | 1 | | | 1 | | | | | | | | | |
| Wyoming | 2 | | 1 | 1 | | 1 | | | | | | | | | | |
| Total | 42 | 26 | 27 | 35 | 26 | 33 | 23 | 17 | 23 | 16 | 16 | 22 | 30 | 17 | 17 | 13 |

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

## MSHA Impact Inspections, 2017[1]

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC | Year Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Coal** | | | | | | | | | | | | | |
| Number of Impact Inspections | 10 | 12 | 10 | 10 | 12 | 10 | 10 | 11 | 11 | 9 | 9 | 9 | 123 |
| Total # Citations Issued | 153 | 110 | 58 | 92 | 79 | 79 | 69 | 85 | 65 | 88 | 48 | 52 | 978 |
| # Orders[2] Issued | 2 | 4 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 2 | 12 |
| # S&S[3] Citations Issued | 52 | 29 | 11 | 36 | 21 | 26 | 13 | 20 | 36 | 23 | 15 | 13 | 295 |
| % S&S Citations | 34% | 26% | 19% | 39% | 27% | 33% | 19% | 24% | 55% | 26% | 31% | 25% | 30% |
| **Metal/Nonmetal** | | | | | | | | | | | | | |
| Number of Impact Inspections | 5 | 2 | 4 | 5 | 5 | 3 | 2 | 2 | 1 | 6 | 4 | 6 | 45 |
| Total # Citations Issued | 55 | 9 | 16 | 40 | 59 | 52 | 26 | 11 | 11 | 87 | 60 | 45 | 471 |
| # Orders[2] Issued | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 15 | 21 | 1 | 40 |
| # S&S[3] Citations Issued | 12 | 4 | 6 | 8 | 15 | 22 | 7 | 1 | 2 | 40 | 41 | 12 | 170 |
| % S&S Citations | 22% | 44% | 38% | 20% | 25% | 42% | 27% | 9% | 18% | 46% | 68% | 27% | 36% |

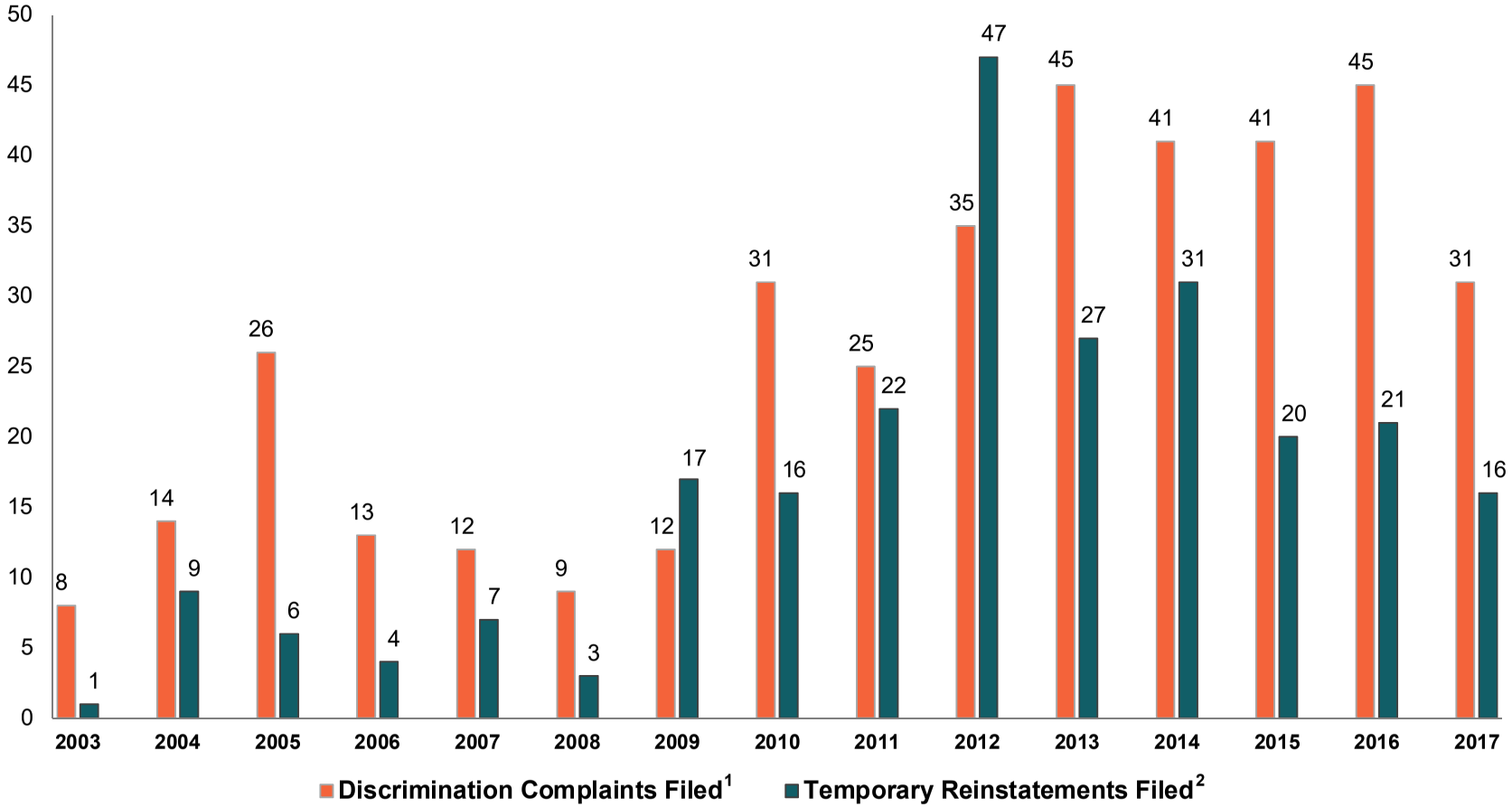
Source: Mine Safety and Health Administration (MSHA).

[1]Impact 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.

[2]MSHA 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.

[3]A 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.

## MSHA Discrimination Complaints and Temporary Reinstatements Filed by the Department of Labor on Behalf of Miners, 2003–2017



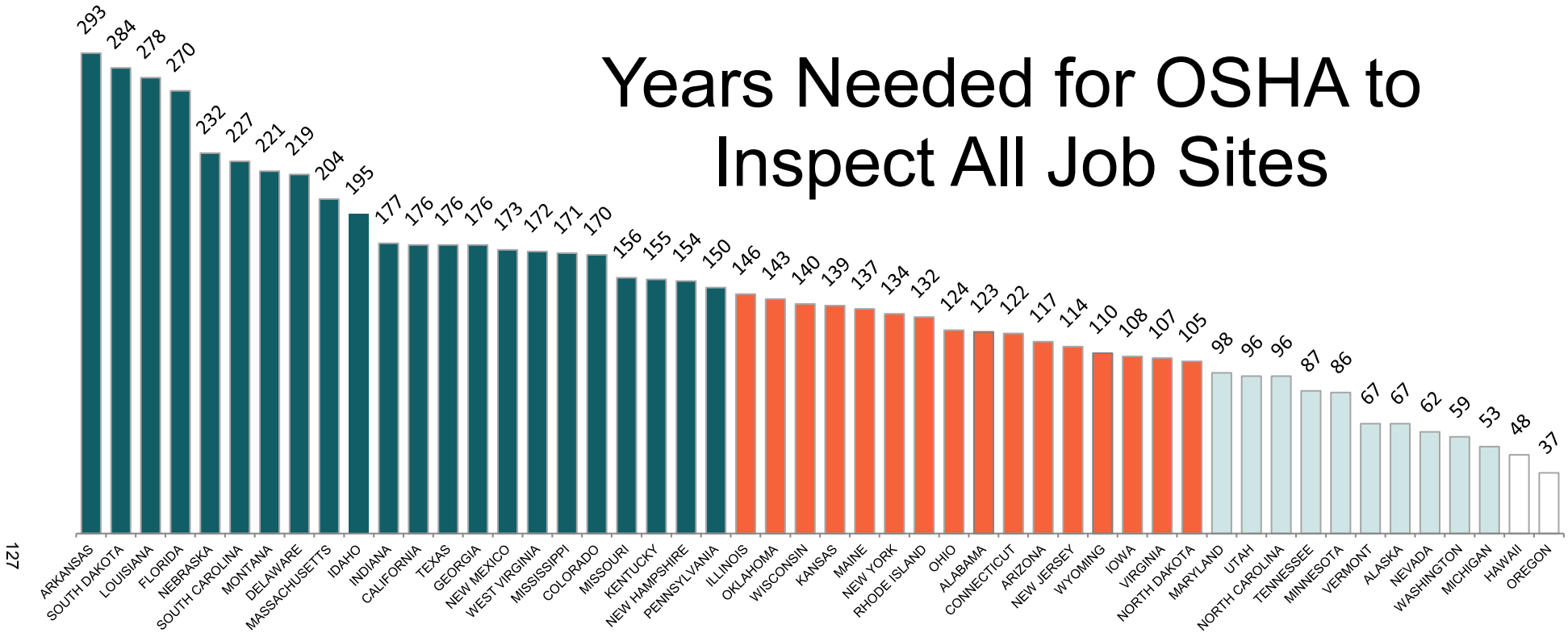

Source: Mine Safety and Health Administration.

[1]Under 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.

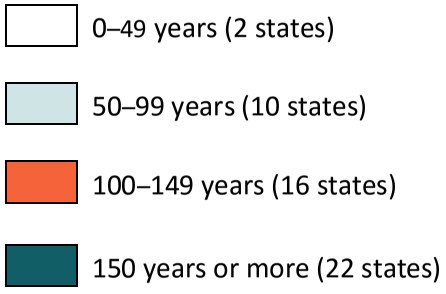
[2]If the Mine Safety and Health Administration (MSHA) finds that a miner's discrimination complaint is "not frivolously brought," MSHA will ask the Federal Mine Safety and Health Review Commission to order immediate reinstatement of the miner while the discrimination case is pending.

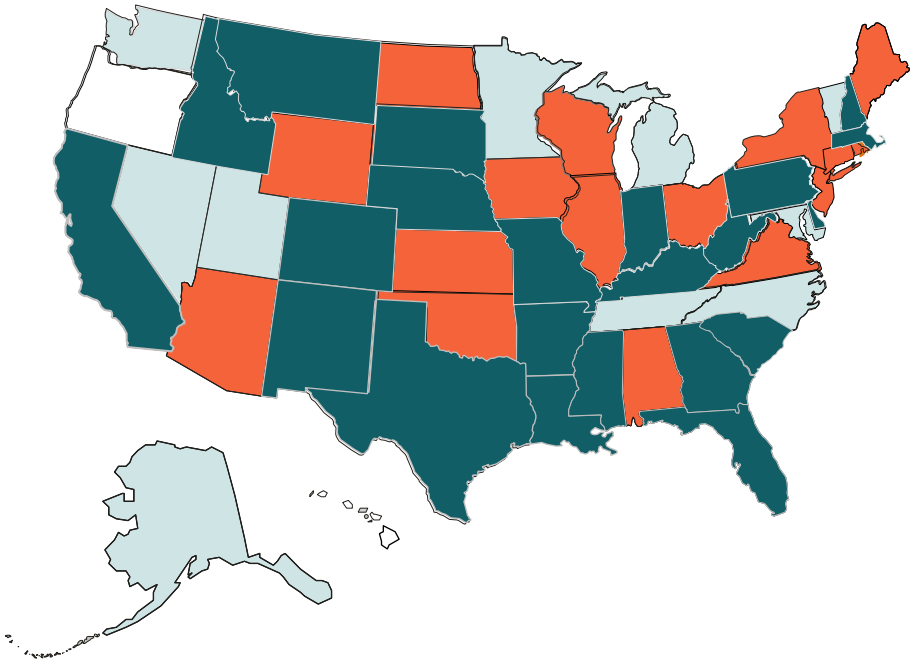
# STATE COMPARISONS

# Years Needed for OSHA to Inspect All Job Sites





Sources: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Wages Annual Averages 2016," and Occupational Safety and Health Administration OIS data on worksite inspections, FY 2017.

Prepared by the AFL-CIO

# Number of OSHA Inspectors by State Compared with ILO Benchmark Number of Labor Inspectors[1]

| State | Number of Employees[1] | Actual Number of OSHA Inspectors[2,3] Federal | State | Number of Labor Inspectors Needed to Meet ILO Benchmark[4] | Ratio of OSHA Inspectors/Number of Employees |
|---|---|---|---|---|---|
| Alabama | 1,915,306 | 20 | 0 | 192 | 1/95,765 |
| Alaska | 326,295 | 3 | 7 | 33 | 1/32,630 |
| Arizona | 2,680,065 | 2 | 20 | 268 | 1/121,821 |
| Arkansas | 1,191,763 | 7 | 0 | 119 | 1/170,252 |
| California | 16,718,647 | 6 | 231 | 1,672 | 1/70,543 |
| Colorado | 2,552,503 | 26 | 0 | 255 | 1/98,173 |
| Connecticut | 1,666,554 | 14 | 5 | 167 | 1/87,713 |
| Delaware | 438,238 | 4 | 0 | 44 | 1/109,560 |
| Florida | 8,309,351 | 59 | 0 | 831 | 1/140,836 |
| Georgia | 4,262,937 | 42 | 0 | 426 | 1/101,499 |
| Hawaii | 647,545 | 3 | 15 | 65 | 1/35,975 |
| Idaho | 687,919 | 8 | 0 | 69 | 1/85,990 |
| Illinois | 5,895,633 | 44 | 5 | 590 | 1/120,319 |
| Indiana | 2,987,091 | 2 | 34 | 299 | 1/82,975 |
| Iowa | 1,539,752 | 2 | 22 | 154 | 1/64,156 |
| Kansas | 1,370,665 | 26 | 0 | 137 | 1/52,718 |
| Kentucky | 1,861,063 | 0 | 27 | 186 | 1/68,928 |
| Louisiana | 1,908,397 | 12 | 0 | 191 | 1/159,033 |
| Maine | 603,785 | 19 | 3 | 60 | 1/27,445 |
| Maryland | 2,627,172 | 6 | 46 | 263 | 1/50,523 |
| Massachusetts | 3,494,553 | 29 | 0 | 349 | 1/120,502 |

# Number of OSHA Inspectors by State Compared with ILO Benchmark Number of Labor Inspectors[1]

| State | Number of Employees[1] | Actual Number of OSHA Inspectors[2,3] | | Number of Labor Inspectors Needed to Meet ILO Benchmark[4] | Ratio of OSHA Inspectors/Number of Employees |
|---|---|---|---|---|---|
| | | Federal | State | | |
| Michigan | 4,242,537 | 2 | 57 | 424 | 1/71,907 |
| Minnesota | 2,815,248 | 0 | 41 | 282 | 1/68,665 |
| Mississippi | 1,124,854 | 10 | 0 | 112 | 1/112,485 |
| Missouri | 2,755,477 | 13 | 0 | 276 | 1/211,960 |
| Montana | 454,819 | 7 | 0 | 45 | 1/64,974 |
| Nebraska | 968,601 | 8 | 0 | 97 | 1/121,075 |
| Nevada | 1,283,642 | 3 | 40 | 128 | 1/29,852 |
| New Hampshire | 647,347 | 7 | 0 | 65 | 1/92,478 |
| New Jersey | 3,953,972 | 43 | 13 | 395 | 1/70,607 |
| New Mexico | 807,387 | 0 | 9 | 81 | 1/89,710 |
| New York | 9,154,025 | 65 | 36 | 915 | 1/90,634 |
| North Carolina | 4,259,276 | 2 | 100 | 426 | 1/41,758 |
| North Dakota | 417,119 | 8 | 0 | 42 | 1/52,140 |
| Ohio | 5,319,679 | 52 | 0 | 532 | 1/102,302 |
| Oklahoma | 1,575,978 | 13 | 0 | 158 | 1/121,229 |
| Oregon | 1,840,874 | 4 | 71 | 184 | 1/24,545 |
| Pennsylvania | 5,737,759 | 54 | 0 | 574 | 1/106,255 |
| Rhode Island | 473,406 | 6 | 0 | 47 | 1/78,901 |
| South Carolina | 1,996,297 | 2 | 18 | 200 | 1/99,815 |
| South Dakota | 420,460 | 2 | 0 | 42 | 1/210,230 |
| Tennessee | 2,887,754 | 0 | 34 | 289 | 1/84,934 |
| Texas | 11,805,698 | 85 | 0 | 1,181 | 1/138,891 |

# Number of OSHA Inspectors by State Compared with ILO Benchmark Number of Labor Inspectors[1]

| State | Number of Employees[1] | Actual Number of OSHA Inspectors[2,3] Federal | State | Number of Labor Inspectors Needed to Meet ILO Benchmark[4] | Ratio of OSHA Inspectors/Number of Employees |
|---|---|---|---|---|---|
| **Utah** | 1,388,878 | 0 | 19 | 139 | 1/73,099 |
| **Vermont** | 308,044 | 0 | 6 | 31 | 1/51,341 |
| **Virginia** | 3,789,744 | 3 | 42 | 379 | 1/84,217 |
| **Washington** | 3,215,014 | 3 | 106 | 322 | 1/29,496 |
| **West Virginia** | 684,322 | 6 | 0 | 68 | 1/114,054 |
| **Wisconsin** | 2,828,166 | 28 | 0 | 283 | 1/101,006 |
| **Wyoming** | 271,813 | 0 | 6 | 27 | 1/45,302 |
| **Totals[5]** | 141,870,066 | 1,821[6] | | 14,187 | 1/77,908 |

[1]U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages, Annual Averages 2016.

[2]Includes only safety and industrial hygiene Compliance Safety and Health Officers (CSHOs) 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 2017. State plan CSHOs provided by OSHA's Directorate of Cooperative and State Programs and includes "on board" safety and health CSHOs from the FY 2018 State Plan Grant Applications as of July 1, 2017. 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 particular state.

[3]Under 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, Illinois, Maine, New Jersey and New York have state programs covering state and local employees only.

[4]The 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.

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

[6]Total number of inspectors includes two inspectors in the Virgin Islands and 46 inspectors in Puerto Rico.

# Profile of Workplace Safety and Health in the United States

| State | Fatalities 2016[1] | | | Injuries/Illnesses 2016[2] | | Penalties FY 2017[3] | | Inspectors[4,5] | | Years to Inspect Each Workplace Once[6] | State or Federal Program |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Rate | Rank[7] | Number | Rate | Average ($) | Rank[8] | Federal | State | | |
| **Alabama** | 100 | 5.2 | 39 | 35,400 | 2.7 | 3,583 | 15 | 20 | 0 | 123 | Federal |
| **Alaska** | 35 | 10.6 | 49 | 7,300 | 3.6 | 1,288 | 41 | 3 | 7 | 67 | State |
| **Arizona** | 77 | 2.6 | 8 | 53,000 | 2.9 | 1,083 | 45 | 2 | 20 | 117 | State |
| **Arkansas** | 68 | 5.3 | 41 | 20,500 | 2.4 | 3,254 | 24 | 7 | 0 | 293 | Federal |
| **California** | 376 | 2.2 | 3 | 360,100 | 3.3 | 7,326 | 1 | 6 | 231 | 176 | State |
| **Colorado** | 81 | 3.0 | 12 | N/A | N/A | 2,725 | 30 | 26 | 0 | 170 | Federal |
| **Connecticut** | 28 | 1.6 | 1 | 38,200 | 3.3 | 2,824 | 29 | 14 | 5 | 122 | Federal[5] |
| **Delaware** | 12 | 2.6 | 8 | 8,000 | 2.6 | 4,701 | 2 | 4 | 0 | 219 | Federal |
| **Florida** | 309 | 3.6 | 22 | N/A | N/A | 3,681 | 13 | 59 | 0 | 270 | Federal |
| **Georgia** | 171 | 3.9 | 25 | 82,300 | 2.7 | 3,805 | 10 | 42 | 0 | 176 | Federal |
| **Hawaii** | 29 | 2.4 | 4 | 13,700 | 3.5 | 2,129 | 33 | 3 | 15 | 48 | State |
| **Idaho** | 30 | 4.1 | 28 | N/A | N/A | 3,202 | 26 | 8 | 0 | 195 | Federal |
| **Illinois** | 171 | 2.9 | 11 | 111,600 | 2.7 | 3,571 | 17 | 44 | 5 | 146 | Federal[5] |
| **Indiana** | 137 | 4.5 | 34 | 72,400 | 3.4 | 1,235 | 42 | 2 | 34 | 177 | State |
| **Iowa** | 76 | 4.8 | 35 | 40,300 | 3.7 | 1,362 | 39 | 2 | 22 | 108 | State |
| **Kansas** | 74 | 5.2 | 39 | 31,800 | 3.3 | 3,016 | 28 | 26 | 0 | 139 | Federal |

# Profile of Workplace Safety and Health in the United States

| State | Fatalities 2016[1] | | | Injuries/Illnesses 2016[2] | | Penalties FY 2017[3] | | Inspectors[4,5] | | Years to Inspect Each Workplace Once[6] | State or Federal Program |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Rate | Rank[7] | Number | Rate | Average ($) | Rank[8] | Federal | State | | |
| **Kentucky** | 92 | 5.0 | 37 | 40,600 | 3.2 | 3,333 | 21 | 0 | 27 | 155 | State |
| **Louisiana** | 95 | 5.0 | 37 | 25,700 | 1.9 | 3,811 | 9 | 12 | 0 | 278 | Federal |
| **Maine** | 18 | 2.4 | 4 | 19,000 | 4.7 | 4,303 | 3 | 19 | 3 | 137 | Federal[5] |
| **Maryland** | 92 | 3.2 | 15 | 48,400 | 2.8 | 640 | 49 | 6 | 46 | 98 | State |
| **Massachusetts** | 109 | 3.3 | 19 | 64,300 | 2.6 | 3,752 | 11 | 29 | 0 | 204 | Federal |
| **Michigan** | 162 | 3.5 | 21 | 97,000 | 3.3 | 1,131 | 44 | 2 | 57 | 53 | State |
| **Minnesota** | 92 | 3.4 | 20 | 62,900 | 3.3 | 993 | 48 | 0 | 41 | 86 | State |
| **Mississippi** | 71 | 6.3 | 43 | N/A | N/A | 3,306 | 22 | 10 | 0 | 171 | Federal |
| **Missouri** | 124 | 4.3 | 30 | 52,700 | 2.8 | 3,645 | 14 | 13 | 0 | 156 | Federal |
| **Montana** | 38 | 7.9 | 48 | 12,200 | 4.2 | 2,149 | 32 | 7 | 0 | 221 | Federal |
| **Nebraska** | 60 | 6.3 | 43 | 22,400 | 3.4 | 3,903 | 8 | 8 | 0 | 232 | Federal |
| **Nevada** | 54 | 4.2 | 29 | 33,900 | 3.7 | 1,133 | 43 | 3 | 40 | 62 | State |
| **New Hampshire** | 22 | 3.2 | 15 | N/A | N/A | 3,370 | 20 | 7 | 0 | 154 | Federal |
| **New Jersey** | 101 | 2.4 | 4 | 72,500 | 2.6 | 4,205 | 4 | 43 | 13 | 114 | Federal[5] |
| **New Mexico** | 41 | 4.9 | 36 | 16,900 | 3.2 | 1,025 | 47 | 0 | 9 | 173 | State |
| **New York** | 272 | 3.1 | 13 | 139,500 | 2.3 | 3,707 | 12 | 65 | 36 | 134 | Federal[5] |

# Profile of Workplace Safety and Health in the United States

| State | Fatalities 2016[1] | | | Injuries/Illnesses 2016[2] | | Penalties FY 2017[3] | | Inspectors[4,5] | | Years to Inspect Each Workplace Once[6] | State or Federal Program |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Rate | Rank[7] | Number | Rate | Average ($) | Rank[8] | Federal | State | | |
| **North Carolina** | 174 | 3.7 | 24 | 71,500 | 2.5 | 1,594 | 37 | 2 | 100 | 96 | State |
| **North Dakota** | 28 | 7.0 | 46 | N/A | N/A | 3,582 | 16 | 8 | 0 | 105 | Federal |
| **Ohio** | 164 | 3.1 | 13 | 98,300 | 2.7 | 3,907 | 7 | 52 | 0 | 124 | Federal |
| **Oklahoma** | 92 | 5.6 | 42 | N/A | N/A | 3,299 | 23 | 13 | 0 | 143 | Federal |
| **Oregon** | 72 | 3.9 | 25 | 50,000 | 4.0 | 547 | 50 | 4 | 71 | 37 | State |
| **Pennsylvania** | 163 | 2.8 | 10 | 138,000 | 3.3 | 3,454 | 19 | 54 | 0 | 150 | Federal |
| **Rhode Island** | 9 | 1.8 | 2 | N/A | N/A | 3,215 | 25 | 6 | 0 | 132 | Federal |
| **South Carolina** | 96 | 4.4 | 32 | 32,800 | 2.5 | 1,042 | 46 | 2 | 18 | 227 | State |
| **South Dakota** | 31 | 7.5 | 47 | N/A | N/A | 4,176 | 5 | 2 | 0 | 284 | Federal |
| **Tennessee** | 122 | 4.3 | 30 | 60,200 | 2.9 | 1,510 | 38 | 0 | 34 | 87 | State |
| **Texas** | 545 | 4.4 | 32 | 185,300 | 2.2 | 3,481 | 18 | 85 | 0 | 176 | Federal |
| **Utah** | 44 | 3.2 | 15 | 27,800 | 2.9 | 1,315 | 40 | 0 | 19 | 96 | State |
| **Vermont** | 10 | 3.2 | 15 | 9,300 | 4.6 | 1,698 | 36 | 0 | 6 | 67 | State |
| **Virginia** | 153 | 4.0 | 27 | 63,200 | 2.5 | 1,871 | 34 | 3 | 42 | 107 | State |
| **Washington** | 78 | 2.4 | 4 | 89,200 | 4.3 | 1,866 | 35 | 3 | 106 | 59 | State |
| **West Virginia** | 47 | 6.6 | 45 | 14,700 | 3.2 | 3,102 | 27 | 6 | 0 | 172 | Federal |

# Profile of Workplace Safety and Health in the United States

| State | Fatalities 2016[1] | | | Injuries/Illnesses 2016[2] | | Penalties FY 2017[3] | | Inspectors[4,5] | | Years to Inspect Each Workplace Once[6] | State or Federal Program |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Rate | Rank[7] | Number | Rate | Average ($) | Rank[8] | Federal | State | | |
| **Wisconsin** | 105 | 3.6 | 22 | 72,400 | 3.7 | 4,068 | 6 | 28 | 0 | 140 | Federal |
| **Wyoming** | 34 | 12.3 | 50 | 6,000 | 3.4 | 2,188 | 31 | 0 | 6 | 110 | State |
| **Total or National Average:** | **5,190** | **3.6** | | **2.9 Million** | **2.9** | **2,633[9]** | | **1,821[10]** | | **126[11]** | |

[1]The state fatality rates are calculated by BLS as 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 include Guam, Puerto Rico and the Virgin Islands.

[3]U.S. Department of Labor, OSHA, OIS Inspection Reports, FY 2017. 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.

[4]Includes only safety and industrial hygiene Compliance Safety and Health Officers (CSHOs) 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 2017. State plan CSHOs provided by OSHA's Directorate of Cooperative and State Programs and includes "on board" safety and health CSHOs from the FY 2018 State Plan Grant Applications as of July 1, 2017. 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 particular state.

[5]Under 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, Illinois, Maine, New Jersey and New York have state programs covering state and local employees only.

[6]Years to inspect is based on the number of establishments in 2016 and the number of OSHA inspections in FY 2017. 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.

[7]Rankings are based on best-to-worst fatality rate (1–best, 50–worst).

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

[9]National average is the per citation average for federal OSHA serious penalties and state OSHA plan states' serious penalties combined. Federal serious penalties average $3,553 per citation; state plan OSHA states average $1,849 per citation.

[10]Total number of inspectors includes 764 federal OSHA inspectors and 1,057 state OSHA inspectors, including two inspectors in the Virgin Islands and 46 inspectors in Puerto Rico.

[11]Frequency of all covered establishments for all states combined. Average inspection frequency of covered establishments for federal OSHA states is once every 158 years; inspection frequency of covered establishments for state OSHA plan states is once every 102 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.

# State-by-State OSHA Fatality Investigations, FY 2017

| 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 |
|---|---|---|---|---|---|---|
| **Alabama** | 23 | 606,743 | 26,380 | 12,934 | 11,966 | Federal |
| **Alaska** | 5 | 16,000 | 3,200 | 20,000 | 16,000 | State |
| **Arizona** | 14 | 66,475 | 4,748 | 7,375 | 7,000 | State |
| **Arkansas** | 7 | 309,709 | 44,244 | 11,641 | 11,641 | Federal |
| **California** | 167 | 4,039,095 | 24,186 | 22,625 | 21,485 | State |
| **Colorado** | 24 | 144,736 | 6,031 | 2,716 | 2,716 | Federal |
| **Connecticut** | 8 | 133,893 | 16,737 | 10,348 | 8,000 | Federal[2] |
| **Delaware** | 3 | 26,427 | 8,809 | 16,260 | 9,756 | Federal |
| **Florida** | 90 | 1,561,729 | 17,353 | 12,042 | 7,841 | Federal |
| **Georgia** | 57 | 567,530 | 9,957 | 12,675 | 8,873 | Federal |
| **Hawaii** | 4 | 73,600 | 18,400 | 12,400 | 12,400 | State |
| **Idaho** | 8 | 112,832 | 14,104 | 8,317 | 7,437 | Federal |
| **Illinois** | 48 | 893,258 | 18,610 | 8,511 | 7,136 | Federal[2] |
| **Indiana** | 27 | 258,450 | 9,572 | 10,500 | 7,050 | State |
| **Iowa** | 22 | 218,575 | 9,935 | 3,875 | 4,500 | State |
| **Kansas** | 13 | 244,963 | 18,843 | 13,762 | 12,675 | Federal |
| **Kentucky** | 19 | 121,000 | 6,368 | 7,000 | 7,000 | State |
| **Louisiana** | 28 | 392,363 | 14,013 | 10,865 | 6,881 | Federal |
| **Maine** | 3 | 15,638 | 5,213 | 4,413 | 4,230 | Federal[2] |
| **Maryland** | 25 | 70,712 | 2,828 | 2,900 | 2,888 | State |
| **Massachusetts** | 37 | 2,164,762 | 58,507 | 12,675 | 10,154 | Federal |
| **Michigan** | 40 | 444,050 | 11,101 | 12,600 | 7,000 | State |
| **Minnesota** | 28 | 631,050 | 22,538 | 26,500 | 25,000 | State |
| **Mississippi** | 20 | 176,205 | 8,810 | 10,141 | 6,425 | Federal |

# State-by-State OSHA Fatality Investigations, FY 2017

| 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 |
|---|---|---|---|---|---|---|
| **Missouri** | 22 | 784,552 | 35,661 | 23,268 | 14,239 | Federal |
| **Montana** | 8 | 39,304 | 4,913 | 0 | 0 | Federal |
| **Nebraska** | 9 | 114,926 | 12,770 | 19,557 | 12,800 | Federal |
| **Nevada** | 12 | 151,700 | 12,642 | 12,000 | 10,500 | State |
| **New Hampshire** | 5 | 52,596 | 10,519 | 11,409 | 11,409 | Federal |
| **New Jersey** | 26 | 768,112 | 29,543 | 4,346 | 4,346 | Federal[2] |
| **New Mexico** | 8 | 43,175 | 5,397 | 4,500 | 4,500 | State |
| **New York** | 76 | 1,113,988 | 14,658 | 5,035 | 3,968 | Federal[2] |
| **North Carolina** | 45 | 183,505 | 4,078 | 5,300 | 5,125 | State |
| **North Dakota** | 12 | 58,632 | 4,886 | 3,713 | 2,807 | Federal |
| **Ohio** | 37 | 297,657 | 8,045 | 10,140 | 5,432 | Federal |
| **Oklahoma** | 25 | 189,526 | 7,581 | 7,389 | 5,000 | Federal |
| **Oregon** | 32 | 24,760 | 774 | 2,000 | 2,000 | State |
| **Pennsylvania** | 57 | 1,194,689 | 20,959 | 12,675 | 11,382 | Federal |
| **Rhode Island** | 5 | 0 | 0 | 0 | 0 | Federal |
| **South Carolina** | 26 | 71,650 | 2,756 | 4,300 | 3,500 | State |
| **South Dakota** | 4 | 242,720 | 60,680 | 17,746 | 17,746 | Federal |
| **Tennessee** | 44 | 281,900 | 6,407 | 8,000 | 8,000 | State |
| **Texas** | 202 | 2,621,033 | 12,975 | 8,459 | 6,519 | Federal |
| **Utah** | 14 | 14,000 | 1,000 | 1,500 | 1,500 | State |
| **Vermont** | 5 | 40,650 | 8,130 | 21,000 | 13,650 | State |
| **Virginia** | 51 | 685,382 | 13,439 | 13,835 | 10,170 | State |
| **Washington** | 34 | 378,800 | 11,141 | 8,400 | 7,300 | State |
| **West Virginia** | 10 | 134,415 | 13,442 | 12,675 | 11,620 | Federal |

# State-by-State OSHA Fatality Investigations, FY 2017

| 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** | 23 | 2,082,346 | 90,537 | 8,692 | 6,000 | Federal |
| **Wyoming** | 6 | 57,586 | 9,598 | 15,714 | 15,714 | State |
| **National Median State Plan States** | | | | **4,000** | **4,000** | |
| **National Median Federal States** | | | | **9,080** | **7,500** | |
| **Total or National Average[3]** | **1,569** | **25,243,964** | **16,089** | | | |

Sources: OSHA OIS Fatality Inspection Reports, federal states issued March 3, 2018, and state plan states issued April 9, 2018.

[1]National median penalties include investigations conducted in American Samoa, Puerto Rico, the District of Columbia, Virgin Islands, Northern Mariana Islands and Guam.

[2]Under 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.

[3]National fatality investigations for all federal OSHA and state OSHA plan states combined. Federal OSHA average is $19,152 per fatality investigation; state plan OSHA average is $11,904 per fatality investigation. Total investigations, total penalties and national average penalty per investigation includes four investigations in the District of Columbia, 10 in Puerto Rico, one in the Virgin Islands, two in the Northern Mariana Islands, two in American Samoa and one in Guam.

# Workplace Safety and Health Statistics by State, 2011–2016

| | Fatality Rates[1] | | | | | | Injury/Illness Rates[2] | | | | | | Average Penalties($)[3] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | FY12 | FY13 | FY14 | FY15 | FY16 | FY17 |
| Alabama | 4.0 | 4.3 | 4.0 | 4.0 | 3.7 | 5.2 | 3.7 | 3.3 | 3.3 | 2.9 | 3.0 | 2.7 | 2,184 | 1,803 | 2,016 | 2,311 | 2,582 | 3,583 |
| Alaska | 11.1 | 8.9 | 7.9 | 7.8 | 4.1 | 10.6 | 4.5 | 4.6 | 4.3 | 3.9 | 3.9 | 3.6 | 960 | 889 | 823 | 808 | 1,079 | 1,288 |
| Arizona | 2.7 | 2.3 | 3.5 | 3.1 | 2.4 | 2.6 | 3.2 | 3.2 | 3.3 | 3.0 | 2.9 | 2.9 | 1,036 | 891 | 935 | 960 | 1,002 | 1,083 |
| Arkansas | 8.0 | 5.4 | 5.6 | 5.7 | 5.8 | 5.3 | 3.4 | 3.2 | 3.0 | 2.6 | 2.6 | 2.4 | 2,506 | 2,569 | 2,329 | 2,221 | 2,480 | 3,254 |
| California | 2.4 | 2.3 | 2.4 | 2.0 | 2.2 | 2.2 | 3.5 | 3.5 | 3.5 | 3.4 | 3.3 | 3.3 | 5,043 | 6,422 | 5,733 | 6,543 | 7,131 | 7,326 |
| Colorado | 3.9 | 3.5 | 2.7 | 3.3 | 2.9 | 3.0 | N/A | N/A | N/A | N/A | N/A | N/A | 1,603 | 1,649 | 1,564 | 1,821 | 2,044 | 2,725 |
| Connecticut | 2.2 | 2.1 | 1.8 | 2.1 | 2.6 | 1.6 | 4.5 | 3.9 | 3.8 | 3.5 | 3.2 | 3.3 | 1,985 | 1,735 | 1,794 | 1,896 | 2,142 | 2,824 |
| Delaware | 2.6 | 3.1 | 2.6 | 2.8 | 1.9 | 2.6 | 2.9 | 2.8 | 2.7 | 2.6 | 2.6 | 2.6 | 3,053 | 2,406 | 1,985 | 2,745 | 2,878 | 4,701 |
| Florida | 2.9 | 2.7 | 2.8 | 2.7 | 3.1 | 3.6 | N/A | N/A | N/A | N/A | N/A | N/A | 1,926 | 1,821 | 2,181 | 2,365 | 2,451 | 3,681 |
| Georgia | 2.8 | 2.5 | 2.8 | 3.6 | 4.3 | 3.9 | 2.9 | 2.8 | 2.8 | 2.9 | 2.7 | 2.7 | 2,114 | 2,061 | 2,127 | 2,248 | 2,392 | 3,805 |
| Hawaii | 4.2 | 3.4 | 1.6 | 5.0 | 2.6 | 2.4 | 3.5 | 3.8 | 3.7 | 3.7 | 3.4 | 3.5 | 1,002 | 964 | 1,279 | 1,214 | 1,604 | 2,129 |
| Idaho | 5.1 | 2.7 | 4.3 | 4.7 | 4.8 | 4.1 | N/A | N/A | N/A | N/A | N/A | N/A | 1,347 | 1,449 | 1,639 | 1,973 | 2,485 | 3,202 |
| Illinois | 3.1 | 2.5 | 3.1 | 2.9 | 2.9 | 2.9 | 3.2 | 3.2 | 3.2 | 2.8 | 2.9 | 2.7 | 2,255 | 1,876 | 1,980 | 2,258 | 2,380 | 3,571 |
| Indiana | 4.5 | 4.2 | 4.4 | 4.4 | 3.9 | 4.5 | 4.2 | 3.9 | 3.6 | 3.8 | 3.7 | 3.4 | 996 | 1,054 | 957 | 782 | 1,000 | 1,235 |
| Iowa | 6.3 | 6.6 | 4.7 | 6.0 | 3.9 | 4.8 | 4.3 | 4.5 | 4.5 | 3.9 | 3.7 | 3.7 | 880 | 790 | 901 | 997 | 1,488 | 1,362 |
| Kansas | 5.9 | 5.7 | 4.2 | 5.5 | 4.4 | 5.2 | 3.9 | 3.6 | 3.5 | 3.4 | 3.0 | 3.3 | 2,293 | 1,971 | 2,017 | 2,055 | 2,144 | 3,016 |
| Kentucky | 5.4 | 4.9 | 4.7 | 4.5 | 5.5 | 5.0 | 4.2 | 4.1 | 4.0 | 3.7 | 3.5 | 3.2 | 3,368 | 3,254 | 2,828 | 2,607 | 3,295 | 3,333 |
| Louisiana | 6.3 | 6.4 | 6.3 | 6.3 | 5.8 | 5.0 | 2.5 | 2.3 | 2.2 | 2.0 | 1.9 | 1.9 | 2,348 | 1,765 | 2,201 | 2,334 | 2,847 | 3,811 |
| Maine | 4.2 | 3.2 | 3.1 | 2.9 | 2.5 | 2.4 | 5.7 | 5.6 | 5.3 | 5.3 | 4.8 | 4.7 | 2,146 | 2,083 | 2,013 | 2,025 | 2,508 | 4,303 |
| Maryland | 2.6 | 2.6 | 2.7 | 2.6 | 2.4 | 3.2 | 3.0 | 3.1 | 3.0 | 3.1 | 2.9 | 2.8 | 814 | 685 | 746 | 715 | 650 | 640 |
| Massachusetts | 2.2 | 1.4 | 1.8 | 1.7 | 2.1 | 3.3 | 3.2 | 3.1 | 2.9 | 2.7 | 2.7 | 2.6 | 2,351 | 1,929 | 2,104 | 2,092 | 2,484 | 3,752 |
| Michigan | 3.5 | 3.4 | 3.3 | 3.3 | 3.1 | 3.5 | 3.8 | 4.0 | 3.7 | 3.6 | 3.3 | 3.3 | 537 | 542 | 585 | 612 | 763 | 1,131 |
| Minnesota | 2.3 | 2.6 | 2.6 | 2.3 | 2.7 | 3.4 | 3.7 | 3.8 | 3.7 | 3.6 | 3.5 | 3.3 | 847 | 768 | 752 | 806 | 832 | 993 |
| Mississippi | 5.5 | 5.5 | 6.2 | 7.1 | 6.8 | 6.3 | N/A | N/A | N/A | N/A | N/A | N/A | 1,521 | 1,515 | 1,726 | 2,054 | 2,440 | 3,306 |

# Workplace Safety and Health Statistics by State, 2011–2016

| | Fatality Rates[1] | | | | | | Injury/Illness Rates[2] | | | | | | Average Penalties($)[3] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | FY12 | FY13 | FY14 | FY15 | FY16 | FY17 |
| **Missouri** | 4.9 | 3.3 | 4.3 | 3.9 | 4.3 | 4.3 | 3.4 | 3.3 | 3.2 | 3.2 | 3.0 | 2.8 | 2,076 | 1,931 | 1,877 | 2,103 | 2,466 | 3,645 |
| **Montana** | 11.2 | 7.3 | 5.8 | 4.9 | 7.5 | 7.9 | 5.0 | 5.0 | 4.7 | 4.5 | 4.3 | 4.2 | 2,336 | 1,983 | 1,938 | 1,751 | 1,803 | 2,149 |
| **Nebraska** | 3.9 | 5.2 | 4.0 | 5.8 | 5.4 | 6.3 | 3.9 | 3.9 | 3.8 | 3.5 | 3.4 | 3.4 | 2,835 | 2,565 | 2,569 | 2,727 | 2,891 | 3,903 |
| **Nevada** | 3.1 | 3.6 | 3.0 | 3.1 | 3.5 | 4.2 | 3.9 | 4.1 | 4.0 | 4.0 | 3.8 | 3.7 | 2,054 | 2,133 | 2,244 | 1,059 | 1,157 | 1,133 |
| **New Hampshire** | 1.2 | 2.2 | 2.1 | 2.6 | 2.7 | 3.2 | N/A | N/A | N/A | N/A | N/A | N/A | 2,531 | 2,243 | 2,113 | 2,169 | 2,425 | 3,370 |
| **New Jersey** | 2.6 | 2.4 | 2.6 | 2.1 | 2.3 | 2.4 | 3.0 | 3.1 | 2.9 | 2.9 | 2.7 | 2.6 | 2,398 | 2,151 | 2,176 | 2,441 | 2,533 | 4,205 |
| **New Mexico** | 6.6 | 4.8 | 6.7 | 6.7 | 4.1 | 4.9 | 4.2 | 3.9 | 3.2 | 3.2 | 3.1 | 3.2 | 1,041 | 998 | 879 | 803 | 1,140 | 1,025 |
| **New York** | 2.5 | 2.4 | 2.1 | 2.8 | 2.7 | 3.1 | 2.9 | 2.5 | 2.4 | 2.5 | 2.4 | 2.3 | 2,164 | 2,016 | 1,907 | 2,109 | 2,492 | 3,707 |
| **North Carolina** | 3.7 | 3.5 | 2.5 | 3.1 | 3.4 | 3.7 | 3.1 | 2.9 | 2.7 | 2.7 | 2.6 | 2.5 | 970 | 996 | 1,250 | 1,091 | 1,582 | 1,594 |
| **North Dakota** | 12.4 | 17.7 | 14.9 | 9.8 | 12.5 | 7.0 | N/A | N/A | N/A | N/A | N/A | N/A | 2,655 | 3,045 | 2,659 | 3,028 | 2,723 | 3,582 |
| **Ohio** | 3.1 | 3.1 | 3.0 | 3.6 | 3.9 | 3.1 | N/A | 3.2 | 2.9 | 2.9 | 2.8 | 2.7 | 2,320 | 2,156 | 2,299 | 2,462 | 2,679 | 3,907 |
| **Oklahoma** | 5.5 | 6.1 | 5.8 | 6.2 | 5.5 | 5.6 | 3.9 | 3.6 | N/A | N/A | N/A | N/A | 2,196 | 1,872 | 1,880 | 2,062 | 2,017 | 3,299 |
| **Oregon** | 3.4 | 2.6 | 2.9 | 3.9 | 2.6 | 3.9 | 3.8 | 3.9 | 4.1 | 3.9 | 3.7 | 4.0 | 388 | 363 | 364 | 422 | 570 | 547 |
| **Pennsylvania** | 3.4 | 3.4 | 3.2 | 3.1 | 3.0 | 2.8 | 4.1 | 3.9 | 3.9 | 3.7 | 3.5 | 3.3 | 2,090 | 1,916 | 1,796 | 2,075 | 2,484 | 3,454 |
| **Rhode Island** | 1.5 | 1.7 | 2.1 | 2.1 | 1.2 | 1.8 | N/A | N/A | N/A | N/A | N/A | N/A | 2,332 | 2,023 | 1,895 | 1,910 | 2,077 | 3,215 |
| **South Carolina** | 4.5 | 3.5 | 3.9 | 3.3 | 5.6 | 4.4 | 3.3 | 3.0 | 2.9 | 2.8 | 2.5 | 2.5 | 597 | 492 | 521 | 570 | 790 | 1,042 |
| **South Dakota** | 6.7 | 6.7 | 4.7 | 7.2 | 4.9 | 7.5 | N/A | N/A | N/A | N/A | N/A | N/A | 3,574 | 2,346 | 2,309 | 2,712 | 2,419 | 4,176 |
| **Tennessee** | 4.5 | 3.8 | 3.6 | 4.8 | 3.7 | 4.3 | 3.5 | 3.5 | 3.3 | 3.2 | 3.1 | 2.9 | 710 | 727 | 687 | 1,441 | 1,566 | 1,510 |
| **Texas** | 4.0 | 4.8 | 4.4 | 4.5 | 4.5 | 4.4 | 2.7 | 2.7 | 2.6 | 2.4 | 2.3 | 2.2 | 2,328 | 2,187 | 2,154 | 2,098 | 2,397 | 3,481 |
| **Utah** | 3.3 | 3.0 | 2.9 | 4.2 | 3.2 | 3.2 | 3.6 | 3.4 | 3.4 | 3.2 | 3.5 | 2.9 | 963 | 1,053 | 1,173 | 1,234 | 1,322 | 1,315 |
| **Vermont** | 2.6 | 3.5 | 2.2 | 3.2 | 2.9 | 3.2 | 5.0 | 5.0 | 5.2 | 5.0 | 4.6 | 4.6 | 1,064 | 1,008 | 889 | 1,038 | 1,201 | 1,698 |
| **Virginia** | 3.4 | 3.8 | 3.2 | 2.8 | 2.8 | 4.0 | 2.9 | 2.7 | 2.6 | 2.7 | 2.4 | 2.5 | 770 | 726 | 660 | 893 | 1,504 | 1,871 |
| **Washington** | 1.9 | 2.2 | 1.7 | 2.7 | 2.1 | 2.4 | 4.9 | 4.8 | 4.8 | 4.6 | 4.4 | 4.3 | 745 | 791 | 896 | 1,089 | 2,118 | 1,866 |
| **West Virginia** | 5.9 | 6.9 | 8.6 | 5.2 | 5.0 | 6.6 | 3.9 | 4.1 | 3.7 | 4.0 | 3.2 | 3.2 | 2,177 | 1,798 | 1,685 | 1,801 | 1,916 | 3,102 |

# Workplace Safety and Health Statistics by State, 2011–2016

| | Fatality Rates[1] | | | | | | Injury/Illness Rates[2] | | | | | | Average Penalties($)[3] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | FY12 | FY13 | FY14 | FY15 | FY16 | FY17 |
| **Wisconsin** | 3.3 | 4.0 | 3.5 | 3.5 | 3.5 | 3.6 | 4.2 | 4.0 | 4.0 | 3.9 | 3.6 | 3.7 | 2,343 | 2,207 | 2,121 | 2,277 | 2,573 | 4,068 |
| **Wyoming** | 11.6 | 12.2 | 9.5 | 13.1 | 12.0 | 12.3 | 3.6 | 3.5 | 3.4 | 3.5 | 3.3 | 3.4 | 1,612 | 1,777 | 1,911 | 2,824 | 2,732 | 2,188 |
| **National Average[4]** | 3.5 | 3.4 | 3.3 | 3.4 | 3.4 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.0 | 2.9 | $1,603 | $1,489 | $1,972 | $2,148 | $2,087 | $2,633 |

[1]Bureau of Labor Statistics, rate 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 national average includes Guam, Puerto Rico and the Virgin Islands.

[3]U.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 2017. 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.

[4]National average is the per citation average for federal OSHA serious penalties and state OSHA plan states' serious penalties combined. Federal serious penalties average $3,553 per citation; state plan OSHA states average $1,849 per citation.

# Workplace Fatalities by State, 1998–2016

| Total Fatalities | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| State | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Alabama | 135 | 123 | 103 | 138 | 102 | 124 | 133 | 128 | 100 | 108 | 107 | 75 | 92 | 75 | 84 | 78 | 75 | 70 | 100 |
| Alaska | 43 | 42 | 53 | 64 | 42 | 28 | 42 | 29 | 45 | 30 | 33 | 17 | 39 | 39 | 31 | 32 | 30 | 14 | 35 |
| Arizona | 74 | 70 | 118 | 87 | 101 | 80 | 84 | 99 | 112 | 97 | 100 | 76 | 77 | 69 | 60 | 95 | 88 | 69 | 77 |
| Arkansas | 86 | 76 | 106 | 68 | 80 | 87 | 70 | 80 | 78 | 89 | 85 | 75 | 88 | 93 | 63 | 63 | 67 | 74 | 68 |
| California | 626 | 602 | 553 | 515 | 478 | 459 | 467 | 465 | 537 | 461 | 465 | 409 | 326 | 390 | 375 | 396 | 344 | 388 | 376 |
| Colorado | 77 | 106 | 117 | 139 | 123 | 102 | 117 | 125 | 137 | 126 | 105 | 83 | 85 | 92 | 82 | 65 | 84 | 75 | 81 |
| Connecticut | 57 | 38 | 55 | 41 | 39 | 36 | 54 | 46 | 38 | 38 | 28 | 34 | 49 | 37 | 36 | 29 | 35 | 44 | 28 |
| Delaware | 11 | 14 | 13 | 10 | 11 | 9 | 10 | 11 | 15 | 10 | 11 | 7 | 8 | 10 | 14 | 11 | 12 | 8 | 12 |
| Florida | 384 | 345 | 329 | 368 | 354 | 347 | 422 | 406 | 360 | 363 | 291 | 245 | 225 | 226 | 218 | 239 | 228 | 272 | 309 |
| Georgia | 202 | 229 | 195 | 237 | 197 | 199 | 232 | 200 | 201 | 193 | 182 | 110 | 108 | 111 | 101 | 117 | 152 | 180 | 171 |
| Hawaii | 12 | 32 | 20 | 41 | 24 | 21 | 25 | 15 | 30 | 23 | 19 | 13 | 19 | 26 | 20 | 11 | 31 | 18 | 29 |
| Idaho | 51 | 43 | 35 | 45 | 39 | 43 | 38 | 35 | 38 | 31 | 36 | 27 | 33 | 37 | 19 | 30 | 34 | 36 | 30 |
| Illinois | 216 | 208 | 206 | 231 | 190 | 200 | 208 | 194 | 207 | 185 | 193 | 158 | 206 | 177 | 146 | 176 | 164 | 172 | 171 |
| Indiana | 155 | 171 | 159 | 152 | 136 | 132 | 153 | 157 | 148 | 127 | 143 | 125 | 118 | 125 | 115 | 127 | 130 | 115 | 137 |
| Iowa | 68 | 80 | 71 | 62 | 57 | 76 | 82 | 90 | 71 | 89 | 93 | 80 | 77 | 93 | 97 | 72 | 91 | 60 | 76 |
| Kansas | 98 | 87 | 85 | 94 | 89 | 78 | 80 | 81 | 85 | 101 | 73 | 76 | 85 | 78 | 76 | 55 | 73 | 60 | 74 |
| Kentucky | 117 | 120 | 132 | 105 | 146 | 145 | 143 | 122 | 147 | 112 | 106 | 101 | 69 | 93 | 91 | 86 | 82 | 99 | 92 |
| Louisiana | 159 | 141 | 143 | 117 | 103 | 95 | 121 | 111 | 118 | 139 | 135 | 140 | 111 | 111 | 116 | 114 | 120 | 112 | 95 |
| Maine | 26 | 32 | 26 | 23 | 30 | 23 | 16 | 15 | 20 | 21 | 24 | 16 | 20 | 26 | 19 | 19 | 19 | 15 | 18 |
| Maryland | 78 | 82 | 84 | 64 | 102 | 92 | 81 | 95 | 106 | 82 | 60 | 65 | 71 | 71 | 72 | 79 | 74 | 69 | 92 |
| Massachusetts | 44 | 83 | 70 | 54 | 46 | 78 | 72 | 75 | 66 | 75 | 68 | 64 | 54 | 68 | 44 | 57 | 55 | 69 | 109 |
| Michigan | 179 | 182 | 156 | 175 | 152 | 152 | 127 | 110 | 157 | 120 | 123 | 94 | 146 | 141 | 137 | 135 | 143 | 134 | 162 |

# Workplace Fatalities by State, 1998–2016

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

# Workplace Fatalities by State, 1998–2016

| Total Fatalities | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **State** | **1998** | **1999** | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** |
| **Utah** | 67 | 54 | 61 | 65 | 52 | 54 | 50 | 54 | 60 | 78 | 64 | 48 | 41 | 39 | 39 | 37 | 54 | 42 | 44 |
| **Vermont** | 16 | 14 | 15 | 6 | 11 | 14 | 7 | 7 | 14 | 10 | 10 | 12 | 12 | 8 | 11 | 7 | 10 | 9 | 10 |
| **Virginia** | 177 | 154 | 148 | 146 | 142 | 155 | 171 | 186 | 165 | 146 | 156 | 119 | 107 | 127 | 149 | 128 | 116 | 106 | 153 |
| **Washington** | 113 | 88 | 75 | 102 | 86 | 83 | 98 | 85 | 87 | 90 | 84 | 76 | 104 | 60 | 67 | 56 | 88 | 70 | 78 |
| **West Virginia** | 57 | 57 | 46 | 63 | 40 | 51 | 58 | 46 | 79 | 61 | 53 | 41 | 95 | 43 | 49 | 61 | 38 | 35 | 47 |
| **Wisconsin** | 97 | 105 | 107 | 110 | 91 | 103 | 94 | 125 | 91 | 104 | 77 | 94 | 91 | 89 | 114 | 97 | 99 | 104 | 105 |
| **Wyoming** | 33 | 32 | 36 | 40 | 33 | 37 | 43 | 46 | 36 | 48 | 33 | 19 | 33 | 32 | 35 | 26 | 37 | 34 | 34 |
| **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 | 4,551 | 4,690 | 4,693 | 4,628 | 4,585 | 4,821 | 4,836 | 5,190 |

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

[1]In 2016, 15 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.
[2]Totals include fatalities that occurred in the District of Columbia. In 2016, D.C. had five fatalities.
[3]States cannot always be assigned to fatality cases. For example, some fatalities occur at sea outside of specific state jurisdictions. In 2016, one fatal injury 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, 2016

| State | Total Fatalities | Assaults and Violent Acts | Transportation Incidents | Fires and Explosions | Falls | Exposure to Harmful Substances or Environments | Contact with Objects and Equipment |
|---|---|---|---|---|---|---|---|
| Alabama | 100 | 5 | 61 | 2 | 9 | 7 | 16 |
| Alaska | 35 | 7 | 24 | -- | -- | -- | -- |
| Arizona | 77 | 12 | 33 | -- | 11 | 13 | 8 |
| Arkansas | 68 | 11 | 31 | 3 | 7 | 3 | 13 |
| California | 376 | 77 | 145 | 9 | 64 | 20 | 58 |
| Colorado | 81 | 13 | 48 | -- | 8 | 4 | 6 |
| Connecticut | 28 | 5 | 10 | -- | 5 | 5 | 3 |
| Delaware | 12 | 4 | 5 | -- | -- | -- | 1 |
| District of Columbia | 5 | -- | -- | -- | -- | -- | -- |
| Florida | 309 | 48 | 105 | 9 | 64 | 50 | 33 |
| Georgia | 171 | 37 | 76 | 2 | 29 | 14 | 13 |
| Hawaii | 29 | -- | 20 | -- | 5 | -- | 1 |
| Idaho | 30 | -- | 18 | -- | 4 | -- | 7 |
| Illinois | 171 | 35 | 54 | 3 | 37 | 14 | 28 |
| Indiana | 137 | 24 | 61 | 4 | 13 | 13 | 21 |
| Iowa | 76 | 8 | 36 | -- | 15 | 4 | 11 |
| Kansas | 74 | 12 | 37 | -- | 6 | 4 | 12 |
| Kentucky | 92 | 11 | 47 | -- | 9 | 4 | 19 |
| Louisiana | 95 | 24 | 38 | -- | 8 | 12 | 12 |
| Maine | 18 | -- | 10 | -- | -- | 3 | -- |
| Maryland | 92 | 16 | 28 | -- | 20 | 14 | 14 |

# Fatalities by State and Event or Exposure, 2016

| 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** | 109 | 22 | 32 | -- | 19 | 27 | 9 |
| **Michigan** | 162 | 37 | 50 | 2 | 31 | 23 | 19 |
| **Minnesota** | 92 | 10 | 46 | -- | 11 | 12 | 10 |
| **Mississippi** | 71 | 16 | 34 | -- | 6 | 3 | 12 |
| **Missouri** | 124 | 20 | 48 | -- | 18 | 12 | 24 |
| **Montana** | 38 | 8 | 17 | -- | 5 | -- | 7 |
| **Nebraska** | 60 | 4 | 36 | 2 | 6 | 3 | 9 |
| **Nevada** | 54 | 12 | 18 | -- | 8 | 11 | 5 |
| **New Hampshire** | 22 | -- | 7 | -- | 5 | 5 | 3 |
| **New Jersey** | 101 | 12 | 36 | -- | 26 | 6 | 21 |
| **New Mexico** | 41 | 5 | 23 | -- | 3 | 1 | 7 |
| **New York** | 272 | 47 | 83 | -- | 64 | 29 | 41 |
| **North Carolina** | 174 | 35 | 68 | 3 | 26 | 20 | 21 |
| **North Dakota** | 28 | 1 | 14 | 1 | -- | -- | 10 |
| **Ohio** | 164 | 31 | 54 | 1 | 29 | 25 | 24 |
| **Oklahoma** | 92 | 9 | 47 | -- | 16 | 8 | 11 |
| **Oregon** | 72 | 10 | 30 | 3 | 6 | 3 | 17 |
| **Pennsylvania** | 163 | 17 | 55 | 1 | 35 | 20 | 35 |
| **Rhode Island** | 9 | -- | 3 | -- | -- | -- | -- |
| **South Carolina** | 96 | 14 | 36 | 2 | 15 | 13 | 15 |
| **South Dakota** | 31 | -- | 7 | 3 | 8 | 5 | 6 |

# Fatalities by State and Event or Exposure, 2016

| 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** | 122 | 26 | 42 | 2 | 20 | 6 | 26 |
| **Texas** | 545 | 74 | 244 | 10 | 90 | 50 | 75 |
| **Utah** | 44 | 10 | 20 | -- | 4 | -- | 10 |
| **Vermont** | 10 | -- | 4 | -- | -- | -- | -- |
| **Virginia** | 153 | 41 | 48 | -- | 20 | 18 | 24 |
| **Washington** | 78 | 13 | 27 | -- | 24 | 3 | 8 |
| **West Virginia** | 47 | 4 | 14 | 3 | 8 | 11 | 7 |
| **Wisconsin** | 105 | 23 | 38 | -- | 16 | 11 | 16 |
| **Wyoming** | 34 | 6 | 14 | -- | 5 | -- | 7 |
| **Total**[1,2] | 5,190 | 866 | 2,083 | 88 | 849 | 518 | 761 |

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

[1]Zero fatal injuries occurred in Guam and 15 fatal injuries occurred in Puerto Rico, but are not reflected in the U.S. total.

[2]States 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, 2016

| State | Number of Injuries/Illnesses | | | | Rate of Injuries/Illnesses[1] | | | |
|---|---|---|---|---|---|---|---|---|
| | All Industries | Private Industry | State Government | Local Government | All Industries | Private Industry | State Government | Local Government |
| Alabama | 41,800 | 35,400 | N/A | N/A | 2.6 | 2.7 | N/A | N/A |
| Alaska | 9,700 | 7,300 | 800 | 1,500 | 3.9 | 3.6 | 4.3 | 6.1 |
| Arizona | 64,400 | 53,000 | 1,600 | 9,800 | 3.1 | 2.9 | 2.4 | 5.4 |
| Arkansas | 27,300 | 20,500 | 2,300 | 4,400 | 2.7 | 2.4 | 3.6 | 4.7 |
| California | 466,600 | 360,100 | 19,800 | 86,600 | 3.7 | 3.3 | 5.1 | 6.9 |
| Colorado | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Connecticut | 46,900 | 38,200 | 2,200 | 6,500 | 3.6 | 3.3 | 3.9 | 6.8 |
| Delaware | 10,100 | 8,000 | 800 | 1,400 | 2.8 | 2.6 | 2.8 | 5.6 |
| Florida | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Georgia | 99,300 | 82,300 | N/A | N/A | 2.9 | 2.7 | N/A | N/A |
| Hawaii | 16,400 | 13,700 | 1,500 | 1,200 | 3.6 | 3.5 | 3.4 | 6.2 |
| Idaho | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Illinois | 137,500 | 111,600 | 4,000 | 22,000 | 3.0 | 2.7 | 3.5 | 5.3 |
| Indiana | 84,300 | 72,400 | 2,100 | 9,800 | 3.5 | 3.4 | 2.4 | 5.2 |
| Iowa | 47,900 | 40,300 | 1,500 | 6,200 | 3.8 | 3.7 | 3.0 | 5.1 |
| Kansas | 36,800 | 31,800 | N/A | 4,300 | 3.4 | 3.3 | N/A | 3.7 |
| Kentucky | 50,200 | 40,600 | 2,500 | 7,200 | 3.4 | 3.2 | 3.5 | 5.8 |
| Louisiana | 35,700 | 25,700 | 900 | 9,200 | 2.2 | 1.9 | 1.4 | 5.3 |
| Maine | 22,300 | 19,000 | 1,000 | 2,300 | 4.8 | 4.7 | 5.6 | 5.5 |

# Number and Rate of Injuries and Illnesses by State for All Industries, Private Industry, State Government and Local Government, 2016

| State | Number of Injuries/Illnesses | | | | Rate of Injuries/Illnesses[1] | | | |
|---|---|---|---|---|---|---|---|---|
| | All Industries | Private Industry | State Government | Local Government | All Industries | Private Industry | State Government | Local Government |
| Maryland | 65,500 | 48,400 | 3,700 | 13,500 | 3.3 | 2.8 | 4.2 | 7.7 |
| Massachusetts | 77,800 | 64,300 | 4,500 | N/A | 2.9 | 2.6 | 4.7 | N/A |
| Michigan | 111,700 | 97,000 | 3,300 | 11,400 | 3.4 | 3.3 | 2.8 | 4.7 |
| Minnesota | 73,600 | 62,900 | 2,400 | 8,200 | 3.4 | 3.3 | 3.5 | 4.8 |
| Mississippi | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Missouri | 62,600 | 52,700 | N/A | 7,600 | 2.8 | 2.8 | N/A | 3.4 |
| Montana | 14,300 | 12,200 | 500 | 1,600 | 4.2 | 4.2 | 3.1 | 5.6 |
| Nebraska | 26,700 | 22,400 | N/A | 3,200 | 3.4 | 3.4 | N/A | 3.8 |
| Nevada | 38,300 | 33,900 | 800 | 3,600 | 3.8 | 3.7 | 3.4 | 4.8 |
| New Hampshire | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| New Jersey | 93,000 | 72,500 | 4,100 | 16,400 | 3.0 | 2.6 | 4.0 | 5.7 |
| New Mexico | 21,800 | 16,900 | 1,700 | 3,200 | 3.4 | 3.2 | 3.8 | 4.8 |
| New York | 200,500 | 139,500 | 16,500 | 44,600 | 2.8 | 2.3 | 7.8 | 5.9 |
| North Carolina | 89,800 | 71,500 | 3,500 | 14,700 | 2.7 | 2.5 | 2.4 | 4.1 |
| North Dakota | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Ohio | 114,600 | 98,300 | 3,400 | 13,000 | 2.7 | 2.7 | 2.4 | 3.3 |
| Oklahoma | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Oregon | 57,600 | 50,000 | 1,800 | 5,900 | 4.0 | 4.0 | 2.7 | 4.8 |
| Pennsylvania | 150,900 | 138,000 | N/A | N/A | 3.3 | 3.3 | N/A | N/A |

# Number and Rate of Injuries and Illnesses by State for All Industries, Private Industry, State Government and Local Government, 2016

| State | Number of Injuries/Illnesses | | | | Rate of Injuries/Illnesses[1] | | | |
|---|---|---|---|---|---|---|---|---|
| | All Industries | Private Industry | State Government | Local Government | All Industries | Private Industry | State Government | Local Government |
| Rhode Island | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| South Carolina | 43,700 | 32,800 | 2,300 | 8,600 | 2.8 | 2.5 | 3.1 | 4.9 |
| South Dakota | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tennessee | 71,300 | 60,200 | 1,200 | 9,900 | 3.0 | 2.9 | 1.7 | 4.6 |
| Texas | 244,900 | 185,300 | N/A | N/A | 2.5 | 2.2 | N/A | N/A |
| Utah | 32,300 | 27,800 | 1,300 | 3,200 | 3.0 | 2.9 | 2.6 | 4.1 |
| Vermont | 11,000 | 9,300 | 600 | 1,100 | 4.7 | 4.6 | 3.8 | 5.5 |
| Virginia | 79,900 | 63,200 | 3,200 | 13,500 | 2.8 | 2.5 | 2.7 | 4.5 |
| Washington | 105,900 | 89,200 | 4,200 | 12,600 | 4.4 | 4.3 | 3.5 | 6.1 |
| West Virginia | 18,600 | 14,700 | 1,400 | 2,500 | 3.4 | 3.2 | 3.6 | 4.4 |
| Wisconsin | 82,700 | 72,400 | 2,400 | 7,800 | 3.8 | 3.7 | 3.4 | 4.3 |
| Wyoming | 8,000 | 6,000 | 400 | 1,600 | 3.6 | 3.4 | N/A | 4.7 |
| Total or National Average[2] | 3.5 Million | 2.9 Million | 148,400 | 528,800 | 3.2 | 2.9 | 3.7 | 5.0 |

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

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

[2]Total 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, 1998–2016[1]

| | Fatalities | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| State | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Alabama | -- | -- | -- | -- | 5 | 8 | 6 | 9 | 6 | 5 | 5 | -- | 5 | 3 | 5 | 6 | -- | 3 | 5 |
| Alaska | -- | -- | -- | -- | -- | -- | -- | 3 | 5 | -- | -- | -- | -- | 5 | 5 | 3 | -- | -- | -- |
| Arizona | 27 | 26 | 26 | 34 | 28 | 17 | 25 | 36 | 36 | 26 | 30 | 22 | 18 | 21 | 16 | 25 | 31 | 18 | 21 |
| Arkansas | -- | 8 | 9 | -- | 5 | 9 | 5 | 8 | 3 | 5 | 9 | -- | 6 | 7 | 3 | 6 | 9 | 10 | 4 |
| California | 174 | 216 | 172 | 188 | 176 | 164 | 188 | 190 | 231 | 179 | 180 | 161 | 142 | 154 | 137 | 194 | 130 | 178 | 148 |
| Colorado | 15 | 19 | 27 | 25 | 16 | 25 | 25 | 19 | 18 | 30 | 21 | 17 | 19 | 22 | 21 | 14 | 18 | 20 | 23 |
| Connecticut | 10 | -- | 12 | 9 | 7 | -- | 10 | 5 | 7 | 4 | 7 | 4 | 5 | 7 | 6 | 5 | 3 | 8 | 4 |
| Delaware | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 3 | -- | -- |
| Florida | 58 | 68 | 75 | 84 | 98 | 90 | 119 | 113 | 95 | 111 | 73 | 49 | 38 | 53 | 54 | 68 | 60 | 78 | 91 |
| Georgia | 19 | 17 | 26 | 36 | 16 | 26 | 29 | 25 | 35 | 28 | 26 | 10 | 16 | 14 | 10 | 14 | 21 | 26 | 16 |
| Hawaii | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 | -- | -- | -- | -- | 1 | -- | 4 | 3 | -- |
| Idaho | -- | 6 | 5 | -- | 9 | 3 | 6 | 3 | 7 | -- | 5 | 4 | 5 | -- | -- | 6 | 5 | 5 | 6 |
| Illinois | 17 | 21 | 17 | 30 | 27 | 22 | 29 | 23 | 30 | 27 | 25 | 16 | 25 | 25 | 19 | 26 | 16 | 19 | 27 |
| Indiana | -- | -- | -- | 8 | 9 | 7 | 7 | 5 | 7 | 7 | 14 | 3 | 3 | 8 | 8 | 8 | 13 | 6 | 3 |
| Iowa | -- | -- | -- | -- | -- | -- | 7 | -- | -- | 4 | 6 | 8 | 5 | 3 | 4 | -- | 3 | -- | 4 |
| Kansas | 15 | 5 | 5 | 6 | 5 | 4 | 11 | 10 | 4 | 5 | 9 | 8 | 4 | 10 | 8 | 6 | 10 | 12 | 7 |
| Kentucky | -- | -- | -- | -- | -- | 3 | -- | 6 | 7 | 6 | 7 | 3 | -- | 3 | 6 | -- | 8 | 5 | 7 |
| Louisiana | -- | -- | 5 | 5 | -- | -- | 9 | 8 | 10 | 11 | 5 | 11 | 7 | 8 | 13 | 15 | 8 | 9 | 10 |
| Maine | -- | -- | -- | -- | 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

# Hispanic and Latino Worker Fatalities by State, 1998–2016[1]

| State | Fatalities | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Maryland | -- | -- | 6 | -- | 10 | 11 | 17 | 8 | 22 | 7 | 10 | 3 | 12 | 8 | 15 | 15 | 8 | 9 | 14 |
| Massachusetts | -- | 6 | -- | 6 | 5 | 6 | 9 | 6 | 7 | 11 | 10 | 5 | 7 | 11 | 3 | 3 | 2 | 4 | 10 |
| Michigan | 6 | 12 | 6 | 7 | 7 | 4 | 6 | 8 | 12 | 7 | 8 | 4 | 10 | 4 | 4 | 3 | 6 | 12 | 7 |
| Minnesota | -- | -- | 5 | -- | -- | 5 | 3 | 6 | 4 | -- | -- | -- | 3 | -- | -- | -- | 4 | -- | 6 |
| Mississippi | -- | -- | 5 | 11 | 5 | -- | 4 | 3 | 3 | 7 | 7 | 4 | 5 | -- | -- | -- | -- | 7 | -- |
| Missouri | -- | -- | -- | 8 | -- | 6 | 4 | -- | 4 | 7 | 4 | 6 | 3 | 4 | -- | 5 | 5 | 7 | 5 |
| Montana | -- | -- | -- | 5 | -- | -- | -- | 4 | 3 | 3 | -- | 3 | 3 | -- | -- | -- | -- | -- | -- |
| Nebraska | -- | -- | -- | -- | 9 | 3 | 4 | -- | -- | 4 | 5 | -- | 3 | 3 | 5 | 3 | 9 | 4 | -- |
| Nevada | 9 | 6 | 10 | 10 | 8 | 10 | 17 | 9 | 12 | 12 | 13 | 6 | 9 | 8 | 8 | 9 | 8 | 13 | 14 |
| New Hampshire | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| New Jersey | 12 | 17 | 23 | 25 | 33 | 24 | 34 | 30 | 28 | 23 | 25 | 25 | 20 | 26 | 15 | 20 | 31 | 22 | 26 |
| New Mexico | 17 | 13 | 9 | 27 | 21 | 9 | 12 | 19 | 30 | 21 | 10 | 16 | 17 | 23 | 22 | 20 | 22 | 13 | 16 |
| New York | 34 | 42 | 55 | 45 | 43 | 36 | 45 | 34 | 57 | 41 | 33 | 35 | 29 | 30 | 39 | 32 | 50 | 51 | 47 |
| North Carolina | 14 | 12 | 22 | 20 | 25 | 21 | 26 | 27 | 23 | 14 | 20 | 12 | 13 | 21 | 13 | 16 | 19 | 17 | 19 |
| North Dakota | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 5 | 3 | 12 | -- | -- | 4 | -- |
| Ohio | 5 | -- | 5 | 6 | -- | 15 | 5 | 5 | 8 | 6 | 4 | 4 | 8 | 1 | 8 | 2 | 3 | 11 | 10 |
| Oklahoma | 5 | -- | -- | 16 | 8 | 3 | 13 | 8 | 8 | 13 | 9 | 7 | 17 | 10 | 7 | 18 | 16 | 17 | 10 |
| Oregon | 10 | -- | 6 | 5 | -- | 7 | 4 | 6 | 11 | 6 | -- | 8 | 6 | 6 | -- | 9 | 8 | 5 | 12 |
| Pennsylvania | 7 | 8 | 16 | 10 | 12 | 10 | 6 | 11 | 14 | 16 | 11 | 10 | 13 | 14 | 13 | 4 | 13 | 17 | 7 |

# Hispanic and Latino Worker Fatalities by State, 1998–2016[1]

| | Fatalities | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| State | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Rhode Island | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | -- | -- | -- | -- | -- |
| South Carolina | -- | 7 | 12 | 9 | 7 | 18 | 13 | 10 | 10 | 7 | 8 | 10 | 10 | 10 | 4 | 7 | 6 | 10 | 9 |
| South Dakota | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 3 |
| Tennessee | -- | 5 | 12 | 5 | 7 | 8 | 9 | 5 | 14 | 8 | 9 | 8 | 8 | 9 | 9 | 9 | 6 | 10 | 11 |
| Texas | 175 | 151 | 190 | 170 | 147 | 163 | 150 | 200 | 174 | 211 | 148 | 185 | 165 | 171 | 201 | 192 | 206 | 220 | 211 |
| Utah | 9 | 5 | 6 | 8 | 6 | 11 | 5 | 4 | 6 | 10 | 6 | 8 | 4 | 3 | 6 | 5 | 7 | 4 | 10 |
| Vermont | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| Virginia | 6 | 12 | 5 | 12 | 15 | 13 | 13 | 24 | 13 | 18 | 16 | 7 | 9 | 14 | 15 | 22 | 9 | 9 | 20 |
| Washington | 17 | -- | 13 | 13 | 15 | 5 | 14 | 7 | 7 | 10 | 8 | 7 | 14 | 5 | 12 | 4 | 8 | 14 | 13 |
| West Virginia | -- | -- | -- | -- | -- | -- | -- | 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Wisconsin | -- | -- | -- | 8 | -- | 3 | -- | 9 | 3 | 5 | -- | 5 | 4 | 4 | 7 | 7 | 5 | 7 | 4 |
| Wyoming | -- | -- | 5 | 5 | 8 | -- | 3 | -- | -- | 8 | -- | -- | -- | -- | 3 | -- | 3 | 4 | 4 |
| Totals[2] | 707 | 730 | 815 | 891 | 840 | 794 | 902 | 923 | 990 | 937 | 804 | 713 | 707 | 749 | 748 | 817 | 804 | 903 | 879 |

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

[1]Latino 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 students and temporary workers, and undocumented immigrants. The survey data, however, do not separately identify the number of persons in these categories.

[2]Total includes fatalities that may have occurred in the District of Columbia.

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

# Foreign-Born Worker Fatalities by State, 1998–2016[1]

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

# Foreign-Born Worker Fatalities by State, 1998–2016[1]

| State | Fatalities | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Maryland | 9 | 15 | 12 | 8 | 16 | 21 | 24 | 26 | 34 | 18 | 15 | 10 | 16 | 12 | 20 | 21 | 17 | 16 | 19 |
| Massachusetts | 6 | 16 | 5 | 7 | 14 | 14 | 22 | 22 | 11 | 18 | 16 | 13 | 15 | 16 | 7 | 16 | 10 | 15 | 18 |
| Michigan | 7 | 24 | 18 | 15 | 15 | 16 | 11 | 12 | 19 | 14 | 10 | 8 | 17 | 10 | 12 | 12 | 15 | 16 | 13 |
| Minnesota | -- | -- | -- | -- | 5 | 5 | 4 | 10 | 6 | -- | -- | -- | 5 | 1 | 5 | 2 | 4 | 4 | 8 |
| Mississippi | -- | -- | -- | 6 | 5 | -- | 3 | 8 | -- | 9 | 5 | 3 | 6 | 4 | 2 | 3 | 3 | 10 | 5 |
| Missouri | -- | 10 | 7 | 6 | 7 | 5 | 9 | 6 | 9 | 12 | 8 | 9 | 4 | -- | -- | 19 | 10 | 11 | 6 |
| Montana | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 3 | -- | 5 | -- | 1 | 4 | 3 | -- | 2 | 3 |
| Nebraska | -- | -- | -- | -- | 12 | -- | 3 | -- | -- | 5 | 6 | 4 | 3 | 3 | 7 | 4 | 8 | 2 | 5 |
| Nevada | 7 | 9 | 9 | 12 | 13 | 9 | 15 | 8 | 9 | 11 | 11 | -- | 9 | 13 | 11 | 5 | 9 | 14 | 16 |
| New Hampshire | -- | -- | -- | -- | -- | 3 | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | 1 | 1 | -- |
| New Jersey | 26 | 25 | 31 | 37 | 41 | 41 | 39 | 47 | 34 | 36 | 40 | 41 | 20 | 40 | 27 | 31 | 30 | 38 | 39 |
| New Mexico | 8 | -- | -- | 15 | 6 | 4 | 6 | 7 | 10 | 8 | 5 | 5 | 8 | 10 | 10 | 8 | 13 | 7 | 8 |
| New York | 66 | 67 | 91 | 75 | 80 | 73 | 74 | 79 | 90 | 66 | 71 | 57 | 63 | 57 | 65 | 60 | 66 | 69 | 62 |
| North Carolina | 13 | 17 | 7 | 22 | 26 | 26 | 25 | 29 | 27 | 21 | 25 | 22 | 18 | 29 | 21 | 21 | 22 | 26 | 28 |
| North Dakota | -- | -- | -- | -- | -- | 4 | -- | -- | -- | -- | -- | -- | 3 | 3 | 12 | 1 | -- | 6 | 1 |
| Ohio | 8 | 9 | 12 | 7 | 13 | 18 | 10 | 11 | 13 | 8 | 10 | 10 | 13 | 8 | 19 | 13 | 12 | 22 | 10 |
| Oklahoma | -- | -- | -- | 13 | 15 | 7 | 11 | -- | -- | 14 | 5 | 7 | 13 | 10 | 7 | 17 | 10 | 16 | 13 |
| Oregon | 5 | 11 | -- | -- | 6 | 5 | 6 | 8 | 9 | 7 | -- | 10 | 10 | 6 | 2 | 11 | 8 | 4 | 12 |
| Pennsylvania | 9 | 11 | 16 | 16 | 13 | 15 | 19 | 24 | 23 | 28 | 25 | 22 | 34 | 28 | 19 | 11 | 18 | 17 | 12 |

# Foreign-Born Worker Fatalities by State, 1998–2016[1]

| State | Fatalities | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| **Rhode Island** | -- | -- | -- | -- | -- | 4 | -- | -- | -- | -- | -- | -- | -- | -- | 4 | -- | 2 | 1 | 1 |
| **South Carolina** | 6 | 7 | 16 | 12 | 8 | 18 | 18 | 13 | 11 | 10 | 8 | 8 | 13 | 11 | 4 | 7 | 8 | 13 | 12 |
| **South Dakota** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 3 | -- | -- | 3 |
| **Tennessee** | -- | -- | 5 | -- | 7 | 15 | 12 | 14 | 23 | 12 | 19 | 13 | 17 | 12 | 11 | 15 | 9 | 11 | 12 |
| **Texas** | 111 | 100 | 115 | 122 | 110 | 121 | 101 | 135 | 112 | 153 | 104 | 125 | 117 | 115 | 107 | 134 | 124 | 156 | 156 |
| **Utah** | 5 | 8 | 6 | 8 | 9 | 12 | 4 | 8 | 5 | 8 | 12 | 4 | 8 | 5 | 4 | 6 | 10 | 5 | 11 |
| **Vermont** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| **Virginia** | 10 | 18 | 17 | 22 | 20 | 22 | 41 | 33 | 17 | 31 | 18 | 21 | 12 | 19 | 25 | 22 | 19 | 11 | 34 |
| **Washington** | 19 | 7 | 13 | 17 | 19 | 6 | 21 | 9 | 12 | 23 | 15 | 9 | 11 | 12 | 15 | 8 | 13 | 10 | 13 |
| **West Virginia** | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | -- | -- | -- | 1 | 2 | 2 | 1 | 1 | 3 |
| **Wisconsin** | -- | 7 | -- | 9 | -- | 5 | 5 | 9 | -- | 5 | -- | 4 | -- | 9 | 13 | 8 | 7 | 13 | 7 |
| **Wyoming** | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 7 | -- | -- | -- | 5 | 4 | 3 | 1 | 2 | 3 |
| **Totals[2]** | 654 | 811 | 849 | 994 | 929 | 890 | 979 | 1,035 | 1,046 | 1,009 | 835 | 740 | 798 | 843 | 824 | 879 | 846 | 943 | 970 |

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

[1]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 students and temporary workers, and undocumented immigrants. The survey data, however, do not separately identify the number of persons in these categories.

[2]Totals include fatalities that may have occurred in the District of Columbia.

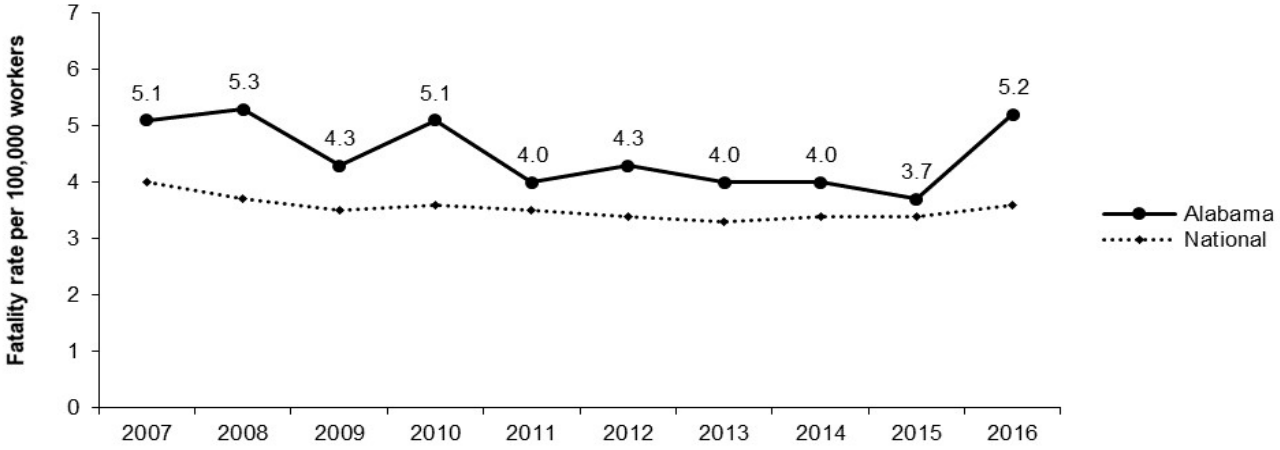
*Note: Dashes indicate no data reported or data that do not meet BLS publication criteria.*

# STATE PROFILES

# ALABAMA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,915,306 |
| Number of establishments:[1] | 122,310 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 306,457 |
| Number of workplace fatalities, 2016:[3] | 100 |
| Rate per 100,000 workers:[4] | 5.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 39 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 35,400 |
| Rate per 100 workers: | 2.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 19,100 |
| Rate per 100 workers: | 1.4 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 20 |
| Length of time it would take for OSHA to inspect each workplace once: | 123 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 954 |
| Construction: | 463 |
| Non-construction: | 491 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,583 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $26,380 |
| National average: | $16,089 |

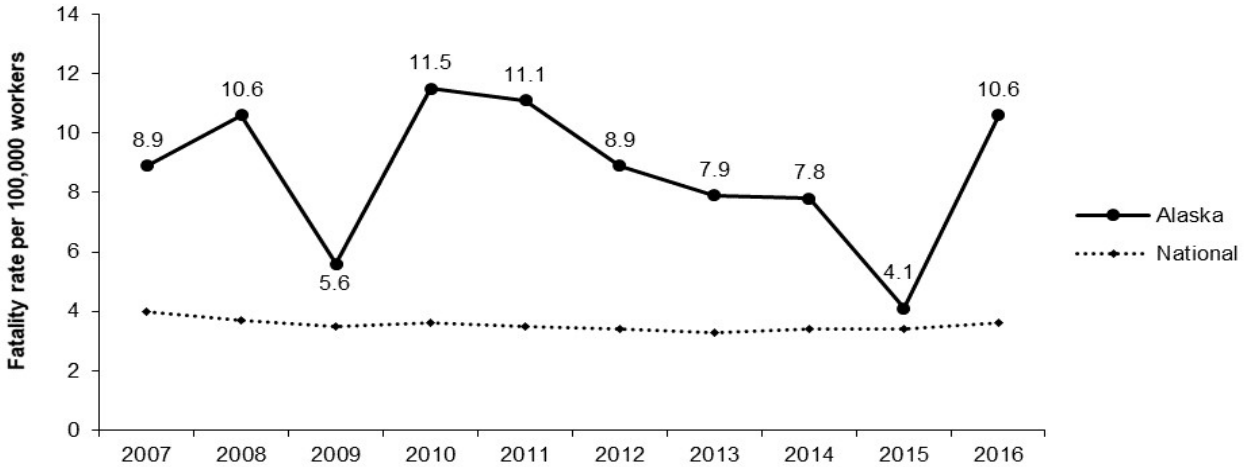



Prepared by AFL-CIO Safety and Health, April 2018

# ALASKA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 326,295 |
| Number of establishments:[1] | 22,045 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 35 |
| Rate per 100,000 workers:[4] | 10.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 49 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 7,300 |
| Rate per 100 workers: | 3.6 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 3,700 |
| Rate per 100 workers: | 1.8 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 10 |
| Length of time it would take for OSHA to inspect each workplace once: | 67 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 327 |
| Construction: | 68 |
| Non-construction: | 259 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,288 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $3,200 |
| National average: | $16,089 |

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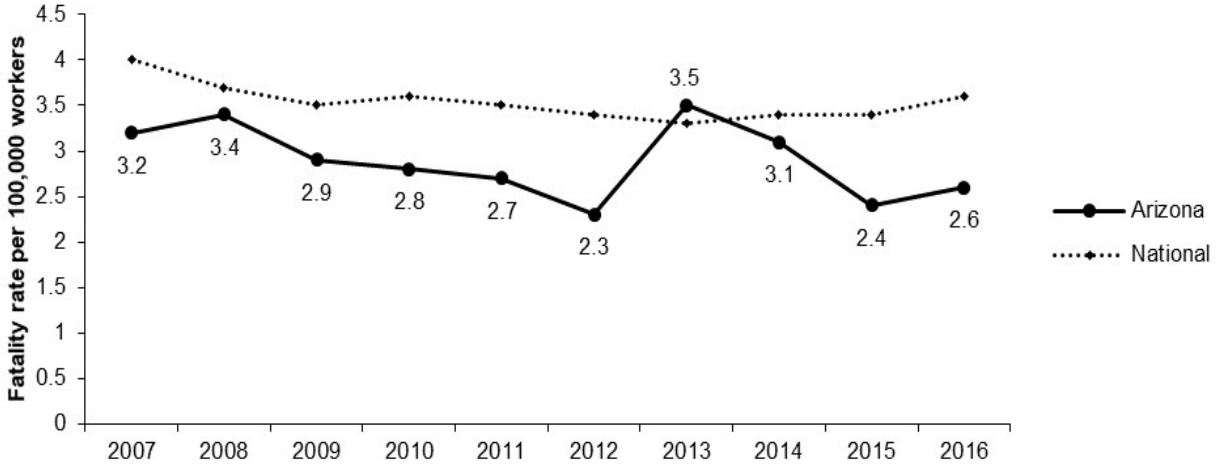
# ARIZONA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,680,065 |
| Number of establishments:[1] | 152,210 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 77 |
| Rate per 100,000 workers:[4] | 2.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 8 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 53,000 |
| Rate per 100 workers: | 2.9 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 26,300 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 22 |
| Length of time it would take for OSHA to inspect each workplace once: | 117 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,296 |
| Construction: | 543 |
| Non-construction: | 753 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,083 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $4,748 |
| National average: | $16,089 |

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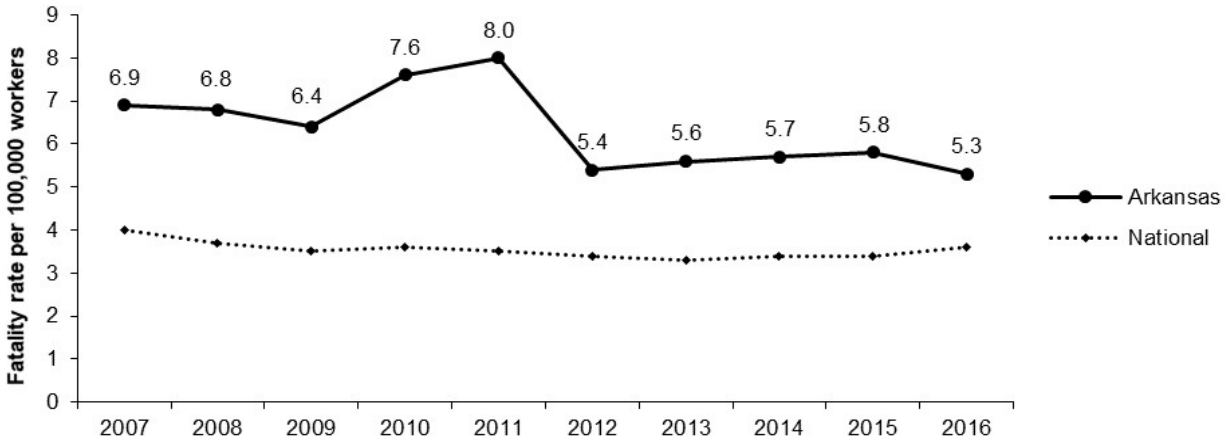
# ARKANSAS

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,191,763 |
| Number of establishments:[1] | 88,453 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 177,510 |
| Number of workplace fatalities, 2016:[3] | 68 |
| Rate per 100,000 workers:[4] | 5.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 41 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 20,500 |
| Rate per 100 workers: | 2.4 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 10,100 |
| Rate per 100 workers: | 1.2 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 7 |
| Length of time it would take for OSHA to inspect each workplace once: | 293 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 291 |
| Construction: | 161 |
| Non-construction: | 130 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,254 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $44,244 |
| National average: | $16,089 |

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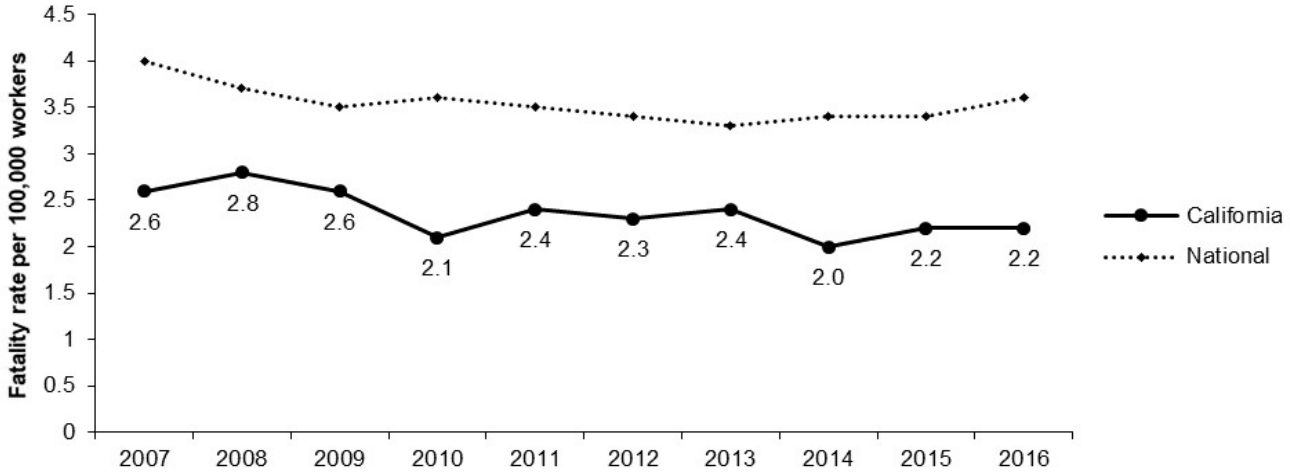
# CALIFORNIA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 16,718,647 |
| Number of establishments:[1] | 1,471,110 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 376 |
| Rate per 100,000 workers:[4] | 2.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 3 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 360,100 |
| Rate per 100 workers: | 3.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 223,600 |
| Rate per 100 workers: | 2.0 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 237 |
| Length of time it would take for OSHA to inspect each workplace once: | 176 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 8,339 |
| Construction: | 2,510 |
| Non-construction: | 5,829 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $7,326 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $24,186 |
| National average: | $16,089 |

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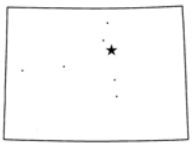
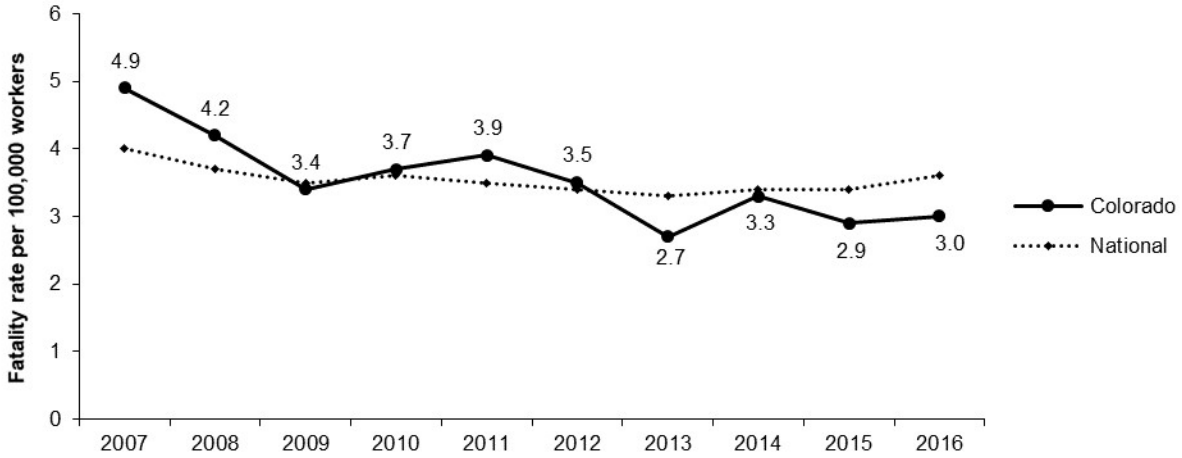
# COLORADO

## Worker Safety and Health



| | |
|---|---|
| Number of employees:[1] | 2,552,503 |
| Number of establishments:[1] | 191,895 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 351,637 |
| Number of workplace fatalities, 2016:[3] | 81 |
| Rate per 100,000 workers:[4] | 3.0 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 12 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 26 |
| Length of time it would take for OSHA to inspect each workplace once: | 170 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,115 |
| Construction: | 648 |
| Non-construction: | 467 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $2,725 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $6,031 |
| National average: | $16,089 |

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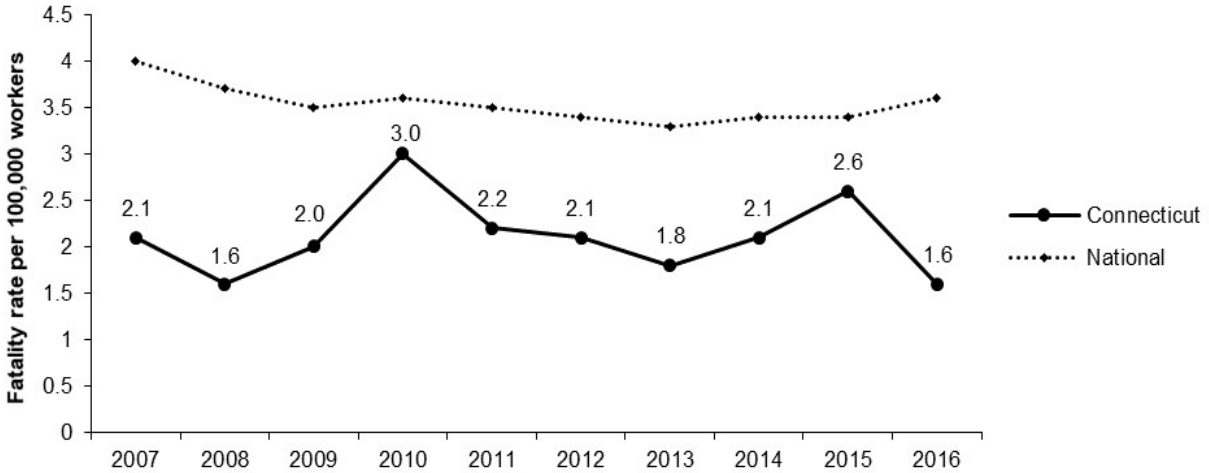
# CONNECTICUT

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,666,554 |
| Number of establishments:[1] | 116,805 |
| State or federal OSHA program:[2] | Federal |
| Number of workplace fatalities, 2016:[3] | 28 |
| Rate per 100,000 workers:[4] | 1.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 1 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 38,200 |
| Rate per 100 workers: | 3.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 21,900 |
| Rate per 100 workers: | 1.9 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 19 |
| Length of time it would take for OSHA to inspect each workplace once: | 122 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 958 |
| Construction: | 387 |
| Non-construction: | 571 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $2,824 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $16,737 |
| National average: | $16,089 |

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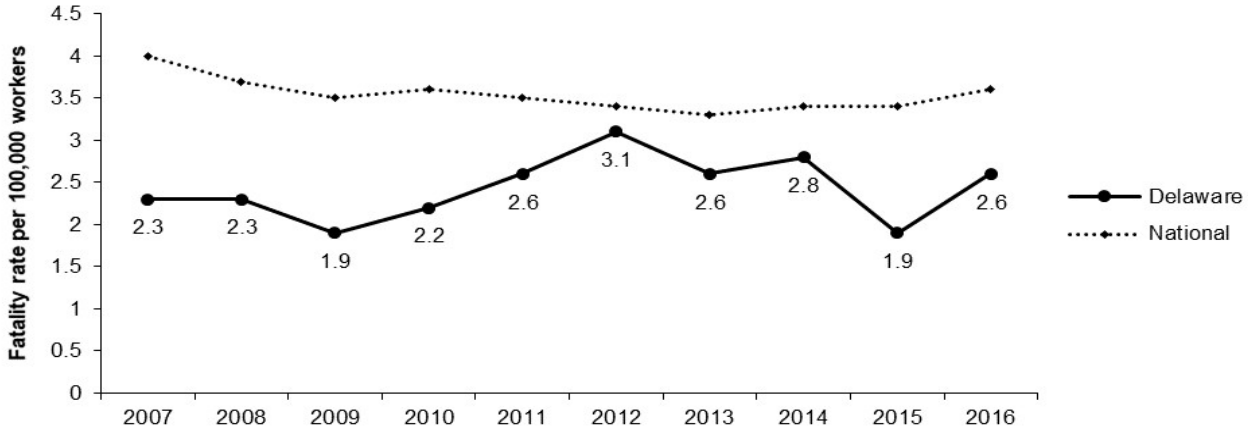
# DELAWARE

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 438,238 |
| Number of establishments:[1] | 31,715 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 56,566 |
| Number of workplace fatalities, 2016:[3] | 12 |
| Rate per 100,000 workers:[4] | 2.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 8 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 8,000 |
| Rate per 100 workers: | 2.6 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 4,300 |
| Rate per 100 workers: | 1.4 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 4 |
| Length of time it would take for OSHA to inspect each workplace once: | 219 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 143 |
| Construction: | 88 |
| Non-construction: | 55 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $4,701 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $8,809 |
| National average: | $16,089 |

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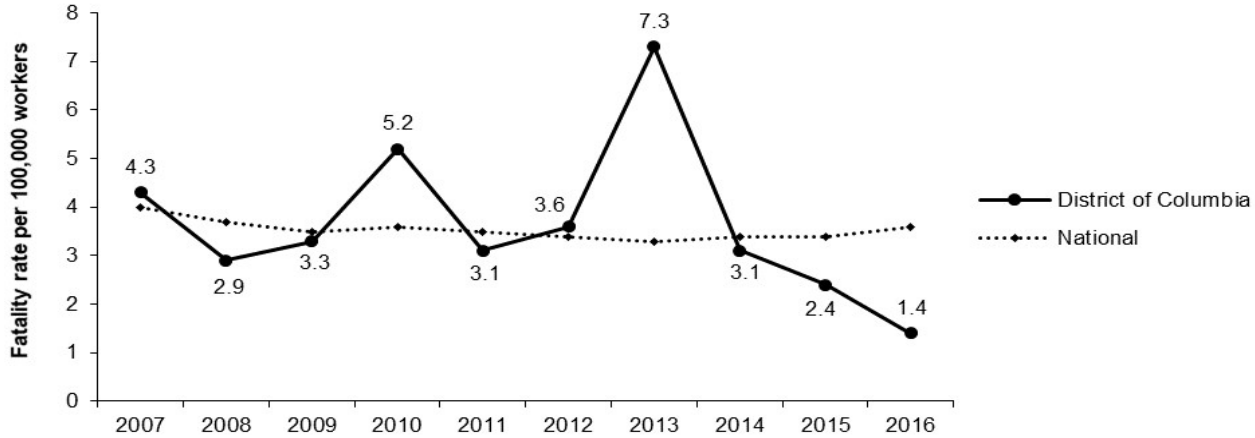
# DISTRICT OF COLUMBIA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 756,646 |
| Number of establishments:[1] | 38,866 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 39,011 |
| Number of workplace fatalities, 2016:[3] | 5 |
| Rate per 100,000 workers:[4] | 1.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | N/A |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 6,400 |
| Rate per 100 workers: | 1.5 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 3,300 |
| Rate per 100 workers: | 0.8 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | N/A |
| Length of time it would take for OSHA to inspect each workplace once: | 205 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 189 |
| Construction: | 151 |
| Non-construction: | 38 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,514 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $20,531 |
| National average: | $16,089 |

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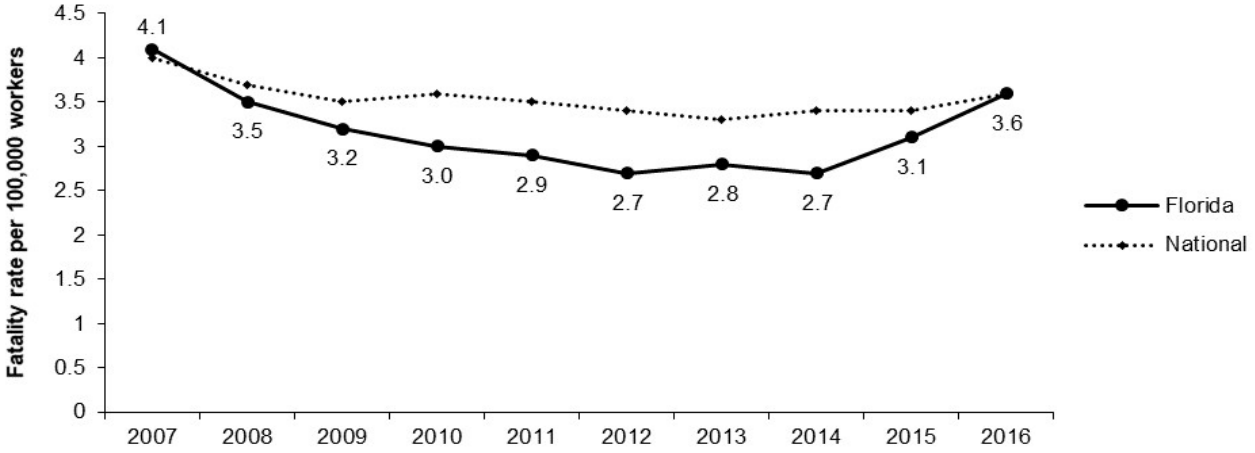
# FLORIDA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 8,309,351 |
| Number of establishments:[1] | 658,095 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 909,831 |
| Number of workplace fatalities, 2016:[3] | 309 |
| Rate per 100,000 workers:[4] | 3.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 22 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 59 |
| Length of time it would take for OSHA to inspect each workplace once: | 270 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,417 |
| Construction: | 1,313 |
| Non-construction: | 1,104 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,681 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $17,353 |
| National average: | $16,089 |

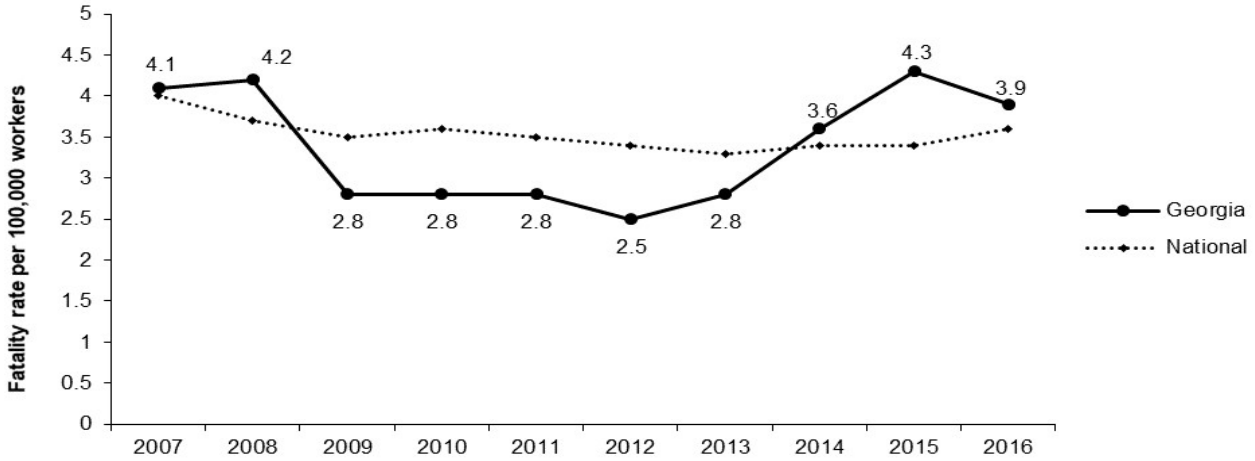



Prepared by AFL-CIO Safety and Health, April 2018

# GEORGIA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 4,262,937 |
| Number of establishments:[1] | 298,477 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 542,560 |
| Number of workplace fatalities, 2016:[3] | 171 |
| Rate per 100,000 workers:[4] | 3.9 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 25 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 82,300 |
| Rate per 100 workers: | 2.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 44,500 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 42 |
| Length of time it would take for OSHA to inspect each workplace once: | 176 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,654 |
| Construction: | 849 |
| Non-construction: | 805 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,805 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $9,957 |
| National average: | $16,089 |

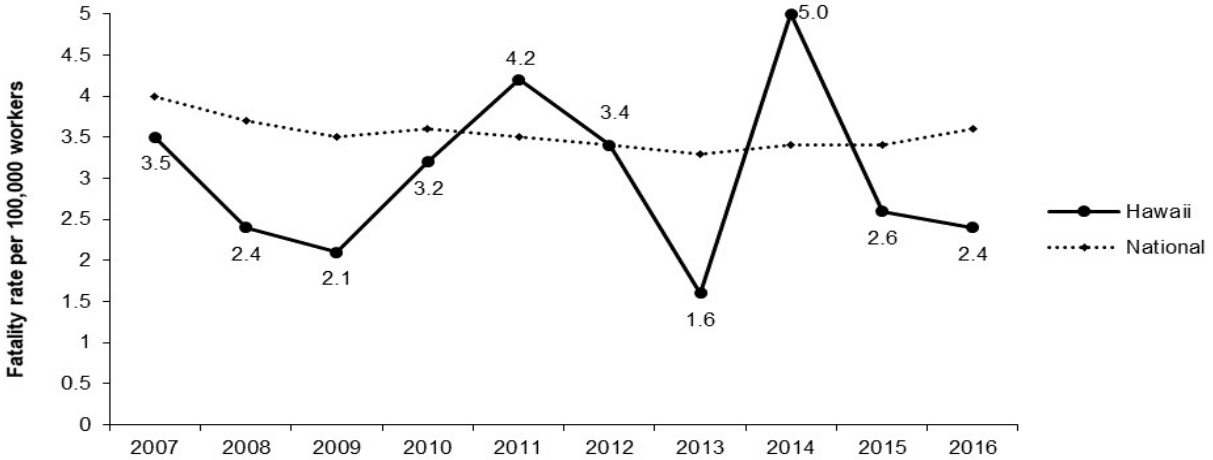



**Prepared by AFL-CIO Safety and Health, April 2018**

# HAWAII

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 647,545 |
| Number of establishments:[1] | 39,740 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 29 |
| Rate per 100,000 workers:[4] | 2.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 4 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 13,700 |
| Rate per 100 workers: | 3.5 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 8,100 |
| Rate per 100 workers: | 2.1 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 18 |
| Length of time it would take for OSHA to inspect each workplace once: | 48 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 823 |
| Construction: | 514 |
| Non-construction: | 309 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $2,129 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $18,400 |
| National average: | $16,089 |

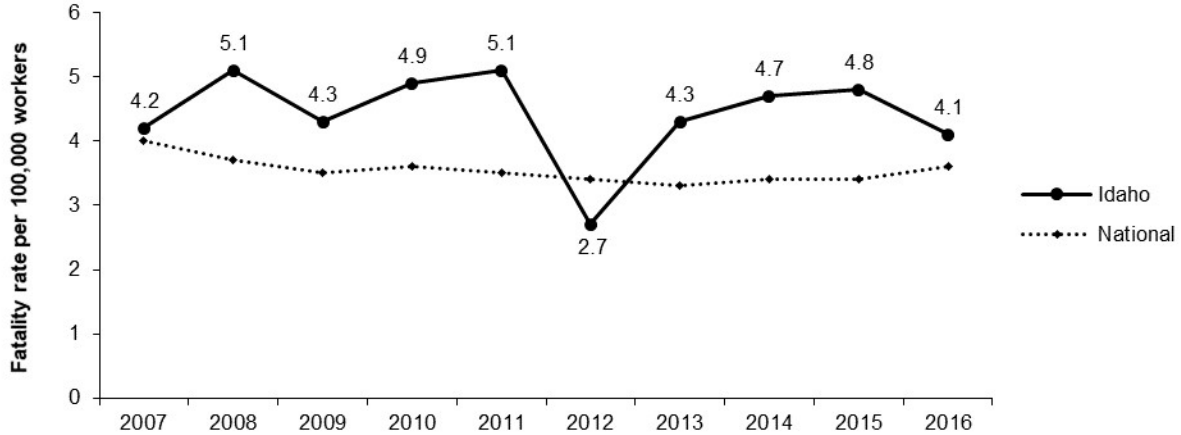



Prepared by AFL-CIO Safety and Health, April 2018

# IDAHO

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 687,919 |
| Number of establishments:[1] | 58,858 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 102,759 |
| Number of workplace fatalities, 2016:[3] | 30 |
| Rate per 100,000 workers:[4] | 4.1 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 28 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 8 |
| Length of time it would take for OSHA to inspect each workplace once: | 195 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 291 |
| Construction: | 147 |
| Non-construction: | 144 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,202 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $14,104 |
| National average: | $16,089 |

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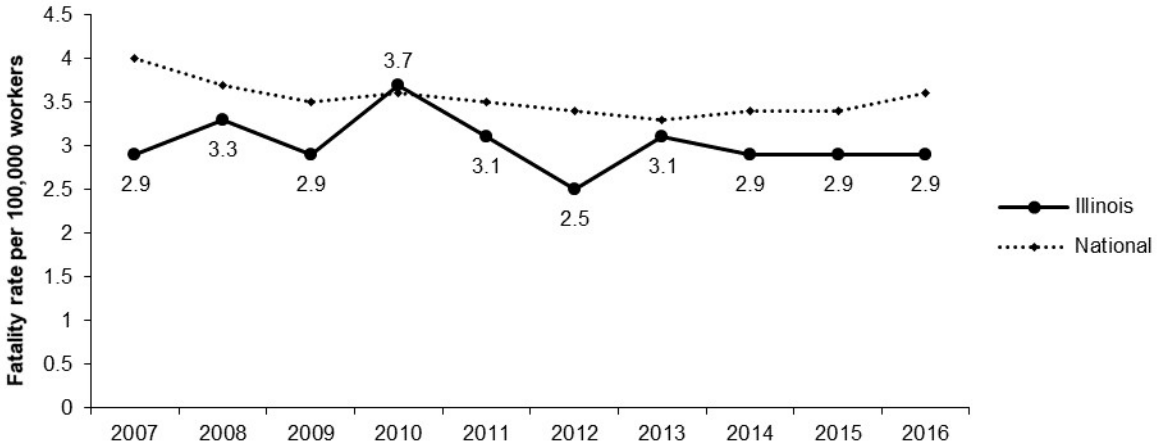
# ILLINOIS

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 5,895,633 |
| Number of establishments:[1] | 396,865 |
| State or federal OSHA program:[2] | Federal |
| Number of workplace fatalities, 2016:[3] | 171 |
| Rate per 100,000 workers:[4] | 2.9 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 11 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 111,600 |
| Rate per 100 workers: | 2.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 60,800 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 49 |
| Length of time it would take for OSHA to inspect each workplace once: | 146 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,725 |
| Construction: | 1,379 |
| Non-construction: | 1,346 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,571 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $18,610 |
| National average: | $16,089 |

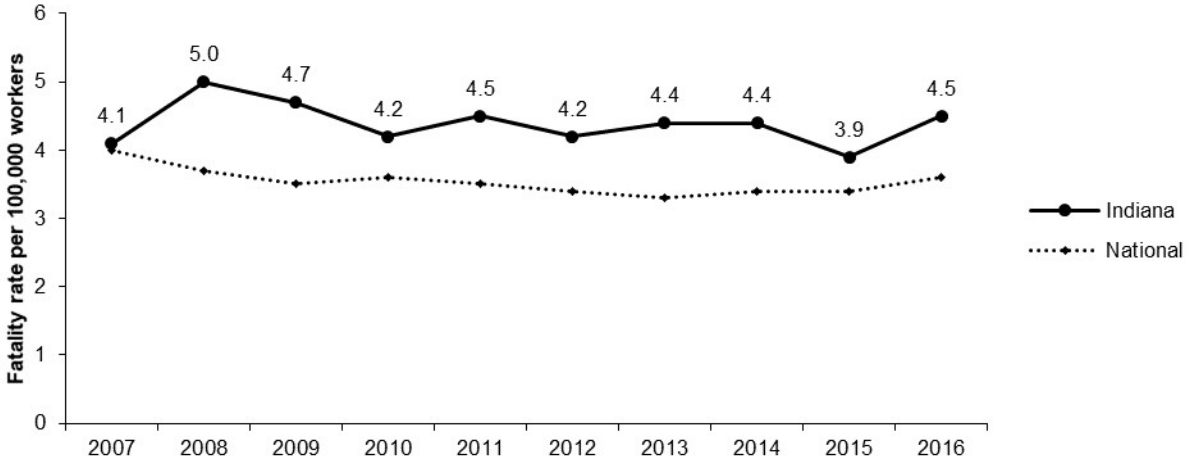



Prepared by AFL-CIO Safety and Health, April 2018

# INDIANA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,987,091 |
| Number of establishments:[1] | 162,216 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 137 |
| Rate per 100,000 workers:[4] | 4.5 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 34 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 72,400 |
| Rate per 100 workers: | 3.4 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 36,400 |
| Rate per 100 workers: | 1.7 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 36 |
| Length of time it would take for OSHA to inspect each workplace once: | 177 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 966 |
| Construction: | 458 |
| Non-construction: | 508 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,235 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $9,572 |
| National average: | $16,089 |

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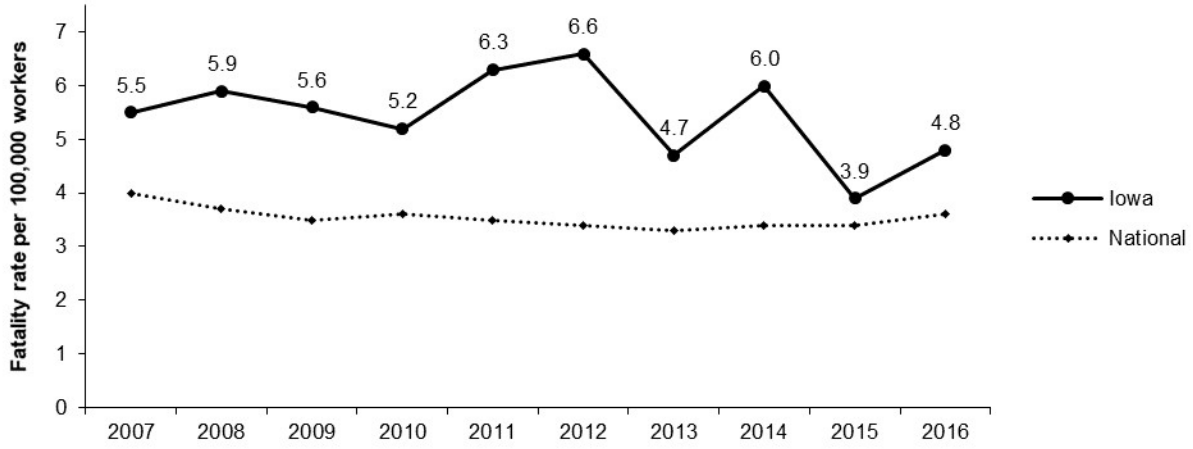
# IOWA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,539,752 |
| Number of establishments:[1] | 101,159 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 76 |
| Rate per 100,000 workers:[4] | 4.8 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 35 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 40,300 |
| Rate per 100 workers: | 3.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 21,200 |
| Rate per 100 workers: | 2.0 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 24 |
| Length of time it would take for OSHA to inspect each workplace once: | 108 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 936 |
| Construction: | 389 |
| Non-construction: | 547 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,362 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $9,935 |
| National average: | $16,089 |

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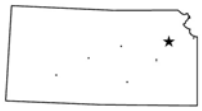
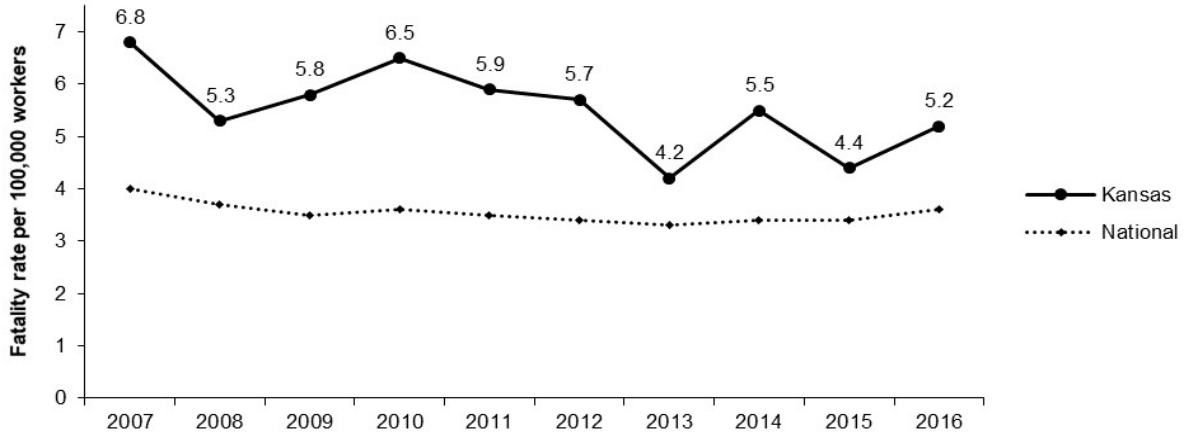
# KANSAS

## Worker Safety and Health



| | |
|---|---|
| Number of employees:[1] | 1,370,665 |
| Number of establishments:[1] | 90,065 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 216,464 |
| Number of workplace fatalities, 2016:[3] | 74 |
| Rate per 100,000 workers:[4] | 5.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 39 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 31,800 |
| Rate per 100 workers: | 3.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 16,900 |
| Rate per 100 workers: | 1.8 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 26 |
| Length of time it would take for OSHA to inspect each workplace once: | 139 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 622 |
| Construction: | 307 |
| Non-construction: | 315 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,016 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $18,843 |
| National average: | $16,089 |

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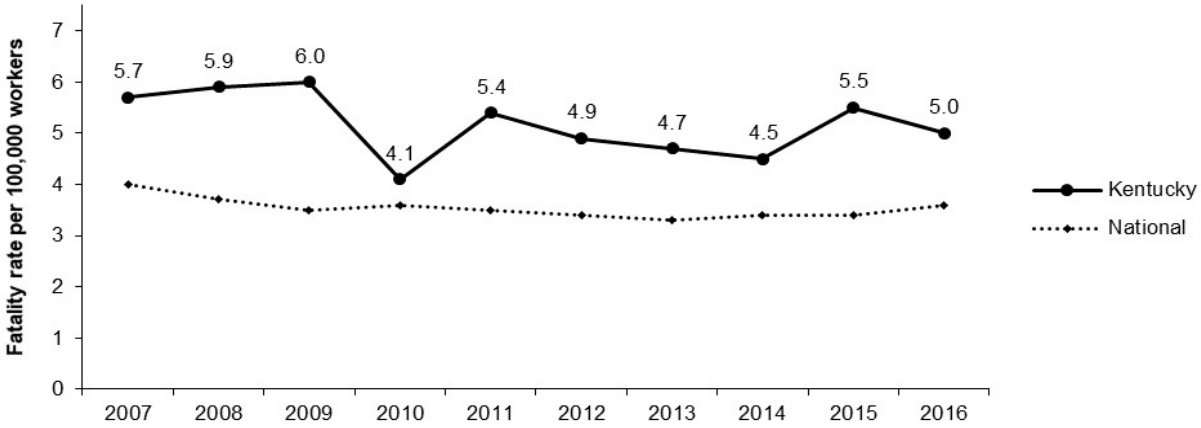
# KENTUCKY

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,861,063 |
| Number of establishments:[1] | 123,556 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 92 |
| Rate per 100,000 workers:[4] | 5.0 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 37 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 40,600 |
| Rate per 100 workers: | 3.2 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 22,400 |
| Rate per 100 workers: | 1.8 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 27 |
| Length of time it would take for OSHA to inspect each workplace once: | 155 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 797 |
| Construction: | 314 |
| Non-construction: | 483 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,333 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $6,638 |
| National average: | $16,089 |

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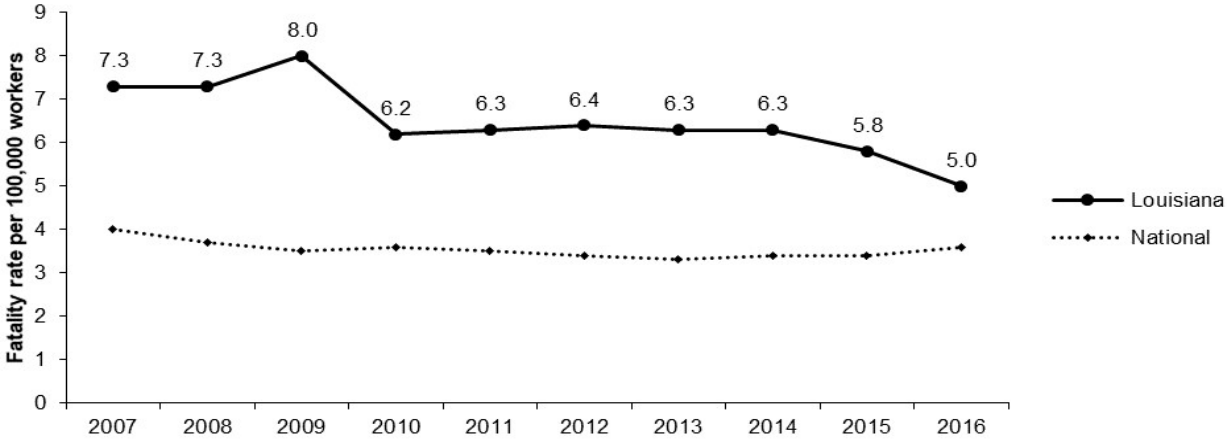
# LOUISIANA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,908,397 |
| Number of establishments:[1] | 127,995 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 278,388 |
| Number of workplace fatalities, 2016:[3] | 95 |
| Rate per 100,000 workers:[4] | 5.0 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 37 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 25,700 |
| Rate per 100 workers: | 1.9 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 13,100 |
| Rate per 100 workers: | 1.0 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 12 |
| Length of time it would take for OSHA to inspect each workplace once: | 278 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 443 |
| Construction: | 237 |
| Non-construction: | 206 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,811 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $14,013 |
| National average: | $16,089 |

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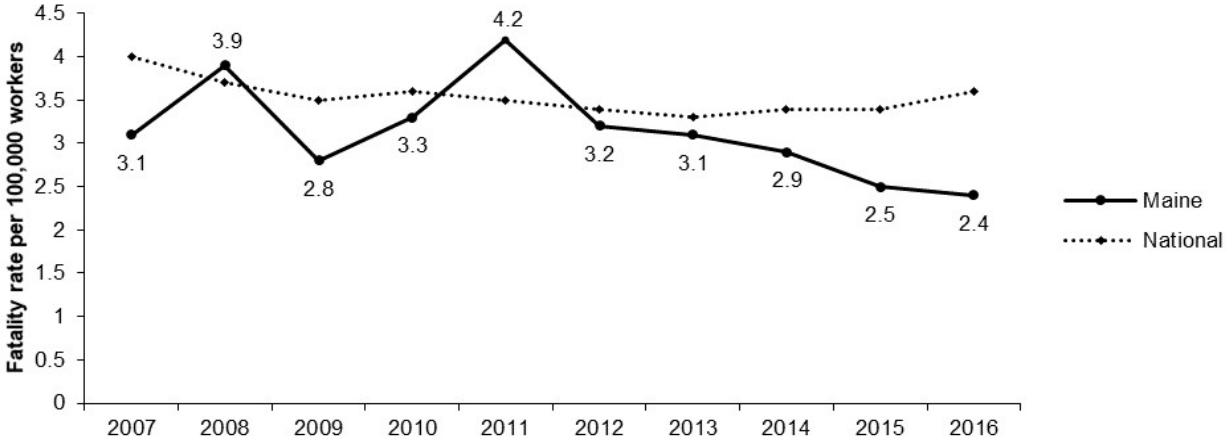
# MAINE

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 603,785 |
| Number of establishments:[1] | 52,931 |
| State or federal OSHA program:[2] | Federal |
| Number of workplace fatalities, 2016:[3] | 18 |
| Rate per 100,000 workers:[4] | 2.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 4 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 19,000 |
| Rate per 100 workers: | 4.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 10,500 |
| Rate per 100 workers: | 2.6 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 22 |
| Length of time it would take for OSHA to inspect each workplace once: | 137 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 385 |
| Construction: | 129 |
| Non-construction: | 256 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $4,303 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $5,213 |
| National average: | $16,089 |

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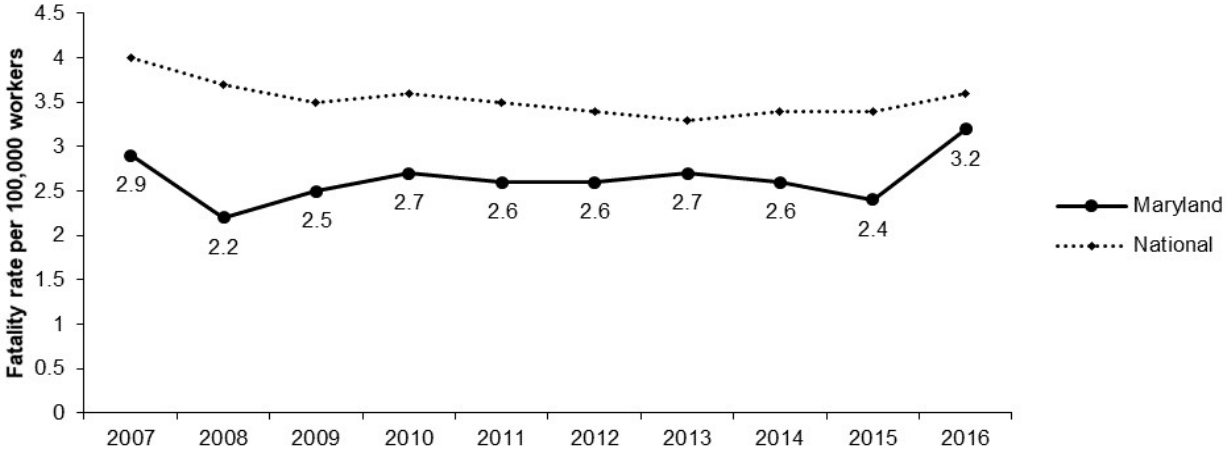
# MARYLAND

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,627,172 |
| Number of establishments:[1] | 170,931 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 92 |
| Rate per 100,000 workers:[4] | 3.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 15 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 48,400 |
| Rate per 100 workers: | 2.8 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 25,700 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 52 |
| Length of time it would take for OSHA to inspect each workplace once: | 98 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,744 |
| Construction: | 1,399 |
| Non-construction: | 345 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $640 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $2,828 |
| National average: | $16,089 |

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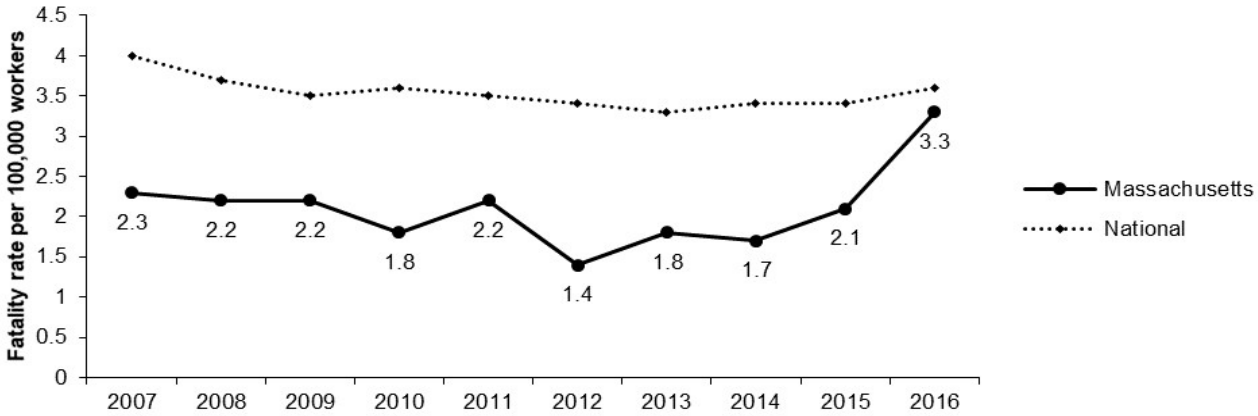
# MASSACHUSETTS

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 3,494,553 |
| Number of establishments:[1] | 246,651 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 382,929 |
| Number of workplace fatalities, 2016:[3] | 109 |
| Rate per 100,000 workers:[4] | 3.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 19 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 64,300 |
| Rate per 100 workers: | 2.6 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 37,600 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 29 |
| Length of time it would take for OSHA to inspect each workplace once: | 204 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,181 |
| Construction: | 710 |
| Non-construction: | 471 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,752 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $58,507 |
| National average: | $16,089 |

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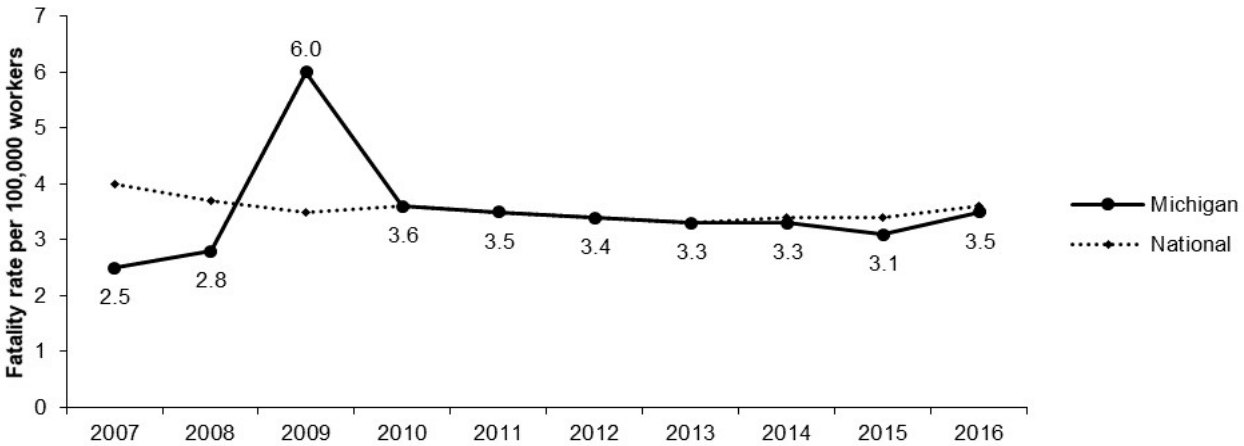
# MICHIGAN

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 4,242,537 |
| Number of establishments:[1] | 241,084 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 162 |
| Rate per 100,000 workers:[4] | 3.5 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 21 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 97,000 |
| Rate per 100 workers: | 3.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 47,600 |
| Rate per 100 workers: | 1.6 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 59 |
| Length of time it would take for OSHA to inspect each workplace once: | 53 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 4,558 |
| Construction: | 2,382 |
| Non-construction: | 2,176 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,131 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $11,101 |
| National average: | $16,089 |

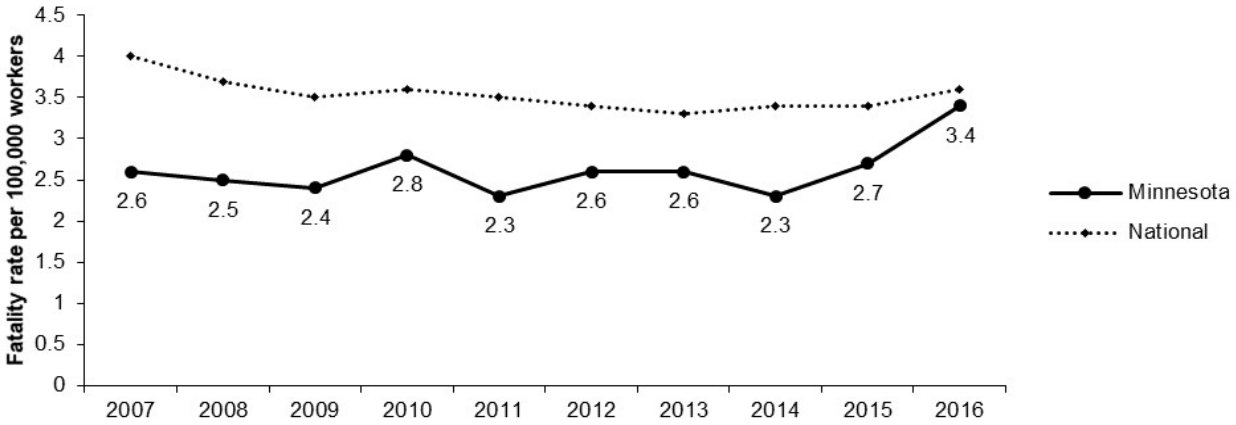



Prepared by AFL-CIO Safety and Health, April 2018

# MINNESOTA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,815,248 |
| Number of establishments:[1] | 161,015 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 92 |
| Rate per 100,000 workers:[4] | 3.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 20 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 62,900 |
| Rate per 100 workers: | 3.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 29,900 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 41 |
| Length of time it would take for OSHA to inspect each workplace once: | 86 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,865 |
| Construction: | 672 |
| Non-construction: | 1,193 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $993 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $22,538 |
| National average: | $16,089 |

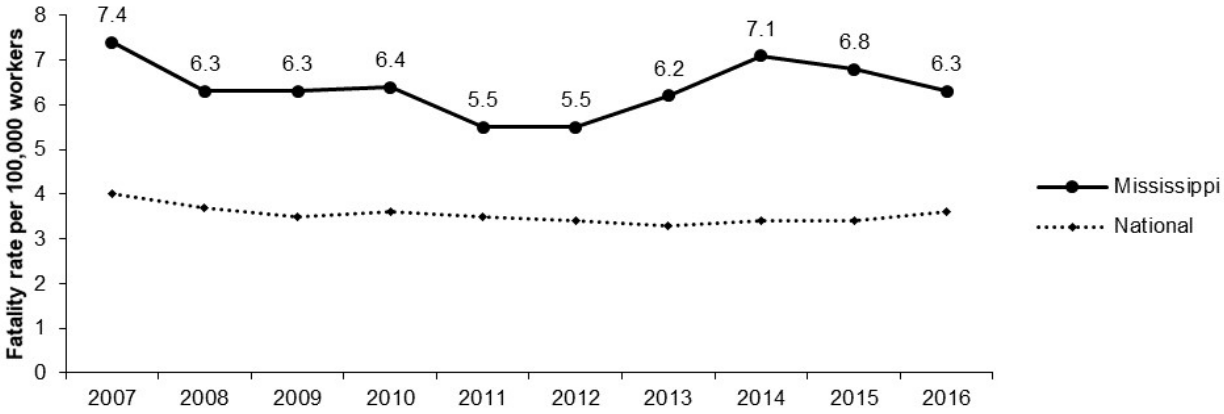



**Prepared by AFL-CIO Safety and Health, April 2018**

# MISSISSIPPI

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,124,854 |
| Number of establishments:[1] | 73,173 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 210,533 |
| Number of workplace fatalities, 2016:[3] | 71 |
| Rate per 100,000 workers:[4] | 6.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 43 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 10 |
| Length of time it would take for OSHA to inspect each workplace once: | 171 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 411 |
| Construction: | 164 |
| Non-construction: | 247 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,306 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $8,810 |
| National average: | $16,089 |

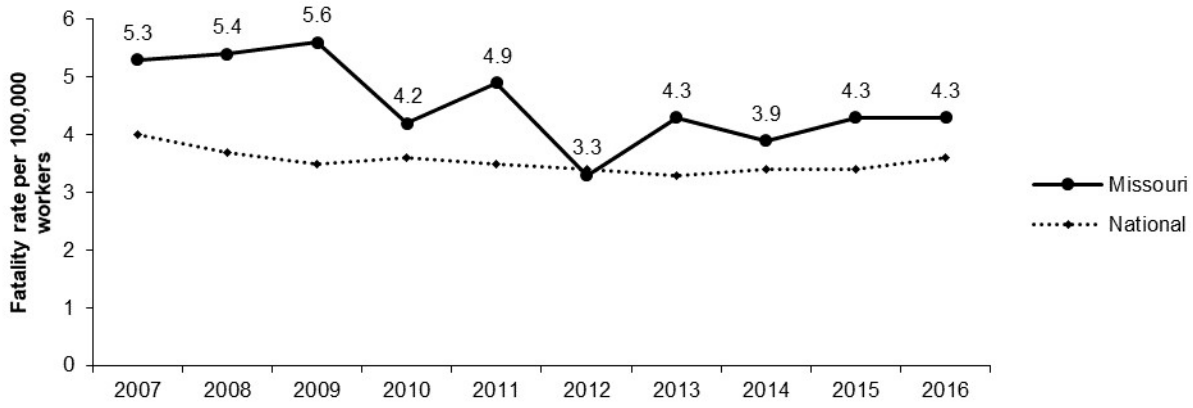



**Prepared by AFL-CIO Safety and Health, April 2018**

# MISSOURI

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,755,477 |
| Number of establishments:[1] | 194,161 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 360,468 |
| Number of workplace fatalities, 2016:[3] | 124 |
| Rate per 100,000 workers:[4] | 4.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 30 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 52,700 |
| Rate per 100 workers: | 2.8 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 26,900 |
| Rate per 100 workers: | 1.4 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 13 |
| Length of time it would take for OSHA to inspect each workplace once: | 156 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,195 |
| Construction: | 616 |
| Non-construction: | 579 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,645 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $35,661 |
| National average: | $16,089 |

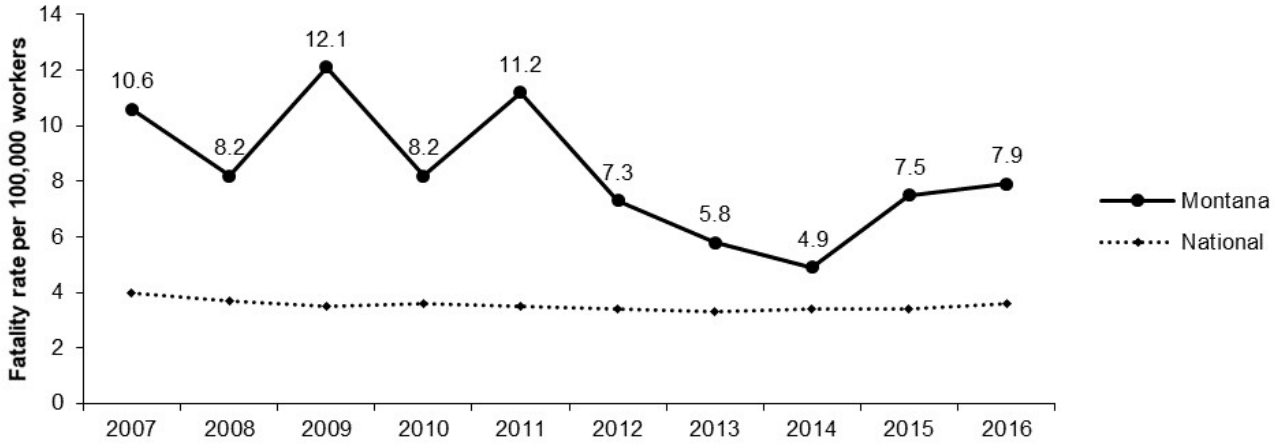



Prepared by AFL-CIO Safety and Health, April 2018

# MONTANA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 454,819 |
| Number of establishments:[1] | 46,017 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 70,548 |
| Number of workplace fatalities, 2016:[3] | 38 |
| Rate per 100,000 workers:[4] | 7.9 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 48 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 12,200 |
| Rate per 100 workers: | 4.2 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 5,600 |
| Rate per 100 workers: | 1.9 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 7 |
| Length of time it would take for OSHA to inspect each workplace once: | 221 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 201 |
| Construction: | 82 |
| Non-construction: | 119 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $2,149 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $4,913 |
| National average: | $16,089 |

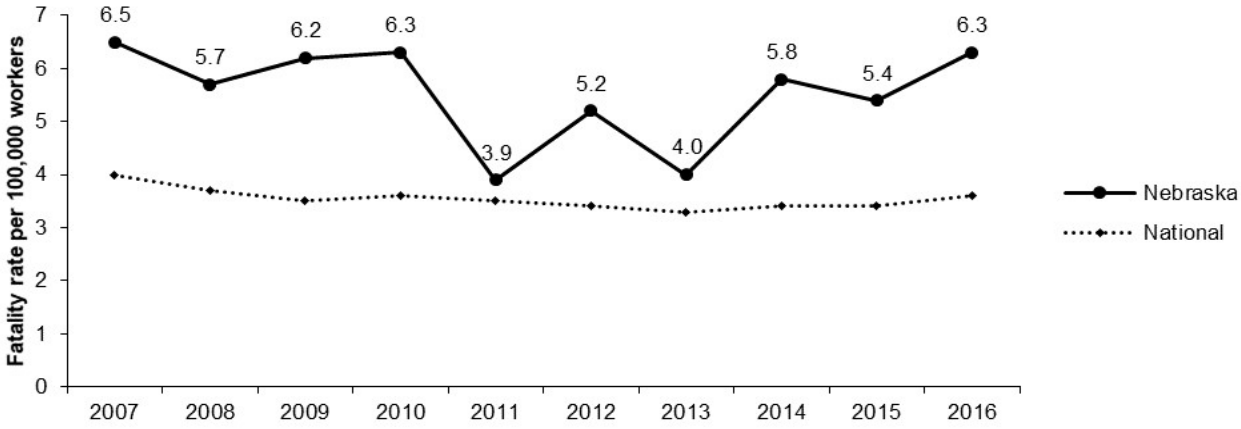



**Prepared by AFL-CIO Safety and Health, April 2018**

# NEBRASKA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 968,601 |
| Number of establishments:[1] | 72,080 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 144,346 |
| Number of workplace fatalities, 2016:[3] | 60 |
| Rate per 100,000 workers:[4] | 6.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 43 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 22,400 |
| Rate per 100 workers: | 3.4 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 11,000 |
| Rate per 100 workers: | 1.6 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 8 |
| Length of time it would take for OSHA to inspect each workplace once: | 232 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 299 |
| Construction: | 152 |
| Non-construction: | 147 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,903 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $12,770 |
| National average: | $16,089 |

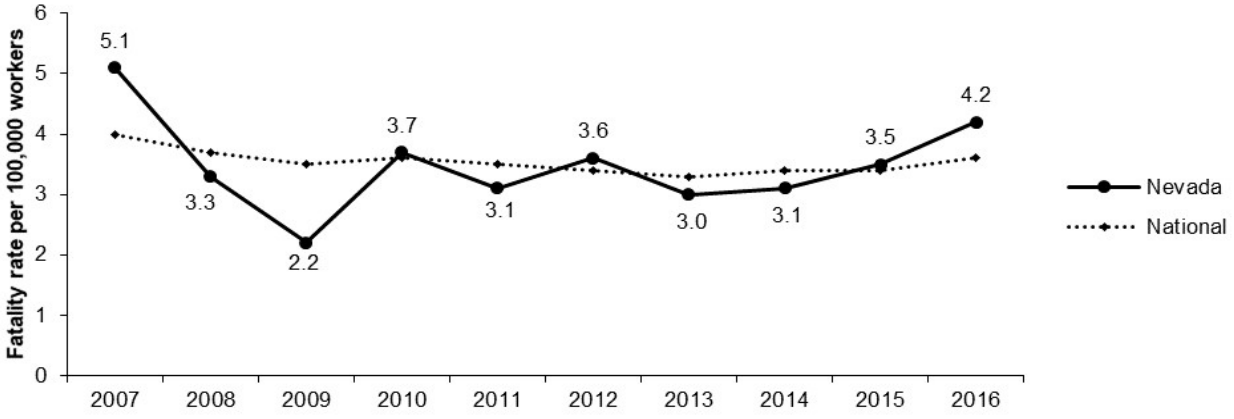



Prepared by AFL-CIO Safety and Health, April 2018

# NEVADA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,283,642 |
| Number of establishments:[1] | 81,479 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 54 |
| Rate per 100,000 workers:[4] | 4.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 29 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 33,900 |
| Rate per 100 workers: | 3.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 18,700 |
| Rate per 100 workers: | 2.1 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 43 |
| Length of time it would take for OSHA to inspect each workplace once: | 62 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,305 |
| Construction: | 497 |
| Non-construction: | 808 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,133 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $12,642 |
| National average: | $16,089 |

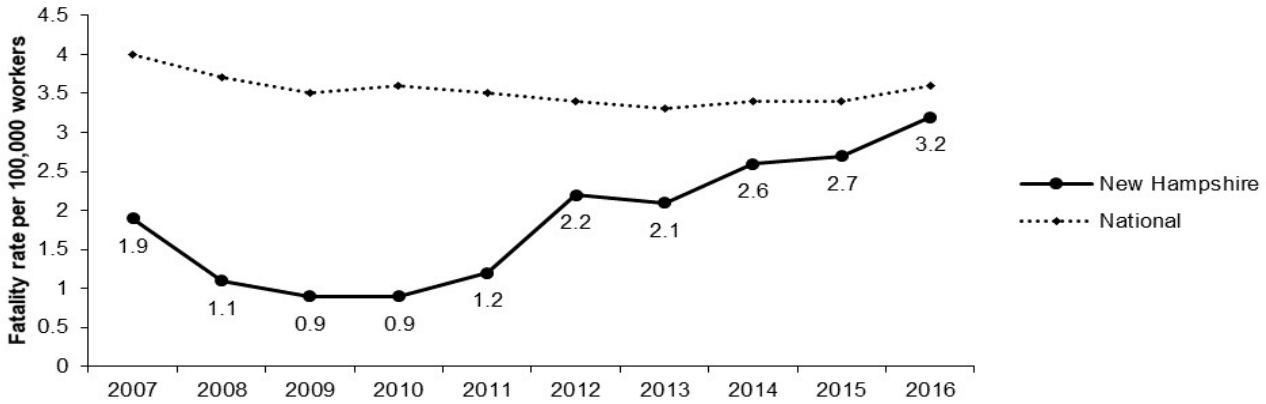



**Prepared by AFL-CIO Safety and Health, April 2018**

# NEW HAMPSHIRE

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 647,347 |
| Number of establishments:[1] | 51,393 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 76,914 |
| Number of workplace fatalities, 2016:[3] | 22 |
| Rate per 100,000 workers:[4] | 3.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 15 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 7 |
| Length of time it would take for OSHA to inspect each workplace once: | 154 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 319 |
| Construction: | 183 |
| Non-construction: | 136 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,370 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $10,519 |
| National average: | $16,089 |

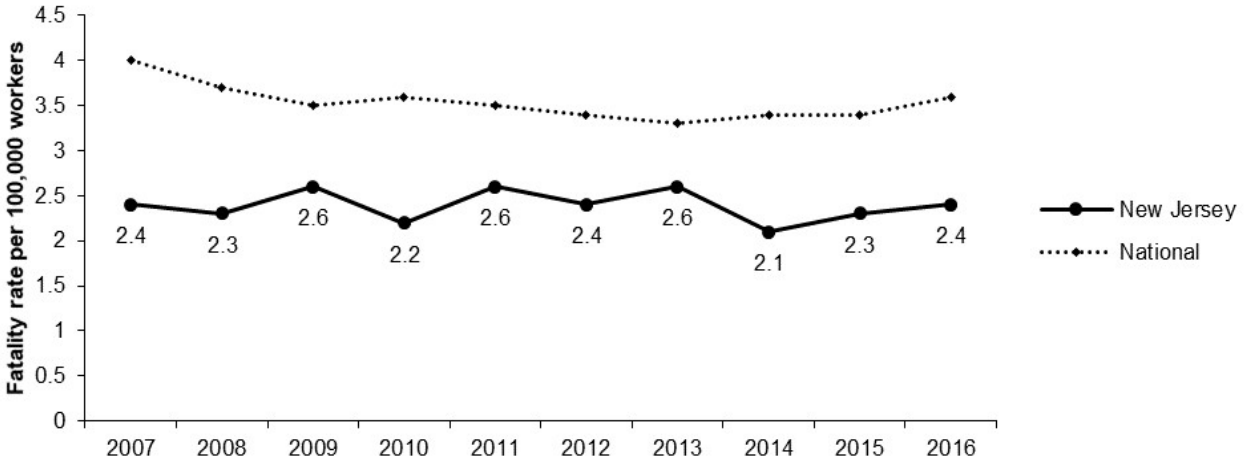



**Prepared by AFL-CIO Safety and Health, April 2018**

# NEW JERSEY

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 3,953,972 |
| Number of establishments:[1] | 262,798 |
| State or federal OSHA program:[2] | Federal |
| Number of workplace fatalities, 2016:[3] | 101 |
| Rate per 100,000 workers:[4] | 2.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 4 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 72,500 |
| Rate per 100 workers: | 2.6 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 41,200 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 56 |
| Length of time it would take for OSHA to inspect each workplace once: | 114 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,313 |
| Construction: | 841 |
| Non-construction: | 1,472 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $4,205 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $29,543 |
| National average: | $16,089 |

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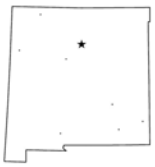
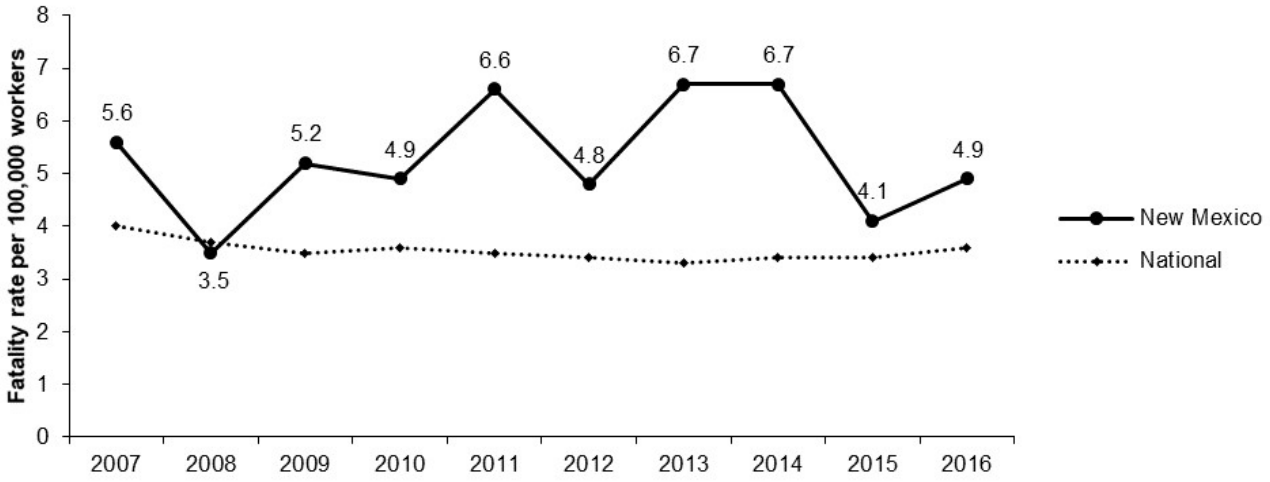
# NEW MEXICO



## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 807,387 |
| Number of establishments:[1] | 58,215 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 41 |
| Rate per 100,000 workers:[4] | 4.9 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 36 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 16,900 |
| Rate per 100 workers: | 3.2 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 8,100 |
| Rate per 100 workers: | 1.6 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 9 |
| Length of time it would take for OSHA to inspect each workplace once: | 173 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 336 |
| Construction: | 139 |
| Non-construction: | 197 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,025 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $5,397 |
| National average: | $16,089 |

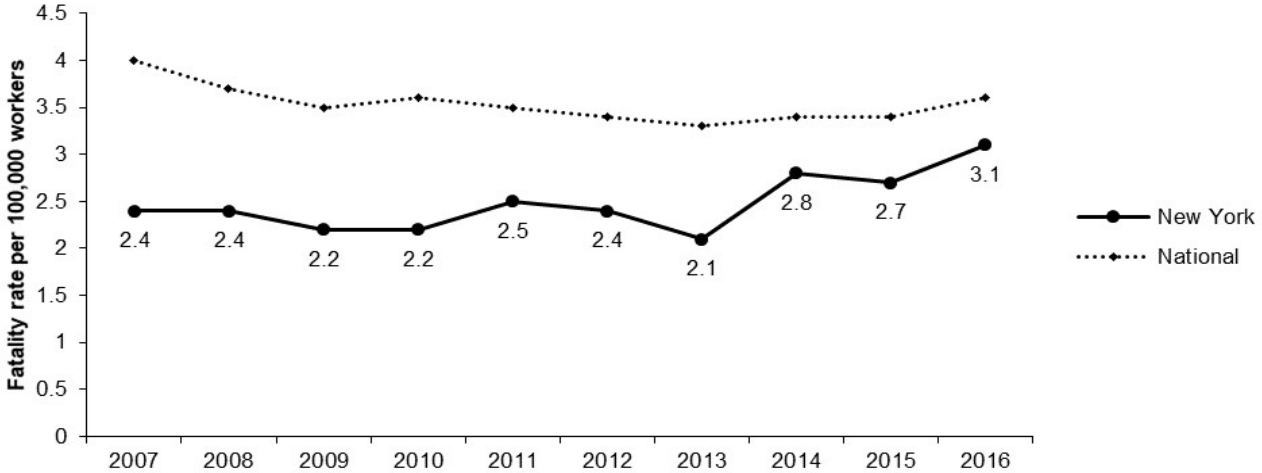



**Prepared by AFL-CIO Safety and Health, April 2018**

# NEW YORK

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 9,154,025 |
| Number of establishments:[1] | 632,559 |
| State or federal OSHA program:[2] | Federal |
| Number of workplace fatalities, 2016:[3] | 272 |
| Rate per 100,000 workers:[4] | 3.1 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 13 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 139,500 |
| Rate per 100 workers: | 2.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 79,700 |
| Rate per 100 workers: | 1.3 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 101 |
| Length of time it would take for OSHA to inspect each workplace once: | 134 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 4,704 |
| Construction: | 2,300 |
| Non-construction: | 2,404 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,707 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $14,658 |
| National average: | $16,089 |

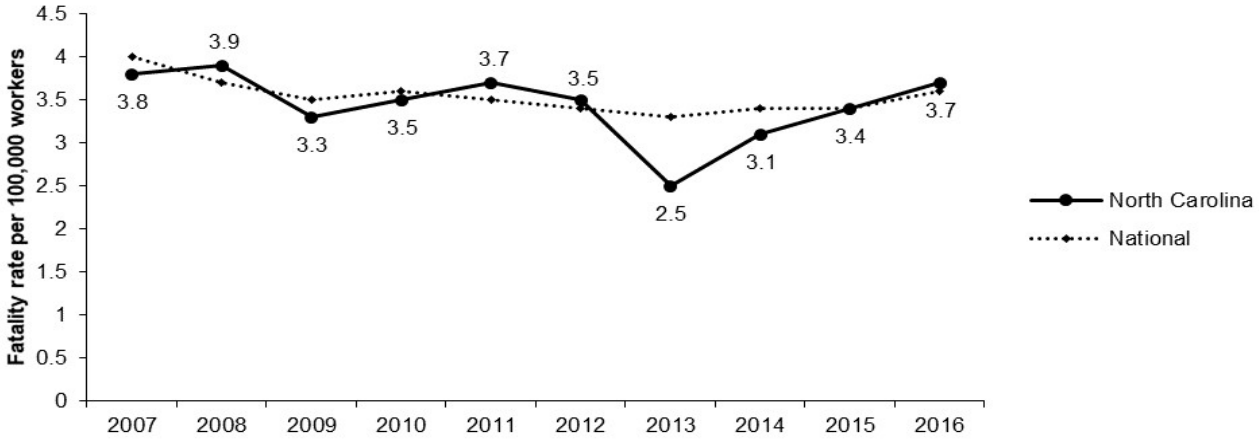



Prepared by AFL-CIO Safety and Health, April 2018

# NORTH CAROLINA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 4,259,276 |
| Number of establishments:[1] | 268,897 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 174 |
| Rate per 100,000 workers:[4] | 3.7 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 24 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 71,500 |
| Rate per 100 workers: | 2.5 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 37,700 |
| Rate per 100 workers: | 1.3 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 102 |
| Length of time it would take for OSHA to inspect each workplace once: | 96 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,811 |
| Construction: | 1,352 |
| Non-construction: | 1,459 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,594 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $4,078 |
| National average: | $16,089 |

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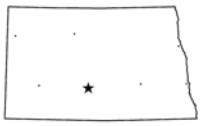
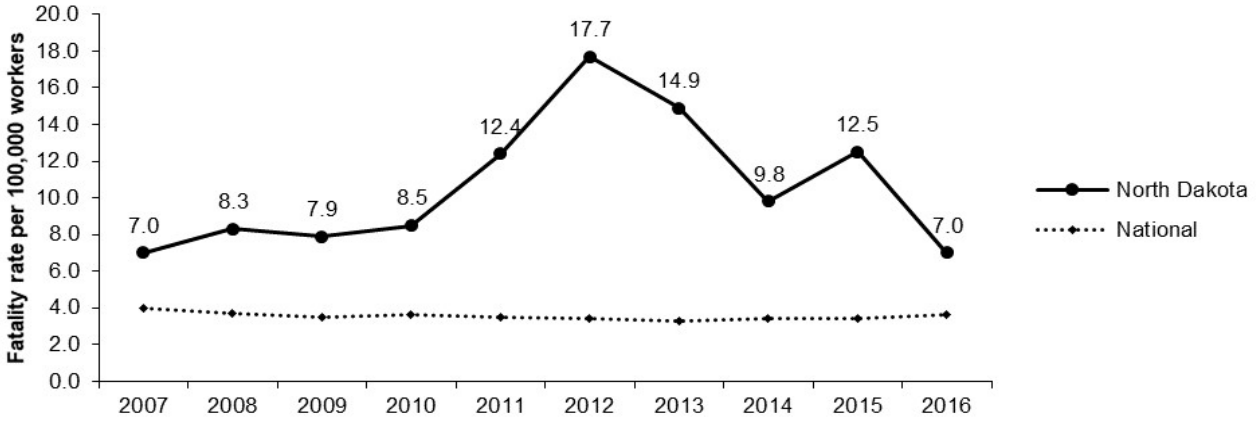
# NORTH DAKOTA

## Worker Safety and Health



| | |
|---|---|
| Number of employees:[1] | 417,119 |
| Number of establishments:[1] | 32,086 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 62,023 |
| Number of workplace fatalities, 2016:[3] | 28 |
| Rate per 100,000 workers:[4] | 7.0 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 46 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 8 |
| Length of time it would take for OSHA to inspect each workplace once: | 105 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 292 |
| Construction: | 164 |
| Non-construction: | 128 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,582 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $4,886 |
| National average: | $16,089 |

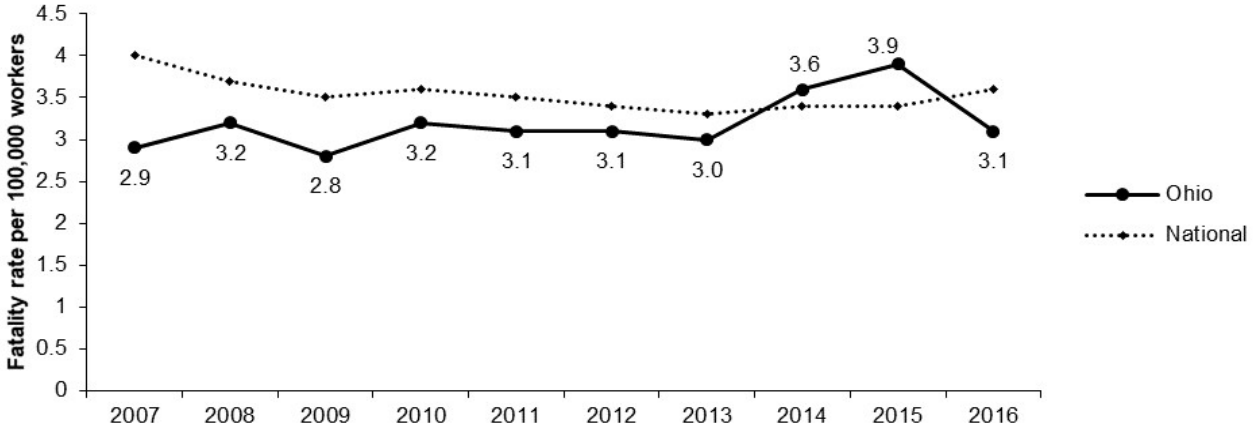



**Prepared by AFL-CIO Safety and Health, April 2018**

# OHIO

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 5,319,679 |
| Number of establishments:[1] | 293,074 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 635,498 |
| Number of workplace fatalities, 2016:[3] | 164 |
| Rate per 100,000 workers:[4] | 3.1 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 13 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 98,300 |
| Rate per 100 workers: | 2.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 49,300 |
| Rate per 100 workers: | 1.3 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 52 |
| Length of time it would take for OSHA to inspect each workplace once: | 124 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,253 |
| Construction: | 1,103 |
| Non-construction: | 1,150 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,907 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $8,045 |
| National average: | $16,089 |

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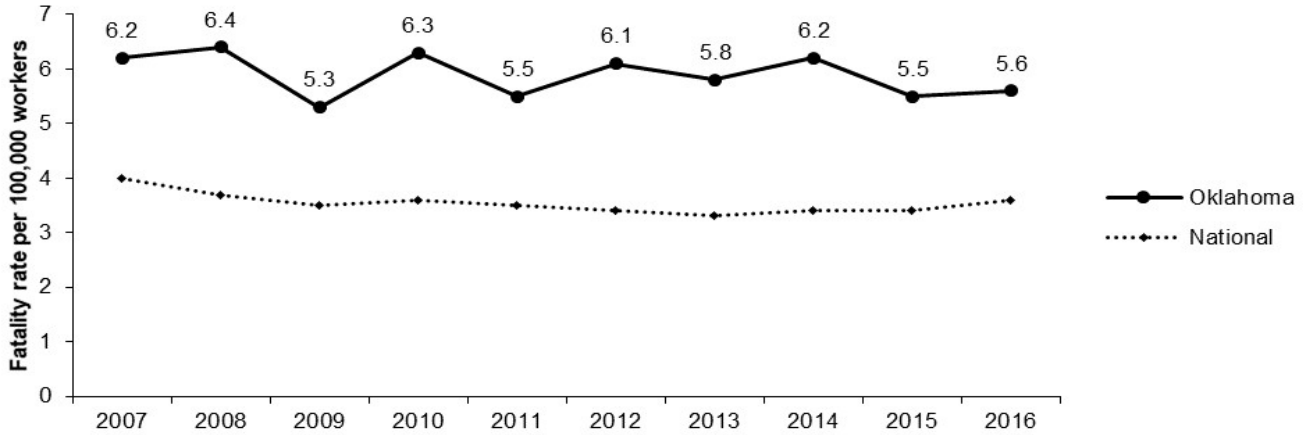
# OKLAHOMA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,575,978 |
| Number of establishments:[1] | 109,138 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 245,219 |
| Number of workplace fatalities, 2016:[3] | 92 |
| Rate per 100,000 workers:[4] | 5.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 42 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 13 |
| Length of time it would take for OSHA to inspect each workplace once: | 143 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 733 |
| Construction: | 422 |
| Non-construction: | 311 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,299 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $7,581 |
| National average: | $16,089 |

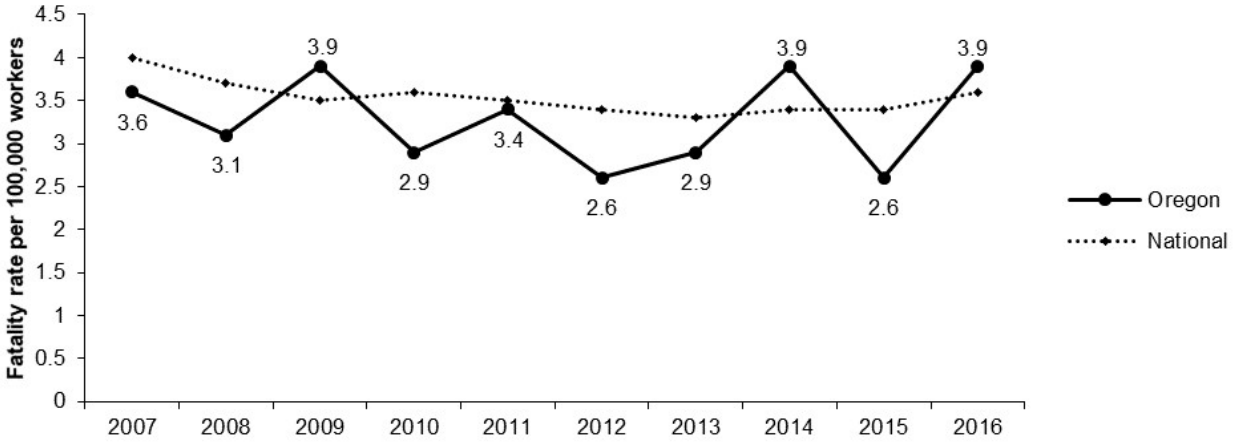



**Prepared by AFL-CIO Safety and Health, April 2018**

# OREGON

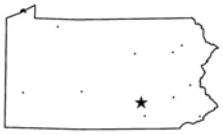
## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,840,874 |
| Number of establishments:[1] | 145,178 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 72 |
| Rate per 100,000 workers:[4] | 3.9 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 25 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 50,000 |
| Rate per 100 workers: | 4.0 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 29,600 |
| Rate per 100 workers: | 2.4 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 75 |
| Length of time it would take for OSHA to inspect each workplace once: | 37 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 3,871 |
| Construction: | 1,271 |
| Non-construction: | 2,600 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $547 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $774 |
| National average: | $16,089 |



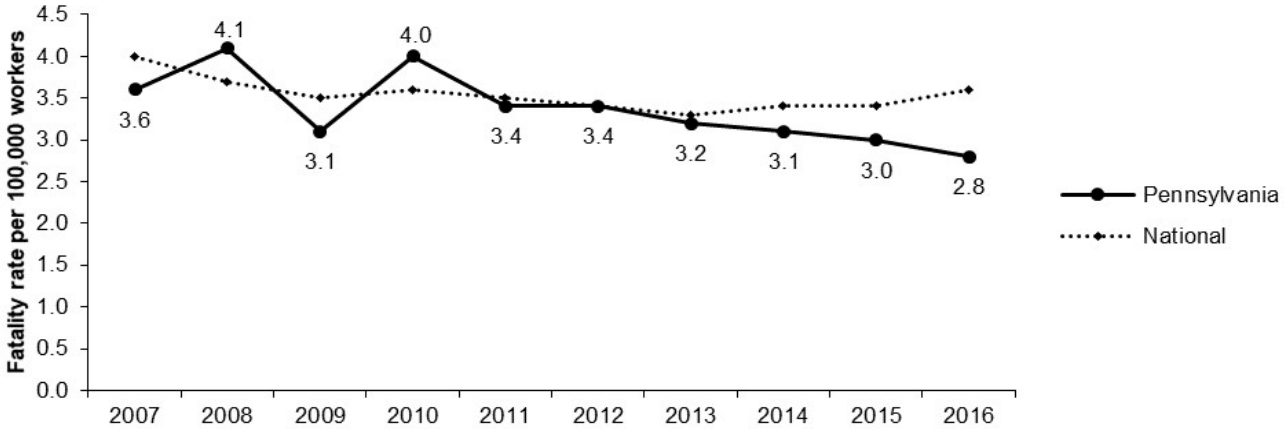

**Prepared by AFL-CIO Safety and Health, April 2018**

# PENNSYLVANIA



## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 5,737,759 |
| Number of establishments:[1] | 352,589 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 578,365 |
| Number of workplace fatalities, 2016:[3] | 163 |
| Rate per 100,000 workers:[4] | 2.8 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 10 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 138,000 |
| Rate per 100 workers: | 3.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 72,700 |
| Rate per 100 workers: | 1.8 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 54 |
| Length of time it would take for OSHA to inspect each workplace once: | 150 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,270 |
| Construction: | 998 |
| Non-construction: | 1,272 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,454 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $20,959 |
| National average: | $16,089 |

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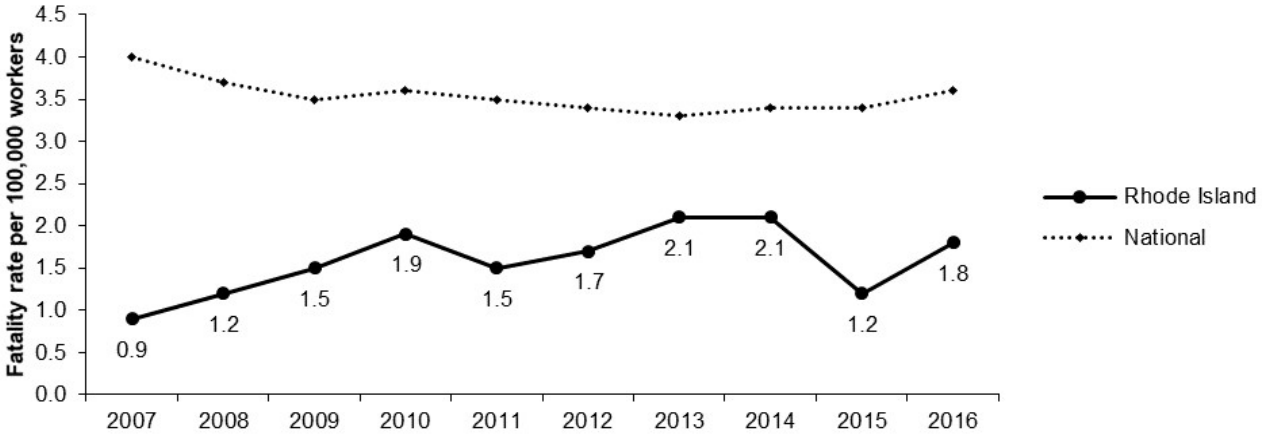
# RHODE ISLAND

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 473,406 |
| Number of establishments:[1] | 36,862 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 48,295 |
| Number of workplace fatalities, 2016:[3] | 9 |
| Rate per 100,000 workers:[4] | 1.8 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 2 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 6 |
| Length of time it would take for OSHA to inspect each workplace once: | 132 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 275 |
| Construction: | 169 |
| Non-construction: | 106 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,215 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $0 |
| National average: | $16,089 |

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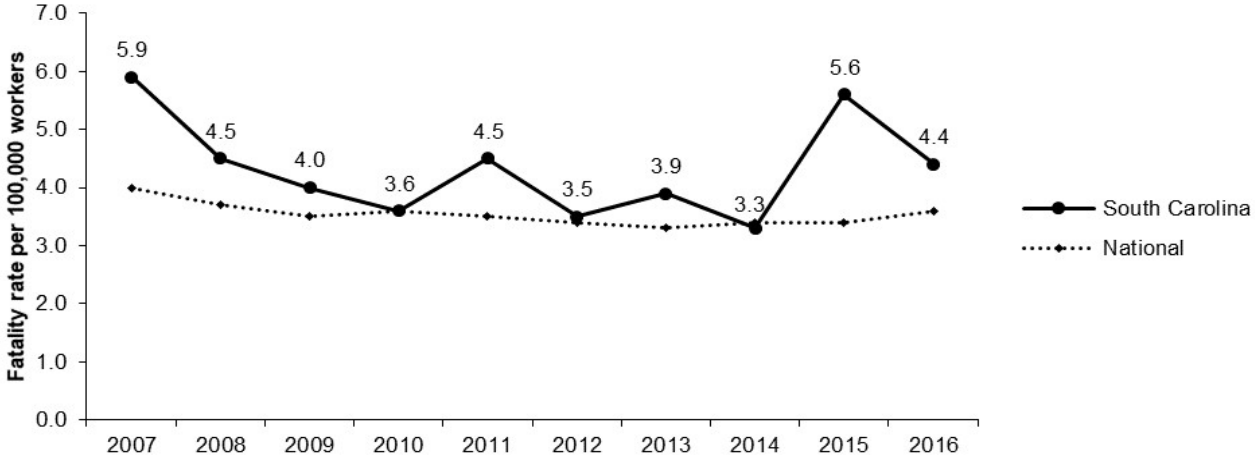
# SOUTH CAROLINA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,996,297 |
| Number of establishments:[1] | 124,928 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 96 |
| Rate per 100,000 workers:[4] | 4.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 32 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 32,800 |
| Rate per 100 workers: | 2.5 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 18,700 |
| Rate per 100 workers: | 1.4 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 20 |
| Length of time it would take for OSHA to inspect each workplace once: | 227 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 551 |
| Construction: | 283 |
| Non-construction: | 268 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,042 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $2,756 |
| National average: | $16,089 |

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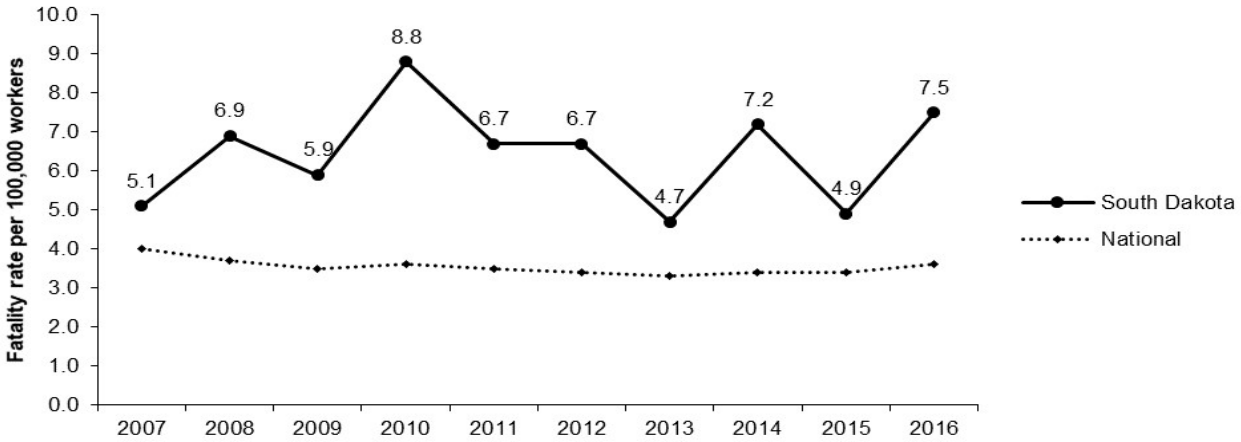
# SOUTH DAKOTA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 420,460 |
| Number of establishments:[1] | 32,980 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 61,646 |
| Number of workplace fatalities, 2016:[3] | 31 |
| Rate per 100,000 workers:[4] | 7.5 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 47 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | N/A |
| Rate per 100 workers: | N/A |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 2 |
| Length of time it would take for OSHA to inspect each workplace once: | 284 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 110 |
| Construction: | 82 |
| Non-construction: | 28 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $4,176 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $60,680 |
| National average: | $16,089 |

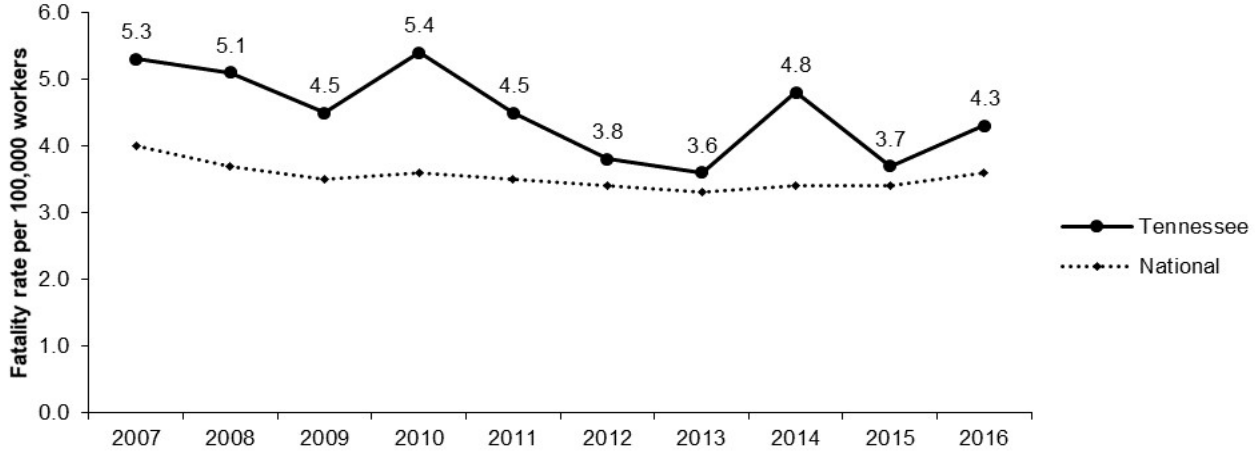



**Prepared by AFL-CIO Safety and Health, April 2018**

# TENNESSEE

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,887,754 |
| Number of establishments:[1] | 153,158 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 122 |
| Rate per 100,000 workers:[4] | 4.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 30 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 60,200 |
| Rate per 100 workers: | 2.9 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 31,700 |
| Rate per 100 workers: | 1.5 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 34 |
| Length of time it would take for OSHA to inspect each workplace once: | 87 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,768 |
| Construction: | 434 |
| Non-construction: | 1,334 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,510 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $6,407 |
| National average: | $16,089 |

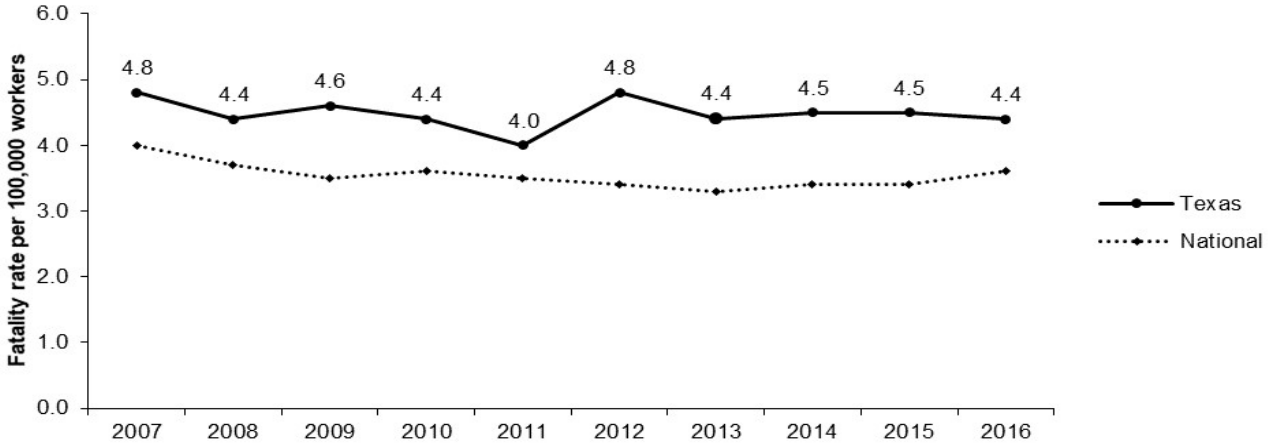



**Prepared by AFL-CIO Safety and Health, April 2018**

# TEXAS

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,805,698 |
| Number of establishments:[1] | 658,759 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 1,647,698 |
| Number of workplace fatalities, 2016:[3] | 545 |
| Rate per 100,000 workers:[4] | 4.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 32 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 185,300 |
| Rate per 100 workers: | 2.2 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 103,100 |
| Rate per 100 workers: | 1.2 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 85 |
| Length of time it would take for OSHA to inspect each workplace once: | 176 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 3,672 |
| Construction: | 2,065 |
| Non-construction: | 1,607 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,481 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $12,975 |
| National average: | $16,089 |

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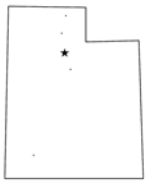
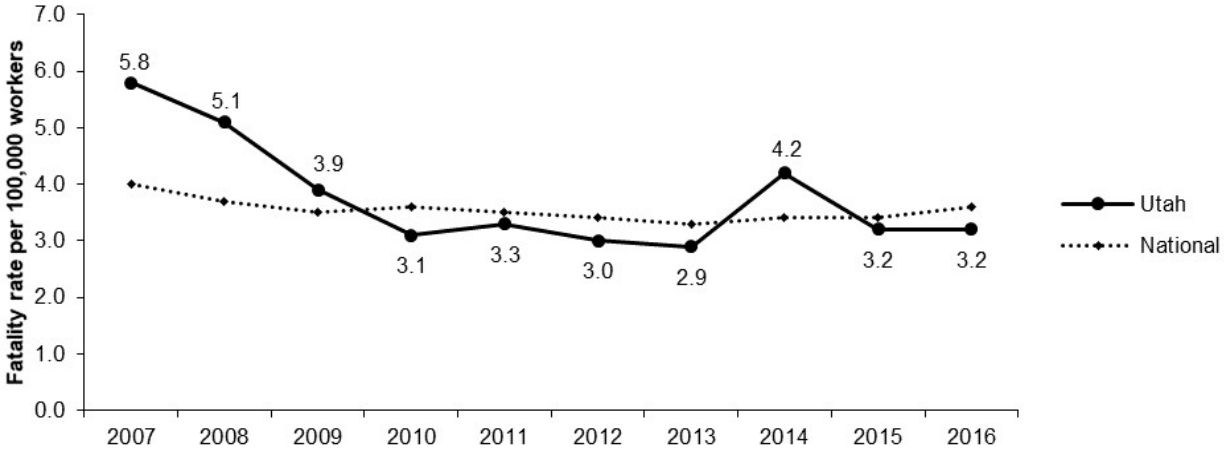
# UTAH



## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 1,388,878 |
| Number of establishments:[1] | 95,901 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 44 |
| Rate per 100,000 workers:[4] | 3.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 15 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 27,800 |
| Rate per 100 workers: | 2.9 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 12,000 |
| Rate per 100 workers: | 1.3 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 19 |
| Length of time it would take for OSHA to inspect each workplace once: | 96 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,003 |
| Construction: | 467 |
| Non-construction: | 536 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,315 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $1,000 |
| National average: | $16,089 |

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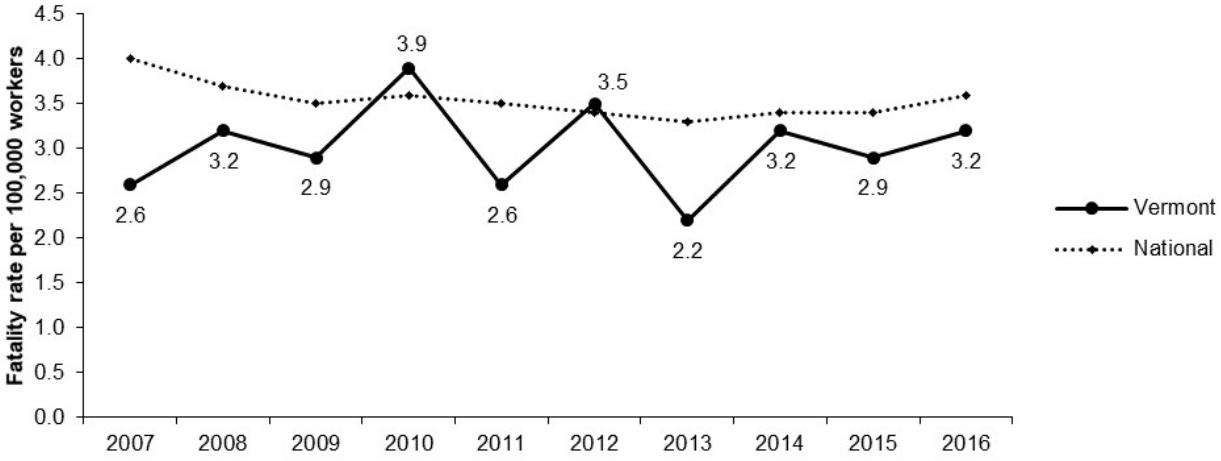
# VERMONT

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 308,044 |
| Number of establishments:[1] | 25,043 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 10 |
| Rate per 100,000 workers:[4] | 3.2 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 15 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 9,300 |
| Rate per 100 workers: | 4.6 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 4,500 |
| Rate per 100 workers: | 2.2 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 6 |
| Length of time it would take for OSHA to inspect each workplace once: | 67 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 376 |
| Construction: | 187 |
| Non-construction: | 189 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,698 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $8,130 |
| National average: | $16,089 |

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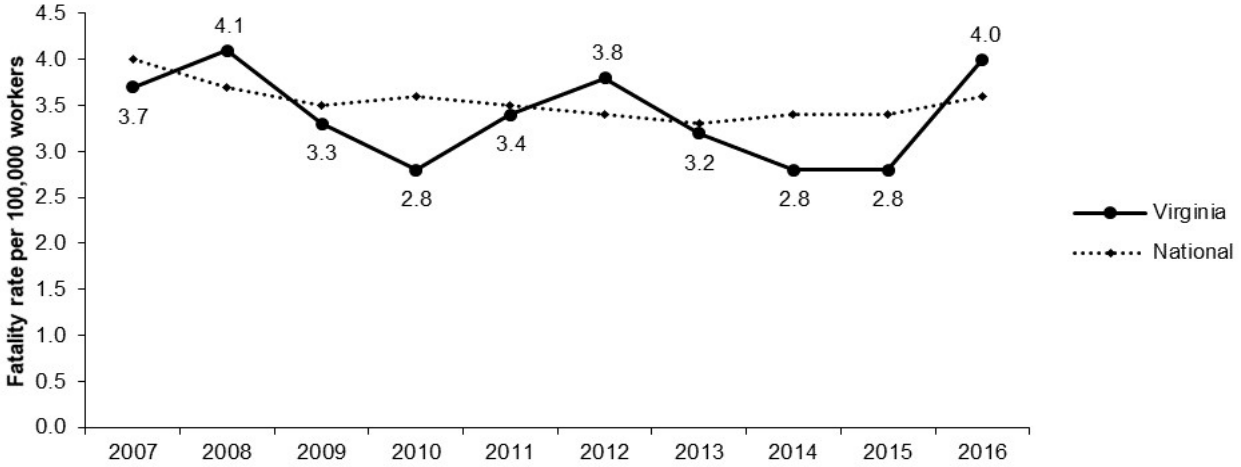
# VIRGINIA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 3,789,744 |
| Number of establishments:[1] | 264,329 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 153 |
| Rate per 100,000 workers:[4] | 4.0 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 27 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 63,200 |
| Rate per 100 workers: | 2.5 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 34,800 |
| Rate per 100 workers: | 1.4 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 45 |
| Length of time it would take for OSHA to inspect each workplace once: | 107 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 2,463 |
| Construction: | 1,329 |
| Non-construction: | 1,134 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,871 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $13,439 |
| National average: | $16,089 |

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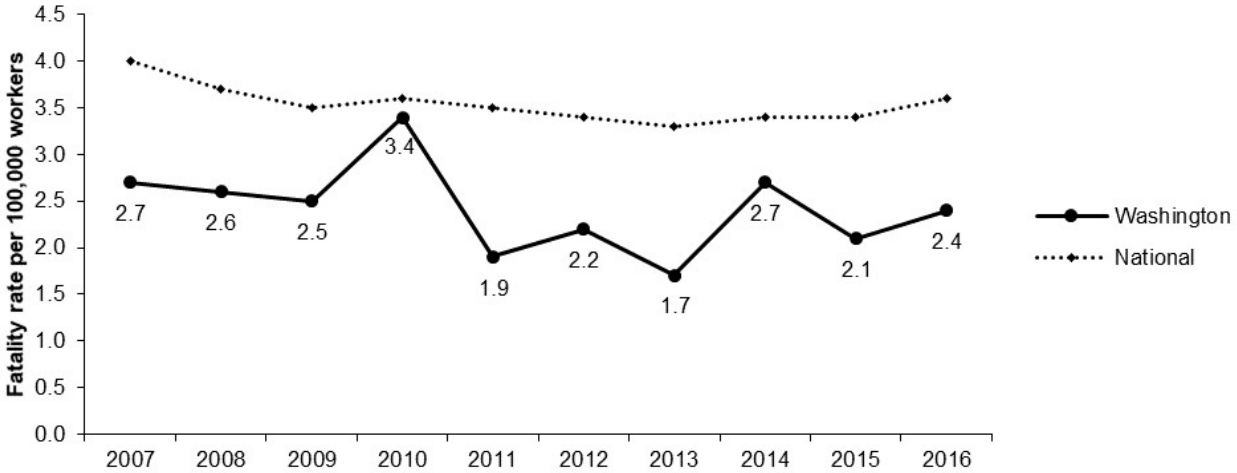
# WASHINGTON

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 3,215,014 |
| Number of establishments:[1] | 241,736 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 78 |
| Rate per 100,000 workers:[4] | 2.4 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 4 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 89,200 |
| Rate per 100 workers: | 4.3 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 46,900 |
| Rate per 100 workers: | 2.3 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 109 |
| Length of time it would take for OSHA to inspect each workplace once: | 59 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 4,119 |
| Construction: | 1,700 |
| Non-construction: | 2,419 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $1,866 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $11,141 |
| National average: | $16,089 |

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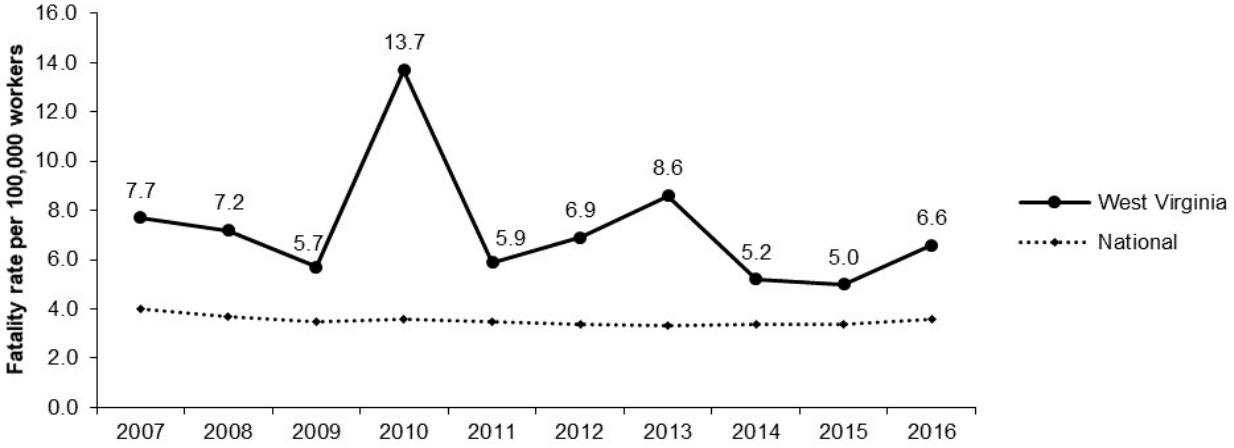
# WEST VIRGINIA

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 684,322 |
| Number of establishments:[1] | 50,017 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 114,196 |
| Number of workplace fatalities, 2016:[3] | 47 |
| Rate per 100,000 workers:[4] | 6.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 45 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 14,700 |
| Rate per 100 workers: | 3.2 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 7,600 |
| Rate per 100 workers: | 1.7 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 6 |
| Length of time it would take for OSHA to inspect each workplace once: | 172 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 273 |
| Construction: | 112 |
| Non-construction: | 161 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $3,102 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $13,442 |
| National average: | $16,089 |

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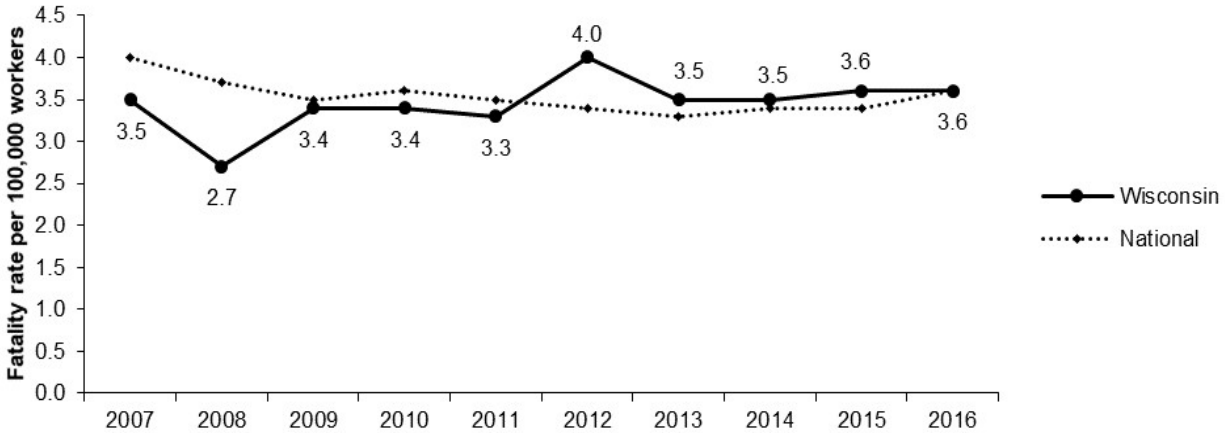
# WISCONSIN

## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 2,828,166 |
| Number of establishments:[1] | 169,000 |
| State or federal OSHA program:[2] | Federal |
| Number of state and local public employees not covered by the OSH Act: | 351,313 |
| Number of workplace fatalities, 2016:[3] | 105 |
| Rate per 100,000 workers:[4] | 3.6 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 22 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 72,400 |
| Rate per 100 workers: | 3.7 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 37,000 |
| Rate per 100 workers: | 1.9 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 28 |
| Length of time it would take for OSHA to inspect each workplace once: | 140 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 1,159 |
| Construction: | 537 |
| Non-construction: | 622 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $4,068 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $90,537 |
| National average: | $16,089 |

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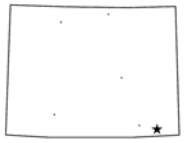
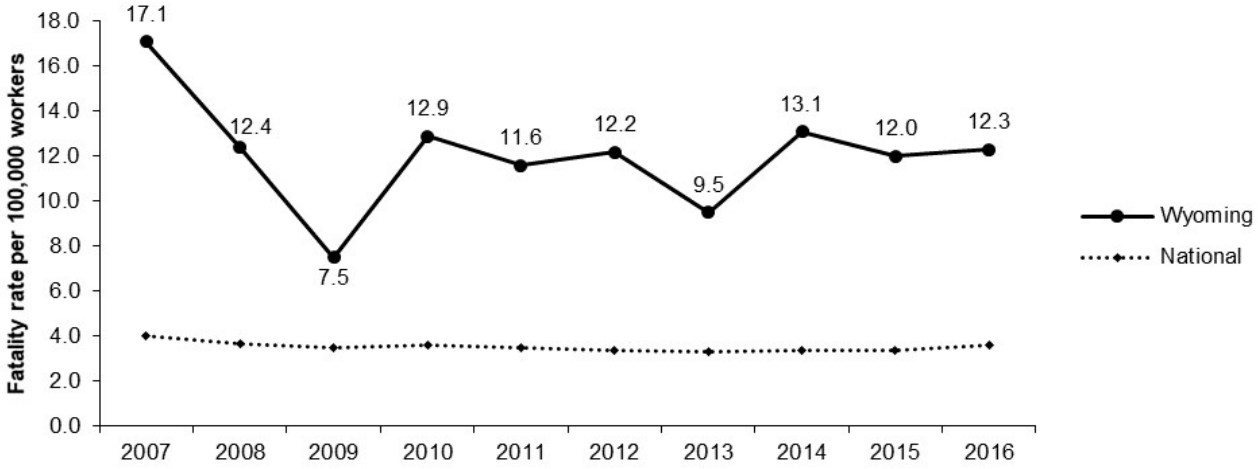
# WYOMING



## Worker Safety and Health

| | |
|---|---|
| Number of employees:[1] | 271,813 |
| Number of establishments:[1] | 26,047 |
| State or federal OSHA program:[2] | State |
| Number of workplace fatalities, 2016:[3] | 34 |
| Rate per 100,000 workers:[4] | 12.3 |
| National rate: | 3.6 |
| Ranking of state fatality rate, 2016:[5] | 50 |
| Total cases of workplace injuries and illnesses, private industry, 2016:[6] | 6,000 |
| Rate per 100 workers: | 3.4 |
| National rate: | 2.9 |
| Total injury and illness cases with days away from work, job transfer or restriction, private industry, 2016:[7] | 3,400 |
| Rate per 100 workers: | 1.9 |
| National rate: | 1.6 |
| Number of workplace safety and health inspectors, FY 2018:[8] | 6 |
| Length of time it would take for OSHA to inspect each workplace once: | 110 |
| Number of workplace safety and health inspections conducted, FY 2017:[9] | 236 |
| Construction: | 167 |
| Non-construction: | 69 |
| Avg. penalty assessed for serious violations of the OSH Act, FY 2017:[9] | $2,188 |
| National average: | $2,633 |
| Avg. total penalty per fatality investigation, FY 2017:[10] | $9,598 |
| National average: | $16,089 |

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# STATE PROFILES
# FOOTNOTES

[1]U.S. Department of Labor, Bureau of Labor Statistics, Employment and Wages: Annual Averages, 2016.
[2]Under §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 public- and private-sector workers. Connecticut, Illinois, Maine, New Jersey, New York and the Virgin Islands have state programs for public employees only.
[3]U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2016, released Dec. 19, 2017.
[4]*Ibid.*
[5]Ranking based on best to worst (1=best; 50=worst).
[6]U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses, 2016 private sector only.
[7]U.S. Department of Labor, Bureau of Labor Statistics, State Data, Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work, Job Transfer or Restriction, 2016 private sector only.
[8]U.S. Department of Labor, OSHA. Federal Compliance Safety and Health Officer Totals by State, as of December 2017; data received March 23, 2018. State plan state Compliance Safety and Health Officers "on board" from FY 2018 State Plan Grant Applications, as of July 1, 2017; data received March 23, 2018.
[9]U.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).
[10]U.S. Department of Labor, OSHA, FY 2017. 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, 2016, 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, 2016.

**Workplace Fatality Information:** Census of Fatal Occupational Injuries, 2016, 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, 2016, Bureau of Labor Statistics, U.S. Department of Labor. Rate reflects 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 2018 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 inspections 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 2017.

**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, 2016, at www.bls.gov/cew/cewbultn15.htm.

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 (NAICS) for industries and the Standard Occupation Classification system (SOC) for occupations. Prior to 2003, the surveys used the Standard Industrial Classification (SIC) 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.

AFL-CIO

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

RICHARD L. TRUMKA
President

ELIZABETH H. SHULER
Secretary-Treasurer

TEFERE GEBRE
Executive Vice President