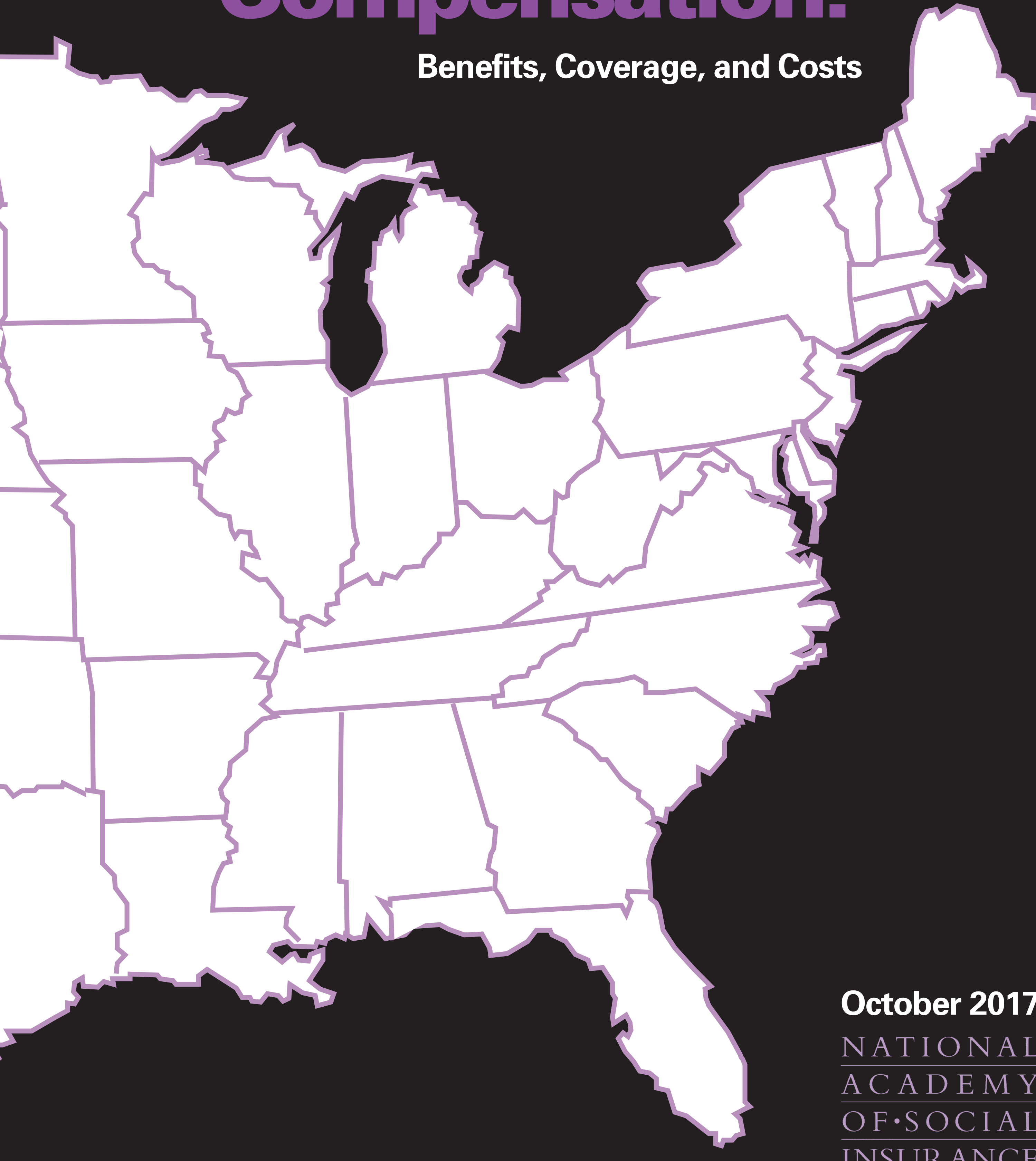
Workers' Compensation:

Benefits, Coverage, and Costs



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Washington, DC

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The **National Academy of Social Insurance** (the Academy) is a non-profit, non-partisan organization made up of the nation's leading experts on social insurance. Social insurance encompasses broad-based systems that help workers pool risks to avoid loss of income due to retirement, death, disability, or unemployment, and to ensure access to health care. The mission of the Academy is to advance solutions to challenges facing the nation by increasing public understanding of how social insurance contributes to economic security. The Academy convenes steering committees and study panels that are charged with conducting research, issuing findings, and, in some cases, making recommendations based on their analyses. Members of these groups are selected for their recognized expertise in a particular area of social insurance, and with due consideration for the balance of disciplines and perspectives appropriate to the project.

This research report presents data on trends in workers' compensation benefits, costs, and coverage as of 2015. The report was prepared with the guidance of the Study Panel on Workers' Compensation Data and, in accordance with procedures of the Academy, has been reviewed for completeness, accuracy, clarity, and objectivity by a committee selected by the Board of Directors. The purpose of the report is to present the data and describe trends over time, but not to make policy recommendations.

The Social Security Administration provides partial funding to support the collection, processing, and validation of data for this report. The data are also used in tables for its *Annual Statistical Supplement to the Social Security Bulletin*. The Centers for Medicare & Medicaid Services provide funding to produce selected tables for this report that are also used in its own estimates. The project also receives financial support from the Office of Workers' Compensation Programs in the U.S. Department of Labor and in-kind support from the National Council on Compensation Insurance and the National Association of Insurance Commissioners.

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Workers' Compensation:

Benefits, Coverage, and Costs, (2015 data)

by

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with advice from the

Study Panel on Workers' Compensation Data

October 2017

NATIONAL ACADEMY OF SOCIAL INSURANCE

Washington, DC

Preface

Workers' compensation provides funding for medical care, rehabilitation, and cash benefits for workers who are injured on the job or who contract work-related illnesses. The program also pays benefits to families of workers who die of work-related injuries or illnesses. Unlike most other U.S. social insurance programs, workers' compensation programs are regulated by the states, with no federal financing or administration. The federal government provides workers' compensation insurance for federal employees and for workers in some high-risk industries, but no federal laws set standards for workers' compensation plans or require comprehensive reporting of workers' compensation data.

The lack of uniform reporting of states' experiences with workers' compensation makes it difficult to provide national estimates of amounts of benefits paid, costs to employers, and numbers of workers covered. In order to produce national summary statistics on the program, it is necessary to piece together data from various sources.

Until 1995, the U.S. Social Security Administration (SSA) produced the only comprehensive national data on workers' compensation benefits, costs, and coverage, with annual estimates dating back to 1946. SSA discontinued the series in 1995 and the National Academy of Social Insurance (the Academy) assumed the task of reporting national data on workers' compensation in 1997. The Academy published its first report that year and has produced the report annually ever since.

This is the Academy's 20th annual report on workers' compensation benefits, costs, and coverage. This report presents new data on workers' compensation programs for 2015 and updated estimates for 2011-2014. The revised estimates in this report replace estimates in the Academy's prior reports.

The Academy and its expert advisors are continually seeking ways to improve the report and to adapt estimation methods to track new developments in workers' compensation programs. Detailed descriptions of the methods used to produce the estimates in this report are available online at **www.nasi.org/research/workers-compensation**.

Despite the Academy's continued efforts to improve the quality of its estimates, there are limitations to the data that we acknowledge in the report. It is important to note that our estimates of workers' compensation costs borne by employers, do not capture the full economic and human costs of work-related injuries, illnesses, and fatalities. These costs – borne by workers, families and communities – are significant but are beyond the scope of the report. Additionally, our estimates do not evaluate whether workers' compensation programs are meeting key objectives to prevent injuries and diseases, compensate disabled workers adequately and equitably, and to rehabilitate injured workers and return them to work at an affordable cost.

The audience for the Academy's annual report on workers' compensation includes insurers, journalists, business and labor leaders, employee benefit specialists, actuaries, federal and state policymakers, and researchers working in universities, government, and private consulting firms. The data from some tables are published by the National Safety Council (NSC) (in *Injury Facts*), by the Employee Benefit Research Institute (in *Employee Benefit News, Fundamentals of Employee Benefit Programs*) and by the SSA (in the *Annual Statistical Supplement to the Social Security Bulletin*).

The Academy's estimates inform state and federal policymakers in numerous ways. The federal Centers for Medicare & Medicaid Services (CMS), for example, use the data in estimates and projections of health care spending in the United States. The National Institute for Occupational Safety and Health (NIOSH) uses the data to track the costs of workplace injuries in the United States. The International Association of Industrial Accident Boards and Commissions (IAIABC), the organization of state and provincial agencies that administer workers' compensation in the United States and Canada, uses the information to track and compare the performance of workers' compensation programs in the United States with similar systems in Canada.

Acknowledgements

The Academy expresses its deep appreciation to staff members in the 50 states and District of Columbia workers' compensation offices who provide data on their jurisdictions each year. While there are too many individuals to name here, we are grateful for the time they spend responding to our survey and answering clarification questions as needed. Without support from these individuals, constructing this annual data series would be impossible. The Academy also acknowledges support from the U.S. Social Security Administration (SSA), Centers for Medicare & Medicaid Services (CMS), and the Office of Workers' Compensation Programs of the U.S. Department of Labor (DOL).

Members of the Academy's Study Panel on Workers' Compensation Data generously give their time and expertise in all phases of production of the annual report. Members of the Panel are listed on page iii, but we would like to especially acknowledge the contributions of: Terry Bogyo (Independent Workers' Compensation Researcher, Canada); Charles Davoli (Louisiana Governor's Workers' Compensation Advisory Council); Jeff Eddinger (National Council on Compensation Insurance); Doug Holmes (UWC Strategic Services); Frank Neuhauser (University of California, Berkeley); and Emily Spieler (Northeastern University College of Law). We also thank David Maddy, the Academy's workers' compensation summer intern, whose help was invaluable in producing this year's report. Finally, the report benefited greatly from helpful comments during Board review by Glenn Shor (California Department of Industrial Relations); David Torrey (Pennsylvania Department of Labor & Industry); and Barbara Wynn (RAND). We greatly appreciate the time and effort they devoted to their reviews.

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Additional Appendices On-line

Additional appendices are published in *Sources, Methods, and State Summaries: A Companion to Workers' Compensation: Benefits, Coverage, and Costs*, available on the Academy's website at www.nasi.org. These appendices provide more information on:

- Data sources for each state
- Methods used to estimate workers' compensation benefits and costs by type of coverage, including:
  - Deductibles
  - Self-insured benefit payments and administrative costs
  - Medical benefits
- Updated version of Table 9.B1 of the *Annual Statistical Supplement to the Social Security Bulletin*
- 2011 to 2015 trends in benefits paid by second injury funds, special funds, and guaranty funds
- State summary tables that report key metrics from 2011 to 2015

Highlights

This is the 20th annual report on workers' compensation benefits, costs, and coverage produced by the National Academy of Social Insurance.

- The report provides data on state and federal workers' compensation programs in 2015, with comparison data for the five-year period 2011-2015. Its purpose is to facilitate policymaking and comparisons with other social insurance and employee benefit programs.

National Trends (Table 1)

- **Covered employment and wages continue to rise.**
    - In 2015, workers' compensation covered an estimated 135.6 million U.S. workers, an increase of 7.7% across the five years reported in the study (2011-2015).
    - Covered wages broke the $7 trillion barrier for the first time, increasing 18.7 percent in the five-year period.
- **Total benefits increased between 2011 and 2015, but benefits as a percentage of covered wages declined.**
    - In 2015, workers' compensation total benefits paid were $61.9 billion, up 0.7 percent from 2011.
    - After increasing 2.1 percent between 2011 and 2013, benefits declined 1.4 percent from 2013 to 2015.
    - *Total* benefits paid were $0.86 per $100 of covered wages, a decrease of $0.15 since 2011 (Figures 1 and 2).
        - — Medical benefits were $0.43 per $100 covered wages, down $0.08 from 2011.
        - — Cash benefits were $0.43 per $100 covered wages, down $0.07 from 2011.
- **Total costs to employers increased sharply between 2011 and 2015, but costs as a percentage of covered wages only increased slightly.**
    - In 2015, employers' costs for workers' compensation were $94.8 billion, up 20.1 percent from 2011.
    - Costs increased by 12.0 percent in the period 2011-2013, but the growth rate slowed to 7.3 percent in the period 2013-2015.
    - Employers' costs were $1.32 per $100 of covered wages in 2015, down $0.04 from 2013 but up $0.02 from 2011 (Figure 1).

State Trends

- **Workers' compensation covered employment increased in almost every state between 2011 and 2015.**
    - Workers' compensation covered employment increased in every state except West Virginia. Eleven states experienced double-digit growth in covered employment (Table 3).
    - Covered wages increased in every state, and by more than 20 percent in 16 states (Table 4).
- **Workers' compensation benefits per $100 of covered wages decreased in most states.**
    - Benefits *decreased* by more than $0.20 per $100 of covered wages in 15 states and by more than $0.30 in Illinois, Oklahoma, and West Virginia (Table 12).
    - Benefits per $100 covered wages *increased* in only three states: Hawaii, New Mexico, and North Dakota.
- **Employers' costs per $100 of covered wages decreased in 27 states, but increased in 24.**
    - West Virginia, Montana, and Oklahoma experienced the largest reductions, with costs dropping more than $0.30 per $100 covered wages (Table 14).
    - Employer costs increased by more than $0.20 in Wyoming, Delaware, and California.

Table 1

Overview of Workers' Compensation Benefits, Coverage, and Costs, 2011-2015

Aggregate Benefits, Coverage, and Costs	2015	Percent Change 2011-2013	Percent Change 2013-2015	Percent Change 2011-2015
Covered Workers (in thousands)	135,593	3.4	4.2	7.7
Covered Wages (in billions)	$7,188	7.2	10.7	18.7
Workers' Compensation Benefits Paid (in billions)	61.9	2.1	-1.4	0.7
Medical Benefits	31.1	3.3	-2.2	1.0
Cash Benefits	30.7	1.0	-0.6	0.4
Employer Costs for Workers' Compensation (in billions)	94.8	12.0	7.3	20.1

Benefits and Costs per $100 of Covered Wages	2015	Dollar Change 2011-2013	Dollar Change 2013-2015	Dollar Change 2011-2015
Workers' Compensation Benefits Paid	$0.86	-$0.04	-$0.11	-$0.15
Medical Benefits	0.43	-0.02	-0.06	-0.08
Cash Benefits	0.43	-0.02	-0.05	-0.07
Employer Costs for Workers' Compensation	1.32	0.06	-0.04	0.02

Notes: Benefits are calendar-year payments to injured workers (cash benefits) and to providers of their medical care (medical benefits). Costs for employers who purchase workers' compensation insurance include calendar-year insurance premiums paid plus benefits paid by the employer to meet the annual deductible, if any. Costs for self-insuring employers are calendar-year benefits paid plus the administrative costs associated with providing those benefits.

Source: National Academy of Social Insurance estimates.

Background on Workers' Compensation

This section of the report, covering background material that is repeated annually, describes the history of workers' compensation insurance in the United States; the current structure of state workers' compensation programs; types of benefits paid; and how workers' compensation is financed. Reporting of detailed program data for 2015 begins on page 8 and a glossary of terms used in this report is found on page 55.[1]

History of Workers' Compensation

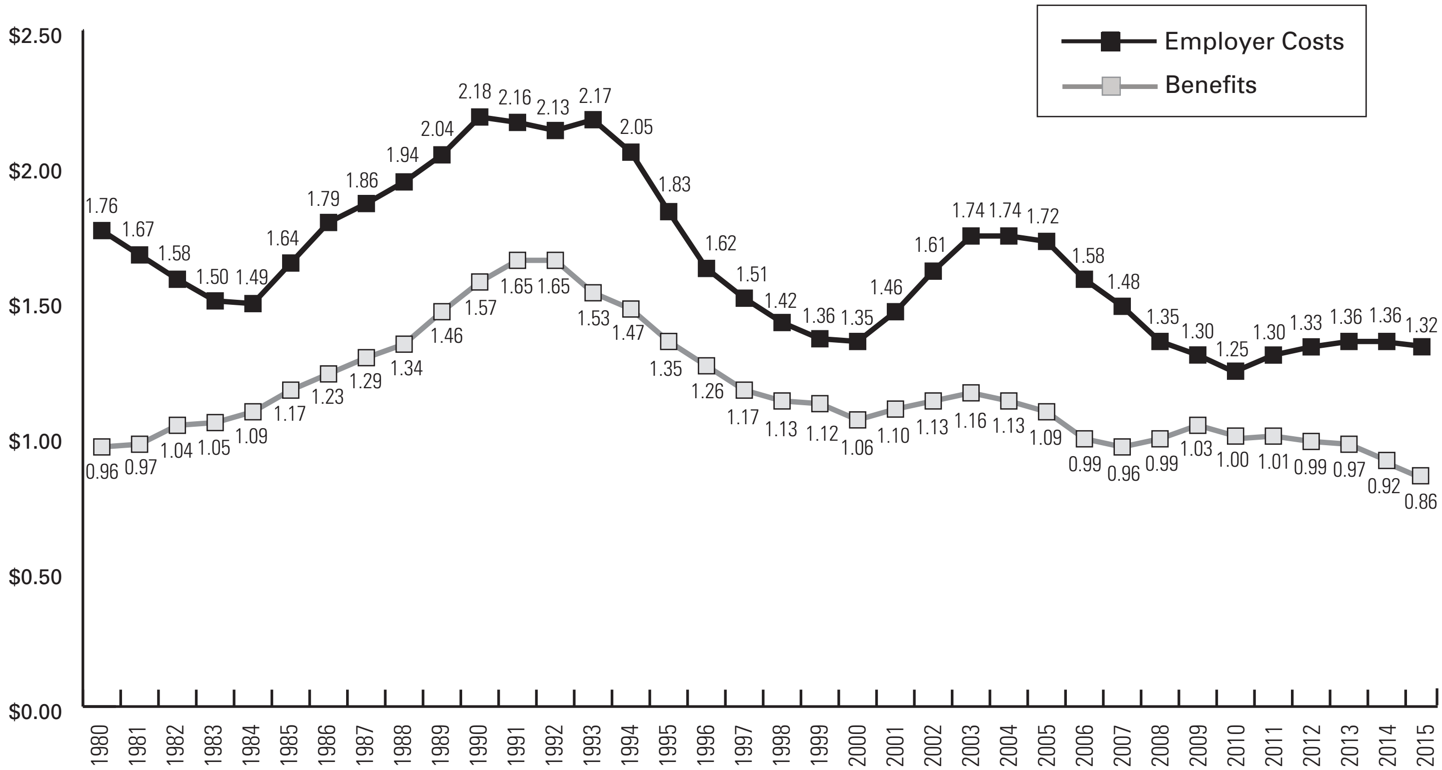
Workers' compensation was the first social insurance program adopted in most developed countries. Germany enacted the first modern workers' compensation laws, known as Sickness and Accident Laws, in 1884 under Chancellor Otto von Bismarck (Clayton, 2004). The next such laws were implemented in England in 1897.

The first workers' compensation law in the United States was enacted in 1908 to cover certain federal civilian workers. Most states adopted workers' compensation laws in a relatively short period between 1910 and 1920. The first state laws that

1 This report tracks benefits, costs, and coverage in the 50 states plus the District of Columbia. For brevity, we refer to the District of Columbia as a state.

Figure 1

Workers' Compensation Benefits and Costs Per $100 of Covered Wages, 1980-2015



Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care. Costs for employers who purchase workers' compensation insurance include calendar-year insurance premiums paid plus benefits paid by the employer to meet the annual deducible, if any. Costs for self-insuring employers are calendar-year benefits paid plus the administrative costs associated with providing those benefits.

Source: National Academy of Social Insurance estimates.

survived constitutional challenges were passed in 1911 by New Jersey and Wisconsin.[2] Of the contiguous 48 states, the last to pass a workers' compensation law was Mississippi in 1948. Today, workers' compensation coverage is more than 100 years old in 32 states (Fishback and Kantor, 1996).

Before workers' compensation laws were enacted, injured workers' primary legal remedy for a work-related injury was to file a tort suit claiming negligence on the part of their employer.[3] Employers could use three common law defenses to avoid liability: assumption of risk (showing the injury resulted from an ordinary hazard of employment of which the worker should have been aware);[4] fellow worker rule (showing the injury was caused by a fellow worker's negligence); or contributory negligence (showing the worker's own negligence contributed to

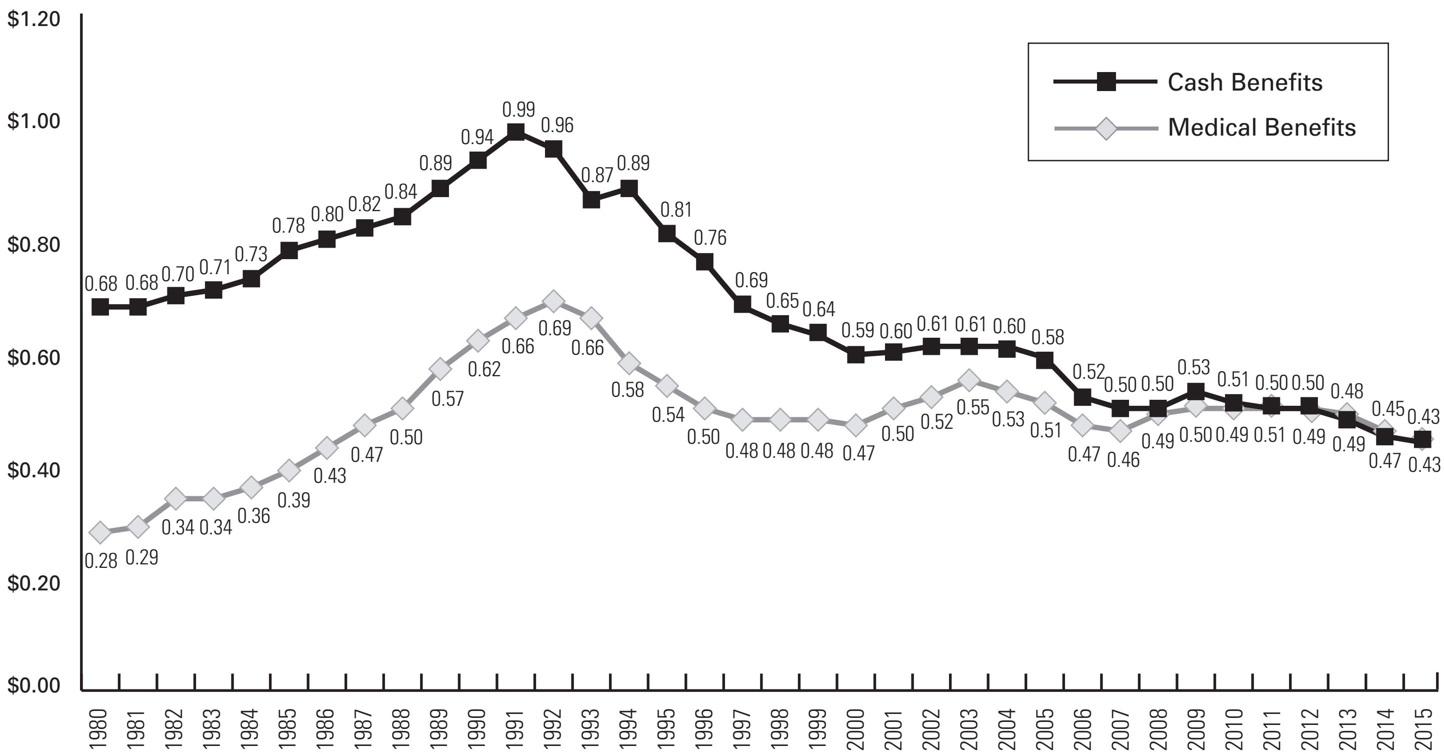
2 The New Jersey law was enacted on April 3, 1911, signed by Governor Woodrow Wilson on April 4, and took effect on July 4, 1911 (Calderone, 2011). The Wisconsin law was enacted and took effect on May 3, 1911 (Krohm, 2011).

3 Some injured workers received voluntary compensation from their employers or medical benefits paid through personal accident insurance, but many workers received no compensation at all (Fishback and Kantor, 1996).

4 A more complete definition is provided by Willborn, et al. (2012): "The assumption of risk doctrine barred recovery for the ordinary risks of employment; the extraordinary risks of employment, if the worker knew of them or might reasonably have been expected to know of them; and the risks arising from the carelessness, ignorance, or incompetency of fellow servants."

Figure 2

Workers' Compensation Medical and Cash Benefits Per $100 of Covered Wages, 1980-2015



Source: National Academy of Social Insurance estimates.

the injury, regardless of any fault of the employer). Given the available defenses, it was not surprising that employers often prevailed in court. Employers were, however, at risk for substantial and unpredictable losses if a worker's lawsuit was successful. Litigation also created friction between employers and workers so that both sides became increasingly dissatisfied with the status quo, setting the stage for reform.

Initial reforms came in the form of employer liability acts, which eliminated some of the employer's common law defenses. Nonetheless, employees still had the burden of proving negligence on the part of the employer, which remained a significant obstacle to recovery of damages (Burton and Mitchell, 2003).[5] Ultimately, both employers and employees favored workers' compensation legislation to ensure that workers who sustained occupational injuries or contracted occupational diseases received predictable and timely compensation. As a *quid pro quo*, workers' compensation became the "exclusive remedy" for occupational injuries and diseases, and an employer's liability was limited to the statutory benefits specified in a state workers' compensation act.[6]

The adoption of state workers' compensation programs has been called a significant event in the nation's economic, legal, and political history. Passage

5 As a result, the employers' liability approach was abandoned in all jurisdictions and industries except the railroads, where it still exists.

6 Under the exclusive remedy concept, the worker accepts workers' compensation as payment in full and gives up the right to sue. There are limited exceptions to the exclusive remedy concept in some states, such as when there is an intentional injury of the employee or when an employer violates a safety regulation. A suit is also possible if the employer is uninsured.

of the laws required prodigious efforts on the part of business and labor leaders in each state to reach agreements on the specifics of the laws. Essentially, business and labor reached a grand compromise: Injured workers gave up the right to sue their employers in return for guaranteed benefits. Employers agreed to pay compensation for covered injuries on a no-fault basis in return for statutory limits on coverage.

> *Each of the 50 states, and the District of Columbia, has its own workers' compensation program. Separate U.S. government programs cover federal civilian employees and workers in specific high-risk occupations.*

Today, each of the 50 states, the District of Columbia, and the U.S. territories has its own workers' compensation program. Separate U.S. government programs cover federal civilian employees, long shore and harbor workers, and specific high-risk workers (e.g., coal miners with black lung disease, energy employees exposed to certain materials such as beryllium, workers exposed to radiation, and veterans of military service). State workers' compensation programs vary in terms of who is allowed to provide insurance, which injuries or illnesses are compensable, and the level of benefits provided. However, there is consistency across states in central features of the programs:

- With the exception of Texas, workers' compensation insurance coverage is mandatory for private-sector employers in all states, with limited exemptions for small employers and for workers in specific classifications, such as agricultural or domestic employees.[7] Oklahoma implemented a law in 2014 that allowed employers to opt-out of a traditional workers' compensation plan by adopting an alternative benefit plan. This Opt-Out Act was in place in 2015, but the Supreme Court of the State of Oklahoma ruled that it was unconstitutional in September 2016.[8]

- Workers' compensation pays 100 percent of injury-related medical costs for injured workers and cash benefits for lost work time. Lost-time compensation may be subject to a waiting period (typically three to seven days) that may be waived retroactively if the disability involves hospitalization or a lengthy duration of work absence. Wage-replacement rates vary by state but are, on average, about two-thirds of a worker's pre-injury gross wage. Lost-time compensation is tax-exempt and typically restricted by minimums and maximums established by state law.

- Workers' compensation is financed exclusively by employers except in three states where workers pay part of the cost of workers' compensation benefits and services through direct payroll deductions or charges.[9] Employers purchase workers' compensation insurance from private insurers or a state insurance fund, and many large employers self-insure.[10]

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7 In addition, many states allow specific classes of employers to voluntarily purchase workers' compensation coverage or to opt-out of statutory coverage, e.g., independent contractors, corporate officers, and local governments.

8 Oklahoma passed sweeping workers' compensation statutory amendments in 2013 when Senate Bill 1062 was signed into law. One of the key provisions of the bill called the Oklahoma Employee Injury Benefit Act (also known as the "Opt-Out Act"), became effective February 1, 2014 and allowed employers to provide insurance for injured workers under alternative benefit systems while maintaining their immunity from tort litigation by injured workers. The Oklahoma Workers' Compensation Commission reviewed the Opt-Out Act in *Vasquez v. Dillards* and found that the Act was unconstitutional. The ruling was appealed to the Oklahoma State Supreme Court which, in September 2016, decided 7-2 that the Opt-Out Act was unconstitutional (*Vasquez v. Dillard's, Inc.* 381 P. 3d 768, 2016). The OK Supreme Court, in its decision, wrote: "The core provision of the Opt Out Act, 85A O.S. Supp.2015 203, creates impermissible, unequal, disparate treatment of a select group of injured workers. Therefore, we hold that the Oklahoma Employee Benefit Injury Act, 85A O.S. 2014 201-213, is an unconstitutional special law under the Oklahoma Constitution."

9 In Washington, workers pay part of workers' compensation premium costs through payroll deductions (See page 41 and footnote to Table 14.) Oregon has special funds for some workers' compensation benefits that are financed in part by workers. New Mexico applies a per capita assessment based on employment on the last day of the quarter (currently $2.30 for employers and $2.00 for workers).

10 Some economists argue that workers pay a substantial portion of program costs indirectly in the form of lower wages (Leigh, et al. 2000).

Workers' Compensation Benefits

There are three basic types of workers' compensation claims through which injured workers or their medical providers may collect benefits: (1) medical-only; (2) temporary disability; and (3) permanent disability. The type of claim is determined by the severity of injury and whether or not the claim involves an injury-related work absence. Medical-only claims are the most common, but permanent disability claims impose the greatest costs.

Medical-only claims. Most workers' compensation claims do not involve lost work time in excess of the waiting period for cash benefits, so only medical benefits (and not cash benefits) are paid for these claims. "Medical-only" claims are the most common type of workers' compensation claim, but they represent only a small share of overall payments.

Temporary disability claims. When a work-related injury or illness *temporarily* prevents a worker from returning to their pre-injury job or to another job for the same employer, temporary total disability (TTD) benefits are paid in addition to medical benefits. Benefits replace approximately two-thirds of the worker's gross, pre-injury weekly earnings from the time-of-injury employer. If the worker had concurrent employment at the time of injury – an additional job (or jobs) with another employer – earnings from a second or other job may or may not be covered by temporary disability benefits.

Compensation for temporary disability is subject to maximum and minimum benefit levels that vary by state. As of January 2017, the maximum weekly TTD benefit ranged from a high of $1,688 in Iowa to a low of $478 in Mississippi. The minimum weekly benefit ranged from a high of $583 in North Dakota to a low of $20 in Arkansas, Florida, and Wisconsin.[11]

Most workers who receive TTD benefits fully recover and return to work, at which time benefits end. In many cases, however, employers make accommodations allowing injured workers to return to work before they are physically able to resume some or all of their former job duties. In these cases, workers may be assigned to restricted duties or shorter hours at lower wages. When injured workers return to work at less than their pre-injury wage, they may be eligible for *temporary partial disability* (TPD) benefits in some states.

Permanent disability claims. Some injured workers experience work-related injuries or illnesses that result in permanent impairments. These workers may be eligible for either permanent partial or permanent total disability benefits. Eligibility for permanent disability benefits is determined after the injured worker reaches maximum medical improvement (the point at which further medical intervention is no longer expected to improve functional capacity or provide further healing). Permanent total disability (PTD) benefits are paid to workers who are considered legally unable to work at all because of a work-related injury or illness.[12] Permanent partial disability (PPD) benefits are paid to workers whose injuries result in permanent impairments, even though they are able to work in some capacity.[13] The amount of permanent disability benefits may be determined by reduced earning capacity or by some measure of physical loss to the body.

States differ in their methods for determining whether a worker is entitled to permanent partial disability benefits, the extent of permanent disability, and the amount of benefits to be paid (Barth and Niss, 1999; Burton, 2008). A few states do not pay permanent disability benefits if the injured worker returns to work at a wage that is at least 80 percent of their pre-injury wage. Most states impose limits on either the maximum duration or maximum amount of permanent disability benefits.[14]

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11 Colorado, Iowa, Maine, Michigan, Montana, Nevada, Oklahoma, and Rhode Island do not have a specified minimum weekly TTD benefit. Details on benefit and coverage provisions of state laws are summarized in Appendix C.

12 Most states allow permanently and totally disabling conditions to be compensated for life if the condition leads to an inability to work. The requirements for a lifetime PTD benefit vary across jurisdictions, but many have a provision such that if an injured worker has a permanent disability rating over a specified threshold (for instance, more than 70 percent disabled), then the worker would qualify.

13 Some state workers' compensation laws automatically trigger permanent injury benefits after certain types of injuries.

14 Many PPD cases are settled with compromise and release agreements (see glossary for complete definition).

Fatalities. Workers' compensation programs also pay death benefits when a work-related illness or injury is fatal. The benefits typically include an amount for funeral and burial expenses, and cash benefits for the worker's family or dependents. For workers who die without dependents, benefits are limited to funeral and burial expenses.

Sources of Workers' Compensation Insurance

Non-federal employers pay for workers' compensation by purchasing insurance from a private insurance carrier, a state workers' compensation insurance plan (called a state fund), or by self-insuring. Federal workers' compensation insurance covers federal civilian employees and some private-sector workers employed in high-risk jobs or jobs related to national defense. Many states also have special workers' compensation funds to cover exceptional circumstances, such as a second work-related injury.

Private insurance. Workers' compensation policies provided by private insurers operate much like automobile or homeowners' insurance. Employers purchase insurance for a premium, which varies according to expected risk. There are two types of policies: (1) a policy that requires the insurer to pay all workers' compensation benefits; and (2) a policy with a deductible that requires the employer to reimburse the insurer for benefits paid up to the specified deductible amount. In return for accepting a policy with a deductible, the employer pays a lower premium. Deductibles may be written into an insurance policy on a per-injury basis, an aggregate-benefit basis, or a combination of both. Most states permit deductible policies in workers' compensation insurance, but state regulations vary regarding specifics (e.g. the maximum deductible allowed and the minimum premium volume eligible for a deductible policy).

State funds. In general, state funds are established by an act of state legislature and are designated as *exclusive* or *competitive*. An *exclusive* state fund is, by statute, the sole provider of workers' compensation insurance in a state (although some states with an exclusive state fund allow employers to self-insure). A *competitive* state fund competes with other workers' compensation insurers, making them sometimes difficult to differentiate from private insurers. For this report, we define an insurer as a *competitive* state fund if: (1) the insurer sells workers' compensation policies to private-sector employers in the voluntary insurance market; and (2) the insurer is exempt from federal taxes.[15] In 2015, four states had exclusive state funds and, according to our criteria, 17 states had competitive state funds.[16, 17] In addition, South Carolina had a nonexclusive state fund that provided workers' compensation insurance for state and local government employees but did not write policies for private employers. West Virginia discontinued its state fund in 2009, but was still paying benefits on some claims in 2015.

Self-insurance. Many large employers choose to self-insure for workers' compensation.[18] Where self-insurance is permitted, employers must apply for permission to self-insure from the regulatory authority, and demonstrate that they have the financial resources to cover their expected workers' compensation losses.[19] Some states permit groups of employers in the same industry or trade association to self-insure through group self-insurance.

Federal programs. The federal government covers workers' compensation benefits for federal civilian employees under the Federal Employees

15 All competitive state funds are exempt from federal taxes and six funds are also exempt from paying state premium taxes (Hawaii, Idaho, Louisiana, New Mexico, Texas, and Utah).

16 In 2015, North Dakota, Ohio, Washington, and Wyoming had exclusive state funds. Competitive state funds operated in California, Colorado, Hawaii, Idaho, Kentucky, Louisiana, Maryland, Missouri, Montana, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, and Utah.

17 Of the 17 competitive state funds, 12 operated as the "insurer of last resort," by selling policies to high-risk employers or any other employers that were unable to self-insure or purchase insurance from a private carrier.

18 Employers are allowed to self-insure in all states except for North Dakota and Wyoming, which both require all employers to obtain workers' compensation insurance from their exclusive state funds.

19 Nearly all self-insured firms are required to post some type of financial security (e.g. surety bonds) so that workers' compensation benefits are paid even if the employer experiences financial distress.

Employers purchase workers' compensation insurance for a premium, which varies according to expected risk. Most states allow insurers to offer policies with deductibles. In return for accepting a deductible, the employer pays a lower premium.

Compensation Act (FECA). Federal programs also cover some private-sector workers, including coal miners with black lung disease, employees of overseas contractors with the U.S. government, energy employees exposed to certain hazardous materials, workers engaged in manufacturing atomic bombs, and veterans injured while on active duty in the armed forces. The federal government also provides oversight for workers' covered under the Longshore and Harbor Workers' Compensation Act (LHWCA), but employers are still required to purchase private insurance or self-insure. (More details about these federal programs are provided in Appendix B.)

Guaranty funds. State *guaranty funds* ensure benefit payments to injured workers in cases where a private insurance carrier or self-insured employer becomes insolvent and does not have sufficient assets earmarked to pay outstanding benefits. The benefit payments and administrative costs of guaranty funds for private insurers are typically funded through assessments on workers' compensation insurers, and for self-insured employers through assessments on self-insuring employers.

Second injury funds reimburse employers or insurance carriers in cases where an employee with a pre-existing condition related to a work-related injury experiences another work-related injury or illness. The second injury fund pays any costs associated with the *prior condition* to reduce the cost burden on the current employer. The funds encourage employers to hire injured workers who want to return to work with residual impairments. The current employer is responsible only for workers' compensation benefits associated with the second injury or illness. Second injury funds are financed through assessments on employers, and, in a small number of jurisdictions, with general fund monies.[20]

Estimates for 2015

The workers' compensation system involves numerous stakeholder groups: employers, workers, insurers, attorneys, medical providers and state governments. The estimates presented in this report reflect the aggregate experience of only two groups: workers who rely on compensation for workplace injuries, and employers (including the federal government) who pay the bills. Estimates of benefits include payments made in 2015 for injuries and illnesses that occurred in 2015 and in prior years. Estimates of costs include premiums that incorporate projected future liabilities for injuries and illnesses that occur in 2015.

The Academy's measures are designed to provide the best available estimates of workers' compensation benefits, costs, and coverage, in a given year and over time. The estimates are *not designed* to assess the performance of the insurance industry or insurance markets. Other organizations analyze insurance

The Academy's measures are designed to provide the best available estimates of workers' compensation benefits, costs, and coverage at the state and national levels. The estimates are not designed to assess the performance of the insurance industry, nor are they designed to assess the performance of workers' compensation systems in achieving key objectives such as adequacy, affordability, efficiency, and equity.

20 See *Sources and Methods 2015* on the Academy's website for further details on special funds, second injury funds, and guaranty funds.

trends.[21] The estimates are also *not designed* to measure the performance of the workers' compensation system in achieving objectives such as: the prevention of occupational injuries and illnesses; the adequacy, equity, and affordability of compensation; and the impact of vocational rehabilitation or job accommodations in returning injured workers back to work.

Covered Employment and Wages

Methods for Estimating Covered Employment and Wages

There is no national system for counting the number of workers covered by workers' compensation, and covered workers and wages must be estimated. The Academy's methodology (for all states except Texas) is designed to count the number of workers who are legally required to be covered by workers' compensation under state laws. We use the number of workers and amount of wages covered by unemployment insurance (UI) in each state as the starting point for our estimates (Table 2).[22]

First, we estimate the number of workers that are not required to be covered by workers' compensation according to each state's statute (e.g. workers in small firms and agricultural workers). Second, we subtract the exempted workers from the UI base to determine the proportion of UI covered workers that are covered by workers' compensation. We then apply this proportion to the UI covered wages to obtain total workers' compensation covered wages. In Texas, where coverage is optional for employers, we apply the proportion of workers employed in firms that opt-in to workers' compensation to the UI base.

The Academy's methodology may undercount the actual number of workers (and wages) covered because some employers that are not required to carry workers' compensation do so anyway. For example, self-employed persons are not typically required to carry unemployment or workers' compensation insurance, but, in some states, self-employed persons may voluntarily elect to be covered. In states with exemptions for small firms, some small firms may voluntarily purchase workers' compensation insurance.

On the other hand, our methodology may overestimate the number of workers (and wages) covered because some employers are not in compliance with their state's workers' compensation or unemployment insurance laws. Every state has a program to detect and penalize employers who fail to report or cover employees under state labor statutes, but no definitive national study has documented the extent of noncompliance. (For more details on the Academy's methods for estimating coverage refer to Appendix A.)

National Estimates of Covered Employment and Wages

In 2015, workers' compensation covered an estimated 135.6 million U.S. workers, a 2.2 percent increase from the previous year (Table 2). The number of workers covered has increased steadily since 2011 as the economy has recovered from the Great Recession. Between 2011 and 2015, covered employment increased by 7.7 percent (8.0 percent for non-federal employees), with an average annual growth rate of 1.7 percent (Tables 2 and 3). In 2014, covered employment surpassed the pre-recession high of 131.7 million, posted in 2007. Overall, in 2015, workers' compensation coverage extended to an estimated 97.2 percent of jobs covered by unem-

Compared to the Great Recession low of 124.6 million covered workers in 2010, the number of covered workers was up 8.8 percent in 2015.

21 The National Council on Compensation Insurance and state rating bureaus, for example, assess insurance developments in the states and advise regulators and insurers on proposed insurance rates.

22 Unemployment Insurance (UI) programs, under the U.S. Department of Labor, provide cash benefits to workers who become unemployed (through no fault of their own) and meet specific eligibility requirements.

ployment insurance and 86.3 percent of all jobs held in the employed workforce.[23, 24]

While the number of workers covered by workers' compensation increased steadily between 2011 and 2015, covered wages increased at a faster rate. In 2015, covered wages broke the $7 trillion barrier for the first time, up 5.4 percent from 2014 (Table 2). Between 2011 and 2013, covered wages increased by 7.2 percent, whereas from 2013 to 2015, covered wages increased 10.7 percent (Table 4). Overall, between 2011 and 2015, covered wages increased by 18.7 percent for all workers and 19.2 percent for non-federal workers (Table 4).

In contrast to the overall trend, the number of workers covered by the federal workers' compensation program declined between 2011 and 2015. Federal covered employment fell by 3.2 percent between 2011 and 2013, and by 0.5 percent between 2013 and 2015, for an overall reduction of 3.7 percent over the time period. Federal covered wages also declined between 2011 and 2013 (-3.4%) but rebounded between 2013 and 2015 (6.3%), for an overall increase of 2.7 percent between 2011 and 2015.

State Estimates of Covered Employment and Wages

Between 2011 and 2015, every state except West Virginia experienced an increase in the number of workers covered by workers' compensation. North Dakota, which has experienced significant gains in employment in recent years, ranked first in the country, with a 15.8 percent increase in covered employment between 2011 and 2015. However, between 2013 and 2015, the growth in covered employment in the state was a relatively modest 2.4 percent. Other states with relatively large percentage increases in covered employment between 2011 and 2015 include: Utah (14.4%), Colorado (13.1%), and Florida (12.4%). Florida and Nevada had the highest growth rate (7.4%) in covered employment in recent years (2013-2015). States with the smallest increases in coverage (lagging behind in the recovery) were West Virginia (-0.7%), Maine (2.8%), and Pennsylvania (3.1%).

In 2015, covered wages broke the $7 trillion barrier for the first time, up 19.2 percent from 2011. In virtually every state, covered wages grew by more than 10 percent between 2011 and 2015.

All states experienced significant increases in covered wages between 2011 and 2015; in virtually every state, covered wages grew by more than 10 percent (Table 4). Covered wages increased most dramatically (41.2%) in North Dakota, along with the boom in energy production in the state. Sixteen states experienced growth rates in covered wages of over 20 percent in the time period, led by Utah (26.6%), California (25.9%), Colorado (25.3%), and Oregon (24.7%). At the other end of the spectrum, the smallest growth in covered wages occurred in West Virginia (6.1%), Wyoming (10.2%), Connecticut (10.7%), and New Mexico (11.1%).

23 The estimate of workers' compensation coverage as a percent of all jobs held in the employed workforce is lower than in previous reports, in part because our methods have been revised. Please see Appendix A for details.

24 According to unpublished estimates provided by the BLS, three percent of civilian workers represented by the BLS National Compensation Survey (NCS) were employed in establishments reporting zero annual workers' compensation costs in March 2016 (DOL, 2017). Civilian workers are those employed in private industry or state and local governments. Excluded from private industry are the self-employed and farm and private household workers. Federal government workers are excluded from the public sector. The private industry series and the state and local government series provide data for the two sectors separately. The Academy's estimate of legally required workers' compensation coverage is 97.2 percent of all UI covered workers in 2015, which is virtually identical to the workers' compensation coverage shown by the NCS.

Table 2

Workers' Compensation Covered Workers and Covered Wages, 1995-2015

Year	Covered Workers (thousands)	Covered Workers Percent Change	Covered Wages (billions)	Covered Wages Percent Change
1995	112,800	3.5	3,123	5.9
1996	114,773	1.7	3,337	6.9
1997	118,145	2.9	3,591	7.6
1998	121,485	2.8	3,885	8.2
1999	124,349	2.4	4,151	6.8
2000	127,141	2.2	4,495	8.3
2001	126,972	-0.1	4,604	2.4
2002	125,603	-1.1	4,615	0.2
2003	124,685	-0.7	4,717	2.2
2004	125,878	1.0	4,953	5.0
2005	128,158	1.8	5,213	5.3
2006	130,339	1.7	5,544	6.3
2007	131,734	1.1	5,857	5.6
2008	130,643	-0.8	5,954	1.7
2009	124,856	-4.4	5,675	-4.7
2010	124,638	-0.2	5,834	2.8
2011	125,876	1.0	6,058	3.8
2012	127,916	1.6	6,317	4.3
2013	130,149	1.7	6,491	2.8
2014	132,655	1.9	6,821	5.1
2015	135,593	2.2	7,188	5.4

Source: National Academy of Social Insurance estimates. See Appendix A for more details.

Table 3

Workers' Compensation Covered Workers, by State, 2011-2015

	Number of Workers (in thousands)					Percent Change			Ranking (1=largest percent increase, 2011-2015)
State	2011	2012	2013	2014	2015	2011-2013	2013-2015	2011-2015	
Alabama	1,666	1,680	1,700	1,719	1,747	2.0	2.8	4.9	37
Alaska	305	311	313	315	317	2.6	1.2	3.9	45
Arizona	2,326	2,374	2,431	2,485	2,555	4.5	5.1	9.8	13
Arkansas	1,086	1,093	1,094	1,105	1,125	0.7	2.8	3.6	46
California	14,310	14,674	15,139	15,567	16,051	5.8	6.0	12.2	5
Colorado	2,147	2,200	2,271	2,353	2,428	5.8	6.9	13.1	3
Connecticut	1,594	1,611	1,623	1,636	1,645	1.8	1.4	3.2	47
Delaware	396	398	407	417	427	2.7	5.0	7.8	19
District of Columbia	494	506	519	532	545	5.0	5.1	10.4	9
Florida	6,689	6,826	7,005	7,239	7,521	4.7	7.4	12.4	4
Georgia	3,594	3,644	3,722	3,834	3,954	3.6	6.2	10.0	11
Hawaii	558	569	583	593	605	4.6	3.7	8.5	17
Idaho	595	602	618	634	652	3.9	5.5	9.6	14
Illinois	5,467	5,537	5,590	5,669	5,754	2.2	2.9	5.2	32
Indiana	2,705	2,762	2,799	2,842	2,892	3.5	3.3	6.9	21
Iowa	1,419	1,443	1,464	1,483	1,497	3.2	2.2	5.5	30
Kansas	1,268	1,285	1,303	1,322	1,332	2.7	2.2	5.0	35
Kentucky	1,689	1,718	1,738	1,765	1,794	2.9	3.2	6.2	27
Louisiana	1,811	1,833	1,858	1,889	1,896	2.6	2.1	4.7	39
Maine	562	565	569	573	578	1.2	1.6	2.8	50
Maryland	2,330	2,363	2,384	2,406	2,443	2.3	2.5	4.9	38
Massachusetts	3,136	3,190	3,244	3,315	3,382	3.4	4.3	7.8	20
Michigan	3,692	3,774	3,860	3,931	4,003	4.6	3.7	8.4	18
Minnesota	2,553	2,597	2,643	2,682	2,727	3.6	3.2	6.8	24
Mississippi	989	997	1,007	1,017	1,031	1.8	2.3	4.2	41

Missouri	2,390	2,412	2,444	2,472	2,517	2.3	3.0	5.3	31
Montana	406	414	421	424	432	3.7	2.7	6.4	26
Nebraska	874	892	905	918	931	3.5	2.9	6.5	25
Nevada	1,095	1,112	1,140	1,182	1,224	4.1	7.4	11.8	6
New Hampshire	598	605	611	619	629	2.2	3.0	5.2	33
New Jersey	3,687	3,725	3,769	3,793	3,841	2.2	1.9	4.2	42
New Mexico	723	726	734	743	752	1.6	2.4	4.0	43
New York	8,308	8,428	8,549	8,710	8,878	2.9	3.8	6.9	23
North Carolina	3,663	3,729	3,800	3,884	3,988	3.7	5.0	8.9	16
North Dakota	366	399	414	432	424	13.0	2.4	15.8	1
Ohio	4,888	4,967	5,033	5,108	5,182	3.0	2.9	6.0	28
Oklahoma	1,364	1,390	1,421	1,446	1,458	4.2	2.6	6.9	22
Oregon	1,587	1,612	1,651	1,699	1,760	4.1	6.5	10.9	7
Pennsylvania	5,409	5,458	5,482	5,529	5,576	1.4	1.7	3.1	49
Rhode Island	437	441	445	452	459	1.8	3.0	4.9	36
South Carolina	1,677	1,704	1,742	1,792	1,846	3.9	5.9	10.1	10
South Dakota	378	385	389	395	400	2.9	2.8	5.7	29
Tennessee	2,433	2,482	2,526	2,582	2,652	3.8	5.0	9.0	15
Texas	8,334	8,477	8,678	8,903	9,238	4.1	6.5	10.9	8
Utah	1,137	1,177	1,216	1,253	1,301	6.9	7.0	14.4	2
Vermont	287	290	292	295	298	2.0	1.8	3.9	44
Virginia	3,324	3,361	3,386	3,402	3,477	1.9	2.7	4.6	40
Washington	2,773	2,822	2,889	2,972	3,049	4.2	5.5	9.9	12
West Virginia	662	671	665	662	658	0.4	-1.1	-0.7	51
Wisconsin	2,563	2,591	2,619	2,657	2,692	2.2	2.8	5.0	34
Wyoming	267	271	272	277	275	2.0	1.2	3.2	48
Total Non-Federal	123,012	125,095	127,379	129,925	132,837	3.5	4.3	8.0	
Federal Employees	2,864	2,820	2,771	2,730	2,756	-3.2	-0.5	-3.7	
TOTAL	125,876	127,916	130,149	132,655	135,593	3.4	4.2	7.7	

Source: National Academy of Social Insurance estimates. See Appendix A for more details.

Table 4

Workers' Compensation Covered Wages, by State, 2011-2015

	Covered Wages (in millions)					Percent Change			Ranking (1=largest percent increase, 2011-2015)
State	2011	2012	2013	2014	2015	2011-2013	2013-2015	2011-2015	
Alabama	$66,757	$68,790	$70,195	$72,652	$75,584	5.2	7.7	13.2	44
Alaska	14,677	15,367	15,822	16,499	17,008	7.8	7.5	15.9	35
Arizona	102,162	106,986	110,455	115,300	121,117	8.1	9.7	18.6	23
Arkansas	39,999	41,290	42,113	43,679	45,498	5.3	8.0	13.7	41
California	783,390	831,610	861,194	914,844	986,111	9.9	14.5	25.9	3
Colorado	104,124	110,073	114,426	122,942	130,421	9.9	14.0	25.3	4
Connecticut	97,281	99,935	101,064	104,441	107,652	3.9	6.5	10.7	49
Delaware	19,913	20,553	21,108	22,104	22,963	6.0	8.8	15.3	37
District of Columbia	36,805	38,542	39,756	41,850	44,245	8.0	11.3	20.2	15
Florida	279,826	291,607	302,557	321,055	344,378	8.1	13.8	23.1	8
Georgia	159,541	166,397	171,979	182,364	193,610	7.8	12.6	21.4	9
Hawaii	22,753	23,760	24,753	25,911	27,455	8.8	10.9	20.7	11
Idaho	20,868	21,463	22,475	23,768	25,003	7.7	11.2	19.8	17
Illinois	276,331	287,520	292,573	305,179	320,627	5.9	9.6	16.0	33
Indiana	107,900	113,017	115,798	120,024	126,044	7.3	8.8	16.8	27
Iowa	55,306	57,861	59,873	62,775	65,691	8.3	9.7	18.8	21
Kansas	50,106	52,268	53,607	55,958	57,907	7.0	8.0	15.6	36
Kentucky	66,097	68,692	70,161	73,262	77,074	6.1	9.9	16.6	29
Louisiana	76,078	78,716	81,171	84,992	86,388	6.7	6.4	13.6	42
Maine	20,959	21,426	21,976	22,783	23,734	4.9	8.0	13.2	43
Maryland	117,735	122,148	123,586	127,741	133,953	5.0	8.4	13.8	40
Massachusetts	186,326	193,733	200,044	211,967	225,054	7.4	12.5	20.8	10
Michigan	168,035	175,202	180,737	189,373	199,159	7.6	10.2	18.5	24
Minnesota	121,674	127,560	132,003	137,888	145,477	8.5	10.2	19.6	19
Mississippi	33,952	35,120	36,115	37,076	38,102	6.4	5.5	12.2	47
Missouri	97,934	101,946	104,208	108,378	113,603	6.4	9.0	16.0	34

Montana	14,169	15,008	15,492	16,159	16,969	9.3	9.5	19.8	18
Nebraska	33,085	34,687	35,821	37,450	39,527	8.3	10.3	19.5	20
Nevada	46,824	48,160	49,922	52,491	55,562	6.6	11.3	18.7	22
New Hampshire	28,106	29,005	29,762	31,506	32,889	5.9	10.5	17.0	26
New Jersey	211,059	217,495	223,167	229,085	238,725	5.7	7.0	13.1	45
New Mexico	28,023	28,688	29,179	30,319	31,145	4.1	6.7	11.1	48
New York	512,323	527,111	538,418	572,923	598,418	5.1	11.1	16.8	28
North Carolina	152,927	159,429	165,132	173,345	184,150	8.0	11.5	20.4	14
North Dakota	15,152	18,187	19,693	21,884	21,396	30.0	8.6	41.2	1
Ohio	207,775	217,773	222,973	232,924	242,199	7.3	8.6	16.6	31
Oklahoma	53,698	56,828	59,407	62,324	63,556	10.6	7.0	18.4	25
Oregon	67,704	70,707	73,690	78,393	84,407	8.8	14.5	24.7	5
Pennsylvania	252,338	262,207	267,201	277,707	289,036	5.9	8.2	14.5	38
Rhode Island	19,674	20,254	20,964	22,004	22,940	6.6	9.4	16.6	30
South Carolina	63,706	66,222	68,649	72,363	76,748	7.8	11.8	20.5	13
South Dakota	13,135	13,820	14,263	15,065	15,838	8.6	11.0	20.6	12
Tennessee	101,944	107,788	110,114	115,235	122,532	8.0	11.3	20.2	16
Texas	402,835	425,760	441,226	470,775	498,207	9.5	12.9	23.7	7
Utah	44,928	47,795	50,081	53,039	56,871	11.5	13.6	26.6	2
Vermont	11,391	11,739	12,133	12,533	12,983	6.5	7.0	14.0	39
Virginia	162,450	168,019	170,434	174,400	182,679	4.9	7.2	12.5	46
Washington	137,892	145,246	151,870	162,254	171,473	10.1	12.9	24.4	6
West Virginia	25,222	25,990	26,099	26,616	26,767	3.5	2.6	6.1	51
Wisconsin	104,571	108,289	111,582	115,945	121,600	6.7	9.0	16.3	32
Wyoming	11,465	11,964	12,143	12,781	12,632	5.9	4.0	10.2	50
Total Non-Federal	$5,848,919	$6,109,755	$6,289,167	$6,614,325	$6,973,106	7.5	10.9	19.2	
Federal Employees	$209,059	$206,823	$202,017	$206,877	$214,726	-3.4	6.3	2.7	
TOTAL	$6,057,978	$6,316,578	$6,491,185	$6,821,202	$7,187,832	7.2	10.7	18.7	

Source: National Academy of Social Insurance estimates.

Workers' Compensation Benefits Paid

Data Sources for Estimating Benefits Paid

This section describes the primary data sources that we used to estimate workers' compensation benefits nationally and for each state. A detailed, state-by-state explanation of how the benefit estimates in this report are produced is provided in *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2015*, and is available on the Academy's website (www.nasi.org).

The Academy's estimates of workers' compensation benefits paid are based on three main data sources: 1) data from the annual questionnaire distributed by the Academy to state agencies and from annual reports published by the states; 2) data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies; and 3) data from the National Council on Compensation Insurance (NCCI). Together, the data from state agencies, A.M. Best, and NCCI allow us to piece together estimates of workers' compensation benefits paid by private insurance carriers, state funds, and self-insured employers. The U.S. Department of Labor provides data on benefits paid through federal programs.

Academy questionnaire. The primary sources of data on benefits paid to injured workers are state agencies' responses to the Academy's questionnaire on workers' compensation benefits and costs. The questionnaire is distributed annually to state agencies overseeing workers' compensation programs. This year, we received responses from at least one particular agency or organization in 38 out of 51 jurisdictions. Among the states that did not directly reply to the survey, some published annual reports containing the workers' compensation information normally included in the questionnaire.

States vary in their ability to provide complete program data. The most common problems are in reporting amounts of benefits paid by employers under deductible policies and by self-insured employers. To estimate deductibles, we use two approaches based on whether states include deductibles in the amounts reported on the survey. If states do not report benefits paid by self-insured employers, the amounts are imputed.[25]

Benefits provided under group self-insurance are included with self-insured benefits in this report. Benefits paid through special funds, second injury funds, and guaranty funds are estimated from state survey data and from data on the websites of state workers' compensation agencies.

A.M. Best data. The A.M. Best data supplement the state survey data in cases where the survey data are incomplete, missing, or determined to be incorrect. The A.M. Best data used for this report show benefits paid in each state for 2011 through 2015 (A.M. Best, 2017). The data include information for all private carriers in every state and for 17 of the 23 state funds. The data do not include information about benefits paid by the other six state funds, by self-insured employers, by employers under deductible policies, or by special funds.[26]

NCCI data. The primary source of data on medical benefits is NCCI (2017). Where NCCI data are not available, estimates of medical benefits are based on reports from the states. NCCI also provides data on reimbursements paid through deductible policies and covered payroll amounts for workers covered by private insurers or a competitive state fund in one of the states that NCCI is licensed in.

National Estimates of Benefits Paid

Total benefits paid. Table 5 shows total workers' compensation benefits paid and benefits paid by each type of insurer, since 1995. In 2015, all workers' compensation insurers paid $61.9 billion in

25 We estimate self-insured benefits by either using historical data on self-insured benefits paid or by using current payroll and self-insured benefits paid in the jurisdictions where those amounts are available. See *Sources and Methods 2015* on the Academy's website for a detailed description of the methods used to estimate self-insured benefits and deductible payments.

26 A. M. Best does not provide data on the four exclusive state funds (Ohio, North Dakota, Washington, Wyoming), the state fund in South Carolina that only provides benefits to government workers, and the state fund in West Virginia that discontinued in 2009, but was still paying benefits on some claims in 2015.

Table 5

Workers' Compensation Benefits Paid by Type of Insurer, 1995-2015

	Private Insurers		State Funds		Federal Government		Self-Insured Employers		All Insurers			
Year	Total (millions)	% Share	Total (millions)	% Share	Total (thousands)	% Share	Total (millions)	% Share	Total Benefits (millions)	% Change from Prior Year	Total Medical (millions)	% Medical
1995	20,106	47.7	7,681	18.2	3,103	7.4	11,232	26.7	42,122	-3.1	16,733	39.7
1996	21,024	50.1	8,042	19.2	3,066	7.3	9,828	23.4	41,960	-0.4	16,739	39.9
1997	21,676	51.6	7,157	17.1	2,780	6.6	10,357	24.7	41,971	0.0	17,397	41.5
1998	23,579	53.6	7,187	16.3	2,868	6.5	10,354	23.5	43,987	4.8	18,622	42.3
1999	26,383	57.0	7,083	15.3	2,862	6.2	9,985	21.6	46,313	5.3	20,055	43.3
2000	26,874	56.3	7,388	15.5	2,957	6.2	10,481	22.0	47,699	3.0	20,933	43.9
2001	27,905	54.9	8,013	15.8	3,069	6.0	11,839	23.3	50,827	6.6	23,137	45.5
2002	28,085	53.7	9,139	17.5	3,154	6.0	11,920	22.8	52,297	2.9	24,203	46.3
2003	28,395	51.9	10,442	19.1	3,185	5.8	12,717	23.2	54,739	4.7	25,733	47.0
2004	28,632	51.0	11,146	19.9	3,256	5.8	13,115	23.4	56,149	2.6	26,079	46.4
2005	29,039	50.9	11,060	19.4	3,258	5.7	13,710	24.0	57,067	1.6	26,361	46.2
2006	27,946	50.9	10,555	19.2	3,270	6.0	13,125	23.9	54,896	-3.8	26,206	47.7
2007	29,410	52.2	10,153	18.0	3,340	5.9	13,482	23.9	56,385	2.7	27,105	48.1
2008	30,725	52.3	10,347	17.6	3,424	5.8	14,255	24.3	58,750	4.2	28,987	49.3
2009	30,909	52.9	9,997	17.1	3,543	6.1	13,987	23.9	58,435	-0.5	28,157	48.2
2010	31,090	53.2	9,809	16.8	3,672	6.3	13,894	23.8	58,465	0.1	28,715	49.1
2011	33,014	53.7	9,837	16.0	3,777	6.1	14,805	24.1	61,433	5.1	30,805	50.1
2012	33,650	54.0	9,929	15.9	3,776	6.1	14,903	23.9	62,257	1.3	31,073	49.9
2013	34,641	55.2	9,502	15.1	3,693	5.9	14,905	23.8	62,741	0.8	31,815	50.7
2014	34,467	55.0	9,228	14.7	3,681	5.9	15,275	24.4	62,652	-0.1	31,832	50.8
2015	33,991	55.0	9,021	14.6	3,706	6.0	15,139	24.5	61,857	-1.3	31,120	50.3

Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care, including benefits paid by employers through deductible policies. Federal benefits include benefits paid under the Federal Employees' Compensation Act and employer-financed benefits paid through the Federal Black Lung Disability Trust Fund. In years before 1997, federal benefits also include the part of the black lung program financed by federal funds. In 1997–2015, federal benefits include a portion of employer-financed benefits under the Longshore and Harbor Workers' Compensation Act. See Appendix B for more information about federal programs

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

benefits, a 1.3 percent decrease from the total paid in 2014. Private carriers were the largest single payer, followed by self-insured employers, state funds, and the federal government.

Workers' compensation insurers paid nearly $62 billion in benefits in 2015, a 1.3 percent decrease from 2014.

Benefits by type of insurer. Over the 20-year period shown in Table 5, private insurance carriers were the largest single payer in workers' compensation, accounting for 48 to 57 percent of all benefits paid. In 2015, private insurers paid $34 billion in benefits, representing 55 percent of the total.

Self-insured employers have consistently been the second largest payer of workers' compensation benefits, accounting for approximately one-fourth of total benefits paid in most years since 1995. In 2015, self-insured employers paid $15.1 billion in benefits, accounting for 24.5 percent of the total. While the proportion of benefits paid by self-insured employers has remained steady at approximately one-fourth of benefits, the proportion in 2015 is the highest since 1997 when it was 24.7 percent.

State funds are the third largest payer in workers' compensation, but their share of the market has declined since 2004. In 2015, state funds paid $9.0 billion in benefits, 14 percent of the total, compared to nearly 20 percent of total benefits paid in 2004. The decline in relative importance of state funds in recent years largely reflects the decline in coverage of the California State Fund (which accounted for 50 percent of the California's workers' compensation insurance market in 2004 but only 10 percent more recently) and, to a lesser extent, the dissolution of funds in West Virginia (in 2009) and Arizona (in 2012).

The federal government has always been a relatively small payer of workers' compensation benefits, because the number of workers covered under federal programs represents such a small fraction of total covered employment. In 2015, the federal government paid $3.7 billion in workers' compensation benefits, or 6.0 percent of total benefits paid.

Deductibles. Table 6 shows the estimated dollar amount of benefits that employers paid under deductible provisions since 1995. In 2015, employers paid nearly $10 billion in deductibles, or 16.2 percent of total benefits paid. Between 1995 and 2015, the share of benefits paid by employers under deductible provisions doubled (from 8% to 16%), reflecting the increasing popularity of deductibles as a means to reduce workers' compensation insurance premiums. The vast majority of benefits paid under deductible provisions are by employers covered through private insurers (96% of total deductibles paid in 2015), as opposed to deductibles paid by employers covered through a state fund (4% of total).

Employers who have policies with deductibles are, in effect, self-insured up to the amount of the deductible.[27] If we allocate the amount of benefits paid under deductibles to self-insurance (instead of to private carriers as in Table 5) we obtain a more complete picture of the share of the workers' compensation market for which employers are assuming primary financial risk. The result indicates that, in 2015, employers and private insurance carriers each accounted for about 40 percent of total benefits paid (Table 7, columns 3 and 9).[28] The remaining 20 percent of benefits were paid by state funds (14%) and the federal government (6%).

Private insurers and self-insured employers together accounted for 80 percent of total benefits paid in 2015.

27 Deductible policies may be written in a variety of ways and the maximum amount may represent a specified number of injuries and the corresponding benefits paid, or a specified amount of aggregate benefits paid.

28 The Academy estimates of employer costs do not include the costs borne by employers who pay injured workers full salary during periods of light duty or other post-injury job accommodation. Some of this voluntary payment is a loss to the employer because of the reduced productivity of the workers being accommodated.

Table 6

Workers' Compensation Employer-Paid Benefits Under Deductible Provisions, 1995-2015

Year	Deductibles (millions $) Total	Private Insured	State Fund Insured	Deductibles as a % of Total Benefits
1995	3,384	3,060	324	8.0
1996	3,716	3,470	246	8.9
1997	3,994	3,760	234	9.5
1998	4,644	4,399	245	10.6
1999	5,684	5,452	232	12.3
2000	6,201	5,931	270	13.0
2001	6,388	6,085	303	12.6
2002	6,922	6,511	411	13.2
2003	8,020	7,547	474	14.7
2004	7,645	7,134	510	13.6
2005	7,798	7,290	508	13.7
2006	7,575	7,052	524	13.8
2007	8,217	7,684	533	14.6
2008	8,603	8,095	508	14.6
2009	8,582	8,118	464	14.7
2010	8,904	8,466	438	15.2
2011	9,248	8,822	426	15.1
2012	9,740	9,295	445	15.6
2013	9,954	9,559	395	15.9
2014	10,047	9,673	375	16.0
2015	9,990	9,608	382	16.2

Notes: For states that provide information on deductible payments, we rely on the survey data alone, or together with data from AM Best, to estimate amounts paid for deductibles. For states that do not include deductibles in the survey, we rely on NCCI data on manual equivalent premiums together with data from AM Best to estimate deductible payments. (See the *Sources and Methods 2015* available at www.nasi.org for more details).

Source: National Academy of Social Insurance estimates.

State Estimates of Benefits Paid

Benefits by type of insurer. Table 8 shows the shares of workers' compensation benefits paid by each type of insurer in each state in 2015. The shares vary considerably across states because not all states have a state fund and, where state funds exist, their legal status varies.

In 2015, the share of benefits paid by *private carriers* was more than 85 percent in some jurisdictions with no state fund: South Dakota (96.6%), Wisconsin

Table 7

Percentage Distribution of Workers' Compensation Benefit Payments, by Type of Insurer: With and Without Deductibles, 1995-2015

		Percent of Total Benefits								
	Total Benefits	Private Insured			State Fund Insured					
Year	(millions)	*Total*	Employer Paid Deductibles	Insurer Paid after Deductibles	*Total*	Employer Paid Deductibles	Insurer Paid After Deductibles	Federal	Self-Insured	Total Employer Paid
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(2)+(5)+(8)
1995	42,122	47.7	7.3	40.5	18.2	0.8	17.5	7.4	26.7	34.7
1996	41,960	50.1	8.3	41.8	19.2	0.6	18.6	7.3	23.4	32.3
1997	41,971	51.6	9.0	42.7	17.1	0.6	16.5	6.6	24.7	34.2
1998	43,987	53.6	10.0	43.6	16.3	0.6	15.8	6.5	23.5	34.1
1999	46,313	57.0	11.8	45.2	15.3	0.5	14.8	6.2	21.6	33.8
2000	47,699	56.3	12.4	43.9	15.5	0.6	14.9	6.2	22.0	35.0
2001	50,827	54.9	12.0	42.9	15.8	0.6	15.2	6.0	23.3	35.9
2002	52,297	53.7	12.4	41.3	17.5	0.8	16.7	6.0	22.8	36.0
2003	54,739	51.9	13.8	38.1	19.1	0.9	18.2	5.8	23.2	37.9
2004	56,149	51.0	12.7	38.3	19.9	0.9	18.9	5.8	23.4	37.0
2005	57,067	50.9	12.8	38.1	19.4	0.9	18.5	5.7	24.0	37.7
2006	54,896	50.9	12.8	38.1	19.2	1.0	18.3	6.0	23.9	37.7
2007	56,385	52.2	13.6	38.5	18.0	0.9	17.1	5.9	23.9	38.5
2008	58,750	52.3	13.8	38.5	17.6	0.9	16.7	5.8	24.3	38.9
2009	58,435	52.9	13.9	39.0	17.1	0.8	16.3	6.1	23.9	38.6
2010	58,465	53.2	14.5	38.7	16.8	0.7	16.0	6.3	23.8	39.0
2011	61,433	53.7	14.4	39.4	16.0	0.7	15.3	6.1	24.1	39.2
2012	62,257	54.0	14.9	39.1	15.9	0.7	15.2	6.1	23.9	39.6
2013	62,741	55.2	15.2	40.0	15.1	0.6	14.5	5.9	23.8	39.6
2014	62,652	55.0	15.4	39.6	14.7	0.6	14.1	5.9	24.4	40.4
2015	61,857	55.0	15.5	39.4	14.6	0.6	14.0	6.0	24.5	40.6

Notes: Shaded columns sum to 100%. Total employer paid benefits include employer-paid deductibles under private carriers and state funds, as well as benefits paid by self-insured employers.

Source: National Academy of Social Insurance estimates based on Tables 5 and 6.

(88.6%), Indiana (88.3%), and Vermont (87.2%). In contrast, the share paid by private carriers was less than two percent in the four states with exclusive state funds: North Dakota (0.5%), Washington (0.6%), Ohio (1.1%), and Wyoming (1.9%).[29]

Among those states that allow employers to self-insure, the share of workers' compensation benefits paid by *self-insured employers* ranged from a high of 52.1 percent in Alabama to a low of 3.1 percent in Idaho. There are several explanations for the tremendous variation in take-up rates for self-insurance: 1) Large employers are more likely to self-insure, and some states (e.g., Michigan) have a disproportionate share of large employers relative to other states. 2) Financial incentives to self-insure vary across states because of differences in state workers' compensation statutes.[30] 3) Self-insurance and private insurance are substitutes, so the self-insured market share is, all else equal, inversely related to the premiums charged in the private insurance market. When workers' compensation premium rates are rising in a state, employers tend to shift to self-insurance. When premium rates are declining, employers tend to shift to private insurance. 4) Measurement error may account for some of the observed variation in the share of benefits paid by self-insured employers, because our methods for estimating benefits paid under self-insurance vary across states, depending on responses to the Academy's survey.

In 2015, 23 states paid some amount of workers' compensation benefits through a state fund. Among those states that operated an exclusive state fund, the share of benefits paid by the fund varied from nearly 100 percent in North Dakota (99.5%) and Wyoming (98.1%) (states that do not allow self-insurance), to approximately 80 percent in Ohio (80.7%) and Washington (78.2%). Among those states with competitive state funds, the share of benefits paid by the state fund ranged from a high of 63.1 percent in Idaho, to a low of 7.2 percent in Pennsylvania.

The relative importance of different workers' compensation payers varies widely across states. In Alabama, for example, private insurers accounted for 48% of total benefits paid in 2015; self-insured employers accounted for 52%. In Indiana, private insurers accounted for 88%, compared to 12% for self-insured employers. Neither state had a state fund in 2015.

State benefit trends. Table 9 shows total workers' compensation benefits paid in each state in the years 2011 to 2015. Total (non-federal) benefits increased 0.9 percent over the five years covered in the data. Benefits increased in 28 jurisdictions, with the largest percentage increases in North Dakota (43.2%), Hawaii (20.9%) and Massachusetts (12.6%). Benefits declined in the remaining 23 jurisdictions (including the District of Columbia), with the largest percentage decreases in West Virginia (-20.7%), Illinois (-19.3%), and Michigan (-17.1%).

The within-state totals of workers' compensation benefits paid vary from year to year for a number of reasons. Benefits change as within-state employment changes, although much of the impact occurs with a lag. Michigan, for example, experienced steadily declining employment from 1999 to 2010, whereas North Dakota has experienced two decades of sustained employment growth.

29 Private carrier workers' compensation benefit payments occur in states with exclusive state funds for a few possible reasons. First, some policies sold to employers provide multistate coverage whereas the exclusive state fund may be restricted to providing benefits only in the state where it operates. Second, the exclusive state fund might not be permitted to offer employers' liability coverage, federal LHWCA coverage, or excess coverage for authorized self-insurers.

30 Some states, for example, do not collect assessments for special workers' compensation funds from self-insured employers, thereby increasing the incentive to self-insure. Special funds include second injury funds, and funds that pay for certain types of claims, such as claims from commercial fishermen, coal workers with pneumoconiosis, and others. For a detailed list of the special funds included in this report, please refer to the *Sources and Methods* appendix.

Table 8

Workers' Compensation Benefits Paid, by Type of Insurer and State, 2015

State	Private Insured		State Fund Insured		Self-Insured[a]		Total Benefits Paid (thousands)[b]	Medical Benefits Paid (thousands)[c]	Percent Medical	Ranking (1=largest percent medical)
	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share				
Alabama	$296,148	47.9			$321,474	52.1	$617,622	$421,836	68.3	5
Alaska	163,053	71.5			64,981	28.5	228,034	159,624	70.0	3
Arizona	574,670	77.6			166,113	22.4	740,783	491,139	66.3	10
Arkansas	137,683	63.4			79,507	36.6	217,190	138,567	63.8	13
California	7,482,096	62.0	1,016,146	8.4	3,567,337	29.6	12,065,579	6,771,562	56.1	23
Colorado	257,995	30.9	400,246	47.9	177,025	21.2	835,265	470,254	56.3	22
Connecticut	645,879	71.1			262,190	28.9	908,069	408,631	45.0	44
Delaware	176,352	77.3			51,888	22.7	228,240	131,466	57.6	20
District of Columbia	85,891	71.5			34,263	28.5	120,154	43,976	36.6	47
Florida	2,152,528	70.5			898,862	29.5	3,051,390	2,090,202	68.5	4
Georgia	1,008,077	74.0			354,403	26.0	1,362,480	667,615	49.0	36
Hawaii	148,795	49.9	38,749	13.0	110,692	37.1	298,237	133,610	44.8	45
Idaho	88,672	33.8	165,801	63.1	8,201	3.1	262,674	169,950	64.7	11
Illinois	1,806,183	74.6			614,234	25.4	2,420,417	1,096,449	45.3	43
Indiana	501,109	88.3			66,427	11.7	567,536	398,410	70.2	2
Iowa	479,727	77.7			137,648	22.3	617,375	330,913	53.6	29
Kansas	258,243	71.4			103,315	28.6	361,558	220,912	61.1	17
Kentucky	355,916	52.0	121,738	17.8	206,768	30.2	684,422	379,854	55.5	25
Louisiana	453,023	59.9	98,138	13.0	204,553	27.1	755,714	419,421	55.5	25
Maine	157,759	67.9			74,705	32.1	232,464	111,350	47.9	37
Maryland	489,397	50.7	181,592	18.8	295,080	30.5	966,069	447,290	46.3	41
Massachusetts	819,854	72.6			309,539	27.4	1,129,393	385,695	34.2	49
Michigan	672,792	62.4			405,155	37.6	1,077,947	536,562	49.8	34
Minnesota	776,615	75.0			259,042	25.0	1,035,657	559,651	54.0	28
Mississippi	230,760	69.6			100,923	30.4	331,683	197,351	59.5	18
Missouri	530,322	59.7	126,836	14.3	230,846	26.0	888,004	498,170	56.1	24
Montana	84,034	33.2	128,634	50.8	40,349	15.9	253,017	169,268	66.9	9
Nebraska	242,872	79.1			64,162	20.9	307,034	194,966	63.5	14
Nevada	235,299	68.3			109,305	31.7	344,604	174,370	50.6	33
New Hampshire	156,567	70.5			65,497	29.5	222,064	143,231	64.5	12
New Jersey	1,788,715	78.3			496,664	21.7	2,285,378	1,184,157	51.8	32

New Mexico	184,923	60.8	23,084	7.6	96,071	31.6	304,077	173,932	57.2	21
New York	2,599,496	44.8	1,276,707	22.0	1,927,550	33.2	5,803,753	1,986,694	34.2	48
North Carolina	941,770	75.5			305,198	24.5	1,246,968	577,346	46.3	40
North Dakota[d]	971	0.5	179,430	99.5			180,401	99,034	54.9	27
Ohio[d]	21,116	1.1	1,557,501	80.7	350,645	18.2	1,929,262	765,852	39.7	46
Oklahoma	341,856	46.7	231,672	31.6	159,014	21.7	732,542	347,958	47.5	38
Oregon	192,399	30.4	323,167	51.1	116,342	18.4	631,907	338,070	53.5	30
Pennsylvania	2,111,596	71.1	214,216	7.2	645,832	21.7	2,971,644	1,390,699	46.8	39
Rhode Island	61,615	38.2	77,625	48.1	22,221	13.8	161,460	48,761	30.2	51
South Carolina[e]	611,603	68.8	66,321	7.5	211,504	23.8	889,428	407,358	45.8	42
South Dakota	102,983	96.6			3,611	3.4	106,594	71,418	67.0	7
Tennessee	568,047	82.6			119,548	17.4	687,595	431,122	62.7	15
Texas	827,836	53.3	422,399	27.2	303,262	19.5	1,553,497	905,689	58.3	19
Utah	98,199	35.1	131,701	47.0	50,225	17.9	280,124	190,484	68.0	6
Vermont	132,177	87.2			19,367	12.8	151,544	78,803	52.0	31
Virginia	720,096	76.9			216,226	23.1	936,322	581,456	62.1	16
Washington[d]	15,096	0.6	1,879,245	78.2	510,023	21.2	2,404,364	733,882	30.5	50
West Virginia[f]	162,786	39.2	184,814	44.5	67,358	16.2	414,958	204,574	49.3	35
Wisconsin	1,036,310	88.6			133,445	11.4	1,169,754	903,160	77.2	1
Wyoming[d]	3,359	1.9	175,086	98.1			178,444	119,383	66.9	8
Total Non-Federal	$33,991,257	58.5	$9,020,846	15.5	$15,138,592	26.0	$58,150,694	$29,902,133	51.4	
All Federal[g]							$3,705,848	$1,217,995	32.9	
Federal Employees[h]							$2,988,242	$1,041,353	34.8	
TOTAL							$61,856,542	$31,120,128	50.3	

Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care. Benefits paid under special funds, second injury funds and guaranty funds are prorated across private insured, state fund insured and self-insured employers.

a. Self-insured includes individual self-insured and group self-insured.

b. These data may not include benefits paid under second injury funds for some states and may, therefore, be an understatement of total benefits paid.

c. For further details see Sources and Methods 2015 available at www.nasi.org.

d. States with exclusive state funds (Ohio, North Dakota, Washington, and Wyoming) may have some amounts of benefits paid in the private insured category, because: (1) some employers doing business in these states may need to obtain coverage from private carriers under the US Longshore and Harbor Workers' Act; (2) some employers carry liability coverage which the state fund is not authorized to provide; and/or (3) some employers obtain excess compensation coverage from private carriers.

e. South Carolina's State Accident Fund is not a competitive state fund.

f. West Virginia completed the transition from monopolistic state fund to competitive insurance status on July 1, 2008.

g. Federal benefits include: those paid under the Federal Employees' Compensation Act for civilian employees; the portion of the Black Lung benefit program that is financed by employers; and a portion of benefits under the Longshore and Harbor Workers' Compensation Act that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix B for more information about federal programs.

h. Included in the Federal benefits total.

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

Table 9

Workers' Compensation Total Benefits Paid and Five-Year Percent Change, by State, 2011-2015

	Total Benefits (thousands)					Percent Change			Ranking
State	2011	2012	2013	2014	2015	2011-2013	2013-2015	2011-2015	(1=largest percent increase, 2011-2015)
Alabama	$616,260	$644,224	$639,549	$636,813	$617,622	3.8	-3.4	0.2	28
Alaska	240,482	247,862	253,297	233,962	228,034	5.3	-10.0	-5.2	37
Arizona	719,537	718,152	716,253	734,908	740,783	-0.5	3.4	3.0	21
Arkansas	218,670	229,180	240,676	228,195	217,190	10.1	-9.8	-0.7	29
California	10,850,879	11,535,904	12,113,656	12,097,277	12,065,579	11.6	-0.4	11.2	5
Colorado	761,760	845,654	813,193	788,559	835,265	6.8	2.7	9.6	10
Connecticut	892,920	914,723	955,329	909,138	908,069	7.0	-4.9	1.7	25
Delaware	220,830	216,588	240,313	249,385	228,240	8.8	-5.0	3.4	18
District of Columbia	110,316	115,743	130,968	118,249	120,154	18.7	-8.3	8.9	12
Florida	3,254,002	3,178,981	3,189,393	3,207,769	3,051,390	-2.0	-4.3	-6.2	38
Georgia	1,383,560	1,431,794	1,381,721	1,386,071	1,362,480	-0.1	-1.4	-1.5	31
Hawaii	246,780	248,433	260,352	270,720	298,237	5.5	14.6	20.9	2
Idaho	249,368	239,807	248,667	254,120	262,674	-0.3	5.6	5.3	15
Illinois	2,998,181	2,666,873	2,632,204	2,741,604	2,420,417	-12.2	-8.0	-19.3	50
Indiana	627,737	620,780	643,068	590,031	567,536	2.4	-11.7	-9.6	42
Iowa	615,544	630,303	627,280	643,701	617,375	1.9	-1.6	0.3	27
Kansas	435,145	426,096	377,452	376,158	361,558	-13.3	-4.2	-16.9	48
Kentucky	671,282	667,084	668,956	649,182	684,422	-0.3	2.3	2.0	24
Louisiana	833,632	810,539	808,073	789,789	755,714	-3.1	-6.5	-9.3	41
Maine	252,726	250,479	253,139	252,084	232,464	0.2	-8.2	-8.0	40
Maryland	1,009,026	993,842	969,103	980,011	966,069	-4.0	-0.3	-4.3	35
Massachusetts	1,003,138	982,005	1,070,458	1,150,958	1,129,393	6.7	5.5	12.6	3
Michigan	1,301,061	1,189,483	1,246,512	1,108,978	1,077,947	-4.2	-13.5	-17.1	49
Minnesota	1,011,890	1,042,478	1,064,684	1,079,263	1,035,657	5.2	-2.7	2.3	23
Mississippi	334,430	336,208	332,790	336,689	331,683	-0.5	-0.3	-0.8	30
Missouri	807,294	833,119	832,469	848,867	888,004	3.1	6.7	10.0	9
Montana	251,981	250,090	248,039	245,858	253,017	-1.6	2.0	0.4	26

Nebraska	319,228	303,014	299,774	321,449	307,034	-6.1	2.4	-3.8	33
Nevada	392,862	374,209	361,651	355,323	344,604	-7.9	-4.7	-12.3	45
New Hampshire	231,835	230,831	225,320	212,002	222,064	-2.8	-1.4	-4.2	34
New Jersey	2,201,474	2,246,386	2,301,663	2,348,949	2,285,378	4.6	-0.7	3.8	16
New Mexico	275,783	306,304	298,690	299,359	304,077	8.3	1.8	10.3	7
New York	5,272,629	5,506,370	5,522,078	5,692,894	5,803,753	4.7	5.1	10.1	8
North Carolina	1,421,576	1,434,643	1,410,746	1,286,647	1,246,968	-0.8	-11.6	-12.3	44
North Dakota	125,960	151,034	182,405	192,237	180,401	44.8	-1.1	43.2	1
Ohio	2,203,962	2,196,508	2,083,101	2,039,406	1,929,262	-5.5	-7.4	-12.5	46
Oklahoma	839,922	879,695	842,466	759,385	732,542	0.3	-13.0	-12.8	47
Oregon	683,452	663,181	668,686	655,971	631,907	-2.2	-5.5	-7.5	39
Pennsylvania	2,895,338	2,910,221	2,974,135	2,997,930	2,971,644	2.7	-0.1	2.6	22
Rhode Island	169,754	178,681	170,136	164,983	161,460	0.2	-5.1	-4.9	36
South Carolina	860,818	866,545	885,307	895,401	889,428	2.8	0.5	3.3	19
South Dakota	95,373	92,251	99,084	97,595	106,594	3.9	7.6	11.8	4
Tennessee	771,006	790,158	754,091	698,448	687,595	-2.2	-8.8	-10.8	43
Texas	1,583,205	1,654,624	1,564,956	1,503,302	1,553,497	-1.2	-0.7	-1.9	32
Utah	271,124	283,714	270,444	260,024	280,124	-0.3	3.6	3.3	20
Vermont	137,359	146,149	151,088	150,844	151,544	10.0	0.3	10.3	6
Virginia	882,193	926,568	898,149	929,225	936,322	1.8	4.3	6.1	14
Washington	2,316,713	2,311,299	2,331,783	2,392,919	2,404,364	0.7	3.1	3.8	17
West Virginia	523,130	476,927	435,709	419,656	414,958	-16.7	-4.8	-20.7	51
Wisconsin	1,099,950	1,123,861	1,166,872	1,204,002	1,169,754	6.1	0.2	6.3	13
Wyoming	162,960	162,304	191,825	184,398	178,444	17.7	-7.0	9.5	11
Total Non-Federal	$57,656,037	$58,481,901	$59,047,753	$58,970,688	$58,150,694	2.4	-1.5	0.9	
All Federal[a]	$3,776,993	$3,775,592	$3,693,254	$3,681,205	$3,705,848	-2.2	0.3	-1.9	
Federal Employees[b]	$2,994,122	$3,006,009	$2,948,132	$2,940,811	$2,988,242	-1.5	1.4	-0.2	
TOTAL	$61,433,030	$62,257,493	$62,741,006	$62,651,893	$61,856,542	2.1	-1.4	0.7	

Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care. Data sources for each state are described in detail in *Sources and Methods 2015* available at www.nasi.org.

a. Includes federal benefits as described in Table 8.

b. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data from state agencies, A.M. Best, National Association of Insurance Commissioners, the U.S. Department of Labor, and the Social Security Administration.

Benefits are also affected by modifications to a state's legal system for processing claims, such as changes in statutory rules, legal decisions, administrative processes, or reporting requirements. West Virginia, for example, changed its compensability rules and definitions of permanent disability in 2005. A number of other states adopted medical fee schedules over the primary time period of this study (2011-2015). For example, Illinois implemented a revised fee schedule in 2011 that reduced payments to medical providers by 30 percent. Other states that adopted new workers' compensation legislation during the study period include California, Kansas, Montana, Oklahoma, and Tennessee.

Additional explanatory factors include changes in the number of work-related injuries and illnesses, fluctuations in wage rates, changes in the mix of occupations/industries, changes in the costs and effectiveness of medical care, differences in the ways stakeholders interact within the system over time (e.g., if employees have the initial choice of physician), return to work and vocational rehabilitation efforts, and changes to coverage requirements (e.g. special exclusions for small employers or agricultural employers).

The state with the largest percentage increases in benefits in recent years (2013-2015) was Hawaii (14.9%). During this period, employment in the state increased by 8 percent, while the unemployment rate fell by 4 percentage points. The increase in benefits in Hawaii may largely reflect the increase in number of workers (and, therefore, an increase in work-related injuries).

Table 10 shows trends in *medical benefits* in each state between 2011 and 2015. Across all non-federal jurisdictions, medical benefits increased by 0.7 percent. The aggregate amount of medical benefits paid actually decreased by 2.3 percent from 2013 to 2015, after a 3.1 percent increase from 2011 to 2013. The jurisdictions with the largest percentage increases in medical benefits across the five years reported in the study were: North Dakota (32.6%), Hawaii (20.6%), Wisconsin (17.2%), and the District of Columbia (16.6%). The states with the largest percentage decreases in medical benefits were Illinois (-23.3%), Ohio (-19.0%), West Virginia (-17.5%), Rhode Island (-14.3%), and Indiana (-13.3%). Overall, 24 jurisdictions experienced a decline in medical benefits between 2011 and 2015.

Table 11 shows trends in *cash benefits* in each state between 2011 and 2015. Nationally, total non-federal cash benefits increased by 1.0 percent over the five years reported in the study. Across states, however, the change in cash benefits ranged from an increase of 58.7 percent in North Dakota to a decrease of 32.1 percent in Michigan. Along with North Dakota, seven other states experienced double-digit percentage increases in cash benefits between 2011 and 2015. The largest increases were in: Hawaii (21.1%), Missouri (18.4%), and California (16.3%). Along with Michigan, 12 other states experienced double-digit decreases in cash benefits between 2011 and 2015. The largest decreases were in Kansas (-26.4%), West Virginia (-23.5%), and Wisconsin (-19.0%).

Nationally, total (non-federal) workers' compensation benefits increased 0.9 percent between 2011 and 2015. Medical benefits increased 0.7 percent and cash benefits increased 1.0 percent. However, many states experienced double-digit percentage increases or decreases in benefits paid.

Benefits Per $100 Covered Payroll

Much of the interstate variation in benefit payments described above can be attributed to different trends in employment and wages across states, rather than to structural differences in state workers' compensation systems. To control for differential changes in employment and wages over the time period we study, we construct a standardized measure of benefits (benefits per $100 covered wages). The standardized measure of benefits captures interstate differences in: (1) the incidence, nature, and severity of work-related injuries and illnesses; (2) the quantity, prices, and effectiveness of medical services provided to injured workers; (3) the dollar value of cash benefits (driven by factors such as the average weekly wage, the benefit replacement rate, maximum and minimum weekly benefits, the waiting period and retroactive period, and the maximum allowable duration of benefits); and (4) public and private investments to reduce durations of work absence, as well as vocational rehabilitation efforts to reduce the functional impairment associated with work-related injuries.

Workers' compensation benefits per $100 covered payroll reached a 25-year low in 2015, with 48 jurisdictions experiencing a decrease in standardized benefits between 2011 and 2015.

The reader is cautioned that the data on standardized benefits (benefits paid per $100 covered payroll) *do not* provide meaningful comparisons of the performance of state workers' compensation systems. For example, standardized benefits do not indicate the extent to which cash benefits compensate workers for their losses due to injury (i.e. benefit adequacy). Standardized benefits could be high or low in a given state for a number of reasons completely unrelated to the adequacy of benefits injured workers receive.[31] For example, if wage rates (and, therefore, payrolls) are relatively low, all else equal, standardized benefits will be higher. If a state has a disproportionate share of risky occupations (e.g., mining), all else equal, standardized benefits will tend to be higher.[32]

Table 12 shows benefits paid per $100 of covered wages, by state, from 2011 through 2015. Nationwide, total non-federal benefits paid were $0.83 per $100 covered wages in 2015, down from $0.99 in 2011. Benefits per $100 covered wages decreased by $0.05 between 2011 and 2013, and by $0.11 between 2013 and 2015. As shown in Figure 1, standardized benefits reached a 25-year low in 2015.

Between 2011 and 2015, benefits per $100 covered wages declined in every state, except North Dakota ($0.01 increase), Hawaii ($0.01), and New Mexico ($0.00). The largest decreases in standardized benefits occurred in West Virginia (-$0.52), Oklahoma (-$0.41), and Illinois (-$0.33). All three states implemented significant changes in their workers' compensation systems during this period.

State outliers. Between 2011 and 2015, the four states experiencing the largest percent increases in total workers' compensation benefits paid were: North Dakota (43.2%), Hawaii (20.9%), Massachusetts (12.6%), and South Dakota (11.8%). In each case, the state experienced little or no change in benefits per $100 covered wages, suggesting that benefits increased primarily because employment and/or wages increased.

The five states experiencing the largest percent *decreases* in total workers' compensation benefits paid over the five years reported in the study were: West Virginia (-20.7%), Illinois (-19.3%), Michigan (-17.1%), Kansas (-16.9%), and Oklahoma (-12.8%). In each case, the state also experienced a large decrease in benefits per $100 covered wages, suggesting that the decrease in benefits paid is explained by factors other than changes in employment and wages. In West Virginia there were large percentage decreases in both medical and cash benefits, which can likely be attributed to the dissolution of the exclusive state fund and significant changes in eligibility and duration rules governing indemnity benefits. In Illinois, the percentage decrease in medical benefits was 50 percent greater than the decrease in cash benefits (-23.3% vs. -15.6%). Hence, the large decrease in total benefits paid is most likely attributed to a number of changes implemented in 2011 that regulated the medical delivery system,

31 To provide meaningful comparisons of benefit adequacy, a study should compare the benefits that injured workers actually receive to the wages they lose because of their occupational injuries or diseases. Such wage-loss studies have been conducted in several states (e.g., California, New Mexico, Oregon, Washington, Wisconsin), but the data for estimating wage losses are not available for most states. Please refer to Savych and Hunt (2015), Seabury et al. (2014), Hunt and Dillender (2014), Boden et al. (2005), and Hunt (2004) for a review of studies evaluating benefit adequacy.

32 Sometimes the benefit maximum is less likely to be binding when wages are lower. However, benefit maximums are generally tied to the state average wage and are, therefore, lower when wages are lower.

Table 10

Workers' Compensation Medical Benefits Paid and Five-Year Percent Change, by State, 2011-2015

	Medical Benefits (thousands)					Percent Change			Ranking (1=largest percent increase, 2011-2015)
State	2011	2012	2013	2014	2015	2011-2013	2013-2015	2011-2015	
Alabama	$417,208	$434,851	$440,009	$437,490	$421,836	5.5	-4.1	1.1	24
Alaska	157,035	167,802	177,814	165,879	159,624	13.2	-10.2	1.6	23
Arizona	456,906	471,826	472,010	487,244	491,139	3.3	4.1	7.5	14
Arkansas	140,168	150,342	158,605	149,696	138,567	13.2	-12.6	-1.1	30
California	6,297,975	6,656,307	7,031,719	6,984,914	6,771,562	11.7	-3.7	7.5	13
Colorado	427,347	481,177	474,091	451,056	470,254	10.9	-0.8	10.0	9
Connecticut	416,101	424,431	432,764	429,113	408,631	4.0	-5.6	-1.8	33
Delaware	130,731	130,169	142,986	142,399	131,466	9.4	-8.1	0.6	25
District of Columbia	37,728	40,047	47,934	40,796	43,976	27.1	-8.3	16.6	4
Florida	2,128,117	2,104,485	2,120,946	2,168,452	2,090,202	-0.3	-1.4	-1.8	32
Georgia	697,314	724,488	699,151	686,105	667,615	0.3	-4.5	-4.3	36
Hawaii	110,804	108,069	111,431	121,553	133,610	0.6	19.9	20.6	2
Idaho	159,845	155,635	161,385	161,366	169,950	1.0	5.3	6.3	18
Illinois	1,430,132	1,170,757	1,184,492	1,236,463	1,096,449	-17.2	-7.4	-23.3	51
Indiana	459,503	455,652	471,369	432,493	398,410	2.6	-15.5	-13.3	47
Iowa	329,316	355,491	336,849	337,943	330,913	2.3	-1.8	0.5	27
Kansas	244,116	249,266	223,829	232,842	220,912	-8.3	-1.3	-9.5	44
Kentucky	377,932	370,899	365,919	360,945	379,854	-3.2	3.8	0.5	26
Louisiana	442,659	427,154	434,743	426,486	419,421	-1.8	-3.5	-5.2	37
Maine	123,583	116,723	121,507	119,992	111,350	-1.7	-8.4	-9.9	45
Maryland	466,170	451,204	452,571	457,665	447,290	-2.9	-1.2	-4.1	35
Massachusetts	344,568	342,918	359,121	387,721	385,695	4.2	7.4	11.9	6
Michigan	503,694	422,455	531,556	507,046	536,562	5.5	0.9	6.5	17
Minnesota	547,632	566,776	590,273	596,802	559,651	7.8	-5.2	2.2	22
Mississippi	199,989	189,958	198,343	198,983	197,351	-0.8	-0.5	-1.3	31
Missouri	477,918	477,377	471,177	483,005	498,170	-1.4	5.7	4.2	21
Montana	157,740	157,057	158,745	160,053	169,268	0.6	6.6	7.3	15

Nebraska	196,964	186,354	184,661	200,263	194,966	-6.2	5.6	-1.0	29
Nevada	185,431	183,363	182,272	176,596	174,370	-1.7	-4.3	-6.0	38
New Hampshire	153,939	153,272	146,683	141,830	143,231	-4.7	-2.4	-7.0	41
New Jersey	1,105,047	1,152,656	1,172,485	1,215,862	1,184,157	6.1	1.0	7.2	16
New Mexico	159,403	179,188	177,123	162,851	173,932	11.1	-1.8	9.1	11
New York	1,890,663	1,882,502	1,838,405	1,979,838	1,986,694	-2.8	8.1	5.1	20
North Carolina	641,131	657,067	647,532	597,004	577,346	1.0	-10.8	-9.9	46
North Dakota	74,691	90,894	109,455	110,983	99,034	46.5	-9.5	32.6	1
Ohio	945,046	885,240	879,037	807,720	765,852	-7.0	-12.9	-19.0	50
Oklahoma	372,926	387,945	379,952	353,114	347,958	1.9	-8.4	-6.7	40
Oregon	367,014	365,413	353,066	350,944	338,070	-3.8	-4.2	-7.9	43
Pennsylvania	1,320,645	1,345,960	1,411,789	1,437,654	1,390,699	6.9	-1.5	5.3	19
Rhode Island	56,868	56,463	54,103	57,579	48,761	-4.9	-9.9	-14.3	48
South Carolina	376,177	378,680	409,897	407,407	407,358	9.0	-0.6	8.3	12
South Dakota	63,041	63,561	67,080	66,462	71,418	6.4	6.5	13.3	5
Tennessee	460,291	465,403	452,455	426,053	431,122	-1.7	-4.7	-6.3	39
Texas	978,420	1,017,594	965,578	906,491	905,689	-1.3	-6.2	-7.4	42
Utah	191,956	200,018	189,041	183,057	190,484	-1.5	0.8	-0.8	28
Vermont	70,740	73,075	74,033	78,590	78,803	4.7	6.4	11.4	7
Virginia	527,551	559,647	546,075	573,332	581,456	3.5	6.5	10.2	8
Washington	750,282	742,658	741,875	762,486	733,882	-1.1	-1.1	-2.2	34
West Virginia	247,964	240,371	227,876	205,631	204,574	-8.1	-10.2	-17.5	49
Wisconsin	770,936	781,897	899,879	934,385	903,160	16.7	0.4	17.2	3
Wyoming	108,707	110,008	132,291	130,452	119,383	21.7	-9.8	9.8	10
Total Non-Federal Medical Benefits	$29,698,063	$29,962,545	$30,613,986	$30,631,090	$29,902,133	3.1	-2.3	0.7	
All Federal[a]	$1,106,723	$1,110,074	$1,110,860	$1,200,519	$1,217,995	0.4	9.6	10.1	
Federal Employees[b]	$917,095	$924,622	$923,564	$1,011,450	$1,041,353	0.7	12.8	13.5	
TOTAL	$30,804,786	$31,072,619	$31,724,845	$31,831,608	$31,120,128	3.0	-1.9	1.0	

Notes: Benefits are payments in the calendar year to injured workers and to providers of their medical care. Data source for each state is described in detail in *Sources and Methods 2015* available at www.nasi.org.

a. Includes federal (medical) benefits as described in Table 8.

b. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data from state agencies, A.M. Best, National Association of Insurance Commissioners (NAIC), the U.S. Department of Labor, and the Social Security Administration.

Table 11

Workers' Compensation Cash Benefits Paid and Five-Year Percent Change, by State, 2011-2015

	Cash Benefits (thousands)					Percent Change			Ranking (1=largest percent increase, 2011-2015)
State	2011	2012	2013	2014	2015	2011-2013	2013-2015	2011-2015	
Alabama	$199,052	$209,373	$199,539	$199,322	$195,786	0.2	-1.9	-1.6	32
Alaska	83,447	80,059	75,482	68,083	68,410	-9.5	-9.4	-18.0	47
Arizona	262,631	246,326	244,242	247,664	249,644	-7.0	2.2	-4.9	34
Arkansas	78,503	78,838	82,070	78,499	78,623	4.5	-4.2	0.2	26
California	4,552,904	4,879,596	5,081,937	5,112,364	5,294,017	11.6	4.2	16.3	4
Colorado	334,413	364,477	339,101	337,503	365,011	1.4	7.6	9.1	10
Connecticut	476,819	490,291	522,565	480,025	499,438	9.6	-4.4	4.7	17
Delaware	90,099	86,418	97,327	106,986	96,774	8.0	-0.6	7.4	13
District of Columbia	72,588	75,696	83,034	77,453	76,178	14.4	-8.3	4.9	16
Florida	1,125,885	1,074,495	1,068,447	1,039,317	961,188	-5.1	-10.0	-14.6	42
Georgia	686,246	707,306	682,570	699,966	694,865	-0.5	1.8	1.3	21
Hawaii	135,976	140,365	148,921	149,167	164,627	9.5	10.5	21.1	2
Idaho	89,523	84,172	87,282	92,754	92,724	-2.5	6.2	3.6	19
Illinois	1,568,049	1,496,116	1,447,712	1,505,140	1,323,968	-7.7	-8.5	-15.6	43
Indiana	168,234	165,127	171,699	157,538	169,126	2.1	-1.5	0.5	23
Iowa	286,228	274,812	290,431	305,758	286,462	1.5	-1.4	0.1	27
Kansas	191,029	176,830	153,623	143,316	140,646	-19.6	-8.4	-26.4	50
Kentucky	293,350	296,185	303,037	288,237	304,568	3.3	0.5	3.8	18
Louisiana	390,974	383,385	373,330	363,303	336,293	-4.5	-9.9	-14.0	40
Maine	129,143	133,756	131,633	132,092	121,114	1.9	-8.0	-6.2	35
Maryland	542,856	542,638	516,532	522,346	518,779	-4.8	0.4	-4.4	33
Massachusetts	658,569	639,087	711,337	763,237	743,698	8.0	4.5	12.9	6
Michigan	797,368	767,028	714,956	601,932	541,386	-10.3	-24.3	-32.1	51
Minnesota	464,258	475,703	474,410	482,462	476,006	2.2	0.3	2.5	20
Mississippi	134,441	146,251	134,447	137,706	134,332	0.0	-0.1	-0.1	29
Missouri	329,376	355,742	361,291	365,862	389,834	9.7	7.9	18.4	3
Montana	94,241	93,034	89,294	85,804	83,749	-5.2	-6.2	-11.1	39
Nebraska	122,264	116,660	115,113	121,186	112,067	-5.8	-2.6	-8.3	38

Nevada	207,431	190,847	179,379	178,728	170,234	-13.5	-5.1	-17.9	46
New Hampshire	77,897	77,559	78,637	70,173	78,833	1.0	0.2	1.2	22
New Jersey	1,096,427	1,093,730	1,129,178	1,133,087	1,101,221	3.0	-2.5	0.4	24
New Mexico	116,380	127,116	121,567	136,508	130,145	4.5	7.1	11.8	8
New York	3,381,966	3,623,869	3,683,673	3,713,056	3,817,059	8.9	3.6	12.9	7
North Carolina	780,445	777,577	763,213	689,643	669,622	-2.2	-12.3	-14.2	41
North Dakota	51,269	60,139	72,950	81,254	81,368	42.3	11.5	58.7	1
Ohio	1,258,915	1,311,268	1,204,063	1,231,686	1,163,410	-4.4	-3.4	-7.6	37
Oklahoma	466,997	491,749	462,514	406,271	384,585	-1.0	-16.8	-17.6	45
Oregon	316,438	297,768	315,620	305,027	293,837	-0.3	-6.9	-7.1	36
Pennsylvania	1,574,693	1,564,261	1,562,346	1,560,275	1,580,945	-0.8	1.2	0.4	25
Rhode Island	112,887	122,218	116,033	107,404	112,699	2.8	-2.9	-0.2	30
South Carolina	484,641	487,865	475,410	487,994	482,070	-1.9	1.4	-0.5	31
South Dakota	32,331	28,690	32,004	31,133	35,176	-1.0	9.9	8.8	12
Tennessee	310,716	324,755	301,636	272,395	256,473	-2.9	-15.0	-17.5	44
Texas	604,784	637,030	599,378	596,811	647,808	-0.9	8.1	7.1	14
Utah	79,168	83,696	81,404	76,967	89,640	2.8	10.1	13.2	5
Vermont	66,619	73,075	77,055	72,254	72,741	15.7	-5.6	9.2	9
Virginia	354,642	366,921	352,075	355,893	354,866	-0.7	0.8	0.1	28
Washington	1,566,431	1,568,641	1,589,908	1,630,432	1,670,482	1.5	5.1	6.6	15
West Virginia	275,166	236,556	207,833	214,025	210,384	-24.5	1.2	-23.5	49
Wisconsin	329,015	341,964	266,993	269,617	266,594	-18.9	-0.1	-19.0	48
Wyoming	54,253	52,296	59,534	53,946	59,061	9.7	-0.8	8.9	11
Total Non-Federal Cash Benefits	$27,957,974	$28,519,356	$28,433,767	$28,339,598	$28,248,561	1.7	-0.7	1.0	
All Federal[a]	$2,670,270	$2,665,518	$2,582,394	$2,480,686	$2,487,853	-3.3	-3.7	-6.8	
Federal Employees[b]	$2,077,027	$2,081,387	$2,024,568	$1,929,360	$1,946,890	-2.5	-3.8	-6.3	
TOTAL	$30,628,244	$31,184,874	$31,016,161	$30,820,284	$30,736,414	1.3	-0.9	0.4	

Notes: Benefits are payments in the calendar year to injured workers and to providers of their medical care. Data source for each state is described in detail in *Sources and Methods 2015* available at www.nasi.org.

a. Includes federal benefits as described in Table 8.
b. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data from state agencies, A.M. Best, National Association of Insurance Commissioners, the U.S. Department of Labor, and the Social Security Administration.

Table 12

Workers' Compensation Total Benefits Paid Per $100 of Covered Wages, by State, 2011-2015

State	2011	2012	2013	2014	2015	Dollar Amount Change 2011-2013	Dollar Amount Change 2013-2015	Dollar Amount Change 2011-2015	Ranking (1=largest percent increase, 2011-2015)
Alabama	$0.92	$0.94	$0.91	$0.88	$0.82	-$0.01	-$0.09	-$0.10	19
Alaska	1.64	1.61	1.60	1.42	1.34	-0.04	-0.26	-0.30	48
Arizona	0.70	0.67	0.65	0.64	0.61	-0.05	-0.04	-0.09	16
Arkansas	0.55	0.56	0.57	0.52	0.48	0.02	-0.09	-0.07	12
California	1.39	1.39	1.41	1.32	1.22	0.02	-0.19	-0.17	31
Colorado	0.73	0.77	0.71	0.64	0.64	-0.02	-0.07	-0.09	16
Connecticut	0.92	0.92	0.95	0.87	0.84	0.03	-0.11	-0.08	14
Delaware	1.11	1.05	1.14	1.13	0.99	0.03	-0.15	-0.12	24
District of Columbia	0.30	0.30	0.33	0.28	0.27	0.03	-0.06	-0.03	5
Florida	1.16	1.09	1.05	1.00	0.89	-0.11	-0.16	-0.27	45
Georgia	0.87	0.86	0.80	0.76	0.70	-0.07	-0.10	-0.17	32
Hawaii	1.08	1.05	1.05	1.04	1.09	-0.03	0.04	0.01	1
Idaho	1.19	1.12	1.11	1.07	1.05	-0.08	-0.06	-0.14	27
Illinois	1.08	0.93	0.90	0.90	0.75	-0.18	-0.15	-0.33	49
Indiana	0.58	0.55	0.56	0.49	0.45	-0.02	-0.11	-0.13	25
Iowa	1.11	1.09	1.05	1.03	0.94	-0.06	-0.11	-0.17	33
Kansas	0.87	0.82	0.70	0.67	0.62	-0.17	-0.08	-0.25	41
Kentucky	1.02	0.97	0.95	0.89	0.89	-0.07	-0.06	-0.13	26
Louisiana	1.10	1.03	1.00	0.93	0.87	-0.10	-0.13	-0.23	40
Maine	1.21	1.17	1.15	1.11	0.98	-0.06	-0.17	-0.23	38
Maryland	0.86	0.81	0.78	0.77	0.72	-0.08	-0.06	-0.14	29
Massachusetts	0.54	0.51	0.54	0.54	0.50	0.00	-0.04	-0.04	8
Michigan	0.77	0.68	0.69	0.59	0.54	-0.08	-0.15	-0.23	38
Minnesota	0.83	0.82	0.81	0.78	0.71	-0.02	-0.10	-0.12	23
Mississippi	0.98	0.96	0.92	0.91	0.87	-0.06	-0.05	-0.11	20
Missouri	0.82	0.82	0.80	0.78	0.78	-0.02	-0.02	-0.04	7

Montana	1.78	1.67	1.60	1.52	1.49	-0.18	-0.11	-0.29	47
Nebraska	0.96	0.87	0.84	0.86	0.78	-0.12	-0.06	-0.18	34
Nevada	0.84	0.78	0.72	0.68	0.62	-0.12	-0.10	-0.22	37
New Hampshire	0.82	0.80	0.76	0.67	0.68	-0.06	-0.08	-0.14	27
New Jersey	1.04	1.03	1.03	1.03	0.96	-0.01	-0.07	-0.08	14
New Mexico	0.98	1.07	1.02	0.99	0.98	0.04	-0.04	0.00	3
New York	1.03	1.04	1.03	0.99	0.97	0.00	-0.06	-0.06	11
North Carolina	0.93	0.90	0.85	0.74	0.68	-0.08	-0.17	-0.25	41
North Dakota	0.83	0.83	0.93	0.88	0.84	0.10	-0.09	0.01	1
Ohio	1.06	1.01	0.93	0.88	0.80	-0.13	-0.13	-0.26	43
Oklahoma	1.56	1.55	1.42	1.22	1.15	-0.14	-0.27	-0.41	50
Oregon	1.01	0.94	0.91	0.84	0.75	-0.10	-0.16	-0.26	43
Pennsylvania	1.15	1.11	1.11	1.08	1.03	-0.04	-0.08	-0.12	22
Rhode Island	0.86	0.88	0.81	0.75	0.70	-0.05	-0.11	-0.16	30
South Carolina	1.35	1.31	1.29	1.24	1.16	-0.06	-0.13	-0.19	35
South Dakota	0.73	0.67	0.69	0.65	0.67	-0.04	-0.02	-0.06	10
Tennessee	0.76	0.73	0.68	0.61	0.56	-0.08	-0.12	-0.20	36
Texas	0.39	0.39	0.35	0.32	0.31	-0.04	-0.04	-0.08	13
Utah	0.60	0.59	0.54	0.49	0.49	-0.06	-0.05	-0.11	20
Vermont	1.21	1.24	1.25	1.20	1.17	0.04	-0.08	-0.04	8
Virginia	0.54	0.55	0.53	0.53	0.51	-0.01	-0.02	-0.03	6
Washington	1.68	1.59	1.54	1.47	1.40	-0.14	-0.14	-0.28	46
West Virginia	2.07	1.84	1.67	1.58	1.55	-0.40	-0.12	-0.52	51
Wisconsin	1.05	1.04	1.05	1.04	0.96	0.00	-0.09	-0.09	18
Wyoming	1.42	1.36	1.58	1.44	1.41	0.16	-0.17	-0.01	4
Total Non-Federal	$0.99	$0.96	$0.94	$0.89	$0.83	-$0.05	-$0.11	-$0.16	
Federal Employees	$1.43	$1.45	$1.46	$1.42	$1.39	$0.03	-$0.07	-$0.04	
TOTAL	$1.01	$0.99	$0.97	$0.92	$0.86	-$0.04	-$0.11	-$0.15	

Note: Federal total includes only workers covered under *Federal Employees' Compensation Act.*

Source: National Academy of Social Insurance estimates.

including: a new medical fee schedule, utilization review procedures, and establishment of a preferred provider program.[33]

In the remaining three states (Michigan, Kansas, and Oklahoma) the percentage decrease in cash benefits was far greater than the decrease in medical benefits. (In fact, medical benefits increased in Michigan between 2011 and 2015). During the relevant time period, each of these states adopted changes to their workers' compensation laws that likely impacted benefits and costs in the respective states. In 2011, Michigan implemented new legislation that amended the state's Worker's Disability Compensation Act, including: a change to the definition of work disability and additional criteria required to establish disability and/or wage loss.[34] Kansas also adopted new legislation in 2011 that changed its compensability criteria, particularly for permanent partial and permanent total disability awards.[35] Finally, Oklahoma implemented significant legislation in 2011 and 2014 that included: an option for employers to opt-out of the state workers' compensation system; reductions in the maximum allowable durations of TTD and PPD benefits; and reductions in permanent disability (PPD & PTD) ratings by the amount of impairment determined to be pre-existing.

Medical Benefits as a Share of Total Benefits Paid

Historically, medical benefits have been a smaller share of workers' compensation benefits than cash benefits. Since 2008, however, the national experience has been for medical and cash benefits to account for almost equal shares of total benefits (as shown in Figure 3). In 2015, medical benefits accounted for 51.4 percent of non-federal workers' compensation benefits nationally, but only 32.9 percent of federal benefits (Table 8).

In the United States as a whole, medical benefits accounted for 50 percent of total workers' compensation benefits paid in 2015. Across states, however, the share of benefits attributed to medical care varied from 77 percent in Wisconsin to 30 percent in Rhode Island and Washington.

Across states, however, the share of benefits attributed to medical care ranged from approximately three-fourths of total benefits in Wisconsin (77.2%), Indiana (70.2%), and Alaska (70.0%), to approximately one-third in the District of Columbia (36.6%), Massachusetts (34.2%), New York (34.2%), Washington (30.5%), and Rhode Island (30.2%).

Benefits by Type of Claim

Estimates of the proportion of overall workers' compensation benefits paid for each type of claim come from the National Council on Compensation Insurance (NCCI), for the 38 states where NCCI is licensed (NCCI, 2017a). The estimates are for 2013, the most recent year for which the NCCI data are available.

In 2013, medical-only claims accounted for nearly 75 percent of all workers' compensation claims, but less than 10 percent of all benefits paid. Since 1995, there has been a gradual decline in the share of medical only claims from 77.1 percent to the current 74.9 percent. The share of benefits paid for medical only claims has, on the other hand, increased from

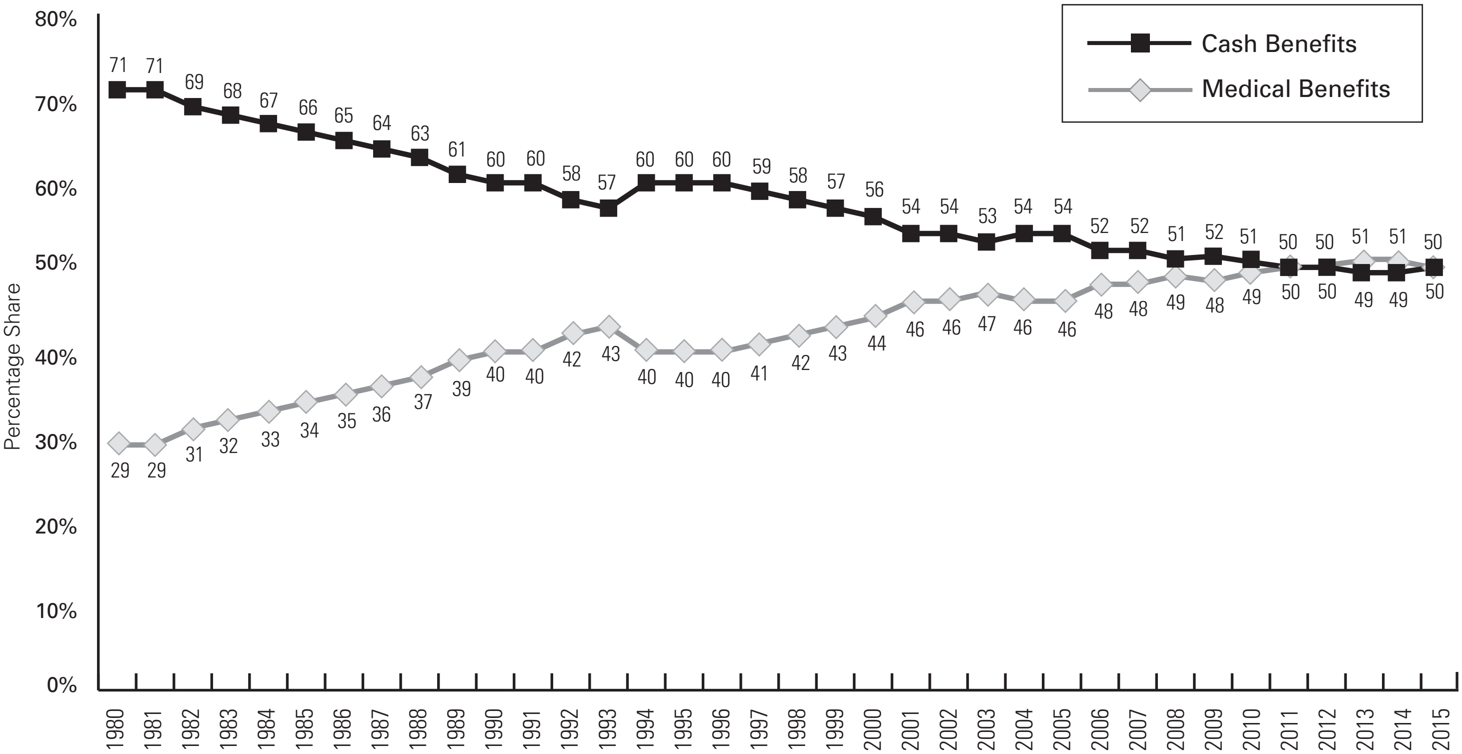
33 If changes to the workers' compensation law in a given state reduce the dollar value of cash benefits, but medical benefits are stable, the share of benefits accounted for by medical care increases.

34 Before the change in law, "disability" was defined as "a limitation of an employee's wage earning capacity in work suitable to his or her qualifications and training resulting from a personal injury or work-related disease." After the new law was passed in 2011, disability was defined as "an inability to perform 'all jobs' suitable to the employee's level of training, including 'transferable work skills' in other industries."

35 For instance, the new laws apportion compensation for permanent disability by the amount of functional impairment that is determined to be preexisting and define an injury as not compensable if it affected a preexisting condition. There were also changes to the statutory conditions for permanent total and permanent partial disability. Previously, there were presumptions of total disability but the new bill requires expert evidence to prove permanent total disability. To qualify for permanent partial disability, "…the compensation calculation was revised so that an employee is eligible to receive benefits if the functional impairment exceeds 7.5 percent to the body or 10.0 percent to the body when a preexisting condition is present." (Kansas House Bill 2134).

Figure 3

Percentage Share of Medical and Cash Benefits, 1980-2015



Source: National Academy of Social Insurance estimates.

6.2 percent in 1995 to 7.3 percent of overall benefits in 2013.

Indemnity claims (claims involving cash benefits) accounted for less than one-fourth of workers' compensation claims in 2013, but more than 90 percent of benefits paid. Temporary total disability (TTD) claims represented more than 61 percent of all indemnity claims, but less than 34 percent of cash benefits paid in 2013 (Figures 4a & 4b). The frequency of TTD claims as a share of total indemnity claims declined steadily from 72.1 percent in 1995 to a twenty-year low of 58.2 percent in 2008, before increasing gradually to 61.2 percent in 2013. While the frequency of TTD claims as a share of total indemnity claims was lower in 2013 than in 1995, the proportion of total losses has steadily increased. TTD claims represented 22.5 percent of total losses paid in 1993, compared to 33.3 percent in 2013, the highest it has been over that time period.

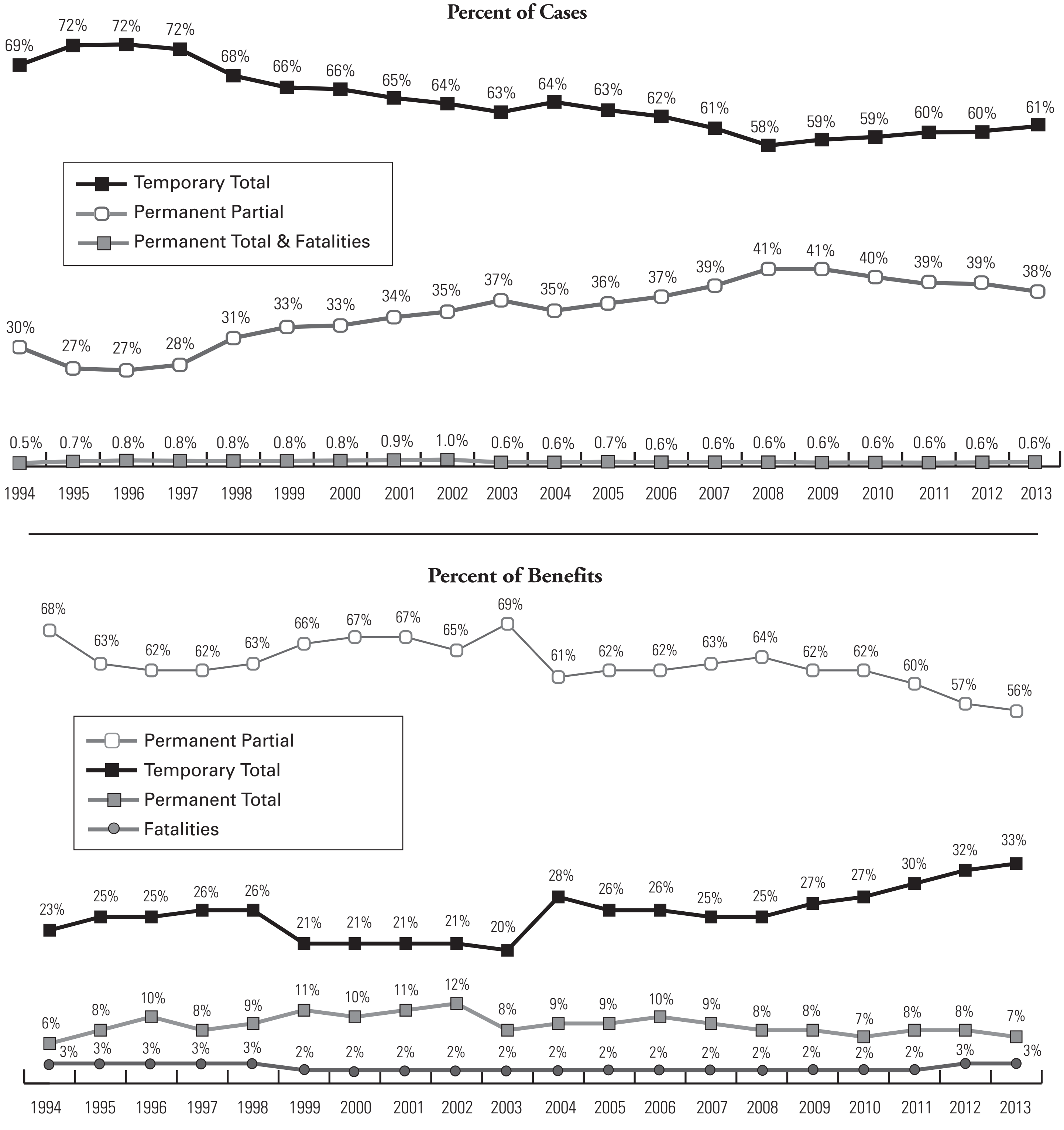
The bulk of cash benefits for workers' compensation go to permanent disability claims, of which permanent partial disability claims are most common.[36] In 2013, PPD claims accounted for slightly less than 39 percent of indemnity claims, but more than 56 percent of cash benefits paid. PPD claims varied between 27-41 percent of indemnity claims in the years 1995-2013, but accounted for 56-69 percent of all cash benefits (Figures 4a & 4b).

Permanent total disability and fatality claims are relatively rare, accounting for less than 1 percent of claims involving cash benefits. However, these claims

36 Workers' compensation claims are typically classified into discrete types according to the most severe type of disability benefit received. For example, a permanent partial disability beneficiary has typically received temporary disability benefits until the point of maximum medical improvement, but the entire cost of cash benefits for the claim is ascribed to permanent partial disability.

Figure 4

Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 1994-2013



Notes: Cases classified as permanent partial include cases that are closed with lump sum settlements. Benefits paid in cases classified as permanent partial, permanent total and fatalites can include any temporary total disability benefits also paid in such cases. The data are from the first report from the NCCI *Annual Statistical Bulletin*.

Source: NCCI 1995-2017, *Annual Statistical Bulletin*, Exhibits X and XII.

tend to be expensive. In 2013, PTD and fatality claims were 0.2 and 0.4 percent of total indemnity claims, respectively, but 7.3 and 3.1 percent of total payments. Over time, the share of payments for fatalities has remained relatively steady, whereas there has been pronounced variation in the share of payments for PTDs. Between 1994 and 2013, on an annual basis, fatalities accounted for 1.7 to 3.1 percent of total payments (standard deviation equals 0.39). During the same time period, PTD claims accounted for 6.4 to 12.4 percent of total payments (standard deviation equals 1.33) (Figures 4a & 4b).

Employer Costs for Workers' Compensation

Data Sources for Estimating Employer Costs

This section describes the primary sources of data that we use to estimate employer costs for workers' compensation. A detailed, state-by-state explanation of how the cost estimates in the report are produced is provided in *Sources and Methods: A Companion to Workers' Compensation Benefits, Coverage, and Costs, 2015*, and is available on the Academy's website (www.nasi.org/research/workers-compensation).

The Academy's estimates of employer costs are equal to the sum of: premiums and deductibles paid to private insurers and state funds; plus benefits and administrative costs paid by self-insured employers; plus assessments paid to special funds (e.g. guaranty funds, second-injury funds). The Academy's methods for estimating employer costs vary according to the employer's source of workers' compensation coverage. For employers purchasing insurance from private carriers or state funds, the cost of workers' compensation in any year equals the sum of premiums paid in that year plus reimbursements paid to the insurer under deductible provisions. Our cost data come from the state surveys, A.M. Best, and NCCI.

The growing use of large deductible policies complicates the measurement of employer costs. For states that provide information on deductible payments, we rely on the survey data alone, or together with data from AM Best, to estimate amounts paid for deductibles. For states that do not include deductibles in the survey, we rely on NCCI data on manual equivalent premiums together with data from AM Best to estimate deductible payments. The availability of deductible policies varies by state and by type of insurer (private carriers or state funds).[37]

For self-insured employers, workers' compensation costs include medical and cash benefits paid during the calendar year, plus the administrative costs of providing those benefits. Administrative costs include the direct costs of managing claims, as well as expenditures for litigation, cost containment, taxes, licenses, and fees. Self-insured employers generally do not report administrative costs of workers' compensation separately from the costs of administering other employee benefit programs, so the costs associated with administering workers' compensation must be estimated. The National Association of Insurance Commissioners reports the ratio of administrative costs to total benefits paid, for private insurers who report to them (NAIC, 2015). To estimate administrative costs for self-insured employers, we assume that the ratio of administrative costs to total benefits paid is the same for self-insured employers as it is for private insurers.[38]

For the federal employee workers' compensation program, employer costs are benefits paid plus administrative costs, as reported by the Department of Labor (DOL, 2017).

The Academy's estimates of employer costs also include estimates of assessments for special funds,

37 Deductible policies are not allowed in North Dakota, Ohio, Washington, Wisconsin, and Wyoming. Twelve out of the 17 competitive state funds allow deductible policies: Colorado, Hawaii, Idaho, Kentucky, Louisiana, Maryland, Missouri, Montana, New Mexico, Oklahoma, Texas, and Utah. For more details, see *Sources and Methods 2015* on the Academy's website.

38 Private insurers face some cost factors, such as commissions, profit allowances, and taxes on premiums that self-insurers do not face. The NAIC estimates of administrative costs are equal to the amount spent on direct defense and cost containment expenses plus taxes, licenses, and fees, divided by direct losses paid (for more detail see *Sources and Methods 2015*). NAIC's estimate of administrative costs is based on the experience of private insurers. Other reports have found higher administrative overhead costs as a percent of total premiums compared to those reported by NAIC (e.g. Neuhauser et al., 2010).

second injury funds, and guaranty funds. Employer assessments for these funds are estimated from assessment rates applied either to premiums or losses (benefits paid). The state assessment rates are provided either by state agencies or by NCCI. Assessments for insurance guaranty funds are paid by insurers' and are included in the reported premiums.

Because the Academy pieces together data on employer costs from a variety of sources, there are some limitations. First, there may be some workers' compensation costs not captured in the estimates. We may, for example, miss some unreported expenditures, such as those for legal or case management services. Second, we do not capture all of the costs of claim litigation in states where the appeals structure is subsidized by tax revenues. We do capture litigation costs in states where the appeals structure is fully funded by the workers' compensation premium, so there is systematic variation in the cost estimates between the two types of states. Finally, our estimates are limited to the monetary costs of work-related injuries and illnesses paid by employers. Estimates of the costs imposed on workers, families, and society in the form of pain and suffering, and losses of productivity, are beyond the scope of this report.

National Estimates of Employer Costs

Trends in employer costs. Table 13 shows employer costs for workers' compensation by type of insurer for 1995 through 2015. In 2015, total employer costs were $94.8 billion, an increase of 2.3 percent from 2014.

In 2015, costs for employers insured through private carriers were 61.8 percent of total costs ($58.6 billion); costs for self-insured employers were 19.0 percent ($18.0 billion); costs for employers insured through state funds were 14.0 percent ($13.3 billion); and costs to the federal government were 5.2 percent ($4.9 billion). Over the two-decade period shown in the table, the share of costs paid through private insurers has increased (from 55.3% to 61.8%) in response to a decrease in the share paid through state funds (from 18.4% to 14.0%). The shares of costs paid by self-insured employers and the federal government have remained fairly constant (approximately 20% and 5%).

State Estimates of Employer Costs

Table 14 reports estimates of employer costs for workers' compensation per $100 covered payroll for each state between 2011 and 2015. Costs are aggregated across all types of insurers (excluding the federal government). Between 2011 and 2015, employer costs per $100 of covered payroll *increased* in 24 states and *decreased* in 27.

The largest increases in employer costs occurred in Wyoming ($0.31), Delaware ($0.22), California ($0.21), Colorado ($0.20), and New Mexico ($0.20). In each case, the increase in costs occurred primarily between 2011 and 2013. Between 2013-2015, payrolls increased more rapidly, while the incidence of workers' compensation claims declined, so increases in costs per $100 of payroll were negligible in all of these states (except Colorado) in this period. In Delaware, costs per $100 covered payroll declined slightly between 2013-2015.

The largest decreases in employer costs occurred in West Virginia (-$0.40), Montana (-$0.37), Oklahoma (-$0.34), and Ohio (-$0.30). In West Virginia, the reductions continue a downward trend that began when the state changed from an exclusive state fund in 2008 to a private carrier system after 2009, along with substantial reductions in the statutory levels of benefits. In Montana, the cost reductions occurred from 2011-2013 after the state implemented a number of changes to its workers' compensation laws, but stabilized from 2013-2015.[39] In Oklahoma, the cost reductions occurred from 2013-2015, after the implementation of a number of workers' compensation reforms in 2014.[40] In Ohio, the reductions in costs occurred throughout 2011-2015, and are primarily attributed

39 Effective July 1, 2011, Montana established utilization review and treatment guidelines for medical care and instituted a cap on medical benefits at 260 weeks. Other changes during this period limited eligibility for indemnity benefits (Personal communication from Richard Martin, workers' compensation attorney.)

40 Oklahoma passed sweeping workers' compensation reforms under Senate Bill 1062 that included, among other reforms, the Opt-Out Act, significant reductions in the maximum TTD benefit amount and maximum duration, and the adoption of the most current edition of the American Medical Association Guides.

Table 13

Workers' Compensation Employer Costs, by Type of Insurer, 1995-2015

Year	Total (millions)	% Change	Private Insured[a] (millions)	Private Insured[a] % of total	State Fund Insured[a] (millions)	State Fund Insured[a] % of total	Self-Insured[a] (millions)	Self-Insured[a] % of total	Federal[b] (millions)	Federal[b] % of total
1995	57,089	-5.7	31,554	55.3	10,512	18.4	12,467	21.8	2,556	4.5
1996	53,898	-5.6	31,081	57.7	8,480	15.7	11,736	21.8	2,601	4.8
1997	54,365	0.9	30,594	56.3	8,268	15.2	12,145	22.3	3,358	6.2
1998	55,028	1.2	31,446	57.1	8,130	14.8	11,981	21.8	3,471	6.3
1999	56,392	2.5	33,740	59.8	7,577	13.4	11,580	20.5	3,496	6.2
2000	60,681	7.6	36,038	59.4	8,934	14.7	12,089	19.9	3,620	6.0
2001	67,387	11.1	38,110	56.6	11,778	17.5	13,721	20.4	3,778	5.6
2002	74,114	10.0	41,600	56.1	14,794	20.0	13,822	18.6	3,898	5.3
2003	82,294	11.0	45,493	55.3	17,820	21.7	15,011	18.2	3,970	4.8
2004	86,114	4.6	47,601	55.3	19,103	22.2	15,337	17.8	4,073	4.7
2005	89,838	4.3	50,972	56.7	18,225	20.3	16,545	18.4	4,096	4.6
2006	87,493	-2.6	51,648	59.0	15,729	18.0	15,979	18.3	4,138	4.7
2007	86,537	-1.1	52,291	60.4	13,898	16.1	16,112	18.6	4,236	4.9
2008	80,602	-6.9	47,338	58.7	12,244	15.2	16,680	20.7	4,341	5.4
2009	73,921	-8.3	42,965	58.1	10,640	14.4	16,252	22.0	4,065	5.5
2010	72,788	-1.5	42,798	58.8	9,565	13.1	16,197	22.3	4,228	5.8
2011	78,915	8.4	46,614	59.1	10,382	13.2	17,493	22.2	4,427	5.6
2012	84,252	6.8	51,069	60.6	10,994	13.0	17,682	21.0	4,507	5.3
2013	88,385	4.9	54,399	61.5	12,107	13.7	17,327	19.6	4,552	5.2
2014	92,700	4.9	56,621	61.1	13,296	14.3	18,021	19.4	4,762	5.1
2015	94,812	2.3	58,590	61.8	13,296	14.0	18,042	19.0	4,885	5.2

a Costs for second injury funds and special funds are included in the totals from 1996 onwards. The costs for special funds are estimated from assessment rates, based on premiums and losses. Employee contributions to workers' compensation costs in Washington state are included in the totals from 2011 to 2015.

b Federal costs include costs to the Federal government under the Federal Employees' Compensation Act and employer costs associated with the Federal Black Lung Disability Trust Fund. In years before 1997, Federal costs also include the part of the black lung program financed by federal funds. In 1997–2015 federal costs include employer costs associated with the Longshore and Harbor Workers' Compensation Act. See Appendix B for more information about federal programs.

Sources: National Academy of Social Insurance estimates of costs for private carriers and state funds are based on information from A.M. Best and direct contact with state agencies. Costs for federal programs are from the Department of Labor and the Social Security Administration. Self-insured administrative costs are based on information from the National Association of Insurance Commissioners.

Table 14

Employer Costs for Workers' Compensation Per $100 of Covered Wages, by State, 2011-2015

State	2011	2012	2013	2014	2015	Dollar Amount Change 2011-2013	Dollar Amount Change 2013-2015	Dollar Amount Change 2011-2015	Ranking (1=largest percent increase, 2011-2015)
Alabama	$1.19	$1.20	$1.16	$1.16	$1.13	-$0.03	-$0.03	-$0.06	34
Alaska	2.46	2.73	2.57	2.33	2.25	$0.11	-$0.32	-$0.21	47
Arizona	0.84	0.90	0.97	1.01	0.99	$0.13	$0.02	$0.15	9
Arkansas	0.86	0.85	0.90	0.85	0.83	$0.04	-$0.07	-$0.03	28
California	1.76	1.85	1.95	2.00	1.97	$0.19	$0.02	$0.21	3
Colorado	0.86	0.95	0.99	1.03	1.06	$0.13	$0.07	$0.20	4
Connecticut	1.13	1.23	1.31	1.25	1.24	$0.18	-$0.07	$0.11	12
Delaware	1.20	1.24	1.43	1.43	1.42	$0.23	-$0.01	$0.22	2
District of Columbia	0.52	0.52	0.58	0.53	0.61	$0.06	$0.03	$0.09	13
Florida	1.39	1.39	1.41	1.45	1.32	$0.02	-$0.09	-$0.07	35
Georgia	1.11	1.14	1.13	1.13	1.11	$0.02	-$0.02	$0.00	23
Hawaii	1.45	1.43	1.48	1.55	1.62	$0.03	$0.14	$0.17	7
Idaho	1.58	1.63	1.67	1.66	1.70	$0.09	$0.03	$0.12	11
Illinois	1.37	1.32	1.31	1.31	1.23	-$0.06	-$0.08	-$0.14	41
Indiana	0.83	0.85	0.88	0.86	0.85	$0.05	-$0.03	$0.02	21
Iowa	1.54	1.61	1.63	1.62	1.57	$0.09	-$0.06	$0.03	19
Kansas	1.25	1.26	1.23	1.19	1.12	-$0.02	-$0.11	-$0.13	40
Kentucky	1.27	1.11	1.10	1.13	1.10	-$0.17	$0.00	-$0.17	45
Louisiana	1.50	1.54	1.49	1.50	1.40	-$0.01	-$0.09	-$0.10	38
Maine	1.56	1.48	1.44	1.43	1.39	-$0.12	-$0.05	-$0.17	46
Maryland	1.05	1.07	1.11	1.12	1.08	$0.06	-$0.03	$0.03	19
Massachusetts	0.75	0.76	0.74	0.76	0.73	-$0.01	-$0.01	-$0.02	25
Michigan	1.05	0.98	0.98	0.98	0.93	-$0.07	-$0.05	-$0.12	39
Minnesota	1.04	1.07	1.07	1.07	1.06	$0.03	-$0.01	$0.02	21
Mississippi	1.35	1.37	1.40	1.51	1.42	$0.05	$0.02	$0.07	14

Missouri	1.08	1.11	1.13	1.17	1.15	$0.05	$0.02	$0.07	14
Montana	2.54	2.49	2.25	2.25	2.17	-$0.29	-$0.08	-$0.37	50
Nebraska	1.33	1.33	1.36	1.36	1.30	$0.03	-$0.06	-$0.03	28
Nevada	1.03	0.98	1.00	1.02	0.99	-$0.03	-$0.01	-$0.04	32
New Hampshire	1.18	1.28	1.29	1.23	1.18	$0.11	-$0.11	$0.00	23
New Jersey	1.30	1.38	1.49	1.55	1.49	$0.19	$0.00	$0.19	6
New Mexico	1.35	1.50	1.51	1.56	1.55	$0.16	$0.04	$0.20	5
New York	1.32	1.43	1.49	1.46	1.47	$0.17	-$0.02	$0.15	10
North Carolina	1.18	1.19	1.20	1.16	1.12	$0.02	-$0.08	-$0.06	33
North Dakota	1.71	1.81	1.81	1.68	1.63	$0.10	-$0.18	-$0.08	37
Ohio	1.18	1.02	1.01	1.06	0.88	-$0.17	-$0.13	-$0.30	48
Oklahoma	2.07	2.26	2.16	1.89	1.73	$0.09	-$0.43	-$0.34	49
Oregon	1.17	1.16	1.18	1.12	1.02	$0.01	-$0.16	-$0.15	43
Pennsylvania	1.49	1.52	1.53	1.49	1.47	$0.04	-$0.06	-$0.02	25
Rhode Island	1.08	1.10	1.11	1.13	1.13	$0.03	$0.02	$0.05	17
South Carolina	1.79	1.81	1.82	1.79	1.72	$0.03	-$0.10	-$0.07	36
South Dakota	1.32	1.34	1.37	1.32	1.29	$0.05	-$0.08	-$0.03	28
Tennessee	1.09	1.13	1.12	1.02	0.95	$0.03	-$0.17	-$0.14	41
Texas	0.70	0.73	0.74	0.73	0.67	$0.04	-$0.07	-$0.03	27
Utah	0.84	0.92	0.91	0.92	0.90	$0.07	-$0.01	$0.06	16
Vermont	1.67	1.83	1.96	1.82	1.84	$0.29	-$0.12	$0.17	7
Virginia	0.73	0.78	0.75	0.77	0.77	$0.02	$0.02	$0.04	18
Washington[a]	1.80	1.69	1.69	1.65	1.65	-$0.11	-$0.04	-$0.15	44
West Virginia	2.01	1.87	1.71	1.59	1.61	-$0.30	-$0.10	-$0.40	51
Wisconsin	1.77	1.77	1.73	1.71	1.74	-$0.04	$0.01	-$0.03	28
Wyoming	1.73	1.85	2.03	2.01	2.04	$0.30	$0.01	$0.31	1
Total Non-Federal	$1.27	$1.30	$1.33	$1.33	$1.29	$0.06	-$0.04	$0.02	
Federal Employees	$2.12	$2.18	$2.25	$2.30	$2.27	$0.13	$0.02	$0.15	
TOTAL	$1.30	$1.33	$1.36	$1.36	$1.32	$0.06	-$0.04	$0.02	

* *Note:* Generally states with exclusive state funds operate special funds (or their equivalents) and their experience is included in the benefit and costs entries for those exclusive state funds.

a. In Washington state both employers and employees contribute to workers' compensation premiums. In 2015, employees contributed 22 percent of total premiums (26 percent of state fund premiums and 9 percent of self-insured employer cost-of-living-adjustment premiums).

Source: National Academy of Social Insurance estimates.

to a dramatic reduction in injury rates and changes that impacted the administration of claims by the Ohio Bureau of Workers' Compensation.[41]

Although there is considerable inter-state variation in employer costs for workers' compensation per $100 covered payroll, readers are cautioned against using the estimates in Table 14 to identify states with more or less favorable climates for employers or workers. The costs of workers' compensation to employers vary across states because states differ in the relative risk of their industry/occupational mix. A meaningful comparison of employer costs across states must control for variation in the proportions of employers in different insurance classifications (based on industries and occupations) in each state, which is beyond the scope of this report.

In addition, the cost data reported here may not capture the full impact of recent changes in laws that may have changed the workers' compensation market within a state. Cost data for 2015 include a substantial proportion of cash benefits paid for injuries that occurred in prior years, when legal regimes and economic conditions may have been different.

Benefits Paid Relative to Employer Costs

Table 15 reports standardized estimates (per $100 of covered wages) of workers' compensation benefits paid (medical, cash, total) and employer costs from 1995 to 2015. The reader is cautioned that the benefits paid by private insurers or state funds include payments for injuries/illnesses that occurred in a given year *and in prior years*, while the premiums paid to insurers and state funds incorporate *projected future liabilities* for injuries/illnesses that occur in the given year. In other words, the costs and benefits paid in a given year are not necessarily tracking the same claims.[42]

In 2015, employers paid $0.86 in benefits per $100 of covered wages ($0.43 for medical benefits and $0.43 for cash benefits), and incurred costs of $1.32. This is the lowest level of standardized benefits in the last 25 years, and one of the lowest levels of standardized employer costs over the same time period (Figure 1). Between 2011 and 2015, standardized total benefits decreased by $0.15 (15.1%). Medical and cash benefits per $100 of covered wages declined at approximately the same rate during this period: medical benefits fell by $0.08 (-15%) and cash benefits fell by $0.07 (-14%).

Between 2011 and 2015, total benefits per $100 of covered wages fell by $0.15 (-15%) and medical and cash benefits declined at approximately the same rate.

Table 15 also reports the ratio of workers' compensation benefits to employer costs over the last 20 years. The ratio is determined by three factors: 1) the extent to which employers' payments to the workers' compensation system go to medical providers and injured workers, as opposed to administrative costs; 2) the extent to which insurers' returns on investments mitigate increases in the premiums charged for workers' compensation; and 3) the time lag between premiums collected vs. benefits paid (as described above).

Over the last two decades, the ratio of benefits paid to employer costs has varied between 0.63 (2006) and 0.82 (1999) (Table 15). In 2015, the benefit/cost ratio was 0.65, comparable to the lows that occurred in 2003-2007. Between 2011 and 2015, the benefit to cost ratio declined 16.7 percent. This trend is typical during a period when claims

41 Over the 2010 to 2015 period, the standardized rate of injury claims in the Ohio workers' compensation system decreased by almost 20 percent (from 3.6 per 100 full-time employees to 2.9). (Personal communication from Dr. Ibraheem Tarawneh, Superintendent in the Division of Safety & Hygiene, Ohio Board of Workers' Compensation.)

42 For employers covered by private insurers or state funds, costs are largely determined by premiums paid. However, in a given year, premiums paid by employers do not necessarily match benefits received by workers. Premiums in a given year pay for all compensable injuries that occur in the same year and benefits paid (on the same injuries) in future years. On the other hand, the majority of cash benefits paid in any given year are for injuries that occurred in previous years (and are covered by the premiums paid in those same previous years). Premiums are influenced by a number of factors (some are modified to account for previous workers' compensation liability experience) and may incorporate insurers' past and anticipated investment returns on reserves set aside to cover future liabilities.

Table 15

Workers' Compensation Benefit/Cost Ratios, 1995-2015

Year	Medical Benefits per $100 Covered Wages	Cash Benefits per $100 Covered Wages	Total Benefits per $100 Covered Wages	Employer Costs per $100 Covered Wages	Total Benefits per $1 Employer Cost
1995	$ 0.54	$ 0.81	$ 1.35	$ 1.83	$ 0.74
1996	0.50	0.76	1.26	1.62	0.78
1997	0.48	0.69	1.17	1.51	0.77
1998	0.48	0.65	1.13	1.42	0.80
1999	0.48	0.64	1.12	1.36	0.82
2000	0.47	0.59	1.06	1.35	0.79
2001	0.50	0.60	1.10	1.46	0.75
2002	0.52	0.61	1.13	1.61	0.71
2003	0.55	0.61	1.16	1.74	0.67
2004	0.53	0.60	1.13	1.74	0.65
2005	0.51	0.58	1.09	1.72	0.64
2006	0.47	0.52	0.99	1.58	0.63
2007	0.46	0.50	0.96	1.48	0.65
2008	0.49	0.50	0.99	1.35	0.73
2009	0.50	0.53	1.03	1.30	0.79
2010	0.49	0.51	1.00	1.25	0.80
2011	0.51	0.50	1.01	1.30	0.78
2012	0.49	0.50	0.99	1.33	0.74
2013	0.49	0.48	0.97	1.36	0.71
2014	0.47	0.45	0.92	1.36	0.68
2015	0.43	0.43	0.86	1.32	0.65

Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care. Employer costs are calendar-year expenditures for workers' compensation insurance premiums, benefits paid under deductibles or self-insurance, and administrative costs.

Source: National Academy of Social Insurance estimates.

rates are decreasing faster than insurance premiums are adjusted.

Estimates of Employer Costs from Other Sources

The Academy's estimates compared to Bureau of Labor Statistics (BLS) estimates. The BLS publishes a quarterly report on *Employer Costs for Employee Compensation* (DOL, 2016a). Estimates are derived from a representative sample of establishments in the private sector, state and local governments. Costs are reported for five benefit categories (paid leave, supplemental pay, insurance, retirement and savings, and legally required benefits) per employee hour worked. Workers' compensation benefits are included within the legally required benefits category. The purpose of the BLS report is to provide average estimates of employer costs per hour worked, inclusive of wages, salaries, and employee benefits.

The purpose of the Academy's report is quite different. The Academy seeks to provide summary data on workers' compensation benefits paid to workers, and costs borne by employers, at a state and national level. Our estimates of $61.9 billion in benefits paid and $94.8 billion in workers' compensation costs borne by employers in 2015 are the only data that answer questions about aggregate benefits and costs of workers' compensation.

Burton (2015) uses data from the BLS survey to calculate employer costs for workers' compensation per $100 of covered payroll and compares it with the Academy's national estimates.[43] This series, which is now published by the National Institute of Occupational Safety and Health (NIOSH), is derived from different methods of data collection compared to the Academy. The BLS collects data on a broad range of employee benefits and the Academy focuses on workers' compensation.

The Academy's estimates compared to Oregon Rate Ranking estimates. The Oregon Workers' Compensation Rate Ranking study (Oregon Department of Consumer and Business Services, 2016), also provides estimates of employer costs for workers' compensation. The study conducted on a biennial basis by the state of Oregon, compares workers' compensation *premium rates* across states for a standardized set of insurance classifications. The standardization is designed to factor out differences in hazard mix (riskiness of industries) across states to provide a measure of interstate differences in costs for comparable risk distributions.[44] The standardized rates are based on the Oregon mix of insurance classifications, hence the rankings could be quite different if standardized based on another state. Results of the Oregon study should not be compared to the estimates of employer costs reported here. Interstate differences in employer costs that appear in the Academy data are influenced in part by the different risk profiles presented by each state's economy, as well as by variations in self-insurance across states. The Oregon study reports rates for a constant set of risk classifications across states, and does not include self-insured employers.[45]

Direct and Indirect Costs to Workers

Some of the costs of workers' compensation are explicitly paid by workers. In Washington, for example, workers contribute directly to the insurance premiums for workers' compensation. In 2015, about 22 percent of the total costs of workers' compensation in Washington were paid directly by workers.[46] In some states, workers' pay a portion of special funds. For example, in Oregon, workers pay into the Workers' Benefit Fund. New Mexico has a small assessment per worker. This report primarily covers the employer paid portion of workers' compensation. However, the direct workers' compensation costs to employees in Washington are included in our estimates.

In addition to such explicit contributions to premiums, there are implicit costs borne by workers in the form of waiting periods. A waiting period is essentially a worker deductible – it is the time after a worker suffers an injury but must wait to collect any workers' compensation benefits. All but three states (Hawaii, Rhode Island and, as of 2013, Oklahoma) have provisions to pay retroactive benefits to cover the waiting period for more serious time-loss injuries. In most states the retroactive period is between 7 and 21 days, however in Alaska and New Mexico the waiting period is 28 days, and in Nebraska it is 42 days (see Appendix Table C). For

43 The BLS methodology and the procedure used to calculate workers' compensation benefits per $100 of payroll are discussed in Burton (2015).

44 The Oregon estimates are standardized on 50 out of 450 rate classifications.

45 Burton (2013) and Manley (2013) provide more extended discussions of the differences between the Academy and Oregon measures of employers' costs.

46 Employees contributed 26 percent of state fund premiums and paid half of the cost-of-living-adjustment premium for self-insured employers in 2015, which accounted for approximately 10 percent of self-insured workers' compensation costs.

workers who do not receive retroactive benefits, the three to seven days of uncompensated time loss attributable to the waiting period may constitute direct costs to the worker (if not covered by other programs or by employer provided sick leave). The financial costs of uncompensated waiting periods are not routinely tracked or reported by individual states and are, therefore, extremely difficult to collect and tabulate.[47]

Other indirect costs to workers include losses of earnings, wealth (Galizzi and Zagorsky, 2009), and fringe benefits that occur during periods of injury-related work absence (when the worker is compensated at less than their pre-injury wage); loss of home production attributable to work-related injury or illness; loss of employer contributions to health insurance premiums (except in the few states that mandate continuation of employer contributions during periods of injury-related work absence); and loss of future income not covered by compensation for permanent impairments. Refer to Leigh and Marcin (2012) for estimates of how the direct and indirect costs of work-related injuries are allocated among insurers, government payers, and injured workers.

Disputed claims are responsible for significant indirect costs to injured workers (and employers). Workers often hire attorneys to represent them in claim disputes; attorney fees can siphon off 20 percent or more of the indemnity payment to their clients. Insured employers are represented by their insurance carrier in legal proceedings, but time off work for witnesses and managers to participate in hearings is a cost borne by the employer.

Finally, a large portion of costs borne by workers are for work-related injuries and illnesses that never result in a workers' compensation claim. In particular, occupational illnesses are frequently uncompensated (see, e.g., Leigh and Robbins, 2004).

Incidence of Workplace Injuries and Workers' Compensation Claims

Incidence of Work-Related Injuries

Fatal Injuries. The BLS collects information on fatal work-related injuries from the National Census of Fatal Occupational Injuries (DOL 2016b).[48] According to the BLS data, a total of 4,836 fatal work-related injuries occurred in 2015, an *increase* of 0.3 percent from 2014, and the highest number of fatalities recorded since 2008 (Table 16). However, the increase in fatal injuries is entirely explained by increases in employment. Between 2014 and 2015, the *incidence* of fatal workplace injuries remained steady at 3.4 per 100,000 full-time equivalent workers (DOL, 2016b).[49]

The leading cause of work-related fatalities in 2015 was transportation incidents, accounting for almost half (42%) of all fatal injuries. Other leading causes of fatalities were: falls, slips, and trips (16.5%); contact with objects and equipment (15%); and injuries by persons or animals, excluding homicides (14.5%). Homicides accounted for 411 (8.5%) work-related fatalities in 2015. (DOL, 2016b).

Annual work-related fatalities have declined 23% over the last two decades, despite a slight uptick in recent years in response to the expanding economy.

Nonfatal injuries and illnesses. The BLS collects information on nonfatal work-related injuries or illnesses from a sample survey of employers (Survey of Occupational Injuries and Illnesses) (DOL 2016c).

47 Waiting periods may result in lost wages and/or lost partial wage replacement compensation for injured workers if either 1) the worker is injured for fewer days than the waiting period and thus, does not qualify for workers' compensation benefits, or 2) if the worker is out of work due to an injury for more days than the waiting period, but fewer days than the retroactive period requirement.

48 The BLS Census of Fatalities includes work-related deaths among populations that are not covered by workers' compensation, such as self-employed workers.

49 The BLS incidence rate takes into account the number of injuries and illnesses and the total hours worked by all employees during the calendar year, assuming a 40-hour workweek, 50 weeks per year.

Table 16

Fatal Occupational Injuries — All and Private Industry, 1995-2015

Year	Number of Fatal Injuries: All	Private Industry
1995	6,275	5,495
1996	6,202	5,597
1997	6,238	5,616
1998	6,055	5,457
1999	6,054	5,488
2000	5,920	5,347
2001	8,801	7,545
9/11 events	2,886	
Other	5,915	
2002	5,534	4,978
2003	5,575	5,043
2004	5,764	5,229
2005	5,734	5,214
2006	5,840	5,320
2007	5,657	5,112
2008	5,214	4,670
2009	4,551	4,090
2010	4,690	4,206
2011	4,693	4,188
2012	4,628	4,175
2013	4,585	4,101
2014	4,821	4,386
2015	4,836	4,379

Source: U.S. Department of Labor (2016b).

The survey reported 2.9 million recordable nonfatal workplace injuries and illnesses in *private industry* workplaces in 2015, and roughly one-third (902,160) involved days away from work (DOL, 2016c). Both metrics declined by about 1.5 percent from 2014, despite the increases in employment.

The incidence rate per 100 full-time workers, which controls for changes in employment levels, also declined from 3.2 per 100 workers in 2014 to 3.0 per 100 workers in 2015 (Table 17 and Figure 5). The decline in the incidence of all reported nonfatal occupational injuries and illnesses continues a trend that has persisted over the last two decades. Since 1995, the incidence rate has decreased 63 percent from 8.1 per 100 full-time workers, to 3.0 per 100 in 2015. Since 2002, after the Occupational Safety and Health Administration (OSHA) changed recordkeeping requirements, the incidence rate per 100 full-time workers is down 43 percent.[50]

Injuries involving lost work time or work restrictions. Figure 5 and Table 17 show trends in the incidence of work-related injuries and illnesses among private industry employers for cases involving either days away from work or injury-related job accommodations (job transfer or restrictions on work). These data also come from the BLS employer survey (DOL, 2016c).

The incidence of injuries or illnesses involving days away from work has also declined, down from 2.5 per 100 full-time workers in 1995 to 0.9 per 100 in 2015, the first year in which the rate has fallen below 1.0 in the time period reported (Table 17 and Figure 5). While the incidence rate of injuries or illnesses involving days away from work has declined steadily since 1995, the incidence of cases resulting in job transfers or work restrictions has fluctuated. The rate of cases with a job transfer or restriction held fairly consistent at about 1.1 per 100 full-time workers until 2004, after which time the rate dropped 36 percent to reach 0.7 in 2011, where it has remained until 2015.

Some of the changes in the 1990s, when the incidence of injuries involving work absence was

50 The break in the trend lines in 2002 represents a change in OSHA recordkeeping requirements in that year, indicating that the data before and after 2002 may not be strictly comparable.

Table 17

Non-Fatal Occupational Injuries and Illnesses Among Private Industry Employers, 1995-2015

	Number of Cases (millions)			Incidence Rate (per 100 full-time workers)		
Year	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction
1995	6.6	2.0	0.9	8.1	2.5	1.1
1996	6.2	1.9	1.0	7.4	2.2	1.1
1997	6.1	1.8	1.0	7.1	2.1	1.2
1998	5.9	1.7	1.1	6.7	2.0	1.2
1999	5.7	1.7	1.0	6.3	1.9	1.2
2000	5.7	1.7	1.1	6.1	1.8	1.2
2001	5.2	1.5	1.0	5.7	1.7	1.1
2002*	4.7	1.4	1.1	5.3	1.6	1.2
2003	4.4	1.3	1.0	5.0	1.5	1.1
2004	4.3	1.3	1.0	4.8	1.4	1.1
2005	4.2	1.2	1.0	4.6	1.4	1.0
2006	4.1	1.2	0.9	4.4	1.3	1.0
2007	4.0	1.2	0.9	4.2	1.2	0.9
2008	3.7	1.1	0.8	3.9	1.1	0.9
2009	3.3	1.0	0.7	3.6	1.1	0.8
2010	3.1	0.9	0.7	3.5	1.1	0.8
2011	3.0	0.9	0.6	3.4	1.0	0.7
2012	3.0	0.9	0.7	3.4	1.0	0.7
2013	3.0	0.9	0.7	3.3	1.0	0.7
2014	3.0	0.9	0.7	3.2	1.0	0.7
2015	2.9	0.9	0.7	3.0	0.9	0.7

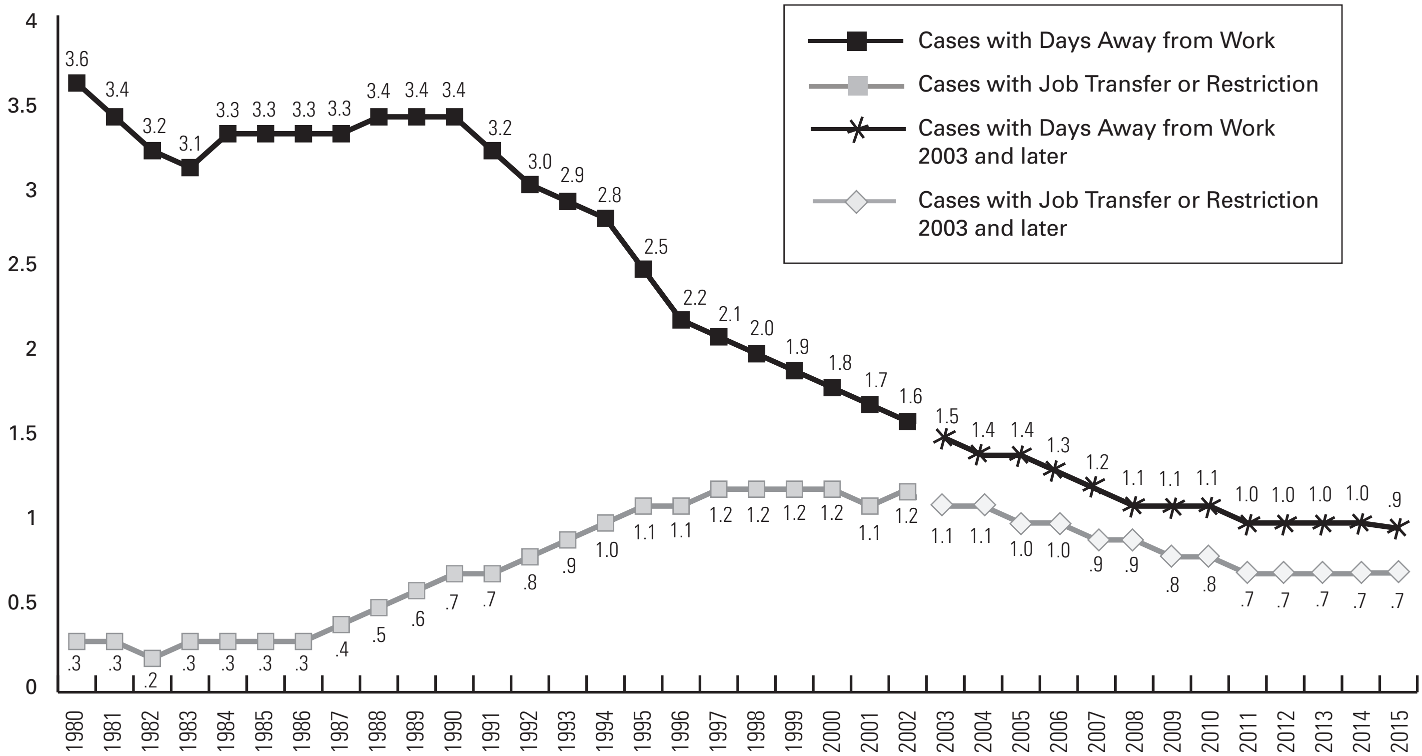
*Data for 2002 and beyond are not strictly comparable to data from prior years because of changes in OSHA recordkeeping requirements.

Source: U.S. Department of Labor (2016c).

decreasing while the incidence of transfers/work restrictions was increasing, may reflect a greater focus on employer accommodations that enable injured workers to return to modified work, until they are fully recovered and able to return to their pre-injury jobs. The declining incidence rate of cases with job transfer or restriction in recent years is not necessarily indicative of less focus on employer accommodations, because the overall incidence rate of cases with any days away from work is also

Figure 5

Private Industry Occupational Injuries and Illnesses: Incidence Rates, 1980-2015



Notes: The break in the graph indicates that the data for 2002 and beyond are not strictly comparable to prior year data due to changes in Occupational Safety & Health Administration recordkeeping requirements. Cases involving days away from work are cases requiring at least one day away from work with or without days of job transfer or restriction. Job transfer or restriction cases occur when, as a result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

Source: U.S. Department of Labor (2016c).

declining. In fact, over time, the proportion of cases with job transfers or restrictions is rising as a share of total cases with either any days away from work or with a job transfer or restriction. This suggests that injured workers today have a higher probability of benefiting from employer accommodations compared to the past.

In 2015, the most common nonfatal workplace injuries and illnesses that resulted in days away from work in private industry were (with incidence rates per 10,000 full-time equivalent (FTE) workers in parentheses): sprains, strains, and tears (33.8); soreness or pain, including back pain (14.2); cuts, lacerations, and punctures (9.7); fractures (8.4); and bruises and contusions (7.9) (DOL, 2016c).[51] The three occupational groups with the highest incidence of injuries and illnesses involving days away from work in private industry were: transportation and material moving occupations (228.5/10,000 FTE); installation, maintenance, and repair occupations (191.4); and building and grounds cleaning and maintenance occupations (187.2). Each of these occupational groups had incidence rates that were more than double the incidence rate (93.9) for the private sector as a whole (DOL, 2016c).

51 The BLS category: "All other natures" had an incidence rate of 14.2 per 10,000 FTEs.

Table 18

Number of Workers' Compensation Claims Per 100,000 Insured Workers: Private Carriers in 38 Jurisdictions, 1995-2013

Policy Period	Total (including medical only)	Medical Only	Medical Only Claims as % of Total	Temporary Total	Temporary Total Claims as % of Total	Permanent Partial	Permanent Partial Claims as % of Total
1995	7,377	5,689	77.1%	1,217	16%	459	6%
1996	6,837	5,281	77.2%	1,124	16%	419	6%
1997	6,725	5,230	77.8%	1,070	16%	414	6%
1998	6,474	5,035	77.8%	977	15%	452	7%
1999	6,446	5,047	78.3%	927	14%	461	7%
2000	6,003	4,685	78.0%	870	14%	437	7%
2001	5,510	4,277	77.6%	799	15%	423	8%
2002	5,239	4,036	77.0%	770	15%	422	8%
2003	4,901	3,747	76.5%	725	15%	423	9%
2004	4,728	3,635	76.9%	702	15%	385	8%
2005	4,571	3,514	76.9%	667	15%	383	8%
2006	4,376	3,351	76.6%	638	15%	381	9%
2007	4,076	3,107	76.2%	587	14%	375	9%
2008	3,615	2,730	75.5%	515	14%	363	10%
2009	3,452	2,659	77.0%	521	15%	357	10%
2010	3,486	2,616	75.0%	519	15%	347	10%
2011	3,411	2,563	75.1%	509	15%	335	10%
2012	3,279	2,466	75.2%	500	15%	308	9%
2013	3,202	2,398	74.9%	492	15%	307	10%
Percent change, 1995-2013							
	-56.6	-57.8		-59.6		-33.1	

Source: National Council on Compensation Insurance, 1997-2017, Exhibit XII, *Annual Statistical Bulletin*.

Incidence of Workers' Compensation Claims

The National Council on Compensation Insurance collects information on the number of workers' compensation *claims* paid by private carriers and competitive state funds in 38 states (NCCI, 2017a).[52] The data, replicated in Table 18 for years 1995-2013 (the most recent year reported), show declining trends in the incidence of claims similar to the declining trends in incidence of work-related injuries reported by the BLS.

52 NCCI measures frequency by lost time claims for injuries occurring in the accident year per one million of earned premium adjusted by state for changes in average weekly wages.

According to NCCI data, the number of workers' compensation claims from privately insured employers declined by 56.6 percent between 1995 and 2013 (compared to the BLS estimate of a 55.9 percent decrease in injuries and illnesses for private industry employers over the same time period). The NCCI data indicate that the number of temporary total disability claims from private industry declined by 59.6 percent (compared to the BLS estimate of a 55.9 percent decline in injuries and illnesses involving days away from work for private industry employers) (Tables 17 & 18).[53]

One must be cautious, however, in extrapolating injury rates from workers' compensation claims data. Key stakeholders in the workers' compensation systems have incentives to under-report or over-report occupational injuries and illnesses.[54] There are many reasons to suspect under-reporting on the part of workers, employers, and/or medical providers. *Workers* may not report injuries because: they do not know an injury is covered by workers' compensation; they believe filing for benefits is too time-consuming, difficult, or stressful; they believe the injury is something to be expected as part of their job; or they fear employer retaliation (Galizzi et al., 2010; Pransky et al., 1999; Strunin and Boden, 2004). *Employers* may not report injuries because: their recordkeeping is faulty; they want to maintain a superior safety record or protect their experience rating modification; or they are unaware that an injury is covered by workers' compensation (Azaroff et al., 2002; Lashuay and Harrison, 2006). *Medical providers* may fail to report injuries and illnesses that take time to develop, such as carpal tunnel syndrome, noise-induced hearing loss, and lung diseases like silicosis, because they are unaware of the workplace connection.[55] According to a GAO report, some health care providers say they have been pressured to provide less treatment in order to avoid the need to report an injury or illness as work-related (GAO, 2009).

There are also incentives for workers and/or medical providers to over-report injuries or illnesses as work-related. The 100 percent coverage of medical costs under workers' compensation creates incentives for both groups to identify a work-related cause when the etiology of an injury or illness is uncertain. There is evidence that soft-tissue conditions are more likely to be classified as work-related in states with higher workers' compensation physician reimbursement rates (Fomenko and Gruber, 2016). The trend towards capitated payment systems in health care also influences medical provider incentives. As one study found, an increase of capitation under group health plans led to an increase in the number of soft-tissue conditions that were called work-related and paid by workers' compensation (Victor et al., 2015). Workers also have incentives to report injuries as work related if they can receive higher disability benefits from workers' compensation than from a private disability plan or state unemployment insurance.

Addendum

Other Disability Benefit Programs

The primary purpose of this report is to describe trends in workers' compensation benefits, costs, and coverage with respect to two main stakeholder groups: the injured workers who receive benefits and the employers who pay for them. However, workers' compensation benefits can be supplemented by other sources of income for injured workers. This addendum describes the major disability support programs that interact with workers' compensation, namely:

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53 While the trends in private sector injury or illness claims from the BLS and NCCI are similar across time, there are a number of reasons why they may differ. First, there are discrepancies in the classification of claims. In workers' compensation, there is generally a three to seven-day waiting period before a claim is recorded (and would be reported in NCCI data) whereas any case in which a worker misses at least one day away from work is classified as a "days away from work" (DAFW) case by OSHA and reflected as such in BLS published data. Second, the BLS and NCCI cover different jurisdictions – the BLS covers injuries and illnesses across the entire U.S. whereas the NCCI only records workers' compensation claims in 38 jurisdictions. Third, there is evidence that some employers do not comply with OSHA recordkeeping or Survey of Occupational Injury and Illness reporting instructions, leading to underreporting of workers' compensation eligible claims in BLS data (Rappin et al., 2016).

54 See Azaroff et al. (2002), Spieler and Burton (2012), and OSHA (2015) for reviews of studies on the reporting of work-related injuries and illnesses

55 Studies have typically shown much less reporting of these types of conditions as work-related than is suggested by their prevalence in medical data (Stanbury et al., 1995; Biddle et al., 1998; Morse et al., 1998; Milton et al., 1998; DOL, 2008).

temporary sick leave, short- and long-term disability benefits, retirement benefits, Social Security Disability Insurance, and Medicare.

Sick leave. Sick leave is a common form of wage replacement for short-term absences from work due to illnesses or injuries unrelated to work. About 61 percent of all private-sector employees had access to some type of paid sick leave in 2015, provided through their employer or a private short-term disability plan (DOL, 2015). Sick leave typically pays 100 percent of wages for a number of days depending on the worker's job tenure and hours worked. Sick leave can be used to cover wage losses for the first three to seven days of a workers' compensation disability claim, when these days are not covered by statute.

Paid sick leave is often utilized to cover work absences associated with minor work-related injuries, rather than filing a claim for workers' compensation temporary disability benefits, because sick leave is administratively easier for workers to access and employers to administer. For employers, the workers' compensation option has reporting requirements and negative impacts on premium rates that are not present in paid sick leave. For workers, the decision to report and pursue a workers' compensation claim involves a lower wage replacement rate, and a minimum three-day wage penalty (unless they also apply for paid sick leave).[56] All these factors influence worker and employer decisions regarding whether to cover short duration work-related time losses with sick leave or workers' compensation.

Short-term disability benefits. Five states (California, Hawaii, New Jersey, New York, and Rhode Island) require that employers provide short- to medium-term disability insurance for employees. Some private employers offer short-term disability insurance to their workers even in states where such insurance is not required. About 40 percent of private industry workers had access to short-term disability insurance in 2015, and 39 percent were covered (DOL, 2015). Typically, workers must have a specified amount of past employment or earnings to qualify for benefits, and benefits replace about half of the worker's prior earnings. In general, workers receiving workers' compensation benefits are not eligible for these types of short-term disability benefits.

There are also short-term disability plans that cover periods that are longer than the sick leave provided as a function of payroll but shorter than required to qualify for long-term disability benefits. In addition, there are state and municipal short-term disability benefit programs for public employees (particularly for police and firefighters) that coordinate with workers' compensation programs or, in some cases, are an alternative to workers' compensation.

Long-term disability benefits. Long-term disability insurance covered 33 percent of private-sector employees in 2015 (DOL, 2015). Such coverage is most common among relatively high-paying management, professional, and related occupations. About 57 percent of workers in management and professional-related occupations were covered by long-term disability plans as of 2015, compared to 32 percent of workers in sales and office occupations, and 11 percent of workers in service occupations (DOL, 2015). Long-term disability insurance is also sold in individual policies, typically to high-earning professionals. Such individual policies are not included in these coverage statistics.

Long-term disability benefits are usually paid after a waiting period of three to six months or after short-term disability benefits end. Long-term disability insurance is generally designed to replace 60 percent of earnings, although replacement rates of 50 or 66 percent are also common. Almost all long-term disability insurance is coordinated with Social Security Disability Insurance (SSDI) and workers' compensation. That is, private long-term disability benefits are reduced dollar for dollar by the amount of Social Security or workers' compensation benefits received. If Social Security benefits replace 40 percent of a worker's prior earnings, for example, the long-term disability benefit would pay the balance to achieve a 60 percent wage replacement.

56 Workers' compensation typically replaces two-thirds of a worker's pre-injury wages before tax up to a maximum, but these benefits are not taxed. A useful wage-replacement comparison is workers' compensation benefits and post-tax wages.

Retirement benefits. Retirement benefits may also be available to workers who become disabled because of a work-related injury or illness. Most defined-benefit pension plans have some disability provision; benefits may be available at the time of disability or may continue to accrue until retirement age. Defined-contribution pension plans will often make funds in an employee's account available without penalty if the worker becomes disabled, but these plans do not have the insurance features of defined-benefit pensions or disability insurance.

Federal disability programs. Social Security Disability Insurance (SSDI) and Medicare provide cash and medical benefits, respectively, to workers who become disabled and unable to work prior to normal retirement age. SSDI benefits are available to workers with disabilities whether or not the disability results from a work-related injury, but the eligibility rules for SSDI differ from the rules for workers' compensation.

Workers are eligible for workers' compensation benefits from their first day of employment, while eligibility for SSDI requires workers to have a history of contributions to the Social Security system.[57] Workers' compensation cash benefits begin after a few days' work absence, while SSDI benefits begin only after a five-month waiting period. Workers' compensation provides benefits for both short- and long-term disabilities and for partial as well as total disabilities. SSDI benefits are paid only to workers who have long-term impairments that preclude gainful employment that is suitable for the worker by virtue of their training and experience.

Medicare pays health care costs for persons who receive SSDI benefits, after an additional 24-month waiting period (or 29 months after the onset of disability). Medicare covers all medical conditions, whether or not the primary disability is work-related. In 2015, workers' compensation benefits paid (cash benefits plus medical payments) totaled $61.9 billion. SSDI paid $143.4 billion in wage replacement benefits to disabled persons and their dependents, and Medicare paid $93.4 billion for medical care for disabled persons under age 65, for a total of $236.8 billion (SSA, 2016b; CMS, 2017).

Dual beneficiaries. If a worker becomes eligible for both SSDI and workers' compensation cash benefits, one or both programs will reduce benefits to avoid making excessive payments relative to the worker's past earnings.[58] The Social Security Amendments of 1965 require that SSDI benefits be reduced (or "offset") such that the combined total of workers' compensation and SSDI benefits does not exceed 80 percent of the worker's prior earnings.[59] The offset provision affects 35 states; 15 states which had established reverse-offset laws prior to the 1965 legislation received exemptions.[60] In reverse-offset states, workers' compensation benefits are reduced (or "offset") by SSDI benefits.

57 To qualify for SSDI, individuals must meet two different earnings tests: 1) a recent work test, based on age at the time of disability; and 2) a duration of work test. Generally, workers must have earned at least 20 work credits in the 10 years immediately before becoming disabled, although younger workers may qualify with fewer credits.

58 The interaction between workers' compensation and SSDI is complex. Studies have investigated the impact of changes to workers' compensation programs on SSDI outcomes using aggregate data and found mixed results (e.g. Guo and Burton, 2012; McInerney and Simon, 2012). While the potential impact and magnitude of changes in workers' compensation on SSDI is unclear, studies using micro-level data have found evidence that work-related injuries are a significant source of disability later in life (e.g. Reville and Schoeni, 2004; O'Leary et al., 2012). Burton and Guo (2016) examine the relationship between SSDI and workers' compensation programs in detail and provide a number of policy options aimed at improving the interaction between the two programs.

59 The cap remains at 80 percent of the worker's average earnings before disability except that, in the relatively few cases when Social Security disability benefits for the worker and dependents exceed 80 percent of prior earnings, the benefits are not reduced below the Social Security amount. This cap also applies to coordination between SSDI and other public disability benefits derived from jobs not covered by Social Security, such as state or local government jobs where the governmental employer has chosen not to cover its employees under Social Security. The portion of workers' compensation benefits that offset (reduce) SSDI benefits are subject to federal income tax (IRC section 86(d)(3)).

60 States with reverse offset laws for some or all types of workers' compensation benefits are Alaska, California, Colorado, Florida, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Washington, and Wisconsin. In addition, there are reverse offset rules for other types of public disability benefits in Hawaii, Illinois, New Jersey, and New York (SSA Program Operations Manual System, DI 52105.001). California's reverse offset laws only apply to workers' compensation benefits paid through the Subsequent Injuries Fund and Industrial Disability Leave. Legislation in 1981 eliminated the states' option to adopt reverse offset laws.

According to the Medicare Secondary Payer Act, workers' compensation is the primary payer for illnesses and injuries covered under workers' compensation law. Medicare is the secondary payer for medical costs after the workers' compensation insurer's obligation is met.

As of December 2015, about 8.9 million workers with disabilities and 1.9 million dependents received SSDI benefits (SSA, 2016a) (Table 19). The total number of SSDI beneficiaries increased from about 8.3 million in 2005 to roughly 11 million in 2013, before declining slightly in 2014 and 2015. About 621,000 (5.7%) of these individuals were dual beneficiaries of workers' compensation or other public disability benefit (PDB) programs in 2015.[61] Of these, 105,793 persons (1.0% of total beneficiaries and 17.0% of beneficiaries currently receiving SSDI and workers' compensation or public disability benefits) were currently receiving reduced SSDI benefits because of the offset provision.

Benefits Incurred vs. Benefits Paid

The Academy's estimates of workers' compensation benefits in this report reflect amounts paid for work-related injuries and illnesses in a calendar year regardless of when those injuries occurred. This measure of benefits is commonly used in reporting

Table 19

Dual Eligible Individuals: Social Security Disability Insurance (SSDI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefits (PDB), 2015

	Total		Workers		Dependents	
Type of Case	Number	Percent	Number	Percent	Number	Percent
All Disability Insurance Beneficiaries	10,806,466	100.0	8,909,430	100.0	1,897,036	100.0
Total Dual Eligibles	1,264,121	11.7	1,029,149	11.6	234,972	12.4
Currently Receiving SSDI and WC or PDB	621,356	5.7	508,700	5.7	112,656	5.9
SSDI Reduced by Cap	105,793	1.0	79,571	0.9	26,222	1.4
SSDI Not Reduced by Cap	387,120	3.6	322,533	3.6	64,587	3.4
Reverse Jurisdiction	50,356	0.5	41,408	0.5	8,948	0.5
Pending Decision on WC or PDB	78,087	0.7	65,188	0.7	12,899	0.7
SSDI Previously Offset by WC or PDB	642,765	5.9	520,449	5.8	122,316	6.4

Notes: Social Security disability benefits are offset against workers' compensation and certain other public disability benefits (PDB) in most states. In general, PDBs refer to disability benefits earned in state, local, or federal government employment that are not covered by Social Security. There are 15 states with reverse offset laws where SSDI is the first payer for some or all types of workers' compensation benefits. The states are Alaska, California, Colorado, Florida, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Washington, and Wisconsin. California's reverse offset laws only apply to workers' compensation benefits paid through the Subsequent Injuries' Fund and Industrial Disability Leave. SSDI previously offset by WC or PDB consists of the entire universe of beneficiaries who are currently receiving SSDI benefits that at one point had their SSDI benefits offset by WC or PDB, but no longer do.

Source: Social Security Administration, Master Beneficiary Record, 100 percent data, and Social Security Administration Workers' Compensation and Public Disability Benefit file, 100 percent data (SSA, 2016a).

61 In general, PDBs refer to disability benefits earned in state, local, or federal government employment that are not covered by Social Security.

data on social insurance programs, private employee benefits, and other income security programs.

A different measure, accident year incurred losses (or accident year incurred benefits) is the common reporting measure for private workers' compensation insurers and some state funds. Incurred benefits measure the total expected benefits associated with injuries that occur in a particular year, regardless of whether the benefits are paid in that year or future years. The two measures, calendar year *benefits paid* and accident year *benefits incurred*, reveal important but different information.[62]

For the purpose of setting insurance premiums, it is vital to estimate the incurred benefits the premiums are required to cover. When an employer purchases workers' compensation insurance for a particular period, the premiums are designed to cover current *and future* liabilities for all injuries that occur during the period covered by the policy. NCCI and state rating bureaus use trends in accident year (or policy year) incurred benefits to help determine their rates.

Benefits incurred are also more appropriate for policy purposes than benefits paid. For example, if a state lowers benefits or tightens compensability rules for new injuries as of a given date, benefits would be expected to decline in the future. Similarly, if a state raises benefits or expands the range of compensable injuries, benefits would be expected to increase in the future. The policy change will show up immediately in estimates of incurred benefits but will be observed more slowly in measures of paid benefits because the latter measure is also influenced by payments for injuries occurring in years prior to the policy change.

Despite the advantages of tracking benefits incurred, there are a number of disadvantages. It takes many years before the estimated losses associated with injuries occurring in a given year are reliable and stable, whereas benefits paid are known and fixed for any given reporting period. Further, using incurred loss data instead of paid losses may have some advantages for actuarial reserve setting and rate making, but it has the disadvantage of not being readily available from state agencies, self-insured employers, many state funds, or from federal workers' compensation programs. Nor are incurred losses from different sources useful to aggregate without an understanding of how the incurred losses were estimated by each source. Finally, data on incurred benefits do not include benefits paid by employers under large deductible policies, benefits paid by employers insured under monopolistic state funds, or benefits paid in states with a rating bureau. For these reasons, the Academy relies on calendar year benefits paid to provide the most accurate and consistent estimates of state-by-state and national workers' compensation payments.

62 A more detailed discussion of these measures is included in the Glossary and in Thomason et al., (2001).

Glossary

Accident Year: The year in which an injury occurred, or the year of onset or manifestation of an illness.

Accident Year Incurred Benefits: Benefits associated with all injuries and illnesses occurring in the accident year, regardless of the years in which the benefits are paid. (Also known as calendar accident year incurred benefits.)

Black Lung Benefits: See: Coal Mine Health and Safety Act.

BLS: The Bureau of Labor Statistics (BLS) in the U.S. Department of Labor is a statistical agency that collects, processes, analyzes, and disseminates statistical data about the labor market. For more information, visit www.bls.gov.

Calendar Year Paid Benefits: Benefits paid during a calendar year regardless of when the injury or illness occurred.

Coal Mine Health and Safety Act: The Coal Mine Health and Safety Act (Public Law 91-173) was enacted in 1969 and provides black lung benefits to coal miners disabled as a result of exposure to coal dust and to their survivors.

Compromise and Release (C&R) Agreement: An agreement to settle a workers' compensation case. State laws vary as to the nature of these releases, but there are typically three elements to a C&R agreement: a compromise between the worker's claim and the employer's offer concerning the amount of cash and/or medical benefits to be paid; the payment of the compromised amount in a fixed amount (commonly called a "lump sum" but which may or may not be paid to the claimant at once); and the release of the employer from further liability. Unless it was "full and final", the release may allow for reopening medical or indemnity payments under specific conditions.

Covered Employment: The Academy's coverage data include employees of those employers required to be covered by workers' compensation programs. A more inclusive measure of covered employment would also include employees of those employers that voluntarily elect coverage.

Deductibles: Under deductible policies written by private carriers or state funds, the insurer is responsible for paying all of the workers' compensation benefits, but employers are responsible for reimbursing the insurer for those benefits up to a specified deductible amount. Deductibles may be written into an insurance policy on a per injury basis, or an aggregate basis, or a combination of a per injury basis with an aggregate cap.

Defense Base Act: The Defense Base Act (DBA-42 U.S.C. §§ 1651-54) is a federal law extending the Longshore and Harbor Workers' Compensation Act (33 U.S.C. §§ 901-50), passed in 1941 and amended later, to persons: (1) employed by private employers at U.S. defense bases overseas; (2) employed under a public work contract with the United States performed outside the U.S.; (3) employed under a contract with the United States, for work performed outside the U.S. under the Foreign Assistance Act; or (4) employed by an American contractor providing welfare or similar services outside the United States for the benefit of the Armed Services.

DI: Disability insurance from the Social Security program. See: SSDI.

Disability: A loss of functional capacity associated with a health condition.

FECA: The Federal Employees' Compensation Act (FECA) Public Law (103-3 or 5 U.S.C. §§ 8101-52), enacted in 1916, provides workers' compensation coverage to U.S. federal civilian and postal workers around the world for work-related injuries and occupational diseases.

FELA: The Federal Employers' Liability Act (FELA 45 U.S.C. § 51 et seq.), enacted in 1908, gives railroad workers engaged in interstate commerce an action in negligence against their employer in the event of work-related injuries or occupational diseases.

Guaranty Fund: A guaranty fund is a special state-based fund that assumes all or part of the liability for workers' compensation benefits provided to a worker when the employer or insurance carrier legally responsible for those benefits is unable to make payments. Guaranty funds for private insurance carriers (all states with private carriers have these) and for self-insuring employers (less than half the states have these) are always separate funds. Both types are financed by assessments on insurers or self-insured employers, respectively.

Group Self-Insurance: A special form of self-insurance that is available to groups of employers, which is only available in a little over half of the states. This is similar to a mutual insurance company and, as such, is closely regulated.

IAIABC: The International Association of Industrial Accident Boards and Commissions (IAIABC) is the organization representing workers' compensation agencies in the United States, Canada, and other nations and territories. For more information, visit www.iaiabc.org.

Incurred Losses (or Incurred Benefits): Benefits paid to the valuation date plus liabilities for future benefits for injuries that occurred in a specified period, such as an accident year.

Jones Act: The Jones Act is Section 27 of the Merchant Marine Act (P.L. 66-261), passed in 1920, which extends the provision of the Federal Employers' Liability Act to qualifying sailors (individuals assigned to a vessel or fleet that operates in navigable waters, meaning waterways capable of being used for interstate or foreign commerce).

LHWCA: The Longshore and Harbor Workers' Compensation Act (LHWCA 33 U.S.C. §§ 901-50), enacted in 1927, requires employers to provide workers' compensation protection for longshore, harbor, and other maritime workers. See: Defense Base Act (DBA).

Loss Adjustment Expenses: Salaries and fees paid to insurance adjusters, as well as other expenses incurred from adjusting claims.

Losses: A flexible term that can be applied in several ways: Paid benefits, incurred benefits, fully developed benefits, and possibly including incurred but not reported benefits.

Manual Equivalent Premium (MEP): A firm's payroll multiplied by the approved rate for the firm's insurance classification code. The manual equivalent premium represents an employer's costs for workers' compensation without adjustment for schedule rating, deductible credits, or experience rating.

NAIC: The National Association of Insurance Commissioners (NAIC) is the national organization of chief insurance regulators in each state, the District of Columbia, and five U.S. territories. It assists state insurance regulators, individually and collectively, to achieve insurance regulatory goals. For more information, visit www.naic.org.

NCCI: The National Council on Compensation Insurance, Inc. (NCCI) is a national organization that assists private carriers and insurance commissioners in collecting statistical information for pricing workers' compensation coverage in 38 states. For more information, visit www.ncci.com.

No-fault: A strict liability rule that, in workers' compensation, holds the employer fully liable for medical costs and compensation for injury-related work absences, without proof of negligence or culpability.

Overall Operating Ratio: The combined ratio after dividends minus net investment gain/loss and other income as a percent of net premium.

OSHA: The OSH Act created the Occupational Safety and Health Administration (OSHA) within the U.S. Department of Labor. OSHA is responsible for promulgating standards, inspecting workplaces for compliance, and prosecuting violations.

OSH Act: The Occupational Safety and Health Act (OSH Act Public Law 91-596) is a federal law enacted in 1970 that establishes and enforces workplace safety and health rules for nearly all private-sector employers.

Paid Losses (or Paid Benefits): Benefits paid during a specified period, such as a calendar year, regardless of when the injury or disease occurred.

Permanent Partial Disability (PPD): A disability that, although permanent, does not completely limit a person's ability to work. A statutory benefit award is paid for qualifying injuries.

Permanent Total Disability (PTD): A permanent disability that is deemed by law to preclude material levels of employment.

Residual Market: The mechanism used to provide insurance for employers who are unable to purchase insurance in the voluntary private market. In some jurisdictions, the state fund is the "insurer of last resort" and serves the function of the residual market. In others, there is a separate pool financed by assessments of private insurers, which is also known as an assigned risk pool.

Second Injury Fund: A second injury fund is a special fund that assumes all or part of the liability for workers' compensation benefits provided to a worker because of the combined effects of a work-related injury or disease with a preexisting medical condition. The second injury fund pays costs associated with the prior condition to encourage employers to hire injured workers who want to return to work.

Self-insurance: Self-insurance is a state-regulated arrangement in which the employer assumes responsibility for the payment of workers' compensation benefits to the firm's employees with workplace injuries or diseases. Most employers do not self-insure but instead purchase workers' compensation insurance from a private carrier or state fund.

SSA: The U.S. Social Security Administration (SSA) administers the Social Security program, which pays retirement, disability, and survivors' benefits to workers and their families, and the federal Supplemental Security Income program, which provides income support benefits to low-income, aged, and disabled individuals. For more information, visit www.ssa.gov.

SSDI: Social Security Disability Insurance (SSDI) pays benefits to insured workers who sustain severe, long-term work disabilities due to any cause. See: DI.

Temporary Partial Disability (TPD): A temporary disability that does not completely limit a person's ability to work.

Temporary Total Disability (TTD): A disability that temporarily precludes a person from performing the pre-injury job or another job at the employer that the worker could have performed prior to the injury.

Unemployment Insurance (UI): Federal/state program that provides cash benefits to workers who become unemployed through no fault of their own and who meet certain eligibility criteria set by the states.

U.S. Census County Business Patterns (CBP): County Business Patterns is an annual series that provides subnational economic data by industry. CBP basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau.

U.S. DOL: The U.S. Department of Labor administers a variety of federal labor laws including those that guarantee workers' rights to safe and healthy working conditions, a minimum hourly wage and overtime pay, freedom from employment discrimination, unemployment insurance, and other income support. For more information, visit www.dol.gov.

WC: Workers' compensation. A form of government insurance, mandated for most employers, that provides statutory benefits for covered work-related injuries and illnesses.

WCRI: The Workers' Compensation Research Institute (WCRI) is a research organization providing information about public policy issues involving workers' compensation systems. For more information, visit www.wcrinet.org

Work-Related Injury/Illness: An injury or illness caused by activities related to the workplace. The usual legal test for "work-related" is "arising out of and in the course of employment." However, the definition of a work-related injury or disease that is compensable under a state's workers' compensation program can be quite complex and varies across states.

Appendix A: Coverage Estimates

The National Academy of Social Insurance's estimates of workers' compensation coverage start with the number of workers in each state who are covered by unemployment insurance (UI) (DOL, 2016d). Those who are not required to be covered by UI include: some farm and domestic workers who earn less than a threshold amount from one employer; some state and local employees, such as elected officials; employees of some nonprofit entities, such as religious organizations, for whom coverage is optional in some states; unpaid family workers; and railroad employees who are covered under a separate unemployment insurance program. Railroad workers also are not covered by state workers' compensation because they have other arrangements (NASI, 2002).

One category of workers not covered under either unemployment insurance or workers' compensation is self-employed individuals. All U.S. employers who are required to pay unemployment taxes must report quarterly information to their state employment security agencies about their employees and payroll covered by unemployment insurance. These employer reports are the basis for statistical reports prepared by the U.S. Bureau of Labor Statistics, known as the ES-202 data. These data are a census of the universe of U.S. workers who are covered by unemployment insurance (DOL, 2016d).

Key assumptions underlying the Academy's estimates of workers' compensation coverage, shown in Table A, are:

(1) Workers whose employers do not report that they are covered by UI are not covered by workers' compensation.

(2) Workers who are reported to be covered by UI are generally covered by workers' compensation as well, except in the following cases:

  (a) Workers in small firms (which are required to provide UI coverage in every state) are not covered by workers' compensation if the state law exempts small firms from mandatory workers' compensation coverage.

  (b) Employees in agricultural industries (who may be covered by UI) are not covered by workers' compensation if the state law exempts agricultural employers from mandatory workers' compensation coverage.

  (c) In Texas, where workers' compensation coverage is elective for almost all employers, estimates are based on periodic surveys conducted by the Texas Department of Insurance Workers' Compensation Research and Evaluation Group (TDI, 2016).

All federal employees are covered by workers' compensation, regardless of the state in which they work.

Small Firm Exemptions. Private firms with *fewer than three employees* are exempt from mandatory workers' compensation coverage in eight states: Arkansas, Georgia, Michigan, New Mexico, North Carolina, Virginia, West Virginia, and Wisconsin. Firms with *fewer than four employees* are exempt in two states: Florida and South Carolina. Firms with *fewer than five employees* are exempt from mandatory coverage in five states: Alabama, Mississippi, Missouri, Oklahoma, and Tennessee (IAIABC-WCRI, 2016). The Academy assumes that workers are not covered by workers' compensation if they work in a small firm that meets the specific exemption requirements in one of these states.

To estimate the number of employees affected by the small firm exemptions, we use data from the U.S. Census County Business Patterns (CBP). The CBP is an annual data series that tracks employment across state, industry, and firm size.[63] The data allow us to identify the fraction of workers employed at firms with less than five workers in the states with workers' compensation exemptions for small firms.

63 Previous versions of this report relied on data from the U.S. Small Business Administration. However, the SBA data is not reported on an annual basis. There are minor differences in the employment estimates between the CBP and the SBA, however they are not large enough to alter the coverage estimates. Previous year estimates were updated using the CBP for consistency.

For the five states with workers' compensation exemptions for firms with fewer than five employees, we directly apply the fraction of workers employed by these small firms as reported by the CBP to the number of UI-covered workers to calculate the number of employees affected by the exemption. In 2015, these proportions were: Alabama, 5.6 percent; Mississippi, 5.9 percent; Missouri, 5.9 percent; Oklahoma, 6.3 percent; and Tennessee, 4.7 percent.

For the states with numerical exemptions for firms with fewer than three or four workers, the CBP proportions of workers in small firms (fewer than five employees) must be adjusted downward to correspond to the workers' compensation cutoff in each state. We use national data on small firms from the U.S. Census Bureau (2005) to make the adjustments. The data indicate that, among those workers employed in small firms, 71.8 percent work in firms with fewer than four employees and 43.9 percent work in firms with fewer than three employees.

For the eight states that exempt firms with fewer than three workers, the proportions in small firms are: Arkansas, 6.0 percent; Georgia, 5.5 percent; Michigan, 5.2 percent; New Mexico, 6.4 percent; North Carolina, 5.4 percent; Virginia, 5.6 percent; West Virginia, 5.8 percent; and Wisconsin, 4.8 percent (CBP, 2016). These proportions are adjusted by a factor of 43.9 percent to estimate the proportion of workers in exempt firms. For example, the proportion of Arkansas private-sector workers in firms with fewer than three employees is: (6.0%) x (43.9%) = 2.6 percent.

For the two states that exempt firms with fewer than four workers, the proportions in small firms are: Florida, 6.6 percent, and South Carolina, 5.7 percent. These proportions are adjusted by a factor of 71.8 percent to estimate the proportion of workers in exempt firms. For South Carolina, the proportion of private sector workers in firms with fewer than four employees is (5.7%) x (71.8%) = 4.1 percent. The adjusted ratios are applied to the proportion of workers in small firms in each state to calculate the exempt population. In total, we estimate that 1.29 million workers were excluded from workers' compensation coverage in 2015 because of small firm exemptions from mandatory coverage.

Agricultural Exemptions. We assume agricultural workers are excluded from workers' compensation coverage if they work in a state where agricultural workers are exempt from mandatory coverage. Only 13 jurisdictions have no exemption for agricultural workers: Alaska, Arizona, California, Connecticut, District of Columbia, Hawaii, Idaho, Massachusetts, New Hampshire, New Jersey, Ohio, Oregon, and Wyoming.[64] In states with agricultural exemptions, we identify the number of agricultural workers and subtract them from the total number of UI covered jobs. To identify agricultural workers, we use the Quarterly Census of Employment and Wages (DOL, 2016d), which provides estimates of total employment by state and by industry using North American Industry Classification System (NAICS) codes. We estimate that 431,498 agricultural workers were excluded from workers' compensation in 2015 because of state exemptions.

Texas. In Texas, where workers' compensation coverage is elective for almost all employers, the Academy's estimate of coverage is based on periodic surveys conducted by the Texas Department of Insurance Workers' Compensation Research and Evaluation Group (TDI, 2016). Their most recent survey estimated that 80 percent of private-sector employees were covered by workers' compensation in 2014 and 82 percent in 2016. We averaged the two amounts to get 81 percent coverage in Texas in 2015. We applied this ratio to all UI-covered Texas employees (other than federal government workers, who were not included in the Texas surveys) to determine the total number of employees covered by workers' compensation. In 2015, we estimate that 2.2 million workers in Texas were not covered by workers' compensation.

64 Washington also has an exemption for agricultural workers, but it is limited to some family members of family-owned operations. RCW 51.12.020 – employments excluded include "…Any child under eighteen years of age employed by his or her parents in agricultural activities on the family farm…" Mark Mercier of the Washington Department of Labor and Industries confirmed that the minor family member exemption is a very small part of the agricultural workforce and is not necessarily taken in all instances. Therefore, we did not include any agricultural exemptions for workers in Washington.

Employed Workforce Coverage Estimates. The workers' compensation coverage estimates described above are an estimate of the proportion of UI-covered jobs that are also covered by workers' compensation. However, there are a number of jobs that are not covered by either UI or workers' compensation. Previous editions of this report provided an estimate of the percent of the total employed workforce that is covered by workers' compensation. The estimate was derived by dividing the number of workers' compensation covered jobs by total employment as reported by the Current Population Survey (CPS) which, in recent years, typically indicated an annual coverage rate of total employment of about 90 percent. However, this estimate is comparing the total number of *jobs* in the numerator to the total number of *workers* in the denominator.

Some individuals have multiple jobs, so comparing the number of workers' compensation covered jobs to the total number of employed workers in the population may overestimate the overall workers' compensation coverage rate. To develop a more consistent estimate, we used the Integrated Public Use Microdata Series of the CPS (IPUMS-CPS, 2017) to identify the distribution of employed individuals with one, two, three, or four or more jobs. Using that distribution of multiple jobholders, we expanded total employment to develop an estimate of the total number of jobs in the economy.[65, 66] This new measure allowed us to calculate the percentage of total jobs among the employed workforce that are covered by workers' compensation using a consistent unit of measure in the numerator and denominator: *jobs*. As Table A.2 shows, workers' compensation covered jobs, as a proportion of total jobs in the economy, has hovered around 85 percent between 2005 and 2015.

65 We calculated the total number of jobs in time t as:
$\text{Total Jobs}_t = \text{Total Employment}_t * [\text{\% Single Job}_t + (2*\text{\% Two Jobs}_t) + (3*\text{\% Three Jobs}_t) + (4*\text{\% Four or More Jobs}_t)]$

66 Using data from the CPS, we estimated that 5.0 percent of the U.S. employed workforce held more than one job in 2015.

Table A

Documenting Workers' Compensation Coverage Estimates, 2015 Annual Averages

	Unemployment Insurance (UI) Covered Jobs[a]		Workers' Compensation (WC) Exemptions				
State	Total (1)	Private, Non-Farm Firms (2)	Small Firm[b] (3)	Agriculture[c] (4)	Texas[d] (6)	WC Covered Jobs (7)	WC as a % of UI (8)
Alabama	1,837,327	1,527,156	85,297	5,011	-	1,747,019	95.1
Alaska	316,746	254,731	-	-	-	316,746	100.0
Arizona	2,555,155	2,211,658	-	-	-	2,555,155	100.0
Arkansas	1,157,603	971,174	25,477	7,558	-	1,124,568	97.1
California	16,051,138	13,712,068	-	-	-	16,051,138	100.0
Colorado	2,440,966	2,084,876	-	12,608	-	2,428,358	99.5
Connecticut	1,645,107	1,423,901	-	-	-	1,645,107	100.0
Delaware	428,110	370,576	-	1,175	-	426,935	99.7
District of Columbia	545,461	506,781	-	-	-	545,461	100.0
Florida	7,905,692	6,950,999	329,953	54,923	-	7,520,816	95.1
Georgia	4,053,026	3,499,610	84,369	14,655	-	3,954,002	97.6
Hawaii	604,792	508,984	-	-	-	604,792	100.0
Idaho	652,121	532,466	-	-	-	652,121	100.0
Illinois	5,768,135	5,046,291	-	14,108	-	5,754,027	99.8
Indiana	2,905,399	2,538,065	-	12,946	-	2,892,453	99.6
Iowa	1,512,735	1,278,966	-	15,827	-	1,496,908	99.0
Kansas	1,342,323	1,113,767	-	10,569	-	1,331,754	99.2
Kentucky	1,798,982	1,534,996	-	4,908	-	1,794,074	99.7
Louisiana	1,900,675	1,616,292	-	4,529	-	1,896,146	99.8
Maine	581,365	497,747	-	3,130	-	578,235	99.5
Maryland	2,447,167	2,102,023	-	3,890	-	2,443,277	99.8
Massachusetts	3,382,273	2,995,475	-	-	-	3,382,273	100.0
Michigan	4,110,208	3,585,342	82,033	25,298	-	4,002,877	97.4
Minnesota	2,745,226	2,384,708	-	17,842	-	2,727,384	99.4
Mississippi	1,089,224	871,242	51,499	7,148	-	1,030,577	94.6
Missouri	2,661,764	2,290,985	135,113	9,609	-	2,517,042	94.6

Montana	435,663	361,936	-	3,850	-	431,813	99.1
Nebraska	942,525	787,914	-	11,473	-	931,052	98.8
Nevada	1,226,297	1,093,497	-	2,252	-	1,224,045	99.8
New Hampshire	629,297	550,884	-	-	-	629,297	100.0
New Jersey	3,841,068	3,308,661	-	-	-	3,841,068	100.0
New Mexico	777,614	617,969	17,380	8,653	-	751,581	96.7
New York	8,899,979	7,626,983	-	22,335	-	8,877,644	99.7
North Carolina	4,091,404	3,453,422	82,057	21,356	-	3,987,991	97.5
North Dakota	427,885	363,481	-	3,657	-	424,228	99.1
Ohio	5,181,539	4,538,720	-	-	-	5,181,539	100.0
Oklahoma	1,547,211	1,260,588	79,867	9,502	-	1,457,842	94.2
Oregon	1,759,573	1,478,981	-	-	-	1,759,573	100.0
Pennsylvania	5,595,758	4,995,829	-	20,088	-	5,575,670	99.6
Rhode Island	459,531	410,441	-	624	-	458,907	99.9
South Carolina	1,917,021	1,601,518	65,678	5,615	-	1,845,728	96.3
South Dakota	404,912	339,272	-	4,808	-	400,104	98.8
Tennessee	2,771,114	2,408,584	113,233	5,685	-	2,652,196	95.7
Texas	11,462,746	9,800,469	-	46,408	2,177,922	9,238,416	80.6
Utah	1,305,607	1,117,864	-	4,681	-	1,300,926	99.6
Vermont	300,290	251,449	-	2,650	-	297,640	99.1
Virginia	3,559,065	3,035,585	74,207	8,314	-	3,476,544	97.7
Washington	3,048,839	2,513,400	-	-	-	3,048,839	100.0
West Virginia	672,985	558,344	14,348	824	-	657,813	97.7
Wisconsin	2,765,377	2,393,720	50,796	22,989	-	2,691,592	97.3
Wyoming	275,325	213,674	-	-	-	275,325	100.0
Total Non-Federal	136,737,345	117,494,064	1,291,308	431,498	2,177,922	132,836,618	97.1
Federal Employees	2,756,426					2,756,426	100.0
TOTAL	139,493,771	117,494,064	1,291,308	431,498	2,177,922	135,593,044	97.2

a. UI-covered employment reported in the ETA-202 data produced by the Bureau of Labor Statistics (U.S. DOL, 2016d).
b. Data on employees at small firms came from the U.S. Census Bureau (2005; 2016).
c. Data on agricultural workers came from the Quarterly Census of Employment and Wages (U.S. DOL, 2016d).
d. Data on workers not covered by workers' compensation in Texas came from the Texas Department of Insurance (TDI, 2016).

Source: National Academy of Social Insurance estimates.

Table A-2

Workers' Compensation Coverage as a Percent of the Employed Workforce, 2005-2015 National Averages

Year	Total Employment[a] (thousands)	Total Jobs[b] (thousands)	WC Covered Jobs[c] (thousands)	WC % Coverage of Total Employment	WC % Coverage of Total Jobs
	(1)	(2)	(3)	(4) = (3) / (2)	(5) = (3) / (1)
2005	141,730	150,276	128,141	85.3%	90.4%
2006	144,427	153,006	130,322	85.2%	90.2%
2007	146,047	154,678	131,734	85.2%	90.2%
2008	145,362	153,953	130,643	84.9%	89.9%
2009	139,877	148,074	124,856	84.3%	89.3%
2010	139,064	146,782	124,454	84.8%	89.5%
2011	139,869	147,660	125,876	85.2%	90.0%
2012	142,469	150,319	127,916	85.1%	89.8%
2013	143,929	151,888	130,149	85.7%	90.4%
2014	146,305	154,396	132,655	85.9%	90.7%
2015	148,834	157,124	135,593	86.3%	91.1%

a. Data on total employment as reported in the Current Population Survey (CPS).

b. Total Jobs are estimated by multiplying total employment by the proportional distribution of single- and muliple-jobholders. Data on the proportional distribution of single- and multiple-jobholders processed from the Integrated Public Use Microdata Series-CPS (IPUMS-CPS, 2017).

c. Workers' Compensation Covered Jobs from Table A and previous editions of this report.

Source: National Academy of Social Insurance estimates.

Appendix B: Federal Programs

Various federal programs compensate certain categories of workers for disabilities caused on the job and provide benefits to dependents of workers who die of work-related causes. Each program is described briefly below along with an explanation of whether and how it is included in our national totals of workers' compensation benefits. Our aim in this report is to include in the national totals for workers' compensation those federally administered programs that are financed by employers and that are not otherwise included in workers' compensation benefits reported by states, such as the benefits paid under the Federal Employees' Compensation Act. Programs that cover private-sector workers and are financed by federal general revenues, such as the Radiation Exposure Compensation Act, are not included in our national totals for workers' compensation benefits and employer costs. More detail on these programs is given below.

Federal Employees

The Federal Employees' Compensation Act of 1916 (FECA), which superseded previous workers' compensation laws for federal employees, provided the first comprehensive workers' compensation program for federal civilian employees. In 2015, total benefits were approximately $3 billion, of which 35 percent were for medical care, a one percentage point increase from 2014. The share of benefits for medical care is lower than in most state programs because federal cash benefits, particularly for higher-wage workers, replace a larger share of pre-injury wages than most state programs. Administrative costs of the program were $156 million in calendar year 2015, or 5.2 percent of total benefits (DOL, 2017). Table B1 reports benefits and administrative costs for federal civilian employees under FECA from 2005-2015. These benefits to workers and costs to the federal government as employer are included in national totals in this report and are classified with federal programs.

Longshore and Harbor Workers

The Longshore and Harbor Workers' Compensation Act (LHWCA) requires employers to provide workers' compensation protection for longshore, harbor, and other maritime workers. The original program was enacted in 1927 in response to a U.S. Supreme Court decision holding that the Constitution prohibits states from extending workers' compensation coverage to maritime employees who are injured while working over navigable waters. The LHWCA excludes coverage of the master or crew of a vessel. However, the Act covers other types of workers who fall outside the jurisdiction of state workers' compensation programs, such as employees working on overseas military bases, persons working overseas for private contractors of the United States, and private-sector employees engaged in offshore drilling enterprises.

The Academy's data series on benefits and costs of workers' compensation allocate part of the benefits paid under the LHWCA to the states where the companies operate, and part to federal programs. Private employers cover longshore and harbor workers by purchasing private insurance or self-insuring. Benefits paid by private carriers under the LWHCA are not identified separately in the information provided by A.M. Best or the state agencies, so these benefits and employer costs appear with the state data. Benefits paid by private employers who self-insure under the LHWCA, and benefits paid from the LHWCA special funds, are not reported by the states or A.M. Best. Consequently, these benefits and employer costs are included with federal programs in this report.

Table B2 shows benefits reported to the U.S. Department of Labor by insurers and self-insured employers under the LHWCA from 2005-2015. In 2015, about 640 self-insured employers and insurance companies reported a total of 23,543 injuries (13,926 lost-time injuries) to the federal Office of Workers' Compensation Programs (DOL, 2017). Total benefits paid under the LHWCA in 2015 were approximately $1.4 billion, including $893 million paid by private insurance carriers, $421 million paid by self-insured employers, $113 million paid from the federally administered special fund for second injuries and other purposes, and $8 million for the District of Columbia Workers' Compensation Act Fund – all reductions from the previous year. Federal direct administrative costs were $14.3 million, or about 1 percent of benefits paid (Table B2).
Total benefits under the LHWCA include benefits paid under the Defense Base Act (DBA). Under the

Table B1

Federal Employees' Compensation Act, Benefits and Costs, 2005-2015 (in thousands)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Benefits	$2,462,059	$2,454,861	$2,586,700	$2,676,370	$2,763,885	$2,889,321	$2,994,122	$3,006,009	$2,948,132	$2,940,811	$2,988,242
Compensation Benefits	1,791,003	1,767,926	1,833,958	1,878,331	1,900,156	1,976,439	2,077,027	2,081,387	2,024,568	1,929,360	1,946,890
Medical Benefits	671,056	686,935	752,742	798,039	863,729	912,882	917,095	924,622	923,564	1,011,450	1,041,353
% Medical	27	28	29	30	31	32	31	31	31	34	35
Direct Administrative Costs	128,536	137,386	143,768	142,532	146,015	156,522	155,123	157,922	158,625	173,570	156,239
Total Costs	2,590,595	2,592,247	2,730,468	2,818,902	2,909,900	3,045,843	3,149,245	3,163,931	3,106,757	3,114,380	3,144,481
Indirect Administrative Costs[a]	5,494	7,619	6,773	7,756	7,739	7,765	8,161	7,566	7,299	8,426	10,444

a. Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General.

Source: U.S. Department of Labor (2017).

DBA, benefits are paid for injuries or deaths of employees (of any nationality) working overseas for companies under contract with the U.S. government. These benefits are also shown separately in Table B2. Total payments rose annually from about $60 million in 2005 to $707 million in 2014, before falling for the first time in 2015 to $668 million. The number of DBA death claims per year rose from single digits prior to 2003 to 585 in 2010. The increase reflects, in large part, claims and deaths of employees of companies working under contract for the U.S. government in the war zones in Iraq and Afghanistan. However, the number of DBA death claims has fallen since 2011, and was 100 in 2015.

Coal Miners with Black Lung Disease

The Black Lung Benefits Act, enacted in 1969, provides compensation for coal miners with pneumoconiosis – or black lung disease – and their survivors. The program has two parts. Part B is financed by federal general revenues and was administered by the Social Security Administration until 1997, when administration shifted to the U.S. Department of Labor. Part C is paid through the Black Lung Disability Trust Fund, which is financed by coal mine operators through a federal excise tax on coal that is mined and sold in the United States. In this report, only the Part C benefits that are financed by employers are included in national totals of workers' compensation benefits and employer costs for 2005–2015. Total benefits in 2015 were $288 million, of which $113 million was paid under Part B and $175 million was paid under Part C. Part C benefits include $34 million for medical care. Medical benefits are a small share of black lung benefits because many of the recipients of benefits are deceased coal miners' dependents, whose medical care is not covered by the program. Federal direct administrative costs were $36.2 million, or about 12.6 percent of benefit payments.

Table B3 shows benefits under the black lung program in 2005 through 2015 for both parts of the program.67 Its benefits are paid directly by the responsible mine operator or insurer, from the federal Black Lung Disability Trust Fund, or from federal general revenue funds. No data are available on the experience of employers who self-insure under the black lung program. Any such benefits and costs are not reflected in Table B3 and are not included in national estimates.

Energy Employees

The Energy Employees Occupational Illness Compensation Program Act (EEOICPA) provides lump sum payments up to $150,000 to civilian workers (and/or their survivors) who become ill as a result of exposure to radiation, beryllium, or silica in the production or testing of nuclear weapons and other materials. This is Part B of the program, which went into effect in July 2001. It provides smaller lump sum payments to individuals previously found eligible for an award under the Radiation Exposure Compensation Act. Medical benefits are awarded for the treatment of covered conditions. Total benefits in 2015 decreased to $687 million, of which $294 million were paid as compensation benefits (DOL, 2017).

The EEOICPA originally included a Part D program that required the Department of Energy (DOE) to establish a system for contractor employees and eligible survivors to seek DOE assistance in obtaining state workers' compensation benefits for work-related exposure to toxic substances at a DOE facility. In October 2004, Congress abolished Part D, creating a new Part E program to be administered by the Department of Labor. Part E provides benefit payments up to $250,000 for DOE contractor employees, eligible survivors of such employees, and uranium miners, millers, and ore transporters. Wage loss, medical, and survivor benefits are also provided under certain conditions. Total Part E benefits in 2015 were $309 million. Benefits under both Part B and Part E are financed by general revenues and are not included in our national totals. Table B4 provides information on both Part B and Part E of the EEOICPA, as amended.

Workers Exposed to Radiation

The Radiation Exposure Compensation Act of 1990 provides lump sum compensation payments to individuals who contracted certain cancers and other serious diseases as a result of exposure to radiation released during above ground nuclear weapons tests or during employment in underground uranium mines. The lump sum payments are specified in law and range from $50,000 to $100,000. From the beginning of the program through December 2015, 31,437 claims were paid for a total of $2.1 billion,

Table B2

Longshore and Harbor Workers' Compensation Act (LHWCA), Benefits, Costs, and Number of Defense Base Act[a] (DBA) Death Claims, 2005-2015 (in thousands)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Benefits	$$795,466	$879,508	$923,045	$983,050	$1,081,266	$1,134,759	$1,269,904	$1,363,677	$1,475,916	$1,516,786	$1,435,641
Insurance Carriers[a]	325,027	367,625	456,773	504,348	551,716	589,387	710,330	801,962	927,417	961,542	893,226
Self-Insurance Employer	325,694	368,744	325,544	340,336	388,088	408,534	425,581	430,926	420,016	429,307	421,030
LHWCA Special Fund	134,230	132,933	130,673	128,372	131,544	127,415	124,664	122,133	120,100	117,694	113,307
DCCA Special Fund	10,515	10,206	10,055	9,994	9,918	9,423	9,328	8,656	8,383	8,243	8,078
DBA[a] Benefits	59,797	115,758	170,231	199,837	242,530	311,643	415,274	540,283	665,943	707,468	667,644
Number of DBA Death Claims[b]	284	338	426	289	341	585	405	280	211	146	100
Total Annual Assessments	146,500	135,500	135,000	132,500	136,500	131,500	131,000	132,000	132,000	123,000	118,000
LHWCA	135,000	125,000	125,000	124,000	125,000	124,000	123,000	124,000	123,000	118,000	110,000
DCCA	11,500	10,500	10,000	8,500	11,500	7,500	8,000	8,000	9,000	5,000	8,000
Administrative Expenses	12,568	12,715	12,725	12,667	12,922	13,394	13,461	13,330	13,317	14,164	14,280
General Revenue	10,553	10,691	10,699	10,633	10,855	11,356	11,354	11,229	11,203	12,029	12,116
Trust Fund	2,015	2,024	2,026	2,034	2,067	2,038	2,107	2,101	2,114	2,135	2,164
Indirect Administrative Costs[c]	2,019	2,115	2,437	1,856	2,155	2,766	1,922	1,632	1,211	1,534	1,471

a. Includes benefit costs for cases under the Defense Base Act (DBA) and all other extensions to the LHWCA.

b. Number of civilian overseas deaths.

c. Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General. These are not employer costs but are provided for through general revenue appropriations.

Source: U.S. Department of Labor (2017).

or roughly $65,824 per claim (DOJ, 2015). The program is financed with federal general revenues and is not included in national totals in this report. Table B5 shows cumulative payments under the Radiation Exposure Compensation Act since its enactment in 1990.

Veterans of Military Service

U.S. military personnel are covered by the federal veterans' compensation program of the Department of Veterans Affairs, which provides cash benefits to veterans who sustained total or partial disabilities while on active duty. In fiscal year 2015, 4.2 million veterans were receiving monthly compensation payments for service-connected disabilities. Of these, 41 percent of the veterans had a disability rating of 30 percent or less, while the others had higher rated disabilities. Total monthly payments for disabled veterans and their dependents increased to $5 billion in 2015, or about $60.2 billion on an annual basis (VA, 2016). Veterans' compensation is not included in our national estimates of workers' compensation. Table B6 provides information on the veterans' compensation program. This program is somewhat similar to workers' compensation in that it is financed by the employer (the federal government) and compensates for injuries or illness caused on the job (the armed forces). It is different from other workers' compensation programs in many respects. With cash benefits of about $60.2 billion in 2015, veterans' compensation is about 196 percent of the size of total cash benefits in other workers' compensation programs, which were $30.7 billion in 2015. Because it is large and qualitatively different from other programs, veterans' compensation benefits are not included in national totals to measure trends in regular workers' compensation programs.

Railroad Employees and Merchant Mariners

Finally, federal laws specify employee benefits for railroad workers involved in interstate commerce and merchant mariners. The benefits are not workers' compensation benefits and are not included in our national totals. Instead, these programs provide health insurance as well as short-term and long-term cash benefits for ill or injured workers whether or not their conditions are work-related. Under federal laws, these workers also retain the right to bring tort suits against their employers for negligence in the case of work-related injuries or illness (Williams and Barth, 1973).

Federal Programs not Included in National Totals

This report includes in the national totals, federal workers' compensation benefits and costs that are financed by employers but not reported by states. However, some programs that cover private-sector workers and are financed by federal general revenues are not included in our national totals. The following tables (B5 and B6) provide detailed information on two federally administered programs that are not included in the national totals in this report.

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67 The Patient Protection and Affordable Care Act (PPACA) of 2010 amended the Black Lung Benefits Act, 30 U.S.C. 901-44, to reinstate two methods of establishing entitlement that were repealed with respect to claims filed after 1981. Specifically, PPACA reinstated 30 U.S.C. 921(c)(4) (presumption of total disability or death due to pneumoconiosis arising out of coal mine employment where the miner had 15 years of coal mine employment and proof of total disability) and 30 U.S.C. 932(l) (automatic entitlement to benefits for eligible survivors of miners who were awarded benefits based on lifetime claims). The newly amended statutory provisions apply to claims filed after January 1, 2005. The Department anticipates proposing rules that define the class of claims affected by the amendments and set the criteria for establishing entitlement to benefits under the amendments.

Table B3

Black Lung Benefits Act, Benefits and Costs, 2005-2015 (in thousands)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Benefits	$665,844	$616,039	$569,300	$524,645	$481,172	$445,488	$406,514	$368,661	$337,282	$312,814	$287,841
Part C Compensation	276,413	262,026	248,375	231,261	217,685	204,873	189,363	176,886	162,410	148,926	141,290
Part C Medical Benefits	49,244	41,552	38,545	37,492	31,485	32,492	33,935	30,982	34,213	36,224	33,900
Part B Compensation	340,187	312,461	282,380	255,892	232,002	208,123	183,216	160,793	140,659	127,664	112,651
Total Direct Administrative Costs	37,917	38,453	38,749	38,009	37,502	37,292	36,818	37,875	35,950	35,488	36,200
Part C (DOL)	32,724	33,182	33,374	32,648	32,411	32,363	31,695	32,486	31,085	30,713	31,378
Part B (SSA)	5,193	5,271	5,375	5,361	5,091	4,929	5,123	5,389	4,865	4,775	4,822
Trust Fund Advances from U.S. Treasury[a]	446,000	445,000	426,000	426,000	0	60,000	107,749	214,000	401,000	496,000	585,000
Bond Payments[b]	*	*	*	*	341,939	364,757	400,905	431,486	452,439	472,849	492,482
Interest Payments on Past Advances[c]	674,894	694,964	717,214	739,469	0	0	60,160	107,864	214,372	401,393	496,546
Coal Tax Revenues Received by the Black Lung Trust Fund	620,420	598,520	650,432	646,800	652,935	588,743	631,002	636,536	512,866	574,403	546,305
Indirect Administrative Costs[d]	24,424	25,242	26,020	25,473	25,528	25,979	26,191	25,767	24,661	25,489	28,972

* Information not available

a. Advance of funds required when Trust Fund expenses exceed tax revenues received in a given year. Under the Emergency Economic Stabilization Act of 2008 (EESA), total Trust Fund debt (cumulative advances) at the end of 2008 was converted to zero coupon bonds that are repayable to the U.S. Treasury on an annual basis.

b. Repayment of bond principal and interest on principal debt as required by the Trust Fund debt restructuring portion of the EESA.

c. 1997-2008 are interest payments on cumulative debt from past Trust Fund borrowing from the U.S. Treasury. Beginning in 2011, the amount shown is the repayment of one-year obligations of the Trust Fund, which include the previous year's advances from the U.S. Treasury and applicable interest due on those advances, as required under the EESA.

d. Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General, services provided by the Department of the Treasury, and costs for the Office of Administrative Law Judges (OALJ) and the Benefits Review Board (BRB). OALJ and BRB costs are not included for any other program but cannot be separately identified for Coal Mine Workers' Compensation.

Source: U.S. Department of Labor (2017).

Table B4

Energy Employees Occupational Illness Compensation Program Act, Part B and Part E Benefits and Costs, 2005-2015 (in thousands)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Benefits Part B	$392,503	$502,636	$561,824	$605,338	$471,639	$803,456	$784,278	$868,248	$850,126	$737,187	686,605
Compensation Benefits	358,751	460,494	490,089	517,383	337,642	576,364	474,213	538,517	496,868	354,103	294,153
Medical Benefits[a]	33,752	42,142	71,735	87,955	133,997	227,092	310,065	329,731	353,258	383,084	392,453
Direct Administrative Costs[b]	106,818	104,872	107,417	92,075	51,377	53,102	51,228	49,577	49,555	51,937	52,079
Total Benefits Part E[c]	268,635	270,598	409,100	468,982	395,680	383,760	348,431	331,089	351,842	302,672	308,647
Compensation Benefits	268,586	269,558	407,277	465,742	390,077	370,351	319,032	296,019	306,604	260,168	263,944
Medical Benefits[d]	49	1,040	1,823	3,240	5,603	13,409	29,399	35,071	45,237	42,504	44,703
Direct Administrative Costs[b]	39,295	55,088	61,671	59,152	68,146	74,622	74,189	72,259	68,523	66,752	67,530

a. Medical payments made for claimants eligible under Part B only and claimants eligible under both Part B and Part E.

b. Part B costs for 2002-2008 include funding for the Department of Health and Human Services/National Institute for Occupational Safety and Health's (DHHS/NIOSH) conduct of dose reconstructions and special exposure cohort determinations. For 2002, these costs were $32.7 million; 2003, $26.8 million; 2004, $51.7 million; 2005, $50.5 million; 2006, $58.6 million; 2007, $55.0 million; and 2008, $41.5 million. Beginning in 2009, these costs are a direct appropriation to DHHS/NIOSH. Part B costs for 2009-14 include funding for an ombudsman position. For 2009, these costs were $0.1 million; 2010, $0.4 million; 2011, $0.2 million; 2012, $0.3 million; 2013, $0.5 million; 2014, $0.6 million; and 2015, $0.6 million. Part E costs for 2005-15 also include funding for an ombudsman position. For 2005 these costs were $0.2 million; 2006, $0.5 million; 2007, $0.7 million; 2008, $0.8 million; 2009, $0.8 million; 2010, $0.5 million; 2011, $0.8 million; 2012, $0.8 million; 2013, $0.8 million; 2014, $0.8 million; and 2015, $0.7 million.

c. The Energy Part E benefit program was established in October 2004.

d. Medical payments made for claimants eligible under Part E only.

Source: U.S. Department of Labor (2017).

Table B5

Radiation Exposure Compensation Act, Benefits Paid as of December, 2015 (in thousands)

Claim Type	# Claims	Benefits
Downwinder	19,333	$966,620
Onsite Participant	3,926	285,605
Uranium Miner	6,192	618,475
Uranium Miller	1,661	166,100
Ore Transporter	325	32,500
TOTAL	31,437	$2,069,300

Source: U.S. Department of Justice (2016).

Table B6

Federal Veterans' Compensation Program, Compensation Paid in Fiscal Year 2015 (in thousands)

Class of Dependent	Number	Monthly Value (in thousands)
Veteran Recipients - total	4,168,774	$5,017,722
Veterans Less Than 30 Percent Disabled (no dependency benefit)	1,712,718	418,561
Veterans 30 percent or More Disabled	4,168,774	$5,017,722

Source: U.S. Department of Veterans Affairs (2016).

Appendix C: Workers' Compensation under State Laws

Table C identifies the parameters that determine workers' compensation benefits *under the current laws* (as of January 2017) in each jurisdiction. The table is adapted from the IAIABC (International Association of Industrial Accident Boards and Commissions) and WCRI (Workers Compensation Research Institute) joint publication of *Workers' Compensation Laws* (IAIABC-WCRI 2016), as well as the U.S. Chamber of Commerce's *Analysis of Workers' Compensation Laws* (COC, 2017). In some instances, the parameters were obtained from specific state workers' compensation agencies.

The benefit parameters defined in this table include the following:

- The *waiting period* before a worker becomes eligible for cash benefits.
- The *retroactive period* when a worker becomes eligible for compensation for the waiting period.
- The minimum and maximum weekly *benefit payments for temporary total disability*.
- The maximum *duration of temporary total disability benefits*.
- The maximum *weekly benefit and benefit limitations for permanent partial disability*.
- The maximum *weekly benefit and benefit limitations for permanent total disability*.
- The *maximum weekly benefit and benefit limitations for death benefits*.

A point to be noted is that the value of lost wages not recompensed by a retroactive period is an additional cost of work-related injuries borne by workers.

Table C

Workers' Compensation State Laws as of January 2017

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
State	Waiting Period	Retro-active Period	Min Weekly Benefit	Max Weekly Benefit	Max Duration (Weeks)	Basis of PTD Calculation	Max Weekly Benefit	Max Duration (Weeks)	Limit to Monetary PTD Benefits	Max Weekly Benefit	Max Benefit for "Unscheduled Injuries"	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Alabama	3 days, TTD only	21 days	$229	$832	Duration of TTD disability	66 2/3% PIWW	$832	No	None	$220	300	$832	500 weeks
Alaska	3 days, for income benefits only	28 days	$273	$1,239	Until medically stable	80% of spendable earnings	$1,239	If found to no longer be PTD	Up to max TTD weekly rate.	% of impairment x $177k, paid in lump sum[a]	No unscheduled PPD	$1,239	12 years[b]
Arizona	7 days	14 days	n/a	$694	Duration of TTD disability	66 2/3% AMW	$694	No	None	$781[c]	None unless rearranged by Industrial Commission	$694	None
Arkansas	7 days	14 days	$20	$661	450 weeks	66 2/3% PIWW	$661	No	Limit on weekly amount but not total amount	$496	450 weeks	$661	$214,825; additional benefits paid by Death and PD Trust Fund
California	3 days	14 days	$176	$1,173	104 weeks[d]	66 2/3 of AWW	$1,173	No	None	$290	n/a	$1,173	$320,000 Spouse plus Children[e]
Colorado	3 days	14 days	None	$940	Duration of TTD disability	66 2/3% of AWW	$940	No	None	$295 for scheduled injuries; $940 unscheduled	400[g]	$940	None
Connecticut	3 days	7 days	$258	$1,292	Duration of TTD disability	75% of after-tax income	$1292	No	None	$1,063	780 weeks however no unscheduled PPD since 1993	$1,292	None
Delaware	3 days	7 calendar days	$230	$689	Duration of TTD disability	66 2/3% AWW	$689	No	None	$689	300 weeks	$827	None
District of Columbia	3 days	14 days	$367	$1,467	Duration of TTD disability	66 2/3% PIWW	$1,467	No	First $75,000 in benefits paid by employer / insurer. Amounts over $75,000 paid from PTD Trust Fund	$1,467	500 weeks; may petition for additional 167 weeks	$1,467, Max 100% SAWW	None

Florida	7 days	21 days	$20	$886	104	66 2/3% PIWW	$886	Age 75[f]	None	$886	2 weeks for each % of impairment from 1-10%; 3 weeks from 11-15%; 4 weeks from 16-20%; and 6 weeks for each rating over 21%	$886[g]	$150,000
Georgia	7 days	21 days	$503	$575	400 weeks unless catastrophic injury	66 2/3% PIWW	$575.00	No	None	$575	300 weeks	$575	$220,000 for surviving spouse with no dependents
Hawaii	3 days, TTD only	None	$212	$846	Duration of TTD disability	66 2/3% PIWW	$846	No	None	$846	312 weeks	$846 or max SAWW	312 weeks
Idaho	5 days	14 days	$109	$655	Duration of TTD disability	67% of AWW	$655	No	Weekly rate may change annually based on increases in the SAWW.	$538	500 weeks	$587	500 weeks
Illinois	3 days, TTD only	14 calendar days	$220[h]	$1,435	Duration of TTD disability	66 2/3% AWW	$1,435	No	None	$775	500 weeks	$1,435	$500,000 or 25 years
Indiana	7 days	21 days	$50	$737	500 weeks[i]	66 2/3% AWW	$737	500 weeks[i]	$368,000	N/A	N/A	$737	$368,000
Iowa	3 days; no waiting period for PPD	14 days	None	$1,668.00	Duration of TTD disability	80% (of spendable earnings)	$1,688	No	None	$1,447	415 weeks	$1,688	None
Kansas	7 days	21 consecutive days	$25	$627	415 weeks[j]	66 2/3% AWW	$627	Up to Monetary Limit	$155,000	$627	415 weeks; functional impairment only up to $75,000	$627	$300,000
Kentucky	7 days	14 days	$167	$835	Duration of TTD disability or until injured worker qualifies for normal old age Social Security benefit	66 2/3% AWW	$835	Until injured worker qualifies for normal old age Social Security benefit	None	$835	425 weeks if rating is 50% or less; 520 wks if over 50%; limited to qualification for normal old age Social Security	$835	None
Louisiana	7 days	14 days	$175	$657	None	66 2/3% PIWW	$657	No	None	$657	520	$657	None
Maine	7 days[k]	14 days	None	$710 for DOI 1/1/93-12/31/12; $789 for DOI after 1/1/13	520 weeks[l]	80% (of after-tax AWW) for DOI prior to 1/1/13; 2/3 gross AWW for DOI after 1/1/13	$710 for DOI 1/1/93-12/31/12; $789 for DOI after 1/1/13	No	None	$710 for DOI 1/1/93-12/31/12; $789 for DOI after 1/1/13	None	$710 for DOI 1/1/93-12/31/12; $789 for DOI after 1/1/13	500 weeks

Table C continued

Workers' Compensation State Laws as of January 2017

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
State	Waiting Period	Retro-active Period	Min Weekly Benefit	Max Weekly Benefit	Max Duration (Weeks)	Basis of PTD Calculation	Max Weekly Benefit	Max Duration (Weeks)	Limit to Monetary PTD Benefits	Max Weekly Benefit	Max Benefit for "Unscheduled Injuries"	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Maryland	3 days, TTD only	14 days	$50 or employee's AWW	$1,052	Duration of TTD disability	66 2/3% PIWW	$1,052	No	$45,000	$789	None	$1,052	144 months[m]
Massachusetts	5 days	21 days	$258	$1,292	156 weeks	66 2/3% PIWW	$1,292	260 weeks	None	N/A	N/A	$1,292	250 weeks
Michigan	7 days	14 days	$241	$870	Duration of TTD disability	80% of spendable earnings	$870	800 weeks[n]	None	N/A	N/A	$870	500 weeks
Minnesota	3 days	10 days	$130 or the worker's actual wage, whichever is less	$1,047[o]		66 2/3% PIWW	$1,047	Until age 67	None	$1,047	$515,000	$1,047	10 years or 10 years after youngest child is no longer dependent
Mississippi	5 days[p]	14 days	$25	$478	450 weeks	66 2/3% AWW	$478	450 weeks	$215,019	$478	450 weeks	$478	450 weeks
Missouri	3 days	14 days	$40	$911	400 weeks	66 2/3% PIWW	$911	No	None	$477	400 weeks	$911	None
Montana	4 days or 32 hours, whichever less	21 days[q]	None	$756	Disability until MMI, restrictions are identified and job analyses are approved, or return to work	66 2/3% PIWW	$756	Until injured worker qualifies for normal old age Social Security benefit	None	$378	400 weeks	$378	500 weeks
Nebraska	7 days	42 days	$49 or actual wage, if less	$817	Until MMI or return to work	66 2/3% PIWW	$817	No	None	$817	300 weeks	$817	None
Nevada	5 days[r]	6 days[r]	None	$854	Duration of TTD disability	66 2/3% pre-injury AMW	$854	No	Per maximum compensation limit and formula	$854	Benefits paid for 5 years or to age 70, whichever is later	$854	None
New Hampshire	3 days	14 days or more	$302	$1,508	Duration of TTD disability	60 % PIWW	$1,508	No	None	$1,508	350 weeks for a whole person award	$1,508	None
New Jersey	7 days	7 days	$239	$896	400 weeks	70%	$896	600 weeks	None	$896	600 weeks	$896	Lifetime with exceptions

New Mexico	7 days	28 days	$36	$797	700 weeks	66 2/3% PIWW	$797	No	None	$797	$557,739 if disability rating > 80%; $398,385 if < 80%	$797	700 weeks
New York	7 days, wage replacement benefits only	14 days	$100.00	$864	Duration of TTD disability	66 2/3% PIWW	$864	No	None	$864	$453,768	$864	None
North Carolina	7 days	21 days	$30	$978	Duration of TTD disability	66 2/3% PIWW	$978	500 weeks[s]	None	$978	$20,000	$978	500 weeks
North Dakota	5 days	5 days	$583	$1,214	104 weeks or MMI 260 weeks	66 2/3% PIWW	$1,214	Until injured worker qualifies for normal old age Social Security benefit	None	$340	Based on whole body impairment, up to 100% lump sum payment	$1,214	$300,000
Ohio	7 days	14 days	$301	$902	Duration of TTD disability	72% PIWW for the first 12 weeks; 66 2/3% thereafter	$902	No	None	$301	200 weeks	$902	None
Oklahoma	3 days, TTD only	None	None	$596	104 weeks, with additional 52 weeks if consequential injury found	70% AWW	$851	15 years or upon reaching Social Security retirement age, whichever is longer	None	$323	350 weeks	$851	None
Oregon	3 days	14 days	Not less than $50 or 90% AWW; whichever is less	$1,296	Duration of TTD disability	66 2/3% PIWW	$974t	Lifetime plus benefits to surviving spouse and children	None	$974	$389,680.00	$1,304	None
Pennsylvania	7 days	14 days	$543	$978	Duration of TDD disability subject to conversion to partial benefits at 104 weeks[u]	66 2/3%	$978	Disability up to 500 weeks	None	$978	500 weeks	$978	None
Rhode Island	3 days	No payment for waiting period	None	$1,154	Duration of TTD disability	75% (of spendable income)	$1,154	No	None	$180	500 weeks	$1,154	None
South Carolina	7 days	14 days	$75 if wages are >$75; otherwise, comp rate is equal to wages	$807	Up to 500 weeks	66 2/3% PIWW	$807	500 weeks[v]	None	Depends on scheduled body part	340 weeks	$807	500 weeks
South Dakota	7 consecutive days, TTD only	7 days	$381	$762	Duration of TTD disability	66 2/3% PIWW	$762	No	None	$762	312 weeks	$762	None
Tennessee	7 days	14 days	$133	$977	450 weeks	66 2/3% PIWW	$888	Until age 65	None	$888	450 weeks	$888	$386,100

Table C continued

Workers' Compensation State Laws as of January 2016

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
State	Waiting Period	Retro-active Period	Min Weekly Benefit	Max Weekly Benefit	Max Duration (Weeks)	Basis of PTD Calculation	Max Weekly Benefit	Max Duration (Weeks)	Limit to Monetary PTD Benefits	Max Weekly Benefit	Max Benefit for "Unscheduled Injuries"	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Texas	7 days	14 days	$137	$913	104 weeks	TTD 70% AWW; PTD 75%; PPD 70%	$913	No	None	$639	401 weeks	$913	Minimum of 364 weeks
Utah	3 days	14 days	$45	$817	312 weeks	66 2/3% AWW at time of injury not to exceed 85% of the SAWW	$694	Now	None	$544	312 weeks	$694	312 weeks; may be extended when beneficiary remains wholly dependent
Vermont	3 days TTD; 8 days PTD; no waiting period for medical benefits	10 days, TTD only	$408	$1,224	Duration of disability; insurer must review after 2 years	66 2/3% PIWW	$1,224	No	None	$1,224	405 weeks for non-spinal; 550 weeks spinal	$1,224	None[X]
Virginia	7 days	21 days	$249	$996	500 weeks	66 2/3% PIWW	$996	No	None	$996	None	$996	500 weeks
Washington	3 days immediately following the DOI	14 days immedi-iately following the DOI	$43[y]	$1,299	Duration of TTD disability	60% to 75% (depending on marital status and number of children)	$1,299	None	Maximum payment for lump sums only, up to $8,500	$1,299	$199,247	$1,299	N/A
West Virginia	3 days	7 con-secutive days	$193	$787	104 weeks	66 2/3% PIWW	$787	Payable until age 70, for all PTD awards granted on or after 07/1/2003	None	$551	None	$787	N/A
Wisconsin	3 days	7 non-consecu-tive days	$20	$961	Duration of TTD disability	66 2/3% PIWW	$961	No	None	$362	1,000 weeks	$961	$280,300
Wyoming	3 days	9 days	30% of SAMW or 2/3 PIMW, whichever is greater, not to exceed PIMW.	SAMW	24 months. May extend beyond in extraordinary circumstances.	66 2/3% PIMW or 92% of PIMW if earns less than 73% of the SAMW	Wages cannot exceed the SAWW for the quarter in which PTD is determined	Paid for 80 months then benefit becomes extended PTD and must be renewed annually	None	Depends on the date of Injury	None	2x the SAMW	None

Table C continued

Workers' Compensation State Laws as of January 2016

a Unless claimant is in a reemployment training program, in which case PPI benefits can be paid at the weekly TTD rates
b Benefit payable to widower ceases 12 years after death date, unless at time of death widow/er is PTD or reaches age 52 before the 12 years expire. Children eligible to receive DB until 18 years old; or if 19 or older and is wholly dependent upon the deceased employee and incapable of self-support by reason of mental or physical disability; and persons of any age while they are attending the first four years of vocational school, trade school, or college; and persons of any age while they are attending high school.
c $780.510 for scheduled injuries; for unscheduled injuries, N/A
d There are some limited exceptions where benefits can be paid for 240 weeks.
e Amount may be higher based on Labor Code 4703.5
f Or at 5 years following determination of PTD for an accident date on or after an employee reaches age 70
g Spouse also entitled to tuition benefit at vocational technical center or community college
h $220 if not amputation is a member or enucleation of an eye if unmarried and no dependents, with a maximum of $330 if 4 or more dependants. In all cases claimant receives rate based on actual wages if less than statutory max.
i After 500 weeks, additional benefits are payable from second injury fund in 150-week incrememnts. TTD benefits subject to child support withholding.
j 225 to 415 weeks depending on type of injury-also maybe a limitation of $130,000 or $155,000 for all indemnity benefits depending on types of benefit paid.
k Does not apply to firefighters.
l 520 weeks under §213. No durational limit under §212.
m 144 months or on the date of what would have been the 70th birthday of the deceased employee, provided that a minimum of 5 years of death benefits has been paid
n 800 weeks conclusive payment with factual determination therefater
o 102% of SAWW
p Any day on which a worker earns less than full wage because of an injury is considered a day of disability for the waiting period, and neither the 5 day period nor the 14-day period have to consist of consecutive calendar days.
q Unless the worker waives the retroactive payment and receives sick leave benefit from the employer instead.
r Consecutive or cumulative days within a 20 day period, TTD only
s And extended by commission if employee has sustained a total loss of wage-earning capacity
t In addition, if the worker returns to work, the workers' wages plus PTD may not exceed the workers' wage at injury
u Disability under PA laws means loss of earning power. PA law allows employer/insurer to request "Impairment Rating Examination" after employee has received 104 weeks of full benefit payments. If IRE shows less than 50% impairment based on AMA Guides then benefits are reclassified as partial disability compensation and are subject to a 500-week cap.
v Except for paraplegic, quadrpalegic, or brain damage benefits for life
w PTD benefits are awarded for life, but PTD status may be reexamined by submitting employee to reasonable medical evaluations, rehabilitation & retraining efforts, disclosure of Federal Income Tax returns
x There is no statutory limit but after minimum of 330 weeks spousal benefits end at age 62 when eligible for Social Security, or with remarriage
y $43.19 if DOI prior to 7/08. 100% of the workers' gross monthly wage if DOI after 7/08. With dependents 15% of the statewide SAMW+$10 for spouse+$10 for each dependent up to 5 dependents

PIWW	Pre-injury weekly wage
PIMW	Pre-injury monthly wage
AWW	Average weekly wage
NWW	Net weekly wage
SAWW	State-wide average weekly wage
SAMW	State-wide average monthly wage
AMW	Average monthly wage

Sources: IAIABC-WCRI (2016); U.S. Chamber of Commerce (2017); Alabama Department of Labor, Arizona Industrial Commission; California Department of Industrial Relations; Colorado Department of Labor and Employment; Connecticut Workers' Compensation Commission; Massachusetts Labor and Workforce Department; Minnesota Department of Labor and Industry; North Dakota Department of Workforce Safety & Insurance; Oregon Workers' Compensation Division; Washington Department of Labor and Industries; Wisconsin Department of Workforce Development

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