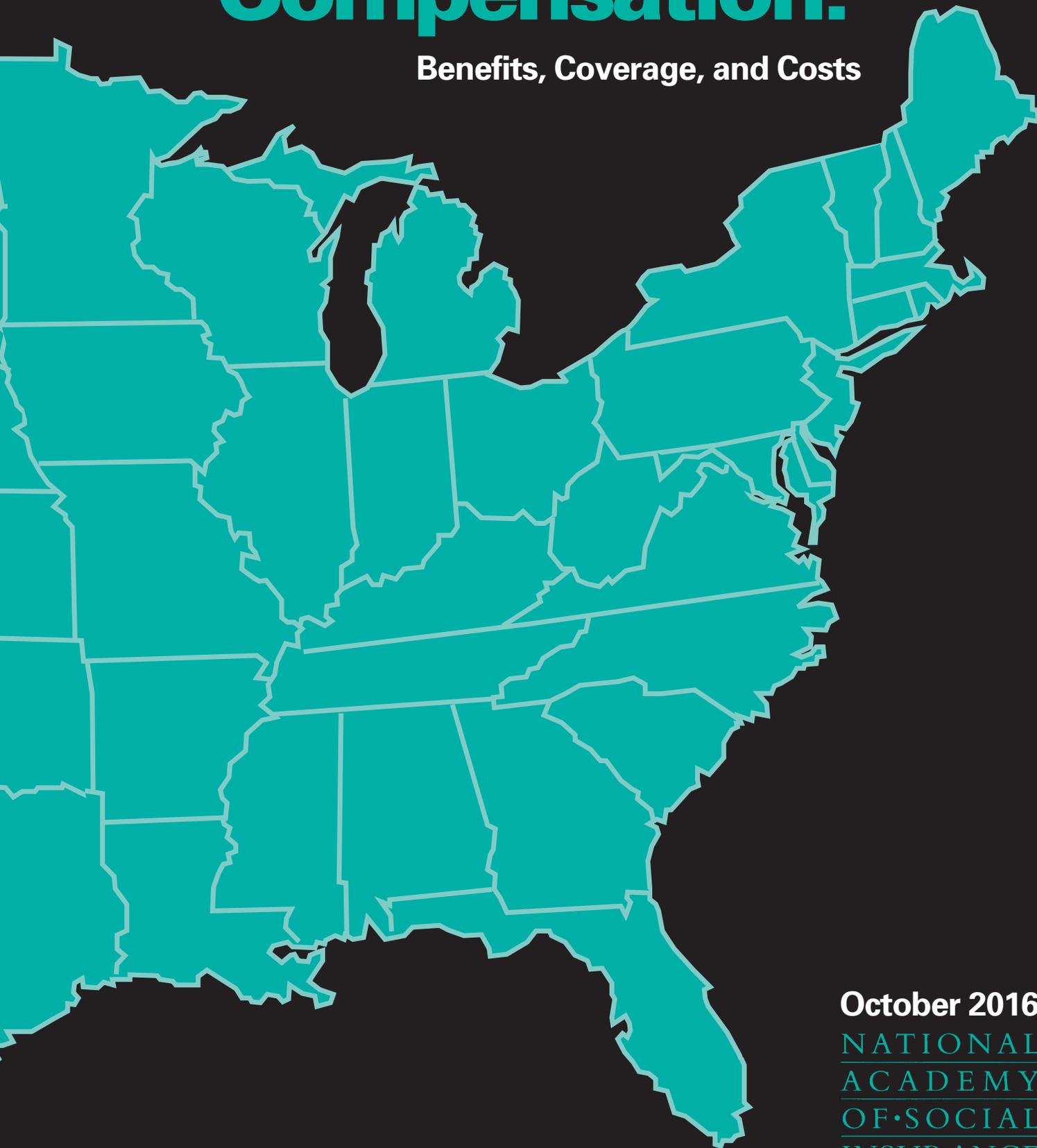


# Workers' Compensation:

Benefits, Coverage, and Costs



October 2016

NATIONAL  
ACADEMY  
OF SOCIAL  
INSURANCE

Washington, DC

# NATIONAL ACADEMY OF SOCIAL INSURANCE

## **Board of Directors**

William M. Rodgers III, Chair

Renée Landers, Vice Chair

Chris O'Flinn, Treasurer

Marty Ford, Secretary

G. Lawrence Atkins

Robert A. Berenson

Ngina Chiteji

Judy Feder

Howard Fluhr

Michael J. Graetz

Alexander W. Hertel-Fernandez

G. William Hoagland

Charles N. Kahn III

Kilolo Kijakazi

Shaun C. O'Brien

Maya Rockeymoore

Rebecca Vallas

## **Founding Chair**

Robert M. Ball

## **Chief Executive Officer**

William J. Arnone

1200 New Hampshire Ave., NW

Suite 830

Washington, DC 20036

Telephone (202) 452-8097

Facsimile (202) 452-8111

[www.nasi.org](http://www.nasi.org)

Twitter: @socialinsurance

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. Its mission is to advance solutions to challenges facing the nation by increasing public understanding of how social insurance contributes to economic security. 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 Academy convenes steering committees and study panels that are charged with conducting research, issuing findings, and, in some cases, reaching recommendations based on their analysis. Members of these groups are selected for their recognized expertise and with due consideration for the balance of disciplines and perspectives appropriate to the project.

This research report presents new data on workers' compensation benefits, coverage, and costs in 2014. It was prepared with the guidance of the Study Panel on Workers' Compensation Data. In accordance with procedures of the Academy, the report has been reviewed for completeness, accuracy, clarity, and objectivity by a committee selected by the Board of Directors. The purposes of the report are 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 that 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.

© 2016 National Academy of Social Insurance

ISBN: 1-884902-64-2

# **Workers' Compensation:**

**Benefits, Coverage, and Costs,  
(2014 data)**

*by*

**Marjorie L. Baldwin and Christopher F. McLaren**

*with advice from the*

**Study Panel on Workers' Compensation Data**

**October 2016**

**NATIONAL  
ACADEMY  
OF SOCIAL  
INSURANCE  
Washington, DC**



# Preface

Workers' compensation provides 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. No federal laws set standards for "tax-qualified" workers' compensation plans or require comprehensive reporting of workers' compensation coverage and costs.

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. 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, coverage, and costs with annual estimates dating back to 1946. SSA discontinued the series in 1995 after publishing data for 1992–1993. The National Academy of Social Insurance assumed the task of reporting national data on workers' compensation in 1997. The Academy published its first report that year, extending the data series from 1993 through 1995, and has produced the report annually ever since.

This is the 19th annual report of the National Academy of Social Insurance on workers' compensation benefits, coverage, and costs. This report presents new data on workers' compensation programs for 2014 and updated estimates for 2010–2013 with newly available data. 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](http://www.nasi.org/research/workers-compensation).

Despite the Academy's continued efforts to improve the quality of its estimates, some limitations should be acknowledged: First, there may be some workers' compensation costs not captured in the estimates of employer costs. We may, for example, miss some unreported expenditures, such as those for legal services. There may also be costs associated with job accommodations to promote early return to work, or safety improvements after an injury has occurred, that are not captured in this report. 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 a systematic variation in the cost estimates between the two types of states. Finally, our estimates of monetary costs cannot 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.

The audience for the Academy's reports 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 (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, 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 uses the data to track the costs of workplace injuries in the United States. The International Association of Industrial Accident Boards and Commissions (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 spent responding to our survey and answering clarification questions when needed. Without support from these sources, constructing this annual data series would not be possible. The Academy also acknowledges 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) for their support.

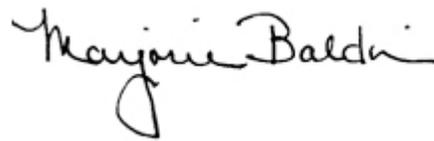
Members of the Academy's Study Panel on Workers' Compensation Data generously gave their time and knowledge in advising on data sources and presentation, interpreting results, and reviewing the draft report. Members of the Panel are listed on page iii, but we would like to especially acknowledge the contributions of Christine Baker (California Department of Industrial Relations); Les Boden (Boston University); Terry Bogyo (Independent Workers' Compensation Researcher, Canada); John Burton (Rutgers and Cornell University); Chuck Davoli (Louisiana Governor's Workers' Compensation Advisory Council); Doug Holmes (UWC Strategic Services); Mike Manley (Oregon Department of Business and Consumer Services); Frank Neuhauser (University of California, Berkeley); Seth Seabury (University of Southern

California); and Hilery Simpson (Bureau of Labor Statistics). Special thanks are also due to John Ruser (Workers' Compensation Research Institute) for his helpful comments on the draft report.

We thank the Academy's workers' compensation summer intern, McCayla Sica, whose help was invaluable in producing the final report and health policy analyst Alexandra Bradley (the Academy) for reviewing an earlier draft. We also thank Jeff Eddinger (National Council on Compensation Insurance), Benjamin Washington (CMS), Judith Binder, Emily Hunter and Anatoli Sznoluch (DOL), and Cherice Jeffries (SSA) for providing private and federal level data.

Finally, this report benefited greatly from helpful comments during Board review by Monica Galizzi (University of Massachusetts, Lowell); Gregory Krohm (Workcomp Strategies, Inc.); and Ishita Sengupta (Mercer). We appreciate the time and effort all of these individuals devoted to reviewing the report.

For 16 years this report has benefitted from the capable and conscientious work of Ishita Sengupta, who was responsible for all data collection and programming, as well as co-authoring the final report. Ishita left the Academy last fall to take a new position with Mercer. We were sad to part with a dear colleague and friend, but wish her the best in her new career.



Marjorie Baldwin  
Chair, *Study Panel on Workers' Compensation Data*

# Study Panel on Workers' Compensation Data

**Marjorie Baldwin, *Chair***

Professor, W. P. Carey  
School of Business,  
Department of Economics,  
Arizona State University

**Christine Baker**

Director, California Department  
of Industrial Relations

**Leslie Boden**

Professor, School of Public  
Health, Boston University

**Terry Bogyo**

Independent Workers'  
Compensation Researcher,  
Canada

**John F. Burton, Jr.**

Professor Emeritus, School of  
Management & Labor Relations,  
Rutgers University, and School of  
Industrial and Labor Relations,  
Cornell University

**Aaron Catlin**

Deputy Director, National  
Health Statistics Group, Office  
of the Actuary, Centers for  
Medicare & Medicaid Services

**Chuck Davoli**

Louisiana Workers' Advocate  
Labor Representative of the  
Governor's Workers'  
Compensation Advisory Council

**Jeff Eddinger**

Senior Division Executive  
Regulatory Services  
National Council on  
Compensation Insurance

**Douglas J. Holmes**

President, UWC Strategic  
Services on Unemployment  
and Workers' Compensation

**Jennifer Wolf Horejsh**

Executive Director, International  
Association of Industrial  
Accident Boards and  
Commissions

**John Jankowski**

Project Officer, Social Security  
Administration

**Kate Kimpan**

Vice President, Workers'  
Compensation Programs,  
Dade Moeller & Associates

**Mike Manley**

Research Coordinator, Oregon  
Department of Consumer and  
Business Services

**Frank Neuhauser**

Executive Director, Center for  
the Study of Social Insurance,  
University of California, Berkeley

**Eric Nordman**

Director of Regulatory Services  
& the CIPR, National  
Association of Insurance  
Commissioners

**Seth A. Seabury**

Associate Professor, Department  
of Emergency Medicine and  
Leonard D. Schaeffer Center for  
Health Policy and Economics,  
University of Southern California

**Hilery Simpson**

Assistant Commissioner,  
Office of Safety, Health, and  
Working Conditions, U.S.  
Bureau of Labor Statistics

**Emily A. Spielger**

Professor of Law, Northeastern  
University School of Law

**Robert Stegert**

Retired, Marriott  
International, Inc.

**Gary Steinberg**

Deputy Director, Office of  
Workers' Compensation  
Programs, U.S. Department  
of Labor

**Alex Swedlow**

President, California Workers'  
Compensation Institute

**Ramona Tanabe**

Executive Vice President,  
Workers Compensation  
Research Institute

**Benjamin Washington**

Economist, National Health  
Statistics Group, Office of the  
Actuary, Centers for Medicare  
& Medicaid Services

**William J. Wiatrowski**

Deputy Commissioner,  
Bureau of Labor Statistics,  
U.S. Department of Labor



# Table of Contents

Highlights .....	1
National Trends .....	1
State Trends .....	1
Trends in Workers' Compensation Benefits and Costs .....	1
Background on Workers' Compensation .....	4
History of Workers' Compensation .....	4
Workers' Compensation Benefits .....	7
Sources of Workers' Compensation Insurance .....	9
Estimates for 2014 .....	11
Covered Employment and Wages .....	16
Methods for Estimating Covered Employment and Wages .....	16
Estimates of Covered Wages and Workers .....	16
Workers' Compensation Benefits Paid .....	17
Data Sources for Estimating Benefits Paid .....	17
National Estimates of Benefits Paid .....	18
State Estimates of Benefits Paid .....	24
Employer Costs for Workers' Compensation .....	35
Data Sources for Estimating Employer Costs .....	35
National and State Estimates of Employer Costs .....	36
Benefits Paid Relative to Employer Costs .....	40
Estimates of Employer Costs from Other Sources .....	41
Direct and Indirect Costs to Workers .....	42
Estimates of Workplace Injuries and Claims .....	43
Incidence of Work-Related Injuries .....	43
Incidence of Workers' Compensation Claims .....	47
Addendum .....	48
Other Disability Benefit Programs .....	48
Benefits Incurred vs. Benefits Paid .....	50
Glossary .....	53
Appendix A: Coverage Estimates .....	56
Appendix B: Federal Programs .....	60
Federal Employees .....	60
Longshore and Harbor Workers .....	60
Coal Miners with Black Lung Disease .....	61
Energy Employees .....	63
Workers Exposed to Radiation .....	63
Veterans of Military Service .....	63
Railroad Employees and Merchant Seamen .....	66
Federal Programs not Included in National Totals .....	66
Appendix C: Workers' Compensation under State Laws .....	67
References .....	77

## Tables

Table 1:	Overview of Workers' Compensation Benefits, Coverage, and Costs, 2010-2014	.2
Table 2:	Workers' Compensation Covered Workers and Covered Wages, 1994-2014	.11
Table 3:	Workers' Compensation Covered Workers, by State, 2010-2014	.12
Table 4:	Workers' Compensation Covered Wages, by State, 2010-2014	.14
Table 5:	Workers' Compensation Benefits Paid, by Type of Coverage, 1994-2014	.19
Table 6:	Workers' Compensation Employer-Paid Benefits Under Deductible Provisions, 1994-2014	.20
Table 7:	Percentage Distribution of Workers' Compensation Benefit Payments, by Type of Coverage: With and Without Deductibles, 1994-2014	.21
Table 8:	Workers' Compensation Benefits, by Type of Coverage and State, 2014	.22
Table 9:	Workers' Compensation Total Benefits Paid and Five-Year Percent Change, by State, 2010-2014	.26
Table 10:	Workers' Compensation Medical Benefits Paid and Five-Year Percent Change, by State, 2010-2014	.28
Table 11:	Workers' Compensation Cash Benefits Paid and Five-Year Percent Change, by State, 2010-2014	.30
Table 12:	Workers' Compensation Total Benefits Paid Per \$100 of Covered Wages, by State, 2010-2014	.32
Table 13:	Workers' Compensation Employer Costs, by Type of Coverage, 1994-2014	.37
Table 14:	Workers' Compensation Employer Costs Per \$100 of Covered Wages, by State, 2010-2014	.38
Table 15:	Workers' Compensation Benefit/Cost Ratios, 1994-2014	.40
Table 16:	Fatal Occupational Injuries: All and Private Industry, 1994-2014	.43
Table 17:	Non-Fatal Occupational Injuries and Illnesses Among Private Industry Employers, 1994-2014	.45
Table 18:	Number of Workers' Compensation Claims per 100,000 Insured Workers: Private Carriers in 37 Jurisdictions, 1994-2012	.46
Table 19:	Dual Eligible Individuals: Social Security Disability Insurance Beneficiaries with Workers' Compensation or Public Disability Benefits, 2014	.50
Table A:	Documenting Workers' Compensation Coverage Estimates, 2014 Annual Averages	.58
Table B1:	Federal Employees' Compensation Act, Benefits and Costs, 2003-2014	.61
Table B2:	Longshore and Harbor Workers' Compensation Act, Benefits, Costs, and Number of Defense Base Act Death Claims, 2003-2014	.62
Table B3:	Black Lung Benefits Act, Benefits and Costs, 2003-2014	.64
Table B4:	Energy Employees Occupational Illness Compensation Program Act, Part B and Part E Benefits and Costs, 2003-2014	.65
Table B5:	Radiation Exposure Compensation Act, Benefits Paid as of June 30, 2014	.66
Table B6:	Federal Veterans' Compensation Program, Compensation Paid in Fiscal Year 2014	.66
Table C:	Workers' Compensation State Laws as of January 2016	.68

## Figures

Figure 1: Workers' Compensation Benefits and Costs Per \$100 of Covered Wages, 1980–2014 . . . . .	3
Figure 2: Workers' Compensation Medical and Cash Benefits per \$100 of Covered Wages, 1980–2014 . . . . .	4
Figure 3: Percentage Share of Medical and Cash Benefits, 1980–2014 . . . . .	5
Figure 4: Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 1994–2012, Percent of Cases and Percent of Benefits . . . . .	8
Figure 5: Private Industry Occupational Injuries and Illnesses: Incidence Rates 1980–2014 . . . . .	44

---

## ***Additional Appendices***

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

- Methods used to estimate workers' compensation benefits and costs by type of coverage;
- Trends in second injury funds, special funds, and guaranty funds;
- Updated version of Table 9.B1 of the *Annual Statistical Supplement to the Social Security Bulletin*; and
- Data sources for each state.



# Highlights

This report provides data on benefits, costs, and coverage for state and federal workers' compensation programs in 2014. Its purpose is to facilitate policy-making and comparisons with other social insurance and employee benefit programs. The report has been produced annually by the National Academy of Social Insurance since 1997. Key trends observed in this year's data are summarized below:

## National Trends

### *Covered employment increased.*

- In 2014, workers' compensation covered an estimated 132.7 million U.S. workers, a 1.9 percent increase in coverage from 2013. Across the five years reported in the study (2010-2014), the number of covered workers increased by 6.4 percent (Table 1). The increase in coverage reflects increases in employment across the country after the recession of 2008-2009.

### *Benefits decreased.*

- In 2014, workers' compensation benefits paid decreased for the second year in a row. The two-year downturn followed a trend of increasing benefits paid between 2010 and 2012 (Table 9).
- *Total* benefits paid were \$62.3 billion, a decrease of 0.3 percent from 2013 (Table 9). *Medical* benefits paid for health care were \$31.4 billion, a decrease of 0.1 percent from 2013 (Table 10). *Cash* benefits paid for lost work time were \$30.9 billion, a decrease of 0.6 percent from 2013 (Table 11).
- *Total* benefits paid were \$0.91 per \$100 of covered wages, down by 5.5 percent from 2013 (Table 12).

### *Employer costs increased.*

- In 2014, employers' costs for workers' compensation increased for the fourth year in a row (Table 13). Total costs to employers were \$91.8 billion, a 4.9 percent increase from 2013 (Table 13).
- Costs increased by 15.9 percent in the period 2010-2012 and by 8.8 percent in the period 2012-2014 (Table 1).

- Employers' costs were \$1.35 per \$100 of covered wages in 2014, unchanged from 2013 (Table 15).

## State Trends (2010 – 2014)

- Workers' compensation covered employment and wages increased in every state. The largest percentage increases were in North Dakota (25% increase in covered employment; 68% increase in covered wages) and Utah (13% and 24%) (Tables 3 and 4).
- Benefits per \$100 of covered wages *decreased* in every state *except* Connecticut, Delaware, New York, Virginia, and Wyoming (Table 12). Benefits *decreased* by more than \$0.20 per \$100 of covered wages in 12 jurisdictions and by more than \$0.40 in Montana, Oklahoma, and West Virginia.
- Employers' costs per \$100 of covered wages *increased* in 31 jurisdictions. However, costs *decreased* by more than \$0.20 per \$100 of covered wages in Montana, Ohio, Oklahoma, and West Virginia (Table 14).

## Trends in Workers' Compensation Benefits and Costs

The Academy's measures of benefits and costs are designed to reflect the aggregate experience of two stakeholder groups: workers who rely on compensation for workplace injuries and employers who pay the bills. Between 2010 and 2014, workers' compensation benefits, coverage, and costs increased in absolute terms. However, as a share of covered payroll over the same time period, employer costs increased but benefits to injured workers decreased (Table 1 and Figure 1).

Total workers' compensation benefits (cash benefits paid to injured workers and medical payments for their health care) were \$62.3 billion in 2014, a 5.7 percent increase from 2010. Medical payments increased by 7.2 percent to \$31.4 billion, and cash benefits increased by 4.3 percent to \$30.9 billion over the period 2010-2014. Controlling for changes in covered wages, total benefits decreased by \$0.10 (to \$0.91 per \$100 of covered wages), medical payments decreased by \$0.04 (to \$0.46 per \$100 of

**Table 1****Overview of Workers' Compensation Benefits, Coverage, and Costs, 2010-2014**

Aggregate Benefits, Coverage, and Costs	Percent Change			
	2014	2010-2012	2012-2014	2010-2014
Covered Workers (in thousands)	132,673	2.7	3.6	6.4
Covered Wages (in billions)	\$6,820	8.4	7.9	16.9
Total Benefits (billions)	62.3	7.0	-1.2	5.7
Medical Benefits	31.4	7.6	-0.4	7.2
Cash Benefits	30.9	6.4	-2.0	4.3
Employer Costs (billions)	91.8	15.9	8.8	26.1

Benefits and Costs per \$100 of Covered Wages	Dollar Change			
	2014	2010-2012	2012-2014	2010-2014
Total Benefits	\$0.91	-\$0.01	-\$0.09	-\$0.10
Medical Benefits	0.46	0.00	-0.04	-0.04
Cash Benefits	0.45	-0.01	-0.05	-0.06
Employer Costs	1.35	0.08	0.02	0.10

*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.

covered wages), and cash benefits decreased by \$0.06 (to \$0.45 per \$100 of covered wages) in the period.

Historically, cash benefits have been a larger share of workers' compensation benefits than medical payments to injured workers. For example, in 1981, cash benefits accounted for 71 percent of total benefits (Figure 3). Since 1995, however, cash benefits per \$100 of covered wages have declined, while medical payments have increased or remained constant (Figure 2). As a result, workers' compensation benefits have been almost equally divided between medical payments and cash benefits since 2010 (Figure 3).

Workers' compensation costs to employers were \$91.8 billion in 2014, an increase of 26.1 percent in the period 2010-2014. Over the same period, the number of workers covered by workers' compensa-

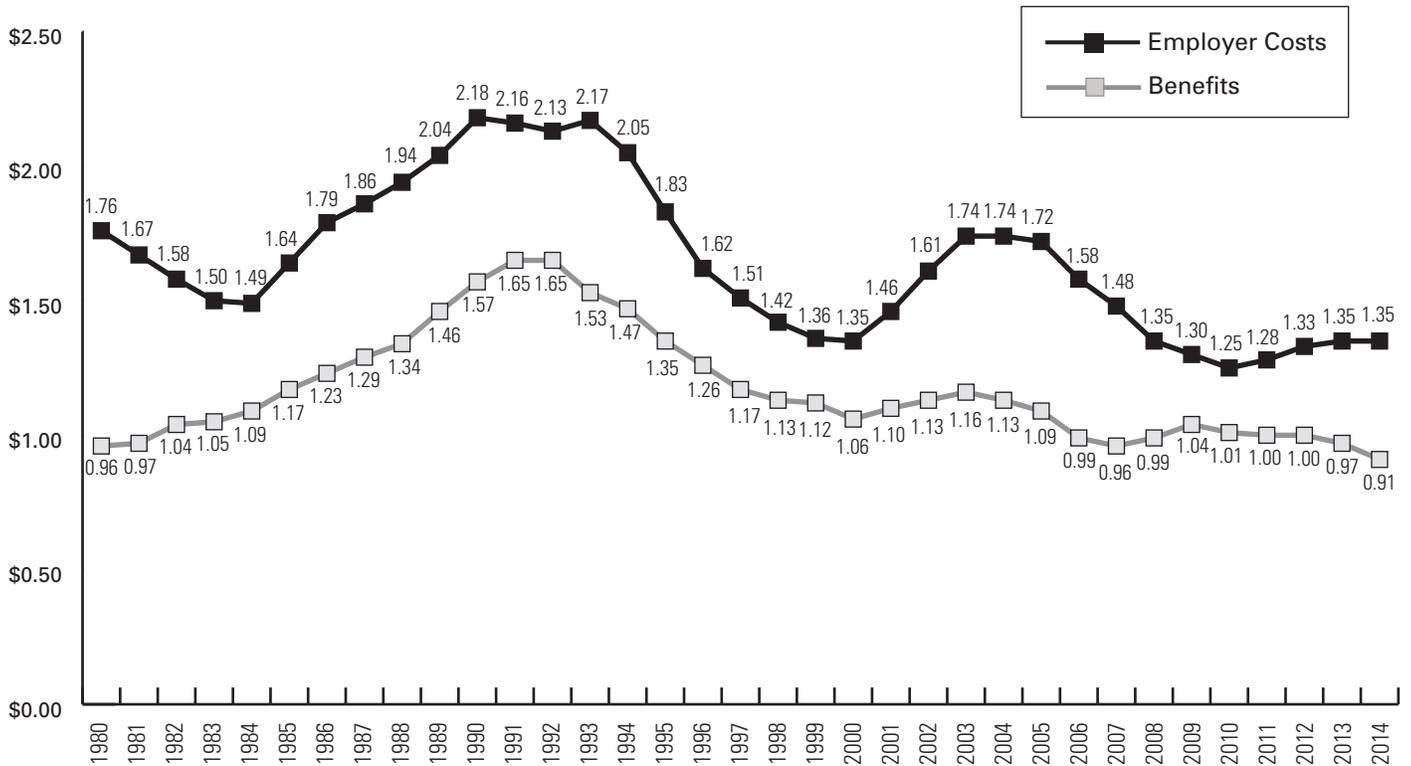
tion increased by 6.4 percent, and covered wages increased by 16.9 percent. When measured relative to \$100 of covered wages, employer costs increased by \$0.10 (8%) over the period 2010-2014 to \$1.35 in 2014.

*Medical and cash benefits have accounted for almost equal shares of total workers' compensation benefits since 2010.*

Despite two consecutive years of declining workers' compensation benefit payments, the increases in costs and coverage reflect, at least in part, the U.S. economy recovering from the Great Recession. As employment increases, the number of workers

**Figure 1**

**Workers' Compensation Benefits and Costs Per \$100 of Covered Wages, 1980-2014**



*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 deductible, if any. Costs for self-insuring employers are calendar-year benefits paid plus the administrative costs associated with providing those benefits.

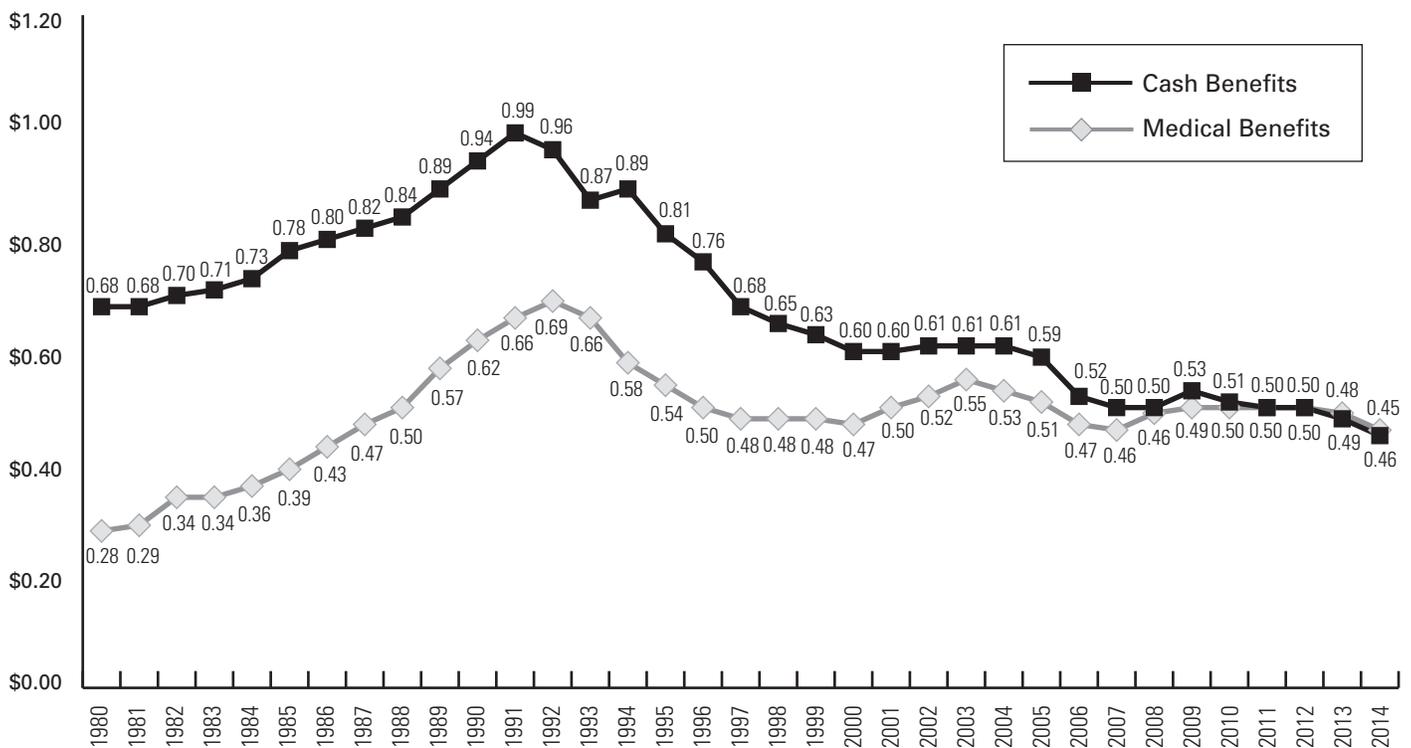
*Source:* National Academy of Social Insurance estimates.

covered by workers' compensation increases along with the number of work-related injuries. Thus, workers' compensation benefits and costs increase as well. However, employer costs increase more rapidly at first while benefits increase more slowly. This occurs because employer costs immediately reflect the increases in premiums paid to cover additional workers. Benefits, on the other hand, lag behind increases in costs and coverage because they commence when an injury occurs and sometimes extend into subsequent years. Because benefits and costs are so sensitive to covered employment, it is best to control for growth in covered wages to identify trends over time and when making comparisons across states.

Figure 1 shows long-term trends in benefits and costs per \$100 of covered wages. Employer costs steadily increased between 2010 and 2013 with the economic recovery and stabilized at \$1.35 in both 2013 and 2014. Despite the recent increases, employer costs per \$100 covered wages remain at some of the lowest levels of the past 35 years. Benefits per \$100 of covered wages, which have been fairly constant since 2006, fell from \$0.97 in 2013 to \$0.91 in 2014 (Figure 1), the lowest level since 1980, when the data series began.

**Figure 2**

**Workers' Compensation Medical and Cash Benefits Per \$100 of Covered Wages, 1980-2014**



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 2014 begins on page 18.

## 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,

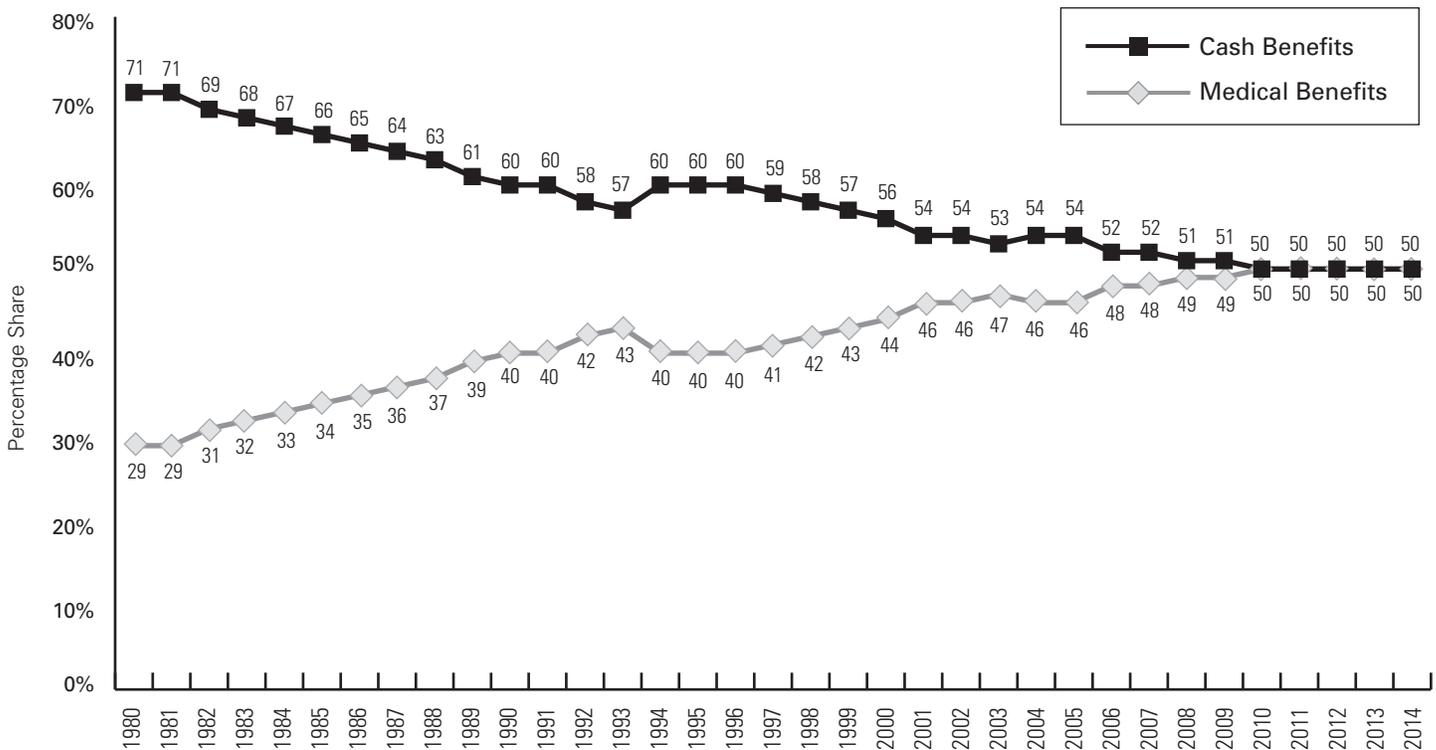
in 1884 under Chancellor Otto von Bismarck (Clayton, 2004). The next such laws were enacted in England in 1897.

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 survived constitutional challenges were passed in 1911 by New Jersey and Wisconsin.<sup>1</sup> 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).

1 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).

**Figure 3**

**Percentage Share of Medical and Cash Benefits, 1980-2014**



Source: National Academy of Social Insurance estimates.

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.<sup>2</sup> 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);<sup>3</sup> 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 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

2 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).

3 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."

recovery of damages (Burton and Mitchell, 2003).<sup>4</sup> 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.<sup>5</sup>

The adoption of state workers' compensation programs has been called a significant event in the nation's economic, legal, and political history. Passage 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, the District of Columbia, and the U.S. territories has its own workers' compensation program. Separate U.S. government programs cover federal civilian employees and 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.<sup>6</sup> Oklahoma adopted a law, implemented in 2014, that allows employers to opt-out of a traditional workers' compensation plan by adopting an alternative benefit plan.<sup>7</sup>
- 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.

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

5 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 illegally insured.

6 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.

7 Oklahoma passed sweeping workers' compensation reforms in 2013 when Senate Bill 1062 was signed into law. The bill, which became effective January 1, 2014, allows employers to provide insurance for injured workers under alternative benefit systems based on the Federal Employee Retirement Income Security Act (Postal, 2013). Under the Oklahoma Employee Injury Benefit Act (OEIBA) a "qualified employer" may opt out of the state workers' compensation system if it provides the state Insurance Commissioner with a written private benefit plan that offers comparable coverage consistent with the state constitution and shows proof that the employer is financially capable of paying the required compensation. Although it is described as an "opt-out" provision, employers in Oklahoma must still insure their workers against work-related injuries. This is in contrast to Texas, which places no coverage requirements on employers who decide to opt-out of the workers' compensation system. In Texas, employers who opt-out of workers' compensation face the possibility of tort suits from injured workers, whereas in Oklahoma, employers are protected against tort suits whether they remain in the state regulated workers' compensation system or choose an optional private benefit plan (Krohm, 2016). In February 2016 the Oklahoma Workers' Compensation Commission ruled that the employer opt-out was unconstitutional but the decision has been appealed to the Oklahoma Supreme Court (Berkes and Grabell, 2016).

- With a few exceptions, workers' compensation is financed exclusively by employers. Employers purchase workers' compensation insurance from private insurers or a state insurance fund, or some large employers may self-insure.<sup>8</sup> In three states, workers pay part of the cost of workers' compensation benefits and services through direct payroll deductions or charges.<sup>9</sup>

## Workers' Compensation Benefits

There are three basic types of workers' compensation claims: (1) medical-only, (2) temporary disability, and (3) permanent disability, which are 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. According to the National Council on Compensation Insurance (NCCI), between 1994 and 2012, medical-only claims accounted for 75 percent of all workers' compensation claims, but only 7 percent of total benefit payments, in the 37 states where NCCI is licensed (NCCI, 2016b).<sup>10</sup>

**Temporary disability claims.** Temporary total disability (TTD) benefits are paid 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

claims accounted for more than 61 percent of all claims involving cash benefits but less than 30 percent of cash benefits paid in 2012 (Figure 4).

In most states, weekly benefits for temporary total disability claims are tax exempt. The 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 not be covered by temporary disability benefits.

Compensation for temporary disability is subject to maximum and minimum benefit levels that vary from state to state. As of January 2016, the maximum weekly TTD benefit ranged from a high of \$1,628 in Iowa to a low of \$469 in Mississippi. The minimum weekly benefit ranged from a high of \$585 in North Dakota to a low<sup>11</sup> of \$20 in Arkansas and Florida.<sup>12</sup>

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, a worker 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.

**Permanent disability claims.** Some injured workers experience work-related injuries or illnesses that result in permanent impairments. These workers may be entitled to either permanent partial or permanent total disability benefits. Eligibility for permanent disability benefits is determined after the

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

9 In Washington, workers pay part of workers' compensation premium costs through payroll deductions. (See footnote to Table 14.) Oregon has special funds for some workers' compensation benefits that are financed in part by workers. New Mexico has a very small assessment per covered worker.

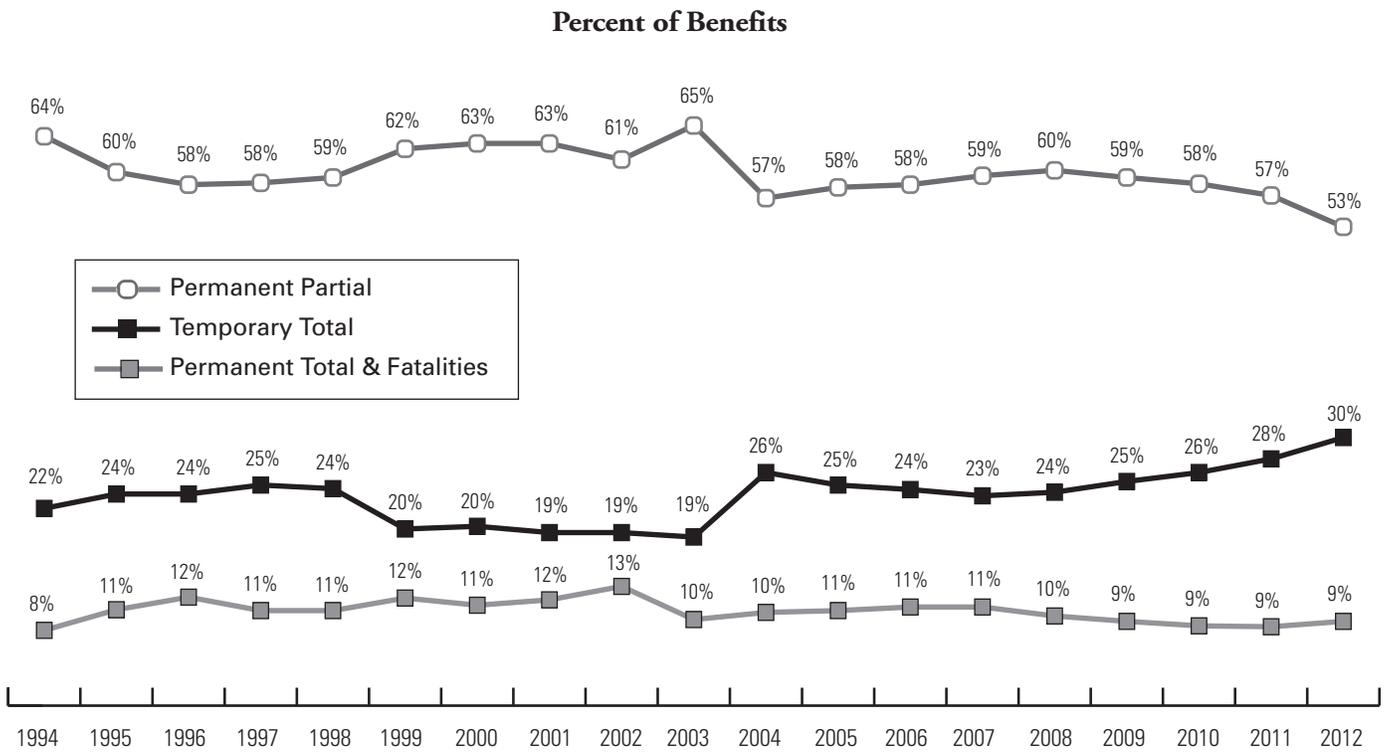
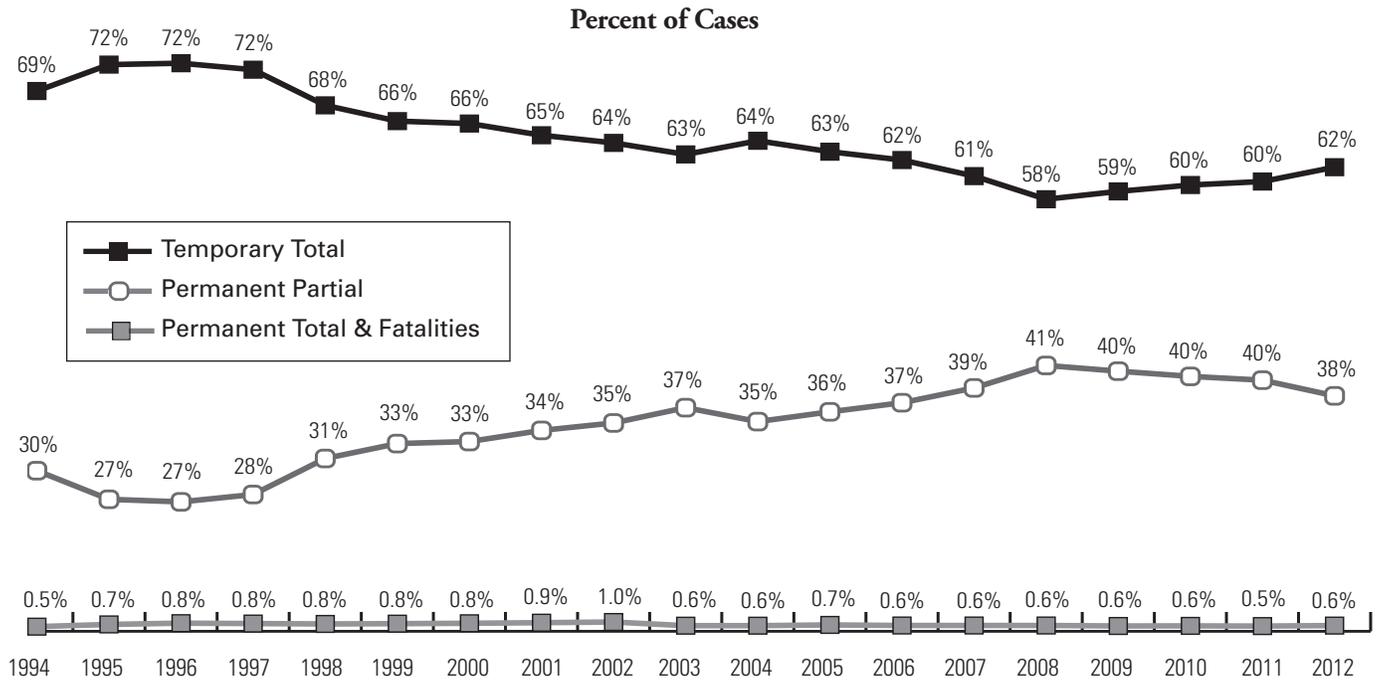
10 The most current year reported in the NCCI Annual Statistical Bulletin (NCCI, 2016b) is 2012.

11 Colorado, Iowa, Maine, Michigan, Montana, Nevada, Oklahoma, and Rhode Island do not have a specified minimum weekly TTD benefit.

12 Details on benefit and coverage provisions of state laws are compiled in *Workers' Compensation Laws as of January 2016*, issued jointly by the International Association of Industrial Accident Boards and Commissions and the Workers Compensation Research Institute and summarized in Appendix C.

**Figure 4**

**Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 1994-2012**



*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 fatalities 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 (1995-2016), *Annual Statistical Bulletin*, Exhibits X and XII.

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. 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.<sup>13</sup> The amount of permanent disability benefits may be determined by reduced earning capacity or by some measure of physical loss to the body.

The bulk of cash benefits for workers' compensation go to permanent disability claims, of which permanent partial disability claims are more common.<sup>14</sup> In 2012, PPD claims accounted for less than 38 percent of claims involving cash benefits but more than 53 percent of cash benefits paid. PPD claims varied between 27-41 percent of the claims paying cash benefits in the years 1994-2012 but accounted for 57-65 percent of all cash benefits (Figure 4). Permanent total disability claims accounted for 0.2 percent of claims involving cash benefits and 6.8 percent of cash benefits paid. Fatality claims occurred in only 0.4 percent of claims and represented 2.6 percent of cash benefits. Permanent total disability and fatality claims are relatively rare, accounting for less than 1 percent of claims involving cash benefits and 7-13 percent of total payments in the period 1994-2012 (Figure 4).

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). In some states, permanent partial disability benefits begin when maximum medical improvement is achieved. In others, permanent disability benefits are simply an extension of temporary disability benefits until the injured worker returns to employment. A few states do not pay per-

manent 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.<sup>15</sup>

## 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. Many states also have special workers' compensation funds to cover exceptional circumstances, such as a second work-related injury. Federal workers' compensation insurance covers federal civilian employees and some private-sector workers employed in high-risk jobs or jobs related to national defense.

**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 large 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 2014, 23 states paid some amount of workers' compensation benefits through a state fund. In general, state funds are established by an act of

---

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

14 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.

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

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. In 2014, four states had exclusive state funds and, according to our criteria, 17 states had competitive state funds.<sup>16</sup> 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 2014.

**Self-insurance.** Many large employers choose to self-insure for workers' compensation.<sup>17</sup> 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.<sup>18</sup> Some states permit groups of employers in the same industry or trade association to self-insure through group self-insurance.

*Employers purchase workers' compensation insurance from private insurers, a state fund, or some large firms choose to self-insure. Just as with other forms of insurance, policies with deductibles are available at lower premium rates.*

**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 the costs associated with the *prior condition* to reduce the cost burden on the current employer. The funds encourage employers to hire injured workers with residual impairments who want to return to work. 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 limited jurisdictions, with general fund monies.<sup>19</sup>

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

16 In 2014, 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 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.

18 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.

19 See *Sources and Methods 2014* on the Academy's website for further details on special funds, second injury funds, and guaranty funds.

**Table 2****Workers' Compensation Covered Workers and Covered Wages, 1994-2014**

Year	Total Workers		Total Wages	
	(thousands)	Percent Change	(billions)	Percent Change
1994	109,400	3.0	\$2,949	5.2
1995	112,800	3.1	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	126,022	1.1	6,063	3.9
2012	128,055	1.6	6,322	4.3
2013	130,245	1.7	6,466	2.3
2014	132,673	1.9	6,820	5.5

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

## Estimates for 2014

The workers' compensation system involves numerous stakeholder groups: employers, workers, insurers, medical providers, attorneys, and state and federal 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 who pay the bills. The Academy's measures are designed to provide the best

available estimates of workers' compensation coverage, benefits, and employer costs, 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 trends.<sup>20</sup> The estimates are also *not designed* to measure the extent to which benefits paid to injured workers compensate them for their earnings losses due to injury, or what is typically referred to as benefit "adequacy."<sup>21</sup>

20 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.

21 Please refer to Hunt and Dillender (2014), Boden et al. (2005), and Hunt (2004) for a review of studies evaluating benefit adequacy.

**Table 3****Workers' Compensation Covered Workers, by State, 2010-2014**

State	Number of Workers (in thousands)						Percent Change			Ranking <sup>a</sup>
	2010	2011	2012	2013	2014	2010-2012	2012-2014	2010-2014		
Alabama	1,681	1,683	1,697	1,717	1,736	1.0	2.3	3.3	44	
Alaska	299	305	311	313	315	4.0	1.4	5.4	30	
Arizona	2,295	2,326	2,374	2,431	2,485	3.4	4.7	8.3	11	
Arkansas	1,083	1,090	1,098	1,098	1,103	1.4	0.5	1.9	50	
California	14,171	14,310	14,674	15,139	15,567	3.6	6.1	9.9	5	
Colorado	2,110	2,147	2,200	2,271	2,353	4.3	6.9	11.5	3	
Connecticut	1,576	1,594	1,611	1,623	1,636	2.2	1.6	3.8	42	
Delaware	392	396	398	407	417	1.7	4.7	6.5	23	
District of Columbia	483	494	506	519	532	4.9	5.1	10.3	4	
Florida	6,644	6,727	6,865	7,045	7,249	3.3	5.6	9.1	6	
Georgia	3,566	3,608	3,658	3,737	3,829	2.6	4.7	7.4	17	
Hawaii	551	558	569	583	593	3.3	4.3	7.7	15	
Idaho	592	595	602	618	634	1.8	5.3	7.1	18	
Illinois	5,397	5,467	5,537	5,590	5,669	2.6	2.4	5.0	33	
Indiana	2,655	2,705	2,762	2,799	2,842	4.0	2.9	7.0	19	
Iowa	1,402	1,419	1,443	1,464	1,483	2.9	2.8	5.8	28	
Kansas	1,261	1,268	1,285	1,303	1,322	1.9	2.9	4.8	34	
Kentucky	1,665	1,689	1,718	1,738	1,765	3.2	2.7	6.0	25	
Louisiana	1,796	1,811	1,833	1,858	1,889	2.1	3.1	5.2	32	
Maine	559	562	565	569	573	1.1	1.4	2.5	48	
Maryland	2,310	2,330	2,363	2,384	2,406	2.3	1.8	4.2	38	
Massachusetts	3,098	3,136	3,190	3,244	3,315	3.0	3.9	7.0	21	
Michigan	3,621	3,705	3,786	3,873	3,924	4.5	3.6	8.4	10	
Minnesota	2,506	2,553	2,597	2,643	2,682	3.6	3.3	7.0	20	
Mississippi	996	1,000	1,008	1,018	1,027	1.1	1.9	3.1	47	

Missouri	2,401	2,413	2,435	2,467	2,496	1.4	2.5	3.9	40
Montana	405	406	414	421	424	2.2	2.4	4.7	35
Nebraska	870	874	892	905	918	2.6	2.9	5.6	29
Nevada	1,088	1,095	1,112	1,140	1,182	2.2	6.4	8.7	7
New Hampshire	593	598	605	611	619	2.1	2.3	4.5	37
New Jersey	3,680	3,687	3,725	3,769	3,793	1.2	1.8	3.1	46
New Mexico	725	726	730	738	742	0.7	1.7	2.4	49
New York	8,195	8,308	8,428	8,549	8,710	2.8	3.3	6.3	24
North Carolina	3,626	3,678	3,743	3,814	3,878	3.2	3.6	7.0	22
North Dakota	345	366	399	414	432	15.4	8.3	25.0	1
Ohio	4,822	4,888	4,967	5,033	5,108	3.0	2.8	5.9	26
Oklahoma	1,359	1,378	1,404	1,435	1,459	3.4	3.9	7.4	16
Oregon	1,567	1,587	1,612	1,651	1,699	2.9	5.3	8.4	9
Pennsylvania	5,343	5,409	5,458	5,482	5,529	2.2	1.3	3.5	43
Rhode Island	436	437	441	445	452	1.2	2.6	3.8	41
South Carolina	1,666	1,689	1,717	1,755	1,799	3.1	4.8	8.0	13
South Dakota	374	378	385	389	395	3.0	2.7	5.8	27
Tennessee	2,412	2,456	2,503	2,550	2,603	3.8	4.0	7.9	14
Texas	8,234	8,334	8,477	8,623	8,903	3.0	5.0	8.1	12
Utah	1,109	1,137	1,177	1,216	1,253	6.1	6.5	13.0	2
Vermont	284	287	290	292	295	2.3	1.8	4.2	39
Virginia	3,295	3,338	3,374	3,400	3,400	2.4	0.8	3.2	45
Washington	2,667	2,707	2,751	2,820	2,899	3.2	5.4	8.7	8
West Virginia	655	665	674	668	662	2.9	-1.8	1.1	51
Wisconsin	2,539	2,572	2,600	2,628	2,654	2.4	2.1	4.5	36
Wyoming	263	267	271	272	277	3.0	2.3	5.4	31
Total Non-Federal	121,657	123,159	125,235	127,474	129,929	2.9	3.7	6.8	
Federal Employees	2,981	2,864	2,820	2,771	2,744	-5.4	-2.7	-7.9	
TOTAL	124,638	126,022	128,055	130,245	132,673	2.7	3.6	6.4	

a. States are ranked from 1 to 51 by the largest percent increase in the number of covered workers from 2010 to 2014.

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

**Table 4**  
**Workers' Compensation Covered Wages, by State, 2010-2014**

State	Covered Wages (in millions)					Percent Change			Ranking <sup>a</sup>
	2010	2011	2012	2013	2014	2010-2012	2012-2014	2010-2014	
Alabama	\$66,021	\$67,443	\$69,494	\$70,846	\$73,377	5.3	5.6	11.1	46
Alaska	14,062	14,677	15,367	15,822	16,499	9.3	7.4	17.3	20
Arizona	98,288	102,162	106,986	110,455	115,300	8.9	7.8	17.3	21
Arkansas	38,652	40,169	41,484	41,290	43,634	7.3	5.2	12.9	42
California	749,264	783,390	831,610	861,194	914,844	11.0	10.0	22.1	7
Colorado	99,804	104,124	110,073	114,426	122,942	10.3	11.7	23.2	5
Connecticut	93,616	97,281	99,935	101,064	104,441	6.7	4.5	11.6	45
Delaware	19,023	19,913	20,553	21,108	22,104	8.0	7.5	16.2	30
District of Columbia	35,214	36,805	38,542	39,756	41,850	9.4	8.6	18.8	11
Florida	273,103	281,411	293,267	299,051	321,517	7.4	9.6	17.7	17
Georgia	154,199	160,163	167,030	168,319	182,121	8.3	9.0	18.1	15
Hawaii	22,130	22,753	23,760	24,753	25,911	7.4	9.1	17.1	22
Idaho	20,335	20,868	21,463	22,475	23,768	5.5	10.7	16.9	25
Illinois	265,517	276,331	287,520	292,573	305,179	8.3	6.1	14.9	36
Indiana	103,299	107,900	113,017	115,798	120,024	9.4	6.2	16.2	31
Iowa	53,097	55,306	57,861	59,873	62,775	9.0	8.5	18.2	13
Kansas	48,552	50,106	52,268	53,607	55,958	7.7	7.1	15.3	33
Kentucky	63,736	66,097	68,692	70,161	73,262	7.8	6.7	14.9	35
Louisiana	73,643	76,078	78,716	81,171	84,992	6.9	8.0	15.4	32
Maine	20,502	20,959	21,426	21,976	22,783	4.5	6.3	11.1	47
Maryland	114,291	117,735	122,148	123,586	127,741	6.9	4.6	11.8	43
Massachusetts	178,233	186,326	193,733	200,044	211,967	8.7	9.4	18.9	10
Michigan	159,926	168,623	175,755	176,734	189,023	9.9	7.5	18.2	14
Minnesota	116,787	121,674	127,560	132,003	137,888	9.2	8.1	18.1	16
Mississippi	33,554	34,306	35,487	36,438	37,443	5.8	5.5	11.6	44

Missouri	96,543	98,885	102,878	105,160	109,410	6.6	6.4	13.3	41
Montana	13,658	14,169	15,008	15,492	16,159	9.9	7.7	18.3	12
Nebraska	32,089	33,085	34,687	35,821	37,450	8.1	8.0	16.7	27
Nevada	45,883	46,824	48,160	49,922	52,491	5.0	9.0	14.4	39
New Hampshire	27,065	28,106	29,005	29,762	31,506	7.2	8.6	16.4	28
New Jersey	206,476	211,059	217,495	223,167	229,085	5.3	5.3	11.0	48
New Mexico	27,638	28,147	28,832	28,549	30,300	4.3	5.1	9.6	51
New York	492,983	512,323	527,111	538,418	572,923	6.9	8.7	16.2	29
North Carolina	147,851	153,526	160,039	161,676	173,060	8.2	8.1	17.1	23
North Dakota	13,004	15,152	18,187	19,693	21,884	39.9	20.3	68.3	1
Ohio	199,447	207,775	217,773	222,973	232,924	9.2	7.0	16.8	26
Oklahoma	50,855	54,238	57,387	59,905	62,867	12.8	9.5	23.6	4
Oregon	64,639	67,704	70,707	73,690	78,393	9.4	10.9	21.3	8
Pennsylvania	242,270	252,338	262,207	267,201	277,707	8.2	5.9	14.6	38
Rhode Island	19,139	19,674	20,254	20,964	22,004	5.8	8.6	15.0	34
South Carolina	61,899	64,182	66,706	68,227	72,661	7.8	8.9	17.4	18
South Dakota	12,575	13,135	13,820	14,263	15,065	9.9	9.0	19.8	9
Tennessee	98,992	102,905	108,730	110,967	116,163	9.8	6.8	17.3	19
Texas	383,235	402,835	425,760	438,471	470,775	11.1	10.6	22.8	6
Utah	42,894	44,928	47,795	50,081	53,039	11.4	11.0	23.7	2
Vermont	11,055	11,391	11,739	12,133	12,533	6.2	6.8	13.4	40
Virginia	157,873	163,092	168,671	167,008	174,289	6.8	3.3	10.4	50
Washington	128,028	134,609	141,613	148,233	158,274	10.6	11.8	23.6	3
West Virginia	24,026	25,336	26,103	25,575	26,611	8.6	1.9	10.8	49
Wisconsin	100,999	104,948	108,660	109,533	115,813	7.6	6.6	14.7	37
Wyoming	10,924	11,465	11,964	12,143	12,781	9.5	6.8	17.0	24
Total Non-Federal	\$5,626,886	\$5,854,426	\$6,115,040	\$6,263,554	\$6,613,510	8.7	8.2	17.5	
Federal Employees	\$207,162	\$209,059	\$206,823	\$202,017	\$206,877	-0.2	0.0	-0.1	
TOTAL	\$5,834,048	\$6,063,485	\$6,321,863	\$6,465,571	\$6,820,387	8.4	7.9	16.9	

a. States are ranked from 1 to 51 by the largest percent increase in covered wages from 2010 to 2014.

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

# Covered Employment and Wages

## Methods for Estimating Covered Employment and Wages

Because there is no national system for counting the number of workers covered by workers' compensation, 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).<sup>22</sup> From these bases, we subtract the number of workers and corresponding amount of wages 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). 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.

Oklahoma also adopted a provision allowing certain employers to opt-out of the state workers' compensation system and purchase an alternative private benefit insurance plan. However, there are no reliable estimates of the total number of workers who have been covered under this alternative arrangement. Current evidence suggests that the opt-out program only affects a small number of workers, so we have not adjusted for the opt-out in estimating workers' compensation coverage in Oklahoma in 2014.<sup>23</sup>

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.)

## Estimates of Covered Wages and Workers

In 2014, workers' compensation covered an estimated 132.7 million U.S. workers, a 1.9 percent increase from the previous year (Table 2). The number of workers covered increased steadily between 2010 and 2014, as the economy pulled out of the recession, such that 6.4 percent more workers were covered in 2014 than in 2010 (Table 3). Overall, workers' compensation coverage extended to an estimated 91 percent of the employed workforce and 97 percent of workers covered by unemployment insurance in 2014.<sup>24</sup>

*Between 2010 and 2014, the number of U.S. workers covered by workers' compensation increased 6.5 percent, and the amount of covered wages increased 17.0 percent.*

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.

23 There is preliminary evidence that roughly 22,500 employees were covered by alternative plans (Grabell and Berkes, 2015). If correct, this would represent 1.5 percent of Oklahoma's workforce, although some officials believe even that number to be high. Hence, we do not adjust for the opt-out provision in Oklahoma in our estimates of covered workers in 2014. A constitutional challenge to the opt-out law is now being appealed to the Oklahoma Supreme Court. If the law is found to be constitutional, the number of employers opting out of traditional coverage is likely to increase.

24 According to the Bureau of Labor Statistics (BLS), the total employed workforce in the United States was 146.3 million in December 2014. According to unpublished estimates provided by the BLS, 2 percent of civilian workers represented by the BLS National

Between 2010 and 2014, every state experienced an increase in the number of workers covered by workers' compensation, with the largest increases in North Dakota (25.0%), Utah (13.0%), and Colorado (11.5%) (Table 3). States with the smallest increases in coverage (lagging behind in the recovery) were West Virginia (1.1%), Arkansas (1.9%), and Maine (2.5%). In fact, West Virginia was unique in experiencing a decline in the number of covered workers between 2012 and 2014, the years following the dissolution of its state fund.

Total wages of covered workers were \$6.8 trillion in 2014, a 5.5 percent increase from 2013, and a 16.9 percent increase from 2010 (Tables 2 and 4). All states experienced an increase in covered wages between 2010 and 2014, but there was tremendous variation in the rates of increase. Covered wages increased most dramatically (68.3%) in North Dakota, along with the boom in energy production in the state (Table 4). No other state experienced an increase anywhere near that rate, but seven states achieved growth in covered wages in excess of 20 percent: Utah (23.7%), Washington (23.6%), Oklahoma (23.6%), Colorado (23.2%), Texas (22.8%), and California (22.1%). At the other end of the spectrum, the smallest growth in covered wages occurred in New Mexico (9.6%), Virginia (10.4%), West Virginia (10.8%), and New Jersey (11.0%).

*All states experienced increases in covered wages and employment between 2010 and 2014, in contrast to the Federal government where covered workers and wages declined.*

While the number of U.S. workers and wages covered by workers' compensation increased broadly

between 2010 and 2014, there were significant declines among federal employees. The total number of federal employees covered by workers' compensation declined 7.9 percent and covered wages fell 0.1 percent across the same time period.

## 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, 2014*, and is available on the Academy's website ([www.nasi.org](http://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

*footnote 24 continued...*

Compensation Survey (NCS) were employed in establishments reporting zero annual workers' compensation costs in March 2015 (DOL, 2016). 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 97.1 percent of all UI covered workers in 2014, which is virtually identical to the workers' compensation coverage shown by the NCS.

year, responses were received from 37 out of 51 jurisdictions, for a response rate of 73 percent. Seven states did not reply specifically to the Academy's questionnaire because they published reports containing the workers' compensation information normally included in the questionnaire. Including these reports, the total number of jurisdictions providing data increases to 44 out of 51, for a response rate of 86 percent.

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. If states do not report benefits paid by self-insured employers, these amounts are imputed based on estimates of self-insured payrolls in the state. Benefits provided under group self-insurance are included with self-insured benefits in this report.

**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 2010 through 2014 (A.M. Best, 2015). 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.<sup>25</sup>

**NCCI data.** The primary source of data on medical benefits is NCCI (2016a). Where NCCI data are not available, estimates of medical benefits are based on reports from the states. 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. NCCI also provides data on reimbursements paid through deductible policies.

## National Estimates of Benefits Paid

This section summarizes key findings from our national estimates of workers' compensation benefits paid. It includes a brief overview of total benefits paid, benefits by type of coverage (private carriers, self-insured, state funds, and the federal govern-

ment), as well as a discussion on payments made through deductible policies.

**Total benefits paid.** Table 5 shows total workers' compensation benefits paid and benefits by type of coverage, since 1994. In 2014, workers' compensation coverage paid \$62.3 billion in benefits, a 1.2 percent decrease from the total paid in 2013. Private carriers were the largest single payer, followed by self-insured employers, state funds, and the federal government.

*Total workers' compensation benefits paid in 2014 declined by 1.2 percent from 2013. Private insurers continued to be the single largest payer of worker's compensation benefits, although part of these payments are reimbursed by employers under deductible policies.*

**Benefits by type of coverage.** 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 2014, private insurers paid \$34.4 billion in benefits, 55.1 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 1994. In 2014, self-insured employers paid \$15.1 billion in benefits, 24.2 percent of the total.

State funds are the third largest payer in workers' compensation, but their share of the market has declined since 2004, when the funds accounted for nearly 20 percent of total benefits paid. In 2014, state funds paid \$9.2 billion in benefits, less than 15 percent of the total. 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 California's

25 A. M. Best does not provide data on the four exclusive state funds (Ohio, North Dakota, Washington, Wyoming), or the state fund in South Carolina that only provides benefits to government workers.

**Table 5****Workers' Compensation Benefits Paid by Type of Coverage, 1994-2014**

Year	Private Insured		State Fund Insured		Federal		Self-Insured		Total			
	Benefits (millions)	% Share	Benefits (millions)	% Share	Benefits (millions)	% Share	Total (millions)	% Share	Benefits (millions)	% Change	Medical Benefits (millions)	% Medical
1994	\$21,391	49.2	\$7,398	17.0	\$3,166	7.3	\$11,527	26.5	\$43,482	1.3	\$17,194	39.5
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	31,330	53.3	9,907	16.9	3,543	6.0	13,972	23.8	58,752	0.0	27,561	46.9
2010	31,654	53.7	9,751	16.5	3,672	6.2	13,861	23.5	58,939	0.3	29,278	49.7
2011	32,715	53.7	9,828	16.1	3,777	6.2	14,636	24.0	60,956	3.4	30,519	50.1
2012	34,387	54.5	10,021	15.9	3,776	6.0	14,878	23.6	63,062	3.5	31,512	50.0
2013	34,585	55.3	9,509	15.2	3,691	5.9	14,725	23.6	62,510	-0.9	31,395	50.2
2014	34,350	55.1	9,224	14.8	3,681	5.9	15,052	24.2	62,307	-1.2	31,375	50.4

*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 1997–2014, 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, SSA (2015), and DOL (2016).

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 2014, the federal government paid \$3.7 billion in workers' compensation benefits, or 5.9 percent of total benefits paid.

**Deductibles.** Table 6 shows the estimated dollar amount of benefits that employers reimbursed under deductible provisions since 1994. In 2014, employers paid \$10 billion under deductibles, or 16.1 percent of total benefits paid. The share of benefits

**Table 6****Workers' Compensation Employer-Paid Benefits Under Deductible Provisions, 1994-2014**

Year	Deductibles (millions)			Deductibles as a % of Total Benefits
	Total	Private Insured	State Fund Insured	
1994	\$2,834	\$2,645	\$189	6.5
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	14.6
2010	8,904	8,466	438	15.1
2011	8,837	8,412	425	14.5
2012	10,485	9,942	544	16.6
2013	9,936	9,512	424	15.9
2014	10,045	9,656	389	16.1

*Notes:* Benefits paid under deductible provisions were either provided directly (or could be calculated directly from data provided) by 18 states. Five states do not allow workers' compensation policies with deductibles. For the other 28 states and the District of Columbia, benefits paid under deductibles were imputed using a ratio of the manual equivalent premiums.

*Source:* National Academy of Social Insurance estimates.

paid by employers under deductible provisions doubled between 1994 and 2000 (from 6.5% to 13%), 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 through private insurers, which accounted for 96 percent of all deductible payments in 2014.

Employers who have policies with deductibles are, in effect, self-insured up to the amount of the deductible

(whether that amount represents a specified number of injuries and the corresponding benefits paid, or a specified amount of aggregate-benefits paid). 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 better picture of the share of the workers' compensation market for which employers are assuming primary financial risk. The result indicates that, in 2014, private carriers and employers each accounted for about 40 percent of total benefits paid (Table 7, columns 3 and 9).<sup>26</sup> The

26 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 7****Percentage Distribution of Workers' Compensation Benefit Payments, by Type of Coverage:  
With and Without Deductibles, 1994-2014**

Year	Total Benefits (millions)	Private Insured			State Fund Insured			Federal	Self-Insured	Total Employer Paid
		Total	Employer Paid	Insurer Paid After Deductibles	Total	Employer Paid	Insurer Paid After Deductibles			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (2) + (5) + (8)
1994	\$43,482	49.2	6.1	43.1	17.0	0.4	16.6	7.3	26.5	33.0
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	58,752	53.3	13.8	39.5	16.9	0.8	16.1	6.0	23.8	38.4
2010	58,939	53.7	14.4	39.3	16.5	0.7	15.8	6.2	23.5	38.6
2011	60,956	53.7	13.8	39.9	16.1	0.7	15.4	6.2	24.0	38.5
2012	63,062	54.5	15.8	38.8	15.9	0.9	15.0	6.0	23.6	40.2
2013	62,510	55.3	15.2	40.1	15.2	0.7	14.5	5.9	23.6	39.5
2014	62,307	55.1	15.5	39.6	14.8	0.6	14.2	5.9	24.2	40.3

*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.

**Table 8****Workers' Compensation Benefits Paid by Type of Coverage, and State, 2014**

State	Private Insured		State Fund Insured		Self-Insured <sup>a</sup>		Total Benefits Paid (thousands) <sup>b</sup>	Medical Benefits Paid (thousands) <sup>c</sup>	Percent Medical	Ranking <sup>a</sup>
	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share				
Alabama	\$305,002	47.9	-	-	\$331,573	52.1	\$636,575	\$437,327	68.7	6
Alaska	167,111	77.7	-	-	47,883	22.3	214,995	152,431	70.9	2
Arizona	583,712	79.2	-	-	153,383	20.8	737,095	488,694	66.3	10
Arkansas	153,224	72.4	-	-	58,409	27.6	211,633	138,831	65.6	11
California	7,258,056	60.0	\$1,231,947	10.2	3,603,238	29.8	12,093,241	6,982,583	57.7	20
Colorado	230,693	28.9	398,040	49.8	169,978	21.3	798,711	456,863	57.2	21
Connecticut	640,139	72.2	-	-	245,877	27.8	886,015	418,199	47.2	38
Delaware	199,431	80.0	-	-	49,954	20.0	249,385	142,399	57.1	22
District of Columbia	85,196	84.2	-	-	16,011	15.8	101,207	34,916	34.5	49
Florida	2,262,870	71.9	-	-	884,898	28.1	3,147,769	2,127,892	67.6	8
Georgia	1,043,238	72.8	-	-	390,004	27.2	1,433,242	709,455	49.5	34
Hawaii	140,092	51.7	33,167	12.3	97,461	36.0	270,720	121,553	44.9	44
Idaho	84,470	33.2	161,190	63.4	8,391	3.3	254,050	161,322	63.5	13
Illinois	2,066,704	75.1	-	-	685,640	24.9	2,752,343	1,241,307	45.1	43
Indiana	524,001	88.9	-	-	65,224	11.1	589,225	431,902	73.3	1
Iowa	506,080	77.9	-	-	143,639	22.1	649,719	341,102	52.5	30
Kansas	273,810	72.2	-	-	105,602	27.8	379,413	234,857	61.9	15
Kentucky	347,398	52.9	109,735	16.7	199,478	30.4	656,611	365,076	55.6	25
Louisiana	479,508	60.3	89,464	11.2	226,527	28.5	795,499	429,569	54.0	28
Maine	173,618	68.6	-	-	79,599	31.4	253,217	120,531	47.6	37
Maryland	523,589	54.8	166,926	17.5	264,958	27.7	955,474	446,206	46.7	39
Massachusetts	815,082	71.0	-	-	333,301	29.0	1,148,384	386,970	33.7	50
Michigan	630,059	60.9	-	-	404,713	39.1	1,034,772	432,148	41.8	45
Minnesota	821,953	76.2	-	-	257,310	23.8	1,079,263	596,802	55.3	26
Mississippi	231,102	68.6	-	-	105,587	31.4	336,689	198,983	59.1	19
Missouri	512,214	60.0	120,810	14.2	220,070	25.8	853,094	485,411	56.9	23
Montana	85,040	34.6	119,312	48.5	41,557	16.9	245,909	160,086	65.1	12
Nebraska	259,366	79.7	-	-	65,897	20.3	325,263	202,639	62.3	14
Nevada	248,431	67.3	-	-	120,965	32.7	369,396	183,590	49.7	33
New Hampshire	152,158	72.4	-	-	58,067	27.6	210,224	140,640	66.9	9
New Jersey	1,771,020	78.0	-	-	498,136	22.0	2,269,156	1,174,560	51.8	32

New Mexico	146,299	55.8	22,179	8.5	93,905	35.8	262,383	142,736	54.4	27
New York	2,551,035	45.7	1,230,051	22.0	1,800,209	32.3	5,581,295	1,940,983	34.8	48
North Carolina	993,730	75.8			317,395	24.2	1,311,126	608,362	46.4	41
North Dakota <sup>d</sup>	155	0.1	191,293	99.9			191,448	108,930	56.9	24
Ohio <sup>d</sup>	14,939	0.7	1,657,878	81.8	355,148	17.5	2,027,964	746,816	36.8	46
Oklahoma	372,545	52.2	201,350	28.2	140,472	19.7	714,367	332,181	46.5	40
Oregon	213,618	32.6	306,526	46.7	135,827	20.7	655,971	350,944	53.5	29
Pennsylvania	2,135,141	70.9	223,305	7.4	652,344	21.7	3,010,790	1,443,822	48.0	36
Rhode Island	67,063	40.9	74,368	45.3	22,654	13.8	164,084	57,265	34.9	47
South Carolina <sup>e</sup>	604,418	68.0	71,108	8.0	213,324	24.0	888,850	404,427	45.5	42
South Dakota	94,355	96.0	-	-	3,911	4.0	98,266	66,919	68.1	7
Tennessee	579,409	81.6	-	-	130,653	18.4	710,062	433,138	61.0	17
Texas	789,276	51.0	447,258	28.9	312,111	20.2	1,548,645	933,833	60.3	18
Utah	95,365	35.1	127,047	46.7	49,556	18.2	271,969	191,466	70.4	4
Vermont	132,596	86.8	-	-	20,154	13.2	152,749	79,582	52.1	31
Virginia	727,990	78.0	-	-	205,069	22.0	933,059	575,697	61.7	16
Washington <sup>d</sup>	25,504	1.1	1,866,286	78.0	501,129	20.9	2,392,919	762,486	31.9	51
West Virginia <sup>f</sup>	165,746	39.1	192,329	45.4	65,452	15.5	423,527	207,528	49.0	35
Wisconsin	1,064,405	91.5	-	-	98,967	8.5	1,163,372	802,017	68.9	5
Wyoming <sup>d</sup>	2,343	1.3	182,054	98.7			184,398	130,452	70.7	3
Total Non-Federal	\$34,350,298	58.6	\$9,223,624	15.7	\$15,051,609	25.7	\$58,625,531	\$30,264,429	51.6	
All Federal <sup>g</sup>	-	-	-	-	-	-	\$3,681,205	\$1,110,621	30.2	
Federal Employees <sup>h</sup>	-	-	-	-	-	-	\$2,940,811	\$1,011,450	34.4	
TOTAL	-	-	-	-	-	-	\$62,306,736	\$31,375,050	50.4	

a. States are ranked from 1 to 51 by the largest percent of medical benefits as a share of total benefits in 2014.

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 2014* available at [www.nasi.org](http://www.nasi.org).

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

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.

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.

remaining 20 percent of benefits were paid by federal (6 percent) and state funds (14 percent).

*When benefits paid under deductibles are counted as self-insurance, private carriers and employers assume a nearly equal share (40%) of the risk of workplace injuries and illnesses.*

## State Estimates of Benefits Paid

This section elaborates on the national estimates of benefits paid by assessing variations in payments across states. Key findings in benefits paid by type of coverage (private, self-insured, state fund) and in the share of medical and cash payments across states are summarized. Additionally, this section reports the Academy's standardized benefits measure, which controls for wage growth and discusses state outliers and important factors to consider when interpreting these results.

**Benefits by type of coverage.** Table 8 shows the shares of workers' compensation benefits paid by each type of coverage in each state in 2014. The shares vary considerably across states because not all states have a state fund and, where state funds exist, their legal status varies.

**Private carriers.** The share of benefits paid by private carriers is more than 85 percent in some jurisdictions with no state fund: South Dakota (96.0%), Wisconsin (91.5%), Indiana (88.9%), and Vermont (86.8%). In contrast, the share paid by private carriers is 1 percent or less in the four states with exclusive state funds: North Dakota (0.1%), Ohio (0.7%), Washington (1.1%), and Wyoming (1.3%).<sup>27</sup>

**Self-insured.** 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 3.3 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. Some states, for example, do not collect assessments for special workers' compensation funds from self-insured employers, thereby increasing the incentive to self-insure.<sup>28</sup> 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 and the availability of A.M. Best data.

*The share of workers' compensation benefits attributed to different payers varies widely across states, so the national estimates of payer shares are not representative of any individual state.*

**State funds.** The share of benefits paid by a state fund varies widely across those states that have such a fund. In North Dakota and Wyoming (states that do not allow self-insurance), the state fund paid approximately 99 percent of benefits in 2014. Among those states with competitive state funds, the share of benefits paid by the state fund ranged from

27 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.

28 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.

a high of 63.4 percent in Idaho, to a low of 7.4 percent in Pennsylvania.

**Share of medical benefits.** Table 8 also shows, for each state, the share of workers' compensation benefits going to medical care for injured workers. 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 2014, medical benefits accounted for half (50.2%) of workers' compensation benefits nationally.

Across states, however, the share of benefits attributed to medical care ranged from nearly three-fourths of total benefits in Indiana (73.3%), Alaska (70.9%), Wyoming (70.7%), and Utah (70.4%) to approximately one-third in Washington (31.9%), Massachusetts (33.7%), District of Columbia (34.5%), and New York (34.8%). The tremendous interstate variation in the share of total benefits going to medical care reflects between-state differences in: average weekly wages; the nature and severity of work-related injuries; the quantity and prices of medical services provided to injured workers; and the dollar value of cash benefits (driven by factors such as benefit replacement rates, maximum and minimum weekly benefits, the waiting period, and duration of TTD benefits). If, therefore, 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.

**State benefit trends.** Table 9 shows *total workers' compensation benefits* paid in each state in the years 2010 to 2014. Total (non-Federal) benefits increased 6.1 percent over the five years covered in the data, with just over half (26) of the states experiencing an increase in total benefits. The largest percentage increases occurred in North Dakota (59.1%), New York (20.9%) and California (19.8%). Benefits declined in the remaining 25 jurisdictions (including the District of Columbia) across the same time-period. The largest percentage decreases occurred in West Virginia (-22.0%), Michigan (-18.6%), and New Hampshire (-16.5%).

The within-state totals of workers' compensation benefits paid vary from year to year for a number of

*In the United States as a whole, medical benefits account for 50 percent of total workers' compensation benefits paid. Across states, however, the share of benefits attributed to medical care varies from approximately one-third to nearly three-fourths of total benefits paid.*

reasons. Benefits change as within-state employment changes, although much of the impact occurs with a lag. For example, the large decline in benefits in Michigan from 2010 to 2014 follows a period of steadily declining employment in the state (1999-2010). The large increase in benefits in North Dakota over the same period is associated with 20 years of sustained employment growth there.

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 (as in West Virginia, which changed its compensability rules and definitions of permanent disability in 2005). Other 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 of medical care, and differences in the ways stakeholders interact within the system over time (e.g., if employees have the initial choice of physician, or if special exclusions exist for small employers or agricultural employers).

Table 10 shows trends in *medical benefits* in each state between 2010 and 2014. Across all non-federal jurisdictions, medical benefits increased by 7.4 percent. The states with the highest percentage increases in medical benefits across the five years reported in the study were North Dakota (49.8%), Wyoming (27.8%), Virginia (22.5%), and California (20.6%). The states with the largest percentage decreases in medical benefits paid between 2010 and 2014 were West Virginia (-25.0%), Ohio (-20.9%), Michigan (-15.0%), and Illinois (-13.0%). Many different factors contribute to the variation in medical benefit trends across states. For example, strong employment growth contributed to the increase in medical benefits

**Table 9****Workers' Compensation Total Benefits Paid and Percent Change, by State, 2010-2014**

State	Total Benefits (thousands)					Percent Change			Ranking <sup>a</sup>
	2010	2011	2012	2013	2014	2010-2012	2012-2014	2010-2014	
	Alabama	\$629,069	\$616,022	\$649,682	\$639,311	\$636,575	3.3	-2.0	
Alaska	221,955	239,635	248,038	253,081	214,995	11.8	-13.3	-3.1	37
Arizona	701,624	719,616	755,440	716,087	737,095	7.7	-2.4	5.1	17
Arkansas	213,970	199,254	207,165	208,110	211,633	-3.2	2.2	-1.1	33
California	10,098,734	10,838,580	11,518,090	12,125,026	12,093,241	14.1	5.0	19.8	3
Colorado	800,294	762,559	879,675	826,788	798,711	9.9	-9.2	-0.2	27
Connecticut	794,728	867,539	920,041	916,977	886,015	15.8	-3.7	11.5	11
Delaware	211,921	220,830	216,588	240,313	249,385	2.2	15.1	17.7	6
District of Columbia	104,948	110,316	90,511	110,307	101,207	-13.8	11.8	-3.6	39
Florida	2,777,207	2,858,363	3,085,225	3,131,293	3,147,769	11.1	2.0	13.3	8
Georgia	1,458,626	1,397,574	1,574,993	1,417,566	1,433,242	8.0	-9.0	-1.7	35
Hawaii	242,400	246,780	248,433	260,352	270,720	2.5	9.0	11.7	10
Idaho	239,549	249,292	237,099	247,284	254,050	-1.0	7.1	6.1	16
Illinois	3,002,991	3,026,105	2,952,908	2,623,840	2,752,343	-1.7	-6.8	-8.3	45
Indiana	598,678	627,671	653,189	644,445	589,225	9.1	-9.8	-1.6	34
Iowa	563,592	622,059	660,236	638,924	649,719	17.1	-1.6	15.3	7
Kansas	405,400	436,122	427,871	383,633	379,413	5.5	-11.3	-6.4	42
Kentucky	663,247	679,654	685,713	676,132	656,611	3.4	-4.2	-1.0	31
Louisiana	802,384	842,532	853,685	821,440	795,499	6.4	-6.8	-0.9	30
Maine	251,593	252,735	245,926	252,607	253,217	-2.3	3.0	0.6	25
Maryland	953,533	1,006,998	970,734	944,612	955,474	1.8	-1.6	0.2	26
Massachusetts	1,015,984	1,003,884	981,890	1,061,981	1,148,384	-3.4	17.0	13.0	9
Michigan	1,271,892	1,301,061	1,189,483	1,134,005	1,034,772	-6.5	-13.0	-18.6	50
Minnesota	1,034,661	1,011,890	1,042,478	1,064,684	1,079,263	0.8	3.5	4.3	18
Mississippi	337,633	334,430	336,208	332,790	336,689	-0.4	0.1	-0.3	29
Missouri	800,789	807,121	869,429	838,134	853,094	8.6	-1.9	6.5	15
Montana	266,364	251,577	248,778	248,217	245,909	-6.6	-1.2	-7.7	43

Nebraska	315,727	321,277	300,419	306,544	325,263	-4.8	8.3	3.0	21
Nevada	429,686	395,320	367,302	370,384	369,396	-14.5	0.6	-14.0	47
New Hampshire	251,682	231,961	225,454	221,430	210,224	-10.4	-6.8	-16.5	49
New Jersey	2,067,380	2,220,424	2,246,398	2,232,645	2,269,156	8.7	1.0	9.8	13
New Mexico	276,126	275,783	306,304	273,448	262,383	10.9	-14.3	-5.0	41
New York	4,617,084	5,097,559	5,370,910	5,543,750	5,581,295	16.3	3.9	20.9	2
North Carolina	1,357,141	1,427,123	1,569,126	1,426,991	1,311,126	15.6	-16.4	-3.4	38
North Dakota	120,355	131,099	151,033	193,975	191,448	25.5	26.8	59.1	1
Ohio	2,209,404	2,200,692	2,168,947	2,070,022	2,027,964	-1.8	-6.5	-8.2	44
Oklahoma	842,553	840,345	922,533	813,073	714,367	9.5	-22.6	-15.2	48
Oregon	681,001	683,452	663,181	668,686	655,971	-2.6	-1.1	-3.7	40
Pennsylvania	2,935,252	2,919,283	2,930,086	2,992,437	3,010,790	-0.2	2.8	2.6	22
Rhode Island	159,988	169,735	171,242	169,436	164,084	7.0	-4.2	2.6	23
South Carolina	891,283	874,227	905,405	878,428	888,850	1.6	-1.8	-0.3	28
South Dakota	100,348	90,844	87,043	99,699	98,266	-13.3	12.9	-2.1	36
Tennessee	780,805	771,905	838,388	761,114	710,062	7.4	-15.3	-9.1	46
Texas	1,491,115	1,594,999	1,838,191	1,622,330	1,548,645	23.3	-15.8	3.9	19
Utah	274,894	272,690	283,301	282,122	271,969	3.1	-4.0	-1.1	32
Vermont	137,357	138,140	138,523	150,185	152,749	0.8	10.3	11.2	12
Virginia	785,652	891,945	979,539	896,845	933,059	24.7	-4.7	18.8	5
Washington	2,308,748	2,316,713	2,311,299	2,331,783	2,392,919	0.1	3.5	3.6	20
West Virginia	543,317	520,769	475,952	437,894	423,527	-12.4	-11.0	-22.0	51
Wisconsin	1,071,877	1,099,950	1,123,861	1,126,058	1,163,372	4.8	3.5	8.5	14
Wyoming	154,077	162,960	162,304	191,825	184,398	5.3	13.6	19.7	4
Total Non-Federal	\$55,266,619	\$57,179,393	\$59,286,249	\$58,819,042	\$58,625,531	7.3	-1.1	6.1	
All Federal <sup>a</sup>	\$3,672,058	\$3,776,993	\$3,775,519	\$3,691,014	\$3,681,205	2.8	-2.5	0.2	
Federal Employees <sup>b</sup>	\$2,889,321	\$2,994,122	\$3,006,009	\$2,948,132	\$2,940,811	4.0	-2.2	1.8	
TOTAL	\$58,938,677	\$60,956,387	\$63,061,768	\$62,510,056	\$62,306,736	7.0	-1.2	5.7	

a. States are ranked from 1 to 51 by the largest percent increase in total benefits from 2010 to 2014.

b. Included in the federal benefits total.

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 2014* available at [www.nasi.org](http://www.nasi.org).

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 10****Workers' Compensation Medical Benefits Paid and Percent Change, by State, 2010-2014**

State	Medical Benefits (thousands)					Percent Change			Ranking <sup>a</sup>
	2010	2011	2012	2013	2014	2010-2012	2012-2014	2010-2014	
	Alabama	\$434,057	\$417,047	\$438,535	\$439,846	\$437,327	1.0	-0.3	
Alaska	145,603	156,482	167,921	177,663	152,431	15.3	-9.2	4.7	27
Arizona	439,217	456,956	496,324	471,902	488,694	13.0	-1.5	11.3	14
Arkansas	137,797	127,722	135,900	137,144	138,831	-1.4	2.2	0.8	34
California	5,788,973	6,290,837	6,646,744	7,038,721	6,982,583	14.8	5.1	20.6	4
Colorado	404,148	427,796	500,535	482,017	456,863	23.8	-8.7	13.0	10
Connecticut	360,012	404,273	426,899	415,391	418,199	18.6	-2.0	16.2	6
Delaware	122,914	130,731	130,169	142,986	142,399	5.9	9.4	15.9	7
District of Columbia	35,682	37,728	31,317	40,372	34,916	-12.2	11.5	-2.1	39
Florida	1,824,625	1,869,370	2,042,419	2,082,310	2,127,892	11.9	4.2	16.6	5
Georgia	732,230	704,377	796,946	717,289	709,455	8.8	-11.0	-3.1	42
Hawaii	105,444	110,804	108,069	111,431	121,553	2.5	12.5	15.3	8
Idaho	150,677	159,796	153,877	160,487	161,322	2.1	4.8	7.1	21
Illinois	1,426,421	1,443,452	1,296,326	1,180,728	1,241,307	-9.1	-4.2	-13.0	48
Indiana	428,654	459,455	479,441	472,378	431,902	11.8	-9.9	0.8	32
Iowa	306,594	332,802	372,373	343,102	341,102	21.5	-8.4	11.3	15
Kansas	222,159	244,665	250,305	227,495	234,857	12.7	-6.2	5.7	23
Kentucky	377,388	382,645	381,257	369,844	365,076	1.0	-4.2	-3.3	43
Louisiana	432,485	447,384	449,892	441,935	429,569	4.0	-4.5	-0.7	37
Maine	123,029	123,587	114,601	121,252	120,531	-6.9	5.2	-2.0	38
Maryland	435,765	465,233	440,713	441,134	446,206	1.1	1.2	2.4	28
Massachusetts	346,312	344,653	343,227	356,246	386,970	-0.9	12.7	11.7	12
Michigan	508,456	503,694	422,455	418,170	432,148	-16.9	2.3	-15.0	49
Minnesota	551,912	547,632	566,776	590,273	596,802	2.7	5.3	8.1	18
Mississippi	211,021	199,989	189,958	198,343	198,983	-10.0	4.8	-5.7	44
Missouri	445,239	477,816	498,183	474,384	485,411	11.9	-2.6	9.0	17
Montana	160,084	157,487	156,233	158,859	160,086	-2.4	2.5	0.0	36

Nebraska	192,909	198,228	184,758	188,831	202,639	-4.2	9.7	5.0	25
Nevada	187,773	186,591	179,978	186,674	183,590	-4.2	2.0	-2.2	40
New Hampshire	154,029	154,022	149,702	144,151	140,640	-2.8	-6.1	-8.7	45
New Jersey	1,027,402	1,114,559	1,152,663	1,137,327	1,174,560	12.2	1.9	14.3	9
New Mexico	161,257	159,403	179,188	162,154	142,736	11.1	-20.3	-11.5	47
New York	1,718,807	1,827,886	1,836,191	1,845,620	1,940,983	6.8	5.7	12.9	11
North Carolina	599,857	643,632	718,660	654,989	608,362	19.8	-15.3	1.4	31
North Dakota	72,707	76,394	90,894	113,592	108,930	25.0	19.8	49.8	1
Ohio	943,750	934,564	874,168	823,242	746,816	-7.4	-14.6	-20.9	50
Oklahoma	372,408	373,113	406,837	366,696	332,181	9.2	-18.4	-10.8	46
Oregon	345,268	367,014	365,413	353,066	350,944	5.8	-4.0	1.6	29
Pennsylvania	1,303,676	1,332,559	1,357,070	1,420,477	1,443,822	4.1	6.4	10.8	16
Rhode Island	53,116	56,861	54,113	53,881	57,265	1.9	5.8	7.8	20
South Carolina	385,034	382,037	395,662	406,712	404,427	2.8	2.2	5.0	26
South Dakota	61,915	60,048	59,973	67,496	66,919	-3.1	11.6	8.1	19
Tennessee	443,497	460,827	493,810	456,669	433,138	11.3	-12.3	-2.3	41
Texas	885,723	985,709	1,130,488	1,000,977	933,833	27.6	-17.4	5.4	24
Utah	188,578	193,064	199,727	197,203	191,466	5.9	-4.1	1.5	30
Vermont	71,288	71,142	69,262	73,590	79,582	-2.8	14.9	11.6	13
Virginia	469,820	533,383	591,642	545,282	575,697	25.9	-2.7	22.5	3
Washington	760,998	750,282	742,658	741,875	762,486	-2.4	2.7	0.2	35
West Virginia	276,557	246,844	239,880	229,019	207,528	-13.3	-13.5	-25.0	51
Wisconsin	749,586	770,936	781,897	770,152	802,017	4.3	2.6	7.0	22
Wyoming	102,095	108,707	110,008	132,291	130,452	7.8	18.6	27.8	2
Total Non-Federal	\$28,184,947	\$29,412,219	\$30,402,033	\$30,283,667	\$30,264,429	7.9	-0.5	7.4	
All Federal <sup>a</sup>	\$1,092,904	\$1,106,723	\$1,110,074	\$1,110,860	\$1,110,621	1.6	0.0	1.6	
Federal Employees <sup>b</sup>	\$912,882	\$917,095	\$924,622	\$923,564	\$1,011,450	1.3	9.4	10.8	
TOTAL	\$29,277,851	\$30,518,942	\$31,512,107	\$31,394,526	\$31,375,050	7.6	-0.4	7.2	

a. States are ranked from 1 to 51 by the largest percent increase in medical benefits from 2010 to 2014.

b. Included in the federal benefits total.

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 2014* available at [www.nasi.org](http://www.nasi.org).

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 Percent Change, by State, 2010-2014**

State	Cash Benefits (thousands)					Percent Change			Ranking <sup>a</sup>
	2010	2011	2012	2013	2014	2010-2012	2012-2014	2010-2014	
	Alabama	\$195,011	\$198,975	\$211,147	\$199,465	\$199,248	8.3	-5.6	
Alaska	76,353	83,153	80,116	75,418	62,563	4.9	-21.9	-18.1	43
Arizona	262,407	262,660	259,116	244,186	248,401	-1.3	-4.1	-5.3	36
Arkansas	76,173	71,532	71,265	70,965	72,802	-6.4	2.2	-4.4	35
California	4,309,762	4,547,743	4,871,346	5,086,305	5,110,658	13.0	4.9	18.6	5
Colorado	396,145	334,763	379,140	344,771	341,848	-4.3	-9.8	-13.7	41
Connecticut	434,716	463,266	493,142	501,587	467,816	13.4	-5.1	7.6	12
Delaware	89,007	90,099	86,418	97,327	106,986	-2.9	23.8	20.2	3
District of Columbia	69,265	72,588	59,194	69,934	66,291	-14.5	12.0	-4.3	33
Florida	952,582	988,994	1,042,806	1,048,983	1,019,877	9.5	-2.2	7.1	13
Georgia	726,396	693,196	778,046	700,278	723,787	7.1	-7.0	-0.4	28
Hawaii	136,956	135,976	140,365	148,921	149,167	2.5	6.3	8.9	10
Idaho	88,873	89,496	83,222	86,797	92,728	-6.4	11.4	4.3	16
Illinois	1,576,570	1,582,653	1,656,581	1,443,112	1,511,037	5.1	-8.8	-4.2	32
Indiana	170,025	168,216	173,748	172,067	157,323	2.2	-9.5	-7.5	39
Iowa	256,998	289,258	287,863	295,822	308,617	12.0	7.2	20.1	4
Kansas	183,241	191,458	177,567	156,139	144,556	-3.1	-18.6	-21.1	49
Kentucky	285,860	297,009	304,457	306,288	291,535	6.5	-4.2	2.0	22
Louisiana	369,899	395,147	403,793	379,505	365,929	9.2	-9.4	-1.1	29
Maine	128,564	129,148	131,324	131,356	132,686	2.1	1.0	3.2	20
Maryland	517,769	541,765	530,021	503,478	509,267	2.4	-3.9	-1.6	30
Massachusetts	669,672	659,231	638,662	705,735	761,413	-4.6	19.2	13.7	6
Michigan	763,435	797,368	767,028	715,834	602,624	0.5	-21.4	-21.1	48
Minnesota	482,749	464,258	475,703	474,410	482,462	-1.5	1.4	-0.1	26
Mississippi	126,613	134,441	146,251	134,447	137,706	15.5	-5.8	8.8	11
Missouri	355,550	329,305	371,246	363,750	367,684	4.4	-1.0	3.4	19
Montana	106,279	94,090	92,546	89,358	85,822	-12.9	-7.3	-19.2	47

Nebraska	122,818	123,049	115,661	117,713	122,624	-5.8	6.0	-0.2	27
Nevada	241,913	208,729	187,324	183,711	185,806	-22.6	-0.8	-23.2	50
New Hampshire	97,652	77,939	75,753	77,279	69,584	-22.4	-8.1	-28.7	51
New Jersey	1,039,978	1,105,865	1,093,736	1,095,318	1,094,596	5.2	0.1	5.3	15
New Mexico	114,868	116,380	127,116	111,293	119,647	10.7	-5.9	4.2	17
New York	2,898,277	3,269,673	3,534,719	3,698,130	3,640,312	22.0	3.0	25.6	2
North Carolina	757,285	783,490	850,466	772,002	702,763	12.3	-17.4	-7.2	38
North Dakota	47,648	54,705	60,139	80,383	82,518	26.2	37.2	73.2	1
Ohio	1,265,654	1,266,128	1,294,779	1,246,780	1,281,148	2.3	-1.1	1.2	24
Oklahoma	470,144	467,232	515,696	446,377	382,186	9.7	-25.9	-18.7	45
Oregon	335,734	316,438	297,768	315,620	305,027	-11.3	2.4	-9.1	40
Pennsylvania	1,631,576	1,586,724	1,573,016	1,571,961	1,566,969	-3.6	-0.4	-4.0	31
Rhode Island	106,872	112,874	117,130	115,555	106,819	9.6	-8.8	0.0	25
South Carolina	506,249	492,190	509,743	471,716	484,423	0.7	-5.0	-4.3	34
South Dakota	38,433	30,796	27,070	32,203	31,347	-29.6	15.8	-18.4	44
Tennessee	337,308	311,078	344,577	304,446	276,924	2.2	-19.6	-17.9	42
Texas	605,393	609,290	707,704	621,352	614,812	16.9	-13.1	1.6	23
Utah	86,317	79,625	83,574	84,919	80,503	-3.2	-3.7	-6.7	37
Vermont	66,069	66,998	69,262	76,594	73,167	4.8	5.6	10.7	9
Virginia	315,832	358,562	387,898	351,563	357,362	22.8	-7.9	13.1	7
Washington	1,547,750	1,566,431	1,568,641	1,589,908	1,630,432	1.3	3.9	5.3	14
West Virginia	266,760	273,924	236,072	208,875	215,999	-11.5	-8.5	-19.0	46
Wisconsin	322,291	329,015	341,964	355,906	361,355	6.1	5.7	12.1	8
Wyoming	51,982	54,253	52,296	59,534	53,946	0.6	3.2	3.8	18
Total Non-Federal	\$27,081,672	\$27,767,175	\$28,884,215	\$28,535,377	\$28,361,102	6.7	-1.8	4.7	
All Federal <sup>a</sup>	\$2,579,154	\$2,670,270	\$2,665,445	\$2,580,155	\$2,570,583	3.3	-3.6	-0.3	
Federal Employees <sup>b</sup>	\$1,976,439	\$2,077,027	\$2,081,387	\$2,024,568	\$1,929,360	5.3	-7.3	-2.4	
TOTAL	\$29,660,827	\$30,437,445	\$31,549,660	\$31,115,532	\$30,931,686	6.4	-2.0	4.3	

a. States are ranked from 1 to 51 by the largest percent increase in cash benefits from 2010 to 2014.

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 2014* available at [www.nasi.org](http://www.nasi.org).

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, 2010-2014**

State	Benefits Per \$100 of Covered Wages				Dollar Amount Change			Ranking <sup>a</sup>	
	2010	2011	2012	2013	2010-2012	2012-2014	2010-2014		
	Alabama	\$0.95	\$0.91	\$0.93	\$0.90	\$0.87	-\$0.02		-\$0.07
Alaska	1.58	1.63	1.61	1.60	1.30	0.04	-0.31	-0.28	47
Arizona	0.71	0.70	0.71	0.65	0.64	-0.01	-0.07	-0.07	19
Arkansas	0.55	0.50	0.50	0.50	0.49	-0.05	-0.01	-0.07	18
California	1.35	1.38	1.39	1.41	1.32	0.04	-0.06	-0.03	8
Colorado	0.80	0.73	0.80	0.72	0.65	0.00	-0.15	-0.15	34
Connecticut	0.85	0.89	0.92	0.91	0.85	0.07	-0.07	0.00	5
Delaware	1.11	1.11	1.05	1.14	1.13	-0.06	0.07	0.01	4
District of Columbia	0.30	0.30	0.23	0.28	0.24	-0.06	0.01	-0.06	15
Florida	1.02	1.02	1.05	1.05	0.98	0.04	-0.07	-0.04	11
Georgia	0.95	0.87	0.94	0.84	0.79	0.00	-0.16	-0.16	37
Hawaii	1.10	1.08	1.05	1.05	1.04	-0.05	0.00	-0.05	13
Idaho	1.18	1.19	1.10	1.10	1.07	-0.07	-0.04	-0.11	26
Illinois	1.13	1.10	1.03	0.90	0.90	-0.10	-0.13	-0.23	42
Indiana	0.58	0.58	0.58	0.56	0.49	0.00	-0.09	-0.09	22
Iowa	1.06	1.12	1.14	1.07	1.03	0.08	-0.11	-0.03	9
Kansas	0.83	0.87	0.82	0.72	0.68	-0.02	-0.14	-0.16	36
Kentucky	1.04	1.03	1.00	0.96	0.90	-0.04	-0.10	-0.14	32
Louisiana	1.09	1.11	1.08	1.01	0.94	-0.01	-0.15	-0.15	35
Maine	1.23	1.21	1.15	1.15	1.11	-0.08	-0.04	-0.12	28
Maryland	0.83	0.86	0.79	0.76	0.75	-0.04	-0.05	-0.09	21
Massachusetts	0.57	0.54	0.51	0.53	0.54	-0.06	0.03	-0.03	10
Michigan	0.80	0.77	0.68	0.64	0.55	-0.12	-0.13	-0.25	45
Minnesota	0.89	0.83	0.82	0.81	0.78	-0.07	-0.03	-0.10	24
Mississippi	1.01	0.97	0.95	0.91	0.90	-0.06	-0.05	-0.11	25

Missouri	0.83	0.82	0.85	0.80	0.78	0.02	-0.07	-0.05	12
Montana	1.95	1.78	1.66	1.60	1.52	-0.29	-0.14	-0.43	49
Nebraska	0.98	0.97	0.87	0.86	0.87	-0.12	0.00	-0.12	27
Nevada	0.94	0.84	0.76	0.74	0.70	-0.17	-0.06	-0.23	43
New Hampshire	0.93	0.83	0.78	0.74	0.67	-0.15	-0.11	-0.26	46
New Jersey	1.00	1.05	1.03	1.00	0.99	0.03	-0.04	-0.01	6
New Mexico	1.00	0.98	1.06	0.96	0.87	0.06	-0.20	-0.13	31
New York	0.94	0.99	1.02	1.03	0.97	0.08	-0.04	0.04	2
North Carolina	0.92	0.93	0.98	0.88	0.76	0.06	-0.22	-0.16	38
North Dakota	0.93	0.87	0.83	0.98	0.87	-0.10	0.04	-0.05	14
Ohio	1.11	1.06	1.00	0.93	0.87	-0.11	-0.13	-0.24	44
Oklahoma	1.66	1.55	1.61	1.36	1.14	-0.05	-0.47	-0.52	50
Oregon	1.05	1.01	0.94	0.91	0.84	-0.12	-0.10	-0.22	41
Pennsylvania	1.21	1.16	1.12	1.12	1.08	-0.09	-0.03	-0.13	29
Rhode Island	0.84	0.86	0.85	0.81	0.75	0.01	-0.10	-0.09	23
South Carolina	1.44	1.36	1.36	1.29	1.22	-0.08	-0.13	-0.22	40
South Dakota	0.80	0.69	0.63	0.70	0.65	-0.17	0.02	-0.15	33
Tennessee	0.79	0.75	0.77	0.69	0.61	-0.02	-0.16	-0.18	39
Texas	0.39	0.40	0.43	0.37	0.33	0.04	-0.10	-0.06	17
Utah	0.64	0.61	0.59	0.56	0.51	-0.05	-0.08	-0.13	30
Vermont	1.24	1.21	1.18	1.24	1.22	-0.06	0.04	-0.02	7
Virginia	0.50	0.55	0.58	0.54	0.54	0.08	-0.05	0.04	1
Washington	1.80	1.72	1.63	1.57	1.51	-0.17	-0.12	-0.29	48
West Virginia	2.26	2.06	1.82	1.71	1.59	-0.44	-0.23	-0.67	51
Wisconsin	1.06	1.05	1.03	1.03	1.00	-0.03	-0.03	-0.06	16
Wyoming	1.41	1.42	1.36	1.58	1.44	-0.05	0.09	0.03	3
Total Non-Federal	\$0.98	\$0.98	\$0.97	\$0.94	\$0.89	-\$0.01	-\$0.08	-\$0.10	
Federal Employees	\$1.39	\$1.43	\$1.45	\$1.46	\$1.42	\$0.06	-\$0.03	\$0.03	
TOTAL	\$1.01	\$1.01	\$1.00	\$0.97	\$0.91	-\$0.01	-\$0.08	-\$0.10	

a. States are ranked from 1 to 51 by the largest dollar amount increase in total benefits per \$100 of covered wages from 2010 to 2014.

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

Source: National Academy of Social Insurance estimates.

in North Dakota, while implementation of a strong fee schedule likely contributed to the decrease in Illinois.

Table 11 shows trends in *cash benefits* in each state between 2010 and 2014. Nationally, total non-federal cash benefits increased by 4.7 percent over the five years reported in the study. Across states, however, the change in cash benefits ranged from an increase of 73.2 percent in North Dakota to a decrease of 28.7 percent in New Hampshire. Along with North Dakota, eight other states experienced double-digit percentage increases in cash benefits between 2010 and 2014: New York (25.6%), Delaware (20.2%), Iowa (20.1%), California (18.6%), Massachusetts (13.7%), Virginia (13.1%), Wisconsin (12.1%), and Vermont (10.7%). In addition to New Hampshire, ten other states experienced double-digit decreases in cash benefits. In three of these states, the decrease was more than 20 percent: Nevada (-23.2%), Kansas (-21.1%), and Michigan (-21.1%).

**Standardized benefits.** 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 isolate the effects of the workers' compensation system, we constructed a standardized measure of benefits (benefits per \$100 of covered wages). The measure of benefits as a percentage of covered wages helps explain whether increases or decreases in a state's benefits payments can be attributed to changes in the state's covered employment and wages, or to other factors.

Table 12 shows benefits paid per \$100 of covered wages, by state, from 2010 through 2014. In all but five states (Connecticut, Delaware, New York, Virginia, Wyoming), standardized benefits declined between 2010 and 2014. The greatest drop in bene-

fits per \$100 covered wages occurred in West Virginia (-\$0.67), Oklahoma (-\$0.52), and Montana (-\$0.43), three states that implemented significant changes in their workers' compensation systems during this period.<sup>29</sup> In contrast, in states where benefits did not decline, the increase in benefits per \$100 covered payroll was miniscule (the largest, in New York and Virginia, was an increase of \$0.04). Recall that 26 states experienced an increase in total workers' compensation benefits paid between 2010 and 2014 (Table 9). Among these, four states (Delaware, New York, Virginia, and Wyoming) experienced an increase in benefits per \$100 covered payroll, and Connecticut experienced no change across this time period. The remaining 21 states experienced an *increase* in total benefits while benefits per \$100 of covered wages *decreased*. The trends in these states generally reflect more rapid growth in wages than in benefit payments.

*Most jurisdictions experienced a decrease in workers' compensation benefits per \$100 of covered payroll between 2010 and 2014, with the largest declines in West Virginia, Oklahoma, and Montana.*

The reader is cautioned that the data on standardized benefits (benefits paid per \$100 of covered payroll) *do not* provide meaningful comparisons of 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.<sup>30</sup> For example, if wage rates (and, therefore, payrolls) are relatively low,

29 Effective July 1, 2011, Montana instituted workers' compensation reforms which established Utilization and Treatment Guidelines for medical care and a cap on medical benefits at 260 weeks. Other reforms during this period limited eligibility for indemnity benefits. (Personal communication from Richard Martin, workers' compensation attorney.) West Virginia disestablished its state fund in 2009. Changes to the workers' compensation system in Oklahoma are described in footnote #7.

30 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 (Boden, Reville, and Biddle, 2005). Refer to the Academy's study panel report *Adequacy of Earnings Replacement in Workers' Compensation Programs* (Hunt, 2004).

all else equal, standardized benefits will be higher.<sup>31</sup> If a state has a disproportionate share of risky occupations (e.g., mining), all else equal, standardized benefits will tend to be higher.

**State outliers.** Between 2010 and 2014, the five states experiencing the largest percent *increases* in total workers' compensation benefits paid were: North Dakota, New York, California, Wyoming, and Virginia. In North Dakota, California, and Virginia, the increase in total benefits paid reflects sizeable increases in both medical and cash benefits. In New York, the increase in total benefits primarily reflects an increase in cash benefits paid (medical benefits were only 34.8 percent of total benefits in New York in 2014). In Wyoming, the increase in total benefits primarily reflects an increase in medical benefits paid (medical benefits were 70.7 percent of total benefits in Wyoming in 2014). None of these states experienced a sizable increase in standardized benefits; hence the increases in benefits are associated with increases in employment and/or wages in these states.

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, Michigan, New Hampshire, Oklahoma, and Nevada. In Nevada, the decrease in total benefits is primarily associated with a decrease in cash benefits paid (medical and cash benefits accounted for equal shares of total benefits in Nevada in 2014). In the remaining four states, the decreases in total benefits reflect sizeable decreases in both medical and cash benefits. All of these states experienced sizeable decreases in standardized benefits, as well (from \$0.23 to \$0.67 per \$100 covered wages). Therefore, the decreases in benefits can be attributed, in whole or in part, to factors *other than* changes in employment and wages in these states (for example, changes in injury rates or workers' compensation statutes).

## 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 this report are produced is provided in *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2014*, and is available on the Academy's website ([www.nasi.org](http://www.nasi.org)).

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 or A.M. Best, but the growing use of large deductible policies complicates the measurement of employer costs. A.M. Best does not provide information on payments under deductibles, and many states are unable to provide data on deductibles for the Academy's survey. Consequently, costs associated with deductibles must be estimated for most states.

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 workers' compensation must be estimated. To estimate total costs for self-insured employers, we assume that the ratio of benefits paid to total employer costs is the same for self-insured employers as it is for private insurers

---

31 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.

who report costs to the National Association of Insurance Commissioners (NAIC, 2014).<sup>32</sup>

For the federal employee workers' compensation program, employer costs are benefits paid plus administrative costs, as reported by the Department of Labor (DOL, 2016).

The Academy's estimates of employer costs also include estimates of assessments for special funds, second injury funds, and guaranty funds. The estimated costs of assessments are based on state assessment rates applied either to premiums or losses (benefits paid).

## National and State Estimates of Employer Costs

This section summarizes key findings from our national estimates of workers' compensation employer costs. It includes a brief overview of total employer costs, trends in costs across different types of coverage, and a description of our standardized estimates of employer costs by state.

**Trends in employer costs.** Table 13 shows employer costs for workers' compensation by type of coverage for 1994 through 2014. In 2014, total employer costs were \$91.8 billion, an increase of 4.9 percent from 2013 and a 20-year high.

*Employer costs for workers' compensation were \$91.8 billion in 2014, a 20-year high.*

In 2014, costs for employers insured through private carriers were 61.6 percent of total costs (\$56.6 billion); costs for self-insured employers were 19.3 percent (\$17.7 billion); costs for employers insured through state funds were 13.9 percent (\$12.8 billion); and costs to the federal government were 5.2 percent (\$4.7 billion). In recent years, the share of total workers' compensation costs attributed to different sources has remained fairly stable at around 60 percent for privately insured employers, 20 percent

for self-insured employers, 15 percent for state funds, and 5 percent for the federal government.

### Standardized estimates of employer costs by state.

Table 14 reports standardized estimates (per \$100 covered payroll) of employer costs for workers' compensation for each state between 2010 and 2014. Costs are aggregated across all types of insurance arrangements (excluding federal programs). Between 2010 and 2014, employer costs per \$100 of covered payroll increased in 31 jurisdictions and decreased in 20. The greatest increases in employer costs occurred in Wyoming (\$0.37) and California (\$0.32). The greatest decreases in costs occurred in Montana (-\$0.51) and West Virginia (-\$0.42). In Montana, the cost reductions occurred from 2010-2013 but stabilized in 2014. 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.

Readers are cautioned against using the estimates in Table 14 to make interstate comparisons of the costs of workers' compensation to employers because states differ in the relative risk of their industry/occupational mix. A meaningful comparison of employer costs across states requires controls 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. Thus, the state estimates of employer costs reported here are *not informative* for making plant location decisions, for determining adequacy of workers' compensation benefits, or for formulating legislative reforms.

In addition, the cost data reported here do not capture recent changes in laws that may have changed the workers' compensation market within a state. Cost data for 2014 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. Thus, the cost data reported here may not fully reflect the *current reality* of the workers' compensation costs in a state.

32 Private insurers face some cost factors, such as commissions, profit allowances, and taxes on premiums that self-insurers do not face. Therefore, our estimates of the administrative costs of self-insurance costs are likely to be an upper bound.

**Table 13****Workers' Compensation Employer Costs, by Type of Coverage, 1994-2014**

Year	Total		Private Insured <sup>a</sup>		State Fund Insured <sup>a</sup>		Self-Insured <sup>a</sup>		Federal <sup>b</sup>	
	(millions)	% Change	(millions)	% of total	(millions)	% of total	(millions)	% of total	(millions)	% of total
1994	\$60,517	-0.5	\$33,997	56.2	\$11,235	18.6	\$12,795	21.1	\$2,490	4.1
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	72,785	-1.5	42,798	58.8	9,565	13.1	16,194	22.2	4,228	5.8
2011	77,760	6.8	46,198	59.4	9,897	12.7	17,238	22.2	4,427	5.7
2012	84,361	8.5	51,680	61.3	10,569	12.5	17,604	20.9	4,507	5.3
2013	87,550	3.8	54,282	62.0	11,660	13.3	17,064	19.5	4,543	5.2
2014	91,810	4.9	56,581	61.6	12,789	13.9	17,698	19.3	4,743	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.

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 1997-2014 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****Workers' Compensation Employer Costs Per \$100 of Covered Wages, by State, 2010-2014**

State	Employer Costs Per \$100 of Covered Wages					Dollar Amount Change			Ranking <sup>a</sup>
	2010	2011	2012	2013	2014	2010-2012	2012-2014	2010-2014	
Alabama	\$1.21	\$1.18	\$1.19	\$1.15	\$1.15	-0.02	-0.04	-0.06	45
Alaska	2.38	2.45	2.74	2.58	2.20	0.36	-0.53	-0.17	47
Arizona	0.84	0.84	0.93	0.97	1.01	0.10	0.07	0.17	11
Arkansas	0.82	0.79	0.78	0.86	0.80	-0.04	0.02	-0.02	36
California	1.68	1.76	1.85	1.95	2.00	0.17	0.15	0.32	2
Colorado	0.94	0.86	0.98	1.00	1.04	0.04	0.06	0.10	16
Connecticut	0.99	1.10	1.17	1.21	1.23	0.19	0.06	0.24	6
Delaware	1.17	1.20	1.24	1.43	1.43	0.07	0.20	0.26	5
District of Columbia	0.53	0.52	0.46	0.53	0.49	-0.08	0.03	-0.04	43
Florida	1.21	1.24	1.35	1.42	1.44	0.15	0.09	0.24	7
Georgia	1.13	1.12	1.23	1.16	1.14	0.11	-0.09	0.01	31
Hawaii	1.41	1.45	1.43	1.48	1.55	0.02	0.12	0.14	14
Idaho	1.50	1.58	1.62	1.67	1.67	0.12	0.05	0.17	12
Illinois	1.37	1.38	1.43	1.31	1.31	0.06	-0.12	-0.06	44
Indiana	0.77	0.83	0.88	0.88	0.85	0.11	-0.03	0.09	19
Iowa	1.44	1.55	1.67	1.66	1.63	0.23	-0.04	0.19	9
Kansas	1.22	1.25	1.26	1.24	1.20	0.04	-0.06	-0.02	37
Kentucky	1.24	1.28	1.20	1.17	1.14	-0.04	-0.06	-0.10	46
Louisiana	1.51	1.52	1.60	1.52	1.51	0.08	-0.09	-0.01	33
Maine	1.48	1.56	1.46	1.45	1.43	-0.02	-0.02	-0.04	42
Maryland	1.04	1.05	1.07	1.11	1.11	0.03	0.05	0.08	21
Massachusetts	0.73	0.75	0.76	0.74	0.76	0.03	0.00	0.02	28
Michigan	0.97	1.04	0.98	1.00	0.94	0.01	-0.04	-0.03	39
Minnesota	1.02	1.04	1.07	1.06	1.07	0.05	0.00	0.04	26
Mississippi	1.32	1.34	1.36	1.39	1.50	0.04	0.14	0.18	10

Missouri	1.07	1.07	1.14	1.13	1.16	0.07	0.02	0.09	18
Montana	2.76	2.54	2.48	2.25	2.25	-0.28	-0.23	-0.51	51
Nebraska	1.32	1.34	1.33	1.38	1.37	0.01	0.04	0.05	24
Nevada	1.06	1.03	0.97	1.02	1.05	-0.09	0.08	-0.02	35
New Hampshire	1.25	1.18	1.26	1.28	1.22	0.01	-0.04	-0.03	38
New Jersey	1.25	1.31	1.38	1.46	1.51	0.13	0.13	0.27	3
New Mexico	1.35	1.35	1.49	1.46	1.44	0.14	-0.05	0.10	17
New York	1.17	1.28	1.40	1.50	1.44	0.23	0.04	0.27	4
North Carolina	1.13	1.18	1.28	1.24	1.18	0.14	-0.10	0.04	25
North Dakota	1.52	1.48	1.41	1.81	1.68	-0.11	0.27	0.16	13
Ohio	1.33	1.17	1.01	1.00	1.05	-0.32	0.05	-0.27	49
Oklahoma	2.08	2.05	2.31	2.13	1.87	0.23	-0.44	-0.21	48
Oregon	1.14	1.17	1.16	1.18	1.12	0.03	-0.04	-0.01	34
Pennsylvania	1.47	1.48	1.51	1.51	1.49	0.04	-0.02	0.02	30
Rhode Island	1.01	1.08	1.06	1.11	1.12	0.05	0.06	0.11	15
South Carolina	1.77	1.68	1.81	1.83	1.79	0.04	-0.03	0.02	29
South Dakota	1.33	1.28	1.30	1.37	1.32	-0.03	0.02	-0.01	32
Tennessee	1.06	1.08	1.16	1.12	1.02	0.10	-0.14	-0.04	41
Texas	0.67	0.71	0.78	0.76	0.74	0.11	-0.04	0.07	22
Utah	0.86	0.84	0.92	0.94	0.94	0.06	0.03	0.08	20
Vermont	1.64	1.68	1.76	1.97	1.83	0.13	0.07	0.20	8
Virginia	0.71	0.74	0.81	0.77	0.77	0.10	-0.04	0.06	23
Washington*	1.38	1.46	1.39	1.38	1.34	0.01	-0.05	-0.04	40
West Virginia	2.03	1.98	1.85	1.74	1.61	-0.18	-0.24	-0.42	50
Wisconsin	1.64	1.77	1.76	1.72	1.67	0.12	-0.09	0.03	27
Wyoming	1.64	1.73	1.85	2.03	2.01	0.21	0.17	0.37	1
<b>Total Non-Federal</b>	<b>\$1.22</b>	<b>\$1.25</b>	<b>\$1.31</b>	<b>\$1.33</b>	<b>\$1.32</b>	<b>\$0.09</b>	<b>\$0.01</b>	<b>\$0.10</b>	

a. States are ranked from 1 to 51 by the largest dollar amount increase in employer costs per \$100 of covered wages from 2010 to 2014.

\* In Washington state both employers and employees contribute to workers' compensation premiums. The data reported include only the employer portion. 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.

Source: National Academy of Social Insurance estimates.

**Table 15****Workers' Compensation Benefit/Cost Ratios, 1994-2014**

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
1994	\$ 0.58	\$ 0.89	\$ 1.47	\$ 2.05	\$ 0.72
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	0.68	1.17	1.51	0.77
1998	0.48	0.65	1.13	1.42	0.80
1999	0.48	0.63	1.12	1.36	0.82
2000	0.47	0.60	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	0.61	1.13	1.74	0.65
2005	0.51	0.59	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	0.49	0.55	1.04	1.30	0.79
2010	0.50	0.51	1.01	1.25	0.81
2011	0.50	0.50	1.01	1.28	0.78
2012	0.50	0.50	1.00	1.33	0.75
2013	0.49	0.48	0.97	1.35	0.71
2014	0.46	0.45	0.91	1.35	0.68

*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.

## Benefits Paid Relative to Employer Costs

This section reviews standardized benefits and costs in 2014 and evaluates changes in the ratio of standardized benefits to costs across states.

Table 15 reports standardized estimates (per \$100 of covered wages) of workers' compensation benefits paid and employer costs from 1994 to 2014. In

2014, employers paid \$0.91 in benefits per \$100 of covered wages, and incurred costs of \$1.35. This is the lowest level of standardized benefits in the last 20 years, and one of the lowest levels of standardized employer costs over the same time period. Between 2010 and 2014, total benefits per \$100 of covered wages decreased by 9 percent (standardized medical benefits decreased by 8 percent, and standardized cash benefits by 10 percent).

*Between 2010 and 2014, total standardized benefits fell by 9 percent, while standardized medical and cash benefits fell by 8 percent and 10 percent, respectively.*

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. 3) The time lag between premiums collected vs. benefits paid.<sup>33</sup>

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 2014, the benefit/cost ratio was 0.68, a decrease of 5.0 percent from 2013, and continuing a downward trend since 2010. Since 2010, the benefit/cost ratio has decreased 16.2 percent, with a 9.2 percent decline over the period 2012-2014 and a 7.7 percent decline between 2010 and 2012.

## 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, 2015a). The purpose of the BLS report is to provide average estimates of employer costs per hour worked, inclusive of wages, salaries, and employee benefits. Estimates are derived from a representative sample of establishments in the private sector, state and local government. Costs are reported for five benefit categories (paid leave, sup-

plemental 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 BLS data are available at a national level by industry, occupational group, establishment size, bargaining status, four census regions, and nine census divisions. Total compensation, wages and salaries, and total benefits are available annually for the 15 largest metropolitan areas. The data are not available for individual states.

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 \$62.3 billion in benefits paid to workers and \$91.8 billion in workers' compensation costs borne by employers in 2014 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 payroll and compares it with the Academy's estimates.<sup>34</sup> Burton and the Academy use different methods to arrive at estimates of employer costs per \$100 of covered payroll, so we would not expect the two measures to produce identical results, although we would expect them to be close. In fact, the estimates derived from BLS data typically exceed the Academy estimates of employer costs, although the trends over time are similar.

**The Academy's estimates compared to Oregon Rate Ranking estimates.** The Oregon Workers' Compensation Rate Ranking study also produces estimates of employer costs. The study (Oregon Department of Consumer and Business Services, 2015), conducted on a biennial basis by the State of Oregon, is designed to address the question: "How does the standardized cost of workers' compensation in Oregon compare to other states?"

33 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.

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

The Oregon estimates are comparisons of workers' compensation premium rates for a standardized set of insurance classifications. The standardization partly factors out differences in hazard mix (riskiness of industries) across states to provide a measure of interstate differences in costs for employers with comparable risk distributions.<sup>35</sup> The Oregon study bases its estimates on premium rates, which are available at the start of an applicable period, rather than costs, which may not be fully reported until several years after. Some elements that apply only to individual employers but affect employer costs in aggregate reporting are not included in the Oregon study. A more complete accounting of cost data is reflected in Academy's data, which also include estimates of self-insurer costs. Average employer costs derived from Academy data are influenced in part by the different risk profile presented by each state's economy, as well as variations in self-insurance across states. Unlike the Academy's data series, the Oregon study reports rates for a constant set of risk classifications across states.

Results of the Oregon study should not be compared to the estimates of employer costs reported here. The Oregon approach is based on premiums employers would currently pay for insurance coverage in different states (excluding discounts, dividends, and experience rating). The Academy's data reflect the current costs of workers' compensation for all employers in a state, including those who self-insure. It should not be surprising that the results of these disparate approaches do not agree, because the estimates are designed to measure different concepts for different purposes.<sup>36</sup>

## Direct and Indirect Costs to Workers

Some of the costs of workers' compensation are explicitly or implicitly paid by workers. In Washington, for example, workers contribute directly to the insurance premiums for workers' compensation. About 25-27 percent of the total costs of workers' compensation in Washington are paid by workers. This report only covers the employer paid portion of workers' compensation. 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.

In addition to such explicit contributions to premiums, there are implicit costs borne by workers in the form of waiting periods. 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. For 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). 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.

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 born by the employer.

---

35 The Oregon estimates are standardized on 50 out of 450 rate classifications. Additionally, the standardized rates are based on the Oregon mix of payrolls, hence the rankings could be quite different if standardized based on another state.

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

## Estimates of Workplace Injuries and Claims

Information on the incidence of work-related injuries and illnesses in any given year comes from two sources: 1) The BLS collects information on fatal work-related injuries from the Census of Fatal Occupational Injuries, and information on nonfatal work-related injuries or illnesses from a sample survey of employers (Survey of Occupational Injuries and Illnesses) (DOL 2015c & 2015e). 2) The National Council on Compensation Insurance collects information on the number of workers' compensation claims paid by private carriers and competitive state funds in 37 states (NCCI, 2016b).

### Incidence of Work-Related Injuries

**Fatal Injuries.** According to the BLS, a total of 4,821 fatal work-related injuries occurred in 2014, an *increase* of 5.1 percent from 2013, and the highest number of fatalities recorded since 2008 (Table 16). However, employment increased between 2013 and 2014, so the increase in the *incidence* of fatal workplace injuries was smaller than 5.1 percent. In 2013, private industry workers (including self-employed workers), accounted for 89.4 percent fatal injuries; in 2014, private industry workers accounted for 90.9 percent of total fatalities.

The leading cause of work-related fatalities in 2014 was transportation incidents, accounting for 41 percent of the total. Other leading causes of fatalities were homicides (8.5%) and other injuries by persons or animals (16%), contact with objects and equipment (15%), and falls, slips, and trips (17%) (DOL, 2015c).

*Between 2013 and 2014, the total number of work-related fatalities increased 5.1 percent, and private-sector fatalities increased for the first time since 2010. Still, work-related fatalities remain significantly lower than they were before 2008.*

**Nonfatal injuries and illnesses.** The BLS reports a total of 2.95 million Occupational Safety & Health Administration recordable nonfatal workplace injuries and illnesses in private industry workplaces in 2014, a decrease of approximately 50,000 from

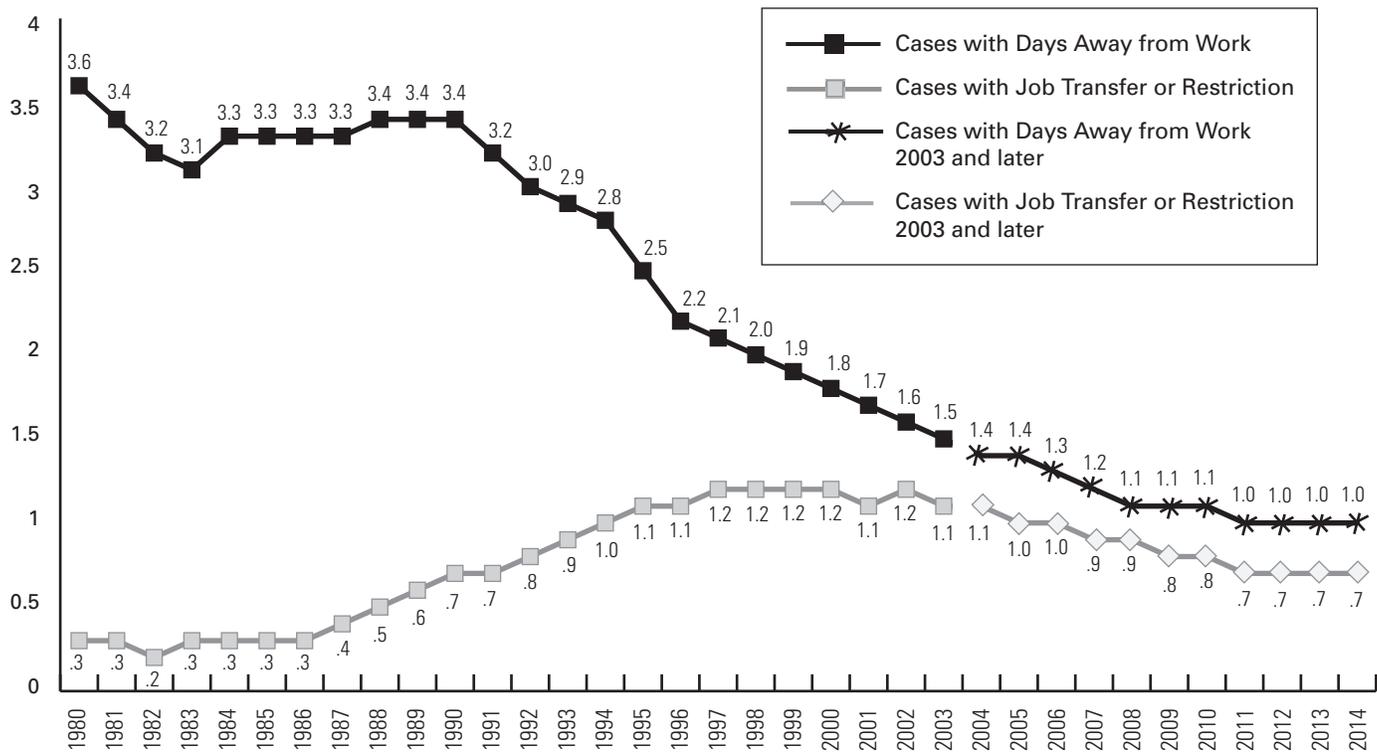
**Table 16**  
**Fatal Occupational Injuries — All and Private Industry, 1994-2014**

Year	Number of Fatal Injuries	
	All	Private Industry
1994	6,632	5,959
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
<i>September 11 events</i>	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

Source: U.S. Department of Labor (2015c).

**Figure 5**

**Private Industry Occupational Injuries and Illnesses: Incidence Rates, 1980-2014**



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 (2015e).

the number reported in 2013 (DOL, 2015e). A total of 916,400 work-related injuries/illnesses involved at least one day's work absence following the day of injury, which was essentially unchanged from 2013.

The incidence of all reported nonfatal occupational injuries and illnesses has declined steadily over the last two decades, decreasing from 8.4 per 100 full-time workers in 1994, to 3.2 cases per 100 full-time workers in 2014. The incidence of work-related injuries or illnesses involving days away from work has also declined, down from 2.8 per 100 full-time

workers in 1994 to approximately 1 per 100 in every year since 2008 (Table 17 and Figure 5).

In 2014, the most common nonfatal workplace injuries and illnesses that resulted in days away from work were (with incidence rates/10,000 FTE in parentheses)<sup>37</sup>: sprains and strains (35.4); soreness or pain, including back pain (16.0); fractures (8.6); bruises and contusions (7.9); and cuts, lacerations, and punctures (7.6) (DOL, 2015e). The three occupational groups with the highest incidence rates of nonfatal injuries and illnesses involving days away

37 The BLS incidence rate represents the number of injuries and illnesses per 10,000 full-time workers. This 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 work week, 50 weeks per year.

**Table 17****Non-Fatal Occupational Injuries and Illnesses Among Private Industry Employers, 1994-2014**

Year	Number of Cases (millions)			Incidence Rate (per 100 full-time workers)		
	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
1994	6.8	2.2	0.8	8.4	2.8	1.0
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
<hr/>						
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

\*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 (2015d).

from work in the private sector were transportation and material moving occupations (246.7), building and grounds cleaning and maintenance occupations (214.2), and healthcare support occupations (201.3), which all had incidence rates of more than double

the overall private industry rate of 97.8. The occupation groups with the highest median days away from work were: architecture and engineering (16); transportation and material moving occupations (14); construction and extraction (11).

**Table 18**

**Number of Workers' Compensation Claims Per 100,000 Insured Workers:  
Private Carriers in 37 Jurisdictions, 1994-2012**

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
1994	7,875	6,001	76%	1,300	17%	565	7%
1995	7,377	5,689	77%	1,217	16%	459	6%
1996	6,837	5,281	77%	1,124	16%	419	6%
1997	6,725	5,230	78%	1,070	16%	414	6%
1998	6,474	5,035	78%	977	15%	452	7%
1999	6,446	5,047	78%	927	14%	461	7%
2000	6,003	4,685	78%	870	14%	437	7%
2001	5,510	4,277	78%	799	15%	423	8%
2002	5,239	4,036	77%	770	15%	422	8%
2003	4,901	3,747	76%	725	15%	423	9%
2004	4,728	3,635	77%	702	15%	385	8%
2005	4,571	3,514	77%	667	15%	383	8%
2006	4,376	3,351	77%	638	15%	381	9%
2007	4,076	3,107	76%	587	14%	375	9%
2008	3,615	2,730	76%	515	14%	363	10%
2009	3,452	2,659	77%	521	15%	357	10%
2010	3,486	2,616	75%	519	15%	347	10%
2011	3,411	2,563	75%	509	15%	335	10%
2012	3,279	2,466	75%	500	15%	308	9%
Percent change, 1994-2012							
	-56.7		-57.3		-60.8		-40.7

Source: National Council on Compensation Insurance (1997-2016), Exhibit XII, *Annual Statistical Bulletin*.

**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) (DOL, 2015e). The data show rates per 100 full-time equivalent employees from 1994 to 2014. (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.)

While the incidence of injuries or illnesses involving days away from work has declined steadily since 1994, the incidence of cases resulting in job transfers or work restrictions has fluctuated. The rate increased from 0.9 per 100 full-time equivalent

workers in 1994 to 1.2 in 1997, leveled off until 2002, decreased gradually through 2011, and has leveled off at 0.7 per 100 full-time equivalent workers since then. Some of the changes in the 1990s, when the incidence of injuries involving work absence was decreasing while the incidence of transfers/work restrictions was increasing, may reflect an increasing 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.

## Incidence of Workers' Compensation Claims

NCCI (2016b) reports the frequency of workers' compensation *claims* for insured employers and state funds in 37 jurisdictions.<sup>38</sup> The data, replicated in Table 18 for years 1994-2012 (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.

According to NCCI data, the number of workers' compensation *claims from privately insured employers* declined by 56.7 percent between 1994 and 2012 (compared to the BLS estimate of a 55.3 percent decrease in *injuries and illnesses for private industry employers* over the same time period). The NCCI data indicate the number of temporary total disability claims from private industry declined by 60.8 percent (compared to the BLS estimate of a 58.9 percent decline in *injuries and illnesses involving days away from work for private industry employers*) (Tables 17 and 18).<sup>39</sup>

A number of studies suggest that occupational injuries and illnesses are commonly under-reported,

so it is unclear to what extent the decline in workers' compensation claims reflects a decrease in injury rates versus an increase in under-reporting.<sup>40</sup> 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.<sup>41</sup>

Several studies based on independent sources of data (emergency room referrals, hospital discharge rates, and trauma registry data) show much smaller declines in occupational injury rates than appear in the NCCI data (CDC, 2007; Friedman and Forst, 2007; Sears et al., 2014). These differences suggest either that under-reporting has worsened or that only rates of less-severe injuries (which would not be referred for emergency care) have declined.

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

---

38 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.

39 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 37 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).

40 See Azaroff et al. (2002), Spieler and Burton (2012), and OSHA (2015) for reviews of these studies.

41 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). On the other hand, there are incentives in some states for providers to report injuries as work-related because compensation for medical care is higher in workers' compensation.

under workers' compensation creates incentives for both groups to identify a work-related cause when the etiology of an injury or illness is uncertain. 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

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: 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 2014, provided through their employer or a private short-term disability plan (DOL, 2015b). 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 far more common than workers' compensation temporary disability benefits, and it 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).<sup>42</sup> 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 2014 (DOL, 2015g). 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 covers about 34 percent of private-sector employees. Such coverage is most common among relatively high-paying management, professional, and related occupations. About 59 percent of workers in management and professional-related occupations were covered by long-term disability plans as of 2014, compared to 34 percent of workers in sales and office occupations, and 10 percent of workers in service occupations (DOL, 2015g). 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

---

42 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.

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.

**Retirement benefits.** Retirement benefits also may 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 substantial history of contributions to the Social Security system. Workers' compensation provides benefits for both short- and long-term disabilities and for partial as well as total disabilities. Workers' compensation cash benefits begin after a few days' work absence, while SSDI benefits begin only after a five-month waiting period. SSDI benefits are paid only to workers who have long-term impairments that preclude gainful employment in the labor mar-

ket suitable for the worker by virtue of training or experience.

Medicare pays health care costs for persons who receive SSDI, after an additional 24-month waiting period (or 29 months after the onset of disability). Medicare covers all medical conditions, including work-related injuries or illnesses. According to the Medicare Secondary Payer Act, however, if a worker has workers' compensation and Medicare coverage, workers' compensation is the primary payer for illnesses and injuries covered under the workers' compensation law. Medicare is the secondary payer for medical costs after the primary workers' compensation obligation is met.

In 2014, workers' compensation benefits paid (cash benefits plus medical payments) totaled \$62.3 billion. SSDI paid \$145.1 billion in wage replacement benefits to disabled persons and their dependents, and Medicare paid \$90.3 billion for medical care for disabled persons under age 65, for a total of \$235.4 billion (SSA, 2015b; CMS, 2016).

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. The Social Security amendments of 1965 require that SSDI benefits be reduced<sup>43</sup> (or "offset") such that the combined total of workers' compensation and SSDI benefits does not exceed 80 percent of the worker's prior earnings.<sup>44</sup> Some states, however, had established reverse offset laws prior to the 1965 legislation, whereby *workers' compensation payments are reduced* if the worker receives SSDI. Legislation in 1981 eliminated the states' option to adopt reverse offset laws, but the 15 states that already had such laws in place received exemptions.<sup>45</sup>

As of December 2014, about 8.95 million workers with disabilities and 1.98 million dependents received SSDI benefits (SSA, 2015a) (Table 19). About 651,000 (6.0%) of these individuals were

---

43 The portion of workers' compensation benefits that offset (reduce) SSDI benefits are subject to federal income tax (IRC section 86(d)(3)).

44 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.

**Table 19****Dual Eligible Individuals: Social Security Disability Insurance (SSDI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefits (PDB), 2014**

Type of Case	Total		Workers		Dependents	
	Number	Percent	Number	Percent	Number	Percent
All Disability Insurance Beneficiaries	10,931,092	100.0	8,954,518	100.0	1,976,574	100.0
Total Dual Eligibles	1,309,634	12.0	1,053,756	11.8	255,878	12.9
Currently Receiving SSDI and WC or PDB	651,212	6.0	526,744	5.9	124,468	6.3
SSDI Reduced by Cap	112,264	1.0	82,706	0.9	29,558	1.5
SSDI Not Reduced by Cap	393,565	3.6	324,728	3.6	68,837	3.5
Reverse Jurisdiction	52,569	0.5	42,707	0.5	9,862	0.5
Pending Decision on WC or PDB	92,814	0.8	76,603	0.9	16,211	0.8
SSDI Previously Offset by WC or PDB	658,422	6.0	527,012	5.9	131,410	6.6

*Notes:* Social Security disability benefits are offset against workers' compensation and certain other public disability benefits (PDB) in most states. In general, the PDB offset applies to disability benefits earned in state, local, or federal government employment that is 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, 2015a).

dual beneficiaries of workers' compensation or other public disability programs in 2014. Of these, 112,264 persons (1.0% of total beneficiaries) were currently receiving reduced SSDI benefits because of the offset provision.<sup>46</sup>

### 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 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

45 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.

46 Burton and Guo (2016) examine the relationship between SSDI and workers' compensation programs in detail.

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.<sup>47</sup>

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.

However, a disadvantage of relying on the measure of incurred benefits is that it takes many years before

the estimated losses associated with injuries occurring in a given year are reliable and stable. NCCI updates accident year incurred benefits for 16 or more years before the data for a particular year are considered final (or "developed to ultimate"). On the other hand, benefits paid are known and fixed for any given reporting period

Another disadvantage of using accident year incurred data for reports such as this is that the data on incurred benefits are even more difficult to obtain than data on benefits paid. Information on incurred benefits is not routinely available for state regulatory agencies, self-insured employers, and many state funds, or for federal workers' compensation programs. While using incurred loss data instead of paid losses may have some advantages for actuarial reserve setting and rate making, it has the disadvantage of not being readily available from state agencies. Nor are incurred losses from different sources useful to aggregate without an understanding of how the incurred losses were estimated by each source. In addition, 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.

---

47 A more detailed discussion of these measures is included in the Glossary and in Thomason, Schmidle, and Burton (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](http://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. Most high-deductible plans are administered by a third party administrator that handles payments and settles accounts with the insurer. 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 from 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.iaiaabc.org](http://www.iaiaabc.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 devel-

oped benefits, and possibly including incurred but not reported benefits.

**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](http://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 37 states. For more information, visit [www.ncci.com](http://www.ncci.com).

**OSHA:** The OSHA 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](http://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. 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](http://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](http://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, 2015f). 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, 2015f).

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 Research and Oversight Council (TDI et al., 2014).

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, 2014). The Academy assumes that workers are not covered by workers' compensation if they work in a small firm located in one of the these states.

To estimate the number of employees affected by the small firm exemptions, we use data from the U.S. Small Business Administration (SBA). The data show, for each state, the proportion of private-sector employees who worked for firms with fewer than five employees in 2013, the latest year for which data are available (SBA, 2016). For the 5 states with numerical exemptions for firms with fewer than five employees, these proportions are: Alabama, 4.6 percent; Mississippi, 5.0 percent; Missouri, 4.9 percent; Oklahoma, 5.5 percent; and Tennessee, 4.0 percent. These proportions are applied to the number of UI-covered workers in each state to calculate the number of employees affected by the small firm exemption.

For the states with numerical exemptions for firms with fewer than three or four workers, the SBA 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, 43.9 percent work in firms with fewer than three employees, and 71.8 percent work in firms with fewer than four employees.

For the eight states that exempt firms with fewer than three workers, the proportions in small firms are: Arkansas, 5.1 percent; Georgia, 4.9 percent; Michigan, 4.7 percent; New Mexico, 5.6 percent; North Carolina, 4.8 percent; Oklahoma, 5.5 percent; Tennessee, 4.0 percent; Virginia, 4.7 percent; West Virginia, 4.8 percent; and Wisconsin, 4.2 percent (SBA, 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:  $(5.1\%) \times (43.9\%) = 2.2\%$  percent.

For the two states that exempt firms with fewer than four workers, the proportions in small firms are: Florida, 6.2 percent, and South Carolina, 4.9 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  $(4.9\%) \times (71.8\%)$ . 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 1.1 million workers were excluded from workers' compensation coverage in 2014 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 employers 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. 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, 2015h), which provides estimates of total employment by state and by industry using North American Industry Classification System (NAICS) codes. We estimate that roughly 497,000 agricultural workers were excluded from workers' compensation in 2014 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 and the Workers' Compensation Research and Evaluation Group (TDI et al., 2014). Their most recent survey estimated that 80 percent of Texas employees were covered in 2014. 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 2014, we estimate that 2.2 million workers in Texas were not covered by workers' compensation.

**Table A****Documenting Workers' Compensation Coverage Estimates, 2014 Annual Averages**

State	Unemployment Insurance (UI) Covered Jobs <sup>a</sup>		Workers' Compensation (WC) Exemptions			WC Covered Jobs	WC as a % of UI
	Total	Private, Non-Farm Firms	Small Firm <sup>b</sup>	Agriculture <sup>c</sup>	Texas <sup>d</sup>		
Alabama	1,810,070	1,499,419	69,449	4,901	-	1,735,720	95.9
Alaska	315,214	252,942	-	-	-	315,214	100.0
Arizona	2,484,708	2,140,512	-	-	-	2,484,708	100.0
Arkansas	1,137,487	949,774	26,487	7,562	-	1,103,438	97.0
California	15,566,828	13,298,988	-	-	-	15,566,828	100.0
Colorado	2,365,067	2,017,211	-	11,958	-	2,353,109	99.5
Connecticut	1,636,175	1,412,982	-	-	-	1,636,175	100.0
Delaware	418,087	361,143	-	1,146	-	416,941	99.7
District of Columbia	532,343	495,073	-	-	-	532,343	100.0
Florida	7,623,897	6,675,923	319,632	55,261	-	7,249,004	95.1
Georgia	3,933,907	3,382,176	90,498	14,512	-	3,828,897	97.3
Hawaii	593,146	498,821	-	-	-	593,146	100.0
Idaho	634,014	515,634	-	-	-	634,014	100.0
Illinois	5,682,743	4,961,472	-	13,691	-	5,669,052	99.8
Indiana	2,854,541	2,487,303	-	12,592	-	2,841,949	99.6
Iowa	1,498,392	1,264,826	-	15,427	-	1,482,965	99.0
Kansas	1,332,253	1,103,515	-	10,282	-	1,321,971	99.2
Kentucky	1,769,426	1,503,150	-	4,852	-	1,764,574	99.7
Louisiana	1,893,712	1,606,530	-	4,629	-	1,889,083	99.8
Maine	576,363	491,896	-	2,985	-	573,378	99.5
Maryland	2,409,894	2,062,699	-	3,955	-	2,405,939	99.8
Massachusetts	3,314,718	2,927,768	-	-	-	3,314,718	100.0
Michigan	4,039,788	3,514,095	91,131	24,889	-	3,923,768	97.1
Minnesota	2,699,095	2,340,933	-	17,281	-	2,681,814	99.4
Mississippi	1,077,248	858,483	42,755	7,457	-	1,027,036	95.3
Missouri	2,614,676	2,241,513	109,390	9,402	-	2,495,884	95.5

Montana	427,226	354,347	-	3,535	-	423,691	99.2
Nebraska	929,474	775,799	-	11,015	-	918,459	98.8
Nevada	1,184,582	1,053,429	-	2,118	-	1,182,464	99.8
New Hampshire	619,189	540,074	-	-	-	619,189	100.0
New Jersey	3,793,109	3,255,269	-	-	-	3,793,109	100.0
New Mexico	769,504	610,083	18,804	8,411	-	742,289	96.5
New York	8,732,253	7,462,044	-	22,104	-	8,710,149	99.7
North Carolina	3,988,579	3,354,480	89,397	21,180	-	3,878,002	97.2
North Dakota	435,577	372,457	-	3,592	-	431,985	99.2
Ohio	5,107,621	4,465,025	-	-	-	5,107,621	100.0
Oklahoma	1,536,581	1,253,147	68,515	9,226	-	1,458,840	94.9
Oregon	1,698,599	1,423,746	-	-	-	1,698,599	100.0
Pennsylvania	5,548,947	4,941,790	-	19,657	-	5,529,290	99.6
Rhode Island	453,117	403,714	-	638	-	452,479	99.9
South Carolina	1,863,335	1,551,386	58,207	5,768	-	1,799,360	96.6
South Dakota	399,852	334,615	-	4,502	-	395,350	98.9
Tennessee	2,701,647	2,336,592	93,018	5,795	-	2,602,834	96.3
Texas	11,185,632	9,551,277	-	45,671	2,237,126	8,902,835	79.6
Utah	1,257,595	1,071,545	-	4,512	-	1,253,083	99.6
Vermont	297,859	249,026	-	2,498	-	295,361	99.2
Virginia	3,485,035	2,961,057	76,526	8,216	-	3,400,293	97.6
Washington	2,972,251	2,446,566	-	72,903	-	2,899,348	97.5
West Virginia	677,522	562,481	14,893	825	-	661,804	97.7
Wisconsin	2,729,877	2,357,366	54,517	21,774	-	2,653,586	97.2
Wyoming	277,058	215,827	-	-	-	277,058	100.0
<b>Total Non-Federal</b>	<b>133,885,813</b>	<b>114,767,923</b>	<b>1,223,219</b>	<b>496,722</b>	<b>2,237,126</b>	<b>129,928,745</b>	<b>97.0</b>
Federal	2,744,340	-	-	-	-	2,744,340	100.0
<b>TOTAL</b>	<b>136,630,153</b>	<b>114,767,923</b>	<b>1,223,219</b>	<b>496,722</b>	<b>2,237,126</b>	<b>132,673,085</b>	<b>97.1</b>

- a. UI-covered employment reported in the ETA-202 data produced by the Bureau of Labor Statistics (U.S. DOL, 2015f).  
b. Data on employees at small firms came from the Small Business Administration and the U.S. Census (SBA, 2016; U.S. Census, 2005).  
c. Data on agricultural workers came from the Quarterly Census of Employment and Wages (U.S. DOL, 2015b).  
d. Data on workers not covered by workers' compensation in Texas came from the Texas Department of Insurance (2014).

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 2014, total benefits were \$2.9 billion, of which 34 percent were for medical care, a three percentage point increase from 2013. 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 \$154 million in calendar year 2014, or 5.3 percent of total benefits (DOL, 2016). Table B1 reports benefits and administrative costs for federal civilian employees under FECA from 2003-2014. 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 pro-

hibits 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 LHWCA 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 2003-2014. In fiscal year 2015, about 540 self-insured employers and insurance companies reported a total of 27,628 lost-time injuries to the federal Office of Workers' Compensation Programs. Total benefits paid under the LHWCA in 2014 were \$1.5 billion, including \$962 million paid by private insurance carriers, \$429 million paid by self-insured employers, \$118 million paid from the federally administered special fund for second injuries and other purposes, and \$8.2 million for the District of Columbia Workers' Compensation Act Fund. Federal direct administrative costs were \$14.2 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 DBA, benefits are paid for injuries or deaths of

**Table B1****Federal Employees' Compensation Act, Benefits and Costs, 2003-2014 (in thousands)**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Benefits	\$2,367,757	\$2,445,077	\$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
Compensation Benefits	1,698,273	1,749,397	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
Medical Benefits	669,484	695,680	671,056	686,935	752,742	798,039	863,729	912,882	917,095	924,622	923,564	1,011,450
% Medical	28	28	27	28	29	30	31	32	31	31	31	34
Direct Administrative Costs	130,672	131,920	128,536	137,386	143,768	142,532	146,015	156,522	155,027	157,649	152,410	154,417
Total Costs	2,498,429	2,576,997	2,590,595	2,592,247	2,730,468	2,818,902	2,909,900	3,045,843	3,149,149	3,163,658	3,100,542	3,095,227
Indirect Administrative Costs <sup>a</sup>	4,806	4,587	5,494	7,619	6,773	7,756	7,739	7,765	8,161	7,566	7,299	8,426

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 (2016).

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 from about \$11.3 million in 2003 to \$707 million in 2014. 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 146 in 2014.

### **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 2003–2014. Total benefits in 2014 were \$309 million, of which \$124 million was paid under Part B and \$185 million was paid under Part C. Part C benefits include \$36 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 \$35.5 million, or about 11.5 percent of benefit payments.

Table B3 shows benefits under the black lung program in 2003 through 2014 for

**Table B2****Longshore and Harbor Workers' Compensation Act (LHWCA), Benefits, Costs, and Number of Defense Base Act<sup>a</sup> (DBA) Death Claims, 2003-2014 (in thousands)**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Benefits	\$716,218	\$747,321	\$795,466	\$879,508	\$923,045	\$983,050	\$1,081,266	\$1,134,759	\$1,269,904	\$1,363,544	\$1,473,676	\$1,516,786
Insurance Carriers <sup>a</sup>	262,753	278,887	325,027	367,625	456,773	504,348	551,716	589,387	710,330	801,902	927,417	961,542
Self-Insurance Employer	309,843	322,520	325,694	368,744	325,544	340,336	388,088	408,534	425,581	430,853	417,776	429,307
LHWCA Special Fund	132,504	135,073	134,230	132,933	130,673	128,372	131,544	127,415	124,664	122,133	120,100	117,694
DCCA Special Fund	11,118	10,841	10,515	10,206	10,055	9,994	9,918	9,423	9,328	8,656	8,383	8,243
DBA <sup>a</sup> Benefits	11,338	30,079	59,797	115,758	170,231	199,837	242,530	311,643	415,274	540,283	665,943	707,468
Number of DBA Death Claims <sup>b</sup>	56	231	284	338	426	289	341	585	405	280	211	146
Total Annual Assessments	135,800	148,500	146,500	135,500	135,000	132,500	136,500	131,500	131,000	132,000	132,000	123,000
LHWCA	125,000	137,000	135,000	125,000	125,000	124,000	125,000	124,000	123,000	124,000	123,000	118,000
DCCA	10,800	11,500	11,500	10,500	10,000	8,500	11,500	7,500	8,000	8,000	9,000	5,000
Administrative Expenses	12,270	12,510	12,568	12,715	12,725	12,667	12,922	13,394	13,461	13,330	13,317	14,187
General Revenue	10,297	10,495	10,553	10,691	10,699	10,633	10,855	11,356	11,354	11,229	11,203	12,052
Trust Fund	1,973	2,015	2,015	2,024	2,026	2,034	2,067	2,038	2,107	2,101	2,114	2,135
Indirect Administrative Costs <sup>c</sup>	2,347	2,396	2,019	2,115	2,437	1,856	2,155	2,766	1,922	1,632	1,211	1,534

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 (2016).

both parts of the program.<sup>48</sup> 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 2014 were \$737 million, of which \$354 million were paid as compensation benefits (DOL, 2016). 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 2014 were \$303 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 2014, 29,846 claims were paid for a total of \$1.97 billion, or roughly \$66,005 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 2014, 3.9 million veterans were receiving monthly compensation payments for service-connected disabilities. Of these, 43 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 were \$4.5 billion in 2014, or about \$54.2 billion on an annual basis (VA, 2015). 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 \$54.2 billion in 2014, veterans' compensation is about 175 percent of the size of total cash benefits in other workers' compensation programs, which were \$30.9 billion in 2014.

---

48 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, 2003-2014**  
(in thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Benefits	\$775,098	\$719,065	\$665,844	\$616,039	\$569,300	\$524,645	\$481,172	\$445,488	\$406,514	\$368,661	\$337,282	\$309,048
Part C Compensation	303,724	289,699	276,413	262,026	248,375	231,261	217,685	204,873	189,363	176,886	162,410	148,926
Part C Medical Benefits	59,739	52,992	49,244	41,552	38,545	37,492	31,485	32,492	33,935	30,982	34,213	36,224
Part B Compensation	411,635	376,374	340,187	312,461	282,380	255,892	232,002	208,123	183,216	160,793	140,659	123,898
Total Direct Administrative Costs	37,393	38,057	37,917	38,453	38,749	38,009	37,502	37,292	36,818	37,902	36,000	35,546
Part C (DOL)	31,991	32,157	32,724	33,182	33,374	32,648	32,411	32,363	31,695	32,486	31,085	30,713
Part B (SSA)	5,402	5,900	5,193	5,271	5,375	5,361	5,091	4,929	5,123	5,416	4,915	4,833
Trust Fund Advances from												
U.S. Treasury <sup>a</sup>	525,000	497,000	446,000	445,000	426,000	426,000	0	60,000	107,749	214,000	401,000	496,000
Bond Payments <sup>b</sup>	*	*	*	*	*	*	341,939	364,757	400,905	431,486	452,439	472,849
Interest Payments on												
Past Advances <sup>c</sup>	620,582	650,579	674,894	694,964	717,214	739,469	0	0	60,160	107,864	214,372	401,393
Coal Tax Revenues Received by												
the Black Lung Trust Fund	480,080	577,575	620,420	598,520	650,432	646,800	652,935	588,743	631,002	636,536	512,866	574,403
Indirect Administrative Costs <sup>d</sup>	23,459	23,914	24,424	25,242	26,020	25,473	25,528	25,979	26,191	25,767	24,661	25,489

\* 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 (2016).

**Table B4****Energy Employees Occupational Illness Compensation Program Act, Part B and Part E Benefits and Costs, 2003-2014**  
(in thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Benefits Part B	\$303,981	\$275,727	\$392,503	\$502,636	\$561,824	\$605,338	\$471,639	\$803,456	\$784,278	\$868,248	\$850,126	\$737,187
Compensation Benefits	288,274	250,123	358,751	460,494	490,089	517,383	337,642	576,364	474,213	538,517	496,868	354,103
Medical Benefits <sup>a</sup>	15,707	25,604	33,752	42,142	71,735	87,955	133,997	227,092	310,065	329,731	353,258	383,084
Direct Administrative Costs <sup>b</sup>	65,941	94,158	106,818	104,872	107,417	92,075	51,377	53,102	51,228	49,577	49,555	51,937
Total Benefits Part E <sup>c</sup>	n/a	n/a	268,635	270,598	409,100	468,982	395,680	383,760	348,431	331,089	351,842	302,672
Compensation Benefits	n/a	n/a	268,586	269,558	407,277	465,742	390,077	370,351	319,032	296,019	306,604	260,168
Medical Benefits <sup>d</sup>	n/a	n/a	49	1,040	1,823	3,240	5,603	13,409	29,399	35,071	45,237	42,504
Direct Administrative Costs <sup>b</sup>	n/a	n/a	39,295	55,088	61,671	59,152	68,146	74,622	74,189	72,259	68,523	66,752

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 2002-08 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, \$0.4 million; and 2014, \$0.6 million. Part E costs for 2005-14 also include funding for an ombudsman position. For 2005 these costs were \$0.3 million; 2006, \$0.6 million; 2007, \$0.8 million; 2008, \$0.8 million; 2009, \$0.7 million; 2010, \$0.6 million; 2011, \$0.8 million; 2012, \$0.8 million; 2013, \$0.8 million; and 2014, \$0.8 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 (2016).

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.

**Table B5**

**Radiation Exposure Compensation Act, Benefits Paid as of October, 2014 (in thousands)**

Claim Type	# Claims	Benefits
Downwinder	18,087	\$904,320
Onsite Participant	3,578	260,204
Uranium Miner	6,046	603,875
Uranium Miller	1,604	160,400
Ore Transporter	315	31,500
<b>TOTAL</b>	<b>29,630</b>	<b>\$1,960,299</b>

*Source:* U.S. Department of Justice (2015).

**Table B6**

**Federal Veterans' Compensation Program, Compensation Paid in Fiscal Year 2014 (in thousands)**

Class of Dependent	Number	Monthly Value (in thousands)
Veteran Recipients - total	3,949,066	\$4,519,044
Veterans Less Than 30 Percent Disabled (no dependency benefit)	1,695,067	407,626
Veterans 30 percent or More Disabled	2,253,999	4,111,418

*Source:* U.S. Department of Veterans Affairs (2015).

## Appendix C: Workers' Compensation under State Laws

Table C identifies the parameters that determine workers' compensation benefits *under the current laws* (as of January 2016) 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).

The benefit parameters defined in Table C include:

- 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*.

The acronyms used in Table C include:

PIWW Pre-injury Weekly 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

TTD Temporary Total Disability

PTD Permanent Total Disability

PPD Permanent Partial Disability

MMI Maximum Medical Improvement

**Table C**

**Workers' Compensation State Laws as of January 2016**

State	Waiting Period <sup>f</sup>		Temporary Total Disability			Permanent Total Disability				Permanent Partial Disability		Death Benefits	
	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" (Weeks)	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Alabama	3 days	21 days	\$224.00	\$813.00	Duration of TTD disability	66 2/3% PIWW	\$813.00	No	No	\$220.00	300	\$813.00	500 weeks
Alaska	3 days	28 days	\$266.00	\$1,211.00	Continue until employee is medically stable or released to work	80% of the workers' spendable after tax or NWW	\$1,211.00	If found to no longer be permanently and totally disabled	Up to the maximum TTD weekly rate. Benefits continue until no longer PTD or death	Paid in lump sum amount unless the claimant is in a reemployment training program, in which case PPI benefits can be paid at the weekly TTD rates: TTD min (\$251) and TTD max (\$1,143)	No unscheduled PPD	\$1,211.00	12 years
Arizona	7 consecutive calendar days	14 days	n/a	\$679.51	Duration of TTD disability	66 2/3% AMW	\$679.51	No	No	\$766.60 for scheduled injuries; for unscheduled injuries, n/a	Payable for life unless rearranged by Industrial Commission	\$679.51	None
Arkansas	7 days	14 days	\$20.00	\$646.00	450	66 2/3% PIWW	\$646.00	Benefits are for the length of disability and may be paid for life	There is a limitation of the weekly amount but not on the total amount	\$485.00	450 maximum for all disability <sup>a</sup>	\$646.00	Remarriage of spouse, attainment of age 18 or dependent child or 25 if full-time student; 450-week limit for partial dependents <sup>b</sup>
California	3 days	14 days	\$169.26	\$1,128.43	104 <sup>c</sup>	2/3 of AWW, subject to minimum/maximum rates	\$1,128.43	Lifetime	No	\$290.00	not applicable	\$1,128.43	There is a maximum amount paid per Labor Code 4702 but that amount can be higher based on Labor Code 4703.5

Colorado	3 scheduled days	14 calendar days	none	\$875.42	Duration of TTD disability	66 2/3% PIWW	\$875.42	Benefits are for the length of disability and may be paid for life	None	\$275.10 is set weekly rate for all scheduled injuries; \$875.42 weekly is maximum for calculating unscheduled injuries	400 <sup>d</sup>	\$875.42	None
Connecticut	3 days	7 days	\$236.80	\$1,184.00	Duration of TTD disability	75% of spendable earnings	\$1256.00	None	None	\$991.00	780 however no unscheduled PPD since 1993	\$1,256.00	None
Delaware	3 days	7 calendar days	\$226.54	\$679.63	unlimited	66 2/3% of the difference between the wages received by the injured before the injury and the earning power of the employee thereafter	\$679.63	No	No	\$679.63	300	\$679.63	When spouse remarries or if minor dependents reach 18 years of age or 25 if attending accredited higher learning institution
District of Columbia	3 days	14 days	\$360.20	\$1,441.80	500 weeks for all disability benefits with ability to petition for an additional 167 weeks	66 2/3% PIWW	\$1,441.80	500 weeks for all disability benefits with ability to petition for an additional 167 weeks	The first \$75,000 in benefits for death or PTSD shall be paid by the employer/insurer. Amounts over \$75,000 are paid from death and PTSD Trust Fund	\$1,441.80	500 week limit for all disability and worker may petition for an additional 167 weeks	\$1,441.80	None
Florida	7 days	22 days	\$20 unless wages are less than \$20, then full wages	\$863.00	104	66 2/3% PIWW	\$863.00	Benefits are payable to age 75. If the injury occurred after age 70, benefits are payable during continuance of PTSD not to exceed 5 years following determination of PTSD	No	\$863.00	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%	\$863.00	Maximum payable is \$150,000
Georgia	7 days	21 days	\$50.00	\$550.00	400 weeks unless catastrophic injury	not applicable	not applicable	not applicable	not applicable	\$550.00	300	\$550.00	\$220,000 for surviving spouse with no dependents
Hawaii	3 days	None	\$203.00	\$812.00	Duration of TTD disability	66 2/3% PIWW	\$812.00	No	No	\$812.00	312	\$812.00	312 weeks

# Table C continued

## Workers' Compensation State Laws as of January 2016

State	Waiting Period <sup>f</sup>		Temporary Total Disability			Permanent Total Disability				Permanent Partial Disability		Death Benefits	
	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" (Weeks)	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Idaho	5 days	Disability extends over 14 days	\$108.15	\$615.60	None. TTD continues while in the period of recovery.	67% of AWW	\$648.90	No	Weekly rate may change after the first 52 weeks of TTD and thereafter on January 1, based on the increase in the AWW	55% of the AWW at the time of injury	500	60% of current average state wage or \$432.60 weekly	500 weeks for spouse, age 18 for children or age 23 if enrolled in an accredited learning institution
Illinois	3 days	14 calendar days	\$220.00	\$1,398.23	Duration of TTD disability	66 2/3% AWW subject to max and min levels	\$1,398.23	No	No	\$755.22	500	\$1,398.23	\$500,000 or 25 years
Indiana	7 days	21 days	\$50.00	\$737.00	500	66 2/3% AWW	\$737.00	500 weeks	500 weeks	not applicable	not applicable	\$650.00	500 weeks
Iowa	3 days	14 days	none	\$1,628.00	Benefits are for length of disability and may be paid for life	80% of the worker's spendable after tax or NWW	\$1,628.00	No	No	\$1,498.00	500	\$1,628.00	None
Kansas	7 consecutive days	21 consecutive days	\$25.00	\$587.00	225 to 415 weeks depending on type of injury-also may be a limitation of \$130,000 or \$155,000 for all indemnity benefits depending on types of benefit paid.	66 2/3% AWW	\$587.00	Benefits are for the length of disability and may be paid for life or until maximum of \$155,000 is reached.	\$155,000	\$587.00	415 weeks	\$587.00	\$300,000
Kentucky	7 days	14 days	20% of SAWW; \$153.81	\$769.06	Duration of disability or until receipt of Social Security old age and survivor benefits	66 2/3% of injured worker's AWW subject to 100% of the SAWW	\$773.61	Until the injured worker qualifies for normal old age Social Security	None	\$580.21	425 weeks if rating is 50% or less; 520 weeks if rating is over 50%; limited to qualification for normal old age Social Security; no scheduled benefits	All combined cannot exceed amount payable for total disability	18 or 22 if in school

Louisiana	7 days	2 weeks	\$168.00 or actual wage, whichever is less	\$630.00	No maximum	66 2/3% PIWW	\$630.00	Benefits are for the length of disability and may be paid for life	None	\$630.00	520	\$630.00	500 weeks or until age 18 for children
Maine	7 days <sup>c</sup>	14 calendar days	none	DOI 1/1/1993-12/31/2012: \$717.90; DOI on/after 1/1/2013: \$728.63	520	1/1/93-12/31/12: 80% of the worker's spendable after-tax or NWW; 1/1/13 and after: 2/3 of AWW	DOI 1/1/93-12/31/12: \$717.90; DOI on/after 1/1/13: \$728.63	Benefits are for the length of disability and may be paid for life	No	DOI 1/1/93-12/31/12: \$717.90; DOI on/after 1/1/13: \$728.63	1/1/93-12/31/2012: 520 weeks for the duration of the disability if PI rating is greater than a threshold of approximately 13.4%; on/after 1/1/13: 520 weeks; longer if PI > 18% & earning 65% or less of AWW & worked 12 months out of 24 month period before benefit ends	DOI 1/1/93-12/31/12: \$717.90; DOI on/after 1/1/13: \$728.63	500 weeks or until age 18 for children
Maryland	3 days	14 days	\$50.00 or employee's AWW	\$1,027.00	Duration of TTD disability	66 2/3% PIWW	\$1,027.00	No	\$45K except that benefit shall be paid for the period that the covered employee is permanently totally disabled	\$771.00	None	\$1,027.00	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
Massachusetts	5 days	21 days	\$251.29	\$1,256.47	156	66 2/3% PIWW	\$1,256.47	No	No	not applicable	not applicable	\$1,000.00	250 weeks
Michigan	7 calendar days	14 calendar days	None	\$842.00	January 1st of each year	80% of the worker's spendable after-tax or NWW	\$842.00	800 weeks conclusive payment with factual determination thereafter	None	not applicable	not applicable	\$842.00	500 weeks
Minnesota	3 days	10 days	\$130.00 or the worker's actual wage, whichever is less	102% of the SAWW for the preceding calendar year	130	66 2/3% PIWW	102% of the SAWW for the preceding calendar year	Until age 67	No	102% of SAWW	Rated by analogy to similar scheduled injury	102% of SAWW for preceding years	Benefits end after 10 years or 10 years after the last child is no longer dependent minimum payable is \$60,000

**Table C continued**

**Workers' Compensation State Laws as of January 2016**

State	Waiting Period <sup>f</sup>		Temporary Total Disability			Permanent Total Disability				Permanent Partial Disability		Death Benefits	
	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" (Weeks)	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Mississippi	5 days <sup>f</sup>	14 days	\$25.00	\$468.63	450	66 2/3% x AWW	\$468.63	450 weeks or until total compensation paid equals \$210,883.50	\$210,883.50	\$468.63	450	\$468.63	450 weeks; remarriage for spouse; age 18-23 for child
Missouri	3 days in which the employer is open for business	14 days	\$40.00	\$886.92	400	66 2/3% PIWW not to exceed 105% of the SAWW	\$886.92	No	None	\$464.58	400	\$886.92	8
Montana	32 hours or 4 days, whichever is less	21 days <sup>h</sup>	None	\$733.00	Duration of TTD disability	66 2/3% PIWW	May not exceed state's AWW at time of injury	Payable until retirement	None	\$366.50	400	May not exceed state's AWW at time of injury	500 weeks or until the spouse remarries
Nebraska	7 days	6 weeks	\$49 or actual wage, if less	\$785.00	Duration of TTD disability	66 2/3% PIWW	\$785.00	Payable for the length of disability and may be for life	None	\$785.00	300	\$785.00	None
Nevada	5 days	5 consecutive days or 5 cumulative days within a 20 day period	None	\$831.88	Duration of TTD disability	66 2/3% pre-injury AWW	\$831.88	No	Per maximum compensation limit and formula	\$831.88	PPD benefits paid for 5 years or to age 70, whichever is later	\$831.88	None
New Hampshire	3 days	14 days	\$293.70	\$1,468.50	Duration of Total disability	60 % PIWW	\$1,468.50	Payable for the length of disability and may be for life	None	\$1,468.50	350 weeks for a whole person award	\$1,468.50	18 or 25 if a full-time student
New Jersey	7 days	7 calendar days	\$232.00	\$871.00	400	70% of actual wage at the time of injury	\$871.00	Payable for the length of disability and may be for life	None	\$871.00	600	\$871.00	Lifetime with exceptions
New Mexico	7 days	4 weeks	\$36.00	\$785.03	700	66 2/3% PIWW	\$785.03	Payable for the length of disability and may be for life	None	\$785.03	500 weeks if the rating is less than 80%, 700 weeks if rating is greater	66 2/3% of AWW divide as stated in Statute 52-1-46	100% of the SAWW for 700 weeks
New York	7 days	More than 14 days	\$150, unless claimant's wages less than \$150, then claimant receives full wages	\$844.29	Duration of TTD disability	66 2/3% PIWW	\$844.29	No. Benefits are payable for the length of disability which is almost always for life of the claimant	None	\$844.29	Calculated by multiplying 525 (max weeks) by \$803.21	\$844.29	i

North Carolina	7 days	21 days	\$30.00	\$944.00	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	66 2/3% PIWW	\$944.00	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	\$944.00 for scheduled injuries	\$20,000.00	\$944.00	500 weeks <sup>l</sup>
North Dakota	5 days	5 days	\$585.00 or 60% of the SAWW unless the amount exceeds the employer's net wages, in which case the employee receives net wages as a weekly compensation rate.	\$1,219.00	104 weeks. An additional 20 weeks may be added if the employee is enrolled in a vocational rehabilitation program.	66 2/3% PIWW	\$1,219.00	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	not applicable	100% impairment based on lump sum payment	\$1,219.00	\$300,000 or death
Ohio	7 days	14 calendar days	\$287.33. However if AWW is below minimum, the TTD is 100% of the AWW	\$862.00. If 72% of the FWW or 66 2/3% of the AWW is above the maximum, TTD is paid at the maximum amount.	As long as disability lasts	66 2/3% PIWW <sup>l</sup>	\$862.00	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	\$287.33	200	\$862.00	None
Oklahoma	3 days	None	None	\$589.33	104 weeks, with an additional 52 weeks if consequential injury found	70% PIWW	\$841.90	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	\$323.00	350	\$841.90	None
Oregon	3 days	14 days	Not less than \$50 or 90% of the worker's AWW; whichever is less	\$1,226.78	n/a	66 2/3% PIWW but cannot exceed the state AWW	\$922.39. In addition, if the workers' wages plus PTD may not exceed the workers' wage at injury	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	not applicable	\$353,543.14	\$1229.82 <sup>m</sup>	None
Pennsylvania	7 days	14 calendar days	50% of statewide AWW or 90% of worker's AWW, whichever is lower.	\$978.00	Duration of TTD disability subject to conversion to partial benefits at 104 weeks <sup>n</sup>	not applicable <sup>o</sup>	not applicable	Benefit limits have been changed to 500 weeks and can be extended by Commission if employee has sustained a total loss of wage-earning capacity	\$978.00	500 weeks	\$978.00	n/a

## Table C continued

### Workers' Compensation State Laws as of January 2016

State	Waiting Period <sup>1</sup>		Temporary Total Disability			Permanent Total Disability				Permanent Partial Disability		Death Benefits	
	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" (Weeks)	Max Weekly Benefit	Statutory Limit for Dependency Benefits
Rhode Island	3 days	No payment for waiting period days	None	\$1,076.00	Duration of TTD disability	75% of worker's spendable or after-tax or NWW	\$1,076.00	Payable for the length of disability and may be for life	None	\$180.00	500	\$1,076.00	None
South Carolina	7 days	More than 14 days	\$75 if wages are >\$75; otherwise, comp rate is equal to wages	\$784.03	Duration of TTD disability with a maximum of 500 weeks	66 2/3% PIWW	\$752.16	500 weeks	500 weeks	Depends on scheduled body part	340	\$784.03	500 weeks
South Dakota	7 days	7 calendar days	\$367.00	\$733.00	Duration of TTD disability	66 2/3% PIWWP	\$733.00	None	None	\$733.00	312	\$733.00	None
Tennessee	7 days	14 days	\$128.70	\$943.80	Duration of TTD for physical injuries; 104 weeks for psychological injuries; 104 weeks after the commencement of pain management	66 2/3% PIWW	\$868.00	Until Social Security eligibility age or 260 weeks where the date of injury is on or after age 60	No	\$868.00	450	\$868.00	\$386,100.00
Texas	7 days	14 days	\$134.00	\$895.00	105 <sup>1</sup>	75% AWW	\$895.00	No	No	\$627.00	300	\$895.00	Minimum of 364 weeks
Utah	3 days	14 calendar days	\$45.00	\$811.00	312	66 2/3% AWW at the time of injury not to exceed 85% of the SAWW	\$689.00	PTD benefits are awarded for life, but PTD status may be reexamined by submitting employee to reasonable medical evaluations, rehabilitation and retraining efforts, disclosure of Federal Income Tax returns	No	\$541.00	312	\$689.00	312 weeks; however may be expanded when beneficiary remains wholly dependent

Vermont	3 days	10 days	\$408.00	\$1,224.00	Duration of TTD disability; insurer must review after 2 years	66 2/3% PIWW	\$1,224.00	For duration of total disability- can be for life	No	\$1,224.00	405 weeks for non-spinal; 550 weeks spinal	\$1,166.00	Varies with dependent
Virginia	7 days	3 weeks	\$243.75	\$975.00	500	66 2/3% PIWW	\$975.00	Can be lifetime	Applicable comp. rate	\$975.00	None	\$975.00	500 weeks
Washington	The 3 days immediately following the DOI	14 calendar days immediately following the DOI	15% of the statewide AMW + \$10 for spouse + \$10 for each dependent child up to five dependent children; 100% of the workers gross monthly wage; minimum time loss rate effective prior to July 2, 2008	\$1,265.28	Duration of TTD disability	Depends on the option chosen by employee	\$1,265.28	For length of disability and can be for life	There is a maximum payment for lump sums only, up to \$8,500	\$1,279.32	\$200,067.21	\$1,265.28	not applicable
West Virginia	3 days	7 consecutive days	Federal minimum wage	\$754.81	104	66 2/3% PIWW not to exceed 100% of the AMW in West Virginia	\$711.38	Payable until age 70 for all PTD awards granted on or after 07/1/2003	No	\$497.27	None	\$754.81	
Wisconsin	3 days	7 non-consecutive days	TTD rate maybe set as restricted part-time at 100% of actual earnings.	\$936.00	Duration of TTD disability	66 2/3% PIWW	\$936.00	For length of disability and can be for life	No	\$322.00	1,000 weeks	\$936.00	\$280,800
Wyoming	3 days	8 days	30% of the statewide AMW or 2/3 of the actual monthly earnings at the time of injury, whichever is greater, but shall not exceed the lesser of 100% of the actual monthly earnings.	\$972.00	24 months or in extraordinary circumstances may extend beyond to provide a reasonable recoperation period	66 2/3% of the worker's actual monthly wage, unless he or she earns less than 73% of the state AMW, then it is 92% of the worker's actual monthly wages	Wages cannot exceed the SAWW for the quarter in which PTD is determined	Paid for 60 months then benefit becomes extended PTD and extended PTD must be renewed annually	No	Depends on the date of injury	None	Cannot exceed more than 2x the SAMW	None

## Table C continued

### Workers' Compensation State Laws as of January 2016

---

- a. Except for PTD which is payable for life
- b. If total amount of weekly compensation is less than \$7.00 per week.
- c. There are some limited exceptions where benefits can be paid for 240 weeks.
- d. Beginning Jan 1, 2012, the caps are adjusted each year. As of Jan 1, 2014 the caps are \$80,868.10 and \$161,734.15.
- e. Does not apply to firefighters.
- f. 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 8 day period nor the 14-day period have to consist of consecutive calendar days.
- g. So long as there is one "total dependent" (such as spouse or a minor child) the weekly death benefit payment is 66 2/3% of the worker's PIWW, not to exceed 105% of state AWW. Additional total or partial dependents do not increase the payment amount.
- h. If the worker is totally disabled and unable to work in any capacity for 21 days or longer, compensation must be paid retroactively to the first day of total wage loss unless the worker waives the retroactive payment and receives sick leave benefit from the employer instead.
- i. Benefits end for spouse on remarriage or upon death and end for children upon turning 18, or if still in school, 23, if not blind or physically disabled. If blind or physically disabled, then the benefits end when the blindness or physical disability ends, after age 18 or 23 as appropriate. If benefits paid to dependent parents or grandparents, they end upon death. For brothers, sisters, or grandchildren at age 18, or, if in school, 23.
- j. Widower may receive lifetime payments if she is totally disabled at the date of decedent's death and child will receive weekly payments for 400 weeks or until age 18, whichever is longer.
- k. ABP benefits are additional benefits payable. ABP are payable for the length of the disability or until death. Benefit is based on the duration of disability prior to retirement.
- l. 66 2/3% of the workers' pre-injury weekly wage not to exceed the maximum for the date of injury or date of disability in occupational disease claims.
- m. This is the lowest benefit level for a child of deceased that is not substantially dependent on a surviving spouse up to age 18.
- n. 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.
- o. Wage Loss benefits may continue for life, however.
- p. If the weekly wage is below 50% of the SAWW the calculation is wages, less income tax and social security.
- q. An exception to this amount could be made when an extension of MMI based on spinal surgery is approved by the Division.
- r. The value of lost wages during the waiting period that are not recompensed by a retroactive period is an additional cost of work-related injuries borne by workers.

Source: IAIABC-WCRI (2016).

# References

- A.M. Best. 2015. *Private Data Request*. Oldwick, NJ: A.M. Best.
- A.M. Best. 2015a. *2015 Best's Aggregates & Averages – Property/Casualty*. Oldwick, NJ: A.M. Best.
- Azaroff, Lenore S., Charles Levenstein, and David Wegman. 2002. "Occupational Injury and Illness Surveillance: Conceptual Filters Explain Underreporting." *American Journal of Public Health* 92 (9): 1421–1429.
- Barth, Peter, and Michael Niss. 1999. *Permanent Partial Disability Benefits: Interstate Differences*. Cambridge, MA: Workers Compensation Research Institute.
- Berkes, Howard and Michael Grabell. 2016. "Oklahoma Commission Declares Workers' Comp Alternative Unconstitutional," <http://www.npr.org> (July 12, 2016).
- Biddle, Jeff, Karen Roberts, Kenneth D. Rosenman, and Edward M. Welch. 1998. "What Percentage of Worker with Work-Related Illness Receive Workers' Compensation Benefits?" *Journal of Occupational and Environmental Medicine* 40 (4): 325– 331.
- Boden, Leslie I., Robert T. Reville and Jeff Biddle. 2005. "The Adequacy of Workers' Compensation Cash Benefits," in Karen Roberts, John F. Burton, Jr., and Matthew M. Bodah (Eds), *Workplace Injuries and Diseases: Prevention and Compensation: Essays in Honor of Terry Thomason*, Kalamazoo, MI: W.E. Upjohn Institute for Employment Research: 37-68
- Burton, John F., Jr. 2008. "Workers' Compensation Cash Benefits: Part Two: Cash Benefit Systems and Criteria for Evaluation." *Workers' Compensation Policy Review* 8 (6): 1331.
- Burton, John F., Jr. 2013. "Workers' Compensation Costs for Employers, National and State Data." *Workers' Compensation Resources Research Report* 6:3-26.
- Burton, John F., Jr. 2014. "Workers' Compensation Insurance Industry Underwriting Results Continue to Improve in 2013." *Workers' Compensation Resources Research Report*, 8: 3-12.
- Burton, John F., Jr. 2015. *Workers' Compensation Costs for Employers: 1986-2014*. *Workers' Compensation Resources Research Report* 10: 1-23.
- Burton, John F., Jr., and Daniel J.B. Mitchell. 2003. "Employee Benefits and Social Insurance: The Welfare Side of Employee Relations." *Industrial Relations to Human Resources and Beyond*, Bruce E. Kaufman, Richard A. Beaumont, and Roy B. Helfgot (Eds). Armonk, NY: M.E. Sharpe.
- Burton, John F., Jr. and Xuguang (Steve) Guo. 2016. "Improving the Interaction Between the SSDI and Workers' Compensation Programs," *SSDI Solutions: Ideas to Strengthen the Social Security Disability Insurance Program*, Jim McCreery and Earl Pomeroy (Eds.). West Conshohocken, PA: Infinity Publishing.
- Calderone, Peter. 2011. "Workers' Compensation: Woodrow Wilson's Important Legacy for New Jersey," *Reflections on the History and Development of Workers' Compensation in the United States*, Gregory C. Krohm (Ed), 165-71. Madison, WI: International Association of Industrial Accident Boards and Commissions.
- Centers for Disease Control and Prevention. 2007. "Nonfatal Occupational Injuries and Illnesses—United States, 2004." *MMWR: Morbidity and Mortality Weekly Report* 56 (16): 393-97.
- Centers for Medicare & Medicaid Services. 2016. *Private data request*.
- Clayton, Ann. 2004. "Workers' Compensation: A Background for Social Security Professionals." *Social Security Bulletin* 65 (4): 715.
- Fishback, Price V., and Shawn Everett Kantor. 1996. "The Adoption of Workers' Compensation in the United States, 1900-1930." *NBER Working Paper Series* 5840.
- Friedman, Lee S, and Linda Forst. 2007. "Occupational Injury Surveillance of Traumatic Injuries in Illinois, Using the Illinois Trauma Registry: 1995–2003." *Journal of Occupational and Environmental Medicine* 49 (4): 401-10.
- Galizzi, Monica and Jay L. Zagorsky. 2009. "How Do On-the-Job Injuries and Illnesses Impact Wealth?" *Labour Economics* 16: 26–36.
- Galizzi, Monica, Petra Miesmaa, Laura Punnett, Craig Slatin, and PHASE. 2010. "Injured Workers' Underreporting in the Health Care Industry." *Industrial Relations* 49: 22–42.
- Grabell, Michael, and Howard Berkes, 2015. "Inside Corporate America's Campaign to Ditch Workers' Comp." <http://www.propublica.org> (July 1, 2016).
- Hunt, H. Allan. 2004. *Adequacy of Earnings Replacement in Workers' Compensation Programs*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research and NASI.
- Hunt, H. Allan, and Marcus Dillender, 2014. "Benefit Adequacy in State and Provincial Workers' Compensation Programs." *Employment Research* 21(4): [1]-4. [http://dx.doi.org/10.17848/1075-8445.21\(4\)-1](http://dx.doi.org/10.17848/1075-8445.21(4)-1)

- IAIABC–WCRI. 2014. *Workers' Compensation Laws, January 2014, WC-12-18*. (Joint Publication of IAIABC and Workers Compensation Research Institute). Boston, MA.
- IAIABC–WCRI. 2016. *Workers' Compensation Laws, January 2016, WC-16-43*. (Joint Publication of IAIABC and Workers Compensation Research Institute). Boston, MA.
- Krohm, Gregory C. 2011. "Wisconsin's Role in Pioneering Workers' Compensation." In *Reflections on the History and Development of Workers' Compensation in the United States*, Gregory C. Krohm (Ed), 185-93. Madison, WI: International Association of Industrial Accident Boards and Commissions.
- Krohm, Gregory C. 2016. *Understanding the Opt-out Alternative to Workers' Compensation*. Madison, WI: International Association of Industrial Accident Boards and Commissions.
- Lashuay, Nan, and Robert Harrison. 2006. "Barriers to occupational health services for low-wage workers in California." Commission on Health and Safety and Workers' Compensation, California Department of Industrial Relations.
- Leigh, J. Paul, and James P. Marcin. 2012. "Workers' Compensation benefits and Shifting Costs for Occupational Injury and Illness." *Journal of Environmental Medicine* 54(4): 445-450.
- Leigh, J. Paul, Steven Markowitz, Marianne Fahs, and Philip Landrigan. 2000. *Costs of Occupational Injuries and Illnesses*. Ann Arbor, MI: The University of Michigan Press.
- Manley, Mike. 2013. "Comments on Workers' Compensation Costs for Employers: National and State Data." *Workers' Compensation Resources Research Report, Supplement 6*: 3-5.
- Milton, Donald K., Gina M. Solomon, Richard A. Rosiello, and Robert F. Herrick. 1998. "Risk and Incidence of Asthma Attributable to Occupational Exposure among HMO Members." *American Journal of Industrial Medicine* 33: 110.
- Minnesota Department of Labor and Industry. 2005. *Comparing Workers' Compensation Claims and OSHA Data Initiative Case*, research report prepared by E. Messiou, and B. Zaidman. St. Paul, MN: Minnesota Department of Labor and Industry.
- Morse, Timothy F., Charles Dillon, Nicholas Warren, Charles Levenstein, and Andrew Warren. 1998. "The Economic and Social Consequences of Work-Related Musculoskeletal Disorders: The Connecticut Upper Extremity Surveillance Project (CUSP)," *International Journal of Occupational & Environmental Health* 4: 209-216.
- National Academy of Social Insurance (NASI). 2002. "Workers' Compensation Coverage: Technical Note on Estimates," *Workers' Compensation Data Fact Sheet 2*. Washington, DC: NAIC.
- National Association of Insurance Commissioners (NAIC). 2014. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 2014*. Kansas City, MO: NAIC. Similar publication for the years 1998-2013.
- National Council on Compensation Insurance, Inc. (NCCI). 2016a. *Private Data Request*. Boca Raton, FL: NCCI.
- . 2016b. *Annual Statistical Bulletin, ed. 1996*. Boca Raton, FL: NCCI. Similar publication for the years 1997-2015.
- Occupational Safety & Health Administration (OSHA). 2015. *Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job*. U.S. Department of Labor, OSHA.
- Oregon Department of Consumer and Business Services. 2015. *Oregon Workers' Compensation Premium Rate Ranking: Calendar Year 2014*, Central Services Division, Information and Research Section.
- Postal, Arthur D. 2013. "Oklahoma Passes Bill Allowing Employers to Opt Out of Workers' Comp System," *PropertyCasualty360.com* (May 1, 2013).
- Pransky, Glenn, Terry Snyder, Allard Dembe, and Jay Himmelstein. 1999. "Under Reporting of Work Related Disorders in the Workplace: A Case Study and Review of the Literature." *Ergonomics* 42: 171-182.
- Rappin, Christina L., Sara E. Wuellner, and David K. Bonauto. 2016. "Employer reasons for failing to report eligible workers' compensation claims in the BLS survey of occupational injuries and illnesses." *American Journal of Industrial Medicine* 59(5): 343-356.
- Sears, Jeanne M, Stephen M Bowman, Sheilah Hogg-Johnson, and Zeynep A Shorter. 2014. "Occupational Injury Trends Derived from Trauma Registry and Hospital Discharge Records: Lessons for Surveillance and Research." *Journal of Occupational and Environmental Medicine* 56 (10): 1067-73.
- Social Security Administration (SSA). 2015. Office of Research, Evaluation, and Statistics. *Annual Statistical Supplement, 2014*. Washington, DC: SSA.

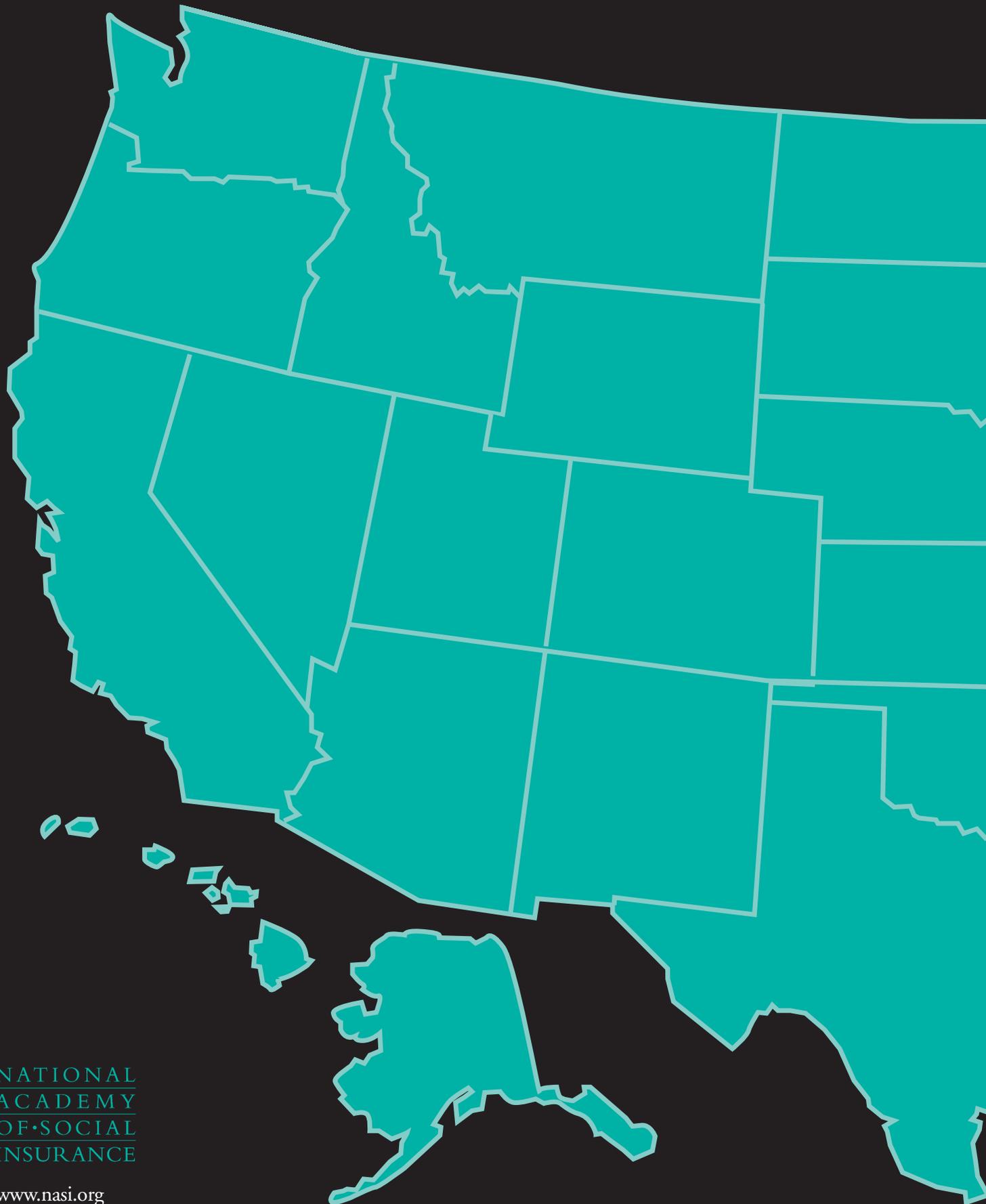
- . 2015a. *Unpublished Data from the Office of Disability*. Baltimore, MD: SSA.
- . 2015b. *The 2015 Annual Report of the Board of Trustees of the Federal Old Age and Survivors Insurance and Disability Insurance Trust Funds*. Washington, DC: SSA.
- Spieler, Emily A., and John F. Burton, Jr. 2012. “The Lack of Correspondence between Work Related Disability and Receipt of Workers’ Compensation Benefits.” *American Journal of Industrial Medicine* 55: 487505.
- Stanbury, Martha, Patrick Joyce, and Howard Kipen. 1995. “Silicosis and Workers’ Compensation in New Jersey.” *Journal of Occupational Environmental Medicine* 37: 1342-1347.
- Strunin, Lee, and Leslie I. Boden. 2004. “The Workers’ Compensation System: Worker Friend or Foe?” *American Journal of Industrial Medicine* 45(4):338-345.
- Texas Department of Insurance (TDI). 2014. Texas Department of Insurance Workers’ Compensation Research and Evaluation Group, *Employer Participation in the Texas Workers’ Compensation System: 2014 Estimates*.
- Thomason, Terry, Timothy P. Schmidle, and John F. Burton, Jr. 2001. *Workers’ Compensation: Benefits, Costs, and Safety under Alternative Insurance Arrangements*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- U.S. Census Bureau. 2005. *The Number of Firms and Establishments, Employment, Annual Payroll, and Receipts in 1997 by Industry and Employment Size of Enterprise*. Washington, DC: U.S. Census Bureau.
- U.S. Department of Justice (DOJ). 2015. *Radiation Exposure Compensation Act*. Washington, DC: U.S. DOJ.
- U.S. Department of Labor (DOL). 2008. *An Interim Report to Congress on Occupational Diseases*, Assistant Secretary for Policy Evaluation and Research. Washington, D.C.
- . 2016. Private Data request from the Office of Workers’ Compensation Program, U.S. DOL.
- . 2015a. Bureau of Labor Statistics. *Employer Costs for Employee Compensation – December 2014*. USDL-14-0390. Washington, DC: U.S. DOL.
- . 2015b. Bureau of Labor Statistics. *Employee Benefits in the United States, March 2013*. Washington, DC: U.S. DOL.
- . 2015c. Bureau of Labor Statistics. *National Census of Fatal Occupational Injuries in 2014*. Washington, DC: U.S. DOL.
- . 2015d. Bureau of Labor Statistics. *Employer Reported Workplace Injuries and Illnesses in 2014*. Washington, DC: U.S. DOL.
- . 2015e. Bureau of Labor Statistics. *Nonfatal Occupational Injuries and Illnesses Requiring Days away from Work, 2014*. Washington, DC: U.S. DOL.
- . 2015f. ES 202 Report. Washington, DC: U.S. DOL.
- . 2015g. Bureau of Labor Statistics. *Private Industry Long-term and Short-term Disability, Access to Benefits*. Washington, DC: U.S. DOL.
- . 2015h. Bureau of Labor Statistics. *Quarterly Census of Employment and Wages*. Washington, DC: U.S. DOL.
- U.S. Department of Veterans Affairs (VA): Veterans Benefit Administration. 2015. *Annual Benefits Report, Fiscal Year 2014*. Washington, DC: U.S. Department of Veterans Affairs.
- U.S. Small Business Administration (SBA). Office of Advocacy. 2016. *Employer Firms, Establishments, Employment, and Annual Payroll by Firm Size and State, 2013*. Washington, DC: U.S. SBA.
- Willborn, Steven L., Stewart J. Schwab, John F. Burton, Jr., and Gillian L.L. Lester. 2012. *Employment Law: Cases and Materials* (Fifth Edition). Newark, NJ: LexisNexis.
- Williams, C. Arthur, and Peter S. Barth. 1973. *Compendium on Workmen’s Compensation*. Washington, DC: National Commission on State Workmen’s Compensation Laws.











NATIONAL  
ACADEMY  
OF SOCIAL  
INSURANCE

[www.nasi.org](http://www.nasi.org)  
ISBN: 1-884902-64-2