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The National Academy of Social Insurance (the Academy) is a non-profit, non-partisan organization made up of the nation's leading experts on social insurance. 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 and their families 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 2013 but does not make recommendations. 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 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 provides funding to produce selected tables for this report that are also used in its own estimates. The project also receives financial support from the Office of Workers' Compensation Programs in the U.S. Department of Labor and in-kind support from the National Council on Compensation Insurance and the National Association of Insurance Commissioners.

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# Workers' Compensation:

Benefits, Coverage, and Costs, **2013** 

by

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with advice of the

Study Panel on Workers' Compensation Data

August 2015

NATIONAL ACADEMY OF SOCIAL INSURANCE Washington, DC

### **Preface**

This is the 18th 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 2013 and updates estimates for 2009–2012 with newly available data. The revised estimates in this report replace estimates in the Academy's prior reports.

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 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 only federal reporting requirement is to report to the Centers for Medicare & Medicaid Services (CMS) information about payments and obligations for ongoing medical expenses for individuals who are eligible for both workers' compensation and Medicare.

The lack of uniform reporting of states' experience 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 (the Academy) assumed the task of reporting national data on workers' compensation in 1997 with startup funding from the Robert Wood Johnson Foundation. The Academy published its first report in 1997, extending the data series from 1993 through 1995, and has produced the report annually ever since.

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. Beginning with last year's report, we added columns to several tables showing intermediate years and five-year trends in benefits and costs. In this year's report we have added long-term trends to several additional tables. Detailed descriptions of the methods used to produce the estimates in this report are available online at www.nasi.org.

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*).

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 estimates of employer costs. We may, for example, miss some unreported expenditures for legal services or assessments for special funds. Second, we do not capture all of the costs of claim litigation in states where the appeals structure is subsidized by tax revenues. There are additional costs of job accommodation to promote early return to work and job safety improvements after an injury that may not be captured in this report. 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 for the two types of states. Finally, our estimates of monetary costs cannot capture the full human costs of workrelated injuries, illnesses, and fatalities. These costs, borne by workers, families, and communities, are significant but are beyond the scope of the report.

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 state and District of Columbia workers' compensation offices who provide data on their jurisdictions each year. Without support from these sources, constructing this annual data series would not be possible. The Academy also acknowledges the U.S. Social Security Administration, Centers for Medicare & Medicaid Services, 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 give generously of 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 especially to acknowledge the contributions of Hilery Simpson and his colleagues at the U.S. Bureau of Labor Statistics who helped resolve some particularly difficult data issues. Special thanks also are due to Les Boden, Boston University; Terry Bogyo, independent workers' compensation researcher, Canada; John Burton, Rutgers and

Cornell University; Jeff Eddinger, National Council on Compensation Insurance; Doug Holmes, Strategic Services on Unemployment and Workers' Compensation; Jennifer Wolf Horejsh, International Association of Industrial Accident Boards and Commissions; Mike Manley, Oregon Department of Business and Consumer Services; Frank Neuhauser, University of California, Berkeley; and Eric Nordman, National Association of Insurance Commissioners. We also thank the Workers' Injury Law & Advocacy Group for sponsoring a summer intern, Christine Steigelman, whose help was invaluable in producing the final report.

Finally, this report benefited from helpful comments during Board review by Fred Kilbourne, The Kilbourne Company; Greg Krohm, International Association of Industrial Accident Boards and Commissions; and John Ruser, Workers Compensation Research Institute. We appreciate the time and effort all of these individuals devoted to reviewing the report.

This is the first year that we have produced the annual workers' compensation report without the help and guidance of Virginia Reno, who has moved on to become the Deputy Commissioner for Retirement and Disability Policy at the Social Security Administration. We miss her wisdom and thoughtful comments but greatly appreciate the legacy she left us in the evolution of this report.

Marjorie Baldwin

Chair, Study Panel on Workers' Compensation Data

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The following data are published in the *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2013* available on the Academy website at www.nasi.org. In addition to the following data, methodology for the benefit and costs estimate for each state is given separately, as outlined in the table of contents of the document.

Appendix D: Data Sources, 2013

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Social Security Bulletin

## **Highlights**

This report provides data on benefits, costs, and coverage for state and federal workers' compensation programs in 2013. 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 has increased.

In 2013, workers' compensation covered an estimated 129.6 million U.S. workers, an increase in covered employment of 3.8 percent in the last five years. The increase, about 3 percent, mainly occurred in the later part of the period between 2011 and 2013. Between 2009 and 2011, there was a less than 1 percent increase in covered employment. The increase in coverage reflects increases in employment across the country. (Table 1)

#### Benefits have increased.

- In 2013, workers' compensation total benefits paid were \$63.6 billion, an increase of 8.2 percent over 2009. (Table 1) The increase in total benefits paid is explained by increases in covered employment over the five-year period.
- Medical payments to providers were \$31.5 billion, a 10.3 percent increase over 2009.
- Cash benefits paid to injured workers were \$32.0 billion, an increase of 6.2 percent from 2009.
- Workers' compensation benefits were \$0.98 per \$100 of covered wages in 2013, down \$0.05 from 2009.

#### Employer costs have increased.

- Employers' costs for workers' compensation were \$88.5 billion in 2013, a 19.8 percent increase over 2009.
- Costs increased by 5.3 percent in the period 2009-2011 and by 13.8 percent in the period 2011-2013. (Table 13)

■ Employers' costs were \$1.37 per \$100 of covered wages in 2013, an increase of \$0.07 over 2009. Costs per \$100 of covered wages increased between 2011-2013, after a slight decline between 2009 and 2011. (Table 1 and Figure 1)

#### State Trends

- Between 2009 and 2013, covered employment and wages increased in almost every state.
   (Tables 3 and 4)
- Workers' compensation benefits paid per \$100 of covered wages decreased in 39 jurisdictions. (Table 12)
- Employers' costs for workers' compensation per \$100 of covered wages increased in 27 jurisdictions. (Table 14)
- In 2013, the states with the highest employer costs for workers' compensation were Alaska (\$2.58 per \$100 of covered payroll), Montana (\$2.24 per \$100 of covered payroll), and Oklahoma (\$2.24 per \$100 of covered payroll). (Table 14)
- Jurisdictions with the lowest employer costs were District of Columbia (\$0.47 per \$100 of covered payroll), Massachusetts (\$0.74 per \$100 of covered payroll), and Texas (\$0.80 per \$100 of covered payroll). It is to be noted that in Texas, workers' compensation coverage is elective for most employers. (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 that pay the bills. (See Appendix A for methods used to estimate coverage.) In the period 2009-2013, workers' compensation benefits, coverage, and costs increased in absolute terms. However, as a share of covered payroll, employer costs increased but benefits to injured workers decreased. (Table 1)

Total workers' compensation benefits (cash benefits paid to injured workers and medical payments for

**Table 1**Overview of Workers' Compensation Benefits, Coverage, and Costs, 2009-2013

			Percent Chan	ige
		Intermediate-	Years Change	Five-Year Change
Aggregate Benefits, Coverage and Costs	2013	2009-2011	2011-2013	2009-2013
Covered Workers (in thousands)	129,602	0.8	3.0	3.8
Covered Wages (in billions)	\$6,458	6.6	6.8	13.8
Workers' Compensation Benefits Paid (in billions)	63.6	3.7	4.3	8.2
Medical Benefits	31.5	6.7	3.4	10.3
Cash Benefits	32.0	0.9	5.3	6.2
Employer Costs for Workers' Compensation (in billions)	88.5	5.3	13.8	19.8

		]	Percent Chan	ge
Benefits and Costs per \$100 of		Intermediate-Y	Years Change	Five-Year Change
Covered Wages	2013	2009-2011	2011-2013	2009-2013
Workers' Compensation Benefits Paid	\$0.98	-\$0.03	-\$0.02	-\$0.05
Medical Benefits	0.49	0.00	-0.02	-0.02
Cash Benefits	0.50	-0.03	-0.01	-0.04
Employer Costs for Workers' Compensation	1.37	-0.02	0.08	0.07

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

Source: National Academy of Social Insurance estimates.

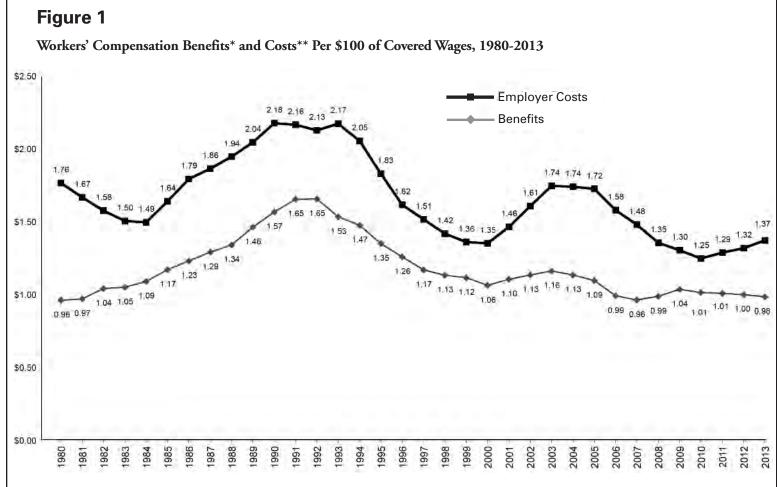
their health care) were \$63.6 billion in 2013, an 8.2 percent increase from 2009. Medical payments increased by 10.3 percent to \$31.5 billion, and cash benefits increased by 6.2 percent to \$32.0 billion. Controlling for changes in covered payroll, total benefits decreased by \$0.05 (to \$0.98 per \$100 of covered wages); medical payments decreased by \$0.02 (to \$0.49 per \$100 of covered wages), and cash benefits decreased by \$0.04 (to \$0.50 per \$100 of covered wages) in the period 2009-2013.

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. 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).

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

Workers' compensation costs to employers were \$88.5 billion in 2013, an increase of 19.8 percent in the period 2009-2013. Over the same period, the number of workers covered by workers' compensa-



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

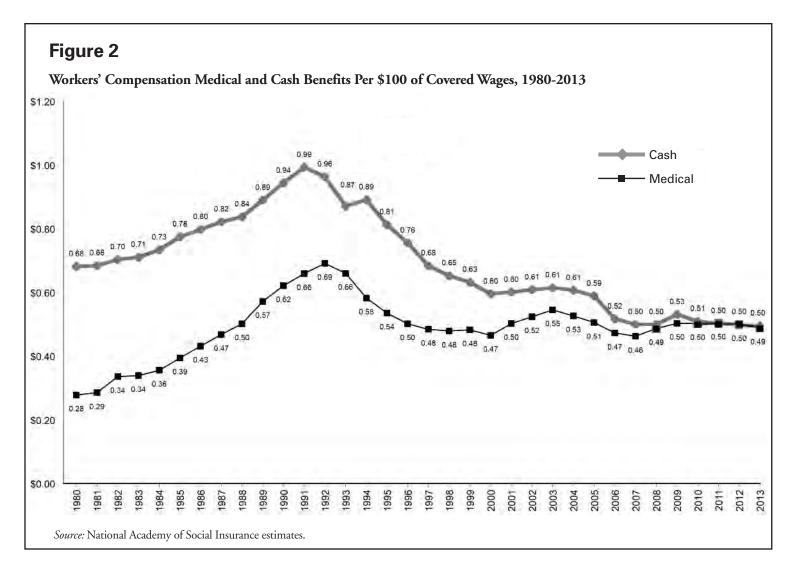
Source: National Academy of Social Insurance estimates.

tion increased by 3.8 percent, and covered wages increased by 13.8 percent. When measured relative to \$100 of covered wages, employer costs increased by \$0.07 over the period 2009-2013 (to \$1.37 per \$100 of covered wages).

The recent increases in workers' compensation benefits, costs, and coverage reflect, at least in part, the U.S. economy slowly recovering from the Great Recession. As employment increases, the number of workers covered by workers' compensation increases along with the number of work-related injuries. Thus, workers' compensation benefits and costs increase as well. Employer costs increase more rapidly at first, reflecting the increases in premiums paid to cover additional workers. Benefits increase more

slowly with increasing coverage, because benefits 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 the growth in covered wages to identify trends over time and to make comparison among states.

Figure 1 shows long-term trends in benefits and costs per \$100 of covered wages. Employer costs have been steadily increasing with the economic recovery, although are still near historic lows. Benefits per \$100 of covered wages have been fairly constant since 2006 and at lower levels than at any time since 1980-81 (Figure 1).



# **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 2013 begins on page 16.

### **History of Workers' Compensation**

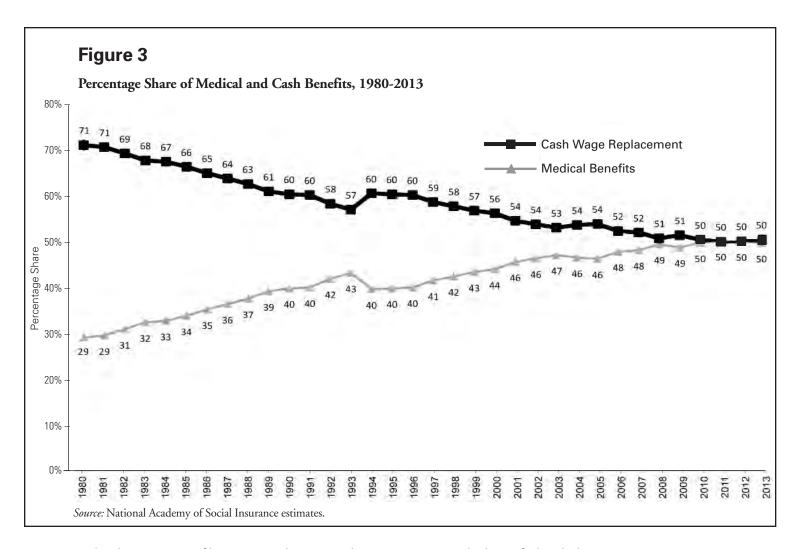
Workers' compensation was the first social insurance program adopted in developed countries. Germany enacted the first modern workers' compensation laws, known as Sickness and Accident Laws, in 1884 under Chancellor Otto von Bismarck (Clayton 2004). The next such laws were enacted in England in 1897.

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. The last state to pass a workers' compensation law was Mississippi in 1948. By 2013, workers' compensation coverage was 100 years old in 22 states (Fishback and Kantor 1996).

Before workers' compensation laws were enacted, injured workers' primary legal remedy for a work-

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).

<sup>4</sup> NATIONAL ACADEMY OF SOCIAL INSURANCE



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 generally 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 were in the form of employer liability acts, which eliminated some of the employer's common law defenses. Nonetheless, employees still had the burden of proving negligence on the part of the employer, which remained a significant obstacle to recovery of damages (Burton and Mitchell 2003).<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

<sup>2</sup> Some injured workers received voluntary compensation from their employers or medical benefits paid through the employer's liability insurance, but many workers received no compensation at all.

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."

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

liability was limited to the statutory benefits specified in the 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 in which injured workers gave up the right to sue their employers in return for guaranteed benefits, and employers gave up their common law defenses in return for statutory limits on coverage.

Texas has long been the only state that allows private employers to opt out of workers' compensation insurance altogether. Oklahoma recently became the second state to opt out.

Today, each of the 50 states, the District of Columbia, and U.S. territories has its own workers' compensation program. Separate U.S. government programs cover federal civilian employees, longshore and harbor workers, and specific high-risk workers (e.g. coal miners with black lung disease, energy employees, workers exposed to radiation, 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 employers with a small number of employees or workers in specific classifications, such as agricultural or domestic employees. Oklahoma recently adopted a form of optout law that is a competitive alternative to a traditional workers' compensation plan.<sup>6</sup>
- Workers' compensation pays 100 percent of injury-related medical costs for workers from the day of injury 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 duration of total disability becomes protracted.
- 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 selfinsure.<sup>7</sup> In a few states, the cost of some workers' compensation benefits and services is paid, in part, by workers through direct payroll deductions or charges.<sup>8</sup>

### **Workers' Compensation Benefits**

Medical-only cases. Most workers' compensation cases do not involve lost work time in excess of the waiting period for cash benefits, so the only costs are medical payments to providers. "Medical-only" cases are the

<sup>5</sup> 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.

<sup>6</sup> Effective January 1, 2014, the Oklahoma workers' compensation statute 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 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. 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, local governments.

<sup>7</sup> Some economists argue that workers pay a substantial portion of program costs indirectly in the form of lower wages (Leigh, et al. 2000).

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.

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), medical-only cases accounted for 75 percent of workers' compensation cases but only 7 percent of total benefit payments in the 38 states where NCCI is licensed, for policy years spanning 1993–2010 (NCCI 2014b).

Temporary disability cases. Temporary total disability (TTD) benefits are paid when a work-related injury or illness temporarily prevents workers from returning to their pre-injury job or another job for the same employer for a period of time. Temporary total disability cases are the most common type of claim involving cash benefits, accounting for more than 61 percent of all cases involving cash benefits but less than 28 percent of cash benefits paid in 2010 (refer to footnote 10 for detailed explanation of TTD claims). TTD cases have varied between 58-72 percent of the cases paying cash benefits in the years 1993-2010 but accounted for less than 29 percent of cash benefits paid (Figure 4).

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

Most states pay tax-exempt weekly benefits for temporary total disability that replaces approximately two-thirds of the worker's pre-injury weekly earnings. The earnings covered by workers' compensation may be limited to the usual or average wages paid to the worker by the time-of-accident employer. If the worker has concurrent employment, earnings from a second or other job may not be included in the temporary disability benefits.

Compensation for temporary disability is subject to maximum and minimum benefit levels that vary from state to state. As of January 2014, the maximum weekly TTD benefit ranged from a high of \$1,543 in Iowa to a low of \$449 in Mississippi. The minimum weekly benefit ranged from a high of \$527 in North Dakota to a low of \$20 in Florida. 10

Permanent disability cases. Some injured workers experience work-related injuries or illnesses that result in permanent impairments. Eligibility for permanent disability benefits is determined after the injured worker reaches maximum medical improvement (the point at which further medical intervention is no longer expected to improve functional capacity or provide further healing).

Permanent total disability (PTD) benefits are paid to workers who are unable to work at all because of a job-related injury or illness. Permanent partial disability (PPD) benefits are paid to workers who have permanent impairments to the body. These may be related to reduced earning capacity or purely based on the 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 cases are more common. In 2010, PPD cases accounted for less than 38 percent of cases involving cash benefits but more than 58 percent of cash benefits paid. PPD cases varied between 27-41 percent of the cases paying cash benefits in the years 1993-2010 but accounted for 57-65 percent of all cash benefits (Figure 4). Permanent total disability cases are relatively rare, accounting for less than 1 percent of cases involving cash benefits and 7-13 percent of total payments for cases in the period 1993-2010 (Figure 4). <sup>11</sup>

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

<sup>9</sup> It is also to be noted that some states like Colorado, Iowa, Maine, Michigan, Montana, Nevada, and Oklahoma do not have a specified minimum.

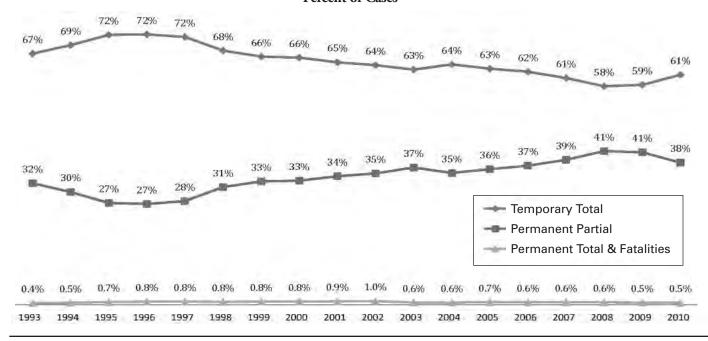
<sup>10</sup> Details on benefit and coverage provisions of state laws are compiled in Workers' Compensation Laws as of January 2014, issued jointly by the International Association of Industrial Accident Boards and Commissions and the Workers Compensation Research Institute and summarized in Appendix C.

<sup>11</sup> Note that when workers' compensation claims are classified into discrete types, this is typically done by labeling the claim classification by the most severe type of disability benefit received. For example, a permanent partial disability beneficiary has typically also received temporary disability benefits, but the entire cost of cash benefits in the claim is ascribed to its permanent partial disability claim type.

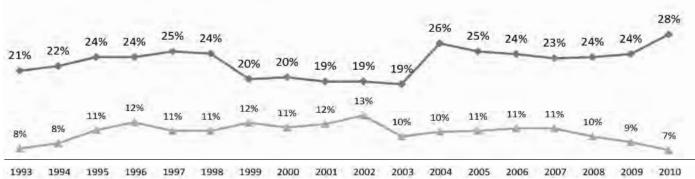
Figure 4

Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 1993-2010

Percent of Cases



#### **Percent of Benefits** 65% 65% 64% 63% 63% 62% 61% 60% 60% 59% 59% 58% 58% 58% 58% 58% Permanent Partial Temporary Total Permanent Total & Fatalities



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

Source: NCCI 1995-2014, Annual Statistical Bulletin, Exhibits X and XII.

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. Most states impose limits on the maximum duration or dollar amount of permanent disability benefits.

## Sources of Workers' Compensation Insurance

Non-federally covered employers pay for workers' compensation by purchasing insurance from a private insurance carrier or from 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. Federal workers' compensation insurance covers federal civilian employees and some private-sector workers in high-risk jobs or defense-related employment.

Private insurance. Workers' compensation policies written by private insurers operate much like automobile or homeowners' insurance. Employers purchase insurance for a premium that varies according to expected risk and the amount of a deductible, if any. There are two types of policies sold by private carriers. An employer can purchase a policy that requires the insurer to pay all workers' compensation benefits. Some employers can purchase 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 basis, or a combination of a per injury basis with an aggregate cap, and states vary in the maximum deductibles they allow in workers' compensation insurance. State funds. In 22 states, workers' compensation insurance is provided to some (or all) employers by a state agency. In general, these state funds are estab-

lished by an act of the 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. In 2013, four states 12 had exclusive state funds. A competitive state fund competes with other insurers in the state, so these state funds are sometimes difficult to identify. 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. According to these criteria, in 2013, 17 states had competitive state funds. <sup>13</sup> In 2013, 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.

Self-insurance. Many large employers choose to self-insure for workers' compensation. Employers are allowed to self-insure in all but two states. <sup>14</sup> Where self-insurance is permitted, employers must apply for permission from the regulatory authority and demonstrate they have the financial resources to cover their expected losses. Some states permit groups of employers in the same industry or trade association to self-insure through group self-insurance.

Special funds. State guaranty funds ensure payment of benefits to injured workers in cases where private insurance carriers or self-insured employers become insolvent. Second injury funds reimburse employers or insurance carriers in cases where an employee with a pre-existing impairment experiences another work-related injury or illness. The second injury fund pays costs associated with the prior condition to encourage employers to hire injured workers 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>15</sup>

<sup>12</sup> In 2013, North Dakota, Ohio, Washington, and Wyoming had exclusive state funds. West Virginia state fund is paying off some of its previous claims before 2009, hence a runoff amount in state fund benefits paid in Table 8.

<sup>13</sup> 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.

<sup>14</sup> North Dakota and Wyoming require all employers to obtain workers' compensation insurance from their exclusive state funds. Ohio and Washington have exclusive state funds, but employers also have the option to self-insure.

<sup>15</sup> See Sources and Methods 2013 on the Academy website for further details on special funds, second injury funds, and guaranty funds.

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, longshore and harbor workers, 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. (More details about these federal programs are provided in Appendix B.)

The workers' compensation system involves numerous stakeholder groups (employers, insurers, workers, medical providers, state and federal governments) but the estimates presented in this report reflect the aggregate experience of only two: workers who rely on compensation for workplace injuries and employers that pay the bills. The Academy measures are *not designed* to assess the performance of the insurance industry or insurance markets; other organizations analyze insurance trends. <sup>16</sup> The estimates also are *not designed* to measure the adequacy of benefits paid to injured workers.

Employers typically purchase workers' compensation insurance from private insurers, but some large firms choose to self-insure, and some firms are insured through their state.

# **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. The Academy uses the number of workers and amount of wages covered by unemployment insurance (UI) in each state as the starting point for its estimates. 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, 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.

The Academy 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 also may voluntarily purchase workers' compensation insurance.

On the other hand, the Academy methodology may overestimate the number of workers (and wages) because some employers are not in compliance with their state's workers' compensation or unemployment compensation laws (Table 2). Every state has a program to detect and penalize employers that fail to report or cover employees under state workers' compensation or unemployment compensation 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 2013, workers' compensation covered an estimated 129.6 million workers, or 90 percent of the employed workforce. <sup>17</sup> Nearly all (96.7%) workers covered by unemployment insurance were covered

<sup>16</sup> 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.

<sup>17</sup> According to the Bureau of Labor Statistics (BLS), the total employed workforce in the United States was 144 million in December 2013.

**Table 2**Workers' Compensation Covered Workers and Covered Wages, 1993-2013

	Total V	Workers	Total	Wages
Year	(thousands)	Percent Change	(billions)	Percent Change
1993	106,200	1.8	\$2,802	3.8
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	124,454	-0.3	5,820	2.6
2011	125,833	1.1	6,049	3.9
2012	127,904	1.6	6,309	4.3
2013	129,602	1.3	6,458	2.4

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

by workers' compensation. <sup>18</sup> The number of workers covered in 2013 was 3.8 percent greater than the number of workers covered in 2009, with most of the increase (3.0%) occurring between 2011 and 2013. Total wages of covered workers were \$6.5 trillion in 2013, an increase of 13.8 percent from 2009. Covered wages increased by approximately 7 percent between 2009 and 2011 and again between 2011 and 2013.

In 2013, nearly 130 million workers, or approximately 90 percent of the U.S. workforce, were covered by workers' compensation.

Between 2009 and 2013, all states experienced an increase in covered wages (Tables 3 and 4). All states

<sup>18</sup> Acording to unpublished estimates provided by the BLS, 3 percent of civilian workers represented by the BLS National Compensation Survey (NCS) were employed in establishments reporting zero annual workers' compensation costs in December 2013. (Civilian workers are those employed in private industry or state and local governments.) The Academy estimate of legally required workers' compensation coverage is 96.7 percent of all UI covered workers in 2013 that is virtually identical to the workers' compensation coverage shown by the NCS.

 Table 3

 Workers' Compensation Covered Workers, by State, 2009-2013

		Number o	Number of Workers (	(in thousands)	ds)	Intermed	Intermediate-Years Percent Change	Five-Year Percent Change	Ranking (1=largest percent
State	2009	2010	2011	2012	2013	2009-2011	2011-2013	2009-2013	increase, 2009-2013)
Alabama	1,702	1,679	1,680	1,697	1,716	-1.3	2.1	0.8	48
Alaska	297	299	305	311	313	2.8	2.6	5.5	9
Arizona	2,340	2,295	2,326	2,374	2,431	9.0-	4.5	3.9	19
Arkansas	1,078	1,075	1,083	1,092	1,072	0.4	-1.0	-0.5	50
California	14,377	14,171	14,310	14,674	15,139	-0.5	5.8	5.3	8
Colorado	2,137	2,110	2,147	2,200	2,271	0.5	5.8	6.3	5
Connecticut	1,596	1,576	1,594	1,611	1,623	-0.1	1.8	1.7	39
Delaware	395	392	396	398	407	0.1	2.7	2.8	29
District of Columbia	482	483	494	909	519	2.6	5.0	7.7	4
Florida	6,689	6,612	6,688	6,832	6,924	0.0	3.5	3.5	23
Georgia	3,592	3,543	3,584	3,637	3,643	-0.2	1.6	1.4	42
Hawaii	559	551	558	569	583	-0.2	4.6	4.4	15
Idaho	009	592	595	602	618	-0.9	3.9	3.0	27
Illinois	5,452	5,397	5,467	5,537	5,590	0.3	2.2	2.5	31
Indiana	2,655	2,655	2,705	2,762	2,799	1.9	3.5	5.4	7
Iowa	1,415	1,402	1,419	1,443	1,464	0.3	3.2	3.5	22
Kansas	1,283	1,261	1,268	1,285	1,303	-1.1	2.7	1.6	40
Kentucky	1,667	1,665	1,689	1,718	1,738	1.3	2.9	4.3	17
Louisiana	1,813	1,796	1,811	1,833	1,858	-0.1	2.6	2.5	32
Maine	564	559	562	595	569	-0.4	1.2	8.0	47
Maryland	2,326	2,310	2,330	2,363	2,384	0.2	2.3	2.5	33
Massachusetts	3,087	3,098	3,136	3,190	3,244	1.6	3.4	5.1	10
Michigan	3,608	3,596	3,678	3,764	3,775	1.9	2.6	4.6	13
Minnesota	2,521	2,506	2,553	2,597	2,643	1.3	3.6	4.9	11

Mississippi	1,004	966	866	1,008	1,017	9.0-	1.9	1.3	43	
Missouri	2,435	2,400	2,409	2,435	2,466	-1.1	2.4	1.3	45	
Montana	407	405	406	414	421	5.0-	3.7	3.2	26	
Nebraska	928	870	874	892	905	-0.1	3.5	3.4	25	
Nevada	1,118	1,088	1,095	1,112	1,140	-2.1	4.1	1.9	37	
New Hampshire	597	593	298	909	611	0.2	2.2	2.3	34	
New Jersey	3,712	3,680	3,687	3,725	3,769	-0.7	2.2	1.5	41	
New Mexico	734	720	721	725	718	-1.9	-0.3	-2.2	51	
New York	8,198	8,195	8,308	8,428	8,549	1.4	2.9	4.3	16	
North Carolina	3,645	3,602	3,652	3,722	3,720	0.2	1.9	2.1	35	
North Dakota	337	345	366	399	414	8.7	13.0	22.8	1	
Ohio	4,866	4,822	4,888	4,967	5,033	0.5	3.0	3.4	24	
Oklahoma	1,379	1,359	1,375	1,404	1,433	-0.3	4.2	3.9	20	
Oregon	1,578	1,567	1,587	1,612	1,651	9.0	4.1	4.7	12	
Pennsylvania	5,344	5,343	5,409	5,458	5,482	1.2	1.4	2.6	30	
Rhode Island	438	436	437	441	445	-0.1	1.8	1.7	38	
South Carolina	1,670	1,657	1,681	1,711	1,732	0.7	3.0	3.7	21	
South Dakota	374	374	378	385	389	1.1	2.9	4.0	18	
Tennessee	2,422	2,410	2,454	2,503	2,546	1.3	3.8	5.1	6	
Texas	7,818	8,234	8,334	8,477	8,623	6.6	3.5	10.3	2	
Utah	1,118	1,109	1,137	1,177	1,216	1.7	6.9	8.8	3	
Vermont	284	284	287	290	292	6.0	2.0	3.0	28	
Virginia	3,290	3,273	3,316	3,355	3,318	0.8	0.0	0.8	46	
Washington	2,697	2,667	2,707	2,751	2,820	0.4	4.2	4.6	14	
West Virginia	650	638	099	0/9	652	1.6	-1.3	0.3	49	
Wisconsin	2,539	2,523	2,557	2,587	2,571	0.7	0.5	1.3	44	
Wyoming	267	263	267	271	272	0.0	2.0	1.9	36	
Total Non-Federal	122,029	121,474	122,969	125,083	126,831	8.0	3.1	3.9		_
Federal Employees	2,827	2,981	2,864	2,820	2,771	1.3	-3.2	-2.0		_
TOTAL	124,856	124,454	125,833	127,904	129,602	0.8	3.0	3.8		_

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

 Table 4

 Workers' Compensation Covered Wages, by State, 2009-2013

			(m: ill: m = :)	(5.5)		Intermediate-Years	Years	Five-Year	Ranking
State	2009	2010	2011	2012	2013	2009-2011 201	2011-2013	2009-2013	(1=1at gest percent increase, 2009-2013)
Alabama	\$65,522	\$65,951	\$67,349	\$69,494	\$70,846	2.8	5.2	8.1	49
Alaska	13,664	14,062	14,677	15,367	15,822	7.4	7.8	15.8	6
Arizona	99,095	98,288	102,162	106,986	110,455	3.1	8.1	11.5	33
Arkansas	37,932	38,156	39,889	41,240	41,290	5.2	3.5	8.9	46
California	737,852	749,264	783,390	831,610	861,194	6.2	6.6	16.7	5
Colorado	99,015	99,804	104,124	110,073	114,426	5.2	9.6	15.6	12
Connecticut	92,085	93,616	97,281	99,935	101,064	5.6	3.9	9.7	40
Delaware	18,811	19,023	19,913	20,553	21,108	5.9	0.9	12.2	26
District of Columbia	34,195	35,214	36,805	38,542	39,756	7.6	8.0	16.3	7
Florida	271,057	271,812	279,786	291,892	299,051	3.2	6.9	10.3	38
Georgia	151,782	153,215	159,127	166,046	168,319	4.8	5.8	10.9	35
Hawaii	22,355	22,130	22,753	23,760	24,753	1.8	8.8	10.7	37
Idaho	20,173	20,335	20,868	21,463	22,475	3.4	7.7	11.4	34
Illinois	262,097	265,517	276,331	287,520	292,573	5.4	5.9	11.6	30
Indiana	100,758	103,299	107,900	113,017	115,798	7.1	7.3	14.9	15
Iowa	52,217	53,097	55,306	57,861	59,873	5.9	8.3	14.7	16
Kansas	48,760	48,552	50,106	52,268	53,607	2.8	7.0	6.6	39
Kentucky	62,585	63,736	260,99	68,692	70,161	5.6	6.1	12.1	27
Louisiana	72,822	73,643	76,078	78,716	81,171	4.5	6.7	11.5	32
Maine	20,270	20,502	20,959	21,426	21,976	3.4	4.9	8.4	48
Maryland	112,865	114,291	117,735	122,148	123,586	4.3	5.0	9.5	42
Massachusetts	172,995	178,233	186,326	193,733	200,044	7.7	7.4	15.6	11
Michigan	156,539	158,816	167,420	174,717	176,734	7.0	5.6	12.9	21
Minnesota	113,658	116,787	121,674	127,560	132,003	7.1	8.5	16.1	8
Mississippi	33,309	33,545	34,254	35,487	36,438	2.8	6.4	9.4	44

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

All states experienced an increase in covered wages, and most states experienced an increase in covered workers, between 2009 and 2013.

except Arkansas and New Mexico experienced an increase in covered workers. North Dakota experienced the largest growth in coverage (22.8% increase in covered workers and 64.8% increase in covered wages), followed by Texas (10.3% increase in covered workers and 30.3% increase in covered wages with only a 1% increase in subscribed employers). New Mexico experienced the smallest growth in coverage (2.2% decline in covered workers, 3.9% increase in covered wages). Other states with below-average growth were Arkansas (0.5% decline in covered workers) and Nevada (5.2% increase in covered wages). The largest increases in covered wages occurred in North Dakota (64.8%) and Texas (30.3%). The smallest increase, only about one-third of the national average, was in New Mexico (3.9%). Workers' compensation coverage rules did not change significantly between 2009 and 2013, so differences in growth rates of covered employment and wages across states primarily reflect differences in the states' growth rates of employment and wages.

# **Workers' Compensation Benefits Paid**

## Methods for Estimating Benefits Paid

The Academy's estimates of workers' compensation benefits paid are based on three main data sources:

1) responses to the annual questionnaire the Academy distributes to state agencies; 2) data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies; and 3) data from NCCI. Together, the data from state agencies and A.M. Best allow us to piece together estimates of workers' compensation benefits paid under polices with private carriers or state funds or by self-insured employers.

The U.S. Department of Labor provides data on benefits paid through federal programs. The NCCI data are the main data source for estimating medical payments to providers.

The primary sources of data on benefits paid are the responses of state agencies to the Academy's questionnaire on workers' compensation benefits and costs. The questionnaire is distributed annually to state agencies overseeing workers' compensation programs. This year responses were received from 44 jurisdictions, for a response rate of 88 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 were unable to report benefits paid by self-insured employers, these amounts were imputed based on estimates of self-insured payrolls in the state. 19 Benefits provided under group selfinsurance are included with self-insured benefits in this report.

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 2009 through 2013. The data include information for all private carriers in every state and for 17 of the 22 state funds but do not include information about benefits paid by the other five state funds, by self-insured employers, by employers under deductible policies, or by special funds.<sup>20</sup>

Medical benefits were estimated based on information from the NCCI for most states. Where NCCI data were not available, medical benefits were based on reports from the states. Benefits paid through special funds, second injury funds, and guaranty funds were estimated from state survey data and websites of the state agency workers' compensation divisions. For the last several years, the Academy has reported data on these funds and has included their benefits payments in the national estimates of total benefits in Table 5 and in the state estimates of total benefits in Table 8.

<sup>19</sup> The methodology for deductible benefits estimation and self-insurance imputation is described in detail in *Sources and Methods: A Companion to Workers' Compensation Benefits Coverage and Costs 2013* at www.nasi.org.

<sup>20</sup> A. M. Best does not provide data on the four exclusive state funds (Ohio, North Dakota, Washington, and Wyoming), or the state fund in South Carolina that only provides benefits to government workers.

**Table 5**Workers' Compensation Benefits Paid, by Type of Insurer, 1963-2013

	Private Ir	nsured	State Fund	Insured	Feder	al	Self-In	sured		All Ins		
	75 1	0/	77 1	0/	75 1	0/	T 1	0/	Total	% Change	Total	0/
37	Total	%	Total	%	Total	%	Total	%	Benefits	from Prior		% 
Year	(millions)	Share	(millions)	Share	(millions)	Share	(millions)	Share	(millions)	Year	(millions)	
1963	\$988	62.4	\$318	20.1	\$70	4.4	\$207	13.1	\$1,583	6.3	\$525	33.2
1964	1,070	62.6	339	19.8	73	4.3	226	13.2	1,708	7.9	565	33.1
1965	1,124	62.0	371	20.5	74	4.1	244	13.5	1,813	6.1	600	33.1
1966	1,239	62.0	404	20.2	82	4.1	275	13.8	2,000	10.3	680	34.0
1967	1,363	62.2	430	19.6	94	4.3	303	13.8	2,190	9.5	750	34.2
1968	1,482	62.4	451	19.0	105	4.4	338	14.2	2,376	8.5	830	34.9
1969	1,641	62.3	486	18.5	121	4.6	386	14.7	2,634	10.9	920	34.9
1970	1,843	60.8	497	16.4	258	8.5	432	14.3	3,030	15.0	1,050	34.7
1971	2,005	56.3	549	15.4	549	15.4	460	12.9	3,563	17.6	1,130	31.7
1972	2,179	53.6	633	15.6	746	18.4	504	12.4	4,062	14.0	1,250	30.8
1973	2,514	49.3	720	14.1	1,278	25.0	592	11.6	5,104	25.7	1,480	29.0
1974	2,971	51.4	823	14.2	1,263	21.8	724	12.5	5,781	13.3	1,760	30.4
1975	3,422	51.9	957	14.5	1,367	20.7	852	12.9	6,598	14.1	2,030	30.8
1976	3,976	52.4	1,088	14.3	1,482	19.5	1,039	13.7	7,585	15.0	2,380	31.4
1977	4,629	53.6	1,209	14.0	1,541	17.9	1,250	14.5	8,629	13.8	2,680	31.1
1978	5,256	53.7	1,221	12.5	1,822	18.6	1,497	15.3	9,796	13.5	2,980	30.4
1979	6,157	51.2	1,709	14.2	2,313	19.2	1,848	15.4	12,027	22.8	3,520	29.3
1980	7,029	51.6	1,797	13.2	2,533	18.6	2,259	16.6	13,618	13.2	3,947	29.0
1981	7,876	52.3	2,017	13.4	2,578	17.1	2,583	17.2	15,054	10.5	4,431	29.4
1982	8,647	52.7	2,191	13.4	2,577	15.7	2,993	18.2	16,408	9.0	5,058	30.8
1983	9,265	52.7	2,443	13.9	2,618	14.9	3,249	18.5	17,575	7.1	5,681	32.3
1984	10,610	53.9	2,754	14.0	2,651	13.5	3,671	18.6	19,686	12.0	6,424	32.6
1985	12,341	55.5	3,059	13.8	2,685	12.1	4,132	18.6	22,217	12.9	7,498	33.7
1986	13,827	56.2	3,554	14.4	2,694	10.9	4,538	18.4	24,613	10.8	8,642	35.1
1987	15,453	56.6	4,084	15.0	2,698	9.9	5,082	18.6	27,317	11.0	9,912	36.3
1988	17,512	57.0	4,687	15.3	2,760	9.0	5,744	18.7	30,703	12.4	11,507	37.5
1989	19,918	58.0	5,205	15.2	2,760	8.0	6,433	18.7	34,316	11.8	13,424	39.1
1990	22,222	58.1	5,873	15.4	2,893	7.6	7,249	19.0	38,237	11.4	15,187	39.7
1991	24,515	58.1	6,713	15.9	2,998	7.1	7,962	18.9	42,187	10.3	16,832	39.9
1992	24,030	53.8	7,829	17.5	3,158	7.1	9,643	21.6	44,660	5.9	18,664	41.8
1993	21,773	50.7	8,105	18.9	3,189	7.4	9,857	23.0	42,925	-3.9	18,503	43.1
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	28,601	48.7
2010	31,634	53.7	9,748	16.5	3,672	6.2	13,862	23.5	58,916	0.3	29,268	49.7
2011	32,696	53.7	9,826	16.1	3,777	6.2	14,630	24.0	60,929	3.4	30,506	50.1
2012	34,370	54.5	10,020	15.9	3,776	6.0	14,865	23.6	63,030	7.0	31,496	50.0
2013	35,316	55.6	9,606	15.1	3,691	5.8	14,961	23.5	63,574	4.3	31,549	49.6

#### Table 5 continued

Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care, including benefits paid by employers under deductible provisions in their worker's compensation insurance. 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 1997–2013, 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 2014, and DOL 2015.

A detailed, state-by-state explanation of how the benefit estimates in this report are produced and description of special funds, second injury funds, and guaranty funds are provided in *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2013* on the Academy's website (www.nasi.org).

#### National Estimates of Benefits Paid

Benefits by type of insurer. Table 5 shows benefits paid by type of insurer (private insurers, state funds, federal programs, and self-insured employers) since 1963. Private insurance carriers have been the single largest payer of workers' compensation benefits throughout the 50-year period. In 2013, private carriers accounted for slightly more than half (55.6%) of all benefits paid.

Private insurance carriers are the largest single payer of workers' compensation benefits, accounting for more than half of benefits paid in 2013.

Self-insured employers were the second largest payer of workers' compensation benefits, accounting for approximately one-fourth (23.5%) of all benefits paid in 2013. The share of benefits paid by self-insured employers doubled between 1963 and 1993 but has been relatively stable since then.

There were 22 state funds in 2013 (Arizona disestablished its state fund in 2012). State funds accounted for 15.1 percent of workers' compensation benefits paid in 2013, a decrease of 0.8 percentage points from 2012 and its lowest share since 1989. Between 2012 and 2013, the share of benefits paid by the state fund decreased in seven states (Colorado, Louisiana, Maryland, New Mexico, New York, Oklahoma, and South Carolina), and either increased or remained constant elsewhere.

Federal funds accounted for 5.8 percent of all workers' compensation payments in 2013, a decrease of 0.2 percentage points from 2012. The proportion of workers' compensation benefits paid by federal funds has remained stable at 6 to 7 percent for the last 20 years.<sup>21</sup>

Deductibles. Table 6 shows the estimated dollar amount of benefits employers paid under deductible provisions with private carriers or state funds since 1993. In 2013, employer payments under deductibles totaled \$10.8 billion, or 17.0 percent of total benefits paid. Deductibles as a share of total benefits increased 10 percentage points between

<sup>21</sup> The spike in federal benefits in the 1970s is entirely accounted for by the black lung program. Prior to 1970, federal data included only payments for federal civilian employees under the Federal Employees Compensation Act (FECA). The federal program for workers with black lung disease began paying benefits in 1970, and by 1973 nearly doubled its payments to approximately \$1 billion. The startup of this program was the sole explanation for the large increase in federal share of benefits in the early 1970s. The federal share has since declined as payments under the black lung program have diminished, due largely to the aging and death of the claimant population and the change to the responsible operator system that increased the level of defense on claims. Also, the presumptions included in the 1970s legislation were largely eliminated by changes in 1981, leading to a very real drop in the number of approved claims. Section 1556 of the 2010 Patient Protection and Affordable Care Act amended the Black Lung Benefits Act to restore the presumptions (Appendix B).

Table 6
Workers' Compensation Employer-Paid Benefits Under Deductible Provisions, 1993-2013

		Deductibles (in m	illions)	Deductibles as a % or
Year	Total	Private Insured	State Fund Insured	Total Benefits
1993	\$2,027	\$2,008	\$19	4.7
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	10,812	10,280	532	17.0

*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.

1993 and 2003 (4.7% to 14.7%) but have increased more gradually since then.

Employers that have policies with deductibles are, in effect, self-insured up to the amount of the deductible. Adding benefits paid under deductibles to benefits paid by self-insured employers shows the share of the total workers' compensation market for which employers are assuming primary financial risk. In 2013, 40.5 percent of benefits were directly paid

by employers (Table 7, column 9). Over the last two decades, employers' share of workers' compensation benefit payments has increased from about 27 percent to more than 40 percent. The increase has been accompanied by decreases in the share of payments (net of deductibles) made by private carriers (down from 46% to 39.4%) and state funds (down from 18.9% to 14.3%). (Refer to columns 3 and 6 of Table 7.)

**Table 7**Percentage Distribution of Workers' Compensation Benefit Payments, by Type of Insurer: With and Without Deductibles, 1993-2013

					Pe	ercent of Total	l Benefits			
	Total		Private Inst	Insurer		State Fund In Employer	Insurer			
**	Benefits		Paid	Paid After	- I	Paid	Paid After		Self-	Total
Year	(millions)	(1)	Deductibles (2)	Deductibles (3)	(4)	Deductibles (5)	Deductibles (6)	Federal (7)	Insured (8)	Employer Paid $(9) = (2) + (5) + (8)$
1993	\$42,925	50.7	4.7	46.0	18.9	*	18.9	7.4	23.0	27.6
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	58,916	53.7	14.4	39.3	16.5	0.7	15.8	6.2	23.5	38.6
2011	60,929	53.7	13.8	39.9	16.1	0.7	15.4	6.2	24.0	38.5
2012	63,030	54.5	15.8	38.8	15.9	0.9	15.0	6.0	23.6	40.2
2013	63,574	55.6	16.2	39.4	15.1	0.8	14.3	5.8	23.5	40.5

<sup>\*</sup> Negligible

*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.

## Estimates of Benefits Paid by State

Benefits by type of insurer. Table 8 shows the shares of workers' compensation benefits paid by each type of insurer in each state in 2013. The shares vary considerably across states because not all states have a state fund, and because the legal status of state funds varies across states where they exist. (In some states, for example, the state fund is the exclusive provider of workers' compensation insurance; in some states, the state fund competes with private insurers; in some states, the state fund is exclusive except for employers that self-insure.)

The share of benefits paid by *private carriers* ranges from more than 85 percent in some jurisdictions with no state fund (District of Columbia, Indiana, South Dakota, Vermont, Wisconsin) to 1 percent or less in the four states with exclusive state funds (North Dakota, Ohio, Washington, Wyoming).<sup>22</sup>

In the states with exclusive state funds, the share of benefit payments accounted for by the *state fund* varies from 99 percent in North Dakota and Wyoming (states that do not allow self-insurance) to approximately 80 percent in Ohio and Washington (states that allow qualifying employers to self-insure). In the 17 states with competitive state funds in 2013, the percentage of benefits accounted for by the state fund varies from a high of 59 percent in Idaho to less than 10 percent in New Mexico, Pennsylvania, and South Carolina.

In states that allow employers to self-insure, the share of workers' compensation benefits paid by *self-insured* employers varies widely. In 2013, the share attributed to self-insurance ranged from a high of 51.9 percent in Alabama to a low of 3.9 percent in South Dakota. There are several explanations for the tremendous variation in take-up rates within states that allow 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 selfinsured employers, thereby increasing the incentive to self-insure. 3) Self-insurance and private insurance are substitutes, so the self-insured market share is sensitive to the premium level 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) The Academy methods for estimating benefits paid by self-insured employers (discussed in detail in the Sources and Methods section on the Academy website at www.nasi.org) vary across states, depending on responses to the Academy survey and availability of A.M. Best data. Hence, measurement error may account for some of the observed variation in the share of benefits paid by self-insured employers.

Nationally, the share of workers' compensation benefits paid by self-insured employers was 25 percent in 2013. Some states, however, do not allow employers to self-insure.

Share of medical benefits. Table 8 also shows, for each state, the share of workers' compensation benefits going to medical care for injured workers. Nationally, about half of all workers' compensation benefits go to medical care, but across states the share of benefits attributed to medical care ranges from 31.8 percent in Rhode Island and Washington to 73.3 percent in Indiana. The interstate variation in the share of total benefits going to medical care reflects between-state differences in the nature and severity of work-related injuries, in the quantity and prices of medical services provided to injured workers, and in the relative generosity (including duration) of cash benefits paid in each state. States with more generous provisions for cash benefits will have smaller shares of medical benefits, all else equal, than states with less generous cash benefits.

<sup>22</sup> The payment of workers' compensation benefits by private carriers in states with exclusive state funds may be due to policies sold to employers in those states providing multistate coverage and also because some exclusive state funds may be restricted to providing workers' compensation benefits for the state in which the exclusive state fund issues the policy and might not be permitted to offer employers liability coverage, federal Longshore and Harbor Workers' Compensation Act coverage, or excess coverage for authorized self-insurers.

Workers' Compensation Benefits Paid, by Type of Insurer and State, 2013

	Private Insured	ured	State Fund Insured	Insured	Self-Insured <sup>a</sup>	ıred <sup>a</sup>	F	Modical		Ranking
State	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share	Benefits Paid (thousands) <sup>b</sup>	Benefits Paid (thousands) <sup>C</sup>	Percent Medical	percent medical
Alabama	\$307,539	48.1			\$331,771	51.9	\$639,311	\$439,846	8.89	5
Alaska	185,820	73.4			67,261	26.6	253,081	177,663	70.2	2
Arizona	620,815	82.5			131,308	17.5	752,123	495,649	6.59	6
Arkansas	152,249	75.3			49,987	24.7	202,235	133,273	62.9	10
California	7,127,798	58.9	\$1,569,806	13.0	3,402,576	28.1	12,100,181	6,622,015	54.7	26
Colorado	248,976	29.0	447,175	52.1	162,796	19.0	858,947	500,766	58.3	23
Connecticut	717,102	75.5			232,963	24.5	950,065	430,379	45.3	41
Delaware	193,163	80.4			47,150	19.6	240,313	142,986	59.5	19
District of Columbia	87,111	85.7			14,519	14.3	101,630	37,196	36.6	47
Florida	2,249,512	71.8			881,781	28.2	3,131,293	2,082,310	66.5	∞
Georgia	1,155,895	73.8			410,291	26.2	1,566,186	792,490	9.05	33
Hawaii	135,674	52.1	32,160	12.4	92,517	35.5	260,352	111,431	42.8	44
Idaho	87,895	34.9	149,076	59.2	14,875	5.9	251,846	163,448	64.9	12
Illinois	2,214,113	75.7			708,912	24.3	2,923,024	1,315,361	45.0	43
Indiana	626,909	0.06			67,227	10.0	674,206	494,193	73.3	1
Iowa	524,101	78.4			144,545	21.6	668,646	359,063	53.7	29
Kansas	275,277	71.1			112,107	28.9	387,384	229,719	59.3	20
Kentucky	383,642	55.0	99,582	14.3	214,751	30.8	697,974	381,792	54.7	27
Louisiana	520,241	59.8	104,972	12.1	244,873	28.1	870,086	468,106	53.8	28
Maine	172,550	9.69			75,216	30.4	247,766	118,928	48.0	36
Maryland	502,810	53.2	152,231	16.1	289,572	30.7	944,612	441,134	46.7	38
Massachusetts	778,504	73.3			283,477	26.7	1,061,981	356,246	33.5	48
Michigan	718,445	63.4			415,560	36.6	1,134,005	418,170	36.9	46
Minnesota	807,064	75.8			257,620	24.2	1,064,684	590,273	55.4	25
Mississippi	225,037	9.79			107,753	32.4	332,790	198,343	9.65	18
Missouri	558,625	63.9	108,069	12.4	207,252	23.7	873,946	494,653	9.99	24
Montana	83,859	34.0	124,512	50.4	38,632	15.6	247,003	158,082	64.0	13
Nebraska	243,804	79.9			61,197	20.1	305,001	187,881	61.6	15
Nevada	244,075	0.89			114,665	32.0	358,740	180,805	50.4	34
New Hampshire	156,713	73.0			57,846	27.0	214,560	139,678	65.1	11

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New Jersey	1,762,282	78.7			476,884	21.3	2,239,166	1,140,649	50.9	32
New Mexico	154,707	6.73	21,597	8.1	91,025	34.0	267,330	158,526	59.3	20
New York	2,538,864	45.8	1,208,492	21.8	1,796,394	32.4	5,543,750	1,845,620	33.3	49
North Carolina	1,188,756	75.8			379,830	24.2	1,568,586	719,981	45.9	40
North Dakota <sup>d</sup>	1,104	9.0	192,871	99.4			193,975	113,592	58.6	22
Ohiod	14,717	0.7	1,689,633	81.6	365,672	17.7	2,070,022	823,242	39.8	45
Oklahoma	479,366	54.6	230,682	26.3	167,974	19.1	878,022	395,988	45.1	42
Oregon	225,745	33.8	310,027	46.4	132,914	19.9	989'899	353,066	52.8	30
Pennsylvania	2,107,745	71.1	204,783	6.9	653,826	22.0	2,966,353	1,408,095	47.5	37
Rhode Island	53,559	33.0	85,725	52.8	23,072	14.2	162,356	51,629	31.8	51
South Carolina <sup>e</sup>	631,987	71.9	48,388	5.5	198,053	22.5	878,428	406,712	46.3	39
South Dakota	90,320	96.1			3,695	3.9	94,015	63,648	67.7	7
Tennessee	675,934	83.6			132,121	16.4	808,055	484,833	0.09	17
Texas	929,389	52.6	490,742	27.8	347,778	19.7	1,767,908	1,090,799	61.7	14
Utah	100,816	35.7	130,333	46.1	51,313	18.2	282,462	197,441	6.69	8
Vermont	123,286	87.1			18,224	12.9	141,511	69,340	49.0	35
Virginia	742,461	6.77			210,703	22.1	953,165	579,524	8.09	16
Washington <sup>d</sup>	13,317	9.0	1,814,346	77.8	504,120	21.6	2,331,783	741,875	31.8	90
West Virginia <sup>f</sup>	171,102	39.2	201,120	46.1	63,795	14.6	436,017	228,037	52.3	31
Wisconsin	1,023,284	6.06			102,773	9.1	1,126,058	770,152	68.4	9
Wyoming <sup>d</sup>	2,022	1.1	189,785	98.9			191,807	132,274	0.69	4
Total Non-Federal	\$35,316,150	59.0	\$9,606,106	16.0	\$14,961,170	25.0	\$59,883,426	\$30,436,905	50.8	
All Federal8							3,691,014	1,112,247	30.1	
Federal Employees <sup>h</sup>							2,948,132	923,564	31.3	
TOTAL							\$63,574,440	\$31,549,152	49.6	

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

- Self-insured includes individual self-insured and group self-insured.
- 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 2013 available at www.nasi.org.
- 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. South Carolina's State Accident Fund is not a competitive state fund.
  - West Virginia completed the transition from monopolistic state fund to competitive insurance status on July 1, 2008.
- 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 H for more information about federal programs.
  - h. Included in the federal benefits total.

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

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

State benefit trends. Table 9 shows total workers' compensation benefits paid in each state in the years 2009 to 2013. Across the five-year period, total benefits increased in 34 states and decreased in the remaining 17 jurisdictions (the total includes the District of Columbia). The largest percentage increases occurred in North Dakota (77.1%), Wyoming (36.7%), and New York (33.6%). The largest percentage decreases occurred in Michigan (-24.9%), West Virginia (-17%), and Nevada (-16.7%).

There is considerable variation in benefit trends within, as well as across, the five-year period. In North Dakota, for example, the larger increase in benefits occurred between 2011 and 2013 (48% increase vs. 20% increase in 2009-2011). In New York, the trend is reversed (23% increase in 2009-2011 vs. 9% in 2011-2013). In Wyoming, the increases in benefits are about evenly divided across the two periods (16% vs. 18%). Some states experienced opposing trends in benefits in the two periods. In Florida, for example, total benefits decreased in 2009-2011 (-2.9%), followed by a sharp increase in 2011-2013 (+9.5%).

A number of factors contribute to variations in total workers' compensation benefits paid within a state from year to year. The explanatory factors include: changes in the number of work-related injuries and illnesses, modifications to the state's legal system for processing claims (e.g. changes in statutory rules, court rulings, administrative processes, reporting requirements); fluctuations in the state labor market (e.g. changes in employment, wage rates, mix of occupations/industries); changes in the costs of medical care; and differences in the ways stakeholders interact within the system, if they change over time (e.g. if employees have the initial choice of physician

or special exclusions for small employers or agricultural employers etc.)

Table 10 shows trends in medical benefits in each state for the period 2009-2013. In 34 states, medical benefits increased along with increases in the number of covered workers. North Dakota, for example, had the largest percentage increase in medical benefits between 2009 and 2013 (75.6%), corresponding to a large increase in covered workers in the state (22.8%). In 15 states and the District of Columbia, however, medical benefits declined even as covered employment increased. In Michigan, for example, medical benefits declined by 21.1 percent between 2009 and 2013, despite the fact that the number of covered workers increased by 4.6 percent. The two states with different five-year trends are: Arkansas, where both covered employment and medical benefits declined; and New Mexico, where medical benefits increased even as covered employment declined.

Table 11 shows trends in *cash benefits* in each state between 2009 and 2013. Nationally, total non-federal cash benefits increased by 6.2 percent over the five-year period; however, the national average does not reflect the tremendous variation among states. Between 2009 and 2013, the change in cash benefits ranged from an increase of 79.4 percent in North Dakota to a decrease of 26.9 percent in Michigan. In both states, the number of covered workers increased over the five-year period. Along with North Dakota, seven states (California, Georgia, Iowa, Massachusetts, New Mexico, New York, and Wyoming) experienced double-digit percentage increases in cash benefits between 2009 and 2013. In most of these states, the number of covered workers was increasing as well, but New Mexico is an outlier. In New Mexico, the number of covered workers declined by 2.2 percent in the state, while medical benefits increased by 7.5 percent and cash benefits by 10.2 percent.

Since 2008, the national trend has been for medical and cash benefits to account for almost equal shares of total workers' compensation benefits (as shown in Figure 3). However, the relative shares of medical and cash benefits vary widely across states and from year to year. In 24 states where total benefits increased between 2009 and 2013, for example, medical benefits accounted for an increasing share of total benefits. In contrast, in five states where total

benefits decreased between 2009 and 2013, medical benefits accounted for a *decreasing* share of total benefits.

Much of the interstate variation in benefit payments described above can be attributed to different trends in employment and wages across states. A standardized measure of benefits (benefits per \$100 of covered wages) controls for such differences and gives a better picture of variation occurring within the workers' compensation system itself. The measure of benefits as a percentage of covered wages helps explain whether increases (decreases) in a state's benefits payments can be attributed to changes in that state's covered payroll or to other factors.

Table 12 shows benefits paid per \$100 of covered wages by state from 2009 through 2013. The results show that increases in benefits paid over the period have been largely driven by increases in coverage. Whereas total benefits paid increased in 34 states, benefits per \$100 covered wages declined in 39 states. In other words, between 2009 and 2013, a number of states (22) experienced an increase in total benefits while benefits per \$100 of covered wages decreased. The trends in these 22 states generally reflect more rapid growth in wages than in benefit payments. In Alaska, for example, there was a 14 percent increase in total benefits paid, but benefits per \$100 of covered wages decreased by \$0.03. Between 2009 and 2013, the largest increase in benefits per \$100 of covered payroll occurred in Wyoming (\$0.27), which also experienced the second largest increase in overall benefits paid. The largest decrease in benefits paid per \$100 of covered payroll occurred in West Virginia (-\$0.55).

In almost half the states, total workers' compensation benefits increased between 2009 and 2013, whereas benefits per \$100 covered wages declined.

The reader is cautioned that the data on benefits paid per \$100 of covered payroll do not provide meaningful comparisons of the adequacy of benefits across states.<sup>23</sup> The data may show higher standardized benefits in some states, not because the workers' compensation system is more generous, but because wage rates<sup>24</sup> (and, therefore, payrolls) are relatively low, and/or because the state has a disproportionate share of risky occupations (e.g. mining). A study of benefit adequacy should compare the benefits 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).

# **Employer Costs for Workers' Compensation**

# Methods for Estimating Employer Costs

For employers that purchase insurance from private carriers or state funds, the cost of workers' compensation in any year equals the sum of premiums paid in the year plus benefit payments made under deductible provisions. The growing use of large deductible policies complicates the measurement of employer costs. Our insurance industry data sources (A.M. Best) do not provide information on 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 benefit payments made during the calendar year and administrative costs of providing those benefits. Administrative costs include the direct costs of managing claims, as well as expenses for litigation and cost containment, taxes, licenses, and fees. Self-insured employers generally do not record administrative costs for workers' compensation sepa-

<sup>23</sup> As discussed in the Academy's study panel report Adequacy of Earnings Replacement in Workers' Compensation Programs (Hunt 2004), the standardized measure of benefits relative to covered wages 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>24</sup> Sometimes the benefit maximum is less likely to be binding when wages are lower. However, benefit maximums are tied to the state average wage and are lower when wages are lower.

 Table 9

 Workers' Compensation Total Benefits Paid and Five-Year Percent Change, by State, 2009-2013

		Total	Total Benefits (thousands)	(spu		Intermed	Intermediate-Years Percent Change	Five-Year Percent Change	Ranking (1=largest percent
State	2009	2010	2011	2012	2013	2009-2011	2011-2013	2009-2013	increase, 2009-2013)
Alabama	\$625,755	\$629,069	\$616,022	\$649,682	\$639,311	-1.6	3.8	2.2	29
Alaska	222,005	221,955	239,635	248,038	253,081	7.9	5.6	14.0	6
Arizona	657,182	701,624	719,616	755,440	752,123	9.5	4.5	14.4	8
Arkansas	224,303	213,970	199,254	207,165	202,235	-11.2	1.5	-9.8	47
California	9,976,005	10,101,786	10,835,059	11,507,681	12,100,181	9.8	11.7	21.3	4
Colorado	834,535	800,294	762,559	879,675	858,947	-8.6	12.6	2.9	27
Connecticut	842,138	794,728	867,539	920,041	950,065	3.0	9.5	12.8	12
Delaware	206,145	211,921	220,830	216,588	240,313	7.1	8.8	16.6	7
District of Columbia	104,316	104,948	110,316	90,511	101,630	5.8	6.7-	-2.6	38
Florida	2,945,069	2,777,207	2,858,363	3,085,225	3,131,293	-2.9	9.5	6.3	21
Georgia	1,343,237	1,458,682	1,397,596	1,574,991	1,566,186	4.0	12.1	16.6	9
Hawaii	244,375	242,400	246,780	248,433	260,352	1.0	5.5	6.5	20
Idaho	242,664	239,549	249,292	237,099	251,846	2.7	1.0	3.8	24
Illinois	3,057,665	3,003,117	3,026,156	2,952,905	2,923,024	-1.0	-3.4	-4.4	39
Indiana	597,124	598,678	627,671	653,189	674,206	5.1	7.4	12.9	111
Iowa	552,753	563,025	621,556	659,408	98,646	12.4	9.7	21.0	5
Kansas	416,079	405,400	436,122	427,871	387,384	4.8	-11.2	-6.9	44
Kentucky	769,323	663,280	899,629	685,712	697,974	-11.7	2.7	-9.3	46
Louisiana	831,203	802,424	842,548	853,685	980,028	1.4	3.3	4.7	23
Maine	260,555	251,593	252,735	245,926	247,766	-3.0	-2.0	-4.9	40
Maryland	895,905	953,533	1,006,998	970,734	944,612	12.4	-6.2	5.4	22
Massachusetts	953,373	1,015,984	1,003,884	981,890	1,061,981	5.3	5.8	11.4	15
Michigan	1,509,881	1,271,892	1,301,061	1,189,483	1,134,005	-13.8	-12.8	-24.9	51
Minnesota	1,072,459	1,034,661	1,011,890	1,042,478	1,064,684	-5.6	5.2	-0.7	35
Mississippi	321,771	337,633	334,430	336,208	332,790	3.9	-0.5	3.4	26
Missouri	842,742	800,789	807,121	869,429	873,946	-4.2	8.3	3.7	25

42	30	49	48	13	19	3	16	1	45	14	41	28	31	36	34	18	10	43	37	17	33	50	32	2				
-5.3	1.0	-16.7	-13.0	12.3	9.8	33.6	10.9	77.1	-9.2	11.9	-5.0	2.2	1.0	-1.5	0.5	9.2	13.8	-6.2	-1.8	10.9	0.8	-17.0	6.0	36.7	8.5	4.2	6.7	8.2
-1.8	-5.1	-9.3	-7.5	0.8	-3.1	8.8	6.6	48.0	-5.9	4.5	-2.2	2.5	-4.3	0.5	3.5	4.7	10.8	3.6	2.4	6.9	0.7	-16.3	2.4	17.7	4.8	-2.3	-1.5	4.3
-3.6	6.4	-8.2	-6.0	11.4	12.0	22.9	6.0	19.7	-3.5	7.1	-2.9	-0.2	5.6	-2.0	-2.9	4.3	2.7	-9.4	-4.1	3.7	0.2	-0.9	-1.5	16.2	3.5	9.9	8.3	3.7
247,003	305,001	358,740	214,560	2,239,166	267,330	5,543,750	1,568,586	193,975	2,070,022	878,022	989,899	2,966,353	162,356	878,428	94,015	808,055	1,767,908	282,462	141,511	953,165	2,331,783	436,017	1,126,058	191,807	\$59,883,426	3,691,014	2,948,132	\$63,574,440
248,778	300,419	367,236	225,454	2,246,396	306,304	5,370,910	1,569,125	151,033	2,168,947	922,533	663,181	2,910,262	171,242	905,405	87,043	838,388	1,838,018	283,301	138,515	979,538	2,311,299	475,952	1,123,861	162,304	\$59,254,931	3,775,519	3,006,009	\$63,030,450 \$63,574,440
251,577	321,281	395,331	231,961	2,220,454	275,783	5,097,559	1,427,145	131,099	2,200,692	840,345	683,452	2,895,406	169,735	874,227	90,844	771,905	1,595,022	272,692	138,141	891,958	2,316,713	520,769	1,099,950	162,960	\$57,151,704	3,776,993	2,994,122	\$60,928,697
266,364	315,736	429,686	251,682	2,067,447	276,126	4,617,084	1,357,196	120,355	2,209,404	842,553	681,001	2,909,863	159,988	891,283	100,348	780,805	1,491,310	274,900	137,367	785,680	2,308,748	543,317	1,071,877	154,077	\$55,244,341	3,672,058	2,889,321	\$58,916,399
260,837	301,944	430,482	246,746	1,994,037	246,272	4,148,353	1,414,052	109,513	2,279,359	784,776	703,812	2,902,311	160,763	891,830	93,578	739,832	1,553,316	300,997	144,087	859,727	2,312,186	525,480	1,116,312	140,297	\$55,209,460	3,542,605	2,763,885	\$58,752,065
Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming	Total Non-Federal	All Federal <sup>a</sup>	Federal Employees <sup>b</sup>	TOTAL

Includes federal benefits as included in Table 8.

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 2013 available at 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.

a Includes federal benefits as included in the federal benefits total.

Workers' Compensation Medical Benefits Paid and Five-Year Percent Change, by State, 2009-2013 Table 10

		Medical	Medical Benefits (thousands)	nds)		Intermed	Intermediate-Years Percent Change	Five-Year Percent Change	Ranking (1=largest percent
State	2009	2010	2011	2012	2013	2009-2011	2011-2013	2009-2013	increase, 2009-2013)
Alabama	\$423,010	\$434,057	\$417,047	\$438,535	\$439,846	-1.4	5.5	4.0	30
Alaska	147,411	145,603	156,482	167,921	177,663	6.2	13.5	20.5	7
Arizona	408,110	439,217	456,956	496,324	495,649	12.0	8.5	21.4	9
Arkansas	147,591	137,797	127,722	135,900	133,273	-13.5	4.3	7.6-	46
California	5,672,145	5,790,722	6,288,793	6,640,737	6,622,015	10.9	5.3	16.7	15
Colorado	418,936	404,148	427,796	500,535	992,005	2.1	17.1	19.5	6
Connecticut	366,330	360,012	404,273	426,899	430,379	10.4	6.5	17.5	13
Delaware	113,586	122,914	130,731	130,169	142,986	15.1	9.4	25.9	4
District of Columbia	39,119	35,682	37,728	31,317	37,196	-3.6	-1.4	-4.9	40
Florida	1,896,625	1,824,625	1,869,370	2,042,419	2,082,310	-1.4	11.4	9.8	21
Georgia	663,559	732,259	704,388	796,946	792,490	6.2	12.5	19.4	10
Hawaii	105,081	105,444	110,804	108,069	111,431	5.4	9.0	6.0	28
Idaho	148,995	150,677	159,796	153,877	163,448	7.2	2.3	9.7	22
Illinois	1,464,621	1,426,481	1,443,477	1,296,325	1,315,361	-1.4	-8.9	-10.2	47
Indiana	424,555	428,654	459,455	479,441	494,193	8.2	7.6	16.4	17
Iowa	298,486	306,286	332,533	371,906	359,063	11.4	8.0	20.3	8
Kansas	246,319	222,159	244,665	250,305	229,719	-0.7	-6.1	-6.7	42
Kentucky	439,283	377,406	382,653	381,256	381,792	-12.9	-0.2	-13.1	49
Louisiana	450,512	432,507	447,393	449,892	468,106	-0.7	4.6	3.9	32
Maine	120,377	123,029	123,587	114,601	118,928	2.7	-3.8	-1.2	36
Maryland	399,574	435,765	465,233	440,713	441,134	16.4	-5.2	10.4	20
Massachusetts	327,422	346,312	344,653	343,227	356,246	5.3	3.4	8.8	23
Michigan	530,182	508,456	503,694	422,455	418,170	-5.0	-17.0	-21.1	51
Minnesota	578,481	551,912	547,632	922,776	590,273	-5.3	7.8	2.0	34
Mississippi	190,810	211,021	199,989	189,958	198,343	4.8	8.0-	3.9	31

25	26	33	45	43	11	24	2	18	1	50	14	38	27	39	19	29	5	12	41	37	16	44	48	35	8				
7.3	6.7	2.8	-8.9	-7.7-	18.0	7.5	75.2	13.9	75.6	-16.6	16.8	-3.5	6.4	-3.8	10.4	4.0	21.6	17.8	-5.1	-2.6	16.4	-8.2	-13.0	0.2	39.7	10.4	7.0	6.9	10.3
3.5	0.4	-5.2	-3.1	-9.3	2.3	-0.5	1.0	11.9	48.7	-11.9	6.1	-3.8	6.5	-9.2	6.5	6.0	5.2	10.7	2.3	-2.5	9.8	-1.1	-7.6	-0.1	21.7	3.5	0.5	0.7	3.4
3.7	6.3	8.5	-6.0	1.8	15.3	8.1	73.5	1.8	18.1	-5.4	10.1	0.3	-0.1	5.9	3.7	-1.9	15.6	6.5	-7.2	-0.1	7.2	-7.2	-5.8	0.3	14.8	6.7	6.5	6.2	6.7
494,653	158,082	187,881	180,805	139,678	1,140,649	158,526	1,845,620	719,981	113,592	823,242	395,988	353,066	1,408,095	51,629	406,712	63,648	484,833	1,090,799	197,441	69,340	579,524	741,875	228,037	770,152	132,274	\$30,436,905	1,112,247	923,564	\$31,549,152
498,183	156,233	184,758	179,945	149,702	1,152,662	179,188	1,836,191	718,659	90,894	874,168	406,837	365,413	1,347,676	54,113	395,662	59,973	493,810	1,130,381	199,727	69,258	591,641	742,658	239,880	781,897	110,008	\$30,386,018	1,110,074	924,622	\$31,496,092
477,816	157,487	198,231	186,596	154,022	1,114,574	159,403	1,827,886	643,643	76,394	934,564	373,113	367,014	1,321,538	56,861	382,037	60,048	460,827	985,724	193,066	71,143	533,391	750,282	246,844	770,936	108,707	\$29,398,994	1,106,723	917,095	\$30,505,717
445,239	160,084	192,915	187,773	154,029	1,027,435	161,257	1,718,807	599,881	72,707	943,750	372,408	345,268	1,292,306	53,116	385,034	61,915	443,497	885,838	188,582	71,294	469,836	760,998	276,557	749,586	102,095	\$28,175,352	1,092,904	912,882	\$29,268,255 \$
460,980	148,156	182,676	198,452	151,255	966,617	147,517	1,053,711	632,081	64,706	987,425	339,023	365,982	1,323,249	53,695	368,326	61,200	398,770	925,777	207,989	71,179	497,782	808,271	262,053	768,661	94,694	\$27,561,346	1,039,167	863,729	\$28,600,513 \$
Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming	Federal enefits	All Federal	Federal Employees	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 2013 available at 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.

Workers' Compensation Cash Benefits Paid and Five-Year Percent Change, by State, 2009-2013 Table 11

		Cash E	Cash Benefits (in thousands)	isands)		Intermed	Intermediate-Years Percent Change	Five-Year Percent Change	Ranking (1=laroest percent
State	2009	2010	2011	2012	2013	2009-2011	2011-2013	2009-2013	increase, 2009-2013)
Alabama	\$202,744	\$195,011	\$198,975	\$211,147	\$199,465	-1.9	0.2	-1.6	32
Alaska	74,594	76,353	83,153	80,116	75,418	11.5	-9.3	1.1	25
Arizona	249,072	262,407	262,660	259,116	256,474	5.5	-2.4	3.0	21
Arkansas	76,712	76,173	71,532	71,265	68,962	-6.8	-3.6	-10.1	45
California	4,303,860	4,311,064	4,546,266	4,866,943	5,478,166	9.6	20.5	27.3	8
Colorado	415,598	396,145	334,763	379,140	358,181	-19.5	7.0	-13.8	46
Connecticut	475,808	434,716	463,266	493,142	519,686	-2.6	12.2	9.2	6
Delaware	92,559	89,007	660,06	86,418	97,327	-2.7	8.0	5.2	17
District of Columbia	65,198	69,265	72,588	59,194	64,433	11.3	-11.2	-1.2	30
Florida	1,048,445	952,582	988,994	1,042,806	1,048,983	-5.7	6.1	0.1	27
Georgia	8/9,6/9	726,424	693,208	778,046	773,696	2.0	11.6	13.8	9
Hawaii	139,294	136,956	135,976	140,365	148,921	-2.4	9.5	6.9	14
Idaho	93,668	88,873	89,496	83,222	88,398	-4.5	-1.2	-5.6	38
Illinois	1,593,043	1,576,637	1,582,680	1,656,580	1,607,663	-0.7	1.6	6.0	26
Indiana	172,569	170,025	168,216	173,748	180,013	-2.5	7.0	4.3	18
Iowa	254,266	256,740	289,024	287,502	309,583	13.7	7.1	21.8	4
Kansas	169,760	183,241	191,458	177,567	157,665	12.8	-17.6	-7.1	41
Kentucky	330,039	285,874	297,015	304,456	316,182	-10.0	6.5	-4.2	36
Louisiana	380,691	369,918	395,155	403,793	401,980	3.8	1.7	5.6	16
Maine	140,179	128,564	129,148	131,324	128,839	-7.9	-0.2	-8.1	42
Maryland	496,332	517,769	541,765	530,021	503,478	9.2	-7.1	1.4	24
Massachusetts	625,952	669,672	659,231	638,662	705,735	5.3	7.1	12.7	7
Michigan	979,700	763,435	797,368	767,028	715,834	-18.6	-10.2	-26.9	51
Minnesota	493,978	482,749	464,258	475,703	474,410	-6.0	2.2	-4.0	35
Mississippi	130,961	126,613	134,441	146,251	134,447	2.7	0.0	2.7	22
Missouri	381,762	355,550	329,305	371,246	379,293	-13.7	15.2	9.0-	28

Montana	112.682	106.279	94.090	92.546	88.921	16.5	-5.5	-21.1	48
Nebraska	119,268	122,821	123,051	115,661	117,121	3.2	4.8	-1.8	33
Nevada	232,030	241,913	208,735	187,290	177,935	-10.0	-14.8	-23.3	50
New Hampshire	95,491	97,652	77,939	75,753	74,881	-18.4	-3.9	-21.6	49
New Jersey	1,027,419	1,040,012	1,105,880	1,093,735	1,098,517	2.6	-0.7	6.9	13
New Mexico	98,755	114,868	116,380	127,116	108,803	17.8	-6.5	10.2	8
New York	3,094,642	2,898,277	3,269,673	3,534,719	3,698,130	5.7	13.1	19.5	5
North Carolina	781,971	757,315	783,503	850,466	848,605	0.2	8.3	8.5	10
North Dakota	44,807	47,648	54,705	60,139	80,383	22.1	46.9	79.4	1
Ohio	1,291,933	1,265,654	1,266,128	1,294,779	1,246,780	-2.0	-1.5	-3.5	34
Oklahoma	445,753	470,144	467,232	515,696	482,034	4.8	3.2	8.1	11
Oregon	337,830	335,734	316,438	297,768	315,620	-6.3	-0.3	9.9-	40
Pennsylvania	1,579,062	1,617,557	1,573,869	1,562,586	1,558,258	-0.3	-1.0	-1.3	31
Rhode Island	107,068	106,872	112,874	117,130	110,727	5.4	-1.9	3.4	19
South Carolina	523,504	506,249	492,190	509,743	471,716	-6.0	-4.2	6.6-	44
South Dakota	32,378	38,433	30,796	27,070	30,367	-4.9	-1.4	-6.2	39
Tennessee	341,063	337,308	311,078	344,577	323,222	-8.8	3.9	-5.2	37
Texas	627,540	605,472	609,299	707,637	677,109	-2.9	11.1	7.9	12
Utah	93,008	86,319	79,626	83,574	85,021	-14.4	8.9	9.8-	43
Vermont	72,908	66,074	866,998	69,258	72,171	-8.1	7.7	-1.0	29
Virginia	361,945	315,843	358,567	387,897	373,641	6.0-	4.2	3.2	20
Washington	1,503,915	1,547,750	1,566,431	1,568,641	1,589,908	4.2	1.5	5.7	15
West Virginia	263,427	266,760	273,924	236,072	207,980	4.0	-24.1	-21.0	47
Wisconsin	347,651	322,291	329,015	341,964	355,906	-5.4	8.2	2.4	23
Wyoming	45,604	51,982	54,253	52,296	59,533	19.0	6.7	30.5	2
Total Non-Federal Cash Benefits	\$27,648,114	\$27,068,989	\$27,648,114 \$27,068,989 \$27,752,710 \$28,868,913	\$28,868,913	\$29,446,521	0.4	6.1	6.5	
All Federal <sup>a</sup>	2,503,438	2,579,154	2,670,270	2,665,445	2,578,767	6.7	-3.4	3.0	
Federal Employees <sup>b</sup>	1,900,156	1,976,439	2,077,027	2,081,387	2,024,568	9.3	-2.5	6.5	
TOTAL	\$30,151,552	\$29,648,144 \$30,422,9	080	\$31,534,358	\$32,025,288	6.0	5.3	6.2	

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 2013 available at

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, 2009-2013

State	2009	2010	2011	2012	2013	Intermed 2009-2011	Dollar Amount Change Intermediate-Years Fivo 09-2011 2011-2013 2009	Change Five-Year 2009-2013	Ranking (1=largest percent increase, 2009-2013)
Alabama	\$0.96	\$0.95	\$0.91	\$0.93	\$0.90	-\$0.04	-\$0.01	-\$0.05	24
Alaska	1.62	1.58	1.63	1.61	1.60	0.01	-0.03	-0.03	16
Arizona	99.0	0.71	0.70	0.71	89.0	0.04	-0.02	0.02	11
Arkansas	0.59	0.56	0.50	0.50	0.49	-0.09	-0.01	-0.10	33
California	1.35	1.35	1.38	1.38	1.41	0.03	0.02	0.05	5
Colorado	0.84	0.80	0.73	0.80	0.75	-0.11	0.02	-0.09	30
Connecticut	0.91	0.85	0.89	0.92	0.94	-0.02	0.05	0.03	6
Delaware	1.10	1.11	1.11	1.05	1.14	0.01	0.03	0.04	7
District of Columbia	0.31	0.30	0.30	0.23	0.26	-0.01	-0.04	-0.05	23
Florida	1.09	1.02	1.02	1.06	1.05	-0.06	0.03	-0.04	19
Georgia	0.88	0.95	0.88	0.95	0.93	-0.01	0.05	0.05	9
Hawaii	1.09	1.10	1.08	1.05	1.05	-0.01	-0.03	-0.04	21
Idaho	1.20	1.18	1.19	1.10	1.12	-0.01	-0.07	-0.08	28
Illinois	1.17	1.13	1.10	1.03	1.00	-0.07	-0.10	-0.17	41
Indiana	0.59	0.58	0.58	0.58	0.58	-0.01	0.00	-0.01	13
Iowa	1.06	1.06	1.12	1.14	1.12	0.07	-0.01	90.0	4
Kansas	0.85	0.83	0.87	0.82	0.72	0.02	-0.15	-0.13	36
Kentucky	1.23	1.04	1.03	1.00	66.0	-0.20	-0.03	-0.23	47
Louisiana	1.14	1.09	1.11	1.08	1.07	-0.03	-0.04	-0.07	27
Maine	1.29	1.23	1.21	1.15	1.13	-0.08	-0.08	-0.16	39
Maryland	62.0	0.83	98.0	62.0	92.0	90.0	60.0-	-0.03	18
Massachusetts	0.55	0.57	0.54	0.51	0.53	-0.01	-0.01	-0.02	15
Michigan	96.0	0.80	0.78	89.0	0.64	-0.19	-0.14	-0.32	49
Minnesota	0.94	0.89	0.83	0.82	0.81	-0.11	-0.03	-0.14	37

Mississippi	0.97	1.01	0.98	0.95	0.91	0.01	-0.06	-0.05	25	
Missouri	0.87	0.83	0.82	0.85	0.83	90.0-	0.01	-0.04	22	
Montana	1.94	1.95	1.78	1.66	1.59	-0.17	-0.18	-0.35	50	
Nebraska	0.95	0.98	0.97	0.87	0.85	0.02	-0.12	-0.10	31	
Nevada	0.91	0.94	0.84	0.76	0.72	90.0-	-0.13	-0.19	43	
New Hampshire	0.93	0.93	0.83	0.78	0.72	-0.10	-0.10	-0.20	45	
New Jersey	0.98	1.00	1.05	1.03	1.00	0.07	-0.05	0.03	10	
New Mexico	06.0	1.01	0.99	1.07	0.94	0.09	-0.05	0.04	8	
New York	0.88	0.94	0.99	1.02	1.03	0.12	0.03	0.15	2	
North Carolina	0.98	0.92	0.94	0.99	0.97	-0.05	0.03	-0.01	14	
North Dakota	0.92	0.93	0.87	0.83	0.98	-0.05	0.12	0.07	8	
Ohio	1.16	1.11	1.06	1.00	0.93	-0.10	-0.13	-0.23	46	
Oklahoma	1.49	1.66	1.55	1.61	1.47	90.0	-0.09	-0.03	17	
Oregon	1.11	1.05	1.01	0.94	0.91	-0.10	-0.10	-0.20	44	
Pennsylvania	1.22	1.20	1.15	1.11	1.11	-0.07	-0.04	-0.11	35	
Rhode Island	98.0	0.84	98.0	0.85	0.77	0.00	-0.09	-0.08	29	
South Carolina	1.47	1.45	1.37	1.36	1.29	-0.10	-0.08	-0.18	42	
South Dakota	92.0	0.80	69.0	0.63	99.0	-0.07	-0.03	-0.10	34	
Tennessee	0.77	0.79	0.75	0.77	0.73	-0.02	-0.02	-0.04	20	
Texas	0.46	0.39	0.40	0.43	0.40	-0.07	0.01	90.0-	26	
Utah	0.71	0.64	0.61	0.59	0.56	-0.10	-0.04	-0.15	38	
Vermont	1.33	1.24	1.21	1.18	1.17	-0.11	-0.05	-0.16	40	
Virginia	0.56	0.50	0.55	0.58	0.57	-0.01	0.02	0.01	12	
Washington	1.82	1.80	1.72	1.63	1.57	-0.10	-0.15	-0.25	48	
West Virginia	2.25	2.22	2.07	1.83	1.70	-0.18	-0.37	-0.55	51	
Wisconsin	1.13	1.07	1.05	1.04	1.03	-0.07	-0.03	-0.10	32	
Wyoming	1.31	1.41	1.42	1.36	1.58	0.12	0.16	0.27	1	
Total Non-Federal	\$1.01	\$0.98	\$0.98	\$0.97	\$0.96	-\$0.03	-\$0.02	-\$0.05		
Federal Employees	1.44	1.39	1.43	1.45	1.46	-0.01	0.03	0.02		
TOTAL	\$1.04	\$1.01	\$1.01	\$1.00	\$6.0\$	-\$0.03	-\$0.02	-\$0.05		

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

Source: National Academy of Social Insurance estimates.

rately from the costs of administering other employee benefit programs, so these costs must be estimated. We assume administrative costs for selfinsured employers are the same proportion of benefits paid as administrative costs reported by private insurers to the National Association of Insurance Commissioners (NAIC 2013). (For more information on estimating costs for self-insured employers, refer to Appendix F online at the Academy website at www.nasi.org.)

For the federal employee workers' compensation program, employer costs are benefits paid plus administrative costs, as reported by the Department of Labor (U.S. DOL 2015).

Employer cost estimates also includes estimates of assessments for special funds, second injury funds, and guaranty funds in the national estimates of employer costs in Table 13 and the estimates of employer costs of workers' compensation in each state in Table 14. The estimated costs of assessments are based on assessment rates applied to premiums or losses (benefits paid).

## National Estimates of Employer Costs

Trends in employer costs. Table 13 shows employer costs for workers' compensation by type of insurer for 1993 through 2013. In 2013, employer costs were \$88.5 billion, an increase of 6.5 percent from \$83.1 billion in 2012. The change establishes a three-year trend of increasing employer costs, following four years of decreasing costs from 2006 through 2009. By 2013, employer costs had almost returned to their 20-year peak (\$89.8 billion in 2005).

In 2013, costs for employers insured through private carriers were 62.1 percent of total costs (\$54.9 billion); costs for self-insured employers were 19.5

percent of the total (\$17.3 billion); costs for employers insured through state funds were 13.3 percent (\$11.8 billion); and costs to the federal government were 5.1 percent (\$4.5 billion).<sup>25</sup> In recent years, the share of total workers' compensation costs attributed to different sources has remained fairly stable at around 60 percent from privately insured employers, 20 percent from self-insured employers, 15 percent from state funds, and 5 percent from the federal government.

Employer costs for workers' compensation increased 6.5 percent in 2013, establishing a three-year trend of increasing costs.

Benefits paid relative to employer costs. Table 15 reports the ratio of benefits paid to employer costs, from 1993 to 2013. The ratio is determined by three factors: 1) The extent to which employers' payments to the workers' compensation system go to injured workers as opposed to administrative costs and insurer profits. 2) The impact of insurers' returns on investments on the premiums charged for workers' compensation. 26 3) The time lag between premiums collected vs. benefits paid. (For employers covered by private insurers or state funds, the majority of benefits paid in any given year are for injuries occurring and paid for in prior years). 27

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 2013, the ratio of benefits paid to employer costs was 0.72, down by 10 points from its peak.

The share of employer costs allocated to special funds, second injury funds, and guaranty funds is less than one-half percent, The costs for special funds are included in the private carrier, self-insured, and state fund costs, according to the payee.

<sup>26 &</sup>quot;A.M. Best reported that in 2013, net investment gain/loss and other income was 20.3 percent of net premium earned for the workers' compensation insurance industry nationally." (Burton 2014, Table 1)

<sup>27</sup> For employers insured through the private market or state funds, employer costs are largely determined by premiums paid in the year. Premiums paid by employers do not necessarily match benefits received by workers in a given year because premiums in a given calendar year must pay for all compensable consequences of injuries that occur during the year, including benefits paid in future years. Premiums can also be influenced by insurers' past and anticipated investment returns on reserves they set aside to cover future liabilities.

**Table 13**Workers' Compensation Employer Costs, by Type of Insurer, 1993-2013

	Total	%		Insureda		d Insured <sup>a</sup>		nsureda	Feder	
Year	(millions)	Change	(millions)	% of total	(millions)	% of total	(millions)	% of total	(millions) 9	% of total
1993	\$60,819	6.0	\$35,596	58.5	\$10,902	17.9	\$11,791	19.4	\$2,530	4.2
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	72,493	-1.9	42,289	58.3	9,797	13.5	16,178	22.3	4,228	5.8
2011	77,821	7.4	46,205	59.4	9,900	12.7	17,289	22.2	4,427	5.7
2012	83,146	6.8	50,691	61.0	10,480	12.6	17,468	21.0	4,507	5.4
2013	88,533	6.5	54,949	62.1	11,760	13.3	17,281	19.5	4,543	5.1

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.

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.

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 1997-2013 federal costs include employer costs associated with the Longshore and Harbor Workers' Compensation Act. See Appendix B for more information about federal programs.

 Table 14

 Workers' Compensation Employer Costs Per \$100 of Covered Wages, by State, 2009-2013

								Dollar Amount Change	eg
State	2009	2010	2011	2012	2013	Intermediate- 2009-2011	Intermediate-Years Change 2009-2011 2011-2013	Five-Year Change 2009-2013	Ranking (1=largest percent increase, 2009-2013)
Alabama	\$1.25	\$1.21	\$1.18	\$1.19	\$1.15	\$-0.07	\$-0.04	-\$0.10	44
Alaska	2.60	2.38	2.45	2.74	2.58	-0.15	0.12	-0.03	33
Arizona	0.87	0.84	0.84	0.89	0.99	-0.03	0.15	0.12	10
Arkansas	0.88	0.83	08.0	08.0	0.84	-0.08	0.05	-0.03	34
California	1.60	1.61	1.76	1.85	1.95	0.16	0.19	0.34	2
Colorado	1.05	0.94	0.87	0.95	1.03	-0.18	0.16	-0.02	32
Connecticut	1.04	66.0	1.10	1.15	1.24	90.0	0.14	0.20	9
Delaware	1.29	1.17	1.20	1.24	1.39	-0.10	0.20	0.10	13
District of Columbia	0.57	0.53	0.52	0.48	0.47	-0.05	-0.05	-0.10	42
Florida	1.29	1.21	1.24	1.27	1.41	-0.05	0.16	0.11	12
Georgia	1.16	1.13	1.13	1.16	1.25	-0.03	0.12	0.09	15
Hawaii	1.44	1.41	1.45	1.43	1.48	0.00	0.03	0.03	23
Idaho	1.59	1.51	1.58	1.63	1.66	-0.02	0.09	0.07	17
Illinois	1.44	1.37	1.39	1.34	1.42	-0.05	0.03	-0.02	31
Indiana	0.79	0.77	0.83	98.0	0.91	0.04	0.08	0.12	111
Iowa	1.47	1.44	1.55	1.64	1.70	0.09	0.15	0.23	5
Kansas	1.26	1.22	1.25	1.25	1.25	-0.01	0.00	-0.01	28
Kentucky	1.46	1.24	1.29	1.16	1.20	-0.17	-0.09	-0.26	48
Louisiana	1.65	1.57	1.58	1.61	1.59	-0.06	0.00	90.0-	40
Maine	1.57	1.48	1.56	1.48	1.42	-0.01	-0.14	-0.15	46
Maryland	0.97	1.04	1.05	1.07	1.12	0.09	90.0	0.15	6
Massachusetts	69.0	0.73	0.75	92.0	0.74	0.05	-0.01	0.05	20
Michigan	1.16	86.0	1.05	0.99	1.00	-0.11	-0.05	-0.16	47
Minnesota	1.09	1.02	1.04	1.07	1.05	-0.06	0.01	-0.05	37

36	29	50	30	45	35	8	14	1	16	4	49	3	26	27	24	25	21	18	39	43	7	22	19	51	38	41	
-0.05	-0.01	-0.82	-0.02	-0.11	-0.04	0.15	0.10	0.38	80.0	0.28	-0.50	0.29	0.00	0.00	0.01	0.01	0.04	90.0	-0.05	-0.10	0.16	0.04	90.0	-1.72	-0.05	-0.10	\$0.07
0.05	0.08	-0.30	0.03	-0.03	0.05	0.15	80.0	0.22	0.14	0.33	-0.17	0.19	0.02	0.03	0.00	0.15	0.05	0.07	0.09	0.10	0.22	0.07	-0.09	-0.27	90.0-	0.30	\$0.09
-0.09	-0.10	-0.52	-0.05	-0.08	-0.09	0.01	0.02	0.16	-0.06	-0.05	-0.33	0.10	-0.01	-0.02	0.01	-0.14	-0.01	-0.01	-0.14	-0.20	-0.05	-0.03	0.15	-1.45	0.01	-0.39	-\$0.02
1.39	1.16	2.24	1.37	1.00	1.22	1.46	1.44	1.50	1.33	1.81	1.00	2.24	1.18	1.51	1.08	1.83	1.33	1.16	08.0	0.94	1.90	0.81	1.37	1.73	1.72	2.03	\$1.34
1.36	1.11	2.49	1.37	0.98	1.28	1.36	1.50	1.41	1.19	1.41	1.01	2.22	1.16	1.51	1.10	1.82	1.35	1.13	0.75	0.94	1.83	0.77	1.39	1.85	1.77	1.85	\$1.29
1.34	1.08	2.54	1.34	1.03	1.18	1.31	1.36	1.28	1.19	1.48	1.17	2.05	1.16	1.48	1.08	1.68	1.28	1.08	0.71	0.84	1.68	0.74	1.46	2.00	1.78	1.73	\$1.26
1.32	1.08	2.76	1.32	1.06	1.25	1.25	1.36	1.17	1.14	1.52	1.33	2.08	1.13	1.47	1.01	1.78	1.33	1.07	29.0	98.0	1.64	0.72	1.34	2.89	1.65	1.64	\$1.22
1.44	1.18	3.06	1.39	1.11	1.27	1.30	1.34	1.12	1.25	1.53	1.50	1.95	1.17	1.50	1.07	1.82	1.29	1.09	0.85	1.04	1.74	0.77	1.32	3.46	1.77	2.12	\$1.27
Mississippi	Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	Washington*	West Virginia	Wisconsin	Wyoming	Total Non-Federal

\* In Washington state both employees 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, 1993-2013

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
1993	\$0.66	\$0.87	\$1.53	\$2.17	\$0.71
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	0.50	0.53	1.04	1.30	0.79
2010	0.50	0.51	1.01	1.25	0.81
2011	0.50	0.50	1.01	1.29	0.78
2012	0.50	0.50	1.00	1.32	0.76
2013	0.49	0.50	0.98	1.37	0.72

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.

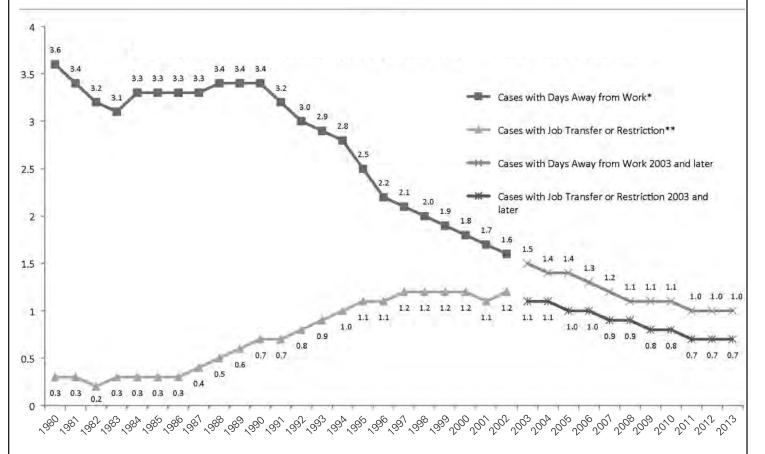
# **Estimates of Employer Costs** by State

Table 14 reports standardized estimates of employer costs for workers' compensation for each state for 2009 to 2013. Costs are aggregated across all types of insurance arrangements (excluding federal programs). Between 2009 and 2013, employer costs per

\$100 of covered payroll *increased* in 27 jurisdictions and *decreased* in 24. Over the five-year period from 2009 to 2013, the greatest increases in costs occurred in New York (\$0.38) and California (\$0.34). The greatest decreases in costs occurred in West Virginia (-\$1.72) and Montana (-\$0.82). The dramatic decrease in employer costs in West Virginia coincides with the conversion from an exclusive state fund in

Figure 5

Private Industry Occupational Injuries and Illnesses: Incidence Rates 1980-2013



*Note:* 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 and 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, 2014e

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. A meaningful comparison of employer costs across states requires controls for differences in the proportions of employers in different insurance classifications (different 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 2013 include a substantial proportion of benefits paid for injuries that occurred in prior years, when legal regimes and economic conditions may have been different. Thus, the data reported here may not fully reflect the *current reality* of the workers' compensation costs in a state.

# Estimates of Employer Costs from Other Sources

Bureau of Labor Statistics (BLS) estimates. The BLS publishes quarterly estimates of employer costs for all types of employee benefits in Employer Costs for Employee Compensation (U.S. DOL 2014a). The BLS estimates, derived from a representative sample of establishments, report the average cost of wages and salaries and benefit per employee hour worked. Estimates are provided for total compensation, wages and salaries, and five benefit categories (e.g., paid leave, supplemental pay, insurance, retirement and savings, and legally required benefits). Workers' compensation is estimated separately under the legally required benefits category. The BLS data are available 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 with each March release for the 15 largest metropolitan areas. Data are not available for individual states.

The purpose of the Academy's study is quite different. The Academy seeks to estimate national aggregates of workers' compensation benefits paid to workers and costs borne by employers. Our estimates of \$63.6 billion in benefits paid to workers and \$88.5 billion in workers' compensation costs borne by employers in 2013 are the only data that answer questions about aggregate benefits and spending.

Burton (2013) uses the BLS data to calculate employer costs for workers' compensation per \$100 of payroll and compares it with the Academy's estimates. The BLS methodology and the procedure used to calculate workers' compensation benefits per \$100 of payroll are discussed in Burton (2013). Burton and the Academy use very 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. In fact, the estimates derived from BLS data typically exceed the Academy estimates of employer costs, although the trends over time are the same.

The Academy 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 2013), conducted on a biennial basis by the state of Oregon, is designed to address the question: How would an employer's workers' compensation rate be affected by moving to another state?

The Oregon estimates are comparisons of workers' compensation premium rates for a standardized set of insurance classifications. The standardization 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. 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 the Academy data, which also include estimates of self-insurer costs. Average employer costs derived from the 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 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; the Academy 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>28</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'

<sup>28</sup> Burton (2013) and Manley (2013) provide more extended discussions of the differences between the Academy and Oregon measures of employers' costs.

compensation. About 25-27 percent of the total costs of workers' compensation in Washington is 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 two states (Hawaii and Rhode Island) 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 constitute indirect costs to the worker. 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 and fringe benefits that occur during periods of injury-related work absence (when the worker is compensated at less than his or her usual wage) and losses of home production attributable to work-related injury or illness. 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.

# **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); and 2) The National Council on Compensation Insurance has information on the number of workers' compensation claims paid by private carriers and competitive state funds in 37 states (NCCI 2014b).

#### **Incidence of Work-Related Injuries**

Fatal Injuries. According to the BLS, a total of 4,585 fatal work-related injuries occurred in 2013, a decrease of 0.9 percent from 2012 and close to the 20-year low of 4,551 in 2009 (Table 16). Among

**Table 16**Fatal Occupational Injuries — All and Private Industry, 1993-2013

		of Fatal Injuries
Year	All	Private Industry
1993	6,331	5,643
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
September 11 events	2,886	
Other	5,915	
2002	5,534	4,978
2003	5,575	5,043
2004	5,764	5,229
2005	5,734	5,214
2006	5,840	5,320
2007	5,657	5,112
2008	5,214	4,670
2009	4,551	4,090
2010	4,690	4,206
2011	4,693	4,188
2012	4,628	4,175
2013	4,585	4,101

Source: U.S. Department of Labor 2014c.

private industry employers, there were 4,101 fatal injuries in 2013, down from 4,175 in 2012. Over the last two decades, the annual number of workrelated fatalities has declined by more than 27 percent.

The leading cause of work-related fatalities in 2013 was transportation incidents, accounting for 41 percent of the total. Other leading causes of fatalities were homicides and suicides (15% of the total), contact with objects and equipment (16%), and falls, slips, and trips (16%) (U.S. DOL 2014c).

Over the last two decades, the annual number of fatal work-related injuries has declined by more than 27 percent. The annual number of nonfatal work-related injuries has declined by more than 55 percent.

Nonfatal injuries and illnesses. The BLS reports a total of 3 million Occupational Safety and Health Administration (OSHA) recordable nonfatal workplace injuries and illnesses in private industry workplaces in 2013, no change from the number reported in 2012 (Table 17) (U.S. DOL 2014e). A total of 917,090 work-related injuries/illnesses involved at least one day's work absence following the day of injury.

The incidence of all reported nonfatal occupational injuries and illnesses has declined steadily over the last two decades, decreasing from 8.5 per 100 fulltime workers in 1993 to 3.3 cases per 100 full-time workers in 2013. The incidence of work-related injuries or illnesses involving lost work time also has declined, down from 2.9 per 100 full-time workers in 1993 to approximately 1 per 100 in every year since 2008 (Table 17 and Figure 5).

In 2013, the most common nonfatal workplace injuries and illnesses that resulted in days away from work were: sprains and strains (35.7%); soreness or pain, including back pain (16.8%); fractures (8.5%); bruises and contusions (7.9%); and cuts, lacerations, and punctures (9.6%). Together these injuries accounted for more than three-fourths (78.5%) of all reported nonfatal work-related injuries that resulted in days away from work in 2013 (U.S. DOL 2014e).

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) (U.S. DOL 2014e). The data show rates per 100 full-timeequivalent employees from 1980 to 2013. (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 1993, the incidence of cases resulting in job transfers or work restrictions has fluctuated. The rate increased from 1993 to 1996 (0.9 to 1.1 per 100 full-time-equivalent workers), leveled off until 2002 (1.2 per 100 full-time-equivalent workers), then decreased slowly through 2013 (0.7 per 100 fulltime-equivalent workers). 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 returning injured workers to work, even before they were fully capable of performing all the required functions of their pre-injury jobs.

## Incidence of Workers' Compensation Claims

NCCI reports the frequency of workers' compensation claims for insured employers and state funds in 37 jurisdictions.<sup>29</sup> The data, replicated in Table 18 for years 1993-2010 (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 insured employers declined by 57.8 percent between 1993 and 2010; (compared to the BLS estimate of a 54 percent decrease in

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.

**Table 17**Non-Fatal Occupational Injuries and Illnesses Among Private Industry Employers, 1993-2013

		Number of Cas (millions)	ses		Incidence F (per 100 full-time v	
Year	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction
1993	6.7	2.3	0.7	8.5	2.9	0.9
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
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

<sup>\*</sup>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 2014d.

injuries for all employers). The NCCI data indicate the number of temporary total disability *claims from* private industry declined by 60 percent (compared to the BLS estimate of a 60.3 % decline in injuries involving days away from work for all employers) (Table 18).

Some caution is warranted with regard to both data series, because the number of injuries and/or claims reported is likely to differ from actual experience in the workplace. Some studies suggest that underreporting of occupational injuries and illnesses is common in workers' compensation data (See

**Table 18**Number of Workers' Compensation Claims Per 100,000 Insured Workers: Private Carriers in 37 Jurisdictions, 1993-2010

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
1993	8,279	6,296	76%	1,331	16%	644	8%
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	3,613	2,731	76%	515	14%	362	10%
2009	3,541	2,659	75%	518	15%	359	10%
2010	3,491	2,625	75%	532	15%	329	9%
Percent decline, 1993- 2010	-57.8	-58.3		-60.0		-48.9	

Source: National Council on Compensation Insurance 1997-2014, Exhibit XII, Annual Statistical Bulletin.

Azaroff, et al. 2002, Spieler and Burton 2012, and OSHA 2015 for reviews of these studies.) In fact, there are many reasons to suspect underreporting on the part of workers, employers, and/or medical providers. However, none of the evidence on the extent of underreporting suggests that it has changed or materially worsened in the past two decades, when steady declines in reported frequency occurred.

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 (Strunin and Boden 2004; Fricker 1997); they believe the injury is something to be expected as part of their job (Galizzi et al. 2010); or because they fear employer retaliation (Pransky et al. 1999). Employers may not report injuries because a claim is being disputed, their recordkeeping is faulty, they want to maintain a superior safety

record, or because they are unaware an injury is covered by workers' compensation. 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>30</sup>

There are also incentives for both workers and medical providers to over report injuries/illnesses as work related. The 100 percent coverage of medical costs under workers' compensation creates incentives for both groups to report injuries/illnesses as work related when the etiology may be uncertain. Workers also have incentives to report injuries as work related if they anticipate a lost job or layoff, or if they can receive higher disability benefits from workers' compensation than from a private disability plan or state unemployment insurance.

In addition to reporting issues, the data on incidence rates for the BLS and NCCI may differ in their classification of cases. A worker may, for example, receive cash benefits to compensate for lost wages, thus appearing in a workers' compensation database as a temporary disability case but not have sufficient days away from work to be classified as temporary disability in the OSHA (BLS) log (Minnesota Department of Labor and Industry 2005).

# **Addendum**

# **Other Disability Benefit Programs**

The primary purpose of this report is to describe trends in workers' compensation benefits, costs, and coverage with respect to two main stakeholder groups: the injured workers who receive benefits and the employers that pay for them. However, workers' compensation benefits can be supplemented by other sources of income for injured workers. This addendum describes the major disability support programs that interact with workers' compensation, namely: 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 not related to work. About 61 percent of all private-sector employees had access to some type of paid sick leave in 2013, provided through their employer or a private insurance plan (U.S. DOL 2014b). 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; it is administratively easier for the worker to access and the employer 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 carries a minimum three-day wage penalty and a lower wage replacement rate (67% vs. 100%).<sup>31</sup> All these factors influence worker and employer decisions regarding whether to cover short duration work-related time losses via sick leave or workers' compensation.

Short-term disability benefits. Five states (California, Hawaii, New Jersey, New York, and Rhode Island) have mandatory state-administered insurance that provides short- to medium-term disability insurance. 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 (U.S. DOL 2014g). 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,

<sup>30</sup> 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; U.S. DOL 2008).

<sup>31</sup> Workers' compensation wages are not taxed. So the terms of comparison are for workers' compensation benefits and post-tax wages.

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 financed, at least in part, by employers covers about 33 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 2013, compared to 33 percent of workers in sales and office occupations, and 10 percent of workers in service occupations (U.S. DOL 2014g). Long-term disability insurance is also sold in individual policies, typically to high earning professionals. Such individual policies are not included in these coverage statistics.

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

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 definedbenefit pensions or disability insurance. Federal disability programs. Social Security Disability Insurance 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 market 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 2013, workers' compensation benefits paid (cash benefits plus medical payments) totaled \$63.6 billion. SSDI paid \$140.1 billion in wage replacement benefits to disabled persons and their dependents, and Medicare paid \$85.2 billion for medical care for disabled persons under age 65, for a total of \$225.3 billion (SSA 2014b; CMS 2015).

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

Table 19

Dual Eligibles: Social Security Disability Insurance (SSDI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefits (PDB), 2013

	Tot	tal	Wor	kers	Depen	dents
Type of Case	Number	Percent	Number	Percent	Number	Percent
All Disability Insurance Beneficiaries	10,985,999	100.0	8,940,950	100.0	2,045,049	100.0
Total Dual Eligibles	1,362,083	12.4	1,085,787	12.1	276,296	13.5
Currently Receiving SSDI and WC or PDB	671,036	6.1	535,985	6.0	135,051	6.6
SSDI Reduced by Cap	114,947	1.0	82,543	0.9	32,404	1.6
SSDI Not Reduced by Cap	392,196	3.6	321,079	3.6	71,117	3.5
Reverse Jurisdiction	54,583	0.5	43,817	0.5	10,766	0.5
Pending Decision on WC or PDB	109,310	1.0	88,546	1.0	20,764	1.0
SSDI Previously Offset by WC or PDB	691,047	6.3	549,802	6.1	141,245	6.9

#### Notes:

Social Security disability benefits are offset against workers' compensation and certain other public disability benefits 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. The states are Alaska, California, Colorado, Florida, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Washington, and Wisconsin.

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 2014a.

that SSDI benefits be reduced<sup>32</sup> (or "offset") such that the combined total of workers' compensation and SSDI benefits does not exceed 80 percent of the workers' prior earnings.<sup>33</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>34</sup>

As of December 2013, about 8.9 million workers with disabilities and 2 million dependents received SSDI benefits (Table 19). About 1.4 million of these individuals (12.4%) were dual beneficiaries of workers' compensation or other public disability programs in 2013 or previous years. Of these, 114,947 persons

<sup>32</sup> The portion of workers' compensation benefits that offset (reduce) SSDI benefits are subject to federal income tax (Internal Revenue Code, section 86(d)(3)).

<sup>33</sup> 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.

<sup>34</sup> States with reverse offset laws 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).

(1.0% of total beneficiaries) were currently receiving reduced SSDI benefits because of the offset provision.

#### Benefits Incurred vs. Benefits Paid

The Academy's estimates of workers' compensation benefits in this report reflect amounts paid for work-related injuries and illnesses in a calendar year regardless of when those injuries occurred. This measure of benefits is commonly used in reporting data on social insurance programs, private employee benefits, and other income security programs.

A different measure, accident year incurred losses (or accident year incurred benefits) is the common reporting measure for private workers' compensation insurers and some state funds. Incurred benefits measure the total expected benefits associated with injuries that occur in a particular year, regardless of whether the benefits are paid in that year or future years. The two measures, calendar year *benefits paid* and accident year *benefits incurred*, reveal important but different information.<sup>35</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. 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 losses associated with injuries occurring in a given year are known. 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"). Estimates of benefits paid are final at the end of a calendar year.

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.

<sup>35</sup> A fuller discussion of these measures is included in the Glossary and in Thomason, Schmidle, and Burton 2001.

# **Glossary**

**AASCIF:** The American Association of State Compensation Insurance Funds (AASCIF) is an association of workers' compensation insurance entities—referred to as state funds—that specialize in writing workers' compensation insurance in a U.S. state or Canadian province. For more information, visit www.aascif.org.

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

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

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

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

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

Combined Ratio After Dividends: [(1) Losses + (2) Loss Adjustment Expenses + (3) Underwriting Expenses + (4) Dividends to Policyholders] / Net Premium. The Combined Ratio After Dividends is expressed as a percentage of net premiums. (See: Overall Operating Ratio.)

Compromise and Release Agreement: An agreement to settle a case that usually involves three elements: 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. The release may allow for reopening medical or indemnity 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 also includes 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, or (2) employed under a public work contract with the United States for work performed outside the United States, or (3) employed under a contract with the United States performed outside United States 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:** Loss of potential earning capacity as a consequence of an injury or disease (although there may not be an actual loss of earnings).

**Dividends to Policyholders:** Both mutual and some stock insurance companies offer policies that pay dividends to policyholders after the policy period. Dividends are based on favorable loss experience by the insurer or the policyholder.

**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 because the employer or insurance carrier legally responsible for the 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; only available in a little over half the states. This is similar to a mutual insurance company and as such is closely regulated.

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

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

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

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

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

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

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

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

**OSHA:** The OSHAct 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.

**OSHAct:** The Occupational Safety and Health Act (OSHAct 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.

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

**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 that 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 that provides income support benefits to low-income aged and disabled individuals. For more information, visit www.ssa.gov.

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

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

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

**Underwriting Expenses:** Commissions, brokerage expenses, general expenses, taxes, licenses, and fees. Underwriting Results: The underwriting experience of private insurance carriers, i.e., losses and loss expenses relative to premium for the same policyholders. (See: Combined Ratio After Dividends and Overall Operating Ratio.)

**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.

**Valuation Date:** A specific time at which data are evaluated to determine the losses (or benefits) paid to that date plus reserves as of that date.

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

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

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

# **Appendix A: Coverage Estimates**

The National Academy of Social Insurance's estimates of workers' compensation coverage start with the number of workers in each state who are covered by unemployment insurance (UI) (U.S. DOL 2014f). Those who are not required to be covered 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 that are required to pay unemployment taxes must report quarterly to their state employment security agencies information 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 (U.S. DOL 2014f).

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

- 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. The Academy assumes that workers are not covered by workers' compensation if they work for small firms in the 15 states that exempt small employers from mandatory coverage. Private firms with fewer than three employees are exempt from mandatory coverage in eight states: Arkansas, Georgia, Michigan, New Mexico, North Carolina, Virginia, West Virginia, and Wisconsin. Those with fewer than four employees are exempt in two states: Florida and South Carolina. Finally, firms with fewer than five employees are exempt from mandatory coverage in Alabama, Mississippi, Missouri, Oklahoma, and Tennessee (IAIABC-WCRI 2014).

The number of employees in small firms is estimated using data from the U.S. Small Business Administration (SBA) for each state, which show the proportion of employees in all private firms who worked for firms with fewer than five employees in 2011, the latest year for which data are available. Those percentages for the 15 states with numerical exemptions are: Alabama, 4.8 percent; Arkansas, 5.0 percent; Florida, 6.4 percent; Georgia, 5.0 percent; Michigan, 4.9 percent; Mississippi, 5.2 percent; Missouri, 4.9 percent; New Mexico, 5.7 percent; North Carolina, 5.0 percent; Oklahoma, 5.7 percent; South Carolina, 5.1 percent; Tennessee, 4.2 percent; Virginia, 4.8 percent; West Virginia, 5.0 percent and Wisconsin, 4.3 percent (U.S. SBA 2013).

To estimate the proportion of workers in firms with fewer than three or four employees, we used national data on small firms from the U.S. Census Bureau (U.S. Census Bureau 2005).

Of workers in firms with fewer than five employees, 79.9 percent worked in firms with fewer than four employees and 57.4 percent worked in firms with fewer than three employees. These ratios were applied to the percentage of workers in firms with fewer than five employees in the respective states. For example, the proportion of Arkansas private-sector workers in firms with fewer than three employees is:  $(5.0 \%) \times (57.4 \%) = 2.9$  percent. These ratios are applied to the number of UI-covered workers in private, nonfarm firms in each state. In the 15 states together, we estimate that 1.7 million workers were excluded from workers' compensation coverage in 2013 because of the small employer exclusion from mandatory coverage.

**Agricultural Exemptions.** We estimate agricultural workers to be excluded from workers' compensation coverage if they work in any state where agricultural

employers are exempt from mandatory coverage. The following 13 jurisdictions have no exemptions for agricultural workers: Alaska, Arizona, California, Connecticut, District of Columbia, Hawaii, Idaho, Massachusetts, New Hampshire, New Jersey, Ohio, Oregon, and Wyoming. In all the other states, we subtract from UI coverage those workers employed in agricultural industries.

**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, which found 80 percent of Texas employees were covered in 2013 (TDI, et al. 2014). This ratio was applied to all UI-covered Texas employees other than federal government workers (who were not included in the Texas surveys).

Documenting Workers' Compensation Coverage Estimates, 2013 Annual Averages

Unempl	oyment Insurance	Unemployment Insurance (UI)-Covered Jobs <sup>a</sup>	Workers' Com	Workers' Compensation (WC) Exemptions	cemptions		
	Total	Private, Non-	Small Eirmb	Amiculture	3CAE	WC Covered John	WC as a
State	(1)	(2)	(3)	(4)	(9)	(7)	(8)
	1,790,976	1,481,072	70,598	4,878	1	1,715,500	95.8
Alaska	313,051	250,645			1	313,051	100.0
Arizona	2,431,298	2,089,091			1	2,431,298	100.0
Arkansas	1,126,409	937,782	46,998	7,257	1	1,072,154	95.2
California	15,139,414	12,907,990	1		ı	15,139,414	100.0
Colorado	2,282,052	1,940,593	1	11,341	1	2,270,711	99.5
Connecticut	1,622,845	1,399,990	ı		ı	1,622,845	100.0
Delaware	407,666	351,474	1	1,079	1	406,587	2.66
District of Columbia	518,934	484,942	1		1	518,934	100.0
Florida	7,388,633	6,438,052	409,525	55,476	1	6,923,632	93.7
Georgia	3,820,770	3,266,540	163,205	14,425	ı	3,643,140	95.4
Hawaii	583,425	490,772	1		1	583,425	100.0
Idaho	618,404	501,845	1		1	618,404	100.0
Illinois	5,603,794	4,881,617	1	14,139	1	5,589,655	2.66
Indiana	2,812,348	2,445,226	1	12,852	1	2,799,496	99.5
Iowa	1,478,751	1,246,786	1	14,258	1	1,464,493	0.66
Kansas	1,312,438	1,083,936	1	9,822	1	1,302,616	99.3
Kentucky	1,742,305	1,471,858	1	4,568	١	1,737,737	2.66
Louisiana	1,862,503	1,566,489	1	4,577	1	1,857,926	8.66
Maine	571,935	487,430	1	2,913	1	569,022	99.5
Maryland	2,387,346	2,041,103	1	3,790	1	2,383,556	8.66
Massachusetts	3,244,188	2,866,791	1		1	3,244,188	100.0
Michigan	3,968,149	3,440,605	169,751	23,656	1	3,774,742	95.1
Minnesota	2,660,800	2,305,097	i	17,357	í	2,643,443	99.3
Mississippi	1,067,732	847,810	43,696	7,513	1	1,016,523	95.2
Missouri	2,584,311	2,211,576	109,001	9,202	1	2,466,108	95.4

99.2	98.8	8.66	100.0	100.0	94.4	8.66	95.3	99.2	100.0	94.8	100.0	7.66	6.66	95.5	98.9	96.2	9.62	9.66	99.2	95.7	9.76	95.7	95.5	100.0	296.7	100.0	296.7
420,629	904,902	1,139,783	611,173	3,768,519	718,231	8,549,212	3,720,226	414,260	5,033,453	1,432,544	1,651,476	5,482,133	445,424	1,731,661	389,277	2,546,010	8,623,421	1,215,517	292,389	3,317,947	2,819,781	651,616	2,570,581	272,166	126,830,931	2,770,876	129,601,807
1	1	ı	ı	1	1		ı	1	ı	1	1	1	1	1	1	1	2,167,063	1	1	1	1	1	1	1	2,167,063		2,167,063
3,423	10,566	1,984			8,254	21,222	21,281	3,484		9,223		19,103	593	5,997	4,209	5,628	44,832	4,338	2,321	8,352	69,174	832	21,150		485,069		485,069
1	1	ı	1	1	34,064	1	163,691	1	1	69,878	1	1	1	76,019	1	95,172	1	1	1	142,292	1	28,290	100,323	ı	1,722,502		1,722,502
351,607	763,270	1,012,569	532,573	3,232,365	601,048	7,300,372	3,269,674	355,736	4,390,743	1,230,281	1,380,554	4,887,484	396,887	1,505,262	329,045	2,280,346	9,213,207	1,038,216	246,433	2,944,832	2,373,677	563,961	2,321,473	210,855	112,169,582	1	112,169,582
424,052	915,468	1,141,767	611,173	3,768,519	760,549	8,570,434	3,905,198	417,744	5,033,453	1,511,645	1,651,476	5,501,236	446,017	1,813,677	393,486	2,646,810	10,835,316	1,219,855	294,710	3,468,591	2,888,955	680,738	2,692,054	272,166	131,205,566	2,770,876	133,976,442
Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming	Total Non-Federal	Federal	TOTAL

a UI-covered employment reported in the ETA-202 data produced by the Bureau of Labor Statistics (U.S. DOL, 2013f)

Source: National Academy of Social Insurance estimates.

b Data not available for 2013, used 2011 data.

# **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 2013, total benefits were \$2.9 billion, of which 31 percent were for medical care. 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 is the case in most state programs. Administrative costs of the program were \$152 million in calendar year 2013, or 5.2 percent of total benefits (U.S. DOL 2015). Table B1 reports benefits and administrative costs for federal civilian employees under FECA from 2003-2013. 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, enacted in 1927, covered maritime employees injured while working over navigable waters because

the U.S. Supreme Court held that the Constitution prohibits states from extending coverage to such individuals. The LHWCA excludes coverage of the master or crew of a vessel. It also covers other workers who fall outside the jurisdiction of state programs, such as employees on overseas military bases, those working overseas for private contractors of the United States, and private employees engaged in offshore drilling enterprises. Private employers cover longshore and harbor workers by purchasing private insurance or self insuring. In fiscal year 2013, about 600 self-insured employers and insurance companies reported a total of 28,129 lost-time injuries to the federal Office of Workers' Compensation Programs. Total benefits paid under the Act in 2013 were \$1.5 billion, which included \$927 million paid by private insurance carriers, \$418 million paid by self-insured employers, \$120 million paid from the federally administered special fund for second injuries and other purposes, and \$8.4 million for the District of Columbia Workers' Compensation Act Fund (DCCA). Federal direct administrative costs were \$13.3 million, or about 1 percent of benefits paid (Table B2).

The Academy's data series on benefits and costs of workers' compensation includes at least part of the benefits paid by private carriers under the LHWCA in the states where the companies operate. The benefits are not identified separately in the information provided by A.M. Best and state agencies. Benefits paid by private employers that self-insure under the LHWCA are not reported by 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 2003-2013. Ideally, benefits and employer costs under the LHWCA would be counted in the states where the employee is located, because our estimates of covered employment and covered workers count these workers and wages in the states where they work. We believe that at least part of LHWCA benefits paid through private insurance carriers are included in state data that are reported to us by A.M. Best or the states. At the same time, self-insured employers under the LHWCA are not included in A.M. Best data and are unlikely to be included in state reports; benefits paid

Federal Employees' Compensation Act, Benefits and Costs, 2003-2013 (in thousands)

**Table B1** 

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Benefits	\$2,367,757	\$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
Compensation Benefits Medical Benefits % Medical	1,698,273 669,484 28	1,749,397 695,680 28	1,791,003 671,056 27	1,767,926 686,935 28	1,833,958 752,742 29	1,878,331 798,039 30	1,900,156 863,729 31	1,976,439 912,882 32	2,077,027 917,095 31	2,081,387 924,622 31	2,024,568 923,564 31
Direct Administrative Costs Total Costs	130,672 2,498,429	131,920 2,576,997	128,536 2,590,595	137,386 2,592,247	143,768 2,730,468	142,532 2,818,902	146,015 2,909,900	156,522 3,045,843	155,027 3,149,149	157,649 3,163,658	152,410 3,100,542
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

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 2015. from the LHWCA special funds are not included in state data. Thus, for 2003–2013 data, our estimates of total federal benefits include benefits paid by self-insured employers and the special funds under the LHWCA. Unless otherwise specified, we assume that privately insured benefits under the program are included in state reports. Whether and how LHWCA benefits can be reflected in state reports is a subject for analysis.

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 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 \$666 million in 2013. 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 211 in 2013.

# 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 in 2003-2013. Total benefits in 2013 were \$337 million, of which \$141 million was paid under Part B and \$197 million was paid under Part C. Part C benefits include \$34 million for medical care. Medical benefits are a small share of black lung benefits because many of the recipients of benefits are deceased coal miners' dependents, whose medical care is not covered by the program. Federal direct administrative costs were \$36.4 million, or about 10.8 percent of benefit payments.

Longshore and Harbor Workers' Compensation Act (LHWCA), Benefits, Costs, and Number of Defense Base Acta (DBA) Death Claims, 2003-2013 (in thousands)

\$7 2 3 3 orkers'	59										
oyer 3 Ind 1 a Workers' t Fund	53 278,887		\$795,466 3 325,027	\$879,508 367,625	\$923,045 456,773	\$983,050 \$	\$983,050 \$1,081,266 \$1,134,759 504,348 551,716 589,387	1,134,759	\$1,269,904 \$1,363,544 710,330 801,902	\$1,363,544 801,902	\$1,473,676
1	43 322,520		325,694	368,744	325,544	340,336	388,088	408,534	425,581	430,853	417,776
	04 135,073		134,230	132,933	130,673	128,372	131,544	127,415	124,664	122,133	120,100
(DCCA) Special Fund		10,841	10,515	10,206	10,055	9,994	9,918	9,423	9,328	8,656	8,383
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
Number of DBA Death Claims <sup>b</sup> 5.	2 99	231	284	338	426	289	341	585	405	280	211
Total Annual Assessments 135,800	00 148,500		146,500	135,500	135,000	132,500	136,500	131,500	131,000	132,000	132,000
LHWCA 125,000	000 137,000		135,000	125,000	125,000	124,000	125,000	124,000	123,000	124,000	123,000
DCCA 10,800		11,500	11,500	10,500	10,000	8,500	11,500	7,500	8,000	8,000	9,000
Administrative Expenses 12,270		12,510	12,568	12,715	12,725	12,667	12,922	13,394	13,461	13,330	13,317
General Revenue 10,297		10,495	10,553	10,691	10,699	10,633	10,855	11,356	11,354	11,229	11,203
Trust Fund 1,973		2,015	2,015	2,024	2,026	2,034	2,067	2,038	2,107	2,101	2,114
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

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

Source: U.S. Department of Labor 2015.

**Table B2** 

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.

Table B3 shows benefits under the black lung program in 2003 through 2013 for both parts of the program.<sup>36</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 that 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 2013 were \$849 million, with \$484 million paid as compensation benefits (U.S. DOL 2015). 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 2013 were \$340 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 June 2013, 27,298 claims were paid for a total of \$1.8 billion, or roughly \$66,281 a claim (U.S. Department of Justice 2013). 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 2013, 3.7 million veterans were receiving monthly compensation payments for service-connected disabilities. Of these, 45 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 \$4.1 billion in 2013, or about \$49.2 billion on an annual basis (U.S. Department of Veterans Affairs 2014). 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' compensa-

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, 2003-2013 (in thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Benefits	\$775,098	\$719,065	\$665,844	\$616,039	\$569,300	\$524,645	\$481,172	\$445,488	\$406,514	\$368,661	\$337,282
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
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
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
Total Direct Administrative Costs	37,393	38,057	37,917	38,453	38,749	38,009	37,502	37,292	36,818	38,035	36,407
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
Part B (SSA)	5,402	5,900	5,193	5,271	5,375	5,361	5,091	4,929	5,123	5,549	5,322
Trust Fund Advances from	000	7000	000 ///	000	000 )67	000	C		07	7 10	000 107
U.S. Ireasury	222,000	497,000	446,000	445,000	476,000	476,000	0	00,000	10/,/49	214,000	401,000
Bond Payments <sup>b</sup>	*	*	*	*	*	*	341,939	364,757	400,905	431,486	452,439
Interest Payments on	(85 00)	025 055	708 729	730 703	717 21 4	037 022			60 160	107 864	217.372
rast Advances	020,702	676,000	0/4,074	074,704	/1/,414	737,407		0	00,100	10/,004	7/C,+17
Coal Tax Revenues Received by	000 00%		00% 00%		(6)	0000	20000	2/1/003	500	(3(5)(	770 613
the black Lung Trust Fund	480,080	6/6///6	020,470	798,520	650,422	046,800	656,750	588,/45	621,002	000,000	512,800
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

<sup>\*</sup> Information not available

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Source: U.S. Department of Labor 2015.

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.

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.

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 iden-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 tified for coal mine workers' compensation.) Ъ

Table B4

Energy Employees Occupational Illness Compensation Program Act, Part B and Part E Benefits and Costs, 2003-2013 (in thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Benefits Part B	\$303,981	\$275,727	\$392,503	\$502,636	\$561,824	\$605,338	\$471,639	\$803,456	\$784,278	\$868,248	\$848,884
Compensation Benefits Medical Benefits <sup>a</sup>	288,274 15,707	250,123 25,604	358,751 33,752	460,494 42,142	490,089 71,735	517,383 87,955	337,642 133,997	576,364 227,092	474,213 310,065	538,517 329,731	484,330 364,554
Direct Administrative Costs	b 65,941	94,158	106,818	104,872	107,417	92,075	51,377	53,102	51,228	49,577	49,208
Total Benefits Part E <sup>C</sup>	n/a	n/a	268,635	270,598	409,100	468,982	395,680	383,760	338,045	318,876	340,327
Compensation Benefits Medical Benefits <sup>d</sup>	n/a n/a	n/a n/a	268,586 49	269,558 1,040	407,277 1,823	465,742 3,240	390,077 5,603	370,351 13,409	319,373 18,672	297,404 21,472	306,299 34,028
Direct Administrative Costs	b n/a	n/a	39,295	55,088	61,671	59,152	68,146	74,622	74,189	72,260	68,397

- 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 2009-12 include funding for an ombudsman position. For 2009, these costs were \$0.1 million; 2010, \$0.4 million; 2011, \$0.2 million; and 2012, \$0.3 million. Part E costs for 2005-12 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; and 2012, \$0.8 million; and 2013, \$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 2015.

tion programs in many respects. With cash benefits of about \$49.2 billion in 2014, veterans' compensation is about 154 percent of the size of total cash benefits in other workers' compensation programs, which were \$32.0 billion in 2013. 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 Seamen

Finally, federal laws specify employee benefits for railroad workers involved in interstate commerce and merchant seamen. The benefits are not workers' compensation benefits and are not included in our national totals. Instead, these programs provide health insurance and 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).

This report includes in national totals for workers' compensation those federal programs that are financed by employers and that are not otherwise included in workers' compensation benefits reported by states in 2003 through 2013. The accompanying tables provide detailed information on federally administered programs, including some that are not included in national totals in this report. Data earlier than 2003 can be found in earlier reports.

**Table B5** 

Radiation Exposure Compensation Act, Benefits Paid as of June 30, 2013 (benefits in thousands)

Claim Type	# Claims	Benefits
Downwinder	16,917	\$845,820
Onsite Participant	2,687	194,867
Uranium Miner	5,855	584,775
Uranium Miller	1,531	153,100
Ore Transporter	308	30,800
TOTAL	27,298	\$1,809,362

Source: U.S. Department of Justice 2013.

**Table B6** 

Federal Veterans' Compensation Program, Compensation Paid in Fiscal Year 2013

Class of Dependent	Number	Monthly Value (in thousands)
Veteran Recipients - total	3,743,259	\$4,096,061
Veterans Less Than 30 Percent Disabled (no dependency benefit) Veterans 30 Percent or More Disabled	1,676,161 2,067,098	397,296 3,698,765

Source: U.S. Department of Veterans Affairs 2014.

### **Appendix C: Workers' Compensation Under State Laws**

Table C illustrates the benefit parameters that form the basis for the data estimated in this report. The table is taken 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 2014). The state laws are as of January 2014.

The benefit parameters defined in this table portray the workers' compensation differences across states. The difference may lie in (a) when the first day of disability begins; (b) compensation that is included in determining the "wage;" (c) periods over which the average wage is calculated; (d) caps on wages earned by the injured worker; or (e) differences in calculation of compensation rate, etc. For each state the table describes:

■ The waiting period before a worker receives benefits.

- The minimum and maximum benefit payments and length of benefit payments for temporary total disability.
- The weekly payments and benefit limitations for permanent total disability.
- The maximum weekly benefit and benefit limitations for permanent partial disability.
- The maximum weekly benefit and benefit limitations for death benefits.

A point to be noted is that most states have provisions to waive the waiting period in certain cases, mostly related to the eventual duration of the disability. The value of lost wages not recompensed by a retroactive period are a significant cost to workers and a cost of workers' compensation borne by one of the key identified stakeholders.

Table C

	Waiting Period, Jan 14	d, Jan 14	Tempor	Temporary Total Disability, Jan 14	ty, Jan 14	Pe	Permanent Total Disability, Jan 14	sability, Jan 14		Permane Disabili	Permanent Partial Disability, Jan 14	Death Ben	Death Benefits, Jan 14
State	Waiting Period Before a Worker Can Receive Indemnity Benefits	Retro- active period	Minimum Weekly TTD Benefits	Maximum Weekly TTD Benefits	Maximum Length of TTD Benefits (in weeks)	Basis of PTD Calculation	Maximum Weekly PTD Benefits	Maximum Length of PTD Benefits	Limit to Monetary PTD Benefits	Maximum Weekly PPD Disability Benefits	Maximum PPD Benefits for "Unscheduled Injuries" (weeks)	Maximum Weekly Dependency Benefits	Statutory Limit for Dependency Benefits
Alabama	3 days	21 days	\$217.00	\$788.00	Duration of TTD disability	66 2/3% PIWW	\$788.00	°N	No	\$220.00	300	\$788.00	500 weeks
Alaska	3 days	28 days	\$251.00	\$1,143.00	Continue until employee is medically stable or released to work	80% of the workers' spendable after tax or NWW	\$1,143.00	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 pro- gram, in which case PPI benefits can be paid at the weekly TTD rates: TTD min (\$251) and TTD max (\$1,143)	No unscheduled PPD	\$1,143.00	12 years
Arizona	7 days	14 days	n/a	\$653.13	Duration of TTD disability	66 2/3% AMW	\$654.96	No	No	\$736.83 for scheduled injuries; for unscheduled injuries; n/a injuries, n/a	Payable for life unless rearranged by Industrial Commission	\$654.96	None
Arkansas	7 days	14 days	\$20.00	\$617.00	450	66 2/3% PIWW	\$617.00	Benefits are for the length of disability and may be paid for life	There is a limitation of the weekly amount but not the total amount	\$463.00	450 maximum for all disability <sup>a</sup>	\$617.00	Remarriage of spouse, attain- ment of age 18 of dependent child or 25 if full-time student; 450-week limit for partial dependents <sup>b</sup>
California	3 days	21 days	\$161.19	\$1,074.64	104°C	2/3 of AWW, subject to minimum /maximum rates	\$1,074.64	Lifetime	2	\$290	not applicable	\$1,074.64	There is a maximum amount paid per Labor Code 4702 but that amount can be higher based on Labor Code 4703.5

Workers' Compensation State Laws as of January 2014

None	None	When spouse remarries or if minor dependents reach 18 years of age or 25 if attending accredited higher learning institution	None	Maximum payable is \$150,000	\$150,000 for surviving spouse with no dependents	312 weeks
\$875.42	\$1,184.00	\$660.79	\$1,441.80	\$827.00	\$525.00	\$777.00
400 <sup>d</sup>	520	300	500 week limit for all disability and worker may petition for an additional 167 weeks	2 weeks for each % of impairment from 1-10%; 3 weeks from 11-15%; 4 weeks from and 6 weeks for each rating over 21%	300	312
\$275.10 is set weekly rate for all scheduled injuries; \$875.42 weekly is maximum for calculating unscheduled injuries	\$985.00	\$660.79	\$1,441.80	\$827.00	\$525.00	\$777.00
None	None	2	The first \$75,000 in benefits for death or PTD shall be paid by the employ-er/insurer. Amounts over \$75,000 are paid from death and PTD Trust Fund	S S	not applicable	No
Benefits are for the length of disability and may be paid for life	None	8	500 weeks for all disability benefits with ability to petition for an additional 167 weeks	Benefits are payable to age 75. If the injury occurred after age 70, benefits are payable during continuance of PTD not to exceed 5 years following determination of PTD	not applicable	N
\$875.42	\$1,184.00	\$660.79	\$1,441.80	\$827.00	not applicable	\$777.00
66 2/3% PIWW	75% of spendable earnings	66 2/3% AWW up to the maximum at the date permanent impairment becomes fixed	66 2/3% PIWW	66 2/3% PIWW	not applicable	66 2/3% PIWW
Duration of TTD disability	Duration of TTD disability	unlimited	500 weeks for all disability benefits with ability to petition for an additional 167 weeks	104	400 weeks un- less catastrophic injury	Duration of TTD disability
\$875.42	\$1,184.00	\$660.79	\$1,441.80	\$827.00	\$525.00	\$777.00
попе	\$236.80	\$220.26	\$360.20	\$20 unless wages are less than \$20, then full wages	\$50.00	\$194.00
14 calendar days	7 days	7 calendar days	14 days	22 days	21 days	None
3 scheduled days	3 days	3 days	3 days	7 days	7 days	3 days
Colorado	Connecticut	<b>D</b> elaware	District of Columbia	Florida	Georgia	Hawaii

Workers' Compensation State Laws as of January 2014

fits, Jan 14	Statutory Limit for Dependency Benefits	500 weeks for spouse, age 18 for children or age 23 if en- rolled in an accredited learning institution	\$500,000 or 25 years	500 weeks	None	\$300,000	18/22 if in school	
Death Benefits, Jan 14	Maximum Weekdy Dependency Benefits	60% of current average state wage or \$410.40 weekly	\$1,331.20	\$650.00	\$1,543.00	\$587.00	All combined cannot exceed amount payable for total disability	\$619.00
Permanent Partial Disability, Jan 14	Maximum PPD Benefits for "Unscheduled Injuries" (weeks)	200	200	not applicable	200	415 weeks	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	520
Perman Disabil	Maximum Weekly PPD Disability Benefits	55% of the AWW at the time of injury	\$721.66	not applicable	\$1,419.00	\$587.00	\$576.80	\$619.00
	Limit to Monetary PTD Benefits	Weekly rate may change after the first 52 weeks of TTD and each year thereafter on January 1, based on the increase in the AWW	No	500 weeks	ON.	\$155,000	None	None
ability, Jan 14	Maximum Length of PTD Benefits	S.	ON O	500 weeks	S.	Benefits are for the length of disability and may be paid for life or until maximum of \$155,000 is reached.	Until the injured worker qualifies for normal old age Social Security	Benefits are for the length of disability and may be paid for life
Permanent Total Disability, Jan 14	Maximum Weekly PTD Benefits	\$615.60	\$1,331.20	\$650.00	\$1,543.00	\$587.00	\$769.06	\$619.00
Pe	Basis of PTD Calculation	67% of AWW	66 2/3% AWW subject to max and min levels	66 2/3% PIWW	80% of the worker's spendable after tax or NWW	66 2/3% AWW	66 2/3% of injured worker's AWW subject to 100% of the SAWW	66 2/3% PIWW
oility, Jan 14	Maximum Length of TTD Benefits (in weeks)	None. TTD continues while in the period of recovery.	Duration of TTD disability	200	Benefits are for length of disability and maybe paid for life	225 to 415 weeks depending on type of injury-also maybe a limitation of \$130,000 or \$155,000 for all indemnity benefits depending on types of benefit paid.	Duration of disability or until receipt of Social Security old age and survivor benefits	Duration of TTD disability
Temporary Total Disability, Jan 14	Maximum Weekly TTD Benefits	\$615.60	\$1,331.20	\$650.00	\$1,543.00	\$587.00	\$769.06	\$619.00
	Minimum Weekdy TTD Benefits	\$102.60	\$220.00	\$50.00	попе	\$25.00	20% of SAWW; \$153.81	\$165 or actual wage whichever is less
od, Jan 14	Retro- active period	Disability extends over 14 days	14 calendar days	21 days	14 days	21 consecutive days	Two Weeks determined by courts to mean 14 days	6 weeks
Waiting Period, Jan 14	Waiting Period Before a Worker Can Receive Indemnity Benefits	5 days	3 days	7 days	3 days	7 consecutive days	7 days	7 days
	State	ldaho	Illinois	Indiana	Юма	Kansas	Kentucky	Louisiana

500 weeks or until age 18 for children	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	250 weeks	500 weeks	Benefits end after 10 years or 10 years after the last child is no longer depen- dent minimum payable is \$60,000
DOI 11/193- 12/31/12: \$777.90; DOI on/after 1/1/13: \$728.63	\$998.00	\$1,000.00	\$805.00	102% of SAWW for preceding years
DOI 1/1/93- 1/1/93-12/31/2012: 520 weeks for the \$717.30; DOI duration of the on/after 1/1/13: disability if PI rating \$728.63 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	None	not applicable	not applicable	Rated by analogy to similar scheduled injury
DOI 1/1/83- 12/31/12: \$717.90; DOI on/after 1/1/1/3: \$728.63	\$749.00	not applicable	not applicable	102% of SAWW
2	\$45K except that benefit shall be paid for the period that the covered employee is permanently totally disabled	No	None	9
Benefits are for the length of disability and may be paid for life	2	ο <sub>N</sub>	800 weeks conclusive payment with factual determination therefater	Until age 67
DOI 1/1/93- 12/31/12: \$777.90; DOI on/after 1/1/13: \$728.63	\$998.00	\$1,181.28	\$805.00	102% of the SAWW for the preceding calendar year
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	66 2/3% PIWW	66 2/3% PIWW	80% of the worker's spendable after tax or NWW	66 2/3% PIWW
920	Duration of TTD disability	156	Duration of TTD disability	130
DOI 1/1/1993- 12/31/2012: \$717.90; DOI on/after 1/1/2013: \$728.63	\$998.00	\$1,181.28	\$805.00	102% of the SAWW for the preceding calendar year
none	\$50 or AWW	\$236.26	None	\$130 or the worker's actual wage, whichever is less
14 calendar days	14 days	21 days	14 calendar days	10 days
7 days <sup>e</sup>	3 days	5 days	7 calendar days	3 days
Maine	Maryland	Massachu- setts	Michigan	Minnesota

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its, Jan 14	Statutory Limit for Dependency Benefits	450 weeks; remarriage for spouse; age 18-23 for child	as	500 weeks	None	None	18 or 25 if a full-time student	Lifetime with exceptions	100% of the SAWW for 700 weeks	
Death Benefits, Jan 14	Maximum Weekly Dependency Benefits	\$449.12	\$853.08	\$698.00	\$747.00	\$811.09	\$1,383.00	\$843.00	66 2/3% of AWW divide as stated in Statute 52-1-46	\$803.21
Permanent Partial Disability, Jan 14	Maximum PPD Benefits for "Unscheduled Injuries" (weeks)	450	400	400	300	PPD benefits paid for 5 years or to age 70, whichever is later	350 weeks for a whole person award	009	500 weeks if the rating is less than 80%, 700 weeks if rating is greater	\$421,685.25. Calculated by multiplying \$25 (max weeks) by max weekly rate \$803.21
Perman Disabil	Maximum Weekly PPD Disability Benefits	\$449.12	\$446.85	\$349.00	\$747.00	\$811.09	\$1,383.00	\$843.00	\$759.89	\$803.21
	Limit to Monetary PTD Benefits	\$202,104.00	None	None	None	Per maximum compensation limit and formula	None	None	None	None
sability, Jan 14	Maximum Length of PTD Benefits	450 weeks or until total compensation paid equals \$202,104.00	ON.	Payable until retirement	Payable for the length of disability and may be for life	N N	Payable for the length of disability and may be for life	Payable for the length of disability and may be for life	Payable for the length of disability and may be for life	No. Benefits are payable for the length of disability which is almost always for life of the claimant
Permanent Total Disability, Jan 14	Maximum Weekly PTD Benefits	\$449.12	\$853.08	\$698.00	\$747.00	\$811.09	\$1,383.00	\$843.00	\$759.89	\$803.21
P	Basis of PTD Calculation	66 2/3% x AWW	66 2/3% PIWW not to exceed 105% of the SAWW.	66 2/3% PIWW	66 2/3% PIWW	66 2/3% pre-injury AMW	09 % PIWW	70% of actual wage at the time of injury	66 2/3% PIWW	66 2/3% PIWW
oility, Jan 14	Maximum Length of TTD Benefits (in weeks)	450	400	Duration of TTD disability	Duration of TTD disability	Duration of TTD disability	Duration of Total disability	400	700	Duration of TTD disability
Temporary Total Disability, Jan 14	Maximum Weekly TTD Benefits	\$449.12	\$853.08	\$698.00	\$747.00	\$811.09	\$1,383.00	\$843.00	\$759.89	\$803.21
Tempo	Minimum Weekly TTD Benefits	\$25.00	\$40.00	попе	\$49 or actual wage, if less	no minimum	\$276.60	\$220.00	\$36.00	\$150, unless claimant's wages less than \$150, then claimant receives full wages
od, Jan 14	Retro- active period	14 days	14 days	21 days <sup>h</sup>	6 weeks	5 consecutive days or 5 cumulative days within a 20 day period	14 days	7 calendar days	4 weeks	More than 14 days
Waiting Period, Jan 14	Waiting Period Before a Worker Can Receive Indemnity Benefits	5 days <sup>f</sup>	3 days in which the em- ployer is open for business	32 hours or 4 days, which- ever is less	7 days	5 days	3 days	7 days	7 days	7 days
	State	Mississippi	Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York

500 weeks	\$300,000 or death	None	None	None	п/а	None
\$912.00	\$1,098.00	\$849.00	\$801.00	\$1149.66 <sup>m</sup>	\$932.00	\$1,017.00
20,000	100% impairment based on lump sum payment	283	500	\$330,499.66	not applicable	200
\$912 for scheduled injuries	PPI rate multiplied by the maximum body impairment percentage of 100%. Paid as lump sum	\$269.97	\$323.00	not applicable	not applicable	\$180.00
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	O <sub>N</sub>	°Z	ON.	The only limit to PTD benefit is SAWW	not applicable	None
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	Payable until retirement at which time benefits may switch to ABP, except in cases of catatrophic injury <sup>k</sup>	N N	15 years or upon reaching Social Security retirement age, whichever is longer	Lifetime plus benefits to surviving spouse and children	not applicable	Payable for the length of disability and may be for life
\$912.00	\$1,098.00	\$849.00	\$801.00	\$862.27	not applicable	\$1,017.00
66 2/3% PIWW	66 2/3% PIWW	66 2/3% PIWW	70% PIWW	66 2/3% PIWW but cannot exceed the state AWW	not applicable <sup>0</sup>	75% of worker's spendable or after tax or NWW
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	104 weeks. An additional 20 weeks maybe added if the employee is enrolled in a vocational rehabilitation program.	As long as disability lasts	156	n/a	Duration of TTD disability subject to conversion to partial benefits at 104 weeks <sup>n</sup>	Duration of TTD disability
\$912.00	\$1,098.00	\$849.00. If 72% of the FWW or 66 2/3% of the AWW is above the maximum, TTD is paid at the maximum amount.	\$801.00	\$1,146.82	\$932.00	\$1,017.00
00008\$	\$527.00	\$283.00. However if AWW is be- low minimum, the TDD is 100% of the AWW	None	Not less than \$50 or 90% of the work- er's AWW; whichever is less	50% of statewide AWW or 90% of worker's AWW, whichever is lower.	поле
21 days	5 days	14 calendar days	More than 21 days	14 days	14 calendar days	No pay- ment for waiting period days
7 days	5 days	7 days	7 days	3 days	7 days	3 days
North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island

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Permanent Partial Death Benefits, Jan 14	dimum PPD  enefits for Maximum Statutory sscheduled Weekly Limit for Injuries" Dependency Dependency (weeks) Benefits	340 \$704.92 500 weeks		312 \$691.00 None	\$835.00	\$691.00	\$850.00	\$835.00
	Maximum PPD Maximum Benefits for Weekly PPD "Unscheduled Disability Injuries" Benefits (weeks)	Depends on scheduled body part		\$691.00				1 405 P. C. S. E.
Limit to Monetary PTD ts Benefits 500 weeks			f None		S S S or			
	Maximum Length of PTD Benefits	500 weeks	For length of disability and can be for life	Until Social Secur-	ny engranny age or 260 weeks where the date of injury is on or after age 60	ny englaniny age or 260 weeks where the date of injury is on or after age 60 after age 60	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	ny enguniny age or 260 weeks where the date of injury is on or after age 60 after age 60 after age 60 the put PTD benefits are awarded for life, but PTD status may be reexamine by submitting employee to reasonable medical evaluations, rehabilitation and retraining efforts, disclosure of Federal Incomman Tax returns  For duration of total disability-can be for life
	Maximum Weekly PTD Benefits	\$752.16	\$691.00	\$835.00		\$850.00		47
	Basis of PTD Calculation	66 2/3% PIWW	66 2/3% PIWWP	66 2/3% PIWW		75% AWW	75% AWW 66 2/3% AWW at the time of injury not to exceed 2/3 of the SAWW	75% AWW 66 2/3% AWW at the time of injury not to exceed 2/3 of the SAWW 66 2/3% PIWW
ability, Jan 14	Maximum Length of TTD Benefits (in weeks)	Duration of TTD disability with a maximum of 500 weeks	Duration of TTD disability	Duration of TTD for physical initi-	ries; 104 weeks for psychological injuries; 104 weeks after the commencement of pain management	ires; 104 weeks for psychological injuries; 104 weeks after the commencement of pain management 1059	ries; 104 weeks for psychological injuries; 104 weeks after the commencement of pain management 1059	ries; 104 weeks for psychological injuries; 104 weeks after the commencement of pain management 1059  Duration of TTD disability; insurer must review after 2 years
Temporary Total Disability, Jan 14	n Maximum Weekly TTD Benefits	ss \$752.16	\$691.00	\$918.50		\$850.00		
	Minimum Weekly TTD Benefits	ss are >\$75, if wages are >\$75, otherwise, comp rate is equal to wages	dar \$346.00	s \$125.25		\$127.00		
waiting reriod, Jan 14	gererererererererererererererererererer	More than 14 days	7 calendar days	s 14 days			-	
1	Waiting Period Before a Worker Can Receive Indemnity Benefits	7 days	7 days	ee 7 days		7 days	7 days	3 days
	State	South	South Dakota	Tennessee		Texas	Texas	Texas Utah

N. A.		\$267,600	None
\$1,203.96	\$754.81	\$892.00	Cannot exceed more than 2x the SAWW
\$194,446.65	None	1,000	None
\$1,178.59 for DOI prior to 7/1/11; \$1,162.07 for DOI 7/1/11-6/30/12; \$1,164.17 for DOI 7/1/12-6/30/13; \$1,203.86 for DOI on or after 7/1/13;	\$497.27	\$322.00	Dependant on the date of injury
There is a maximum payment for lump sums only, up to \$8,500	2	N	N
For length of disability and can be for life	Payable until age 70 for all PTD awards granted on or after 07/1/2003	For length of disability and can be for life	Paid for 80 months then benefit becomes extended PTD and extended PTD must be renewed annually
\$1178.59 for DOI prior to 7/1/11; \$1162.07 for DOI 7/1/11- 6/30/12; \$1164.17 for DOI 7/1/12-6/30/13; \$1203.86 for DOI on or after 7/1/13.	\$711.38	\$892.00	\$543.33
Depends on the option chosen by employee	66 2/3% PIWW not to exceed 100% of the AWW in West Virginia	66 2/3% PIWW	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
Duration of TTD disability	104	Duration of TTD disability	24 months or in extraordinary circumstances up to an additional 12 months
\$1178.59 for DOI prior to 7/1/11; \$1162.07 for DOI 7/1/11-6/30/12; \$1164.17 for DOI 7/1/12-6/30/13; \$1203.86 for DOI on or after 7/1/13	\$754.81	\$892.00	\$815.00
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	Federal minimum wage	TTD rate maybe set as restricted part-time at 100% of actual earnings.	30% of the state AMW or 2/3 of the actual monthly earnings at the time of injury, whichever is greater, but shall not exceed the lesser of the 100% of the actual monthly earnings.
14 calendar days immediately following the DOI	7 con- secutive days	7 non- consecu- tive days	8 days
The 3 days immediately following the DOI	3 days	3 days	3 days
Washington	West Virginia	Wisconsin	Wyoming

Except for PTD which is payable for life а

If total amount of weekly compensation is less than \$7.00 per week.

### Workers' Compensation State Laws as of January 2014

- 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 5 day period notr 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.
- 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 recives 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 benfits 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 decedents's death and child will receive weekly payments for 400 weeks or until age 18, whichever is longer.
- k ABP benefitsare 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.
- 1 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.

ABP Additional Benefits Payable

AMW Average Monthly Wage

AWW Average Weekly Wage

NWW Net Weekly Wage

PIWW Pre-injury Weekly wage

SAWW State-wide Average Weekly Wage

Source: IAIABC-WCRI (2014).

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