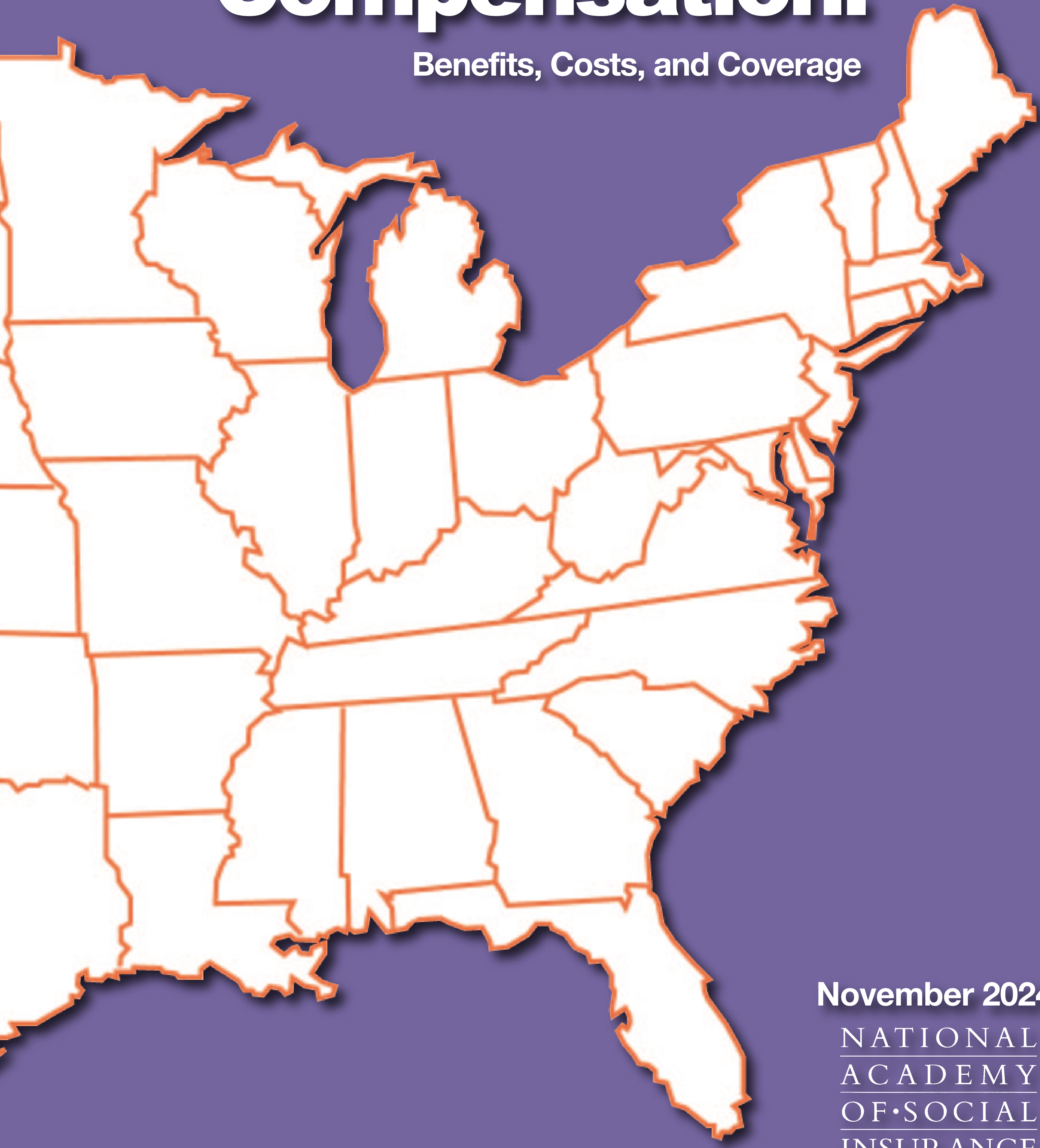
Workers' Compensation:

Benefits, Costs, and Coverage



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Washington, DC

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

This research report presents data on trends in workers' compensation benefits, costs, and coverage as of 2022. The report was prepared with the guidance of the Study Panel on Workers' Compensation Data and, in accordance with procedures of the Academy, has been reviewed for completeness, accuracy, clarity, and objectivity by a committee selected by the Board of Directors. The purpose of the report is to present the data and describe trends over time, but not to make policy recommendations. The Centers for Medicare & Medicaid Services provide funding to produce selected tables for this report that are also used in their own estimates. The project also receives in-kind support from the National Council on Compensation Insurance and the National Association of Insurance Commissioners.

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Workers' Compensation:

Benefits, Costs, and Coverage (2022 data)

by

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with advice from the

Study Panel on Workers' Compensation Data

Nobember 2024

NATIONAL ACADEMY OF SOCIAL INSURANCE

Washington, DC

Preface

Workers' compensation provides funding for medical care, rehabilitation, and wage replacement for workers who are injured on the job or who contract work-related illnesses, and pays survivor benefits to families of workers who die of work-related injuries or illnesses. Unlike most other U.S. social insurance programs, workers' compensation is primarily a state program. Individual states established workers' compensation programs beginning in 1911, before any federal social insurance programs were enacted. No federal laws set standards for the state workers' compensation programs or require comprehensive reporting of workers' compensation data, nor is there any direct federal financing of these state programs.

The lack of uniform federal standards or reporting requirements for state workers' compensation programs makes it difficult to provide national estimates with uniform definitions of amounts of benefits paid, costs to employers, and numbers of workers covered. In order to produce national summary statistics on the program, it is necessary to compile data from various sources.

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

This is the Academy's 27th annual report on workers' compensation benefits, costs, and coverage. This report presents new data on state and federal workers' compensation programs for 2022 and updated estimates for 2018-2021. The updated estimates replace estimates in the Academy's prior reports. This report shows five-year trends in benefits, costs, and coverage, as have been reported in prior years. However, this report also shows the annual changes in data between 2020 and 2022 to highlight year-over-year trends in benefits, costs, and coverage related to the COVID-19 pandemic. Statistical data for Puerto Rico and other U.S. territories are not included in this report. Detailed descriptions of the methods used to produce the estimates in this report are available online at **nasi.org**.

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. Despite the Academy's continued efforts to improve the quality of its estimates, there are data limitations which we acknowledge throughout the report. Our estimates, for example, do not capture the uncompensated economic and human costs of work-related injuries, illnesses, and fatalities borne by workers, families, employers, and communities. These costs are significant but beyond the scope of this report. Similarly, the report does not attempt to measure any sorts of discrimination or inequities that may exist within state systems, and any costs associated with these two factors. Finally, the report does not evaluate the degree to which workers' compensation programs are meeting key objectives, such as: preventing work-related injuries and illnesses; compensating injured workers adequately; rehabilitating injured workers; and returning injured workers to work affordably.

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

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

Compensation and Workers' Compensation uses the data as part of its comparison of state workers' compensation programs in its annual workers' compensation fiscal bulletin.

Another important development that could alter the rebound to pre-pandemic trends is the increase in work-from-home (Bick et al., 2023). Future reports will continue to add to our understanding.[iii]

Word of Caution for 2020 and 2021 Standardized Metrics

Users of this report should exercise caution when comparing standardized costs and benefits in 2020 and 2021 to data from other years. The measures rely in part on covered wages, which experienced a large shock in 2020 due to the COVID-19 pandemic.[i] While we note a clear rebound in 2022, the adaptation to COVID-19 is still ongoing. Covered wages and jobs both increased and returned to trend, but there are reasons to believe it may take time to fully understand the effects.

As just one example, "long COVID" remains a concern and is of particular interest in workers' compensation because of the duration of these claims. A recent study has reported that – as of mid-2022 – nearly a quarter of COVID-19-related claims are related to long COVID (Choo et al., 2022). Only 29% of long COVID claims are closed within six months of accident date, relative to 64% of claims not related to long COVID.[ii]

Another study, based on less recent infection data and on different states, found the prevalence of long COVID to be 7% of all COVID-19 illnesses but associated with medical claim costs nearly ten times greater than claims without long COVID (Savych, 2023). Prevalence rates varied by state, with New York having the highest (15%) and Kansas the lowest (2%).

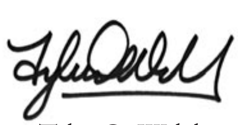
Acknowledgements

The Academy expresses its deep appreciation to staff members in workers' compensation offices across the 50 states and the District of Columbia, in addition to staff at the U.S. Department of Labor Office of Workers' Compensation Programs, who provide data on their programs each year. While there are too many individuals to name individually, we are grateful for the time they spend responding to our survey and answering clarification questions as needed. Without support from these individuals, constructing this annual data series would be impossible.

The Academy acknowledges funding from the Centers for Medicare & Medicaid Services to produce selected tables for this report that are also used in its own estimates. The project also receives in-kind support from the National Council on Compensation Insurance and the National Association of Insurance Commissioners.

The authors gratefully acknowledge the time and expertise contributed by members of the Academy's Study Panel on Workers' Compensation Data. All members of the Panel are listed on page iii. Finally, we appreciate comments from Melissa McInerney (Tufts University) and John Ruser (Insights Into Comp, LLC).

We sadly note the September 2024 passing of our colleague, Donald Gallogly (Oregon Department of Consumer and Business Services), a peer reviewer in multiple prior studies. We appreciate his many contributions in the field of social insurance.



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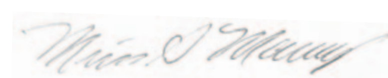

Michael Manley
Chair, Study Panel on Workers' Compensation Data

i Divergence in 2020 between changes in covered jobs and wages was in part driven by the extreme job-loss among low wage and lower-middle wage workers (Abel and Deitz, 2021).

ii We do not define long COVID here because the medical literature has yet to arrive at a consistent definition (Thaweethai et al., 2023).

iii While we recognize official declarations as to the end of the pandemic (CDC, 2023), we continue to include this word of caution for 2022 data because the pandemic period remains a part of the comparison years we present (and the data for which this report updates from prior years), states were active in COVID-19-related changes in 2022, and adaptation from the pandemic is ongoing (Vyas, 2022)

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Highlights

For more than two decades, the National Academy of Social Insurance has produced an annual report on workers' compensation benefits, costs, and coverage. The report provides summary statistics on state and federal workers' compensation programs, with the aim of facilitating policymaking that improves the system for both injured workers and employers. This report provides new data for 2022, with comparison data for the five-year period from 2018 to 2022—herein referred to as "the study period." The report presents annual data over the COVID-19 pandemic period, namely 2020 and 2021, as an indication of the adaptation of the workers' compensation system. Building off of the 2021 data report, the 2022 data in this report suggest a nearly complete return to pre-pandemic norms.

National Trends (Table 1)

- **Workers' compensation covered jobs increased between 2018 and 2022, with gains from 2021 to 2022 that were strong enough to make up for losses during the pandemic. Covered wages experienced continuous growth over the study period.**[1]
  - The number of U.S. jobs covered by workers' compensation increased by 2.6 percent between 2018 and 2022. This growth was driven by a 4.4 percent increase from 2021 to 2022.
  - Covered wages grew by 25.4 percent between 2018 and 2022. The increase from 2021 to 2022 (8.1%) continued the pattern from 2020 to 2021.
- **Total benefits paid decreased over the study period but increased between 2021 and 2022. Benefits paid per $100 of covered wages, however, decreased between 2018-2022, and between 2021-2022. (Figure 1)**
  - In 2022, total workers' compensation benefits paid were $61.7 billion, a 1.9 percent decrease from 2018. Benefits decreased by 5.8 percent from 2019 to 2020, then increased by 0.8 percent from 2020 to 2021 and by 3.3 percent from 2021 to 2022.
  - Total benefits per $100 of covered wages decreased consistently over the study period from $0.77 in 2018 to $0.60 in 2022.
- **Total employer costs increased over the study period, with a large increase in total costs between 2021 and 2022. There were decreases, however, in costs per $100 of covered wages between 2021 and 2022.**
  - In 2022, employer costs for workers' compensation were $103 billion, up 1.4 percent from 2018 and up 7.4 percent from 2021.
  - Employers' costs per $100 of covered wages were $1.00 in 2022, a decrease of $0.24 (19.4%) from 2018. The decrease between 2021 and 2022, however, was much smaller than in the previous three years (less than 1%).

State Trends

- **Workers' compensation covered jobs increased in 34 jurisdictions between 2018-2022. Between 2021 and 2022, covered jobs increased in every jurisdiction.**[2] **(Table 3)**
  - Between 2018 and 2022, the largest increases in covered jobs were in Idaho, Utah, and Texas. The largest decreases were in Hawaii, DC, and West Virginia.
  - Between 2021 and 2022, the largest percentage increases were in Nevada (8.6%), Texas (7.2%), and Hawaii (5.9%).
- **Covered wages increased in every state over the study period (2018-2022) with strong increases between 2021 and 2022. (Table 4)**
  - Between 2018 and 2022, the largest percentage increase occurred in Idaho (42.9%), with twelve other states experiencing increases greater than or equal to 30 percent.

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1 Covered wages represent the sum of all covered wages in calendar year 2022, whereas covered employment represents the annual average of covered jobs for calendar year 2022.

2 This report includes data from all fifty states and the District of Columbia (DC), as well as for select federal programs. For the purposes of this report, we treat DC like a 51st state and use the terms "state" and "jurisdiction" interchangeably throughout.

Table 1

Overview of Workers' Compensation Benefits, Costs and Coverage, 2018-2022

		Percent Change				
Aggregate Benefits, Costs, and Coverage	*2022*	*2018-2019*	*2019-2020*	*2020-2021*	*2021-2022*	*2018-2022*
Covered Jobs (in thousands)	146,312	1.2	-6.1	3.4	4.4	2.6
Covered Wages (in billions)	$10,257	4.7	1.6	9.2	8.1	25.4
Workers' Compensation Benefits Paid (in billions)	61.7	0.0	-5.8	0.8	3.3	-1.9
Medical Benefits	29.0	-0.3	-10.5	1.0	2.3	-7.8
Cash Benefits	32.7	0.3	-1.0	0.6	4.2	4.1
Employer Costs for Workers' Compensation (in billions)	103.0	-1.2	-6.9	2.6	7.4	1.4

		Dollar Change				
Benefits and Costs per $100 of Covered Wages	*2022*	*2018-2019*	*2019-2020*	*2020-2021*	*2021-2022*	*2018-2022*
Workers' Compensation Benefits Paid	$0.60	-$0.03	-$0.05	-$0.05	-$0.03	-$0.17
Medical Benefits	0.28	-0.02	-0.04	-0.02	-0.02	-0.10
Cash Benefits	0.32	-0.02	-0.01	-0.03	-0.01	-0.07
Employer Costs for Workers' Compensation	1.00	-0.07	-0.10	-0.07	-0.01	-0.24

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

Source: National Academy of Social Insurance estimates.

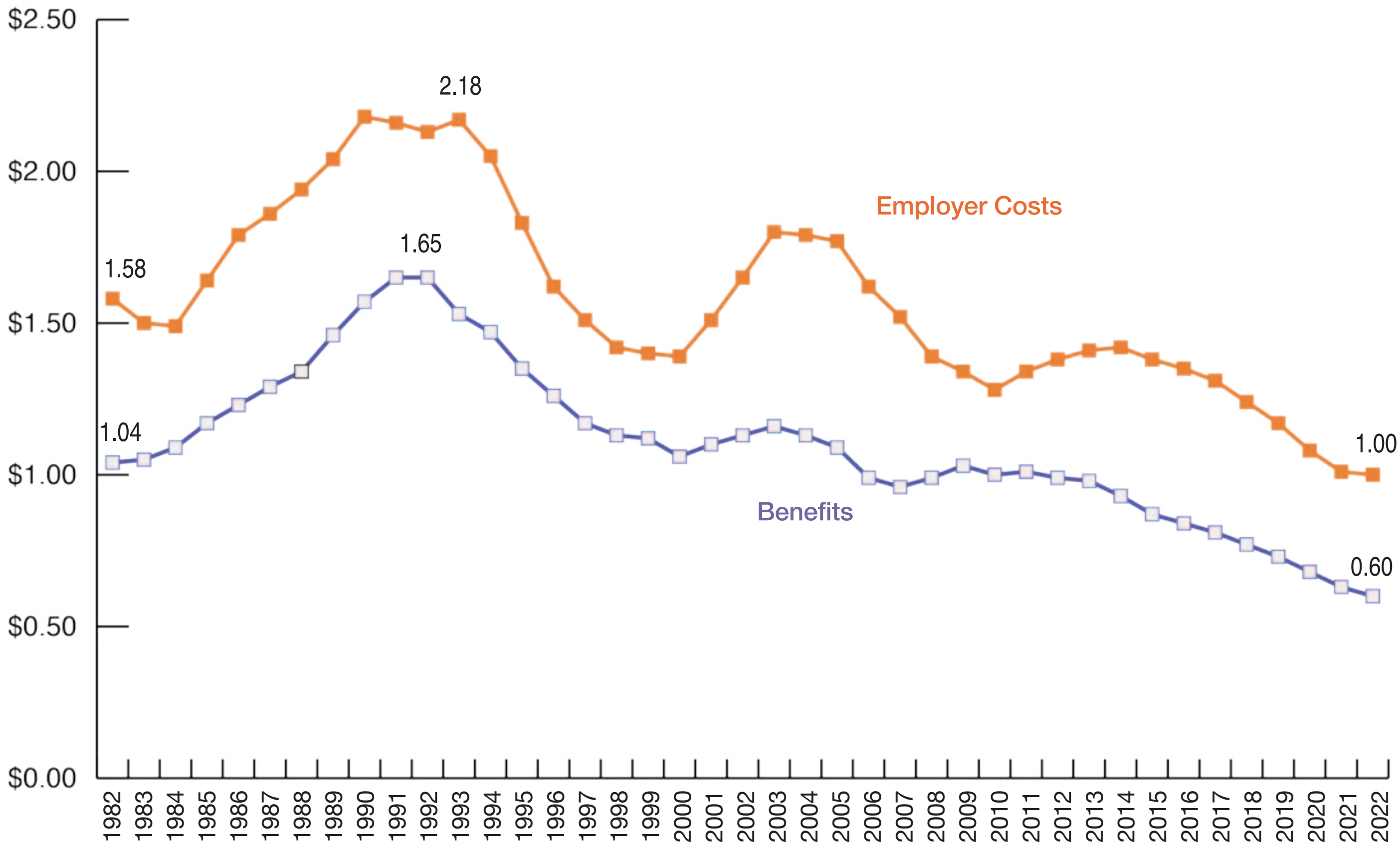
- **Workers' compensation benefits paid per $100 of covered wages decreased in all but one jurisdiction between 2018 and 2022, and in all but six jurisdictions between 2021 and 2022. (Table 12)**
  - Eight jurisdictions experienced decreases in benefits per $100 covered wages of 30 percent or more between 2018 and 2022, with the largest decrease occurring in Delaware (44%). Hawaii was the only jurisdiction with an increase (3.1%).
  - Between 2021 and 2022, the largest percentage decline was also in Delaware (19.9%).
- **Employers' costs per $100 of covered wages decreased in all but one jurisdiction between 2018 and 2022, and in all but 13 jurisdictions between 2021 and 2022. (Table 14)**
  - The largest percent decrease from 2018 to 2022 occurred in Delaware (36.4%), with three other jurisdictions also experiencing decreases of 30 percent or more.
  - Between 2021-2022, the largest percent decrease in in costs per $100 was also in Delaware (15.5%), while the largest percent increase was in Idaho (13.5%).

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'

Figure 1

Workers' Compensation Benefits and Costs Per $100 of Covered Wages, 1982-2022[3]



Notes: Benefits are calendar-year payments to injured workers and to providers of their medical care. Costs for employers who purchase workers' compensation insurance include calendar-year insurance premiums paid plus benefits paid by the employer to meet the annual deducible, if any. Costs for self-insuring employers are calendar-year benefits paid plus the administrative costs associated with providing those benefits. Employer costs data in years prior to 1999 is not directly comparable to data for the years 1999-2022 due to the change in estimates of assessments.
Source: National Academy of Social Insurance estimates.

compensation is financed. Reporting of detailed program data for 2022 begins on page 10, and a glossary of terms used in this report is available on page 65.

History of Workers' Compensation

Workers' compensation was the first social insurance program adopted in most developed countries.[4] The first modern workers' compensation laws, known as Sickness and Accident Laws based on the principle of employer liability for workplace injuries, were adopted in Germany in 1884 under Chancellor Otto von Bismarck (Clayton, 2004). In 1897, England passed a similar law that held employers liable so long as employees could prove that they had been injured on the job.

The first workers' compensation law in the United States was enacted in 1908 to cover certain federal workers. The first state law, passed by New York in 1910, which was compulsory for certain very risky jobs, was struck down as unconstitutional by the state's court of appeals in 1911.[5] That same year,

3 See pages 46-48 for an explanation of why costs and benefits in a given year are not perfectly aligned.

4 Most developed countries – with the exception of the U.S., Australia, and Canada – have national workers' compensation or work injury compensation programs.

5 "[I]n 1911, in Ives v. South Buffalo Railway Co… the Court of Appeals of New York held the New York act unconstitutional on the

Kansas and Washington passed the first state laws that survived constitutional challenges (though New Jersey and Wisconsin both claim the "first in WC" title), with five other states enacting laws that went into effect that year.[6] Most other states then adopted workers' compensation laws by 1920, though the last of the 48 contiguous states to pass one, Mississippi, did so only in 1948.

Before the enactment of these laws, the primary legal remedy for workers who were injured on the job was to file a tort suit claiming negligence by their employer.[7] Employers had three commonly used legal defenses to shield themselves from liability: assumption of risk (showing that the injury resulted from an ordinary risk of employment of which the worker should have been aware);[8] the fellow servant rule (showing the injury was caused by the negligence of a fellow worker, rather than the employer); or, if in an applicable state, contributory negligence (showing that the worker's own negligence contributed to the injury, regardless of whether the employer was to any degree at fault).

Given the available defenses, along with workers' very limited resources to bring suits, employers prevailed in court in the vast majority of cases (Friedman, 1987). In the minority of cases in which employees won, however, employers could be held liable for substantial and unpredictable amounts. Litigation also created friction between employers and employees; dissatisfaction with the status quo on both sides set the stage for reform.

Initial reforms came in the form of employer liability acts, which eliminated some of the employers' common law defenses. Still, employees retained the burden of proving negligence on the part of the employer, which posed a significant obstacle to recovering damages (Burton and Mitchell, 2003).[9]

Workers' compensation is the "exclusive remedy" for occupational injuries and diseases. An employer's liability is limited to the statutory benefits specified by the workers' compensation act in their jurisdiction.

Ultimately, both employers and employees favored workers' compensation legislation (though Weinstein [1967] presents an alternate view), which would ensure that workers who sustained occupational injuries or (as laws evolved) contracted work-related diseases received predictable and timely compensation. As a quid pro quo, workers' compensation became the "exclusive remedy" for occupational injuries and diseases, and an employer's liability was limited to the statutory benefits specified in the state's workers' compensation act.

The adoption of state workers' compensation programs marked significant progress in the nation's economic, legal, and political history. Passage of the laws required extensive efforts on the part of both business and labor leaders in each state to reach agreement on the law's specifics. Ultimately, both employers and employees supported workers' compensation statutes, often referred to as the "grand bargain" because the laws contained some principles favorable to workers, some principles favorable to employers, and some principles beneficial to both parties. For example, workers could receive workers' compensation benefits even when the employer was not negligent, or when the injury resulted from the worker's negligence. For this reason, the program structure is often described as "no-fault" – it is intended to compensate workers

grounds of deprivation of property without due process of law" (Willborn et al., 2017). In 1911, nine states, including Kansas, New Jersey, and Wisconsin, thus enacted elective laws in an effort to avoid similar decisions by their state courts. Washington, however, adopted a compulsory statute, which the Washington Supreme Court upheld (Somers and Somers, 1954).

6 Kansas and Washington had the first enactment date (March 14, 1911), but those laws were not effective until after May 3, 1911, the date when the Wisconsin law was enacted and took effect (Krohm, 2011).

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

8 A more complete definition is provided by Willborn, et al. (2017): "The assumption of risk doctrine… barred recovery for the ordinary risks of employment; as well as the extraordinary risks of employment, if the worker knew of them or might reasonably have been expected to know of them."

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

(almost) regardless of how the injury, illness, or death occurs so long as the cause is work-related.

Employers benefited from state workers' compensation programs because the programs limited their liability for workplace injuries and illnesses. Statutory benefits are less uncertain and can often be more limited than tort awards. Workers' compensation benefits specified in the statutes became the exclusive remedy for injured workers, which meant that employers could not be sued for damages in a tort suit.[10] In essence, workers' compensation statues are a no-fault and limited liability approach to compensate for workplace injuries and diseases.[11]

For both workers and employers, simplified determination of benefits meant that benefits could be paid without attorney involvement in most cases. When benefits were disputed, workers' compensation statutes in most states removed workplace injuries from the general court system and established workers' compensation agencies (or commissions) that were given the primary responsibility for resolving disputes. Reformers believed this delivery system would also reduce the delays, uncertainties, and inconsistencies of the court system (Berkowitz and Berkowitz 1985).

From the beginning, some segments of the working population were excluded from the state programs. Most importantly, given their prevalence in the labor market of the early 20th century, agricultural workers and workers in domestic employment were explicitly excluded. This was also true of the Social Security Act (DeWitt, 2010). Other workers, including independent contractors, have also been outside the reach of workers' compensation insurance.

Today, each of the 50 states and the District of Columbia (DC) has its own workers' compensation program. There is also a federal workers' compensation program for federal employees, and federal programs, such as the Black Lung fund, which insures workers in specific occupations. U.S. territories also have workers' compensation programs, which are not included in this report.[12]

Overview of Programs Included in the Report

The Academy has established a "standard approach" in determining which workers' compensation programs to include in the estimates presented in the main text, tables, and figures. This standard approach includes workers' compensation programs prescribed by state or federal laws for which costs are paid directly by employers or workers. The scope of this approach includes: all state workers' compensation programs; the Federal Employees' Compensation Act (FECA), which provides benefits to federal workers; the portion of the Longshore and Harbor Workers Act (LHWCA) paid by employers, which provides protection to longshore, harbor, and other maritime workers; and the portion of the Black Lung Benefits Act financed by employers, which provides compensation to coal miners with black lung disease. Puerto Rico and other U.S. territories are excluded from the aggregate statistics and only discussed where relevant points can be made. (See Appendix C for two broader measures of the scope of workers' compensation programs in the U.S.)

The state and federal programs in this report vary with respect to which employers and workers are covered, which injuries and diseases are compensable, and what levels of benefits are provided. Yet, there are common features in most of these programs:

- Workers' compensation programs still largely adhere to the no-fault and limited liability principles that were the central features of the grand bargain agreed to when the programs emerged in the early 20th Century.

10 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 in a reckless manner. A suit is also possible if the employer is uninsured.

11 As John Burton notes, this compromise benefited workers by doing away with negligence tests and employers' special defenses, while employers received truncated liability and the guarantee that this was workers' exclusive remedy. Both benefited from simplified determination of the extent of liability and from specialized dispute resolution. In the past decade, concerns have been raised regarding state legislation that has curtailed the availability of benefits to workers. For example, Spieler (2017) and Burton (2017) argue that recent developments in many states are undermining the grand compromise that serves as the foundation for workers' compensation programs.

12 In Puerto Rico, for example, the State Insurance Fund Corporation provides workers' compensation insurance.

- Workers' compensation insurance coverage is mandatory for employers in all but three states (Texas, South Dakota, Wyoming), with limited exemptions for small employers. Workers in specific classifications, such as agricultural or domestic employees, and workers who are classified as independent contractors are generally excluded from coverage.[13]
    - In Texas and South Dakota, employers are not covered by the state workers' compensation laws unless they elect to be covered.[14]
    - Wyoming mandates workers' compensation coverage only for workers in "extra-hazardous" occupations, but the state designates most occupations as "extra-hazardous." Still, several large employers have opted not to provide workers' compensation coverage in recent years, leading to a shrinking share of workers with coverage.[15]
- In principle, workers' compensation pays 100 percent of covered injury-related medical costs for injured workers, and **cash (indemnity)** benefits that replace a portion of wages lost because of the injury. Lost-time compensation may be subject to a waiting period (typically three to seven days) that may be paid retroactively if the disability involves hospitalization or a lengthy duration of work absence. Statutory wage-replacement rates vary by state but, on average, replace about two-thirds of a worker's pre-injury gross wage, subject to minimum and maximum weekly benefits, which also vary among states. Cash benefits are tax-exempt.
- Workers' compensation benefits are financed exclusively by employers except in three states (Oregon, Washington, and New Mexico), where workers pay part of the cost of benefits through direct payroll deductions or assessments.[16]
- Employers purchase workers' compensation insurance from private insurers or from state workers' compensation insurance funds. In most states, large employers have the option to self-insure.

Workers' Compensation Benefits

Injured workers or their medical providers may collect benefits through one of three basic types of claims:

Medical-only claims: Most workers' compensation claims do not involve lost work time in excess of the waiting period for cash benefits, so only medical benefits are paid for these claims. Although these "medical-only" claims are the most common type of workers' compensation claim, they represent only a small share of overall payments.[17]

Temporary disability claims: When a work-related injury or illness temporarily prevents a worker from returning to his or her pre-injury job or to another job for the same employer, the worker receives temporary total disability (TTD) benefits in addition to medical benefits. These TTD benefits replace approximately two-thirds of the worker's gross, pre-injury weekly earnings up to state-specified limits. Depending on the jurisdiction, if a worker had one or more additional jobs with other employers at the time of injury, earnings from those other jobs may or may not be covered by temporary disability benefits, even if the worker cannot perform any job.

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

14 SD Codified L § 62-5-7 (2017).

15 As Michael Duff notes, "Like the situation in Texas, most [Wyoming] employers not covered are liable in tort. Also like in Texas, there are significant numbers of workers employed by companies that offer 'alternative WC' plans." He points to Araguz v. State, ex rel. Wyoming Workers' Safety and Comp. Div., 2011 WY 148, 262 P.3d 1263 as an example of how dual-denial is expanding in that state. This case involved two injured Walmart employees. In short, Walmart provides an ERISA-governed plan for employees in Wyoming instead of workers' compensation coverage, and employees may only sue Walmart in tort if they do not participate in the ERISA plan (Duff [2018], Duff [2019], and Elaine Weiss' correspondence with Michael Duff, July 2019).

16 Employees directly pay for a portion of workers' compensation programs in New Mexico, Oregon, and Washington, as discussed in Appendix C. Even in states where costs are paid directly by employers, it is likely that the incidence of costs falls on employees in the form of lower wages (Gruber and Krueger, 1991).

17 In 2020, medical-only claims accounted for just over 75 percent of all workers' compensation claims, but only 8 percent of all benefits paid (NCCI, 2024a). Since 2000, there has been a gradual decline in the share of medical-only claims from 78 percent to the current 75.3 percent, although the share of benefits paid for medical-only claims increased over that period, from 6.1 percent of overall benefits in 2000 to 7.9 percent in 2020

Compensation for temporary disability, whether total or partial, is subject to minimum and maximum benefit levels that vary from state to state. Usually, the maximum benefit is a percentage of the state's average weekly wage. As of January 2022, the *minimum* weekly TTD benefit ranged from a low of $20 in Arkansas, Florida, and Wisconsin, to a high of $514 in Vermont.[18] The *maximum* weekly benefit ranged from a low of $551.02 in Mississippi to a high of $2,005 in Iowa. See Appendix D for more information on minimum and maximum benefits.

Most workers who receive TTD benefits fully recover and return to work, at which time those benefits end. In many cases, however, employers make accommodations that allow injured workers to return to transitional work before they are physically able to resume all of their former job duties. In these cases, workers may be assigned to restricted duties or given fewer hours at lower wages. When injured workers return to work at less than their pre-injury wage during the healing period, they may be eligible for temporary partial disability (TPD). TPD benefits typically cover two-thirds of the difference between an injured worker's pre-injury wage and their new wage.

Permanent disability claims: Some injured workers experience work-related injuries or illnesses that result in permanent impairments. These workers may be eligible for either permanent partial disability (PPD) or permanent total disability (PTD) benefits after they reach maximum medical improvement (MMI)—the point at which further medical intervention is no longer expected to improve functional capacity or provide further healing.[19] PPD benefits are paid to workers who, after reaching MMI, can return to work but with a permanent loss in functional use of a certain body part, or otherwise with a permanent loss in earning capacity. PTD benefits are paid to workers who are deemed permanently unable to work due to a work-related injury or illness.[20]

Forty states have no limit on the duration or total monetary amount of PTD benefits. Among those states which impose limits, Mississippi has the shortest explicit week limit (450 weeks, or a little over eight years). Seven states have age-based limits, terminating benefits when the injured worker reaches a certain age. In North Dakota, for example, PTD benefits end when the injured worker qualifies for normal Social Security retirement benefits, or at age 67 for all individuals born in 1960 or later. Age-limited benefits result in a shorter period of benefits for workers injured at later ages. So, a worker who suffered a permanently disabling injury at age 65 in North Dakota would receive benefits for only two years with no compensating increase in retirement benefits. Only Kansas places a cap on PTD benefits without also imposing a limit on PTD duration.

Minimum and maximum benefit amounts for PTD claims are typically equal to those of TTD claims. States differ, however, in their methods for determining eligibility and benefit amounts for permanent partial disability (Barth and Niss, 1999; Burton, 2008). There are four operational approaches:

- The impairment approach pays benefits if the worker has a permanent medical loss, without regard to actual loss of earnings. In this case, the amount of permanent disability benefits is determined by some measure of physical impairment to the body.
- The loss of earning capacity approach pays benefits if the impairment causes a permanent loss of earning capacity. In this case, benefits are determined by an estimate of reduced earning capacity.
- The wage loss approach pays benefits only if the worker has actual wage losses. In this case, the worker will not receive PPD benefits unless post-injury earnings are less than pre-injury earnings if they work in some capacity.
- A hybrid of the impairment approach with either the wage loss or earning capacity reduction approach.

18 We note that some states have alternative minimum benefit computations to ensure that low-wage workers are not compensated more than their gross wages. Arizona, Iowa, Maine, Michigan, Montana, Nevada, Oklahoma, and Rhode Island do not have a specified minimum weekly TTD benefit. Details on benefit and coverage provisions of state laws are summarized in Appendix D.

19 In most claims where the workers ultimately receive permanent disability benefits, there is initially a period in which the workers receive temporary disability benefits, as described in the preceding paragraphs.

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

Many cases involving permanent disability are settled through the use of compromise and release agreements, rather than awarding statutory PPD or PTD benefits. These agreements generally provide a lump sum to the injured worker to help cover both future medical costs and lost earnings from the disability, and release the employer from future liability.[21]

Fatalities: Workers' compensation programs also pay death benefits when a work-related illness or injury is fatal. The benefits typically include an amount for funeral and burial expenses, as well as cash benefits for the workers' family and other dependents. The maximum weekly benefit is typically equal to the maximum TTD benefit and varies with the number of the worker's child dependents in eight states. Eighteen states have no limit on dependency benefits except in cases where a surviving spouse remarries. Otherwise, benefit limits vary considerably in size and duration by state.[22]

Sources of Workers' Compensation Insurance

Non-federal employers pay for workers' compensation by purchasing insurance from a private insurance carrier or a state workers' compensation insurance fund (state fund), or by self-insuring. Many states also have special workers' compensation funds to cover exceptional circumstances, such as a second work-related injury for an individual with a pre-existing condition that increases the costs associated with the injury. The federal government provides workers' compensation insurance for federal civilian employees and for some private-sector workers who are employed either in high-risk jobs or jobs related to national defense.

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

> Employers pay for workers' compensation insurance by purchasing from private insurers or a state fund, or by self-insuring.

State funds. In 21 states, some (or all) employers obtain workers' compensation insurance through a state workers' compensation insurance fund. State funds, which are established by an act of the state legislature, are designated as either exclusive or competitive. An exclusive state fund is the sole provider of workers' compensation insurance in a state (although half of states with exclusive state funds allow large employers to self-insure). A competitive state fund competes with private insurers. In this report, we define a competitive state fund as one that: 1) sells workers' compensation policies to private-sector employers in the voluntary insurance market; and 2) is exempt from federal taxes.[23]

In 2022, 22 state funds paid out benefits even though only 21 offered insurance plans; four states had exclusive state funds, 16 states had competitive state funds that met our criteria, and two states had special circumstances.[24]

21 See glossary for complete definition of compromise and release agreements.

22 See Appendix D for cost-of-living adjustment rules by state and specific statutory limitations on death benefits.

23 Five funds (Hawaii, Idaho, Louisiana, New Mexico, and Texas) are also exempt from paying state premium taxes.

24 In 2022, North Dakota, Ohio, Washington, and Wyoming had exclusive state funds. Competitive state funds operated in California, Colorado, Hawaii, Idaho, Kentucky, Louisiana, Maryland, Missouri, Montana, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Rhode Island, and Texas. South Carolina's state fund, which provides workers' compensation insurance for state and local government employees, competes with private insurers for the quasi-state agency market segment. West Virginia discontinued its state fund in 2006, but the state was still paying benefits in 2022 on some claims involving injuries that occurred before 2006.

Self-insurance. Many large employers choose to self-insure for workers' compensation.[25] Where self-insurance is permitted, employers must apply for permission to self-insure from the regulatory authority and demonstrate that they have sufficient financial resources to cover their expected workers' compensation costs.[26] Some states also permit groups of employers in the same industry or trade association to self-insure through group self-insurance.[27]

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

Guaranty funds. State guaranty funds ensure benefit payments to injured workers in cases in which a private insurance carrier or self-insured employer becomes insolvent and lacks sufficient earmarked assets to pay outstanding benefits. The costs of guaranty funds for private insurers are funded through assessments on workers' compensation insurers or, in some states, through assessments paid directly by employers.[28] The costs of guaranty funds for self-insured employers are funded through assessments on self-insuring employers.

Second-injury funds. Second-injury funds reimburse employers or insurance carriers in cases in which an employee with a pre-existing condition from a work-related injury or illness experiences another work-related injury or illness. The second-injury fund pays any costs associated with the prior condition in order to reduce the burden on the current employer. The funds make it more cost-effective for employers to hire injured workers with residual impairments, because the current employer is responsible only for workers' compensation benefits associated with a subsequent illness or injury. Second-injury funds are financed through assessments on employers and, in a small number of jurisdictions, with general fund monies.[29]

Other special funds. Many states have other special funds to address specific risks and problems within their respective programs.[30] The most common special fund, aside from guaranty and second injury funds, is an uninsured employer's fund. These funds ensure that employees of (illegally) uninsured employers receive workers' compensation benefits in the case of a workplace illness or injury. Other special funds relate to a specific industry breakdown in a given state. In Kentucky and West Virginia, for example, there are coal workers' pneumoconiosis funds.[31]

Carve-outs. Several states have legislative provisions for "carve-outs," a variant of workers' compensation insurance that allows union-management agreements to exceed legislated workers' compensation provisions.[32] Carve-outs provide certain benefits and dispute resolution mechanisms outside those typically provided in the legislation. Carve-outs are most common for construction workers, police officers, and firefighters. Cash benefits associated with carve-outs are included in the Academy's data, but some administrative and medical benefits may not be.

25 All states allow employers to self-insure except for North Dakota and Wyoming.

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

27 We recognize the use of captive insurers among employers, but it is unclear how those elements are captured in the data we collect. Depending on structure, for example, captives may be considered self-insurance or traditional insurance.

28 In 2022, most guaranty funds did not levy an assessment. North Carolina did, however, levy a tax in 2022, requiring employers to pay 0.15% of gross premiums paid in 2021 (NCCI, 2024b).

29 See *Sources and Methods November 2024* on the Academy's website for further details on second injury funds and guaranty funds.

30 Not all states have guaranty funds and/or second-injury funds.

31 See *Sources and Methods November 2024* on the Academy's website for further details on special funds.

32 These include California, Florida, Hawaii, Illinois, Kentucky, Massachusetts, Maryland, Maine, Minnesota, Nevada, New York, and Pennsylvania (Torrey, 2019).

COVID-19 and Workers' Compensation

The COVID-19 pandemic was a disruptive event for workers' compensation systems across the United States. As stakeholders responded to the rise of COVID-19 cases in spring 2020, they wrestled with questions about compensability, coverage, and costs. This report includes data from the first and second years of the pandemic, providing information on COVID-19's initial and continuing effects on trends in workers' compensation related to benefits, costs, and coverage.

Coverage. Public health measures designed to reduce the transmission of COVID-19 caused significant economic contraction and loss of covered jobs in 2020. However, covered jobs and wages rebounded in 2021 as the economy adapted to the pandemic, and have now returned to pre-pandemic trends in 2022. The rapid rebound in covered jobs may reflect, at least in part, the trend toward work-from-home (Bick et al., 2023).

Benefits and Costs. Workers' compensation benefits and employer costs tended to increase in 2021 and again in 2022, reflecting strong increases in both covered jobs and wages after the pandemic's first year. However, standardized benefit and cost measures (i.e., per $100 of covered payroll) tended to decrease in 2021 and 2022, although at slower rates than before the pandemic. Long COVID is one possible reason why persistent drops in standardized benefits and costs have not returned fully to pre-pandemic trends (Choo et al., 2022).

As the impact of COVID-19 continues to develop over the coming years, future reports may be able to shed light on the residual effects of the pandemic and trends in workers' compensation, benefits, costs, and coverage. In large part, this report identifies a general reversion to trend from 2020 and 2021.

Estimates for 2022

The workers' compensation system involves multiple stakeholder groups: employers, workers, insurers, attorneys, medical providers, and state governments. The estimates presented in this report primarily reflect the experience of two groups: workers who rely on compensation for workplace injuries and illnesses; and employers (including the federal government) who bear most of the costs. The estimates represent benefits and costs paid in each of the last five calendar years.

The estimates of benefits and costs necessarily represent different time frames. Estimates of benefits for 2022 include payments made in 2022 for injuries and illnesses that occurred in 2022 *and prior years*. For employers that purchase workers' compensation insurance, estimates of costs for 2022 reflect premiums paid in 2022 (to a private insurer or state fund), which incorporate projected *future liabilities* for injuries and illnesses that occur in 2022. For employers that are self-insured, estimates of costs for 2022 include payments for medical and cash benefits made in 2022 for injuries and illnesses that occurred in 2022 *and prior years* plus administrative costs. For additional discussion of these measures, refer to the *Addendum, Benefits Paid vs. Benefits Incurred*.

The Academy has designed its measures to provide the best available estimates of workers' compensation benefits, costs, and coverage in a given year and over time. The estimates are not designed to assess the performance of the insurance industry or of insurance markets. Other organizations analyze insurance trends.[33] Nor are the estimates designed to measure the performance of the workers' compensation system with respect to its many objectives: the prevention of occupational injuries and illnesses, the adequacy and equity of benefits paid to workers, the adequacy of payment for medical coverage, the affordability of compensation, or the impact of vocational rehabilitation and job accommodations on returns to work.

It is not appropriate to use the estimates to compare the performance of workers' compensation systems in different states. Benefits and costs vary across states because of differences in their workers' compensation laws and systems, and because states vary in their mix of industries and occupations, which affects the relative risk of work-related injury or illness. A meaningful comparison of benefits or costs across states is beyond the scope of this report.[34]

33 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.

34 As described in Appendix E, the Oregon Department of Consumer and Business Services produces a biannual report on state costs

Covered Jobs and Wages

There is no national system for counting the number of jobs covered by workers' compensation, so the number of covered jobs and amount of covered wages must be estimated. The Academy's methodology is designed to count the number of jobs that are legally required to be covered by workers' compensation under state laws for all states except Texas and Wyoming, as described in the section *States Without Mandatory Coverage*.[35]

Methods for Estimating Covered Jobs and Wages

To estimate the number of jobs covered by workers' compensation, we use the number of jobs covered by unemployment insurance (UI) in each state as reported by the Quarterly Census of Employment and Wages (QCEW) as the starting point.[36] We then estimate the number of jobs that are not required to be covered by workers' compensation according to each state's statute regarding exemptions for small firms and/or agricultural employers. We subtract the number of exempted jobs from the UI base to determine the number of UI-covered jobs that are covered by workers' compensation.

To estimate the amount of wages covered by workers' compensation, we calculate the fraction of UI-covered jobs that are covered by workers' compensation in each state and multiply this fraction by the state's UI-covered wages to obtain total workers' compensation covered wages. This methodology was not affected by the expanded eligibility of UI during the pandemic, as the method used by the QCEW does not count the number of UI-eligible individuals to construct its estimates, but rather relies on employment data from employers that continued to be tracked throughout the pandemic.[37]

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

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

We note that millions of workers are not covered by UI or workers' compensation because they are not categorized as employees. These include independent contractors, gig economy workers (except perhaps in California[38]), and workers who are paid off the record.[39]

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of workers' compensation premiums that controls for industry mix. However, that report's scope does not extend to measuring system performance, which would require other metrics that are unavailable for all states.

35 Workers' compensation covered employment is measured in terms of "covered jobs" as opposed to "covered workers." Refer to Appendix A's Employed Workforce Coverage Estimates.

36 UI programs provide cash benefits to workers who become unemployed (through no fault of their own) and meet specific eligibility requirements. The UI programs are largely controlled by the states, although there are several federal standards, including a requirement that states produce uniform data. (These aspects of federal involvement are not present in workers' compensation.)

37 The BLS discusses challenges to the QCEW dataset caused by the COVID-19 pandemic, noting: "Workers who were paid by their employer for all or any part of the pay period including the 12th of the month were counted during the pandemic as employed in the QCEW, even if they were not actually at their jobs. Workers who were temporarily or permanently absent from their jobs, but were not paid, were not counted as employed even if they continued to receive benefits." This signifies that, even with increased UI eligibility, individuals who did not receive a wage from their employers are not counted as employed for the purposes of the QCEW (DOL, 2021).

38 California Assembly Bill 5 uses the "ABC" test to determine the classification of workers as employees or independent contractors (Lake, 2021). However, with the passage of Proposition 22, app-based drivers (Uber, Lyft, DoorDash, etc.) are classified as independent contractors and are not entitled to unemployment insurance or workers' compensation benefits.

39 The BLS has some information on occupational fatalities of independent workers. Unfortunately, non-fatal injuries and illnesses are captured via an employer survey, which does not capture independent workers.

States Without Mandatory Coverage[40]

In Texas, employers opt into the workers' compensation system by purchasing coverage or self-insuring. To estimate covered jobs and wages for Texas we apply the proportion of jobs in firms that opt into workers' compensation to the UI base.

In Wyoming, employers are allowed to opt out of workers' compensation for jobs in which coverage is not mandatory. Between 52.3 percent and 67.1 percent of employees are mandatorily covered, according to the Wyoming Department of Workforce Services (2017; 2018), and an additional 22.9 percent of employees are covered under optional coverage. To estimate covered jobs and wages, we assume 59.7 percent mandatory coverage (average of 52.3 and 67.1) and add the 22.9 percent who are covered by employer opt-ins for an estimated 82.7 percent coverage, which is applied to the UI base. Estimates for both Texas and Wyoming include workers who are required to be covered, and those who are covered despite no coverage requirement.[41]

The Academy is working to estimate the proportion of South Dakota employees that are not covered for future reports.[42] For this report, estimates for South Dakota continue to assume universal coverage, except for exemptions for agricultural workers, as the state tracks neither the number of employers nor employees that are covered under its program.[43] As such, this report overestimates covered jobs and covered wages in South Dakota.

Over the past decade, efforts in a handful of states have attempted to eliminate workers' compensation coverage mandates in order to allow employers to design and utilize alternative benefit plans.[44] Such efforts, if successful, might have large impacts on coverage estimates in future reports.

National Estimates of Covered Jobs and Wages

Table 2 reports covered jobs and wages for the last two decades. In 2022, workers' compensation covered an estimated 146.3 million U.S. jobs, a 4.4 percent increase from the previous year, and the largest year-to-year increase since 2015. Gains in covered jobs in 2021 and 2022 represent a sharp turnaround from 2020, and have restored coverage beyond the pre-pandemic level.

Covered wages totaled $10.3 trillion in 2022, an increase of 8.1 percent from 2021. The year-to-year gain is second only to the 9.2 percent increase in 2021 over the last two decades of data. In addition to the effects of the pandemic in the last three years, the difference in percentage changes of covered jobs and covered wages partly reflects the influence of inflation on wages.

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40 Previous reports have stated that Texas was the only state that did not require employers to carry workers' compensation insurance. In the last few years, however, we learned that Wyoming's program has only required coverage for certain jobs since its inception and that South Dakota has never required employers to purchase workers' compensation coverage.

41 In Wyoming, only "extra hazardous" jobs fall under mandatory coverage; otherwise, employers choose whether or not they will provide coverage. The data published by the state of Wyoming on the matter, however, is not consistent and appears to be too volatile to be plausible. For fiscal years 2017 and 2018, for example, their data depicts the labor force size to have declined by 14 percent, and the employees covered as a percent of the labor force to have risen from 75.4 percent to 90.0 percent. With this information, we assume actual coverage to be somewhere in the middle and use 82.7 percent of the employed labor force for our coverage estimate. This is newly instituted as of the 2019 data report. Methods have not yet been improved as of the 2022 data report.

42 South Dakota law (§ 62-3-11) outlines legal remedies for employees who are injured at work (or their dependents) if their employer does not have workers' compensation insurance. In such cases, employees can "proceed against the employer in any action at law to recover damages for personal injury or death; or may elect to proceed against the employer in circuit court." If the circuit court rules in the employee's favor, employers are liable to cover medical costs and pay cash benefits at twice the rate imposed by the workers' compensation system.

43 As of the 2022 data report, South Dakota is depicted as having 100 percent coverage outside of its agricultural exemption, but the state's website makes clear that this is not the case. Until we have more information regarding how many workers are affected, we will remain consistent in our methodology relative to prior years.

44 Legislative proposals in Oklahoma (S.B. 1062, 2013), Tennessee (S.B. 721, 2015), and Arkansas (S.B. 653, 2017) allowed employers to design alternative benefit plans that would provide benefits, outside of the workers' compensation systems, for occupational injuries and illnesses. Like workers' compensation, these would be a worker's exclusive remedy and would preclude employees from suing their employers. Oklahoma was the only state that successfully adopted this legislation, which was subsequently found unconstitutional by the Oklahoma Supreme Court.

Table 2

Workers' Compensation Covered Jobs and Covered Wages, 2002-2022

Year	Covered Jobs (thousands)	Covered Jobs Percent Change	Covered Wages (billions)	Covered Wages Percent Change
2002	125,603	-1.1	$4,615	0.2
2003	124,685	-0.7	4,717	2.2
2004	125,878	1.0	4,953	5.0
2005	128,158	1.8	5,213	5.3
2006	130,339	1.7	5,544	6.3
2007	131,734	1.1	5,857	5.6
2008	130,643	-0.8	5,954	1.7
2009	124,856	-4.4	5,675	-4.7
2010	124,638	-0.2	5,834	2.8
2011	125,876	1.0	6,058	3.8
2012	127,916	1.6	6,317	4.3
2013	130,149	1.7	6,491	2.8
2014	132,791	2.0	6,821	5.1
2015	139,494	5.0	7,207	5.7
2016	138,468	-0.7	7,432	3.1
2017	140,424	1.4	7,787	4.8
2018	142,635	1.6	8,178	5.0
2019	144,415	1.2	8,560	4.7
2020	135,580	-6.1	8,694	1.6
2021	140,164	3.4	9,493	9.2
2022	146,312	4.4	10,257	8.1

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

State Estimates of Covered Jobs and Wages

Table 3 reports state trends in covered jobs over the study period.* Between 2018 and 2022, 34 jurisdictions experienced increases in the number of jobs covered by workers' compensation. The three states with the largest increases over the study period were Idaho (12.6%), Utah (11.8%), and Texas (9.1%). Among the 17 jurisdictions where covered jobs decreased, the three states with the largest percentage declines were Hawaii (6.3%), DC (3.5%), and West Virginia (3.2%).

In most jurisdictions where covered jobs decreased over the study period, the losses were entirely due to changes between 2019 and 2020, as there was a strong rebound from the pandemic in 2021, which continued in 2022. All jurisdictions experienced increases in covered jobs between 2021 and 2022, with the largest percentage increases being in Nevada (8.6%), Texas (7.2%), and Hawaii (5.9%).

Table 3 also reports trends in covered jobs disaggregated into federal and non-federal employment. After a precipitous (6.3%) drop in covered non-federal employment in 2020, covered jobs increased by 3.5 percent (more than 4.5 million jobs) in 2021 and by 4.5 percent (more than 6 million jobs) in 2022. Overall, in 2022 workers' compensation coverage extended to an estimated 97.6 percent of all non-federal jobs covered by unemployment insurance (Table A.1), and 87.8 percent of all U.S. jobs (Table A.2).[45] In contrast to the increase in covered jobs in the non-federal sector, the number of covered jobs in the federal workers' compensation program decreased in both 2021 and 2022, representing a loss of 139,000 jobs.

Table 4 reports state trends in covered wages. Over the study period (2018-2022), every state experienced an increase in covered wages of at least 10 percent, with the largest increases in Idaho (42.9%), Utah (41.7%), and Florida (37.0%). The smallest increases were in West Virginia (11.7%), Hawaii (13.5%), and North Dakota (13.5%). Between 2018-2022, 38 states experienced increases in covered wages of at least 20 percent, compared to only 20 states experiencing that much growth between 2017-2021 (last year's report).

All jurisdictions experienced a growth in covered wages between 2021 and 2022, and, for 31 states, that growth exceeded gains between 2020 and 2021. Between 2021 and 2022, the states with the largest growth were Texas (13.2%), Nevada (13.1%), and Florida (11.8%); the states with the smallest growth were New Hampshire (3.5%), California (3.9%), and Maryland (5.2%).

Table 4 also reports workers' compensation covered wages disaggregated into federal and non-federal employment. Covered non-federal wages increased substantially over the study period, by more than $2 trillion, or 25.8 percent. Between 2021 and 2022, covered non-federal wages increased by nearly $756 million, or 8.2 percent. These increases in the non-federal sector far outpaced increases in the federal sector, where covered wages grew by 13.6 percent between 2018 and 2022, and by 3.3 percent between 2021 and 2022.

Workers' Compensation Benefits Paid

Data Sources and Methods for Estimating Benefits Paid

This section describes the primary data sources the Academy uses to estimate workers' compensation benefits nationally and for each state. A detailed, state-by-state explanation of how the benefit estimates

* Readers will note that this table and subsequent state tables (i.e., Tables 4, 8, 9, 10, 11, 12, and 14), have a new format in which we report annual percentage changes as opposed to changes over multiple years. This format is more transparent and shows changes over the pandemic years more clearly.

45 According to unpublished estimates provided by the BLS, 4.5 percent of civilian (non-federal) workers represented by the BLS National Compensation Survey (NCS) were employed in establishments reporting zero annual workers' compensation costs in March 2022, compared to 4.0 percent in March of 2021 (DOL, 2023c). Civilian workers are those employed in private industry or state and local governments. Excluded from private industry are the self-employed and farm and private household workers. Federal government workers are excluded from the public sector. The private industry series and the state and local government series provide data for the two sectors separately. The Academy's estimate of legally required workers' compensation coverage is 97.6 percent of all non-federal UI covered jobs in 2022, 2.1 percentage points above NCS estimates.

in this report are produced is available in *Sources and Methods November 2024: A Companion to Workers' Compensation: Benefits, Costs, and Coverage 2022*, on the Academy's website (www.nasi.org).

The Academy's estimates of workers' compensation benefits paid in non-federal employment are based on three main data sources: 1) data from a questionnaire on workers' compensation benefits and costs, distributed annually by the Academy to state agencies overseeing workers' compensation programs; 2) data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies; and 3) data provided by the National Council on Compensation Insurance (NCCI). Together, the data allow us to assemble estimates of workers' compensation benefits paid by private insurance carriers, state funds, and self-insured employers. The U.S. Department of Labor provides data on benefits paid through federal programs.[46]

Academy questionnaire. The primary source of data on total benefits paid to injured workers is responses from state workers' compensation agencies to the Academy's annual questionnaire. The questionnaire is designed to collect information on amounts of medical and cash benefits—the latter of which include compromise and release agreements—paid in a calendar year, as well as benefits paid through special funds, second injury funds, and guaranty funds. This year, we received responses from at least one agency or organization in 36 out of 51 states.

States vary in their ability to provide complete data on benefits paid. One of the most common problems is the inability to report benefits paid by self-insured employers. Unreported benefits paid by self-insured employers are imputed using one of two methods. (1) If historical data on self-insured benefits paid in the state are available, this information is used, along with information on the ratio of self-insured benefit payments to total benefits paid to extrapolate benefits paid in the state from trends over time. This method may understate or overstate benefits if there is a change in the proportion of self-insuring companies between the historical data year and the year(s) being estimated. (2) If historical data are not available for a state, we apply the ratio of self-insured benefits to covered wages in states where data are available, to the estimates of covered wages in states where data on self-insureds are missing. This method may understate or overstate benefits if the costs per worker covered by self-insurance in a state differs from the average.

Among the states that did not directly reply to the survey, five published annual reports from which we could obtain workers' compensation information normally included in the questionnaire. We also supplemented respondent state data with annual report information in 10 of the 36 states that responded. For some states, we obtained information on benefits paid through special funds, second injury funds, or guaranty funds from data on the websites of the state workers' compensation agency.

A.M. Best data. The A.M. Best data supplement the state survey data in cases in which the survey data are incomplete, missing, or determined to be incorrect. The A.M. Best data used for this report provide information on benefits paid in each state for 2018 through 2022 (A.M. Best, 2024). The data include information for all private carriers in every state and for 16 of the 22 state funds. These data do not include information about benefits paid by the other six state funds, by self-insured employers, by employers under deductible policies, or by special funds.[47]

NCCI data. NCCI is the primary source of data on medical benefits in the 38 states in which it is licensed (NCCI, 2024). The NCCI data provide the percentage of medical benefits paid relative to total benefits paid in each state. In states where NCCI data are not available, estimates of medical benefits are based on reports from the states. In cases where state data are incomplete and NCCI is licensed, NCCI is also a source for data on reimbursements paid through deductible policies and for amounts of covered wages for employers insured by private insurers or a competitive state fund. NCCI data do not include self-insured employers.

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46 Note that, while in previous reports Table 5 reported benefits paid by insurers, this report uses the term payer instead. We made this change to clarify that payers can be either employers or insurers, depending on the context, and that the federal government is a payer, but not an insurer, with respect to workers' compensation. That is, it pays benefits but does not insure other entities.

47 A.M. Best does not provide data on the four exclusive state funds (Ohio, North Dakota, Washington, and Wyoming), the state fund in South Carolina that only provides benefits to government workers, or the state fund in West Virginia that discontinued in 2006 but was still paying benefits as of 2022.

Table 3

Workers' Compensation Covered Jobs by State, 2018-2022

State	Number of Jobs (in thousands)					Percent Change					Ranking (1=largest percent increase, 2018-2022)
	2018	2019	2020	2021	2022	2018-2019	2019-2020	2020-2021	2021-2022	2018-2022	
Alabama	1,838	1,865	1,787	1,836	1,896	1.5	-4.2	2.7	3.3	3.2	16
Alaska	306	309	282	290	299	0.9	-8.7	2.8	3.1	-2.4	46
Arizona	2,771	2,852	2,765	2,876	3,018	2.9	-3.1	4.0	4.9	8.9	4
Arkansas	1,163	1,170	1,126	1,155	1,199	0.6	-3.7	2.5	3.8	3.1	17
California	17,110	17,385	16,119	16,723	17,667	1.6	-7.3	3.7	5.6	3.3	15
Colorado	2,607	2,667	2,531	2,629	2,745	2.3	-5.1	3.9	4.4	5.3	11
Connecticut	1,656	1,652	1,526	1,573	1,624	-0.2	-7.6	3.0	3.3	-1.9	45
Delaware	440	446	420	435	452	1.3	-5.9	3.6	4.0	2.7	18
District of Columbia	576	581	529	527	556	0.9	-8.9	-0.4	5.5	-3.5	50
Florida	8,264	8,437	8,015	8,384	8,861	2.1	-5.0	4.6	5.7	7.2	6
Georgia	4,242	4,321	4,117	4,278	4,501	1.9	-4.7	3.9	5.2	6.1	9
Hawaii	625	624	525	553	585	0.0	-15.9	5.3	5.9	-6.3	51
Idaho	718	739	734	777	808	3.0	-0.6	5.8	4.0	12.6	1
Illinois	5,879	5,902	5,474	5,599	5,825	0.4	-7.3	2.3	4.0	-0.9	39
Indiana	3,000	3,025	2,865	2,958	3,061	0.8	-5.3	3.3	3.5	2.0	20
Iowa	1,515	1,518	1,441	1,471	1,503	0.2	-5.1	2.1	2.2	-0.8	38
Kansas	1,347	1,356	1,291	1,316	1,354	0.7	-4.8	2.0	2.8	0.5	31
Kentucky	1,844	1,858	1,752	1,817	1,881	0.7	-5.7	3.7	3.5	2.0	21
Louisiana	1,886	1,888	1,744	1,776	1,830	0.1	-7.6	1.9	3.0	-3.0	47
Maine	596	602	563	588	604	0.9	-6.4	4.4	2.8	1.4	25
Maryland	2,530	2,548	2,359	2,423	2,484	0.7	-7.4	2.7	2.5	-1.8	44
Massachusetts	3,540	3,589	3,277	3,412	3,551	1.4	-8.7	4.1	4.1	0.3	32
Michigan	4,262	4,281	3,890	4,053	4,219	0.4	-9.1	4.2	4.1	-1.0	40
Minnesota	2,833	2,851	2,654	2,723	2,803	0.7	-6.9	2.6	2.9	-1.1	41
Mississippi	1,059	1,064	1,020	1,045	1,072	0.5	-4.2	2.5	2.6	1.3	26

Missouri	2,626	2,644	2,511	2,569	2,646	0.7	-5.0	2.3	3.0	0.8	29
Montana	447	453	439	461	478	1.2	-3.1	5.0	3.8	6.9	7
Nebraska	949	953	918	936	955	0.4	-3.7	2.0	2.0	0.6	30
Nevada	1,347	1,384	1,241	1,331	1,445	2.7	-10.4	7.3	8.6	7.3	5
New Hampshire	651	657	616	641	662	1.0	-6.2	4.0	3.3	1.7	22
New Jersey	3,995	4,034	3,701	3,879	4,086	1.0	-8.3	4.8	5.3	2.3	19
New Mexico	771	785	731	744	781	1.8	-6.9	1.9	4.9	1.3	27
New York	9,294	9,404	8,442	8,678	9,126	1.2	-10.2	2.8	5.2	-1.8	43
North Carolina	4,247	4,332	4,157	4,337	4,524	2.0	-4.0	4.3	4.3	6.5	8
North Dakota	404	410	383	387	399	1.3	-6.6	1.2	3.0	-1.3	42
Ohio	5,327	5,360	5,042	5,167	5,313	0.6	-5.9	2.5	2.8	-0.3	37
Oklahoma	1,547	1,565	1,491	1,510	1,566	1.2	-4.7	1.3	3.7	1.2	28
Oregon	1,893	1,925	1,807	1,852	1,923	1.7	-6.1	2.5	3.8	1.6	23
Pennsylvania	5,751	5,807	5,366	5,528	5,742	1.0	-7.6	3.0	3.9	-0.2	36
Rhode Island	470	474	432	452	469	0.8	-8.8	4.5	3.9	-0.1	35
South Carolina	2,000	2,036	1,937	1,997	2,083	1.8	-4.8	3.1	4.3	4.2	13
South Dakota	410	413	400	414	426	0.7	-3.2	3.4	3.0	3.8	14
Tennessee	2,834	2,888	2,774	2,870	3,002	1.9	-3.9	3.5	4.6	5.9	10
Texas	9,877	9,985	9,556	10,049	10,775	1.1	-4.3	5.2	7.2	9.1	3
Utah	1,438	1,479	1,460	1,539	1,607	2.8	-1.2	5.4	4.4	11.8	2
Vermont	301	300	273	282	291	0.0	-9.1	3.1	3.5	-3.0	48
Virginia	3,645	3,688	3,492	3,581	3,698	1.2	-5.3	2.5	3.3	1.5	24
Washington	3,298	3,363	3,180	3,274	3,437	2.0	-5.5	3.0	5.0	4.2	12
West Virginia	669	664	616	631	648	-0.8	-7.3	2.5	2.6	-3.2	49
Wisconsin	2,823	2,833	2,676	2,745	2,824	0.4	-5.6	2.6	2.9	0.0	33
Wyoming*	219	223	209	213	219	1.8	-6.1	1.9	2.6	0.0	34
Total Non-Federal	139,840	141,590	132,652	137,282	143,523	1.3	-6.3	3.5	4.5	2.6	
Federal Employees	2,795	2,824	2,928	2,883	2,789	1.0	3.7	-1.5	-3.2	-0.2	
TOTAL	142,635	144,415	135,580	140,164	146,312	1.2	-6.1	3.4	4.4	2.6	

* The 2022 data report assumes 82.7 percent job coverage in Wyoming. See page 12 and Appendix A for more information.
Source: National Academy of Social Insurance estimates.

Table 4

Workers' Compensation Covered Wages, by State, 2018-2022

	Covered Wages (in millions)					Percent Change					Ranking (1=largest percent increase, 2018-2022)
State	2018	2019	2020	2021	2022	2018-2019	2019-2020	2020-2021	2021-2022	2018-2022	
Alabama	$85,294	$89,199	$91,442	$97,940	$106,838	4.6	2.5	7.1	9.1	25.3	20
Alaska	16,653	17,377	17,077	17,818	19,160	4.3	-1.7	4.3	7.5	15.1	47
Arizona	142,234	152,059	160,223	176,277	194,043	6.9	5.4	10.0	10.1	36.4	4
Arkansas	50,600	52,670	54,349	58,951	64,308	4.1	3.2	8.5	9.1	27.1	19
California	1,167,490	1,236,649	1,279,067	1,432,609	1,488,118	5.9	3.4	12.0	3.9	27.5	17
Colorado	152,312	163,627	167,577	184,361	203,241	7.4	2.4	10.0	10.2	33.4	6
Connecticut	112,001	115,187	115,030	122,432	131,877	2.8	-0.1	6.4	7.7	17.7	43
Delaware	24,909	25,983	26,145	27,911	30,562	4.3	0.6	6.8	9.5	22.7	27
District of Columbia	50,624	52,624	53,540	56,349	60,284	4.0	1.7	5.2	7.0	19.1	40
Florida	410,172	432,890	444,459	502,479	561,832	5.5	2.7	13.1	11.8	37.0	3
Georgia	224,518	236,397	240,101	263,908	293,498	5.3	1.6	9.9	11.2	30.7	12
Hawaii	30,879	31,938	29,567	32,063	35,049	3.4	-7.4	8.4	9.3	13.5	50
Idaho	30,413	32,363	34,702	39,092	43,447	6.4	7.2	12.6	11.1	42.9	1
Illinois	350,809	361,975	361,630	391,472	422,540	3.2	-0.1	8.3	7.9	20.4	36
Indiana	141,826	146,657	147,939	161,708	176,778	3.4	0.9	9.3	9.3	24.6	23
Iowa	71,669	73,587	75,105	79,589	85,935	2.7	2.1	6.0	8.0	19.9	39
Kansas	62,206	64,631	65,966	69,794	75,496	3.9	2.1	5.8	8.2	21.4	31
Kentucky	84,640	87,886	88,272	95,320	104,213	3.8	0.4	8.0	9.3	23.1	26
Louisiana	89,926	92,249	89,839	94,926	102,755	2.6	-2.6	5.7	8.2	14.3	48
Maine	26,567	27,920	28,814	31,669	34,678	5.1	3.2	9.9	9.5	30.5	13
Maryland	148,270	153,805	156,053	167,137	175,864	3.7	1.5	7.1	5.2	18.6	42
Massachusetts	256,581	270,355	274,382	299,056	318,692	5.4	1.5	9.0	6.6	24.2	25
Michigan	228,067	234,068	230,116	248,617	268,295	2.6	-1.7	8.0	7.9	17.6	44
Minnesota	163,774	169,513	169,935	182,087	194,841	3.5	0.2	7.2	7.0	19.0	41

Mississippi	41,354	42,537	43,323	46,201	50,077	2.9	1.8	6.6	8.4	21.1	33
Missouri	127,663	132,520	134,668	143,951	155,642	3.8	1.6	6.9	8.1	21.9	29
Montana	19,059	19,987	20,911	23,311	25,724	4.9	4.6	11.5	10.4	35.0	5
Nebraska	43,501	45,227	46,903	50,114	54,313	4.0	3.7	6.8	8.4	24.9	22
Nevada	66,967	70,735	69,035	78,773	89,130	5.6	-2.4	14.1	13.1	33.1	7
New Hampshire	36,778	38,409	39,855	46,074	47,692	4.4	3.8	15.6	3.5	29.7	14
New Jersey	261,709	270,944	273,250	295,421	320,372	3.5	0.9	8.1	8.4	22.4	28
New Mexico	33,890	36,040	35,911	38,193	42,222	6.3	-0.4	6.4	10.5	24.6	24
New York	676,612	708,015	701,977	764,237	817,453	4.6	-0.9	8.9	7.0	20.8	35
North Carolina	214,070	225,434	232,294	257,044	284,481	5.3	3.0	10.7	10.7	32.9	8
North Dakota	21,035	22,041	21,086	21,879	23,879	4.8	-4.3	3.8	9.1	13.5	49
Ohio	267,238	277,239	279,718	299,310	321,878	3.7	0.9	7.0	7.5	20.4	37
Oklahoma	71,098	73,963	72,733	76,232	83,260	4.0	-1.7	4.8	9.2	17.1	46
Oregon	99,715	105,281	107,728	117,939	126,890	5.6	2.3	9.5	7.6	27.3	18
Pennsylvania	317,832	331,933	331,286	355,965	384,501	4.4	-0.2	7.4	8.0	21.0	34
Rhode Island	24,922	25,683	25,860	27,813	29,942	3.1	0.7	7.6	7.7	20.1	38
South Carolina	88,590	93,571	95,162	103,615	114,854	5.6	1.7	8.9	10.8	29.6	15
South Dakota	17,671	18,415	19,427	20,961	22,776	4.2	5.5	7.9	8.7	28.9	16
Tennessee	141,504	147,856	151,529	168,173	184,989	4.5	2.5	11.0	10.0	30.7	11
Texas	566,668	593,716	597,655	659,679	746,823	4.8	0.7	10.4	13.2	31.8	10
Utah	68,906	74,269	79,469	88,339	97,641	7.8	7.0	11.2	10.5	41.7	2
Vermont	14,101	14,620	14,603	15,650	17,172	3.7	-0.1	7.2	9.7	21.8	30
Virginia	205,610	215,455	221,474	237,281	256,903	4.8	2.8	7.1	8.3	24.9	21
Washington	216,879	233,046	243,617	269,657	288,174	7.5	4.5	10.7	6.9	32.9	9
West Virginia	30,104	30,193	29,239	31,057	33,615	0.3	-3.2	6.2	8.2	11.7	51
Wisconsin	137,448	142,360	143,535	154,267	166,690	3.6	0.8	7.5	8.1	21.3	32
Wyoming	10,395	11,003	10,551	11,183	12,193	5.8	-4.1	6.0	9.0	17.3	45
Total Non-Federal	$7,943,754	$8,322,099	$8,444,131	$9,235,884	$9,991,632	4.8	1.5	9.4	8.2	25.8	
Federal Employees	$233,843	$238,117	$250,241	$257,180	$265,707	1.8	5.1	2.8	3.3	13.6	
TOTAL	$8,177,597	$8,560,216	$8,694,372	$9,493,065	$10,257,340	4.7	1.6	9.2	8.1	25.4	

Source: National Academy of Social Insurance estimates.

Estimating Deductibles

The availability of deductible policies varies by state.[48] Among the states that allow them, a few can provide us with complete information on these policies, but most cannot. For states that do provide information on deductibles, we rely on the survey data alone, or together with data from A.M. Best, to estimate amounts paid for the deductibles. For states that do not include deductibles in the survey, we rely on NCCI data on manual equivalent premiums, together with data from A.M. Best, to estimate deductible payments.[49] See *Sources and Methods November 2024* on the Academy's website for a detailed description of the methods used to estimate deductibles.

> The Academy draws on a range of data and methods to provide the most accurate possible estimates of workers' compensation benefits, costs, and coverage for a five-year study period.

Benefits Paid

The Academy's estimates of workers' compensation benefits in this report reflect amounts paid in calendar year 2022 regardless of when the work-related injuries and illnesses occurred. This measure of benefits is commonly used in reporting data on social insurance programs, private employee benefits, and other income security programs.

Benefits Incurred

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, accident year benefits paid and accident year benefits incurred, reveal important but distinct information. For a discussion of each measure, refer to the Addendum, Benefits Paid vs. Benefits Incurred.

National Estimates of Benefits Paid

Table 5 shows workers' compensation benefits paid by each type of payer (private insurer, state fund, self-insured, and federal government) from 2002 to 2022. Altogether, workers' compensation paid approximately $61.7 billion in benefits in 2022, a 3.3 percent increase from the total paid in 2021. Private carriers were the largest single payer category, followed by self-insured employers, state funds, and the federal government.

Benefits by type of payer. In 2022, private insurers continued to dominate the workers' compensation insurance market, accounting for $33.8 billion in benefits paid. Self-insured employers were the next largest payer, accounting for $16.1 billion in benefits paid. State funds paid $8.5 billion and the federal government the remaining $3.3 billion of benefits. Between 2021 and 2022, all payers, except state funds, saw increases in benefits paid, with large increases for self-insured employers and private insurers that outpaced the growth in total benefits paid overall.

Deductibles. Employers who have workers' compensation policies with deductibles must reimburse their insurer for benefits paid up to the deductible amount. A share of the benefit payments attributed to private insurers and state funds in Table 5 are, therefore, paid by employers. Table 6 shows the amounts paid by employers under deductible policies from 2002 to 2022. Over the two decades, deductibles increased from 13.2 percent of total benefits paid (or $6.9 billion) to 17.9 percent ($11 billion). Almost all (97% in 2022) benefits paid under deductible provisions are paid by employers covered through private insurers, leaving only a small share of deductibles paid by employers covered through a state fund (3%).

Employers who have policies with deductibles are, in effect, self-insured up to the amount of the deductible.[50] If we allocate the amount of benefits

48 Deductible policies are not allowed in the four states with exclusive state funds (Ohio, North Dakota, Washington, and Wyoming), or in Wisconsin. Four states (New York, Oregon, Pennsylvania, and Rhode Island) do not allow deductible policies in their competitive state funds. Deductibles policies are allowed in California's state fund but are not currently offered.

49 Accurately estimating high-deductible policies is particularly challenging. The Academy notes that numbers in this report may not fully capture either the benefits or costs and is working on better methodology for the latter.

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

Table 5

Workers' Compensation Benefits Paid by Type of Payer, 2002-2022

	Private Insurers		Self-Insured Employers		State Funds		Federal Government		All Payers				
Year	Total (millions)	% Share	Total (millions)	% Share	Total (millions)	% Share	Total (millions)	% Share	Total Benefits (millions)	% Change from Prior Year	Total Medical (millions)	% Change from Prior Year	% Medical
2002	$28,085	0.6	$11,920	0.7	$9,139	14.1	$3,154	2.7	$52,297	2.9	$24,203	4.6	46.3
2003	28,395	1.1	12,717	6.7	10,442	14.3	3,185	1.0	54,739	4.7	25,733	6.3	47.0
2004	28,632	0.8	13,115	3.1	11,146	6.7	3,256	2.2	56,149	2.6	26,079	1.3	46.4
2005	29,039	1.4	13,710	4.5	11,060	-0.8	3,258	0.1	57,067	1.6	26,361	1.1	46.2
2006	27,946	-3.8	13,125	-4.3	10,555	-4.6	3,270	0.4	54,896	-3.8	26,206	-0.6	47.7
2007	29,410	5.2	13,482	2.7	10,153	-3.8	3,340	2.1	56,385	2.7	27,105	3.4	48.1
2008	30,725	4.5	14,255	5.7	10,347	1.9	3,424	2.5	58,750	4.2	28,987	6.9	49.3
2009	30,909	0.6	13,987	-1.9	9,997	-3.4	3,543	3.5	58,435	-0.5	28,157	-2.9	48.2
2010	31,090	0.6	13,894	-0.7	9,809	-1.9	3,672	3.7	58,465	0.1	28,715	2.0	49.1
2011	33,014	6.2	14,805	6.6	9,837	0.3	3,777	2.9	61,433	5.1	30,805	7.3	50.1
2012	33,911	2.7	14,991	1.3	9,977	1.4	3,776	0.0	62,655	2.0	31,280	1.5	49.9
2013	35,350	4.2	15,243	1.7	9,503	-4.8	3,693	-2.2	63,788	1.8	32,274	3.2	50.6
2014	35,290	-0.2	15,365	0.8	9,288	-2.3	3,681	-0.3	63,624	-0.3	32,410	0.4	50.9
2015	34,681	-1.7	15,602	1.5	9,063	-2.4	3,706	0.7	63,052	-0.9	31,772	-2.0	50.4
2016	34,797	0.3	15,393	-1.3	8,952	-1.2	3,603	-2.8	62,746	-0.5	31,538	-0.7	50.3
2017	34,861	0.2	15,558	1.1	8,851	-1.1	3,483	-3.3	62,753	0.0	31,458	-0.3	50.1
2018	34,856	0.0	15,760	1.3	8,808	-0.5	3,455	-0.8	62,879	0.2	31,502	0.1	50.1
2019	35,185	0.9	15,617	-0.9	8,706	-1.2	3,375	-2.3	62,882	0.0	31,412	-0.3	50.0
2020	32,714	-7.0	14,813	-5.1	8,472	-2.7	3,265	-3.3	59,263	-5.8	28,119	-10.5	47.4
2021	32,701	0.0	15,314	3.4	8,491	0.2	3,218	-1.4	59,724	0.8	28,398	1.0	47.5
2022	33,808	3.4	16,133	5.3	8,456	-0.4	3,300	2.5	61,697	3.3	29,040	2.3	47.1

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

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

Table 6

Workers' Compensation Employer-Paid Benefits Under Deductible Provisions, 2002-2022

Year	Deductibles (millions) Total	Private Insured	State Fund Insured	Deductibles as a % of Total Benefits
2002	$6,922	$6,511	$411	13.2
2003	8,020	7,547	474	14.7
2004	7,645	7,134	510	13.6
2005	7,798	7,290	508	13.7
2006	7,575	7,052	524	13.8
2007	8,217	7,684	533	14.6
2008	8,603	8,095	508	14.6
2009	8,582	8,118	464	14.7
2010	8,904	8,466	438	15.2
2011	9,248	8,822	426	15.1
2012	9,940	9,494	446	15.9
2013	10,636	10,292	344	16.7
2014	10,809	10,452	356	17.0
2015	10,634	10,275	359	16.9
2016	10,746	10,419	327	17.1
2017	11,156	10,816	340	17.8
2018	11,127	10,788	339	17.7
2019	11,336	10,998	339	18.0
2020	10,777	10,461	316	18.2
2021	10,502	10,189	313	17.6
2022	11,045	10,722	323	17.9

Notes: For states that provide information on deductible payments, we rely on the survey data alone, or together with data from A.M. Best, to estimate amounts paid for deductibles. For states that do not include deductibles in the survey, we rely on NCCI data on manual equivalent premiums together with data from A.M. Best to estimate deductible payments. (See the *Sources and Methods November 2024* available at www.nasi.org for more details.)

Source: National Academy of Social Insurance estimates.

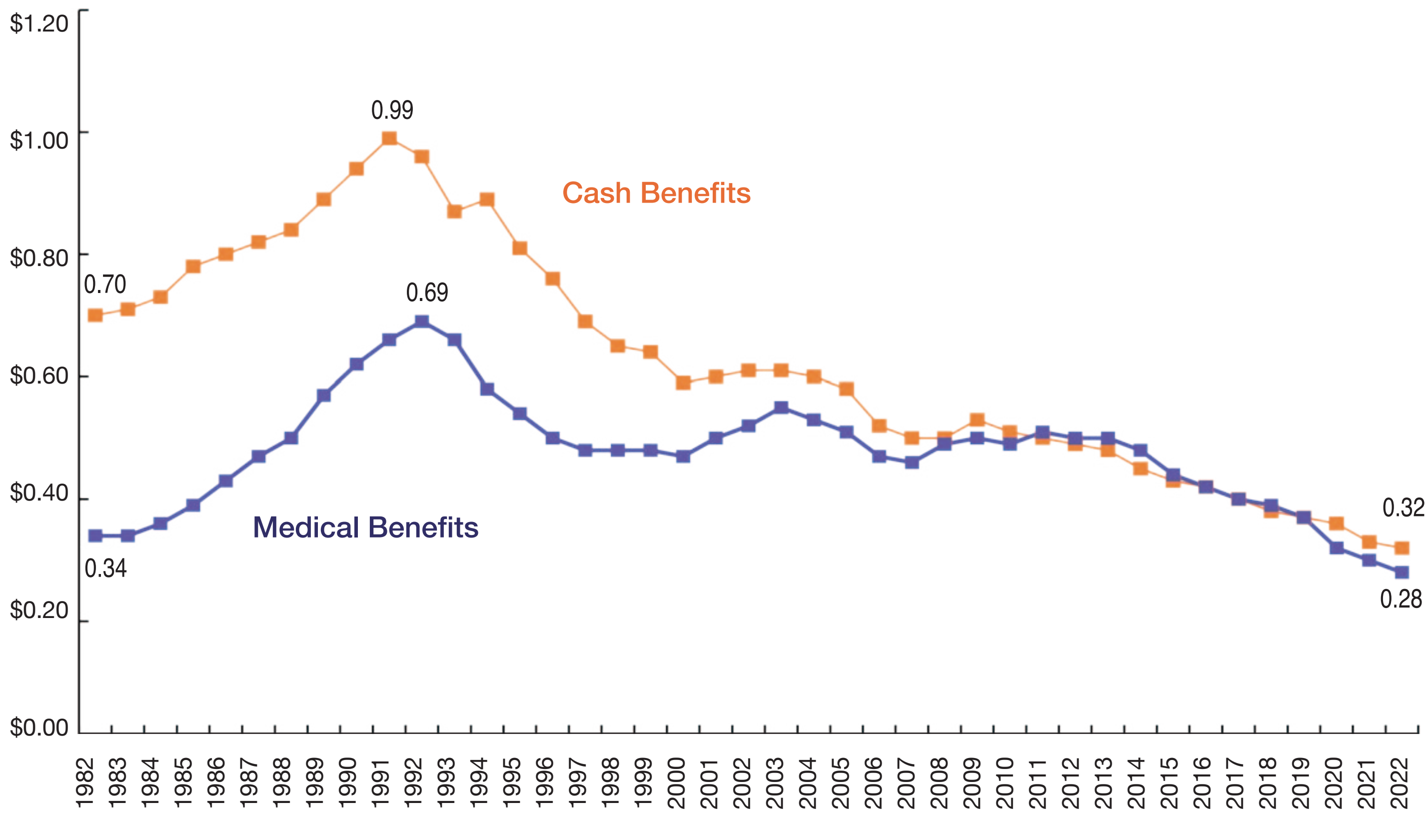
paid under deductibles to self-insurance (instead of to private carriers or state funds as in Table 5), we more clearly see the share of the workers' compensation market for which employers are assuming primary financial risk.

Table 7 shows the share of workers' compensation benefits paid by each type of payer, separating out deductibles paid within private insurance or state funds. When these deductibles are correctly attributed to employers, their share of total benefits paid was 44.1 percent in 2022, up from 36.0 percent in 2002. Private insurers were the second largest payer (37.4% of total benefits). The remaining benefits were paid by state funds (13.2%) and the federal government (5.3%).

Over the last two decades, the workers' compensation insurance market has shifted away from coverage by state funds toward self-insurance. As shown in

Figure 2

Workers' Compensation Medical and Cash Benefits Per $100 of Covered Wages, 1982-2022



Source: National Academy of Social Insurance estimates.

Table 7, state funds decreased their share of benefits by 3.8 percentage points between 2002 and 2022,[51] while the share of benefits paid by self-insurers increased by 3.3 percentage points. The share of benefits paid by private insurers and the federal government fluctuated over time but was nearly the same in 2002 relative to 2022.

Medical vs. cash benefits. Historically, medical benefits paid to health care providers have been a smaller share of workers' compensation benefits than cash benefits paid to injured workers (Figure 2). Beginning in 2008 and continuing through 2019, however, medical and cash benefits accounted for roughly equal shares of total benefits (Table 5). Then, beginning in 2020, medical benefits have once again accounted for less than half of total benefits paid. In 2022, medical benefits were 47.1 percent of total benefits paid—the lowest share since 2003. Although the share of total benefits attributed to medical benefits decreased in 2022, the amount of medical benefits increased by more than $600 million.

The 2020 deviation from the near decade-long trend of roughly equal shares of medical and cash benefits is likely related to the early impacts of COVID-19. U.S. health care providers cancelled and/or delayed many services and procedures in the early months of the pandemic, resulting in an overall decline in medical costs of workers' compensation claims. Also, some medical costs specifically associated with work-related COVID-19 claims may have been externalized to public and private sources, such as publicly funded tests and private health care plans. Finally, many

51 The decline in the relative importance of state funds in recent years largely reflects the decline in coverage of the California State Fund (which accounted for 50 percent of the California workers' compensation insurance market in 2004 but only ten percent more recently) and, to a lesser extent, the dissolution of funds in West Virginia (in 2009), Arizona (in 2012), and Utah (in 2017).

Table 7

Percentage Distribution of Workers' Compensation Benefit Payments by Type of Coverage: With and Without Deductibles, 2002-2022

Year	Total Benefits (millions)	Percent of Total Benefits: Private Insured: Total (1)	Private Insured: Employer Paid Deductibles (2)	Private Insured: Insurer Paid After Deductibles (3)	State Fund Insured: Total (4)	State Fund Insured: Employer Paid Deductibles (5)	State Fund Insured: Insurer Paid After Deductibles (6)	Self-Insured (7)	Federal (8)	Total Employer Paid (9)=(2)+(5)+(7)
2002	$52,297	53.7	12.4	41.3	17.5	0.8	16.7	22.8	6.0	36.0
2003	54,739	51.9	13.8	38.1	19.1	0.9	18.2	23.2	5.8	37.9
2004	56,149	51.0	12.7	38.3	19.9	0.9	18.9	23.4	5.8	37.0
2005	57,067	50.9	12.8	38.1	19.4	0.9	18.5	24.0	5.7	37.7
2006	54,896	50.9	12.8	38.1	19.2	1.0	18.3	23.9	6.0	37.7
2007	56,385	52.2	13.6	38.5	18.0	0.9	17.1	23.9	5.9	38.5
2008	58,750	52.3	13.8	38.5	17.6	0.9	16.7	24.3	5.8	38.9
2009	58,435	52.9	13.9	39.0	17.1	0.8	16.3	23.9	6.1	38.6
2010	58,465	53.2	14.5	38.7	16.8	0.7	16.0	23.8	6.3	39.0
2011	61,433	53.7	14.4	39.4	16.0	0.7	15.3	24.1	6.1	39.2
2012	62,655	54.1	15.2	39.0	15.9	0.7	15.2	23.9	6.0	39.8
2013	63,788	55.4	16.1	39.3	14.9	0.5	14.4	23.9	5.8	40.6
2014	63,624	55.5	16.4	39.0	14.6	0.6	14.0	24.2	5.8	41.1
2015	63,052	55.0	16.3	38.7	14.4	0.6	13.8	24.7	5.9	41.6
2016	62,746	55.5	16.6	38.9	14.3	0.5	13.7	24.5	5.7	41.7
2017	62,753	55.6	17.2	38.3	14.1	0.5	13.6	24.8	5.6	42.6
2018	62,879	55.4	17.2	38.3	14.0	0.5	13.5	25.1	5.5	42.8
2019	62,882	56.0	17.5	38.5	13.8	0.5	13.3	24.8	5.4	42.9
2020	59,263	55.2	17.7	37.5	14.3	0.5	13.8	25.0	5.5	43.2
2021	59,724	54.8	17.1	37.7	14.2	0.5	13.7	25.6	5.4	43.2
2022	61,697	54.8	17.4	37.4	13.7	0.5	13.2	26.1	5.3	44.1

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.

COVID-19 claims were "cash only," likely caused by mild disease experiences and quarantines (NCCI, 2021). Yet, the persistence of this drop in the medical benefits portion of total benefits is notable. Over the 2019-2022 period, NCCI notes that growth in the severity (costs per claim) of cash claims outpaced that of medical claims, 8 percent relative to 5 percent, which could drive changes, given these are share measures (NCCI, 2023).

State Estimates of Benefits Paid

Benefits by type of insurer. Table 8 shows the percent share of workers' compensation benefits paid by each type of insurer in each state in 2022. The shares vary considerably across states for several reasons: not all states have a state fund; where state funds exist, their legal status varies (i.e., whether they operate as a monopoly insurer, as the "insurer of last resort, etc.); the incentives to self-insure vary across states; and two states do not allow self-insurance.

North Dakota and Wyoming have exclusive state funds, and do not allow employers to self-insure. In 2022, their state funds accounted for 99.9 and 99.7 percent of total workers' compensation benefits paid, respectively (Table 8). Ohio and Washington have exclusive state funds but also allow employers to self-insure. In 2022, their state funds accounted for 82.5 and 78.2 percent of total benefits paid, respectively.[52] Among the other 18 states that have active state funds, the share of benefits accounted for by the fund ranges from less than ten percent in Pennsylvania (3.3%), New Mexico (4.8%), and California (7.3%) to more than 50 percent in Idaho (60.6%) and Montana (50.5%).

Among the states that do not have a state fund, private carriers typically accounted for 70 to 80 percent of benefits paid in 2022, with self-insured employers accounting for the other 20 to 30 percent. Alabama is an exception, with self-insured employers covering 47.6 percent of benefits paid in 2022, the highest self-insured share of any state. The proportion of benefits paid by self-insured employers exceeded 30 percent in nine other states, including California (34.4%) and New York (35.2%). South Dakota is an exception in the opposite direction, with private carriers accounting for 97.8 percent of benefits paid in 2022, and self-insured employers only 2.2 percent. Private carrier benefits account for more than 80 percent of total benefits paid in seven other states, including Indiana (86.3%), Utah (86.4%), Vermont (86.4%), and Wisconsin (88.5%).

There are several reasons for the tremendous variation in self-insurance take-up rates across states:

1) Large employers are more likely to self-insure, and some states 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.
3) Rules governing deductible policies vary across states. Deductible policies may serve as a substitute for self-insurance, particularly for large, multi-state employers that want to avoid the stringent regulatory requirements of becoming self-insured in a large number of states.
4) Self-insurance and private insurance are substitutes. 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 (despite the fixed costs of arranging self-insurance).
5) Measurement error may account for some of the observed variation in the share of benefits paid by self-insured employers because our methods for estimating benefits paid under self-insurance vary across states depending upon the responses of state agencies to the Academy's survey.

Medical benefits paid. Table 8 shows, for each state, the amount of medical benefits paid and medical benefits as a share of total benefits in 2022. The median share of medical benefits was 53 percent, nearly the same as in 2021. However, medical benefits account for more than 70 percent of total benefits paid in Wisconsin (77.7%), and close to 70 percent in Indiana (69.6%) and Alabama (69.6%). In the opposite direction, medical benefits account for less

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

Table 8

Workers' Compensation Benefits Paid, by Type of Insurer and State, 2022

State	Private Insured[a]		State Fund Insured[a]		Self-Insured[b]		Total Benefits Paid (thousands)[c]	Medical Benefits Paid (thousands)[d]	Percent Medical	Ranking (1=largest percent medical)
	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share	Benefits (thousands)	Percent Share				
Alabama	$320,113	52.4			$291,139	47.6	$611,252	$425,431	69.6	2
Alaska	130,270	75.7			41,885	24.3	172,156	107,081	62.2	12
Arizona	543,012	73.8			192,707	26.2	735,720	481,161	65.4	6
Arkansas	146,875	72.3			56,254	27.7	203,129	131,627	64.8	7
California	7,614,173	58.3	958,850	7.3	4,491,379	34.4	13,064,403	6,485,387	49.6	33
Colorado	229,978	29.7	360,277	46.5	184,503	23.8	774,758	415,270	53.6	24
Connecticut	594,193	72.1			230,196	27.9	824,389	347,068	42.1	44
Delaware	134,047	81.1			31,168	18.9	165,216	73,519	44.5	42
District of Columbia	70,481	77.0			21,095	23.0	91,576	28,755	31.4	47
Florida	2,599,733	73.1			955,125	26.9	3,554,858	2,289,329	64.4	8
Georgia	1,035,864	76.0			327,471	24.0	1,363,336	677,578	49.7	31
Hawaii	144,571	40.7	42,548	12.0	167,765	47.3	354,884	148,697	41.9	45
Idaho	109,266	34.3	193,263	60.6	16,392	5.1	318,921	190,715	59.8	16
Illinois	1,508,214	74.7			510,725	25.3	2,018,939	922,655	45.7	39
Indiana	499,107	86.3			79,247	13.7	578,354	402,534	69.6	2
Iowa	453,807	78.8			122,214	21.2	576,022	329,484	57.2	21
Kansas	357,428	79.6			91,376	20.4	448,803	282,746	63.0	10
Kentucky	312,626	60.2	96,558	18.6	110,333	21.2	519,517	262,876	50.6	28
Louisiana	438,647	52.0	132,905	15.8	272,260	32.3	843,812	476,754	56.5	22
Maine	141,450	63.6			80,862	36.4	222,311	118,714	53.4	26
Maryland	460,511	57.3	89,322	11.1	254,076	31.6	803,909	348,897	43.4	43
Massachusetts	1,000,860	73.3			364,646	26.7	1,365,506	353,135	25.9	50
Michigan	571,530	67.9			269,881	32.1	841,411	417,799	49.7	32
Minnesota	750,229	70.3			317,686	29.7	1,067,915	545,872	51.1	27
Mississippi	218,617	75.7			70,361	24.3	288,978	172,520	59.7	17
Missouri	554,511	57.3	147,921	15.3	264,707	27.4	967,138	562,875	58.2	20
Montana	78,446	34.7	114,355	50.5	33,579	14.8	226,380	139,903	61.8	14
Nebraska	255,343	80.7			60,933	19.3	316,276	194,193	61.4	15
Nevada	309,028	66.1			158,614	33.9	467,642	220,259	47.1	37
New Hampshire	127,986	66.9			63,201	33.1	191,187	120,066	62.8	11
New Jersey	1,827,883	72.8			681,784	27.2	2,509,667	1,221,002	48.7	35

New Mexico	183,058	66.9	13,022	4.8	77,710	28.4	273,789	154,417	56.4	23
New York	2,790,571	45.6	1,176,685	19.2	2,157,514	35.2	6,124,770	1,916,798	31.3	48
North Carolina	789,713	78.2			219,966	21.8	1,009,678	459,404	45.5	40
North Dakota[e]	99	0.1	106,763	99.9			106,862	63,558	59.5	19
Ohio[e]	3,519	0.2	1,310,490	82.5	275,223	17.3	1,589,232	517,797	32.6	46
Oklahoma	194,975	45.7	157,477	36.9	73,803	17.3	426,255	214,833	50.4	29
Oregon	260,078	33.6	369,979	47.8	143,254	18.5	773,310	385,108	49.8	30
Pennsylvania	1,948,310	72.1	89,389	3.3	666,390	24.6	2,704,090	1,252,671	46.3	38
Rhode Island	68,699	50.3	54,897	40.2	12,889	9.4	136,485	39,444	28.9	49
South Carolina[f]	573,183	63.8	68,660	7.6	255,948	28.5	897,792	439,918	49.0	34
South Dakota	109,497	97.8			2,430	2.2	111,927	74,879	66.9	5
Tennessee	493,242	84.4			91,227	15.6	584,469	376,398	64.4	8
Texas	676,421	49.8	398,265	29.3	283,519	20.9	1,358,206	726,640	53.5	25
Utah[g]	262,437	86.5			41,104	13.5	303,542	205,801	67.8	4
Vermont	116,320	86.4			18,379	13.6	134,699	60,884	45.2	41
Virginia	627,591	77.6			181,224	22.4	808,815	482,053	59.6	18
Washington[e]	8,671	0.3	2,296,715	78.2	630,950	21.5	2,936,336	756,423	25.8	51
West Virginia[h]	184,926	52.0	109,511	30.8	61,033	17.2	355,471	170,626	48.0	36
Wisconsin	977,470	88.5			126,438	11.5	1,103,908	857,546	77.7	1
Wyoming[e,k]	549	0.3	168,074	99.7			168,624	104,331	61.9	13
Total Non-Federal	$33,808,130	57.9	$8,455,925	14.5	$16,132,564	27.6	$58,396,619	$28,153,430	48.2	
All Federal[i]							$3,299,960	$886,289	26.9	
Federal Employees[j]							$1,904,324	$724,885	38.1	
TOTAL							$61,696,579	$29,039,719	47.1	

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

a. Deductibles paid under private insurance policies and state fund policies are included in these estimates, even though they are technically paid by the employer.
b. Self-insured includes individual self-insured and group self-insured.
c. These data may not include benefits paid under second injury funds for some states and may, therefore, be an understatement of total benefits paid.
d. For further details see *Sources and Methods November 2024* available at www.nasi.org.
e. States with exclusive state funds (Ohio, North Dakota, Washington, and Wyoming) may have some amounts of benefits paid in the private insured category, because: (1) some employers doing business in these states may need to obtain coverage from private carriers under the U.S. Longshore and Harbor Workers' Compensation Act (LHWCA); (2) some employers carry liability coverage which the state fund is not authorized to provide; and/or (3) some employers obtain excess compensation coverage from private carriers.
f. South Carolina's State Accident Fund is not a competitive state fund.
g. Utah Senate Bill 92, passed in 2017, repealed the statute creating the Workers' Compensation Fund (Utah's public state fund). The former-lead company of WCF is now known as WCF Mutual Insurance Company and is a for-profit mutual insurance company. Though this did not become effective until January 1, 2018, A.M. Best data on Utah classified all 2017 Utah premiums and losses under private insurance. WCF Mutual Insurance Company will remain the insurer of last resort in Utah until 2020.
h. West Virginia completed the transition from monopolistic state fund to competitive insurance status on July 1, 2008.
i. 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 LHWCA that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix B for more information about federal programs.
j. Included in the Federal benefits total.

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

than 30 percent of total benefits paid in Rhode Island (28.9%), Massachusetts (25.9%), and Washington (25.8%). Note that the share of medical benefits in a state can be relatively high (low) either because the amount of medical benefits is relatively high (low), or the amount of cash benefits is relatively low (high).

State Trends in Benefits Paid

Table 9 shows total workers' compensation benefits paid in each state in the years 2018 to 2022. Over the entire study period, benefits decreased in 37 jurisdictions. Delaware experienced the largest decrease in benefits paid (31.3%), followed by North Dakota (28.4%) and DC (19.5%). Overall, 15 jurisdictions experienced decreases of at least 10 percent. Among the 14 jurisdictions that experienced benefit increases between 2018 and 2022, the largest increases were in Nevada (18.9%), Hawaii (17.0%), and Oregon (15.9%).

Between 2021 and 2022, only 15 states experienced benefit decreases. The largest decreases came in Delaware (12.3%), Oklahoma (10%), and Arkansas (9.3%). The largest increases were in Nevada (14.5%), Utah (13.2%), and Kansas (11.5%). As an indicator of the rebound in benefits paid after the pandemic, the median jurisdiction's change from 2021 to 2022 was 2.3 percent. This is the first positive annual change in the median since the pandemic. From 2019 to 2020, the median change in total benefits was -6.0 percent, and from 2020 to 2021, -0.2 percent.

The within-state amounts of workers' compensation benefits paid vary from year to year for a number of reasons. Benefits change as within-state employment and wages change, although much of the impact occurs with a lag. Benefits are also affected by changes to a state's legal system for processing claims, such as changes in statutory rules, legal decisions, administrative processes, reporting requirements, and lags in recording results. Other factors that may explain within-state changes in benefits over time include: changes in the number and type of work-related injuries and illnesses, fluctuations in wage rates, changes in the mix of occupations/industries, changes in the costs and effectiveness of medical care (including changes to the medical fee schedule), changes to the cash benefit schedule, differences in the way stakeholders interact with the system over time (e.g., whether or not employees and/or employers have and exercise the right to choose a physician), changes in return-to-work and vocational rehabilitation efforts, and changes to coverage requirements (e.g., exclusions for small employers or agricultural employers).

Benefits Per $100 of Covered Wages

Much of the variation in benefit payments described above can be attributed to differences in employment and wages across states. To control for such differences, we construct a standardized measure of benefits, that is, benefits per $100 of covered wages.* This standardized measure is provided for total benefits, and for medical and cash benefits separately. Variations in the standardized measure of benefits capture interstate differences in factors other than wage rates, including type and nature of injuries, quality and intensity of medical care, value of cash benefits, and investments in return-to-work.

We caution the reader that the data on standardized benefits (benefits paid per $100 of covered wages) alone do not provide meaningful comparisons of the performance of state workers' compensation systems. In particular, standardized benefits do not indicate the extent to which cash benefits compensate workers for their losses due to injury (i.e., benefit adequacy). Standardized benefits could be high or low in a given state for a number of reasons completely unrelated to the adequacy of benefits that injured workers receive.[53] For example, if a state has a disproportionate share of risky occupations (e.g., mining), and all else is held equal, standardized benefits will tend to be higher. If a state has high prices for medical care relative to the average wage rate, all else equal, standardized benefits will tend to be higher.

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* See the *Word of Caution for 2020 and 2021 Standardized Metrics* on page ii regarding the standardized metrics.

53 To provide meaningful comparisons of benefit adequacy, a study should, at the very least, compare the benefits that injured workers actually receive to the wages they lose because of their occupational injuries or diseases. Such wage-loss studies have been conducted in several states (e.g., California, New Mexico, Oregon, Wisconsin, and Michigan), but the data for estimating wage losses are not available for most states. For an example, see a May 2019 report on New York's Workers' Compensation system describing challenges to producing such a study for that state (Parrott and Martin, 2019). For benefit adequacy studies, see Hunt and Dillender (2017), Dworsky et al. (2016), Seabury et al. (2014), Boden et al. (2005), and Hunt (2004).

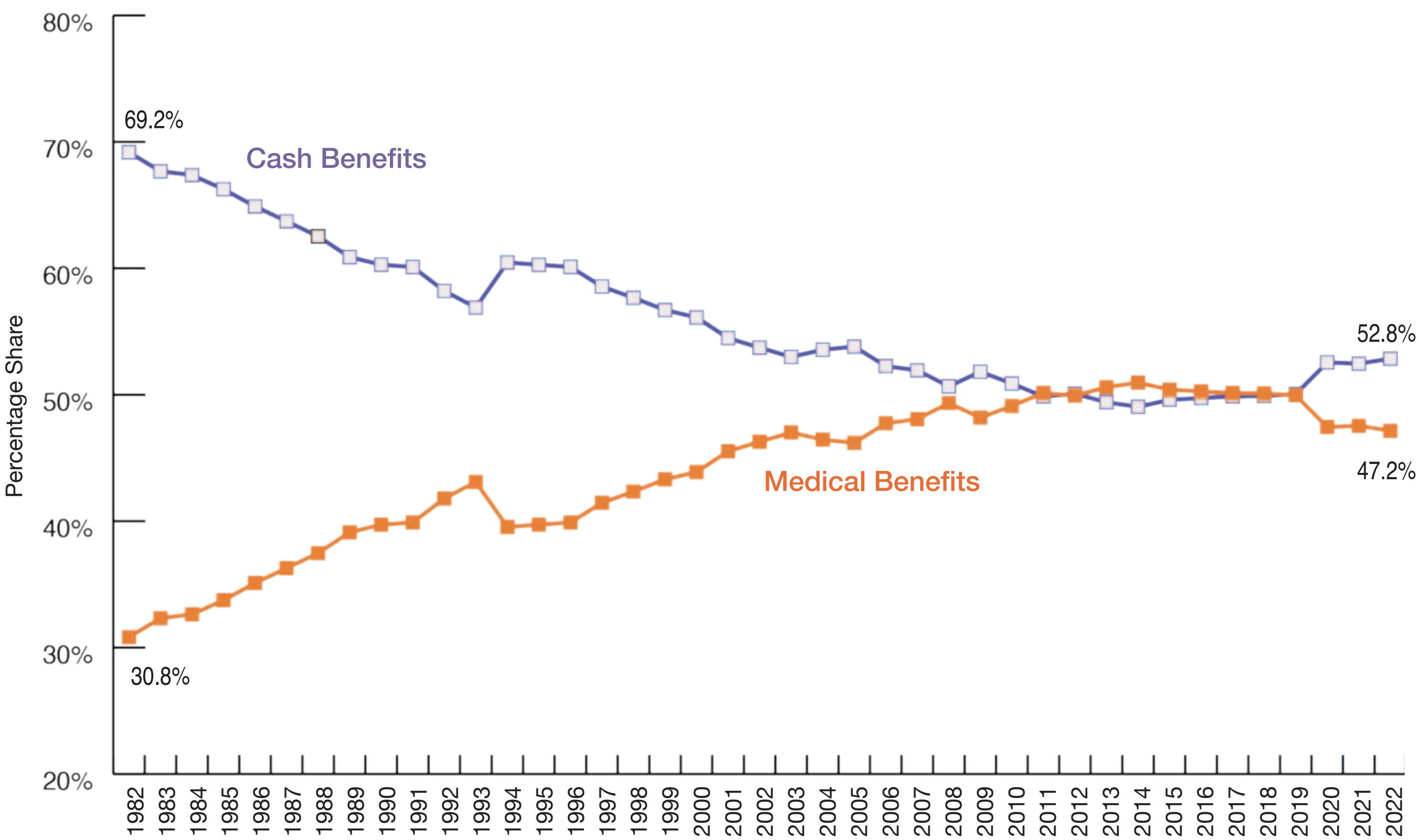
Table 10 shows trends in *medical benefits per $100 of covered wages* in each state between 2018 and 2022. Nationally, medical benefits per $100 of covered wages decreased by 26.5 percent between 2018 and 2022. Standardized medical benefits decreased in every jurisdiction, with the largest decreases in Delaware (51.7%), Florida (37.4%), and Texas (37.3%). Between 2021 and 2022, the largest declines in standardized medical benefits were in Delaware (23.4%), Oklahoma (18.1%), and Arkansas (16.2%). During this same timeframe, only eight jurisdictions experienced increases, with the largest in Nevada (11.1%) and DC (9.4%).

Table 11 shows trends in *cash benefits per $100 of covered wages* in each state between 2018 and 2022. Nationally, standardized cash benefits decreased by 17 percent over the five years covered in the report. Forty-seven jurisdictions experienced decreases over the study period, ranging from as large as 41.5 percent in North Dakota and 40.3 percent in Maine, to as little as 6.6 percent in Washington and 6.9 percent in Wyoming. Only four states experienced an increase in standardized cash benefits over the study period: Hawaii (15.1%), Massachusetts (1.7%), Kansas (1.2%), and Oregon (0.3%).

Between 2021 and 2022, 42 jurisdictions experienced decreases in standardized cash benefits, with the largest decreases in Arkansas (18.0%) and Oklahoma (17.1%). In the remaining jurisdictions, eight states experienced increases in standardized cash benefits, with the largest in Kansas (9.9%) and New York (5.4%), while one state (Oregon) experienced virtually no change.

Figure 3

Percentage Share of Medical and Cash Benefits, 1982-2022



Source: National Academy of Social Insurance estimates. The percentage share of medical and cash benefits sum to 100 percent.

Table 9

Workers' Compensation Total Benefits Paid and Five-Year Percent Change, by State, 2018-2022

State	Total Benefits (in thousands)					Percent Change					Ranking (1=largest percent increase, 2018-2022)
	2018	2019	2020	2021	2022	2018-2019	2019-2020	2020-2021	2021-2022	2018-2022	
Alabama	$643,375	$670,001	$614,646	$608,202	$611,252	4.1	-8.3	-1.0	0.5	-5.0	24
Alaska	208,128	209,330	190,385	172,093	172,156	0.6	-9.1	-9.6	0.0	-17.3	45
Arizona	748,333	755,944	666,773	726,744	735,720	1.0	-11.8	9.0	1.2	-1.7	18
Arkansas	248,255	236,530	219,632	223,942	203,129	-4.7	-7.1	2.0	-9.3	-18.2	48
California	12,321,912	12,460,588	11,874,915	12,429,802	13,064,403	1.1	-4.7	4.7	5.1	6.0	10
Colorado	775,889	833,245	787,342	762,639	774,758	7.4	-5.5	-3.1	1.6	-0.1	15
Connecticut	871,391	889,215	848,840	846,323	824,389	2.0	-4.5	-0.3	-2.6	-5.4	25
Delaware	240,585	191,699	186,771	188,377	165,216	-20.3	-2.6	0.9	-12.3	-31.3	51
District of Columbia	113,823	124,396	104,592	84,700	91,576	9.3	-15.9	-19.0	8.1	-19.5	49
Florida	3,991,887	3,997,337	3,758,084	3,721,279	3,554,858	0.1	-6.0	-1.0	-4.5	-10.9	38
Georgia	1,388,356	1,399,488	1,324,155	1,314,076	1,363,336	0.8	-5.4	-0.8	3.7	-1.8	20
Hawaii	303,374	335,738	340,288	334,502	354,884	10.7	1.4	-1.7	6.1	17.0	2
Idaho	290,820	315,737	289,318	304,905	318,921	8.6	-8.4	5.4	4.6	9.7	9
Illinois	2,272,474	2,203,772	1,970,077	1,972,520	2,018,939	-3.0	-10.6	0.1	2.4	-11.2	39
Indiana	578,259	606,059	580,997	569,298	578,354	4.8	-4.1	-2.0	1.6	0.0	14
Iowa	658,827	604,618	578,392	578,695	576,022	-8.2	-4.3	0.1	-0.5	-12.6	41
Kansas	399,821	417,512	410,021	402,450	448,803	4.4	-1.8	-1.8	11.5	12.3	8
Kentucky	574,813	552,872	512,120	512,006	519,517	-3.8	-7.4	0.0	1.5	-9.6	36
Louisiana	902,387	879,502	762,758	798,904	843,812	-2.5	-13.3	4.7	5.6	-6.5	28
Maine	261,717	252,800	236,538	229,993	222,311	-3.4	-6.4	-2.8	-3.3	-15.1	43
Maryland	976,760	923,161	869,207	805,527	803,909	-5.5	-5.8	-7.3	-0.2	-17.7	47
Massachusetts	1,189,217	1,215,866	1,183,495	1,292,445	1,365,506	2.2	-2.7	9.2	5.7	14.8	5
Michigan	908,792	893,882	789,834	800,887	841,411	-1.6	-11.6	1.4	5.1	-7.4	31
Minnesota	1,053,728	1,065,763	1,037,773	1,042,333	1,067,915	1.1	-2.6	0.4	2.5	1.3	12
Mississippi	291,559	288,589	270,418	285,861	288,978	-1.0	-6.3	5.7	1.1	-0.9	16
Missouri	993,426	1,013,696	999,788	967,644	967,138	2.0	-1.4	-3.2	-0.1	-2.6	21
Montana	230,352	226,485	228,412	216,144	226,380	-1.7	0.9	-5.4	4.7	-1.7	19

Nebraska	320,795	318,724	305,644	309,056	316,276	-0.6	-4.1	1.1	2.3	-1.4	17
Nevada	393,305	401,753	394,947	408,421	467,642	2.1	-1.7	3.4	14.5	18.9	1
New Hampshire	209,611	210,262	207,780	199,033	191,187	0.3	-1.2	-4.2	-3.9	-8.8	34
New Jersey	2,488,921	2,532,585	2,296,855	2,484,058	2,509,667	1.8	-9.3	8.2	1.0	0.8	13
New Mexico	302,928	320,612	287,754	267,560	273,789	5.8	-10.2	-7.0	2.3	-9.6	35
New York	6,292,345	6,181,872	5,900,751	5,504,784	6,124,770	-1.8	-4.5	-6.7	11.3	-2.7	22
North Carolina	1,074,650	1,083,283	980,271	1,028,181	1,009,678	0.8	-9.5	4.9	-1.8	-6.0	26
North Dakota	149,259	107,161	107,132	107,185	106,862	-28.2	0.0	0.0	-0.3	-28.4	50
Ohio	1,770,306	1,728,903	1,563,210	1,608,101	1,589,232	-2.3	-9.6	2.9	-1.2	-10.2	37
Oklahoma	512,963	478,865	476,411	473,828	426,255	-6.6	-0.5	-0.5	-10.0	-16.9	44
Oregon	667,319	697,821	685,096	714,819	773,310	4.6	-1.8	4.3	8.2	15.9	3
Pennsylvania	2,901,565	2,862,210	2,707,223	2,700,771	2,704,090	-1.4	-5.4	-0.2	0.1	-6.8	29
Rhode Island	148,212	157,710	144,327	127,484	136,485	6.4	-8.5	-11.7	7.1	-7.9	33
South Carolina	796,911	843,458	857,183	824,220	897,792	5.8	1.6	-3.8	8.9	12.7	7
South Dakota	119,160	120,741	124,390	114,507	111,927	1.3	3.0	-7.9	-2.3	-6.1	27
Tennessee	630,125	639,706	599,037	547,142	584,469	1.5	-6.4	-8.7	6.8	-7.2	30
Texas	1,538,066	1,520,002	1,350,331	1,343,912	1,358,206	-1.2	-11.2	-0.5	1.1	-11.7	40
Utah	265,543	284,553	260,912	268,246	303,542	7.2	-8.3	2.8	13.2	14.3	6
Vermont	138,862	143,860	122,539	130,482	134,699	3.6	-14.8	6.5	3.2	-3.0	23
Virginia	937,683	887,572	762,164	786,569	808,815	-5.3	-14.1	3.2	2.8	-13.7	42
Washington	2,536,353	2,614,340	2,620,209	2,765,687	2,936,336	3.1	0.2	5.6	6.2	15.8	4
West Virginia	431,119	405,151	379,345	362,132	355,471	-6.0	-6.4	-4.5	-1.8	-17.5	46
Wisconsin	1,195,238	1,222,573	1,060,886	1,073,033	1,103,908	2.3	-13.2	1.1	2.9	-7.6	32
Wyoming	165,009	179,709	168,411	164,778	168,624	8.9	-6.3	-2.2	2.3	2.2	11
Total Non-Federal	$59,424,509	$59,507,248	$55,998,376	$56,506,282	$58,396,619	0.1	-5.9	0.9	3.3	-1.7	
All Federal[a]	$3,454,588	$3,374,778	$3,264,889	$3,218,051	$3,299,960	-2.3	-3.3	-1.4	2.5	-4.5	
Federal Employees[b]	$2,756,361	$2,678,006	$2,598,019	$2,555,928	$2,629,209	-2.8	-3.0	-1.6	2.9	-4.6	
TOTAL	$62,879,096	$62,882,026	$59,263,265	$59,724,333	$61,696,579	0.0	-5.8	0.8	3.3	-1.9	

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 November 2024* available at www.nasi.org.

a Includes federal benefits as described in Table 8.

b Included in the federal benefits total.

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

Table 10

Workers' Compensation Medical Benefits per $100 Covered Wages and Five-Year Percent Change by State, 2018-2022

	Medical Benefits (per $100 covered wages)					Percent Change					Ranking
State	2018	2019	2020	2021	2022	2018-2019	2019-2020	2020-2021	2021-2022	2018-2022	(1=largest percent increase, 2018-2022)
Alabama	$0.55	$0.52	$0.47	$0.42	$0.40	-5.6	-8.4	-10.9	-5.8	-27.5	28
Alaska	0.85	0.84	0.72	0.62	0.56	-0.9	-15.2	-13.2	-10.0	-34.4	42
Arizona	0.37	0.34	0.27	0.27	0.25	-7.5	-20.0	-0.8	-7.8	-32.3	39
Arkansas	0.32	0.30	0.26	0.24	0.20	-5.3	-14.1	-5.1	-16.2	-35.3	45
California	0.57	0.54	0.47	0.44	0.44	-6.0	-12.1	-7.0	-0.7	-23.6	18
Colorado	0.29	0.29	0.26	0.22	0.20	0.7	-11.3	-13.9	-8.2	-29.4	32
Connecticut	0.34	0.35	0.32	0.31	0.26	2.4	-8.8	-4.2	-14.4	-23.5	16
Delaware	0.50	0.38	0.33	0.31	0.24	-24.2	-13.8	-3.5	-23.4	-51.7	51
District of Columbia	0.07	0.07	0.05	0.04	0.05	-4.2	-22.1	-20.6	9.4	-35.1	44
Florida	0.65	0.62	0.53	0.47	0.41	-5.4	-13.2	-12.1	-13.2	-37.4	50
Georgia	0.31	0.29	0.27	0.24	0.23	-4.8	-9.1	-8.6	-5.0	-24.9	20
Hawaii	0.47	0.52	0.54	0.46	0.42	10.3	4.6	-15.3	-8.0	-10.0	2
Idaho	0.59	0.63	0.51	0.47	0.44	6.1	-19.8	-6.8	-6.8	-26.1	23
Illinois	0.30	0.29	0.24	0.23	0.22	-3.2	-16.0	-5.2	-5.4	-27.0	27
Indiana	0.29	0.30	0.27	0.24	0.23	2.5	-9.3	-11.0	-6.1	-22.3	14
Iowa	0.51	0.48	0.44	0.44	0.38	-5.7	-9.8	0.2	-12.4	-25.3	21
Kansas	0.43	0.42	0.40	0.38	0.37	-1.0	-5.8	-5.0	-0.5	-12.0	3
Kentucky	0.36	0.36	0.30	0.26	0.25	-1.1	-15.2	-15.0	-2.4	-30.4	34
Louisiana	0.58	0.53	0.47	0.46	0.46	-7.3	-11.6	-2.5	0.8	-19.4	9
Maine	0.48	0.46	0.43	0.39	0.34	-6.0	-4.8	-10.5	-11.7	-29.4	31
Maryland	0.32	0.28	0.27	0.21	0.20	-10.0	-5.6	-22.6	-4.5	-37.3	48
Massachusetts	0.15	0.15	0.13	0.12	0.11	-1.1	-13.7	-3.3	-11.1	-26.6	24
Michigan	0.20	0.19	0.17	0.16	0.16	-2.0	-10.9	-6.4	-4.0	-21.5	13
Minnesota	0.35	0.34	0.31	0.29	0.28	-4.5	-8.7	-6.4	-2.3	-20.3	11
Mississippi	0.42	0.41	0.38	0.37	0.34	-2.5	-7.2	-3.3	-7.2	-18.8	8

Missouri	0.45	0.45	0.42	0.39	0.36	0.2	-6.7	-6.9	-8.3	-20.3	10
Montana	0.80	0.75	0.71	0.58	0.54	-6.0	-6.5	-18.1	-5.8	-32.2	38
Nebraska	0.47	0.44	0.38	0.39	0.36	-5.2	-14.1	1.4	-7.4	-23.5	17
Nevada	0.28	0.27	0.26	0.22	0.25	-4.3	-5.2	-12.8	11.1	-12.2	4
New Hampshire	0.39	0.35	0.32	0.27	0.25	-9.6	-8.0	-16.1	-6.6	-34.8	43
New Jersey	0.47	0.47	0.40	0.41	0.38	-0.8	-14.1	1.6	-6.2	-18.8	7
New Mexico	0.55	0.54	0.46	0.39	0.37	-1.1	-13.9	-15.7	-6.4	-32.9	40
New York	0.30	0.28	0.26	0.23	0.23	-8.0	-6.3	-11.4	1.2	-22.7	15
North Carolina	0.22	0.22	0.18	0.19	0.16	-0.6	-17.7	3.3	-15.0	-28.2	29
North Dakota	0.40	0.28	0.29	0.28	0.27	-30.8	4.5	-3.6	-4.5	-33.4	41
Ohio	0.25	0.23	0.18	0.17	0.16	-8.2	-20.5	-6.6	-6.6	-36.3	47
Oklahoma	0.37	0.34	0.34	0.32	0.26	-9.2	-0.8	-6.0	-18.1	-30.7	35
Oregon	0.36	0.36	0.31	0.30	0.30	-1.1	-13.2	-3.9	1.2	-16.6	6
Pennsylvania	0.44	0.41	0.37	0.35	0.33	-6.4	-9.3	-6.8	-5.9	-25.6	22
Rhode Island	0.19	0.21	0.16	0.13	0.13	11.7	-26.0	-17.6	2.3	-30.3	33
South Carolina	0.41	0.42	0.38	0.35	0.38	4.0	-9.6	-9.4	10.4	-6.0	1
South Dakota	0.45	0.44	0.43	0.37	0.33	-1.5	-3.5	-12.6	-12.1	-27.0	26
Tennessee	0.29	0.28	0.26	0.21	0.20	-3.7	-9.6	-19.6	-1.0	-30.8	37
Texas	0.16	0.14	0.12	0.11	0.10	-7.7	-14.9	-10.2	-11.2	-37.3	49
Utah	0.27	0.27	0.22	0.20	0.21	1.9	-17.7	-9.5	4.2	-21.0	12
Vermont	0.51	0.52	0.40	0.42	0.35	0.9	-22.5	4.1	-14.9	-30.8	36
Virginia	0.29	0.25	0.20	0.19	0.19	-12.6	-22.4	-3.7	-1.6	-35.7	46
Washington	0.36	0.34	0.29	0.28	0.26	-4.1	-14.7	-5.2	-5.8	-27.0	25
West Virginia	0.71	0.74	0.61	0.58	0.51	4.1	-17.8	-4.9	-11.9	-28.3	30
Wisconsin	0.68	0.68	0.58	0.55	0.51	0.0	-14.8	-5.1	-6.3	-24.2	19
Wyoming	1.02	1.05	0.98	0.89	0.86	3.1	-7.0	-8.7	-4.3	-16.2	5
Total Non-Federal	$0.38	$0.37	$0.32	$0.30	$0.28	-4.6	-11.8	-7.5	-5.4	-26.4	
Federal Employees[a]	$0.39	$0.35	$0.31	$0.29	$0.27	-10.1	-12.1	-8.1	-4.6	-30.7	
TOTAL[b]	$0.39	$0.37	$0.32	$0.30	$0.28	-4.7	-11.9	-7.5	-5.4	-26.5	

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 *November 2024* available at www.nasi.org.

a Includes Federal Employee Compensation Act medical benefits from Table B.1.

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

Source: National Academy of Social Insurance estimates are 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 11

Workers' Compensation Cash Benefits per $100 Covered Wages and Five-Year Percent Change by State, 2018-2022

	Cash Benefits (per $100 covered wages)					Percent Change					Ranking (1=largest percent increase, 2018-2022)
State	2018	2019	2020	2021	2022	2018-2019	2019-2020	2020-2021	2021-2022	2018-2022	
Alabama	$0.21	$0.23	$0.20	$0.20	$0.17	13.5	-15.1	0.2	-12.2	-15.2	13
Alaska	0.40	0.36	0.40	0.34	0.34	-9.4	10.8	-13.6	-1.5	-14.5	12
Arizona	0.16	0.16	0.15	0.14	0.13	-0.8	-8.4	-1.2	-8.6	-18.0	22
Arkansas	0.17	0.15	0.15	0.14	0.11	-14.1	-1.9	-7.6	-18.0	-36.2	49
California	0.48	0.47	0.46	0.43	0.44	-2.8	-3.0	-6.1	3.1	-8.8	8
Colorado	0.22	0.22	0.21	0.19	0.18	-1.0	-3.0	-9.6	-7.4	-19.6	28
Connecticut	0.43	0.42	0.42	0.38	0.36	-3.3	-0.7	-8.0	-5.7	-16.6	17
Delaware	0.47	0.36	0.39	0.36	0.30	-23.0	8.0	-7.2	-16.8	-35.8	48
District of Columbia	0.15	0.17	0.14	0.11	0.10	9.7	-15.4	-24.0	-2.4	-31.1	47
Florida	0.32	0.31	0.31	0.27	0.23	-4.5	1.2	-12.9	-16.9	-30.1	45
Georgia	0.31	0.30	0.29	0.25	0.23	-3.7	-4.6	-10.8	-8.4	-24.9	38
Hawaii	0.51	0.53	0.61	0.58	0.59	3.9	14.3	-4.0	1.1	15.1	1
Idaho	0.36	0.35	0.33	0.31	0.30	-4.7	-4.9	-6.0	-4.5	-18.6	23
Illinois	0.35	0.32	0.30	0.27	0.26	-8.5	-5.6	-9.3	-5.0	-25.6	39
Indiana	0.11	0.11	0.12	0.11	0.10	-1.5	6.5	-8.9	-9.2	-13.2	11
Iowa	0.41	0.34	0.33	0.29	0.29	-16.9	-1.3	-13.2	-0.9	-29.4	44
Kansas	0.22	0.22	0.23	0.20	0.22	3.5	0.1	-11.1	9.9	1.2	3
Kentucky	0.32	0.27	0.28	0.28	0.25	-14.5	2.1	0.9	-11.7	-22.2	33
Louisiana	0.43	0.42	0.38	0.38	0.36	-1.9	-10.1	1.1	-6.3	-16.4	15
Maine	0.50	0.45	0.39	0.34	0.30	-10.1	-13.9	-12.7	-11.7	-40.3	50
Maryland	0.34	0.32	0.29	0.27	0.26	-7.8	-8.6	-5.0	-5.7	-24.5	37
Massachusetts	0.31	0.30	0.30	0.31	0.32	-3.8	0.7	1.7	3.3	1.7	2
Michigan	0.20	0.19	0.17	0.16	0.16	-6.3	-9.3	-5.9	-1.3	-21.1	32
Minnesota	0.29	0.29	0.30	0.29	0.27	0.4	3.8	-6.1	-6.2	-8.2	7
Mississippi	0.28	0.26	0.24	0.25	0.23	-5.7	-9.2	3.0	-6.0	-17.1	19
Missouri	0.32	0.31	0.32	0.28	0.26	-4.3	2.6	-12.8	-6.4	-20.0	29

Montana	0.41	0.38	0.39	0.35	0.34	-6.8	2.2	-9.6	-3.8	-17.2	20
Nebraska	0.27	0.26	0.27	0.23	0.22	-3.1	3.7	-14.9	-2.5	-16.7	18
Nevada	0.31	0.30	0.32	0.30	0.28	-2.4	6.1	-6.6	-6.2	-9.3	10
New Hampshire	0.18	0.20	0.20	0.16	0.15	8.0	1.0	-18.9	-8.2	-18.7	24
New Jersey	0.48	0.47	0.44	0.43	0.40	-2.6	-6.1	-1.4	-7.4	-16.5	16
New Mexico	0.35	0.35	0.34	0.31	0.28	0.5	-3.8	-8.2	-8.7	-18.9	26
New York	0.63	0.59	0.58	0.49	0.51	-5.2	-2.5	-15.6	5.4	-17.9	21
North Carolina	0.28	0.26	0.24	0.21	0.19	-7.2	-7.4	-11.8	-7.9	-30.2	46
North Dakota	0.31	0.21	0.22	0.21	0.18	-32.4	4.5	-3.6	-14.1	-41.5	51
Ohio	0.41	0.39	0.37	0.37	0.33	-4.4	-4.4	-2.5	-8.8	-18.8	25
Oklahoma	0.35	0.31	0.32	0.31	0.25	-11.4	3.3	-4.1	-17.1	-27.3	42
Oregon	0.31	0.30	0.32	0.31	0.31	-0.7	6.9	-5.4	0.0	0.3	4
Pennsylvania	0.48	0.45	0.45	0.41	0.38	-4.8	-1.5	-7.5	-8.5	-20.6	31
Rhode Island	0.41	0.40	0.40	0.33	0.32	-0.7	-0.2	-18.0	-1.7	-20.1	30
South Carolina	0.49	0.48	0.52	0.45	0.40	-2.9	8.4	-13.4	-11.1	-19.0	27
South Dakota	0.22	0.21	0.21	0.17	0.16	-5.4	0.1	-18.8	-5.5	-27.3	43
Tennessee	0.15	0.15	0.14	0.12	0.11	-1.1	-6.8	-14.2	-6.1	-25.7	40
Texas	0.12	0.11	0.10	0.09	0.08	-3.0	-7.7	-9.4	-10.1	-27.2	41
Utah	0.12	0.11	0.10	0.10	0.10	-6.1	-6.1	-3.2	-1.3	-15.7	14
Vermont	0.47	0.47	0.44	0.42	0.43	-1.1	-6.1	-5.0	3.1	-9.1	9
Virginia	0.16	0.16	0.15	0.14	0.13	-4.4	-6.8	-3.7	-9.7	-22.5	35
Washington	0.81	0.78	0.78	0.75	0.76	-4.1	0.6	-4.4	1.3	-6.6	5
West Virginia	0.72	0.61	0.69	0.59	0.55	-16.5	14.3	-14.7	-6.8	-24.1	36
Wisconsin	0.19	0.18	0.16	0.15	0.15	-5.6	-10.7	-8.7	0.8	-22.4	34
Wyoming	0.57	0.58	0.62	0.58	0.53	2.6	6.3	-6.1	-9.1	-6.9	6
Total Non-Federal	$0.37	$0.35	$0.34	$0.31	$0.30	-4.3	-2.5	-8.0	-3.6	-17.2	
Federal Employees[a]	$0.78	$0.77	$0.73	$0.71	$0.72	-1.8	-5.7	-2.6	1.3	-8.7	
TOTAL[b]	$0.38	$0.37	$0.36	$0.33	$0.32	-4.2	-2.6	-7.6	-3.8	-17.0	

Notes: Benefits are payments in the calendar year to injured workers and to providers of their medical care. Data source for each state is described in detail in *Sources and Methods November 2024*, available at www.nasi.org.

a Includes Federal Employee Compensation Act compensation benefits from Table B.1.

b Includes federal (cash) benefits as described in Table 8.

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.

Overall, decreases in standardized medical benefits outpaced decreases in standardized cash benefits over the study period both in percentage and absolute terms (Figure 3). Standardized medical and cash benefits declined at similar rates between 2017 and 2019, but factors related to the pandemic—including the treatment of some COVID-19 cases as cash-only by many states and the delay of medical care for elective procedures—led to a sharper decline in medical benefits than in cash benefits in 2020. In 2021 and 2022, the rates of decline were similar again, indicating a return to pre-pandemic trends. Yet, the gap in percentage share is at a near twenty-year high. Figure 3 depicts these trends—and the 2020 shock—in both standardized medical and cash benefits.

Table 12 shows total benefits paid per $100 of covered wages by state from 2018 through 2022. Nationally, benefits paid were $0.60 per $100 of covered wages in 2022, down $0.17, or 21.8 percent, from 2018. Standardized total benefits increased in only one jurisdiction, Hawaii (3.1%) over the study period. Forty-two jurisdictions experienced decreases in standardized benefits of at least 15 percent, and 24 states experienced a decrease of 25 percent or more. The largest decreases in standardized benefits over the study period were in Delaware (44.0%), North Dakota (36.9%), and Arkansas (35.6%).

Between 2021 and 2022, standardized total benefits decreased in 44 jurisdictions, with the largest decreases in Delaware (19.9%), Oklahoma (17.6%), and Arkansas (16.8%). Among the states experiencing increases in standardized total benefits, the largest increases were in New York (4.0%), Kansas (3.1%), and Utah (2.4%).

Nationally, the changes from 2021 to 2022 appear to indicate a reversion to trend, where the annual reduction in standardized total benefits more closely resembles the reduction in the pre-pandemic years (2018-2019).

In any given year, a state may experience a relatively large increase or decrease in standardized benefits that defies recent trends. Such large changes often are associated, in part, with changes in the state's workers' compensation laws. This was especially true in 2020, as states scrambled to respond quickly to the new conditions brought about by the COVID-19 pandemic. Some of these recent legislative changes related to both shorter- and longer-term trends are described below.

Legislation and Rules Corresponding to Changes in Benefits

Over the past few years, there has been considerable legislative activity related to COVID-19 and workers' compensation, specifically regarding the compensability of COVID-19 as an occupational illness. One strategy was to develop a presumption of compensability for certain classes of workers, generally frontline or "essential" workers, such as health care providers.[54] Throughout 2020 and 2021, twelve states established a COVID-19 presumption through legislation, six states established presumptions through regulatory activity, and two states established broad "infectious disease presumptions."[55] There was wide variance in the scope, duration, and refutability of the presumption across states.[56] As of the middle of 2022, seven states maintained presumptions and fourteen states considered presumption legislation (Kersey, 2022).

54 States developed various definitions that classified workers in jobs that provided critical services to the public. These most often included health care providers, public safety officers, first responders, employees in grocery, retail, and transportation, residential care providers, and other employees directly serving the public.

55 The legislation group includes Alaska, California, Illinois, Kentucky, Minnesota, New Jersey, Texas, Utah, Vermont, Virginia, Wisconsin, and Wyoming. The regulatory group includes Connecticut, Florida, Michigan, Missouri, New Hampshire, and New Mexico. Finally, the "infectious disease presumption" group includes Tennessee and Washington (Kersey, 2022).

56 The Supreme Court made a ruling relevant to presumptions in *National Federation of Independent Business v. Department of Labor, Occupational Safety and Health Administration* 595 U.S. (2022). The Court ruled that OSHA exceeded its authority by mandating that employers with at least 100 employees require their workers to receive a COVID-19 vaccine or else wear a mask and be subject to weekly testing. On whether COVID-19 was/is an occupational hazard, the majority opinion noted that "Although COVID-19 is a risk that occurs in many workplaces, it is not an occupational hazard in most. COVID-19 can and does spread at home, in schools, during sporting events, and everywhere else that people gather. That kind of universal risk is no different from the day-to-day dangers that all face from crime, air pollution, or any number of communicable diseases." Significantly, the Court added "That is not to say OSHA lacks authority to regulate occupation-specific risks related to COVID-19. Where the virus poses a special danger because of the particular features of an employee's job or workplace, targeted regulations are plainly permissible." Moving forward, the case may be cited by business groups in opposition to states that continue to seek any broadly defined presumptions for an infectious disease.

None of the states with COVID-19 presumptions stand out in terms of large changes in standardized benefits between 2021 and 2022 (nor did they between 2020 and 2021 in the last report). Several states that did not adopt new presumptions, in contrast, saw marked changes in trends in 2022.

For example, standardized benefits in Delaware declined by relatively small percentages between 2019 and 2021, but then decreased by almost 20 percent in 2022. Delaware experienced the largest reduction in medical benefits, and fourth largest reduction in cash benefits, between 2021 and 2022. Delaware also experienced large changes over the 2018-2019 period. Thus, the changes in 2021-2022 appear to be a return to trends from the pre-pandemic period. The large reductions in medical benefits may have come from a legislative focus on reducing medical expenses in the state.[57] The reductions do not appear to be driven by growth in covered wages. While Delaware experienced its largest year-over-year covered wage growth between 2021 and 2022, it does not stand out in terms of large percentage changes nationally.[58] Nor are the reductions driven by changes in the incidence rate of nonfatal occupational injuries (DOL, 2023). The large reductions in cash benefits in 2018-2019 and 2021-2022 may be related to notable decreases in cash benefit claim severity (DCRB, 2023) or to spillovers from the medical benefit changes (Cabral and Dillender, 2024).

North Dakota experienced the second-largest decrease in standardized benefits over the study period. In 2020, the state workers' compensation agency determined that COVID-19 cases were ineligible for workers' compensation benefits (ND WSI, 2021). Despite this fact, standardized benefits increased between 2019 and 2020, reversing a decade-long trend of decline likely attributed to legislative changes that negatively affected both medical and cash benefits.[59] Between 2020 and 2022, benefits reverted to this declining trend.

Hawaii was the only state to experience an increase in standardized total benefits over the study period. The state also experienced the largest increase in standardized cash benefits, and second smallest decline in medical benefits. Changes to Hawaii's fee schedule enacted in 2013 and 2018 increased reimbursements for medical care, potentially driving increases in medical benefits in the state (NCSL, 2013; Hawaii Disability Compensation Division, 2018). Between 2020 and 2022, however, Hawaii experienced annual declines in standardized medical benefits of 15.3 and 8.0 percent. These changes may be related to Hawaii having the largest decline in covered jobs, and second smallest gain in covered wages, during the pandemic period and/or the compensability of COVID-19 claims (with a slower return to pre-pandemic benefit levels).

Cash Benefits by Type of Claim

The National Council on Compensation Insurance (NCCI) provides data on the relative incidence (or frequency) of each type of disability claim (temporary total, permanent partial, permanent total, fatalities) as a proportion of the total number of cases receiving cash benefits and total benefits incurred (NCCI, 2024a). Data are reported for each state's "policy period," which may or may not correspond to a calendar year. Data are available for the 38 states in which NCCI is licensed. Figures 4a and 4b display data for 2000 to 2020, the most recent year available.

Figure 4a shows the percentage of cash benefit claims attributed to each type of injury. In 2020, temporary total disability (TTD) claims accounted for 69.7 percent of all cash claims, while permanent partial disability (PPD) claims accounted for 29.7 percent.

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57 As prior Academy reports have noted. Delaware implemented House Bill 373 in 2014, which aimed to decrease workers' compensation medical costs by 33% by 2017 (Delaware General Assembly). The patterns in Delaware's medical benefits have also been explored by WCRI (Radeva, 2022; 2023). While these changes were fully in-force by 2018, the start of our study period, the WCRI studies have also noted continued medical benefit decreases even after 2017.

58 If we compare Delaware's standardized and non-standardized total benefits amounts, there is some role for changes in payroll to be driving some of the change, but not by nearly enough to make it so that Delaware is not the state with the largest reductions in benefits paid over the entire study period. In Table 9, the non-normalized decrease from 2018 to 2022 was 31.3 percent; the normalized decrease was 44 percent (i.e., some of the larger decrease could be driven by covered wage increases but total benefits were down even with more workers). The same is true for the large changes between 2018 and 2019.

59 In April 2013, the North Dakota legislature approved changes to the state's workers' compensation statute that include: disallowing pain as a sole factor to indicate increasing severity of a preexisting injury; increasing restrictions on benefits in cases of out-of-state filing or incarceration; reducing PPD ratings for some amputations; and allowing employers greater latitude in selecting among competing medical opinions (NCSL, 2013).

Table 12

Workers' Compensation Total Benefits Paid Per $100 of Covered Wages, by State, 2018-2022

State	2018	2019	2020	2021	2022	Percent Change 2018-2019	Percent Change 2019-2020	Percent Change 2020-2021	Percent Change 2021-2022	Percent Change 2018-2022	Ranking (1=largest percent increase, 2018-2022)
Alabama	$0.75	$0.75	$0.67	$0.62	$0.57	-0.4	-10.5	-7.6	-7.9	-24.2	26
Alaska	1.25	1.20	1.11	0.97	0.90	-3.6	-7.5	-13.4	-7.0	-28.1	38
Arizona	0.53	0.50	0.42	0.41	0.38	-5.5	-16.3	-0.9	-8.0	-27.9	37
Arkansas	0.49	0.45	0.40	0.38	0.32	-8.5	-10.0	-6.0	-16.8	-35.6	49
California	1.06	1.01	0.93	0.87	0.88	-4.5	-7.9	-6.5	1.2	-16.8	10
Colorado	0.51	0.51	0.47	0.41	0.38	0.0	-7.7	-12.0	-7.8	-25.2	28
Connecticut	0.78	0.77	0.74	0.69	0.63	-0.8	-4.4	-6.3	-9.6	-19.7	16
Delaware	0.97	0.74	0.71	0.67	0.54	-23.6	-3.2	-5.5	-19.9	-44.0	51
District of Columbia	0.22	0.24	0.20	0.15	0.15	5.1	-17.4	-23.1	1.1	-32.4	45
Florida	0.97	0.92	0.85	0.74	0.63	-5.1	-8.4	-12.4	-14.6	-35.0	48
Georgia	0.62	0.59	0.55	0.50	0.46	-4.3	-6.8	-9.7	-6.7	-24.9	27
Hawaii	0.98	1.05	1.15	1.04	1.01	7.0	9.5	-9.4	-2.9	3.1	1
Idaho	0.96	0.98	0.83	0.78	0.73	2.0	-14.5	-6.4	-5.9	-23.2	23
Illinois	0.65	0.61	0.54	0.50	0.48	-6.0	-10.5	-7.5	-5.2	-26.2	31
Indiana	0.41	0.41	0.39	0.35	0.33	1.4	-5.0	-10.4	-7.1	-19.8	17
Iowa	0.92	0.82	0.77	0.73	0.67	-10.6	-6.3	-5.6	-7.8	-27.1	33
Kansas	0.64	0.65	0.62	0.58	0.59	0.5	-3.8	-7.2	3.1	-7.5	2
Kentucky	0.68	0.63	0.58	0.54	0.50	-7.4	-7.8	-7.4	-7.2	-26.6	32
Louisiana	1.00	0.95	0.85	0.84	0.82	-5.0	-10.9	-0.9	-2.4	-18.2	13
Maine	0.99	0.91	0.82	0.73	0.64	-8.1	-9.3	-11.5	-11.7	-34.9	47
Maryland	0.66	0.60	0.56	0.48	0.46	-8.9	-7.2	-13.5	-5.2	-30.6	43
Massachusetts	0.46	0.45	0.43	0.43	0.43	-3.0	-4.1	0.2	-0.9	-7.6	3
Michigan	0.40	0.38	0.34	0.32	0.31	-4.2	-10.1	-6.1	-2.6	-21.3	21
Minnesota	0.64	0.63	0.61	0.57	0.55	-2.3	-2.9	-6.3	-4.3	-14.8	9
Mississippi	0.71	0.68	0.62	0.62	0.58	-3.8	-8.0	-0.9	-6.7	-18.1	12
Missouri	0.78	0.76	0.74	0.67	0.62	-1.7	-2.9	-9.5	-7.6	-20.1	18

Montana	1.21	1.13	1.09	0.93	0.88	-6.2	-3.6	-15.1	-5.1	-27.2	35
Nebraska	0.74	0.70	0.65	0.62	0.58	-4.4	-7.5	-5.4	-5.6	-21.0	20
Nevada	0.59	0.57	0.57	0.52	0.52	-3.3	0.7	-9.4	1.2	-10.7	5
New Hampshire	0.57	0.55	0.52	0.43	0.40	-3.9	-4.8	-17.1	-7.2	-29.7	42
New Jersey	0.95	0.93	0.84	0.84	0.78	-1.7	-10.1	0.0	-6.8	-17.6	11
New Mexico	0.89	0.89	0.80	0.70	0.65	-0.5	-9.9	-12.6	-7.4	-27.5	36
New York	0.93	0.87	0.84	0.72	0.75	-6.1	-3.7	-14.3	4.0	-19.4	15
North Carolina	0.50	0.48	0.42	0.40	0.35	-4.3	-12.2	-5.2	-11.3	-29.3	41
North Dakota	0.71	0.49	0.51	0.49	0.45	-31.5	4.5	-3.6	-8.7	-36.9	50
Ohio	0.66	0.62	0.56	0.54	0.49	-5.9	-10.4	-3.9	-8.1	-25.5	29
Oklahoma	0.72	0.65	0.66	0.62	0.51	-10.3	1.2	-5.1	-17.6	-29.0	39
Oregon	0.67	0.66	0.64	0.61	0.61	-1.0	-4.1	-4.7	0.6	-8.9	4
Pennsylvania	0.91	0.86	0.82	0.76	0.70	-5.5	-5.2	-7.2	-7.3	-23.0	22
Rhode Island	0.59	0.61	0.56	0.46	0.46	3.3	-9.1	-17.9	-0.6	-23.4	24
South Carolina	0.90	0.90	0.90	0.80	0.78	0.2	-0.1	-11.7	-1.7	-13.1	8
South Dakota	0.67	0.66	0.64	0.55	0.49	-2.8	-2.3	-14.7	-10.0	-27.1	34
Tennessee	0.45	0.43	0.40	0.33	0.32	-2.8	-8.6	-17.7	-2.9	-29.0	40
Texas	0.27	0.26	0.23	0.20	0.18	-5.7	-11.7	-9.8	-10.7	-33.0	46
Utah	0.39	0.38	0.33	0.30	0.31	-0.6	-14.3	-7.5	2.4	-19.3	14
Vermont	0.98	0.98	0.84	0.83	0.78	-0.1	-14.7	-0.6	-5.9	-20.3	19
Virginia	0.46	0.41	0.34	0.33	0.31	-9.7	-16.5	-3.7	-5.0	-31.0	44
Washington	1.17	1.12	1.08	1.03	1.02	-4.1	-4.1	-4.6	-0.7	-12.9	6
West Virginia	1.43	1.34	1.30	1.17	1.06	-6.3	-3.3	-10.1	-9.3	-26.2	30
Wisconsin	0.87	0.86	0.74	0.70	0.66	-1.2	-13.9	-5.9	-4.8	-23.8	25
Wyoming	1.59	1.63	1.60	1.47	1.38	2.9	-2.3	-7.7	-6.1	-12.9	7
Total Non-Federal	$0.75	$0.72	$0.66	$0.61	$0.58	-4.4	-7.3	-7.7	-4.5	-21.9	
Federal Employees[a]	$1.18	$1.12	$1.04	$0.99	$0.99	-4.6	-7.7	-4.3	-0.4	-16.1	
TOTAL[b]	$0.77	$0.73	$0.68	$0.63	$0.60	-4.5	-7.2	-7.7	-4.4	-21.8	

a Includes Federal Employee Compensation Act compensation benefits from Table B.1.
b Includes federal (cash) benefits as described in Table 8.
Source: National Academy of Social Insurance estimates.

Figure 4a

Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 2000-2020

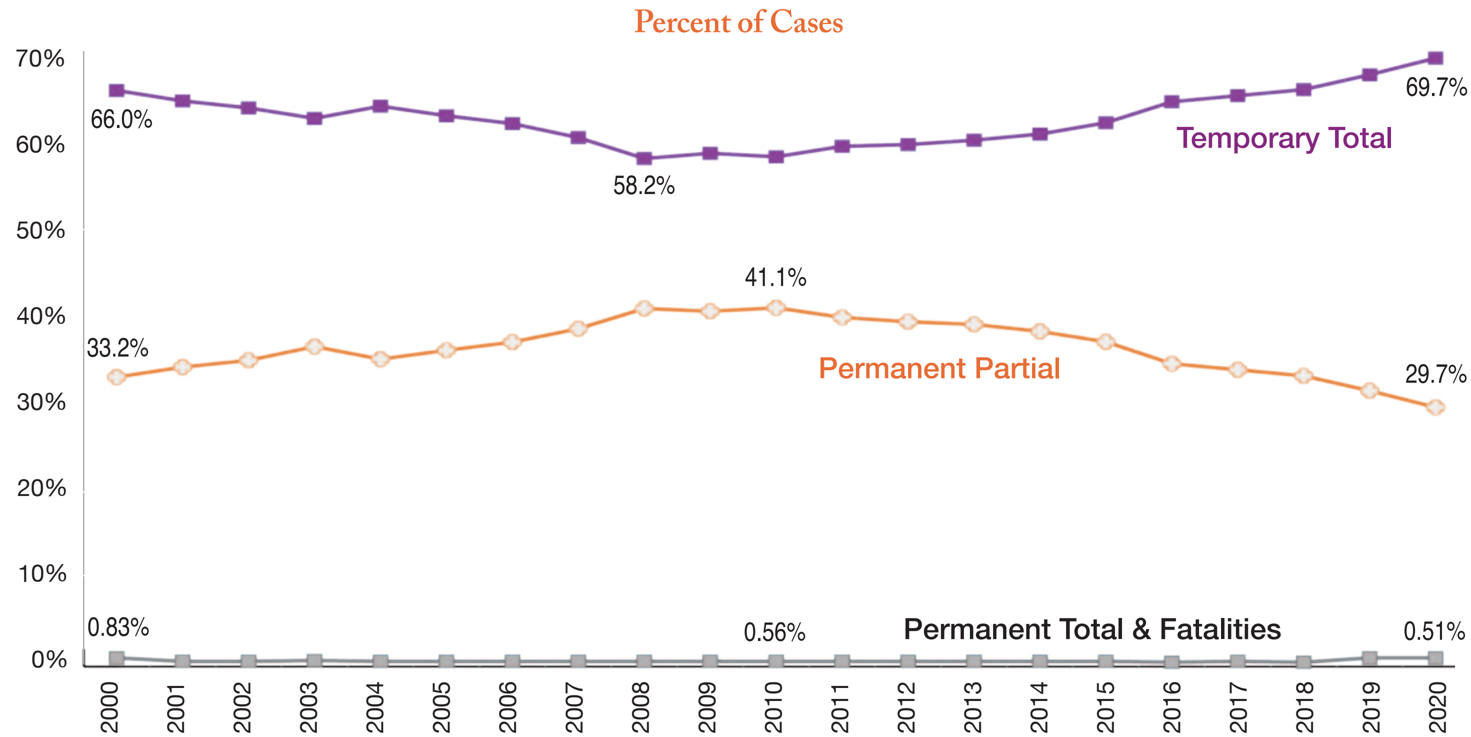
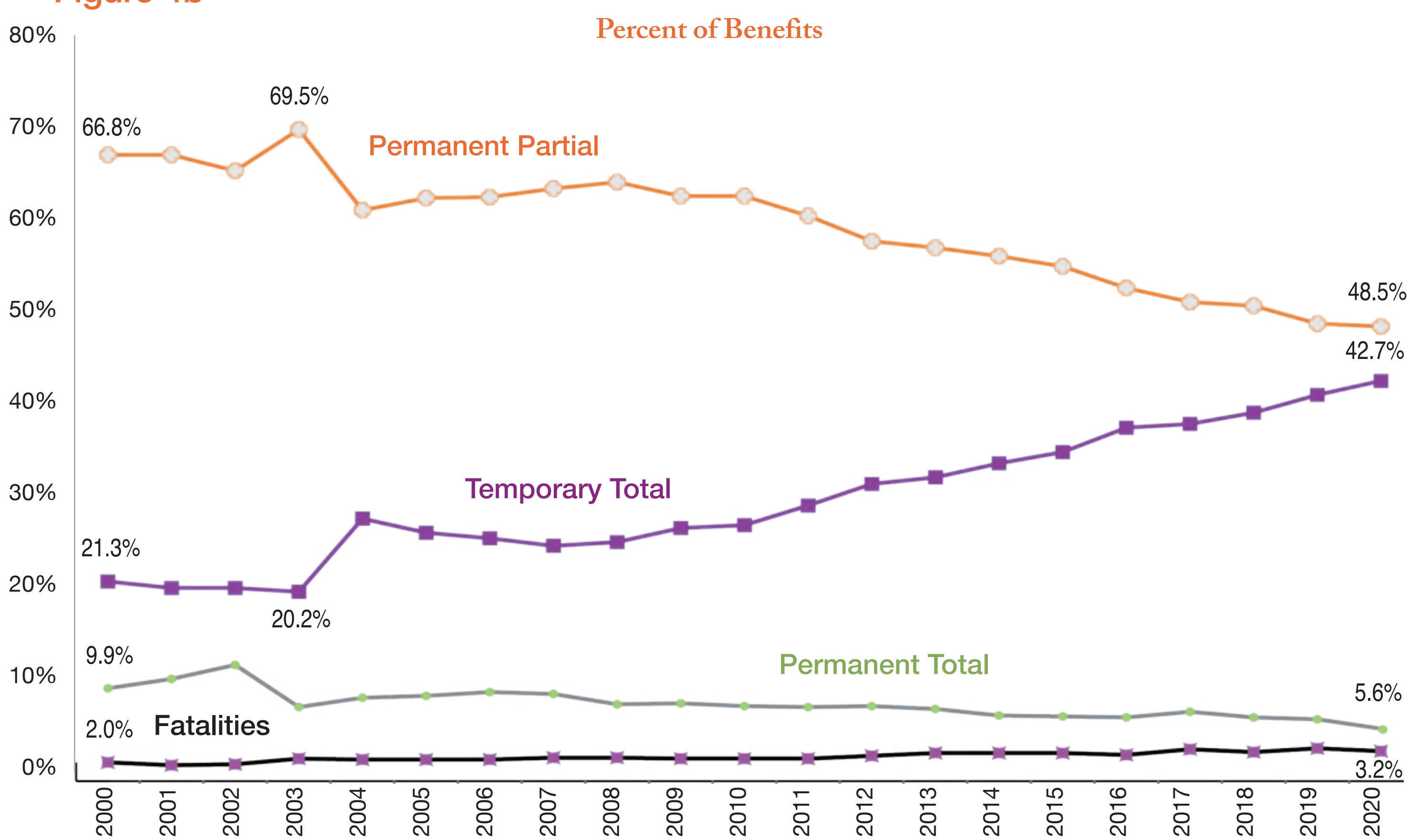


Figure 4b



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 2001-2023, *Annual Statistical Bulletin*, Exhibits X and XII.

Permanent total disability (PTD) and fatality claims account for less than one percent of claims involving cash benefits (approximately 0.6% in every year from 2003 to 2020).

Figure 4b shows the percentage of total benefits attributed to each type of claim. Consistently, most workers' compensation benefits go to workers with permanent disability claims, of which permanent partial disability claims are the most common.[60] Only 42.7 percent of benefits incurred were paid to workers with TTD claims (the most common type of disability claim) in 2020, while 48.5 percent of benefits incurred were paid to workers with PPD claims (much less common). PTD claims and fatalities tend to be expensive because the length of time over which benefits are paid far exceeds that of temporary claims, so they account for an out-sized share of total benefits. In 2020, for example, PTD and fatality claims represented 0.5 percent of total cash claims but 8.8 percent of benefits incurred.

Employer Costs for Workers' Compensation

Data Sources for Estimating Employer Costs

This section describes the primary sources of data that we use to estimate employer costs for workers' compensation. The Academy's estimates of employer costs include: premiums and deductibles paid to private insurers and state funds; benefits and administrative costs paid by self-insured employers; and assessments paid to special funds (e.g., second-injury funds). The primary sources of cost data are the state surveys, A.M. Best, and NCCI. A detailed, state-by-state explanation of how the cost estimates are produced is provided in *Sources and Methods November 2024*, available on the Academy's website.

The Academy's methods for estimating employer costs vary according to an employer's source of workers' compensation coverage. For employers purchasing insurance from private carriers or state funds, the cost of workers' compensation in any year equals the sum of premiums paid in that year plus reimbursements paid to the insurer under deductible provisions.

For self-insured employers, workers' compensation costs include medical and cash benefits paid during the calendar year, plus the administrative costs of providing those benefits. Administrative costs include the direct cost of managing claims, as well as expenditures for litigation, cost containment (e.g., utilization review, treatment guidelines), taxes, licenses, and fees. Self-insured employers generally do not report the administrative costs of workers' compensation separately from the costs of administering other employee benefit programs, so the costs associated with administering workers' compensation must be estimated. The National Association of Insurance Commissioners (NAIC) reports the ratio of administrative costs to total benefits paid for private insurers who report to them (NAIC, 2023). To estimate administrative costs for self-insured employers, we assume that the ratio of administrative costs to total benefits paid is the same for self-insured employers as it is for the private insurers who report to NAIC.[61]

For the federal employee workers' compensation program, employer costs are benefits paid plus administrative costs, as reported by the U.S. Department of Labor (DOL, 2024a).

The Academy's estimates of employer costs also include estimates of assessments for special funds, second-injury funds, and guaranty funds. Employer payments to special funds or second-injury funds are estimated from the assessment rates a state applies either to premiums or losses (benefits paid). State assessment rates are provided either by state agencies or by NCCI. Assessments for guaranty funds are paid

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

61 Private insurers face some cost factors, such as commissions, profit allowances, and taxes on premiums that self-insurers do not face. NAIC estimates of administrative costs are equal to the amount spent on direct defense and cost containment expenses plus taxes, licenses, and fees, divided by direct losses paid (for more detail see *Sources and Methods November 2024).* NAIC's estimate of administrative costs is based on the experience of private insurers. Other reports have found higher administrative overhead costs as a percent of total premiums compared to those reported by NAIC (e.g., Neuhauser et al., 2010).

by insurers, so these costs are included in the premiums paid by employers.

This year's report continues to implement the improved method for estimating employer assessments utilized in the last three reports. The methodological change, relative to prior years' reports, uses data from the NCCI Tax and Assessment Directory and state agencies to obtain better estimates of assessments paid by employers across the country (NCCI, 2024b).[62] This improved methodology is now applied back to 1999.

The fact that data on employer costs must be compiled from a variety of sources imposes some limitations on the report. First, there may be some direct workers' compensation costs not captured in the estimates. We may, for example, be missing some unreported expenditures, such as those for legal or case management services. Second, our estimates are limited to the monetary costs of work-related injuries and illnesses paid by employers. The estimates do not include the costs borne by employers who pay injured workers' full salaries during periods of light duty or other post-injury job accommodations. Some of this payment is a loss to the employer because of the reduced productivity of the workers being accommodated. Finally, our estimates do not include the costs imposed on workers, families, and society in the form of pain and suffering, uncompensated lost wages, and unreimbursed medical costs. These costs are beyond the scope of this report.[63]

National Estimates of Employer Costs

Table 13 shows employer costs for workers' compensation by type of coverage for 2002 through 2022. In 2022, total employer costs were $103 billion, an increase of 1.4 percent over 2018 and of 7.4 percent over 2021. Note that the percentage reduction in 2020 (relative to 2019) was the largest one-year reduction reported since 2009, while the percentage increase in 2022 (relative to 2021) is the largest one-year increase since 2011.

In 2022, costs for employers insured through private carriers were 60.8 percent of total workers' compensation costs ($62.7 billion); costs for self-insured employers were 19.7 percent ($20.3 billion); costs for employers insured through state funds were 11.3 percent ($11.6 billion); and costs for federal government programs were 8.2 percent ($8.4 billion). Between 2021 and 2022, costs increased for all types of coverage, as the economy continued to recover from the pandemic. Historically (from 2002-2022), the share of costs attributed to private insurers has increased from approximately 56 to 61 percent of total costs, and the share attributed to self-insured employers has hovered around 20 percent. The share of costs attributed to state funds has declined from approximately 20 to 11 percent, while the share attributed to the federal government has increased substantially (from 5.1% in 2002 to 8.2% in 2022).

Table 14 shows employer costs per $100 of covered wages overall and disaggregated by *federal/non-federal employment*. When adjusted for growth in employment and wages, employer costs decreased 19.2 percent ($0.24 per $100 of covered wages) between 2018 and 2022, with little change between 2021 and 2022. Standardized employer costs decreased by $0.07, or 5.6 percent, between 2018 and 2019, and by $0.16, or 13.7 percent, between 2019 and 2021. The decrease in standardized costs was even larger (20.5% or $0.24 per $100 of covered wages) among non-federal employees only.

State Estimates of Employer Costs

Table 14 also reports estimates of employer costs for workers' compensation per $100 of covered wages *by state* from 2018 to 2022. Costs are aggregated across all industries and all types of insurers (excluding the federal government). Consistent with the national trend, employer costs per $100 of covered wages decreased in every jurisdiction over the study period, with the exception of Hawaii (where costs increased by 5.7%, or $0.09 per $100 of covered wages). Standardized costs decreased by more than 10 percent in 48 jurisdictions, and by more than 20 percent in 26 jurisdictions. Delaware experienced the largest percentage decrease in standardized costs (36.4%), followed by Alaska (33.5%), Florida (31.3%), and

62 The average increase in total employer costs in a given year for 2015 through 2019 due to the methodological improvement was 3.1 percent. Broken down by private carriers, state funds, and self-insurers, the average increases in yearly costs between 2015 and 2019 were 2.3, 3.3, and 5.3 percent respectively, as many of the previously missed assessments were on self-insurers. The methodological change is further discussed in *Sources and Methods November 2024*

63 We have, however, updated our estimates of workers' contributions to workers' compensation benefits. These contributions are included in cost estimates for three states – New Mexico, Oregon, and Washington.

Table 13

Workers' Compensation Employer Costs by Type of Coverage, 2002-2022

Year	Total (millions)	% Change	Private Insured[a] (millions)	Private Insured[a] % of total	State Fund Insured[a] (millions)	State Fund Insured[a] % of total	Self-Insured[a] (millions)	Self-Insured[a] % of total	Federal[b] (millions)	Federal[b] % of total
2002	$76,288	10.0	$42,611	55.9	$14,490	19.0	$15,289	20.0	$3,898	5.1
2003	84,721	11.1	46,598	55.0	15,736	18.6	18,416	21.7	3,970	4.7
2004	88,651	4.6	48,758	55.0	16,079	18.1	19,742	22.3	4,073	4.6
2005	92,486	4.3	52,211	56.5	17,344	18.8	18,835	20.4	4,096	4.4
2006	90,046	-2.6	52,903	58.8	16,751	18.6	16,255	18.1	4,138	4.6
2007	89,051	-1.1	53,561	60.1	16,891	19.0	14,363	16.1	4,236	4.8
2008	82,969	-6.8	48,488	58.4	17,486	21.1	12,654	15.3	4,341	5.2
2009	76,107	-8.3	44,009	57.8	17,037	22.4	10,996	14.4	4,065	5.3
2010	74,931	-1.5	43,838	58.5	16,980	22.7	9,885	13.2	4,228	5.6
2011	81,260	8.4	47,747	58.8	18,338	22.6	10,729	13.2	4,447	5.5
2012	87,160	7.3	52,513	60.2	18,745	21.5	11,362	13.0	4,539	5.2
2013	91,822	5.3	56,362	61.4	18,354	20.0	12,502	13.6	4,604	5.0
2014	96,602	5.2	58,832	60.9	19,091	19.8	13,764	14.2	4,914	5.1
2015	99,208	2.7	60,834	61.3	19,211	19.4	13,731	13.8	5,432	5.5
2016	100,188	1.0	61,716	61.6	19,340	19.3	13,474	13.4	5,658	5.6
2017	101,774	1.6	62,525	61.4	20,320	20.0	12,679	12.5	6,250	6.1
2018	101,577	-0.2	62,116	61.2	19,828	19.5	12,629	12.4	7,004	6.9
2019	100,349	-1.2	61,220	61.0	19,624	19.6	12,015	12.0	7,491	7.5
2020	93,465	-6.9	56,583	60.5	18,577	19.9	10,762	11.5	7,543	8.1
2021	95,862	2.6	57,029	59.5	19,198	20.0	11,531	12.0	8,103	8.5
2022	102,982	7.4	62,656	60.8	20,253	19.7	11,639	11.3	8,434	8.2

a Costs for second injury funds and special funds are included in the totals. The costs for special funds are estimated from assessment rates, based on premiums and losses. Employee contributions to workers' compensation costs in New Mexico, Oregon, and Washington state are included in the totals from 2011 to 2022.

b Federal costs include costs to the Federal government under the Federal Employees' Compensation Act, employer costs associated with the Federal Black Lung Disability Trust Fund, and employer costs associated with the Longshore and Harbor Workers' Compensation Act. See Appendix B for more information about federal programs.

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

Table 14

Employer Costs for Workers' Compensation Per $100 of Covered Wages, by State, 2018-2022

State	2018	2019	2020	2021	2022	Percent Change 2018-2019	2019-2020	2020-2021	2021-2022	2018-2022	Ranking (1=largest percent increase, 2018-2022)
Alabama	$1.01	$1.03	$0.94	$0.92	$0.86	1.4	-8.3	-2.7	-5.6	-14.6	12
Alaska	2.17	1.96	1.75	1.54	1.45	-9.8	-10.9	-11.6	-6.4	-33.5	50
Arizona	0.84	0.78	0.70	0.66	0.63	-6.9	-10.4	-5.9	-3.9	-24.5	38
Arkansas	0.76	0.69	0.65	0.60	0.56	-8.7	-6.0	-7.1	-6.4	-25.4	40
California	1.75	1.61	1.45	1.34	1.43	-8.1	-10.1	-7.6	7.2	-18.1	20
Colorado	0.93	0.86	0.76	0.71	0.66	-6.8	-11.6	-6.5	-7.0	-28.4	46
Connecticut	1.13	1.09	1.04	0.99	0.95	-3.1	-5.2	-4.5	-4.6	-16.2	16
Delaware	1.50	1.29	1.21	1.13	0.96	-14.3	-5.8	-6.7	-15.5	-36.4	51
District of Columbia	0.49	0.48	0.40	0.35	0.34	-2.9	-15.7	-13.2	-3.2	-31.2	48
Florida	1.43	1.34	1.21	1.08	0.99	-6.2	-10.3	-10.9	-8.4	-31.3	49
Georgia	1.07	1.00	0.94	0.88	0.85	-6.3	-5.9	-6.9	-3.5	-20.8	29
Hawaii	1.54	1.58	1.59	1.60	1.63	2.1	0.9	0.6	1.9	5.7	1
Idaho	1.64	1.59	1.46	1.42	1.61	-2.8	-8.0	-2.9	13.5	-1.4	2
Illinois	1.02	0.95	0.86	0.82	0.80	-7.0	-9.2	-5.1	-2.6	-21.9	32
Indiana	0.70	0.68	0.64	0.60	0.59	-2.8	-5.8	-7.0	-1.8	-16.3	17
Iowa	1.36	1.21	1.15	1.12	1.10	-10.4	-5.1	-2.7	-2.0	-18.9	23
Kansas	0.98	0.96	0.91	0.88	0.87	-2.3	-4.8	-4.1	-1.3	-12.0	8
Kentucky	1.01	0.94	0.82	0.78	0.78	-7.0	-12.7	-5.2	0.3	-22.8	33
Louisiana	1.51	1.48	1.33	1.36	1.34	-1.9	-9.9	2.1	-1.3	-11.0	5
Maine	1.33	1.28	1.24	1.19	1.15	-4.1	-3.2	-3.4	-4.0	-13.9	9
Maryland	1.01	0.92	0.86	0.79	0.78	-9.2	-6.8	-8.4	-0.7	-23.0	34
Massachusetts	0.73	0.69	0.65	0.61	0.64	-4.5	-5.9	-5.9	4.7	-11.5	6
Michigan	0.71	0.66	0.61	0.57	0.56	-6.0	-7.4	-7.0	-1.5	-20.3	26
Minnesota	1.02	1.00	0.98	0.91	0.87	-2.7	-1.7	-6.6	-4.8	-15.0	13
Mississippi	1.19	1.15	1.05	1.03	0.97	-3.4	-9.1	-1.5	-6.0	-18.7	21
Missouri	1.14	1.12	1.10	1.06	1.02	-2.0	-2.2	-3.1	-3.9	-10.8	4
Montana	1.85	1.75	1.61	1.48	1.40	-5.5	-8.0	-8.0	-5.3	-24.2	37

Nebraska	1.16	1.09	1.02	0.95	0.95	-6.1	-6.5	-6.3	-0.3	-17.9	19
Nevada	0.95	0.93	0.92	0.84	0.84	-2.2	-1.1	-8.9	0.3	-11.7	7
New Hampshire	1.00	0.90	0.82	0.76	0.75	-9.8	-8.8	-7.4	-1.9	-25.3	39
New Jersey	1.51	1.45	1.32	1.29	1.30	-4.2	-9.2	-1.6	0.1	-14.2	10
New Mexico[a]	1.35	1.32	1.14	1.08	1.09	-2.0	-13.9	-5.0	0.8	-19.2	24
New York	1.54	1.44	1.29	1.15	1.17	-6.7	-9.9	-11.2	1.9	-23.9	36
North Carolina	0.90	0.83	0.74	0.68	0.66	-7.6	-11.1	-7.9	-3.2	-26.8	43
North Dakota	1.25	1.14	1.09	0.96	0.88	-8.5	-4.2	-12.4	-8.2	-29.5	47
Ohio	0.71	0.70	0.66	0.65	0.61	-0.7	-6.2	-1.5	-6.7	-14.5	11
Oklahoma	1.20	1.10	1.05	1.00	0.97	-8.6	-4.5	-4.9	-2.9	-19.4	25
Oregon	1.06	1.02	0.93	0.95	0.96	-4.1	-8.8	2.4	1.0	-9.6	3
Pennsylvania	1.38	1.26	1.18	1.10	1.10	-9.0	-5.9	-6.7	-0.6	-20.6	27
Rhode Island	1.05	1.07	0.99	0.86	0.88	1.6	-7.7	-13.0	2.8	-16.0	15
South Carolina	1.46	1.39	1.35	1.23	1.21	-4.7	-3.3	-8.8	-1.4	-17.1	18
South Dakota	1.13	1.03	0.91	0.89	0.88	-8.8	-11.5	-2.3	-0.9	-21.8	30
Tennessee	0.80	0.73	0.66	0.59	0.58	-9.0	-9.5	-11.5	-1.0	-27.8	45
Texas	0.55	0.52	0.46	0.41	0.41	-5.2	-12.6	-9.8	-0.2	-25.4	41
Utah	0.78	0.72	0.63	0.63	0.66	-7.4	-12.3	-0.4	4.4	-15.5	14
Vermont	1.65	1.55	1.40	1.31	1.26	-5.8	-10.1	-6.4	-3.3	-23.3	35
Virginia	0.73	0.69	0.61	0.56	0.54	-5.7	-11.8	-8.3	-4.4	-27.1	44
Washington[b]	1.49	1.34	1.20	1.19	1.16	-9.9	-10.6	-0.9	-2.1	-21.9	31
West Virginia	1.48	1.44	1.21	1.10	1.09	-2.6	-15.9	-9.6	-0.8	-26.6	42
Wisconsin	1.58	1.49	1.33	1.26	1.28	-5.4	-11.2	-5.1	1.9	-18.7	22
Wyoming	2.12	1.99	1.83	1.83	1.68	-6.1	-8.3	-0.1	-7.8	-20.7	28
Total Non-Federal	$1.19	$1.12	$1.02	$0.95	$0.95	-6.3	-8.8	-6.6	-0.4	-20.5	
Federal Employees[c]	$1.25	$1.20	$1.11	$1.07	$1.06	-4.3	-7.3	-3.7	-0.5	-15.0	
TOTAL[c]	$1.24	$1.17	$1.08	$1.01	$1.00	-5.6	-8.3	-6.1	-0.6	-19.2	

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

a In New Mexico, employers are assessed $2.30 per covered worker on the last day of each quarter. Of that assessment, $2.00 per employee fund the Workers' Compensation Administration of New Mexico, while the residual $0.30 per employee fund an Uninsured Employers' Fund. Employees also pay $2.00 each on the last day of each quarter toward funding the Workers' Compensation Administration.

b In Washington state both employers and employees contribute to workers' compensation premiums. In 2022, employees contributed 27.3 percent of state fund premiums and 50 percent of self-insured employer cost-of-living-adjustment premiums.

c The "Federal Employees" row depicts the total costs of the Federal Employees Compensation Act (Table B.1) per $100 of federal employee covered wages. In past reports we have included costs of the Longshore and Harbor Workers' Compensation Act and the Black Lung Benefits Act. Consistent with Tables 10-12, data on all three programs is included in the "Total" row. See Appendices B and C for more information about federal programs.

Source: National Academy of Social Insurance estimates.

DC (31.2%). Florida was among the top three states experiencing gains in covered wages over the study period, which may partly explain the large decrease in standardized costs.

Between 2021 and 2022, 38 jurisdictions experienced decreases in employer costs per $100 covered wages. The median decrease across all jurisdictions was two percent. The largest decreases occurred in Delaware (15.5%), Florida (8.4%), North Dakota (8.2%), and Wyoming (7.8%). The four largest increases came from Idaho (13.5%), California (7.2%), Massachusetts (4.7%), and Utah (4.4%).

Legislation and Rules Corresponding to Changes in Employer Costs

Delaware experienced the largest decrease in standardized employer costs over the study period. The reduction is largely attributed to legislative changes that reduced medical and cash benefits, as noted above. Part of the reduction in employer costs may also be associated with measures focused more on future costs, such as large premium decreases for workers' compensation insurance, in both the voluntary and residual markets (Mammarella, 2023).

Alaska was the state with the second largest decrease in employer costs over the study period, and also the state with the largest decrease in workers' compensation insurance premiums (not accounting for reinsurance). Between 2019 and 2022, premiums dropped by more than 19% (NCCI, 2023). Large rate cuts, amounting to a reduction of 46% between 2015 and 2021, have been touted by the state (Alaska Department of Labor and Workforce Development, 2020).

Hawaii did not experience the large decrease in standardized costs between 2018 and 2022 that most other states did. Instead, costs per $100 covered wages increased substantially over the study period (particularly in the 2018-2019 and 2021-2022 periods). The increase in costs likely reflects, in part, increases in the fee schedule for medical care that were enacted in 2013 and 2018 (see page 37).

Although there is considerable interstate variation in employer costs for workers' compensation per $100 of covered wages, readers are cautioned against using the estimates in Table 14 to identify states with more or less favorable climates for employers or workers. The data on standardized costs by state do not, for example, imply that states with lower costs have a more favorable environment for employers, because states differ in their mix of high-risk/low-risk industries. In short, higher risk industries pay higher premiums because expected benefit payments are greater, irrespective of where industries are located.[64]

The simple example in footnote 64 demonstrates that a meaningful comparison of employer costs across states must control for variations in the proportions of employers in different insurance classifications (which are, in turn, based on the riskiness of industries and occupations) in each state. Such comparisons are beyond the scope of this report.[65]

Furthermore, the cost data reported here do not capture the full impact of recent changes in laws that have altered the workers' compensation market within some states. Because the Academy reports costs paid in a particular year, regardless of injury date, a substantial portion of the cost data for 2022 consists of cash benefits paid for injuries that occurred in previous years, under legal regimes and economic conditions that may have been quite different from the current conditions in a state.

Benefits Paid Relative to Employer Costs

Table 15 reports ratios of workers' compensation standardized benefits paid to standardized employer costs, from 2002 through 2022.

The reader is cautioned that the ratios represent benefits and costs paid in a given year, but not necessarily for the same claims. The benefits measure includes payments for all claims receiving benefits in the given year regardless of when they occurred. The costs measure (premiums paid to insurers and state funds), on

64 Consider, for example, two industries: logging, for which the workers' compensation rate is $40 per $100 of wages, and banking, for which the rate is $1 per $100 of wages. Suppose State A has 80 percent of its employees in logging and 20 percent in banking, so average costs for workers' compensation are $32.20 per $100 of wages. State B has 20 percent of its employees in logging and 80 percent in banking, so average employer costs for workers' compensation are $8.20 per $100 of wages. If Timber-R-Us (a logging company) moved from State A to State B to take advantage of the lower average costs of workers' compensation, it would not save on those costs. Rather, Timber-R-Us would continue to pay workers' compensation premiums of $40 per $100 of its wages.

65 As noted below in the section on estimates of employer costs and in Appendix E, Oregon's biannual report does provide such comparisons.

Table 15

Workers' Compensation Benefits to Costs Ratios, 2002-2022

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 Costs
2002	$0.52	$0.61	$1.13	$1.65	$0.69
2003	0.55	0.61	1.16	1.80	0.65
2004	0.53	0.60	1.13	1.79	0.63
2005	0.51	0.58	1.09	1.77	0.62
2006	0.47	0.52	0.99	1.62	0.61
2007	0.46	0.50	0.96	1.52	0.63
2008	0.49	0.50	0.99	1.39	0.71
2009	0.50	0.53	1.03	1.34	0.77
2010	0.49	0.51	1.00	1.28	0.78
2011	0.51	0.50	1.01	1.34	0.76
2012	0.50	0.49	0.99	1.38	0.72
2013	0.50	0.48	0.98	1.41	0.69
2014	0.48	0.45	0.93	1.42	0.66
2015	0.44	0.43	0.87	1.38	0.64
2016	0.42	0.42	0.84	1.35	0.63
2017	0.40	0.41	0.81	1.31	0.62
2018	0.39	0.38	0.77	1.24	0.62
2019	0.37	0.37	0.73	1.17	0.63
2020	0.32	0.36	0.68	1.08	0.63
2021	0.30	0.33	0.63	1.01	0.62
2022	0.28	0.32	0.60	1.00	0.60

Notes: 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.

the other hand, includes projected future liabilities for injuries and illnesses that occurred in the given year. In other words, the costs and benefits paid in a given year do not track the full costs of a certain set of claims.[66]

Employer costs for workers' compensation always exceed benefits paid (i.e., the benefits/costs ratio is less than one) because a portion of employer costs goes to administrative expenses and to profits for workers' compensation insurers. In addition, premiums must

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

account for future inflation in medical costs. That is, employers are paying up front for the costs of current claims that will extend to future years. Finally, the costs of workers' compensation insurance include a risk premium to compensate for the expected variation in costs from year to year.

The benefits to costs ratio varies from year to year for a number of reasons, including: 1) the proportion of costs allotted to administrative expenses changes; 2) underwriting results for the workers' compensation industry (as measured by the overall operating ratio) change; 3) insurers use a larger (or smaller) portion of the returns on their investments (rather than premiums) to defray all or part of their workers' compensation costs; 4) the expected number/severity of workplace injuries increases or decreases; 5) the proportion of workplace injuries that result in reported and compensated claims changes; and 6) the time lag between adjustments in employer costs (premiums collected) and benefits paid varies.

As shown in Table 15, the ratio of standardized workers' compensation benefits to costs was 0.60 in 2022. In other words, $0.60 of benefits were paid to injured workers for every dollar of employer costs. Over the 20-year period shown, the ratio decreased from 0.69 in 2002 to 0.61 in 2006, increased to 0.78 in 2010, and decreased again to 0.62 in 2017. The ratio remained almost constant between 2017 and 2021 before dropping to its lowest value in 20 years in 2022.

The trends in the benefits to costs ratio are typical of changes in workers' compensation benefits and costs in response to changes in the economy. In periods of contraction (2007-2010), benefits decrease more slowly than employer premiums because benefits largely reflect injuries in prior years while premiums reflect expected future benefits for current injuries. Hence, the benefits-costs ratio tends to increase. In periods of expansion (1999-2006, 2011-2018, 2020-2022), the opposite tends to occur.

Underwriting Results

An alternate measure of the relationship between benefits paid to workers and costs to employers is the incurred loss ratio (ILR). The ILR measures losses incurred by insurers in a given year divided by net premiums paid by employers in that year. The numerator of the ratio (incurred losses) is the sum of benefits paid to workers injured in that year, plus reserves for future benefit payments for those injuries. In 2018, for example, the incurred loss ratio was 0.445, meaning that just under 45 percent of premiums paid would be used to cover losses (i.e., benefits paid to injured workers) for injuries occurring in 2018, and the remaining 55 percent cover insurer operating expenses and any profits to investors.

In contrast, the *benefits to costs ratio* (Table 15) measures benefits paid to workers in a given year divided by costs to employers in that year. Note that the benefits to costs ratio pertains to all employers (including those who purchase insurance from private carriers or state funds, and those who self-insure) while the ILR only pertains to employers who purchase insurance from private carriers.

Figure 5 provides data on the benefits to costs ratio and the incurred loss ratio for 1982 to 2022.[67] Between 1984-1992, the workers' compensation insurance market was unprofitable, that is, incurred losses and operating expenses exceeded insurers' receipts (premiums plus investment income) in every year.[68] As shown in Figure 5, the ILR was unusually high between 1984 and 1992. During this period, the insurance industry successfully pursued deregulation of the workers' compensation insurance market, which previously relied on administered pricing.[69,70] The profitability of the industry improved rapidly through the 1990s. The ILR reached a low of 57 percent in 1995, then increased steadily to 78.9 percent in 2001.

After a brief period of unprofitability in the early 2000s, the workers' compensation insurance industry

67 The incurred loss ratio data in Figure 5, plus reference to periods of overall (un)profitability, comes from Table 1 of Brandenburg, et al. (2017) that was acquired by a private data request to Aaron Brandenburg and NAIC.

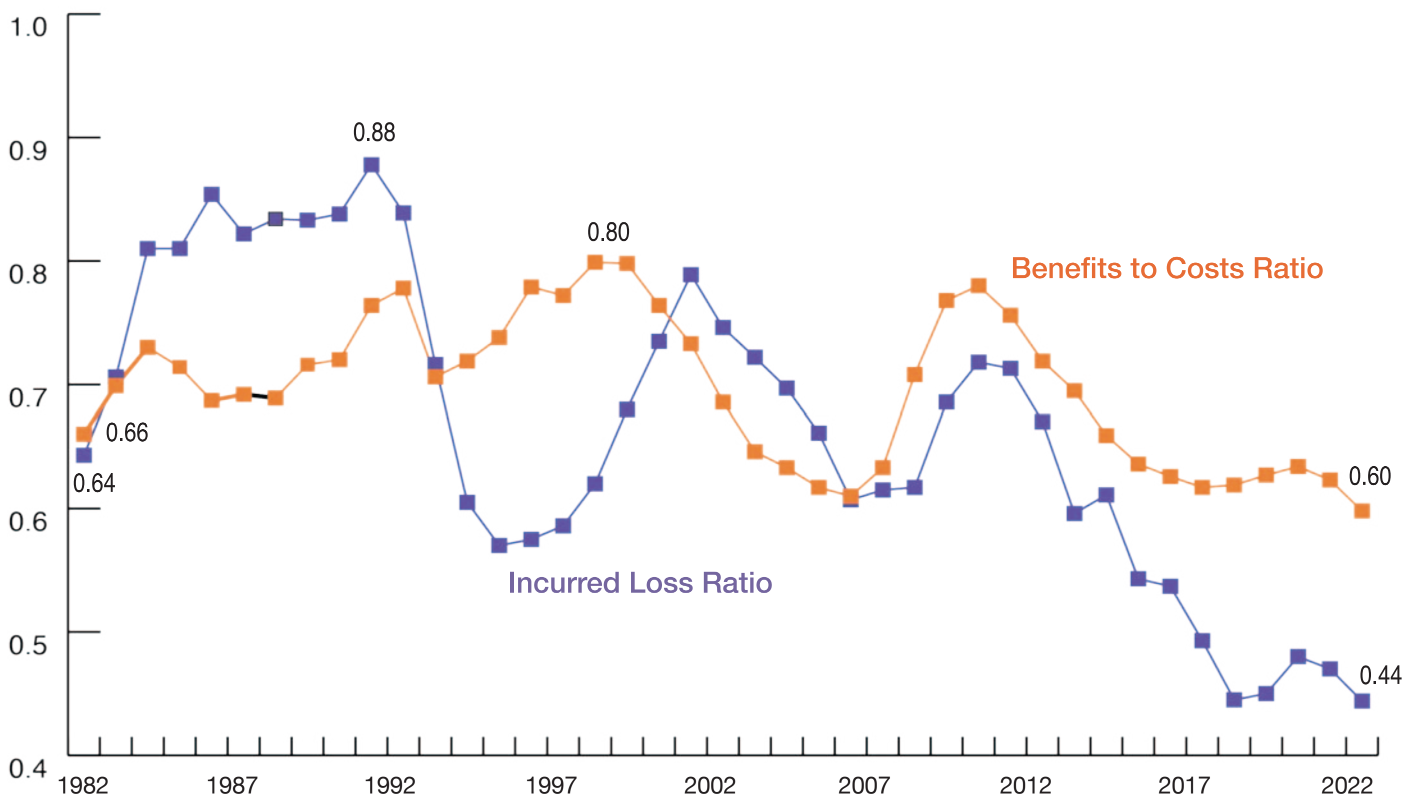
68 The underwriting results discussed in this section are from Brandenburg, et al. (2017).

69 Under administered pricing, "Rating bureaus [in each state] filed rates and rating plans on behalf of all insurers, which were required to adhere to their rates. Competition could only be achieved through service and 'back end' dividend plans" (American Academy of Actuaries, 2000).

70 Thomason, Schmidle, and Burton (2001) provide this discussion of deregulation in the 1990s: "After the initial moves to

Figure 5

Benefits to Costs Ratios and Incurred Loss Ratios, 1982-2022



Sources: Benefit/Cost is 100 X Total Benefits per $1 Employer Cost in Table 15. Incurred Loss Ratio is in Table 1 of Brandenburg, et al. (2017): The Impact of Investment Income on Workers' Compensation Underwriting Results. Updates to the date were provided by Aaron Brandenburg in 2022.

* Employer costs data in years prior to 1999 is not directly comparable to data for the years 1999-2022 due to the change in estimates of assessments.

was a stable source of profit through 2011 (Brandenburg et al., 2017). Since experiencing a loss in 2011, profit levels have increased dramatically. The 2022 ILR was 44.4 percent, the lowest since 1980 (the earliest the comparable data is available).

The steep declines in the ratio of benefits to costs and the ILR over that period—to near-record lows and record lows, respectively—reflect changes in the economy and workers' compensation statutes that have made the industry more profitable.[71]

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deregulation in the early 1980s, the introduction of open competition slowed in the balance of the 1980s… Deregulation reemerged with vigor during the 1990s: open competition statutes became effective in 16 states between 1991 and January 1, 1995, and in an additional five states after that date. Deregulation in some of those states – especially those that adopted open competition in the early 1990s when the industry was still experiencing losses – reflected support from the insurance industry, but deregulation in other states (most notably California [in 1995]…) was generally resisted by the industry."

71 The most comprehensive measure of underwriting results is the overall operating ratio (OOR), which is calculated as: total insurance company expenditures minus investment income divided by net premiums paid by employers in a given year. As discussed in Brandenburg et al. (2017), the lower the OOR, the more profitable the workers' compensation insurance industry. In 2011, the last year in which the industry experienced net losses, the OOR was 1.004 ($100.40 per $100 of net premiums), while in 2022 it was 0.769, down slightly from 2020. The 2022 OOR represents a slight increase from its low point of 0.746 in 2018, and the second consecutive year-over-year. The decade-long decline in the OOR from 1.004 in 2011 to 0.769 in 2022 represents a substantial improvement in underwriting results. Indeed, each of the last five years has been one of the five best underwriting results for the workers' compensation insurance industry since the NAIC's data series began in 1976.

Estimates of Employer Costs from Other Sources[72]

The Academy's Estimates Compared to Bureau of Labor Statistics (BLS) Estimates.

The BLS publishes a quarterly report on Employer Costs for Employee Compensation (DOL, 2022). Estimates are derived from a representative sample of establishments in the private sector, and state and local governments. Costs are reported for five benefit categories (paid leave, supplemented pay, insurance, retirement and savings, and legally required benefits) per employee hour worked. Workers' compensation benefits are listed under the legally required benefits category. The purpose of the BLS report is to provide average estimates of employer costs per hour worked, inclusive of wages, salaries, and employee benefits.[73]

The purpose of the Academy's report is quite different. The BLS collects data on a broad range of employee benefits, while this Academy report focuses on workers' compensation. The Academy seeks to provide summary data on workers' compensation benefits paid to workers and costs borne by employers at the state and national levels. Our estimates of $61.7 billion in benefits paid and $103 billion in costs borne by employers in 2022 are the only data that answer questions about aggregate benefits and costs of workers' compensation in the United States.

The Academy's Estimates Compared to Oregon Rate Ranking Estimates.

The Oregon Workers' Compensation Rate Ranking study (Oregon Department of Consumer and Business Services, 2022) also provides estimates of employer costs for workers' compensation. The study, conducted on a biennial basis by the state of Oregon, compares workers' compensation premium rates across states for a standardized set of occupational classifications. The standardization is designed to factor out differences in hazard mix (riskiness of industries) across states to provide a measure of interstate differences in costs for comparable risk distributions. The standardized rates are based on the Oregon mix of insurance classifications; hence the rankings might be somewhat different if they were standardized based on another state. (See the table in Appendix E.)

When comparing results of the Oregon study with our results, readers should be aware of differences in methodology. Interstate differences in employer costs that appear in the Academy data are influenced in part by the different risk profiles presented by each state's economy, as well as by variations in self- insurance across states. The Oregon study reports rates for the same set of risk classifications across states and does not include self-insured employers.[74]

Costs to Workers

In some states, a portion of the costs of workers' compensation are directly paid by workers, as discussed in more detail in Appendix C. In Washington, for example, workers contribute directly to the insurance premiums for workers' compensation through payroll deductions. In 2022, about 23.4 percent of the total costs of workers' compensation in Washington were paid directly by workers.[75] In some states, workers pay a portion of the costs for special workers' compensation funds. In Oregon, for example, workers pay into the Workers' Benefit Fund, which funds a benefit adjustment fund for long-term cases (PTD and death benefits) and return-to-work programs. New Mexico has a quarterly workers' compensation assessment for each employee that goes toward funding the Workers' Compensation Administration of New Mexico.[76] In terms of magnitude, the Washington assessments are by far the

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72 The Association of Workers' Compensation Boards of Canada (AWCBC) produces the most analogous report of its Key Statistical Measures (KSMs) for workers' compensation programs in Canada. See: https://awcbc.org/en/statistics/#KSM.

73 Burton (2015) uses data from the BLS survey to calculate employer costs for workers' compensation per $100 of covered payroll and compares it with the Academy's national estimates. This series is derived from different methods of data collection compared to the Academy.

74 Burton (2013) and Manley (2013) provide more extended discussions of the differences between the measures of employer costs from the Academy and Oregon studies.

75 Employees contributed 27.3 percent of state fund premiums, accounting for 20.1 percent of total costs in the state. Employees also paid half of the cost-of-living adjustment premium for self-insurers in 2022, which accounted for 13.1 percent of self-insured workers' compensation costs and 3.4 percent of total costs.

76 See footnote a to Table 14 for details about New Mexico's assessment.

largest, making up 23.4 percent of total costs in 2022 compared to 1.4 percent and 2.8 percent for the New Mexico and Oregon assessments, respectively. Cost data in this report primarily cover the employer-paid portion of workers' compensation, but employee contributions in New Mexico, Oregon, and Washington are included in our estimates of costs.[77]

In addition, workers bear considerable costs that are outside the workers' compensation system, such as the portion of lost wages that are not replaced by workers' compensation benefits. Most workers' compensation statutes provide for weekly benefits that are two-thirds of pre-injury wages. However, the statutes also include weekly maximum and minimum benefit amounts such that the mean replacement rate is less than the two-thirds nominal replacement rate.[78] In addition, many states impose limits on the duration of permanent partial disability benefits (so that benefits may cease while workers are still experiencing lost earnings from a workplace injury or illness). The limits on duration further reduce the real replacement rate of cash benefits.[79] Benefits, however, are untaxed, which increases real replacement rates. Studies comparing lost earnings with workers' compensation benefits show that the proportion of lost earnings replaced by workers' compensation benefits is smaller than can be explained by statutory provisions purportedly making it more difficult to claim benefits for a host of substantive and procedural reasons. This suggests that conclusions drawn only from statutory provisions overestimate the extent of workers' injury-related lost earnings replaced by workers' compensation benefits (see footnotes 53, 78, and 79).

Workers also bear costs in the form of waiting periods. A waiting period is the time a worker must wait after experiencing a work-related injury before they can begin collecting cash benefits. All but three states (Hawaii, Rhode Island, and Oklahoma) have provisions to pay retroactive benefits to cover the waiting period for more serious (longer duration) lost-time injuries. In most states the retroactive period is between seven and 21 days (one to three weeks), but Alaska and New Mexico require workers to wait 28 days, and Nebraska's retroactive period is 6 weeks (see Appendix Table D). Waiting periods may result in lost wages or partial wage replacement if either 1) a worker is injured for fewer days than the waiting period and, thus, does not qualify for cash benefits, or 2) a worker is out of work for more days than the waiting period, but fewer days than the retroactive period. In these cases, the uncompensated time loss attributable to the waiting period constitutes a cost to the worker. The financial costs of uncompensated waiting periods are not routinely tracked or reported by individual states, however, and are therefore extremely difficult to collect and tabulate.

Some injured workers may incur costs because they have income that is not covered by workers' compensation at all. For example, workers holding multiple jobs may not be compensated for lost earnings from a second or subsequent job. Many states also have rules excluding certain types of income (e.g., overtime or shift differentials) from coverage. Other costs to workers may include losses of fringe benefits that occur during periods of injury-related work absence; loss of ability to contribute to housework/family care attributable to a work-related injury or illness; and loss of employer contributions to health insurance premiums (unless the worker is also on leave under the Family and Medical Leave Act, or the employer's insurance plan allows continued participation during periods of injury-related work absence). Refer to Leigh and Marcin (2012) for estimates of how the costs of work-related injuries are allocated among insurers, government payers, and injured workers.

Disputed claims are responsible for significant costs to injured workers (and employers). Workers often hire attorneys to represent them in claims disputes, whose fees can reduce the cash benefit received by 20 percent or more.

Insured employers are represented by their insurance carrier in legal proceedings, although there are also

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77 See Appendix C for details on these programs. As mentioned in footnote 16, although workers in New Mexico, Oregon, and Washington are unique in that they observe a direct payroll reduction, all workers covered by workers' compensation "pay" for some portion of benefits and administration in the form of lower wages.

78 A study assessing ten-year losses and replacement rates in five states find that rates were far below the two-thirds ideal, ranging from a high of 46% in New Mexico to a low of just 29% in Wisconsin, with the other three states, California (37%), Washington (41%), and Oregon (42%) in between (Reville et al., 2001).

79 Seabury, et al. (2014) estimated earnings losses for New Mexico workers' compensation claimants injured from 1994-2000. On average, workers lost 15% of earnings in the ten years after injury; workers' compensation replaced 16% of earnings losses for the average worker.

unreimbursed costs to employers, such as reduced productivity related to an injured worker's disability, the costs of lost work time for managers and other witnesses to participate in hearings, workplace disruptions, and claim management costs.

Finally, a large portion of costs borne by workers are for work-related injuries and illnesses that never result in a successful workers' compensation claim. Occupational illnesses in particular are frequently uncompensated (see, e.g., Boden and Ozonoff, 2008; Fan et al., 2006; Biddle et al., 1998; and Spieler, 2017).

Incidence of Workplace Injuries and Workers' Compensation Claims

Incidence of Work-Related Injuries

Fatal injuries. The BLS collects information on work-related injuries that result in a worker's death for the National Census of Fatal Occupational Injuries (DOL, 2023a). Table 16 reports BLS data on the number of fatal injuries, and the incidence rate per 100,000 employed workers from 2002 to 2022. In 2022, there were 5,486 work-related fatalities, a 5.4 percent increase from 2021 and the highest number since 2007. Controlling for employment, the fatality rate was 3.7 per 100,000 employed workers in 2022, a slight increase from 2021 and the highest rate since 2008, but a 7.5 percent decrease since 2002.[80]

As in the past, the leading cause of work-related fatalities in 2022 was transportation incidents, which accounted for over one-third (37.6%) of all fatal injuries. Other leading causes of fatalities were: falls, slips, and trips (15.8%); violence and other injuries by persons or animals (15.5%); and contact with objects and equipment (13.5%). Within these broad categories, the subcategories that were the most common causes of workplace fatalities in 2022 were "roadway incidents involving motorized land vehicle" (24.9%), "intentional injury by person" (14.4%), "falls to lower level" (12.8%), "exposure to other harmful substances" (10.7%), and "struck by object or equipment" (8.8%). The Department of Labor provides more detail within each of these subcategories (DOL, 2023a).

Nonfatal injuries and illnesses. The BLS also collects information on reported nonfatal work-related injuries or illnesses from a sample survey of employers (Survey of Occupational Injuries and Illnesses, or the SOII). These data are of special interest for 2022 in terms of COVID-19 adaptation and the subsequent return to work (with or without protections). Specifically, the SOII results indicate that illnesses were up 26.1 percent, driven by "…the rise in respiratory illness cases, up 35.4 percent to 365,000 in cases in 2022" (DOL, 2023b). More broadly, the survey reported 2.8 million nonfatal workplace injuries and illnesses in private industry workplaces in 2022, less than half (1.2 million) of which involved days away from work (DOL, 2023b). The number of nonfatal workplace injuries and illnesses, and the number of cases involving days away from work, both increased relative to 2021 (Table 17).

> The annual workplace fatality rate declined by about 7.5 percent between 2002 and 2022.

The incidence rate of reported injuries and illnesses per 100 full-time equivalent (FTE) workers controls for changes in employment levels to better measure trends over time. The incidence rate was 2.7 in 2022 (Table 17), continuing the consistent, two-decade decline in the incidence of reported nonfatal occupational injuries and illnesses. Since 2002, when the Occupational Safety and Health Administration (OSHA) changed recordkeeping requirements, the incidence rate of workplace injuries and illnesses has decreased 49.1 percent.[81]

80 Prior to 2007, BLS fatal injury rates represented the number of fatal occupational injuries per 100,000 employed workers. Since then, the incidence rate accounts for the total number of hours worked by all employees during the calendar year. Incidence rates are reported on a full-time equivalent basis (one FTE worker is defined as 2,000 hours worked per year). Rates before and after 2007 are therefore not strictly comparable, and the 7.5 percent reduction is an approximation.

81 The break in the trend lines in 2002 (Figure 6), represents a change in OSHA recordkeeping requirements in that year, indicating that the data before and after 2002 may not be strictly comparable

Table 16

Fatal Occupational Injuries, 2002-2022

Year	Number of Fatal Injuries		Fatal Injury Incidence Rates	
	All	Wage & Salary Workers	All	Wage & Salary Workers
2002	5,534	4,481	4.0	3.5
2003	5,575	4,405	4.0	3.4
2004	5,764	4,587	4.1	3.5
2005	5,734	4,592	4.0	3.5
2006	5,840	4,808	4.2	3.6
2007[a]	5,657	4,613	4.0	3.5
2008	5,214	4,183	3.7	3.2
2009	4,551	3,448	3.5	2.8
2010	4,690	3,651	3.6	3.0
2011	4,693	3,642	3.5	2.9
2012	4,628	3,571	3.4	2.8
2013	4,585	3,635	3.3	2.8
2014	4,821	3,728	3.4	2.8
2015	4,836	3,751	3.4	2.8
2016	5,190	4,098	3.6	3.0
2017	5,147	4,069	3.5	2.9
2018	5,250	4,178	3.5	2.9
2019	5,333	4,240	3.5	2.9
2020	4,764	3,864	3.4	2.9
2021	5,190	4,284	3.6	3.1
2022	5,486	4,601	3.7	3.2

Note: Wage & Salary workers includes individuals employed in private industry or government, but excludes individuals who are self-employed.

a Prior to 2007, fatal injury rates represented the number of fatal occupational injuries per 100,000 employed workers. These rates measure the risk of fatal injury for those employed during a given period of time, regardless of hours worked. Starting in 2007, the BLS adopted a new methodology to calculate fatal injury rates based on the number of hours worked. Hours-based rates measure fatal injury risk based on the average employment and average hours worked during a given period of time. Specifically, the formula takes the total number of fatal injuries and divides it by the total number of hours worked. This figure is then multiplied by 200,000,000, the number of hours worked per year by 100,000 full-time workers with two weeks of leave. Hours-based fatal injury rates are considered more accurate and should not be directly compared to employment-based rates.

Source: U.S. Department of Labor (2023a).

The reader is cautioned that injury rates reported to the Bureau of Labor Statistics or extrapolated from workers' compensation claims data may not be wholly accurate because key stakeholders have incentives to

Table 17

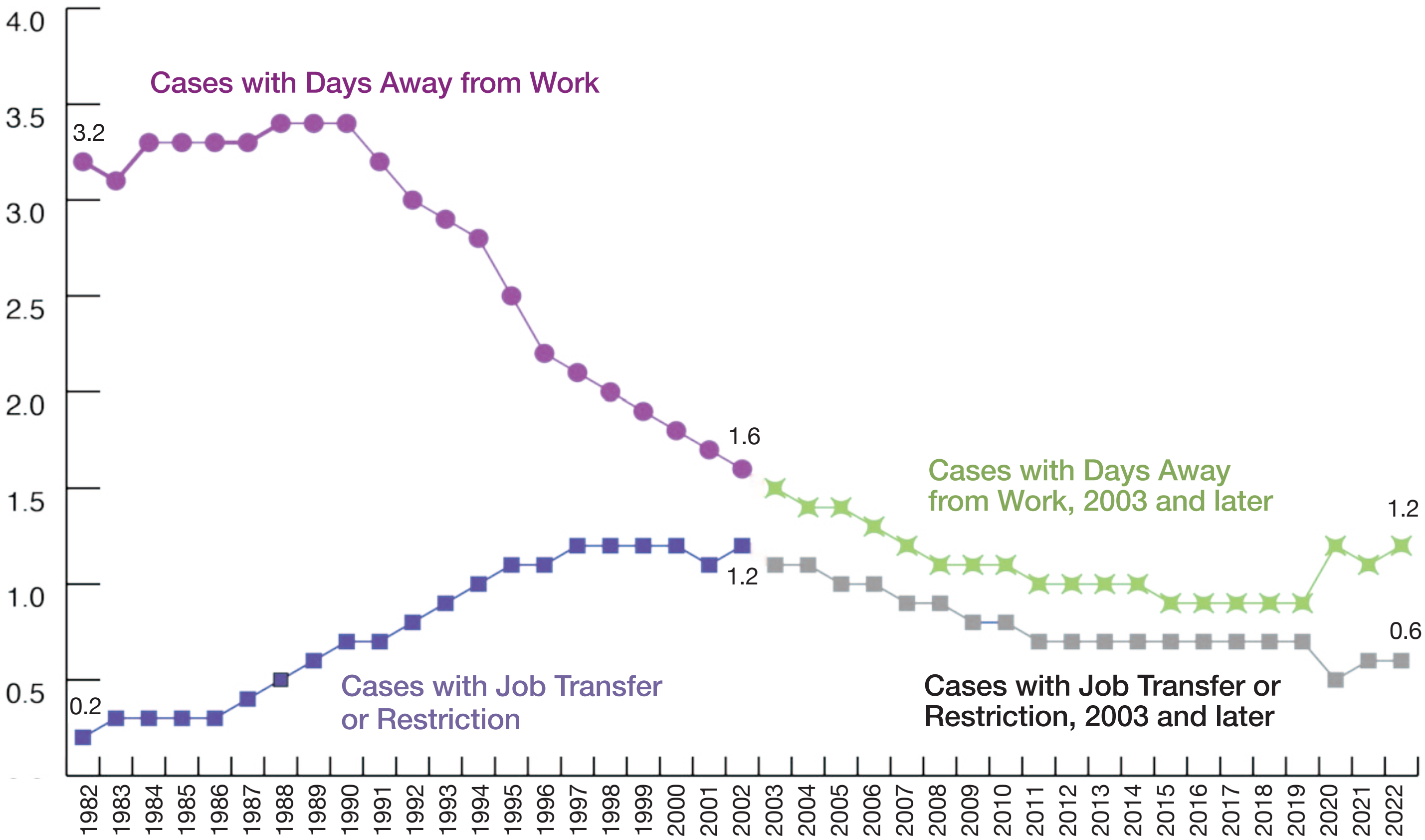
Non-Fatal Occupational Injuries and Illnesses Among Private Industry Employers, 2002-2022

Year	Number of Cases (thousands)			Incidence Rate (per 100 full-time workers)		
	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction
2002	4,700.6	1,436.2	1,058.2	5.3	1.6	1.2
2003	4,365.2	1,315.9	986.0	5.0	1.5	1.1
2004	4,257.3	1,259.3	965.7	4.8	1.4	1.1
2005	4,214.2	1,234.7	950.1	4.6	1.4	1.0
2006	4,085.4	1,183.5	931.1	4.4	1.3	1.0
2007	4,002.7	1,158.9	877.2	4.2	1.2	0.9
2008	3,696.1	1,078.1	822.6	3.9	1.1	0.9
2009	3,277.7	965.0	702.4	3.6	1.1	0.8
2010	3,063.4	933.2	664.9	3.5	1.1	0.8
2011	3,034.5	918.2	642.8	3.4	1.0	0.7
2012	3,027.6	918.7	663.0	3.4	1.0	0.7
2013	3,007.3	917.1	655.6	3.3	1.0	0.7
2014	2,953.5	916.4	663.6	3.2	1.0	0.7
2015	2,905.9	902.2	669.8	3.0	0.9	0.7
2016	2,857.4	892.3	655.6	2.9	0.9	0.7
2017	2,811.5	882.7	645.3	2.8	0.9	0.7
2018	2,834.5	900.4	678.3	2.8	0.9	0.7
2019	2,814.0	888.2	670.0	2.8	0.9	0.7
2020	2,654.7	1,176.3	525.6	2.7	1.2	0.5
2021	2,607.9	1,062.7	554.6	2.7	1.1	0.6
2022	2,804.2	1,184.2	577.7	2.7	1.2	0.6

Source: U.S. Department of Labor (2023b).

Figure 6

Private Industry Occupational Injuries and Illnesses: Incidence Rates 1982-2022



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 & 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 (2023b).

under-report or over-report occupational injuries and illnesses.[82] There is also evidence that changes in workers' compensation laws and procedures since 1990 have made it more difficult for workers to file claims, resulting in reductions in reported injury and claim rates (Ruser and Boden 2003; Guo and Burton 2010).

There are many reasons to suspect under-reporting of workplace injuries—especially those that might qualify for a workers' compensation claim—on the part of workers, employers, and/or medical providers. Workers may not report injuries for several reasons: they do not know that the injury is covered by workers' compensation; they believe that filing for benefits would be too time-consuming, difficult, or stressful; they believe that the injury is something to be expected as part of their job; or they fear employer retaliation (Galizzi et al., 2010; Pransky et al., 1999; Strunin and Boden, 2004). Employers may fail to report injuries because: their recordkeeping is faulty; they want to maintain a superior safety record to protect their experience rating; or they are unaware that

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

an injury is covered by workers' compensation (Azaroff et al., 2002; Lashuay and Harrison, 2006; and Wuellner and Phipps, 2018). 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.[83]

There are also incentives for workers and/or medical providers to over-report injuries or illnesses as work-related. The 100 percent coverage of medical costs under workers' compensation creates incentives for both groups to identify a work-related cause when the etiology of an injury or illness is uncertain. Workers have incentives to report an injury as work-related because there are no deductibles or co-payments for health care. They may also receive more generous cash benefits from workers' compensation than from a private disability plan or state unemployment insurance.

With respect to providers, there is evidence that soft-tissue conditions are more likely to be classified as work-related in states with higher workers' compensation physician reimbursement rates (Fomenko and Gruber, 2016). The trend towards capitated payment systems in health care also influences medical provider incentives. One study found that an increase in capitation payments under group health plans led to an increase in the number of soft-tissue conditions that were labeled work-related and paid by workers' compensation (Victor et al., 2015).

Injuries involving lost work time or work restrictions. Figure 6 and Table 17 show trends in the incidence of reported work-related injuries and illnesses among private-industry employees for cases involving either days away from work or injury-related job accommodations, such as job transfer or restrictions on work (DOL, 2023b).

Consistent with the long-term decline in incidence of fatal workplace injuries, the incidence of reported injuries or illnesses involving days away from work has also declined, down from 1.6 per 100 FTE workers in 2002 to 1.2 per 100 in 2022. Indeed, 2020 was the first year with a year-over-year increase in the incidence rate, which happened again in 2022 (Table 17). While the incidence rate of injuries or illnesses involving days away from work has declined steadily since 1999, the incidence of cases resulting in job transfers or work restrictions only began to fall more recently, around 2004-2005. The rate fell from 1.0 in 2005 to 0.7 by 2011, where it stayed steady until 2020, when it reached a new low of 0.5 per 100; a decline of one-half since 2005. It was 0.6 in 2022.

Some of the changes in the 1990s, when the incidence of reported injuries involving work absence was decreasing while the incidence of transfers/work restrictions was increasing, may reflect a greater focus on employer accommodations that enable injured workers to return to modified work until they are fully recovered and able to return to their pre-injury jobs. The declining incidence rate of cases with job transfer or restriction in recent years is not necessarily indicative of less focus on employer accommodations, because the overall incidence rate of cases with any days away from work is also declining. In fact, over time, the proportion of cases with job transfers or restrictions is rising as a share of total cases with either days away from work or with a job transfer or restriction. This suggests that workers today are more likely than they were in the past to benefit from employer accommodations.

In 2022, the 26.1 percent increase in nonfatal *illnesses* compared to 2021 cited earlier was driven by a jump in respiratory illnesses, despite a large drop between 2020 and 2021.[84] The SOII reported 2.8 million injuries and illnesses in 2022, up from 2.65 million in 2020 (DOL, 2023a). The key difference in recent years is in terms of illnesses, of which there were 460,700 in 2022, relative to 365,200 in 2021 (compared to 126,800 in 2018). In 2022, 79.2 percent of reported illnesses were respiratory (compared to 73.8% in 2021 and 78.7% in 2020). The data are consistent with a general decrease in the presence of COVID-19 related illnesses relative to 2020, but also

83 Studies have typically shown much less reporting of these types of conditions as work-related as is suggested by their prevalence in medical data (Stanbury et al., 1995; Biddle et al., 1998; Morse et al., 1998; Milton et al., 1998; DOL, 2008). According to a Government Accountability Office (GAO) report, some health care providers say that they have been pressured to provide less treatment than they believe is warranted in order to avoid the need to report an injury or illness as work-related (GAO, 2009).

84 The BLS states: "The increase in illnesses is driven by the rise in respiratory illness cases, up 35.4 percent to 365,000 cases in 2022. This comes after a decrease in respiratory illnesses in 2021 compared to 2020" (DOL, 2023b).

suggest that the return to more normal work environments in 2022 may have driven up illnesses.

The major industry sectors with the highest *incidence* of injuries and illnesses involving days away from work in private industry were: transportation and warehousing (2.2 per 100 FTE); health care and social assistance (2.2 per 100 FTE); retail trade (1.7); agriculture, forestry, fishing, and hunting (1.6); and manufacturing (1.1). In terms of total *number* of cases with days away from work, the health care and social assistance industry had more than any other industry with 321,300. Retail trade (188,800) and manufacturing (134,600) had the second and third highest number of cases with days away from work, respectively (DOL, 2023a). As a COVID-19-proxy category, 447,900 cases resulted in days away from work in the health care and social assistance industry in 2020; in 2021 and 2022, that number was 276,600 and 321,300, respectively.

Incidence of Workers' Compensation Claims

The National Council on Compensation Insurance collects information on the number of workers' compensation claims paid by private carriers in 38 states (NCCI, 2024a).[85] The data, replicated in Table 18 for years 2000-2020 (the most recent year reported), show declining trends in the incidence (or frequency) of claims, in keeping with the declining trends in the incidence of work-related injuries reported by the BLS.

According to the NCCI data, the number of workers' compensation claims accepted by private insurers and certain competitive state funds declined by 53.4 percent between 2000 and 2020. The NCCI data indicate that the number of temporary total disability claims accepted declined by 48.5 percent between 2000 and 2020 (Table 18).[86]

Addendum

Alternative, Additional, and Other Disability Benefits for Disabled Workers

The primary purpose of this report is to describe trends in workers' compensation benefits, costs, and coverage. As the exclusive remedy for work-related injury and death, workers' compensation is meant to be the only insurance to compensate for lost wages or earning capacity and medical or rehabilitation expenses.

However, workers' compensation cash and medical benefits can be supplemented by other sources of income and medical care. Disability plans for injured workers may provide financial compensation, coverage for medical expenses, and other benefits to workers as well as to their dependents, and survivors.

The following section presents some of the alternative and additional benefits that may be available to injured workers and their families. Unless otherwise noted, the employer costs and worker benefits of these programs are not reflected in the main body of this report. The extent to which any of these benefits replace workers' compensation or provide additional coverage that may be stacked on, integrated into, or coordinated with workers' compensation varies greatly, as does the extent to which choosing one program over another shifts costs to or from one or more parties. Full descriptions and analysis of these programs are beyond the scope of this report.

This addendum describes the major disability support programs that interact with workers' compensation, namely: temporary sick leave, short- and long-term disability benefits, Social Security Disability Insurance, and Medicare & Medicaid.

85 NCCI measures the frequency of lost time claims for injuries occurring in the accident year per $1 million of earned premium in that year, adjusted by state for changes in average weekly wages.

86 While the trends in private-sector injury or illness claims from the BLS and NCCI are similar over time, there are a number of reasons why they may differ. First, there are discrepancies in the classification of claims. In workers' compensation, there is generally a three-to-seven-day waiting period before a claim is recorded (and would be reported in NCCI data), whereas any case in which a worker misses at least one day away from work is classified as a "days away from work" (DAFW) case by OSHA and is reflected as such in BLS published data (Wiatrowski, 2014). Second, the BLS and NCCI cover different jurisdictions – the BLS covers OSHA-recordable injuries and illnesses across the entire U.S., whereas NCCI only records workers' compensation claims for private insurers and competitive state funds in 38 jurisdictions. And even in these jurisdictions, NCCI does not record any workers' compensation claims that occurred at self-insured firms. Third, there is evidence that some employers do not comply with OSHA recordkeeping or SOII reporting instructions, leading to underreporting of workers' compensation-eligible claims in BLS data (Rappin et al., 2016).

Table 18

Workers' Compensation Claims Per 100,000 Insured Workers: Private Carriers in 38 Jurisdictions, 2000-2020

Policy Period	Total	Medical Only (MO)	MO as Percent of Total	Temporary Total (TTD)	TTD as Percent of Total	Permanent Partial (PPD)	PPD as Percent of Total
2000	6,003	4,685	78.0%	870	14.5%	437	7.3%
2001	5,510	4,277	77.6%	799	14.5%	423	7.7%
2002	5,239	4,036	77.0%	770	14.7%	422	8.1%
2003	4,901	3,747	76.5%	725	14.8%	423	8.6%
2004	4,728	3,635	76.9%	702	14.8%	385	8.1%
2005	4,571	3,514	76.9%	667	14.6%	383	8.4%
2006	4,376	3,351	76.6%	638	14.6%	381	8.7%
2007	4,076	3,107	76.2%	587	14.4%	375	9.2%
2008	3,615	2,730	75.5%	515	14.2%	363	10.0%
2009	3,452	2,659	77.0%	521	15.1%	357	10.3%
2010	3,492	2,621	75.1%	509	14.6%	358	10.3%
2011	3,412	2,566	75.2%	504	14.8%	338	9.9%
2012	3,277	2,464	75.2%	486	14.8%	321	9.8%
2013	3,208	2,405	75.0%	484	15.1%	315	9.8%
2014	3,083	2,313	75.0%	470	15.2%	296	9.6%
2015	2,950	2,221	75.3%	454	15.4%	271	9.2%
2016	3,083	2,313	75.0%	470	15.2%	296	9.6%
2017	2,951	2,220	75.2%	454	15.4%	273	9.3%
2018	2,874	2,164	75.3%	458	15.9%	247	8.6%
2019	2,871	2,162	75.3%	464	16.2%	242	8.4%
2020	2,796	2,106	75.3%	448	16.0%	238	8.5%
Percent change, 2000-2020	-53.4	-55.0		-48.5		-45.5	

Source: National Council of Compensation Insurance, 1997-2024, Exhibit XII, *Annual Statistical Bulletin*. The most recent data available are from 2020.

Alternative Disability Plans

Paid Sick Leave. Paid sick leave is a common form of wage replacement for short-term absences from work due to illnesses or injuries unrelated to work. 77 percent of all private-sector employees had access to some type of paid sick leave in 2022, provided either through their employer or a private short-term disability plan (DOL, 2022a). Sick leave typically pays 100 percent of wages for a number of days, depending on the worker's job tenure and hours worked. Unlike workers' compensation, paid sick leave provided by the employer or an employer-funded disability insurance plan is a taxable benefit and does not cover medical or rehabilitation expenses.

Paid sick leave may sometimes be utilized to cover work absences and resulting lost earnings associated with minor work-related injuries or during the waiting period (three to seven days) of their workers' compensation disability claims. Compared to filing a claim for workers' compensation temporary disability benefits, sick leave is administratively much easier for workers to access and employers to administer. For employers, the workers' compensation option has reporting requirements and may carry negative impacts on premium rates for workers' compensation insurance. For workers, the decision to report and pursue a workers' compensation claim involves a lower wage replacement rate and a minimum three-day wage penalty (unless there is a provision to use paid sick leave).[87] Although these factors may provide incentives for employers and injured workers to rely on paid sick leave rather than workers' compensation for wage replacements, evidence of cost-shifting is limited.

Short-term disability benefits. Six jurisdictions (California, Hawaii, New Jersey, New York, Puerto Rico, and Rhode Island) have Temporary Disability Insurance (TDI) programs, also known as State Disability Insurance (SDI), and eight jurisdictions (California, Connecticut, District of Columbia, Massachusetts, New Jersey, New York, Rhode Island, and Washington) have paid family and medical leave (PFML). Both provide short- to medium-term disability benefits for employees (Ernst & Young, 2021). Another three (Colorado, New Hampshire, and Oregon) passed legislation establishing PFML programs that took effect as of 2023 (Williams, 2021; Dickinson and Rinehart, 2021; Oregon Employment Dept., 2021). In these jurisdictions, SDI is a statutory program that provides partial wage replacement for workers taking time off to recover from a non-work-related injury or illness, or from pregnancy (Glynn et al., 2017).

Some private employers offer short-term disability insurance to their workers even in states in which such insurance is not required. Short term disability is available to approximately 43 percent of private industry workers (DOL, 2022a). Employers pay the full cost of the short-term disability insurance in most cases, but about 14 percent of workers with short-term disability plans are required to contribute to the plan. 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 to simultaneously receive these types of short-term disability benefits.

There are also state and municipal short-term disability benefit programs for public employees (particularly for police and firefighters) that coordinate with workers' compensation programs.

Short-term disability (STD) plans typically pay a lower proportion of average earnings (40 to 60 percent vs. two-thirds of gross wages or 80% of spendable earnings that are typical in workers' compensation), but STD benefits are not limited by a statutory maximum weekly benefit but rather by the provisions of the STD policy. The proportion of benefits supported by employer contributions are taxable (i.e., benefits from temporary disability plans fully paid for by the employer are fully taxable). Benefits from STD plans fully paid for by the employee with pre-tax dollars are also fully taxable in most states,[88] while benefits from group STD plans paid for by the employee with post-tax dollars and

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

88 California is an exception. The State Disability Insurance program is paid for with pre-tax dollars, and benefits are not taxable except in cases involving overlap with unemployment insurance benefits (California Employment Development Department, 2022).

individually purchased STD plans are not taxable. The degree to which STD plans may be coordinated with workers' compensation is typically defined by the individual policy.

Long-term disability insurance. Long-term disability (LTD) insurance plans were offered to 35 percent of private-sector employees in 2022 (DOL, 2022a). Such coverage is most common among relatively high paying management, professional, and related occupations. About 61 percent of workers in management and professional-related occupations had access to long-term disability plans as of 2022, compared to 30 and 13 percent of workers in sales and office, and service roles, respectively (DOL, 2022a). Group LTD insurance may be fully employer-paid, fully paid by workers, or a shared cost. Long-term disability insurance is also sold in individual policies, typically to high-earning professionals. Individual policies are not included in the coverage statistics reported to the DOL.

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, a long-term disability benefit that replaces 60 percent of earnings would pay the balance (20%) to achieve a 60 percent wage replacement. The taxation status of LTD plans mirrors those of the STD plans described above. The Social Security benefit formula is progressive, meaning it replaces a larger share of lower income workers. Given the Social Security offset provision, this will make LTD less attractive to lower-wage workers (CBO, 2019).

Retirement benefits. Retirement benefits may also be available to workers who become disabled because of a work-related injury or illness. Retirement plans may be funded by employee and/or employer contributions. They provide income based on either tenure, seniority, salary at the time of retirement (Defined Benefit), or investment performance (Defined Contribution). Most defined-benefit pension plans have some disability provision; in these cases, benefits may be available at the time of disability or may continue to accrue until retirement age. Defined contribution pension plans will often make funds in an employee's account available without penalty if the worker becomes disabled, but these plans do not have the insurance features of defined-benefit pensions or disability insurance.

Federal disability programs. SSDI and Medicare & Medicaid provide cash and medical benefits, respectively, to workers who become disabled and unable to work prior to normal retirement age. These programs are funded by employee and employer contributions based on a percentage of earned income subject to a maximum contribution set by federal statute. 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. For workers who are ineligible or excluded from workers' compensation coverage – those who are self-employed or who are classified as independent contractors or "gig" workers, and workers in Texas, South Dakota, and Wyoming whose employers choose not to cover them — SSDI effectively serves this role. However, this is true only for workers deemed by SSA to be totally and permanently disabled. Some or all SSDI benefits are taxable federally if the recipient's income exceeds a threshold amount ($25,000 single; $32,000 married joint filing). Most states do not tax SSDI, but 13 states (Colorado, Connecticut, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Rhode Island, Utah, Vermont, and West Virginia) tax SSDI benefits to varying degrees (Depersio, 2021).

Workers are eligible for workers' compensation benefits from their first day of employment, while eligibility for SSDI requires workers to have a history of contributions to the Social Security system.[89]

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

Workers' compensation cash benefits for temporary disability commence immediately following the injury and applicable three-to-seven-day waiting period (waiting periods are typically compensated for claims with durations that exceed a "retroactive period" of five to forty-one days), while SSDI benefits begin only after a five-month waiting period. Workers' compensation provides benefits for both short- and long-term disabilities and for partial as well as total disabilities. SSDI benefits are paid only to workers who have long-term impairments that preclude gainful employment that is suitable for the worker by virtue of his or her training and expertise.

Medicare pays health care costs for persons who receive SSDI benefits after an additional 24-month waiting period (or 29 months after the onset of disability). (Medicaid may pay workers if their income and assets meet requirements.) Medicare covers all medical conditions, but as described below, when the primary disability is work-related, workers' compensation is the required benefit provider.

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

If a worker becomes eligible for both SSDI and workers' compensation cash benefits, one or both programs will reduce benefits to ensure that the payments to beneficiaries do not exceed allowable limits based on the worker's past earnings.[90] The Social Security Amendments of 1965 require that SSDI benefits be reduced (or "offset") such that the combined total of workers' compensation and SSDI benefits does not exceed 80 percent of the worker's prior earnings.[91] The offset provision affects 35 states; 15 states that had established reverse-offset laws prior to the 1965 legislation received exemptions.[92] In reverse-offset states, workers' compensation benefits are reduced (offset) by SSDI benefits (as opposed to the other way around).

Table 19 shows that, as of December 2022, about 7.6 million workers with disabilities and 1.2 million dependents received SSDI benefits (SSA, 2024). About 950,000 (10.7%) of these individuals were dual beneficiaries of workers' compensation or other public disability benefit (PDB) programs in 2022.[93] Of these, about 65,000 persons (0.7% of total beneficiaries; 14.6% of beneficiaries currently receiving SSDI and WC or PDB) had their scheduled SSDI benefits reduced because of the offset provision.

Between 2012 and 2022, the total number of disabled workers receiving SSDI benefits decreased by 13.9 percent. Since the number of SSDI beneficiaries peaked in 2014, there has been a 15.1 percent decline as of 2022. In 2022, disabled worker beneficiaries hit the lowest raw number since 2008, with a particularly large drop (3.5%) since 2021, the largest year-over-year decrease since 2006 (the earliest we have data). Over the entire period, the proportion of workers with disabilities receiving SSDI benefits with a current

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

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

92 States with reverse offset laws for some or all types of workers' compensation benefits are: Alaska, California, Colorado, Florida, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Washington, and Wisconsin. California's reverse offset laws apply only to workers' compensation benefits paid through the Subsequent Injuries Fund and Industrial Disability Leave. In addition, there are reverse offset rules for other types of public disability benefits in Hawaii, Illinois, New Jersey, and New York (SSA, 2018). Legislation in 1981 eliminated states' options to adopt reverse offset laws.

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

Table 19

Dual Eligible Individuals: Social Security Disability Insurance (SSDI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefits (PDB), 2022

Type of Case	Total		Workers		Dependents	
	Number	Percent	Number	Percent	Number	Percent
All Disability Insurance Beneficiaries	8,840,733	100.0	7,604,098	100.0	1,236,635	100.0
Total Dual Eligibles	950,796	10.8	817,645	10.8	133,151	10.8
Currently Receiving SSDI and WC or PDB	450,675	5.1	388,422	5.1	62,253	5.0
SSDI Reduced by Cap	65,838	0.7	52,632	0.7	13,206	1.1
SSDI Not Reduced by Cap	307,440	3.5	268,297	3.5	39,143	3.2
Reverse Jurisdiction	31,855	0.4	27,386	0.4	4,469	0.4
Pending Decision on WC or PDB	45,542	0.5	40,107	0.5	5,435	0.4
SSDI Previously Offset by WC or PDB	500,121	5.7	429,223	5.6	70,898	5.7

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

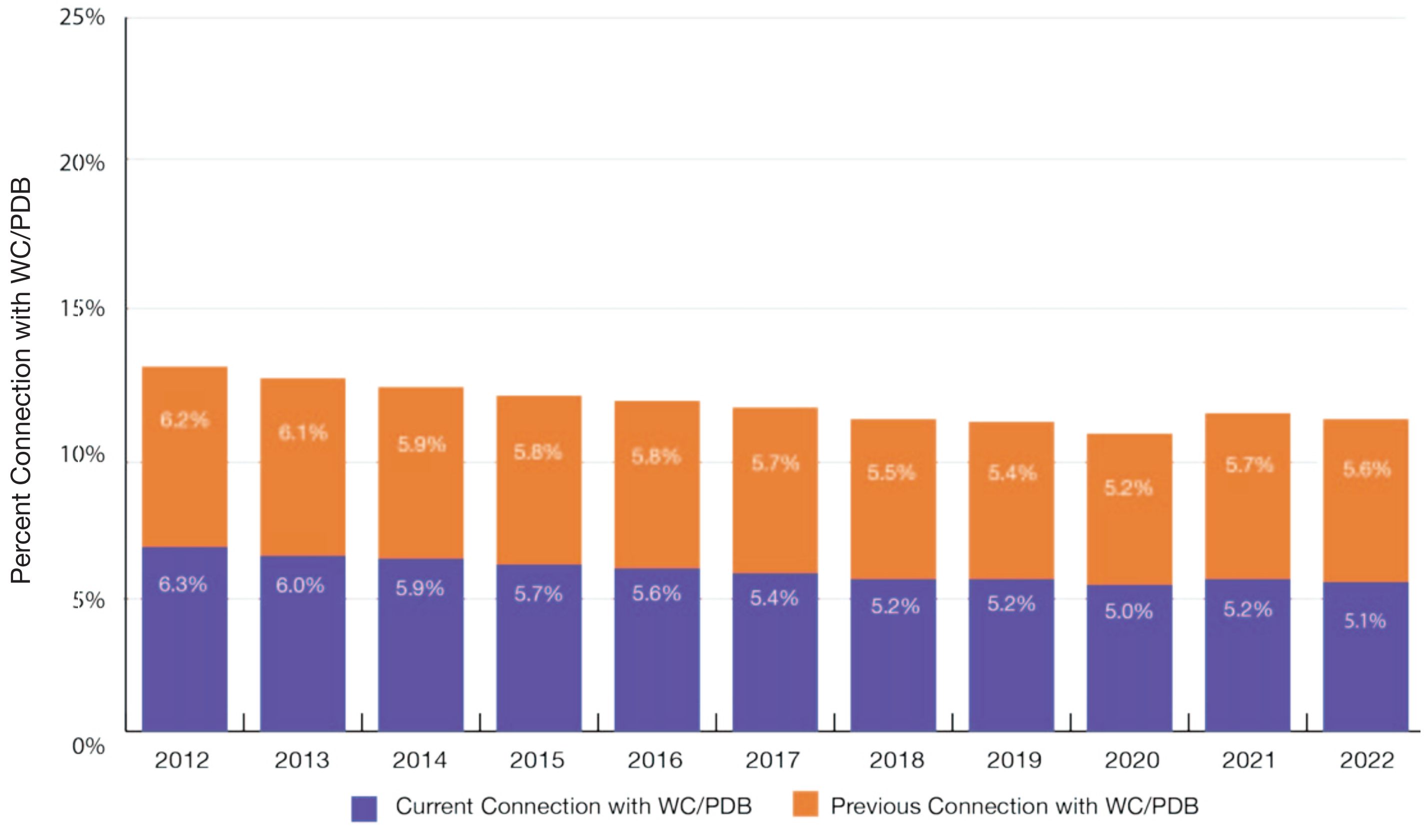
Source: Social Security Administration, Master Beneficiary Record, 100 percent data, and Social Security Administration Workers' Compensation and Public Disability Benefit file, 100 percent data (SSA, 2024).

connection to WC or other PDB programs fell by 1.2 percentage points to 5.1 percent of all SSDI recipients in 2022 (Figure 7). The decline in the proportion of SSDI recipients with a connection (of any kind) to WC or PDB is mostly due to the large decline in the number of workers with a current connection to WC or PDB—down 19 percent over the ten-year period.

The proportion of SSDI recipients with a previous connection to WC or PDB also declined between 2012 and 2022, with a 9.7 percent decrease.

Figure 7

Proportion of Worker SSDI Beneficiaries with Connection to Workers' Compensation or Public Disabilty Benefits (PDB), 2012-2022



Aspects of Various Disability Policies that Support Injured Workers

Program	Paid by	Pre or post tax dollars	Earnings replacement	Medical Expenses	Commencement/ Duration	Taxation of benefits	Included in NASI Costs and Benefits
Workers' Compensation	*Employer*	*n/a*	*60% of gross to 85% of net of pre-injury average earnings*	*Covered*	*Immediately following injury or after unwaived waiting period of 3 to 41 days. Typically continues as long as disability lasts.*	*Not taxable*	*Yes*
Paid Sick Leave	Employer	n/a	100% regular wage or salary	Not covered	Immediately following injury. Typically limited to two weeks or extent of accumulated credits if allow-ed but practices vary widely	Taxable	No
Short Term Disability (STD)	Employer only	n/a	40-60% regular wage or salary	Not covered	Varies from immediately following absence or immediately following end of paid sick leave or a defined post initial absence period	Taxable	No
Short Term Disability (STD)	Employer Employee	n/a Pre-tax	40-60% regular wage or salary	Not covered	Varies from immediately following absence or immediately following end of paid sick leave or a defined post initial absence period	Taxable	No
Short Term Disability (STD)	Employer Employee	n/a Post-tax	40-60% regular wage or salary	Not covered	Varies from immediately following absence or immediately following end of paid sick leave or a defined post initial absence period	Employer-paid portion and employee-paid portion paid with pre-tax dollars are taxable	No
Long-term disability (LTD)	Similar to STD	Similar to STD	50-70% of regular wages	Not covered	Typically commences end of STD and/or depletion of Paid Sick Leave	Employer-paid portion and employee-paid portion paid with pre-tax dollars are taxable	No
State Disability Insurance	Varies by state	Varies by state	60-70% of average earnings in previous 5 to 18 months	Not covered	Date of injury to a maximum of 52 weeks	Varies by state	No
"Carve-outs" and parallel programs	Employer only	n/a	Typically, equivalent to workers' compensation	Covered	Equivalent to workers' compensation	Not taxable	[Not sure]
Social Security Disability Insurance for workers not covered by workers' compensation	Employer and worker, or worker only if self-employed	Pre-tax	Subject to formula based on age, average earnings, years working, dependents; approx. 25-90% of average earnings	Not covered	Five months post on-set of disability that is going to last more than 12 months; payable to retire-ment age subject to reviews depending on expectation of improvement.	Part of taxable income so total taxable income may be taxed if above exempt thresholds.	No

Source: Terry Bogyo produced this table for the 2018 data report and minor modifications have been made over time. Citations for data points can be found throughout the addendum.

Glossary

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

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

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

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

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

Captive (Insurers): An insurance company owned by a company (or group of companies) primarily designed to insure itself (themselves). Organized as an insurer for tax purposes.

Cash (Indemnity) Benefits: Workers' compensation benefits are typically divided into two major categories, medical and cash benefits. Cash (indemnity) benefits are payments to a worker for time lost from work, or other adverse effects of a work injury or illness. These can include payments for loss of earnings or earning capacity, permanent disability, impairment (losses of bodily function), or disfigurement. In our data, settlements are included as cash.

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: The combined ratio after policy holder dividends is a measure of the underwriting profitability of an insurer. The ratio equals the sum of losses, loss adjustment expenses, underwriting expenses, and dividends to policyholders, divided by net premiums. The ratio is expressed as a percent. (See: Overall Operating Ratio for a better measure of overall profitability.)

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

Covered Employment: The Academy's coverage data include jobs in firms that are required to be covered by workers' compensation programs. A more inclusive measure of covered employment would also include jobs in firms that voluntarily elect coverage. A less inclusive measure of covered employment would exclude workers who are legally required to be covered by workers' compensation programs who actually are not covered.

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

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

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

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

Experience Rating: An insurance policy is experience rated if insurance premiums reflect the relative risk of loss of the insured. There are two levels of experience rating in workers' compensation. Manual rates (or pure premiums) are developed for each insurance classification (category of work) in a state based on previous benefit payments by all firms operating in that classification. Firm-level experience rating compares an employer's loss experience to the average losses of other firms in the same insurance classification. An experience modification is developed and applied to the premium of firms which are large enough for the insured's experience to be a reliable indicator of benefit costs in the future.

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

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

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

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

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

Impairment: An impairment is an anatomical or functional abnormality or loss resulting from an injury or disease. The impairment can be physical or mental.

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 (Public Law 66-261), passed in 1920, which extends the provision of the Federal Employers' Liability Act to qualifying sailors (individuals assigned to a vessel or fleet that operates in navigable waters, meaning waterways capable of being used for interstate or foreign commerce).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Schedule Rating: A debit and credit plan that recognizes variations in the hazard-causing features of an individual risk.

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

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

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

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

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

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

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

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

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

WC: Workers' compensation. A social insurance program established by statute that is mandatory for most employers, and that provides cash and medical benefits for covered work-related injuries and illnesses.

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

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

Appendix A: Coverage Estimates

The basis for the NASI estimates of workers' compensation coverage is the number of jobs in each state which are covered by unemployment insurance (UI) (DOL, 2022b). Jobs which are not required to be covered by UI include: some farm and domestic jobs which pay less than a threshold amount; some state and local jobs (such as elected positions); jobs in some nonprofit organizations (such as religious organizations, for whom coverage is optional in some states); jobs held by self-employed persons or unpaid family workers; and railroad jobs (which are covered under a separate unemployment insurance program). Railroad jobs are also covered under a separate workers' compensation program (see Appendix B).

All U.S. employers who are required to pay unemployment taxes must report quarterly data to their state employment security agencies regarding their jobs and wages 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. jobs which are covered by unemployment insurance (DOL, 2022b).

Key assumptions underlying the Academy's estimates of workers' compensation coverage, shown in Table A.1, are:

(1) Jobs which are not reported as covered by UI are assumed not to be covered by workers' compensation.

(2) Jobs which are reported to be covered by UI are assumed to be covered by workers' compensation as well, except in the following cases:

(a) Jobs in small firms (which are required to be covered by unemployment insurance in every state) are assumed to be not covered by workers' compensation if the state law exempts small firms from mandatory workers' compensation coverage.

(b) Jobs in agricultural industries (which may or may not be covered by UI) are assumed to be not covered by workers' compensation if the state law exempts agricultural employers from mandatory workers' compensation coverage.

(c) Jobs in Texas, where workers' compensation coverage is elective for almost all employers, require a different calculation. For Texas, we base our coverage estimates on periodic surveys conducted by the Texas Department of Insurance Workers' Compensation Research and Evaluation Group (TDI, 2023).

(d) Jobs in Wyoming, where only "extra hazardous" occupations are required to be covered, also require a different calculation. For Wyoming, we base our coverage on data from the Wyoming Department of Workforce Services (Wyoming Department of Workforce Services, 2018 & 2019).

(3) All federal jobs are covered by workers' compensation, regardless of the state in which they are located.

Small Firm Exemptions

Private firms with fewer than three employees are exempt from mandatory workers' compensation coverage in five states: Arkansas, Georgia, New Mexico, North Carolina, and Virginia. Firms with fewer than four employees are exempt in two states: Florida and South Carolina. Firms with fewer than five employees are exempt from mandatory coverage in four states: Alabama, Mississippi, Missouri, and Tennessee.[94] The Academy assumes that jobs are not covered by workers' compensation if they are in a small firm that meets the specific exemption requirements in one of these states. To estimate the number of jobs affected by the small firm exemptions, we use data from the

94 In previous reports we have reported Michigan, Oklahoma, West Virginia, and Wisconsin as having small business exemptions of 3, 5, 3, and 3 respectively. Further research has revealed that: in Michigan, "all private employers regularly employing one or more employees 35 hours or more per week for 13 weeks or longer during the preceding 52 weeks" must carry workers' compensation (Michigan.gov, 2020); in Oklahoma, the exemption applies only to employers who employ five or fewer of their relatives by blood or marriage, so we assume this number to be negligible (85A Okl. St. § 2(18)(b)(5)); in West Virginia, employers with fewer than three "intermittent" employees who work fewer than 11 days in a quarter are exempt, so we assume this number to be negligible (W. Va. Code § 23-2-1); and in Wisconsin, employers with fewer than three employees who are "paid wages of $500 or more in any calendar quarter" must have coverage, which we assume to be negligible (Wis. Stat. § 102.04.1(b)2).

Table A.1

Documenting Workers' Compensation Coverage Estimates, 2022 Annual Averages

	Unemployment Insurance (UI) Covered Jobs[a]		Workers' Compensation (WC) Exemptions			
State	Total (1)	Private, Non-Farm Firms (2)	Small Firm[b] (3)	Agriculture[c] (4)	WC Covered Jobs (6)	WC as a Percent of UI (7)
Alabama	1,971,016	1,655,159	70,086	5,136	1,895,794	96.2
Alaska	298,955	239,822	-	-	298,955	100.0
Arizona	3,017,741	2,676,568	-	-	3,017,741	100.0
Arkansas	1,228,415	1,049,504	22,122	7,166	1,199,127	97.6
California	17,667,272	15,263,268	-	-	17,667,272	100.0
Colorado	2,761,655	2,368,135	-	16,228	2,745,427	99.4
Connecticut	1,624,263	1,422,154	-	-	1,624,263	100.0
Delaware	453,160	391,049	-	1,031	452,129	99.8
District of Columbia	555,590	514,546	-	-	555,590	100.0
Florida	9,208,649	8,256,876	347,754	-	8,860,895	96.2
Georgia	4,598,372	4,048,947	83,734	13,320	4,501,318	97.9
Hawaii	585,262	496,597	-	-	585,262	100.0
Idaho	808,060	680,715	-	-	808,060	100.0
Illinois	5,840,033	5,145,833	-	15,176	5,824,857	99.7
Indiana	3,075,031	2,719,629	-	13,739	3,061,292	99.6
Iowa	1,519,389	1,280,873	-	16,460	1,502,929	98.9
Kansas	1,365,082	1,140,005	-	11,428	1,353,654	99.2
Kentucky	1,886,053	1,634,801	-	5,389	1,880,664	99.7
Louisiana	1,833,939	1,567,102	-	4,276	1,829,663	99.8
Maine	610,076	524,309	-	5,767	604,309	99.1
Maryland	2,489,077	2,154,445	-	4,725	2,484,352	99.8
Massachusetts	3,550,584	3,157,332	-	-	3,550,584	100.0
Michigan	4,246,931	3,721,412	-	28,322	4,218,609	99.3
Minnesota	2,821,793	2,464,440	-	19,160	2,802,633	99.3
Mississippi	1,119,742	914,331	42,066	5,525	1,072,151	95.7
Missouri	2,765,554	2,413,780	108,853	11,129	2,645,572	95.7
Montana	482,938	408,204	-	4,820	478,118	99.0

Nebraska	967,354	812,265	-	12,680	954,674	98.7
Nevada	1,450,479	1,309,740	-	5,029	1,445,450	99.7
New Hampshire	662,190	587,619	-	-	662,190	100.0
New Jersey	4,086,152	3,573,976	-	-	4,086,152	100.0
New Mexico	803,326	652,430	14,801	8,009	780,516	97.2
New York	9,150,896	7,883,336	-	24,601	9,126,295	99.7
North Carolina	4,623,299	4,000,121	81,401	18,015	4,523,883	97.8
North Dakota	402,201	335,949	-	3,255	398,946	99.2
Ohio	5,312,864	4,669,572	-	-	5,312,864	100.0
Oklahoma	1,574,090	1,296,288	-	8,246	1,565,844	99.5
Oregon	1,922,641	1,643,702	-	-	1,922,641	100.0
Pennsylvania	5,764,183	5,187,930	-	22,529	5,741,654	99.6
Rhode Island	470,040	420,207	-	762	469,278	99.8
South Carolina	2,146,279	1,828,468	58,021	5,102	2,083,156	97.1
South Dakota	431,923	362,513	-	5,963	425,960	98.6
Tennessee	3,105,359	2,734,761	97,479	6,128	3,001,752	96.7
Texas[d]	13,037,813	11,291,509	-	45,927	10,775,458	82.6
Utah	1,612,448	1,402,748	-	5,000	1,607,448	99.7
Vermont	294,530	247,042	-	3,045	291,485	99.0
Virginia	3,771,936	3,250,015	64,732	8,740	3,698,464	98.1
Washington	3,437,195	2,891,682	-	-	3,437,195	100.0
West Virginia	648,522	538,705	-	908	647,614	99.9
Wisconsin	2,847,500	2,481,792	-	23,809	2,823,691	99.2
Wyoming[e]	264,675	206,369	-	-	218,886	82.7
Total Non-Federal	147,172,527	127,918,575	991,049	396,545	143,522,717	97.5
Federal Employees	2,789,136				2,789,136	100.0
TOTAL	149,961,663	127,918,575	991,049	396,545	146,311,853	97.6

a. UI-covered employment reported in the ETA-202 data produced by the Bureau of Labor Statistics (DOL, 2022b).
b. Data on employees at small firms came from the U.S. Census Bureau (2005; 2023).
c. Data on agricultural workers came from the Quarterly Census of Employment and Wages (DOL, 2022b).
d. We estimate that 2.2 million workers not covered by workers' compensation in Texas as a result of employers not opting into coverage. Data on the portion of workers not covered by workers' compensation in Texas come from the Texas Department of Insurance (TDI, 2023).
e. We estimate that 46,000 workers not covered by workers' compensation in Wyoming in 2022. Data on the percent of uncovered workers in Wyoming comes from the Wyoming Deparment of Workforce Services (Wyoming Department of Workforce Services, 2017 and 2018).

Source: National Academy of Social Insurance estimates.

U.S. Census Statistics of Small Businesses (SUSB). The SUSB is an annual data series that reports national and state-level employment by enterprise size and industry.[95] These data identify the number of jobs in firms with fewer than five employees.

For the four states with workers' compensation exemptions for firms with fewer than five employees, we directly apply the fraction of jobs in these small firms as reported by the SUSB to the number of UI-covered jobs to calculate the number of jobs affected by the exemption. In 2021 (the most recent year the data are available), these proportions were: Alabama, 4.2 percent; Mississippi, 4.6 percent; Missouri, 4.5 percent; and Tennessee, 3.6 percent (Census, 2023).

For the states that exempt firms with fewer than three or four workers, the SUSB proportions of jobs in small firms (fewer than five employees) must be adjusted downward to correspond to the workers' compensation cutoff in each state. We use national data on small firms from the U.S. Census Bureau (2005) to make the adjustments. The data indicate that, among those jobs reported to be in small firms by the SUSB (2023), 71.8 percent are in firms with fewer than four employees and 43.9 percent are in firms with fewer than three employees.

For the five states that exempt firms with fewer than three workers, the proportions of jobs in small firms were reported to be: Arkansas, 4.8 percent; Georgia, 4.7 percent; New Mexico, 5.2 percent; North Carolina, 4.63 percent; and Virginia, 4.5 percent

Agricultural Exemptions

We assume that agricultural jobs are excluded from workers' compensation coverage if they are in a state where agricultural jobs are exempt from mandatory coverage. Only 15 jurisdictions have no exemption for agricultural jobs: Alaska, Arizona, California, Connecticut, District of Columbia, Florida, Hawaii, Idaho, Massachusetts, New Hampshire, New Jersey, Ohio, Oregon, Washington, and Wyoming.[96,97] In states with agricultural exemptions, we identify the number of agricultural jobs using the Quarterly Census of Employment and Wages (DOL, 2022b).

The Quarterly Census provides estimates of total employment by state and industry using North American Industry Classification System (NAICS) codes. We estimate that 396,545 jobs were excluded from workers' compensation in 2022 because of state agricultural exemptions.

Texas

In Texas, where workers' compensation coverage is elective for almost all employers, the Academy's estimate of coverage is based on periodic surveys conducted by the Texas Department of Insurance Workers' Compensation Research and Evaluation Group (TDI, 2023). Their most recent survey estimated that 83 percent of private-sector jobs were covered by workers' compensation in 2020 (82 percent in 2016 and 2018, for reference). We applied this ratio to all UI-covered jobs in Texas (other than federal government jobs, which were not included in the Texas surveys) to determine the total number of jobs covered by workers' compensation. In 2022, we estimate that 2.21 million jobs in Texas were not covered by workers' compensation.

95 Through 2017, the Academy's report relied on the Census County Business Patterns (CBP) to estimate small firm employment. However, the CBP only measures employment at establishments, which refers to a single physical location where business is conducted. The SUSB publishes data on the number of establishments and the number of firms, which is a more appropriate measure for our purposes because workers' compensation coverage exemptions are based on the size of the firm, not the size of a particular establishment. The differences in employment between the SUSB and the CBP are small. Previous estimates were updated in 2018 using the SUSB for consistency.

96 Washington also has an exemption for agricultural workers, but it is limited to some family members of family-owned operations. Employment excluded includes: "…Any child under eighteen years of age employed by his or her parents in agricultural activities on the family farm…" (RCW 51.12.020).

97 It recently came to our attention that, under Florida's Title XXXI 440.2 (17)(c)2, only farmers that employ "5 or fewer regular employees and that [employ] fewer than 12 other employees at one time for seasonal agricultural labor that is completed in less than 30 days, provided such seasonal employment does not exceed 45 days in the same calendar year" are exempt from workers' compensation coverage. We assume that this exempt group makes up a small minority of farmers in Florida and have thus removed their exemption in the data as of the 2019 report for 2019 and all prior years. Notably, under our prior methodology Florida had the largest number of exempt agricultural workers of any state. This number would have been 50,364 in 2019—11.4% of all exempt agricultural workers in the country.

Wyoming

In Wyoming, where employers of "extra hazardous" occupations must provide coverage and other employers must opt-in if they are to provide coverage, the Academy's estimate of coverage is based on data in the 2017 and 2018 Workplace Safety & Occupational Injury and Illness Annual Impact Report (Wyoming Department of Workforce Services, 2018 & 2019). The data in the corresponding 2019 report are not comparable, and reports have not been issued for 2020-2022. The data in the 2017 report indicate that 75.4 percent of all employees are covered, and that in the 2018 report indicates 90.0 percent coverage. With no better data provided, we average these two figures to estimate 82.7 percent of total jobs in Wyoming to be covered by workers' compensation each year. In 2022, we estimate that 45,789 jobs were not covered by workers' compensation.

Employed Workforce Coverage Estimates

The workers' compensation coverage estimates described above are an estimate of the proportion of UI-covered jobs that are also covered by workers' compensation. However, there are a number of jobs that are not covered by either UI or workers' compensation. To develop an estimate of the proportion of all jobs in the economy that are covered by workers' compensation, not just UI-covered jobs, we rely on data from the Current Population Survey (CPS). The CPS reports total employment in the country – which was 158.298 million in 2022 (DOL, 2024). However, the CPS is a household survey that questions individuals about their employment, and provides an estimate of the total number of employed workers. The Quarterly Census of Employment and Wages (QCEW), on the other hand, is an employer-based survey that tracks jobs.

Some individuals have multiple jobs, so comparing the number of workers' compensation covered jobs to the total number of employed workers in the population may overestimate the overall workers' compensation coverage rate. To improve this estimate, we used the Integrated Public Use Microdata Series of the CPS (IPUMS-CPS, 2024) to identify the distribution of employed individuals with one, two, three, four or more jobs. Using that distribution of multiple jobholders, combined with the number of employed workers and multiple jobholders, we expanded total employment to develop an estimate of the total number of jobs in the economy.[98,99] This measure allowed us to calculate the percentage of total jobs among the employed workforce that are covered by workers' compensation using a consistent unit of measure in the numerator and denominator: jobs.

As Table A.2 shows, workers' compensation covered 87.7 percent of the total jobs in the economy in 2022, up 0.3 percentage points from 2021. In total, 2022 had the largest job coverage for workers' compensation over Table A.2's ten-year period.

It also had the largest coverage of total employment for workers' compensation over the decade. Between 2018 and 2022, total employment, total jobs, and workers' compensation covered jobs increased by roughly 2 percent. The number of multiple-job holders as reported by the CPS increased to 7.6 million in 2022, up 8.6 percent from 2021 (DOL, 2024).

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98 We start by subtracting the number of multiple jobholders from total employment as reported by the CPS to get the number of workers with only one job (DOL, 2024). Next, we use data from the Integrated Public Use Microdata Series of the CPS (IPUMS-CPS, 2024) to identify the distribution of multiple jobholders based on whether they have two, three, or four or more jobs. Using this distribution, we expand the number of multiple jobholders to get the total number of jobs held by multiple jobholders. Using this approach, we calculate total jobs as: Total Jobs = (Total Employment – Multiple Jobholders) + Multiple Jobholders*[(2*% Two Jobs) + (3*% Three Jobs) + (4*% Four or More Jobs)].

This approach differs slightly from what was used in the 2015 data report and prior years. That measure was calculated using total employment from the CPS, expanded by the distribution of multiple jobholders as: Total Jobs = Total Employment*[(% One Job) + (2*% Two Jobs) + (3*% Three Jobs) + (4*% Four or More Jobs)]. The key difference in our updated approach is that we use the total number of multiple jobholders as reported by the CPS, instead of only relying on the distribution of jobholders as reported in the IPUMS to estimate the number of multiple jobholders. The differences between the two approaches are small. The approach we use now minimizes the impact of weighting estimates to achieve population level totals. All of the estimates in Table A.2 have been updated to reflect the method change.

99 The BLS reports that 4.5 percent of the U.S. employed workforce held more than one job in 2022 (DOL, 2024).

Table A.2

Workers' Compensation Coverage as a Percent of the Employed Workforce, 2012-2022 National Averages

Year	Total Employment[a] (thousands)	Total Jobs[b] (thousands)	WC Covered Jobs[c] (thousands)	WC % Coverage of Total Jobs	WC % Coverage of Total Employment
	(1)	(2)	(3)	(4) = (3) / (2)	(5) = (3) / (1)
2012	142,475	150,110	127,916	85.2%	89.8%
2013	143,941	151,680	130,149	85.8%	90.4%
2014	146,319	154,218	132,791	86.1%	90.8%
2015	148,845	156,887	139,494	88.9%	93.7%
2016	151,436	159,785	138,468	86.7%	91.4%
2017	153,335	161,743	140,424	86.8%	91.6%
2018	155,763	164,396	142,635	86.8%	91.6%
2019	157,537	166,472	144,415	86.8%	91.7%
2020	147,815	155,248	135,580	87.3%	91.7%
2021	152,587	160,376	140,164	87.4%	91.9%
2022	158,298	166,805	146,312	87.7%	92.4%

a. Data on total employment as reported in the Current Population Survey (IPUMS-CPS, 2024).
b. Total Jobs are estimated by multiplying total employment by the proportional distribution of single- and muliple-jobholders. Data on the proportional distribution of single- and multiple-jobholders processed from the Integrated Public Use Microdata Series-CPS (IPUMS-CPS, 2024).
c. Workers' Compensation Covered Jobs from Table A.1 and previous editions of this report.

Source: National Academy of Social Insurance estimates.

Appendix B: Federal Programs

Various federal programs compensate certain categories of workers and their dependents for work-related injuries or illnesses. The standard approach in this report has been to include in the national totals of workers' compensation data those federally administered programs that are financed by employers and are not included in the data reported by the states. The standard approach, however, excludes programs that cover private sector or public sector workers and are financed by general federal revenues. Henceforth the "standard approach" will be referred to as Scope I. For estimates of the total costs of workers' compensation to the United States, including those financed by federal or state general revenues, please see the Scope II and Scope III data in Appendix C: Alternative Measures of Workers' Compensation Benefits and Costs.

One difficulty with the data on the costs of federal programs is the relative incomparability to state program cost data. For the state data, cost estimates for employers who purchase insurance from private carriers and state-funds are based on a given year's premiums, which include estimates of the benefits that will be paid for injuries that occur during the year plus a loading factor that covers the carriers' underwriting expenses and other administrative expenses.

For state data on the costs for self-insuring employers, costs are the sum of benefits paid in the year plus a loading factor added by the Academy in a procedure described on page 41. For most Federal programs, there are no data comparable to the state data on premiums, which includes both benefits and administrative costs. Most cost estimates in the following tables are based on benefits paid to workers in each year plus the administrative costs for that program to the extent such data are available. To this extent, the data in this Appendix are not perfectly comparable to much of the cost data in the body of the report. Federal program data on costs are comparable to state program data on employers that self-insure since the estimates of costs represent benefits paid plus administrative costs. Details on specific federal programs are provided below.

Federal Programs Included in the Academy Scope I Estimates

Federal Employees

The Federal Employees' Compensation Act of 1916 (FECA) provided the first comprehensive workers' compensation program for federal civilian employees. In 2022, as per Table B.1, total FECA benefits were

Table B.1

Federal Employees' Compensation Act, Benefits and Costs, 2018-2022 (in thousands)

	2018	2019	2020	2021	2022
Benefits					
Compensation Benefits	$1,835,333	$1,834,405	$1,818,785	$1,820,324	$1,904,324
Medical Benefits	921,028	843,601	779,234	735,604	724,885
Total Benefits	2,756,361	2,678,006	2,598,019	2,555,928	2,629,209
Administrative Costs					
Direct Administrative Costs	171,852	175,036	181,529	194,791	198,325
Indirect Administrative Costs[a]	9,746	9,747	8,630	7,318	7,318
Total Administrative Costs	181,598	184,783	190,159	202,109	205,643
Costs borne by Federal Agencies[b]	2,928,213	2,853,042	2,779,548	2,750,719	2,827,534
Costs borne by General Revenues[c]	9,746	9,747	8,630	7,318	7,318

a Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General.
b Includes "Total Benefits" and "Direct Administrative Costs."
c Includes "Indirect Administrative Costs."
Source: U.S. Department of Labor (2024b).

approximately $2.6 billion. Roughly 27.6 percent of benefits were for medical care, down almost six percentage points since 2018. The share of benefits for medical care is lower in the FECA program than in most state workers' compensation systems because federal cash benefits, particularly for higher-wage workers, replace a larger share of pre-injury wages than do most state programs.[100] Total administrative costs for the FECA program were $205.6 million in calendar year 2022, or 7.8 percent of total benefits paid (DOL, 2024a). The benefits and direct administrative costs of the FECA program are included in the national totals in Scope I. Indirect administrative costs are included in Appendix C. FECA financing is similar to the financing of workers' compensation in the private sector in that costs charged to each federal agency reflect benefits paid to the employees of that agency. In this regard, the employer is paying for the benefits (as opposed to general revenues directly).

Longshore and Harbor Workers

The Longshore and Harbor Workers' Compensation Act (LHWCA) requires employers to provide workers' compensation protection for longshore, harbor, and other maritime workers. The original program was enacted in 1927 in response to a U.S. Supreme Court decision holding that the Constitution prohibits states from extending workers' compensation coverage to maritime employees who are injured while working over navigable waters. The LHWCA excludes coverage of the master or crew of a vessel. In 1941, the Defense Base Act (DBA) extended the LHWCA to require coverage for other types of workers who fall outside the jurisdiction of state workers' compensation programs, such as employees working on overseas military bases and persons working overseas for private contractors of the United States. Other extensions of the Act have required coverage for special groups of workers, such as workers on offshore drilling rigs.

Private employers cover workers protected by the LHWCA by purchasing private insurance or self-insuring. The Division of Longshore and Harbor Workers' Compensation also administers two special funds. The first pays certain types of claims authorized under the LHWCA (e.g., for second injuries, or in cases where an employer and their workers' compensation carrier are insolvent or out of business). The special fund is underwritten by annual assessments on employers. The second, the District of Columbia Compensation Act (DCCA) Special Fund, pays benefits to DC government employees who filed claims for injuries prior to July 26, 1982, when the District of Columbia Workers' Compensation Act was enacted. As such, all benefits paid by the DCCA special fund today are for injuries prior to that date (CRS, 2021).

The Academy's data series on benefits of workers' compensation allocate part of the benefits paid under the LHWCA to the states where the companies operate, and part to federal programs. Benefits paid by private carriers under the LHWCA are not identified separately in the information provided by A.M. Best or the state agencies, so these benefits appear in Scope I in the state data. Benefits paid by private employers who self-insure under the LHWCA, and benefits paid from the LHWCA special fund, are not reported by the states or A.M. Best. Consequently, these benefits are included in Scope I in the federal data.

As shown in Table B.2, employers paid $82.1 million to the LHWCA special fund in 2022, which helped cover benefit payments of $89.3 million. Direct and indirect administrative costs to the federal government totaled approximately $14.0 million. The administrative costs of the two special funds, about $2.2 million in 2022, are financed by assessments on private employers.

Coal Miners with Black Lung Disease

The Black Lung Benefits Act, enacted in 1969, provides compensation for coal miners with pneumoconiosis (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 all coal that is mined and sold in the United States.

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100 Statutory wage-replacement rates replace, on average, about two-thirds of a workers' pre-injury gross wage subject to minimum and weekly maximum benefits, which vary by state. For FECA-covered workers, "compensation is generally paid at the rate of two-thirds of the salary if the employee has no dependents, and three-fourths of the salary if one or more dependents are claimed" (DOL Employment Standards Administration).

Table B.2

Longshore and Harbor Workers' Compensation Act (LHWCA), Benefits, Costs, and Death Claims,[a] 2018-2022 (in thousands)

	2018	2019	2020	2021	2022
Benefits					
Insurance Carriers[a]	$739,257	$696,626	$671,379	$851,908	$928,108
Self-Insured Employers	414,077	424,283	404,819	407,975	445,392
LHWCA Special Fund	102,612	99,518	99,230	93,488	89,313
DCCA Special Fund[b]	6,864	6,411	5,779	4,410	5,628
Defense Base Act[a,c]	562,021	521,749	514,641	706,856	798,106
Total Benefits	1,824,830	1,748,587	1,695,848	2,064,638	2,266,547
Administrative Costs					
General Revenue	12,643	12,740	12,731	12,734	12,966
Special Funds	2,164	2,172	2,174	2,177	2,195
Indirect Administrative Costs[d]	949	889	1,080	1,027	1,017
Total Administrative Costs	15,756	15,801	15,985	15,939	16,178
Employer Assessments					
LHWCA Special Fund Assessment	106,159	91,478	101,929	81,677	82,084
DCCA Special Fund Assessment[b]	7,386	5,017	5,779	4,410	5,628
Total Employer Assessments	113,545	96,495	107,708	86,087	87,712
Costs borne by Private Employers[e]	1,938,375	1,845,082	1,803,556	2,150,724	2,354,259
Costs borne by General Revenues[f]	13,592	13,629	13,811	13,761	13,983

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

b The District of Columbia Workmen's Compensation Act Special Fund is an extension of the LHWCA to provide workers' compensation benefits in certain employments in the District of Columbia.

c Civilian overseas deaths in 2018 totaled 74; 2019 totaled 62; 2020 totaled 101; 2021 totaled 114; and 2022 totaled 54.

d 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 through general revenue appropriations.

e Equal to sum of "Insurance Carriers," "Self-Insured Employers," "Defense Base Act," LHWCA Special Fund Assessment," and "DCCA Special Fund Assessment." Does not include special fund administrative costs as they are financed by the employer assessments. Special fund benefits in each year are funded by prior years' assessments.

f Includes administrative costs paid out of general revenues, and indirect administrative costs.

Source: U.S. Department of Labor (2024a).

In this report, only the Part C benefits that are financed by employers are included in Scope I. Benefits under Part C are paid directly by the responsible mine operator or insurer, or otherwise from the federal Black Lung Disability Trust Fund

Table B.3 shows benefits paid under both parts of the black lung program from 2018 through 2022. Total benefits in 2022 were $181.7 million, of which $51.4 million was paid under Part B and $130.4 million under Part C. Part C benefits included $33.6 million for medical care (25.8% of Part C benefits paid). Medical benefits are a relatively 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.

Table B.3 also shows accounting data for the Black Lung Trust Fund, and federal costs for administering the program. In 2022, direct administrative costs for

Table B.3

Black Lung Benefits Act, Benefits and Costs, 2018-2022 (in thousands)

	2018	2019	2020	2021	2022
Benefits					
Part B Compensation	$72,297	$63,477	$60,983	$34,887	$51,350
Part C Compensation	129,674	126,664	124,621	125,455	96,827
Part C Medical Benefits	45,000	39,896	32,421	30,795	33,590
Total Benefits	246,972	230,037	218,025	191,136	181,767
Costs of Past Benefits					
Interest Payments on Past Advances[a]	2,890,135	3,785,000	3,938,800	4,529,450	4,665,597
Bond Payments[b]	465,860	185,039	199,300	213,890	228,783
Total Current Costs of Past Benefits	3,355,994	3,970,039	4,138,100	4,743,340	4,894,380
Administrative Costs					
Part B (SSA)	5,040	4,924	4,763	4,842	4,915
Part C (DOL)	35,590	35,785	36,517	38,414	39,128
Indirect Administrative Costs[c]	30,681	30,955	31,699	32,984	36,435
Total Administrative Costs	71,311	71,664	72,979	76,239	80,478
Employer Assessments					
Coal Tax Paid by Employers	342,443	237,848	297,585	259,579	208,924
Deferred Costs					
Trust Fund Advances from U.S. Treasury[d]	1,892,500	1,983,150	2,292,225	2,291,548	2,604,258
Costs borne by Private Employers[e]	342,443	237,848	297,585	259,579	208,924
Costs borne by General Revenues[f]	2,000,518	2,082,507	2,389,670	2,364,260	2,696,958
Costs borne by the Black Lung Trust Fund[g]	3,566,259	4,172,384	4,331,659	4,938,004	5,063,924

a 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 Emergency Economic Stabilization Act of 2008 (EESA).
b Repayment of bond principal and interest on principal debt as required by the Trust Fund debt restructuring portion of the EESA.
c Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General, services provided by the Department of the Treasury, and costs for the Office of Administrative Law Judges (OALJ) and the Benefits Review Board (BRB). OALJ and BRB costs are not included for any other program but cannot be separately identified for Coal Mine Workers' Compensation.
d Advance of funds required when Trust Fund expenses exceed tax revenues received in a given year. Under the 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.
e Equal to "Coal Tax Paid by Employers."
f Includes Part B compensation, Part B administrative costs, indirect administrative costs, and trust fund advances from the U.S. treasury.
g Includes "Part C Compensation," "Part C Medical Benefits," "Interest Payments on Past Advances," "Bond Payments," and "Part C" administrative costs.

Source: U.S. Department of Labor (2024a).

Table B.4

Benefits and Costs of the Energy Employees Occupational Illness Compensation Program Act: Parts B and E, 2018-2022 (in thousands)

	2018	2019	2020	2021	2022
Benefits					
Part B					
Medical Benefits[a]	$678,134	$763,192	$796,307	$891,897	$999,307
Compensation Benefits	258,389	263,879	250,409	170,910	226,615
Part E[b]					
Medical Benefits[c]	90,726	116,038	146,928	191,281	245,669
Compensation Benefits	335,859	357,166	393,939	440,184	458,661
Total Benefits	1,363,109	1,500,276	1,587,582	1,694,271	1,930,253
Administrative Costs					
Part B					
Direct Administrative Costs[d]	55,540	53,823	56,195	58,403	57,271
Indirect Administrative Costs[e]	1,340	1,427	1,322	1,199	1,195
Part E					
Direct Administrative Costs[d]	71,466	71,560	71,577	72,251	72,990
Indirect Administrative Costs[e]	657	750	700	639	538
Total Administrative Costs	129,004	127,560	129,794	132,491	131,995
Total Costs (Benefits and Admin Costs)	1,492,112	1,627,836	1,717,376	1,826,762	2,062,248

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

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

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

d Part B costs for 2002-2008 include funding for the Department of Health and Human Services/National Institute for Occupational Safety and Health's (DHHS/NIOSH) conduct of dose reconstructions and special exposure cohort determinations. For 2002, these costs were $32.7 million; 2003, $26.8 million; 2004, $51.7 million; 2005, $50.5 million; 2006, $58.6 million; 2007, $55.0 million; and 2008, $41.5 million. Beginning in 2009, these costs are a direct appropriation to DHHS/NIOSH. Part B costs for 2009-18 include funding for an Ombudsman position. For 2009, these costs were $0.1 million; 2010, $0.4 million; 2011, $0.2 million; 2012, $0.3 million; 2013, $0.5 million; 2014, $0.6 million; and 2015, $0.6 million; 2016, $0.7 million; 2017, $0.8 million; 2018, $0.7 million; 2019, $0.7 million; 2020, $0.5 million; 2021, $0.3 million; and 2022, $0.5 million. Part E costs for 2005-22 also include funding for an Ombudsman position. For 2005 these costs were $0.2 million; 2006, $0.5 million; 2007, $0.7 million; 2008, $0.8 million; 2009, $0.8 million; 2010, $0.5 million; 2011, $0.8 million; 2012, $0.8 million; 2013, $0.8 million; 2014, $0.8 million; 2015, $0.7 million; 2016, $0.7 million; 2017, $0.9 million; 2018, $0.9 million; 2019, $0.8 million; 2020, $0.6 million; 2021, $0.8 million; and $0.6 million for 2022.

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

Source: U.S. Department of Labor (2024a).

Part C were $39.1 million. Together with benefit payments of $130.4 million, expenditures under Part C were $169.5 million. Employers paid $208.9 million into the trust fund in 2022, but payments on past debt, totaling $4.9 billion in 2022, far exceeded the extra revenues.

To the extent that treasury loans to the Trust Fund are funded by general revenues, "Trust Fund Advances from the U.S. Treasury" are included under "Costs borne by General Revenues." A recent Government Accountability Office testimony stated that "under federal law the Trust Fund borrows from Treasury's general fund when necessary to cover its expenditures. Federal law does not limit the amount the Trust Fund may borrow from Treasury's general fund—and hence from the taxpayer—as needed to cover its relevant expenditures" (GAO, 2019). Assuming the borrowed money is paid back, these advances will not represent costs against general revenues in the long-run, though the aforementioned GAO testimony is not optimistic about the Trust Fund's financial future under current law. The financial state of the Trust Fund may be further worsened by recent increases in rates of both black lung disease and the most severe cases of black lung among coal miners (Boden, 2022). As the coal tax and Treasury advances provide income which allows the Trust Fund to cover its obligations, it is not appropriate to add any of the three latter items in the table.

No data are available on the experience of employers who self-insure under the black lung program. Any such benefits and costs are not reflected in Table B.3 and are not included anywhere in the report.

Federal Programs Included in Academy Scope II Estimates

Energy Employees

Part B of the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) provides workers' compensation benefits 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. The program pays medical benefits for the treatment of covered conditions, and lump sum cash payments of up to $150,000 for eligible workers.

Part E of the EEOICPA provides compensation for employees of Department of Energy contractors and for uranium miners, millers, and ore transporters who become injured on the job. Workers (or their qualifying survivors) are eligible for cash awards of up to $250,000. Wage loss, medical, and survivor benefits are also provided under certain conditions.

Table B.5

Section 4 Radiation Exposure Compensation Act, Benefits Approved and Costs, 2018-2022 (in thousands)

	2018	2019	2020	2021	2022
Total Benefits Approved[a]	$61,808	$60,482	$53,757	$58,503	$62,266
Total Administrative Costs[b,c]	2,407	2,356	2,094	2,279	2,425
Total Costs (Benefits and Admin Costs)	64,215	62,837	55,850	60,781	64,691

a Only Section 4 (downwinders and on-site) are shown here as "the National Defense Authorization Act for FY 2005 contained language requiring the Energy Employees Occupational Illness Compensation Fund to pay uranium workers – uranium miners, millers, and ore transporters" (DOJ, 2024). Section 5 beneficiaries are thus captured in Table B.4.

b RECA "established monetary compensation for individuals who contracted specified diseases in three defined populations," and is thus very striaghtforward to administer. As of March 2019, the program was "administered by a staff of five attorneys, eight claims examiners, and eight contractors within the Constitutional and Specialized Torts Section of the Civil Division's Torts Branch."

c A job posting in August of 2020 by the U.S. Department of Justice Civil Division for a trial attorney position indicated a salary between $86,335 and $157,709 per year. Glassdoor indicated average salaries in August of 2020 of $80,555 and $44,500 for a Department of Labor claims examiner and a Department of Justice paralegal specialist, respectively. Using the average salary for the trial attorney position ($122,022) and the figures from Glassdoor, then multiplying by the staff numbers in note "b" yields administrative salary costs of $1,610,550. We then multiply that figure by 1.3, assuming an additional 30% of administrative costs beyond salary costs. This method is used to estimate administrative costs in 2020. An equal portion of administrative costs is assumed for 2018-2019 and 2021-2022.

Source: U.S. Department of Justice (2024).

Table B.4 provides information on benefits and costs of both Parts B and E of the EEOICPA for 2018-2022. In 2022, total benefits paid under Part B were $1.2 billion, of which $226.6 million (18.5%) were paid as compensation benefits (DOL, 2024a). Part E benefits in 2022 were $704.3 million, of which $458.7 million (65.1%) were compensation. Benefits under both Parts B and E are financed by general federal revenues and are not included in our national totals. Benefits and costs associated with Part B and Part E are included in Scope II and Scope III in Appendix C.

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 testing or during employment in underground uranium mines. The lump sum payments are specified by law and range from $50,000 to $100,000. Table B.5 shows annual approved benefits under the Radiation Exposure Compensation Act (RECA) from 2018 through 2022. The $62.3 million in benefits approved in 2022 represents a 6.4 percent increase from 2021 and an increase of 0.7 percent over the five- year study period (DOJ, 2024). The program is financed with federal general revenues and is not included in national totals in this report. Benefits and costs associated with RECA are included in Scope II and Scope III in Appendix C.

Federal Programs Included in Academy Scope III Estimates

Veterans of Military Service

U.S. military personnel are covered by the Federal Veterans' Compensation Program of the Department of Veterans Affairs (VA). The program provides cash benefits to veterans who sustain total or partial disabilities while on active duty. This program includes four sub-categories under which benefits may be paid: Disability Compensation, Dependency and Indemnity Compensation (DIC), Special Monthly Compensation (SMC), and Claims Based on Special Circumstances (VA, 2018). For the purposes of this report, we only discuss the former two options, which more closely mirror the types of benefit payments under state workers' compensation programs.

Table B.6 shows the number of recipients, and the value of cash benefits paid, and estimates of administrative costs for 2018 through 2022. In 2022, 5.54 million veterans were receiving monthly compensation payments for service-connected disabilities. Of this group, 70 percent had a disability rating of 30 percent or more.

Due to its large number of beneficiaries, the inclusion of a high proportion of serious injuries, and the provision of medical care through an entirely separate health care system, Veterans' Compensation data are included only in Scope III of the data estimates in Appendix C.

Federal Programs Not Included in Academy Estimates

Railroad Employees and Merchant Mariners

Federal laws specify employee benefits for railroad workers involved in interstate commerce, and for merchant mariners. These programs provide health insurance as well as short- and long-term cash benefits for ill or injured workers whether or not their conditions are work-related. The benefits are not exclusively workers' compensation benefits and are not included in our national totals. Under federal laws, these workers also retain the right to bring tort suits against their employers if the worker believes a work-related injury or illness was caused by employer negligence (Williams and Barth, 1973).

Table B.6

Federal Veterans' Compensation, Benefits and Costs, 2018-2022 (in thousands)

	2018	2019	2020	2021	2022
Recipients					
Veterans Less than 30 Percent Disabled[a]	1,735	1,726	1,700	1,672	1,641
Veterans 30 Percent Disabled or More	3,109	3,287	3,454	3,649	3,898
Total Recipients	4,844	5,013	5,154	5,321	5,540
Benefits					
Disability Compensation Benefits	$80,812,210	$88,170,569	$94,984,594	$105,300,513	$122,573,330
Survivors DIC Benefits[b]	7,035,000	7,380,000	7,720,000	8,295,000	9,265,000
Total Benefits	87,847,210	95,550,569	102,704,594	113,595,513	131,838,330
Administrative Costs					
Direct Administrative Costs[c]	2,342,942	2,131,945	2,227,882	2,626,819	2,911,183
Indirect Administrative Costs[d]	1,310,746	1,399,178	1,439,916	1,595,313	2,059,391
Total Administrative Costs	3,653,688	3,531,123	3,667,798	4,222,132	4,970,574
Total Costs (Benefits + Admin Costs)	91,500,898	99,081,692	106,372,392	117,817,645	136,808,904

a Does not receive dependency benefit.

b Dependency and Indemnity Compensation and Death Compensation.

c These figures come from the "General Operating Expenses" line of the VA Agency Financial Report, and are multiplied according to the portion of total VBA benefits accounted for by Veterans' Comp and Survivors DIC benefits.

d These figures come from the "Indirect Administrative Program Costs" line of the VA Agency Financial Report, and are multiplied according to the portion of total VA program costs accounted for by the VBA, and then according to the portion of total VBA benefits accounted for by Veterans' Comp and Survivors DIC benefits.

Source: U.S. Department of Veterans Affairs (2023 and 2024).

Appendix C: Three Measures of Workers' Compensation Benefits, Costs, and Coverage[101]

Summary

Three measures of the scope of workers' compensation programs in the United States are examined in this Appendix. Each has its merits and limitations.

The **Standard Approach** represents the measures of benefits and costs of the workers' compensation programs that are paid directly by employers and employees. This approach is the only measure of workers' compensation programs that has been used in previous versions of the Academy report and in the main text of this year's edition. The Standard Approach will continue to be the primary measure of the workers' compensation that will be used in subsequent years in order to maintain continuity of the Academy data. In 2022, the Standard Approach indicates that the workers' compensation system paid $61.7 billion in benefits to workers and that costs totaled $103 billion.

The **Augmented Approach** represents a measure of benefits and costs of the workers' compensation that adds those workers' compensation programs that are paid from general revenues of states or the Federal government. The additional benefits provide a more comprehensive measure of the assistance provided to workers disabled at the workplace by workers' compensation programs as well as a better accounting of the costs to society (including taxpayers) of the costs of the programs. A drawback of the Augmented Approach is that considerable effort is required to collect the data. In 2022, the Augmented Approach accounted for an additional $2 billion in benefits paid to workers and an additional $4.9 billion in total costs.

The **Expansive Approach** adds the benefits and costs of the Federal Veterans' Compensation Program, which provides benefits to veterans who "are disabled by injury or disease incurred in or aggravated during active military service." This program arguably is not a workers' compensation program. However, the Academy Report on *Workers' Compensation Benefits, Costs, and Coverage* has included the Veterans Program in its list of Federal Programs in the Appendix since the 2003 edition. In 2022, the Expansive Approach accounted for an additional $131.8 billion to the benefits and $136.8 billion to the costs of programs for persons disabled in their occupations.

Introduction to Three Measures of the Scope of Workers' Compensation Programs

Three measures of the scope of workers' compensation programs in the United States are examined in this Appendix. The Appendix will also explore which benefits and costs associated with work-related injuries and diseases should be included in or excluded from the Academy's data.

Scope I—Standard: workers' compensation programs for civilian workers prescribed by state or federal laws that are *paid directly by employers or workers*. This **standard approach** has been used (with minor exceptions discussed below) in previous editions of *Workers' Compensation: Benefits, Costs, and Coverage* published by the National Academy of Social Insurance. The standard approach is also used in all tables, figures, and text in the 2022 data report except for Appendix C.

Scope II—Augmented: Scope I plus workers' compensation programs for civilian workers prescribed by state or federal government laws *paid from general revenues of state or federal governments*. This **augmented approach** is introduced in this Appendix.

Scope III—Expansive: Scope II plus workers' compensation programs for *veterans* prescribed by state or federal government laws that are paid directly by employers, workers, or from general revenues of state or federal governments.[102] This **expansive approach** is also introduced in this Appendix.

101 This new expanded version of Appendix C was developed jointly by John Burton and Griffin Murphy in August 2020. Appendix C in its current form was included for the first time in the 2018 data report on workers' compensation published by the Academy.

102 Veterans are technically "civilians," so they may receive benefits from veterans' compensation programs in addition to from programs under the Standard and/or Augmented scopes depending on their circumstances.

Definition of Workers' Compensation Programs

Workers' compensation programs are no-fault statutory programs that (a) provide medical and/or cash benefits to current or former workers who receive benefits because they have an impairment and/or disability caused by a work-related injury or disease, or (b) provide cash benefits or other benefits to survivors of workers who died as a result of a work-related injury or disease. It is important to clearly define the key elements of this definition.

- An *impairment* is an anatomic or functional abnormality or loss resulting from an injury or disease. The impairment can be physical or mental.[103]
- A *disability* is a loss of earning capacity and/or an actual loss of earnings.[104]
- *Work-related* means the worker meets the compensability requirements in the jurisdiction's workers' compensation statute.[105]
- The workers' compensation program also includes these definitions:
  - the worker is entitled to workers' compensation benefits even if he or she is negligent;
  - the worker is entitled to workers' compensation benefits even if the employer is not negligent;
  - workers' compensation is the worker's exclusive remedy against the employer even if the employer is negligent.

Which Programs Should be Included in NASI Measures of Workers' Compensation Benefits, Costs, and Coverage

Scope I—Standard

Workers' compensation programs for civilian workers prescribed by state or federal laws that are paid directly by employers or workers.

In most states, the direct costs of the workers' compensation programs are paid by employers who either purchase insurance (from private carriers or state funds) or self-insure and thus pay the costs directly. In three states, however, a portion of the direct costs of workers' compensation is paid by employees.

States in Which Costs Are Paid by Employees. New Mexico applies a per-capita assessment based on employment on the last day of the quarter. Since 2004, the quarterly workers' compensation fee has been $4.30 per covered worker, which is split between employers and employees. The employers' share is $2.30 per covered worker, and the employees' share is $2.00. Most of the total fee ($2.00 from employers and $2.00 from employees) is now used primarily to fund the operation of the New Mexico Workers' Compensation Administration. (Funds from General Revenue previously paid for these administrative costs.) The additional $0.30 per covered worker is paid by employers to fund the Workers' Compensation Uninsured Employers Fund.

Oregon assesses employers and employees for the Workers' Benefit Fund, which pays monthly cost-of-living increases for workers. Between April of 2014 and 2016, the Oregon Workers Benefit Fund Assessment was 3.3 cents per hour worked – employers paid 1.65 cents and workers paid 1.65 cents per hour. In 2017 and 2018, the assessment fell to 2.8

103 The National Commission on State Workmen's Compensation Laws defines impairment as "an anatomic or functional abnormality or loss" (Williams and Barth, 1973).

104 The National Commission defines disability as "loss of actual earnings or earning capacity as a consequence of impairment."

105 Compensability rules vary among jurisdictions. Larson and Robinson (2017) indicate that in the typical act "an employee is automatically entitled to certain benefits whenever the employee suffers 'a personal injury by accident arising out of or in the course of employment' or an occupational disease."

cents per hour worked—1.4 cents per hour for each party. The assessment fell once again in 2019 to 2.4 cents per hour worked, and in 2020 to 2.2 cents per hour worked. It was unchanged in 2021 and 2022.

Washington state employees pay part of the workers' compensation premium costs through payroll deductions. These deductions go toward state fund medical benefits and cost-of-living adjustments for the Supplemental Pension Fund. In 2022, employees contributed 27.3 percent of state fund premiums and paid half of the cost-of-living adjustment premium for the aforementioned fund.

Treatment of the Costs Paid by Employees in Academy Reports. Prior to the *2019 Academy Report*, costs paid by workers in Washington were included as costs of the program, but the costs paid by workers in New Mexico and Oregon were not included.[106] There are four reasons why all payments by workers to a workers' compensation program should be included as costs of the program:

- To provide results that are consistent across all states.
- To provide a more accurate measure of the costs of workers' compensation programs.
- To ensure that the data for both benefits and costs are accurate for workers in New Mexico and Oregon. Prior to 2019, the benefits received by injured workers who paid for part of the costs of workers' compensation in New Mexico and Oregon were included in the Academy data for those states, but the costs were not, and it is misleading to include the benefits but not the costs.
- To recognize the distinction between the nominal incidence of the costs of a program and the actual incidence. The nominal incidence for employees is the assessments, fees, or payroll deductions paid by employees in New Mexico, Oregon, and Washington. In other states, workers' compensation is nominally free for employees, as there are no explicit taxes or payroll reductions to fund the program. In all cases, the actual incidence of the program is the nominal incidence plus any reduction in wages that is the result of being covered by a workers' compensation program. As such, although the employees in these three states face different nominal costs, these costs should not be distinguished from "employer costs" in any strict sense.[107]

Data on Costs Paid by Employees. Based on these four reasons, the Academy now includes employee contributions in all tables, figures, and analysis in the annual reports on *Workers' Compensation: Benefits, Costs, and Coverage*.[108] The amounts for the last five years are shown in Table C.1.

The importance of the employee costs relative to the total costs of the program varies substantially among the three states. In New Mexico, the $6.2 million of costs paid by employees represented 1.4 percent of the total costs of $459.3 million in 2022. In Oregon, the $34.5 million of employee costs represented 2.8 percent of the total costs of $1.2 billion for the workers' compensation program in 2022. In Washington, the employee contributions were a much more important share of program costs than in the two other states. The costs paid by employees of $787 million represented 23.4 percent of the total costs of $3.4 billion in Washington in 2022.

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106 A note in Table 13. *Workers' Compensation Cost by Type of Insurer, 1996-2016* indicates that "Employee contributions to workers' compensation costs in Washington state are included in the total from 2011 to 2016" (McLaren et al., 2018).

107 Most labor economists understand that employers bear the nominal incidence of workers' compensation insurance because the premiums are paid by those employers. However, these economists assert that a substantial portion of the actual cost of workers' compensation is paid by workers in the form of wages that are lower than the workers would have received in the absence of workers' compensation. While the degree of cost shifting to workers may have changed to some degree since the 1990s, the consensus remains that it is invalid and misleading to assess who pays for the costs of the program by focusing solely on the nominal share paid by employers.

A review of the theory and empirical findings by Chelius and Burton (1994) reached this conclusion: *"a substantial portion of workers' compensation costs (and even, according to some estimates, all of the costs) are shifted onto workers* [emphasis in original]." Leigh, et al. (2000) provide another survey of the incidence of the costs of workers' compensation. They noted a lack of consensus among economists but offered this "suggestion" for the incidence of workers' compensation costs: employers 40 percent; consumers 20 percent; and workers 40 percent.

108 Employee costs in these states are included in Tables 13 and 14. In Table 13, costs are allocated by using the ratios of privately insured benefits, state fund insured benefits, and self-insured benefits to total benefits.

Table C.1

Employee Costs, Employer Costs, and Benefits for States in which Employees Directly Pay for a Portion of the Workers' Compensation Program, 2018–2022 (Millions of Dollars)

	2018	2019	2020	2021	2022
New Mexico					
Employee Costs	6.2	6.3	5.8	6.0	6.2
Employer Costs	450.1	469.2	402.2	406.3	453.1
Employee Costs as a percent of Total Costs	1.4%	1.3%	1.4%	1.4%	1.4%
Total Costs	456.2	475.4	408.1	412.2	459.3
Benefits	302.9	320.6	287.8	267.6	273.8
Oregon					
Employee Costs	43.0	37.6	32.8	33.7	34.5
Employer Costs	1,013.2	1,031.8	965.0	1,084.7	1,180.5
Employee Costs as a percent of Total Costs	4.1%	3.5%	3.3%	3.0%	2.8%
Total Costs	1,056.2	1,069.5	997.9	1,118.4	1,214.9
Benefits	667.3	697.8	685.1	714.8	773.3
Washington					
Employee Costs	706.9	699.5	658.3	741.6	787.0
Employer Costs	2,527.6	2,432.4	2,267.5	2,468.5	2,570.0
Employee Costs as a percent of Total Costs	21.9%	22.3%	22.5%	23.1%	23.4%
Total Costs	3,234.5	3,131.9	2,925.7	3,210.1	3,357.1
Benefits	2,536.4	2,614.3	2,620.2	2,765.7	2,936.3
Total					
Employee Costs	756.1	743.4	697.0	781.2	827.8
Employer Costs	3,990.9	3,933.4	3,634.7	3,959.5	4,203.6
Total Costs	4,746.9	4,676.8	4,331.7	4,740.7	5,031.3
Benefits	3,506.6	3,632.8	3,593.1	3,748.1	3,983.4

Sources: New Mexico Workers' Compensation Administration Economic Research & Policy Bureau; Oregon Department of Consumer and Business Services; and Washington State Department of Labor & Industries.

The employee contribution in the three states of $827.8 million represent only 0.80% of the national total. Nonetheless, the inclusion of the costs paid by employees provides a more accurate measure of the magnitude of the program.

Scope II—Augmented:

Workers' compensation programs for civilian workers prescribed by state or federal laws that are paid directly by employers or workers or from general revenues of a state or federal government.

Previous Coverage of Workers' Compensation Programs in the Academy Report. Data reports prior to the 2018 report (published in 2020) restricted the data on benefits, costs, and coverage to those workers' compensation programs for which the costs are paid by employers or workers in the form of (1) insurance premiums to private or public insurers, (2) direct payment by employers of benefits to workers or to health care providers, and (3) payments by workers in the form of assessments or a portion of the insurance premiums. (This represents the Standard Approach.)

This 2022 data report (page 5) provides additional information on the scope of the report:

> The Academy has established a "standard approach" in determining which workers' compensation programs to include in the estimates presented in the main text, tables, and figures. This standard approach includes workers' compensation programs prescribed by state or federal laws for which costs are paid directly by employers or workers. The scope of this approach includes: all state workers' compensation programs; the Federal Employees' Compensation Act (FECA), which provides benefits to federal workers; the portion of the Longshore and Harbor Workers Act (LHWCA) paid by employers, which provides protection to longshore, harbor, and other maritime workers; and the portion of the Black Lung Benefits Act financed by employers, which provides compensation to coal miners with black lung disease.

Analysis of the Previous Coverage of Workers' Compensation Programs. The previous procedure used by the Academy (the Standard Approach) only considers the coverage, benefits, and costs of workers' compensation programs that are financed by employers or workers.

The exclusion of programs that are not financed by employers or workers underestimates the full extent of coverage, benefits, and costs of workers' compensation programs in the United States. Accurately measured, workers' compensation programs provide more benefits to disabled workers and their survivors than the $62.0 billion reported by NASI for 2017 (*2019 Academy Report*: Table 1). And while, according to the *2019 Academy Report* (Table 1), the costs to employers of workers' compensation in 2017 were $97.4 billion, the total costs to the economy include not just costs directly paid by employers and workers, but the costs of the workers' compensation program paid from general revenues, which are in turn are paid for by taxes on employers and individuals. This means that past Academy reports understated both benefits and costs.

The Scope II—Augmented version of coverage includes the costs of workers' compensation programs (or portions of programs) that are funded by general revenues, and any benefits associated with the general revenue funding. This approach excludes payments under the Federal Veterans' Compensation Program due to its unique structure and magnitude relative to other workers' compensation-like programs. (The inclusion of the benefits and costs of the Federal Veterans' Compensation Program in Scope III—Expansive is discussed in the next subsection.)

Which federal programs are already included in the current coverage of workers' compensation data by relying on Scope I coverage?

- The Federal Employees Compensation Act (FECA)
  - Total benefits and direct administrative costs
- The Longshore and Harbor Workers' Compensation Act (LHWCA)
  - Total benefits and special fund administrative costs
- The Black Lung Benefits Act
  - Part C benefits, costs of past benefits, and Part C administrative costs

Which federal or state programs (or portions of programs) are added to the current coverage of workers' compensation programs by adopting Scope II—Augmented coverage?

The additional Federal programs (or portions of programs) shown in Table C.2 include:

- The Federal Employees Compensation Act (FECA)
  - Indirect administrative costs
- The Longshore and Harbor Workers' Compensation Act (LHWCA)
  - Administrative costs paid by general revenues and indirect administrative costs
- The Black Lung Benefits Act paid from general revenue
  - Part B benefits, Part B administrative costs, indirect administrative costs, and advances from the U.S. Treasury
- The Energy Employees Occupational Illness Compensation Act (EEIOCPA)
- The Radiation Exposure Compensation Act (RECA) of 1990

In addition to these Federal programs, which are funded at least in part by general revenues, Table C.2 also includes limited information on state workers' compensation programs for which benefits and/or costs are financed from general revenue and thus fall within the Scope II—Augmented definition of coverage. However, the only state programs which rely on general revenues and for which there is available data are Alaska and Rhode Island. Further research is needed regarding the extent to which other state programs are general revenue financed.

The results in Table C.2 show that the additional costs associated with the Augmented Approach (Scope II) increased from $3.6 billion in 2018 to $4.9 billion in 2022, or by 35.1 percent. Over the same period, the total amount of benefits added by the Augmented Approach increased from $1.5 billion to $2.0 billion, which represents a 36.5 percent increase.

The information in Table C.3 helps to assess the difference in costs and benefits associated with the augmented approach (Table C.2), versus the standard approach. The Scope I—Standard entries in Table C.3 are the data included in the Tables and Figures in the 2022 data report. Table C.3 also includes the totals from Table C.2 showing the amounts of benefits and costs added by Scope II— Augmented.

The Standard Approach indicates that the costs of workers' compensation programs in 2022 were $103.0 billion. The additional costs associated with the Augmented Approach were $4.9 billion, which represents a 4.7 percent increase in costs. The combined costs of the Scope I—Standard and Scope II—Augmented measures are $107.8 billion.

The Standard Approach indicates that the benefits provided by workers' compensation in 2022 were $61.7 billion. The additional benefits associated with the Augmented Approach were $2.0 billion, which represents a 3.3 percent increase in benefits. The combined benefits of the Scope I and Scope II measures in 2022 are $63.7 billion.

Scope III—Expansive:

Workers' compensation programs for civilian workers and veterans prescribed by state or federal laws that are paid directly by employers or workers or from general revenues of a state or the federal government

Scope III—Expansive is the most inclusive measure of the costs and benefits of workers' compensation programs because it adds data on the Federal Veterans' Compensation Program to the programs included in Scope II. The data on the detailed information on the Federal Veterans' Compensation Program are included in Appendix Table B.6. The data in Table C.4 pertain to the benefits paid to veterans "who are disabled by injury or disease incurred in or aggravated during active military service."

The results in Table C.4 show that the costs of the Federal Veterans' Compensation Program increased from $99.1 billion in 2018 to $136.8 billion in 2022, which is a 38.1 percent increase over five years. The benefits paid to disabled veterans increased from $87.8 billion in 2018 to $131.8 billion in 2022,

Table C.2

Costs of Workers' Compensation Programs Paid from General Revenue and Benefits Associated with those Payments: The Augmented Approach (Millions of Dollars)

	2018	2019	2020	2021	2022
Federal Programs[a]					
FECA					
Costs	10	10	9	7	7
LHWCA					
Costs	14	14	14	14	14
Black Lung					
Costs	2,001	2,083	2,390	2,364	2,697
Benefits	72	63	61	35	51
EEIOCPA					
Costs	1,492	1,628	1,717	1,827	2,062
Benefits	1,363	1,500	1,588	1,694	1,930
Radiation					
Costs	62	60	54	59	62
Benefits	62	60	54	59	62
State Programs					
Alaska[b]					
Costs	13	13	10	10	10
Rhode Island[c]					
Costs	18	18	18	18	17
Total of Augmented Costs and Benefits					
Costs	3,599	3,815	4,205	4,292	4,863
Benefits	1,497	1,624	1,702	1,788	2,044

a See Appendix B for more information on federal programs.

b In 2022, Alaska allocated $6.0 million of general revenue to its WC program and $4.5 million toward special funds.

c Contact did not indicate use of revenue.

Sources: U.S. Department of Labor (2024a); U.S. Department of Justice (2024); and Rhode Island Department of Labor and Training.

which is an increase of 50.1 percent over the five-year period.

How significant are the costs and benefits associated with the Expanded Approach shown in Table C.4? The information included in Table C.5 helps answer that question. The Scope I—Standard entries in Table C.5 are the data included in the Tables and Figures in the 2021 data report. Table C.5 also includes the totals from Table C.3 showing the cumulative

Table C.3

Costs and Benefits in Scope I (Standard Approach) and Scope II (Augmented Approach) (Millions of Dollars)

	2018	2019	2020	2021	2022
Scope I					
Costs	101,577	100,349	93,465	95,862	102,982
Benefits	62,879	62,882	59,263	59,724	61,697
Additional Costs and Benefits in Scope II					
Costs	3,599	3,815	4,205	4,292	4,863
Benefits	1,497	1,624	1,702	1,788	2,044
Scopes I and II, Cumulative					
Costs	105,176	104,164	97,671	100,153	107,845
Benefits	64,376	64,506	60,966	61,512	63,740

amounts of benefits and costs associated with Scope I—Standard and Scope II—Augmented.

The cumulative amount of the Standard Approach and the Augmented Approach indicates that the costs of workers' compensation programs in 2022 were $107.8 billion. The additional costs associated with the Expanded Approach, which includes the Federal Veterans' Compensation Program, were $136.8 billion, a 127 percent increase relative to when those costs are excluded. In 2022, the Expanded Approach costs totaled $244.7 billion. The cumulative amount of the Standard Approach and the Augmented Approach indicates that the benefits paid by workers' compensation programs in 2022 were $63.7 billion. The additional benefits associated with the Expanded Approach were $131.8 billion, which represents a 207 percent increase in benefits due to the inclusion of the Federal Veterans' Compensation Program. In 2022, the Expanded Approach benefits totaled $195.6 billion.

Public and private programs that should not be included in the report's measures of benefits, costs, and coverage

Several programs that provide cash or medical benefits to disabled workers, their dependents, or their survivors are not included in the Academy's data because these programs do not comply with the definition of workers' compensation programs presented in this Appendix.

Public Programs

Several public programs that provide cash and/or medical benefits should continue to be excluded from Academy's reports because they do not meet the Academy's definition of workers' compensation:

- The benefits and costs of the Social Security Disability Insurance Program. This program does not meet the definition of a workers' compensation program because the benefits are not restricted to workers disabled by a work-related injury or disease.
- The benefits and costs of Temporary Disability Insurance Programs available in several states. These programs do not meet the definition of a workers' compensation program since benefits are not restricted to workers disabled by a work-related injury or disease.
- The cash benefits, medical care, or damages received by disabled workers under the Federal Employers' Liability Act of 1908 (FELA), which applies to interstate railroad workers disabled on the job. The Act *inter alia* allows

Table C.4

Costs and Benefits of the Federal Veterans' Compensation Program (Millions of Dollars)

	2018	2019	2020	2021	2022
Costs	99,082	99,082	106,372	117,818	136,809
Benefits	87,847	95,551	102,705	113,596	131,838

Source: U.S. Department of Veterans' Affairs (2023; 2024)

workers to sue their employers for negligence in industrial accidents.[109]

- The cash benefits, medical care, and damages received by disabled workers under the Jones Act of 1920, which allows merchant seamen to sue their employers for negligence under statutory provisions similar to the FELA.[110]
- The benefits provided by the September 11th Victim Compensation Fund (VCF). The benefits are not limited to workers but are also available to "certain persons who lived, worked, or were near the World Trade Center on September 11, 2001." (Szymendera 2019).

Programs Provided by Employers and Other Remedies

Employee benefits plans other than workers' compensation that provide cash or medical benefits to workers with disabilities should not be included as a cost of workers' compensation since the plans are not based on a statute and/or are provided to workers whether or not their disabilities are work-related. These employee benefit plans include:

- Paid sick leave, as described on page 59 in the Addendum to this year's report.
- Long-term disability benefits, as described on page 60 of the Addendum to this year's report.
- Retirement benefits, as described on page 60 of the Addendum to this year's report.
- The damages received by workers in tort suits against employers or third parties because of negligence or other criteria for recovery (such as intentional injury). Tort suits do not meet the definition of a workers' compensation program, since the recoveries are not based on a statutory remedy and/or because the recoveries require the employer to be negligent.

Benefits and costs associated with work-related injuries and diseases that should be included in Scope I of the Academy data based on the previous analysis

Benefits and Costs that Should Continue to be Included in Scope I of the Academy Report

- All benefits and costs used to prepare the tables in the 2022 data report.
- The benefits and costs of all special funds within the workers' compensation system should be included as benefits and costs of the program. These funds include Second Injury Funds, Guaranty Funds, Uninsured Employer Funds, Benefit Adjustment funds for long-term beneficiaries, Occupational Disease Funds, and Return-to-work funds, among others.[111]
- Direct payments by workers to a workers' compensation program should be included as

109 The discussion of the Federal Employers' Liability Act of 1908 (FELA) is based on Williams and Barth (1973).

110 The discussion of the Jones Act of 1920 is based on Williams and Barth (1973).

111 Table A.1. of *Sources, Methods, and State Summaries* provides an overview of the many types of special funds included in the costs and benefits data throughout this report, broken down by state. A more academic compilation of the various types of special funds then in existence and of the variety of financing mechanisms for the funds is provided by Larson and Burton (1985).

Table C.5

Costs and Benefits of Workers' Compensation Programs in Scope I (Standard Approach), in Scope II (Augmented Approach), and Scope III (Expanded Approach) (Millions of Dollars)

	2018	2019	2020	2021	2022
Scope I					
Costs	101,577	100,349	93,465	95,862	102,982
Benefits	62,879	62,882	59,263	59,724	61,697
Scopes I and II, Cumulative					
Costs	105,176	104,164	97,671	100,153	107,845
Benefits	64,376	64,506	60,966	61,512	63,740
Additional Costs and Benefits in Scope III					
Costs	99,082	99,082	106,372	117,818	136,809
Benefits	87,847	95,551	102,705	113,596	131,838
Scopes I, II, and III, Cumulative					
Costs	204,258	203,246	204,043	217,971	244,654
Benefits	152,224	160,057	163,670	175,108	195,579

costs of the program. As previously discussed, the payments by workers in New Mexico, Oregon, and Washington were included the Standard Approach beginning with the 2019 Academy Report on 2017 data.

Benefits and costs that should be added to Scope I—Standard of the Academy Report (To the extent these benefits and costs are not already included)

- The expenses incurred by state or federal agencies that administer workers' compensation programs should be included as a cost of the programs. These expenses should include all items in an agency's budget, including interest payments. In some states, the agencies' costs are included as assessments on premiums charged by carriers and/or in assessments on self-insuring employers. In some state or federal programs, some or all of these administrative costs are paid from general revenues. All of these costs of administering the program should be included.
- Medical rehabilitation or vocational rehabilitation benefits that are a component of a state's workers' compensation program should be included as a benefit and a cost of the state's workers' compensation programs. However, vocational rehabilitation benefits for persons with disabilities provided by the federal-state Vocational Rehabilitation (VR) Program should not be considered benefits or costs of the workers' compensation program, since these benefits are provided to many persons for whom the source of disability is not work-related.
- Expenditures for the prevention of injuries or diseases are already included in the Academy's estimates of the costs of workers' compensation if they are included in the premiums paid to

workers' compensation carriers. The costs of workers' compensation should also include safety and health programs if the expenditures are included in the budgets of workers' compensation agencies. However, expenditures for the prevention of injuries or diseases should be excluded from the Academy estimates of the costs of workers' compensation if they are made by separate state or federal agencies, such as the Occupational Safety and Health Administration (OSHA). Expenditures for the prevention of injury or diseases should also be excluded from Academy estimates of the costs of workers' compensation if they are incurred by employers or workers but not included in workers' compensation premiums paid by employers or in payments by workers to the program. These excluded expenditures are important to improving workplace safety and health, but as a practical matter are beyond the scope of this report.

- Potential losses in workers' compensation cases that are settled with compromise and release (C&R) agreements, in which the workers and the employer (or insurance carrier) agree on a compromise on the amount of the benefits, the benefits are paid in a lump sum, and the employer is absolved of additional liability for the injury. These benefits should be captured in our state questionnaires under "compromise lump sum settlements." Research on this topic is beyond the scope of this report.

Benefits and costs that should continue to be excluded from the Academy report

The losses to workers of earnings (including wages or other employer-provided benefits) as a result of work-related injuries or diseases that are not compensated by workers' compensation programs should be excluded. The measurement of these losses is a legitimate and important subject for researchers and policy makers but is beyond the scope of the Academy reports. These losses include:

- Lost earnings that are not compensated because not all employers and employees are covered by workers' compensation programs.
- Lost earnings that are not compensated because not all work-related injuries and diseases meet the compensability rules of workers' compensation programs.
- Lost earnings during the temporary disability period that are not compensated because of waiting periods, maximum weekly benefits, replacement rates of less than less than 100 percent, or duration limits on temporary disability benefits.
- Lost earnings during the permanent disability periods that are not compensated because of maximum weekly benefits, replacement rates of less than 100 percent, or duration limits on permanent partial and permanent total disability benefits.
- Earnings losses of deceased workers that are not considered in determining death benefits because of maximum weekly benefits, replacement rates of less than 100 percent, or duration limits on survivors' benefits.
- The risk premiums in the wages received by workers for performing jobs with risks of injury or disease should not be included as benefits for workers or as costs for employers.
- Employee benefits which go toward attorney's fees.
- The loss of tax revenues to federal, state, and local governments because workers' compensation benefits are not taxable. There are costs to the governments in the loss of tax revenue, and there are benefits to workers because the benefits replace a higher percentage of lost wages than if benefits were taxable. The tax-free status of workers' compensation benefits is also probably advantageous to employers because the benefits are more adequate than taxable benefits would be, thus reducing the pressures on state legislatures to increase cash benefits.

Appendix D: Workers' Compensation under State Laws

Table D identifies the parameters that determine workers' compensation benefits under the current laws in each jurisdiction. This table and the associated notes are provided by the Workers' Compensation Research Institute (WCRI) and the International Association of Industrial Accident Boards and Commissions (IAIABC) as part of their most recent study of state workers' compensation laws. The Academy gratefully acknowledges WCRI and IAIABC for sharing their study results. The full study, *WCRI/IAIABC Workers' Compensation Laws*, is available directly through WCRI and IAIABC, and it contains more information on state laws than what is provided herein.

The benefit parameters defined in this table include the following:

- The waiting period before a worker becomes eligible for cash benefits.
- The retroactive period when a worker becomes eligible for compensation for the waiting period.
- The minimum and maximum weekly benefit payments for temporary total disability.
- The maximum duration of temporary total disability benefits.
- The basis of benefit calculation, maximum weekly benefit, 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.

Table D

Workers' Compensation State Laws as of 2022, from the *WCRI/IAIABC Workers' Compensation Laws* Report

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
Jurisdiction	Waiting Period	Retro-active Period	Weekly Min	Weekly Max	Maximum Duration	Basis of PTD Calculation	Weekly Max	Maximum Duration	Monetary PTD Benefit Cap	Weekly Max	Max Benefit for "Unscheduled Injuries"	Weekly Max	Statutory Limit for Dependency Benefits
Alabama	3 days	21 days	$270.00	$983.00	For the duration of temporary disability	66 2/3% of the worker's preinjury weekly wage	$983.00	No	None	$220.00	300 weeks	$983.00	500 weeks
Alaska	3 days	28 days	$308.00	$1,398.00	Continue until employee is medically stable or released to work	80% of the worker's spendable, after-tax, or net weekly wages	$1,398.00	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	(1)	No unscheduled PPD	$1,398.00	12 years(2)
Arizona	7 calendar days	14 days	N/A	$794.12	None	66 2/3% of the worker's average monthly wage	$794.12	None	None	Scheduled injuries based upon the schedule, unscheduled injuries based upon the average monthly wage	None	$794.12	None
Arkansas	7 days	14 days	$20.00	$790.00	450 weeks maximum for disability benefits	66 2/3% of the worker's preinjury weekly wage	$790.00	Benefits are for length of disability and may be paid for life	There is a limitation of the weekly amount but not on the total amount	$593.00	450-week maximum for all disability(3)	$790.00	Remarriage of spouse, attainment of age 18 of dependent child or 25 if full-time student; 450-week limit for partial dependents(4)
California	3 days	14 days	$230.95	$1,539.71	104 compensable weeks within a period of five years from the date of injury; 240 compensable weeks within a period of five years from the date of injury for specified serious injuries/conditions	2/3 of AWW, subject to minimum/ maximum rates	$1,539.71	Lifetime	None	$290.00	N/A	$1,539.71	There is a maximum amount paid per Labor Code section 4702 but that amount can be higher based on CA Labor Code section 4703.5
Colorado	3 scheduled days	14 calendar days	$150.00	$1,158.92	For the duration of temporary disability	66 2/3% of the worker's temporary disability preinjury weekly wage	$1,158.92	Benefits are for the length of the disability and may be paid for life	None	$363.70 is the set weekly rate for all scheduled injuries; $636.79 is the weekly maximum for non-scheduled injuries	400 weeks(5)	$1,158.92	None

Table D continued

Workers' Compensation State Laws as of 2022, from the *WCRI/IAIABC Workers' Compensation Laws* Report

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
Jurisdiction	Waiting Period	Retro-active Period	Weekly Min	Weekly Max	Maximum Duration	Basis of PTD Calculation	Weekly Max	Maximum Duration	Monetary PTD Benefit Cap	Weekly Max	Max Benefit for "Unscheduled Injuries"	Weekly Max	Statutory Limit for Dependency Benefits
Connecticut	3 days	7 days	$289.20	$1,446.00	For the duration of temporary disability	75% of spendable earnings	$1,446.00	None	None	$1,140.00	780 weeks(6)	$1,446.00	None
Delaware	3 days	7 calendar days	$265.99	$797.96	Unlimited	66 2/3% of the difference between the wages received by the injured employee before the injury and the earning power of the employee thereafter(7)	$797.96	None	None	$797.96	300 weeks	$797.96	None(8)
District of Columbia as of January 1, 2019 (9)	3 days	14 days	$380.44	$1,521.74	500 weeks for all disability benefits, with ability to petition for an additional 167 weeks	66 2/3% of the worker's preinjury weekly wage	$1,521.74	500 weeks for all disability benefits with ability to petition for an additional 167 weeks	The first $75,000 in benefits for death or PTD shall be paid by the employer/ insurer; amounts over $75,000 are paid from the Death and PTD Trust Fund	$1,521.74	500-week limit for all disability; worker may petition for an additional 167 weeks	$1,521.74	None
Florida	7 days	22 days	$20, unless wages are less than $20, then full wages	$1,099.00	260 weeks	66 2/3% of the worker's preinjury weekly wage	$1,099.00	Benefits are payable to age 75; if the injury occurred after age 70, benefits are payable during the continuance of PTD, not to exceed 5 years following determi-nation of PTD	None	$1,099.00	2 weeks for each % of impairment from 1–10%; 3 weeks from 11–15%; 4 weeks from 16–20%; and 6 weeks for each rating over 21%	$1,099.00	Maximum payable is $150,000
Georgia	7 days	21 days	$50.00	$675.00	400 weeks unless catastrophic injury	N/A	N/A	N/A	N/A	$675.00	300 weeks	$675.00	$270,000 for surviving spouse with no dependents
Hawaii	3 days	None	$248.00	$992.00	For the duration of temporary disability	66 2/3% of the worker's preinjury weekly wage	$992.00	None	None	$992.00	312 weeks	$992.00	312 weeks

Idaho	5 days	Disability extends over 14 days	$136.20	$817.20	None(10)	67% of the worker's AWW	$817.20	None	Weekly rate may change after the first 52 weeks of TTD and each year thereafter on January 1st, based on the increase in the ASWW	55% of the SAWW for the year of injury(11)	500 weeks	60% of current average state wage or $544.80 weekly	500 weeks for spouse, age 18 for children or age 23 if enrolled in an accredited learning institution
Illinois	3 days	14 calendar days	$635.16 through 1/14/22, $650.56 beginning 1/15/22	$1,693.76 through 1/14/22, $1,734.83 beginning 1/15/22	For the duration of temporary disability	Calculate 66 2/3% of the worker's AWW, subject to max. and min. levels	$1,693.76 before 1/15/2022, $1,734.83 from 1/15/2022	None	None	Published 1/15/2022	500 weeks	$1,734.83	$500,000 or 25 years
Indiana	7 days	21 days	$50.00	$780.00	500 weeks	66 2/3% of average weekly wage	$780.00	500 weeks	500 weeks	N/A	N/A	$780.00	500 weeks
Iowa	3 days	14 days	None	$2,005.00	Benefits are for length of disability and may be paid for life	80% of the worker's spendable, after-tax, or net weekly wages	$2,005.00	No maximum	None	$1,845.00	500 weeks	$2,005.00	None
Kansas	7 days	21 consecutive days	$25.00	$737.00	225 to 415 weeks(12)	66 2/3% of the worker's AWW	$737.00	Benefits are for length of disability and may be paid for life or until maximum of $155,000.00 is reached	$155,000.00	$737.00	415 weeks	$737.00	$300,000
Kentucky	7 days	Two weeks (statutory language) determined by courts to mean 14 days	$195.29	$1,074.12	For the duration of temporary total disability or until age 70 or a minimum of four years	66 2/3% of injured worker's AWW subject to 110% of the SAWW	$1,074.12	Age 70 or a minimum of four years	None	$716.49	425 weeks if disability rating is 50% or less; 520 weeks if disability rating is over 50%; limited to age 70 or a minimum of four years	All combined disability cannot exceed amount payable for total	18 or 22 if in school
Louisiana	7 days	2 weeks	$198 or actual wage, whichever is less	$743.00	No maximum	66 2/3% of the worker's preinjury weekly wage	$743.00	Benefits are for length of disability and may be paid for life	None	$743.00	N/A	$743.00	Per La. et. seq. R.S. 23:1232
Maine	7 days(13)	14 calendar days	None	DOI 1/1/1993–12/31/2012: $746.37; DOI on/after 1/1/2013: $829.30; on/after 1/1/2020: $1,230	520 weeks	1/1/1993–12/31/2012: 80% of the worker's spendable, after-tax, or net wage; 1/1/2013 and after: 2/3 of average gross weekly wages	DOI 1/1/1993–12/31/2012: $746.37; DOI on/after 1/1/2013: $829.30; on/after 1/1/2020: $1230	Benefits are for length of disability and may be paid for life	None	DOI 1/1/1993–12/31/2012: $746.37; DOI on/after 1/1/2020: $1,230	1/1/1993–12/31/2012: 520 weeks or for duration of disability if PI rating is greater than a threshold of approximately 13.4%; on/after 1/1/2013: 520 weeks; longer if PI > 18% & earning 65% or less of AWW & worked 12 months out of 24-month period before benefits end	DOI 1/1/1993–12/31/2012: $746.37; DOI on/after 1/1/2013: $829.30	500 weeks or until age 18 for children

Table D continued

Workers' Compensation State Laws as of 2022, from the *WCRI/IAIABC Workers' Compensation Laws* Report

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
Jurisdiction	Waiting Period	Retro-active Period	Weekly Min	Weekly Max	Maximum Duration	Basis of PTD Calculation	Weekly Max	Maximum Duration	Monetary PTD Benefit Cap	Weekly Max	Max Benefit for "Unscheduled Injuries"	Weekly Max	Statutory Limit for Dependency Benefits
Maryland	3 days	14 days	$50 or the employee's AWW	$1,338.00	For the duration of temporary total disability	66 2/3% of the worker's preinjury weekly wage	$1,338.00	None	$45,000, except that benefit shall be paid for the period that the covered employee is permanently totally disabled	$1,004.00	None	$1,338.00	144 months or on the date of what would have been the 70th birthday of the deceased employee, provided that a minimum of 5 years of death benefits has been paid
Massachusetts	5 days	21 days	$338.85	$1,694.24	156 weeks	66 2/3% of the worker's preinjury weekly wage	$1,694.24	None	None	N/A	N/A	$1,000.00	250 weeks
Michigan	7 calendar days	14 calendar days	None	$1,048.00	For the duration of temporary total disability	80% of the worker's spendable, after-tax, or net weekly wages	$1,048.00	800 weeks post-DOI conclusive presumption with a factual determination thereafter	Payments cease upon death of claimant	N/A	N/A	$1,048.00	500 weeks
Minnesota	3 days	10 days	$251.33(14)	$1,256.64	130 weeks	66 2/3% of the worker's preinjury wage	102% of the SAWW for the preceding calendar year	PTD benefits cease at age 72, but if the injury occurred after age 67 PTD benefits are paid for five years	None	(15)	Rated by analogy to similar scheduled injury	102% of SAWW for preceding year(16)	Benefit ends after 10 years or 10 years after the last child is no longer dependent; minimum payable is $60,000
Mississippi	5 days(17)	14 days	$25.00	$551.02	450 weeks	66 2/3% of worker's AWW	$494.48	450 weeks or until total compensation paid equals $247,959.00	$247,959.00	$551.02	450 weeks	$551.02	450 weeks; remarriage for spouse; age 18–23 for child
Missouri as of January 1, 2019(18)	3 days in which the employer is open for business	14 days	$40.00	$974.64	400 weeks	66 2/3% of the worker's preinjury average weekly wage, not to exceed 105% of the state average weekly wage (SAWW), but see(19)	$974.64 but see(19)	None	None	$496.38(20)	400 weeks	$947.64, but see(19)	Refer to notes(19), (21) and(22)

Montana	32 hours or 4 days, whichever is less	21 days	None	$917.00	For the duration of temporary total disability	66 2/3% of the worker's preinjury wage	May not exceed the state's average weekly wage at time of injury	Payable until retirement	None	$458.50	400 weeks	May not exceed the state's average weekly wage at time of injury	If the beneficiary dies; after 500 weeks of benefits to the spouse; or until the spouse remarries(23)
Nebraska	7 days	6 weeks	$49 or actual wages if less	$983.00	For the duration of temporary total disability	66 2/3% of the worker's preinjury wage	$983.00	Payable for the length of disability and may be for life	None	$983.00	300 weeks	$855.00	None
Nevada	5 days	5 consecutive days or 5 cumulative days within a 20-day period	No minimum	$1,062.11	For the duration of temporary total disability	66 2/3% of the worker's preinjury average monthly wage	Based on PPD, age, AWW	Up to 70 years of age	Per maximum compensation limit and formula	Variable	PPD benefits paid for 5 years or to age 70, whichever is later	$1,062.11	None
New Hampshire	3 days	14 days	$373.01	$1,865.00	For the duration of the total disability	60% of the worker's preinjury weekly wage	$1,865.00	Payable for the length of the disability	None	$1,865.00	350 weeks for a whole-person award	$1,865.00	18 years of age, or 25 if full time student
New Jersey	7 days	7 calendar days	$284.00	$1,065.00	400 weeks	70% of worker's actual wage at time of injury	$1,065.00	Payable for the length of disability and may be for life	None	$1,065.00	600 weeks	$1,065.00	Lifetime with exceptions
New Mexico	7 days	4 weeks	$36.00	$944.84	700 weeks	66 2/3% of the worker's preinjury weekly wage	$944.84	Payable for the length of disability and may be for life	None	$944.84	500 weeks if the rating is less than 80%, 700 weeks if rating is greater	66 2/3% of AWW as stated in Statute 52-1-46	100% of the SAWW for 700 weeks
New York	7 days	More than 14 days	$150, unless employee's wages are less than $150.00, then claimant receives full wages	$1,063.05	For the duration of temporary total disability	66 2/3% of the worker's average weekly wage which is based on the worker's earnings in the 52 weeks prior to the injury	$1,063.05	Benefits are payable for the length of the disability, which is usually for the life of the claimant	None	$1,063.05	$558,101.25(24)	$1,063.05	(25)
North Carolina	7 days	21 days	$30.00	$1,184.00	500 weeks under N.C. Gen. Stat. §97-29(b), unless extended compensation is awarded by the Commission under N.C. Gen. Stat. §97-29(c)	66 2/3% of the workers' preinjury average weekly wage	$1,184.00	Benefits, including medical compensation, shall be paid during the lifetime of the injured employee	No	$1,184.00	$20,000	$1,184.00	500 weeks(26)
North Dakota	5 days	5 days	$637.00(27)	$1,327.00	104 weeks(28)	66 2/3% of the worker's preinjury wage	$1,327.00	Payable until retirement at which time benefits switch to ABP(29)	None	N/A	100% impairment based on lump-sum payment	$1,327.00	$300,000 or death

Table D continued

Workers' Compensation State Laws as of 2022, from the *WCRI/IAIABC Workers' Compensation Laws* Report

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
Jurisdiction	Waiting Period	Retro-active Period	Weekly Min	Weekly Max	Maximum Duration	Basis of PTD Calculation	Weekly Max	Maximum Duration	Monetary PTD Benefit Cap	Weekly Max	Max Benefit for "Unscheduled Injuries"	Weekly Max	Statutory Limit for Dependency Benefits
Ohio	7 days	14 calendar days	$361.67[30]	$1,085.00[31]	As long as disability lasts	66 2/3% of preinjury wage[32]	$1,085.00 (33)	None	None	$361.67	200 weeks	$1,085.00	None
Oklahoma	3 days	None	None	$953.18	104 weeks, with an additional 52 weeks if consequential injury found	70% of worker's AWW	$953.18	15 years or upon reaching Social Security retirement age, whichever is longer	None	$360.00	350 weeks	$953.18	None
Oregon	3 days	14 days	$50 or 90% of the worker's pre-injury weekly wage whichever is less	$1,658.68	N/A	66 2/3% of the worker's pre-injury weekly wage	133% of the SAWW, $1,658.68	Lifetime plus benefits to surviving spouse and children	No	N/A	$478,011.84[34]	$124.71 unless benefits per ORS 656.204(6) for secondary education[35]	None
Pennsylvania	7 days	14 calendar days	50% of statewide average weekly wage or 90% worker's average weekly wage, whichever is lower	$1,205.00	For duration of disability, subject to conversion to partial benefits at 104 weeks[36]	N/A[37]	N/A	N/A	N/A	$1,205.00	500 weeks	$1,205.00	60% of deceased worker's AWW
Rhode Island	3 days	No payment for waiting period days	None	$1,438.00	For the duration of temporary total disability	62% of average weekly wage	$1,438.00	Payable for the length of disability and may be for life	None	$180.00	500 weeks	$1,438.00	None
South Carolina	7 days	More than 14 days	$75 if wages are > $75; otherwise, comp rate is equal to wages	$963.37	For the duration of temporary total disability with a maximum of 500 weeks	66 2/3% of the worker's preinjury wage	$903.40	500 weeks[38]	500 weeks	Depends on scheduled body part	340 weeks	$903.40	500 weeks
South Dakota	7 days	7 calendar days	$467.00	$934.00	For the duration of temporary total disability	66 2/3% of the worker's preinjury wage[39]	$934.00	For length of disability and can be for life	None	$934.00	312 weeks	$934.00	None
Tennessee	7 days	14 days	$159.00	$1,166.00	Duration of TTD for physical injuries; 104 weeks for psychological injuries; 104 weeks after the commencement of pain management	66 2/3% of the worker's preinjury wage	$1,060.00	Until "Old Age" Social Security-eligible age (or 260 weeks, where the date of injury is on or after age 60)	None	$1,060.00	450 weeks	$1,060.00	$477,000.00

Texas	7 days	14 days	$159.00	$1,058.38	105 weeks(40)	75% of the employee's AWW	$1,058.00	None	None	$741.00	For IIBs: 300 weeks; for SIBs: maximum duration for all income benefits is 401 weeks after the injured employee's date of injury	$1,058.00	Minimum of 364 weeks
US Federal Programs-FECA	3 days	14 days	GS-2 - step 1	GS-15 - step 10	For the duration of temporary disability	75% of the worker's preinjury wage if worker has dependents; 66 2/3% of preinjury wage if not	GS-15, step 10	None	None	GS-15, step 10	None	GS-15, step 10	None
US Federal Programs - Longshore	3 days	14 days	$431.75	$1,726.98	For the duration of temporary disability	66 2/3% of employee's AWW	$1,726.98	During disability or life of the claimant	Maximum per week limit	$1,726.98	None	$1,726.98	Death or independence
Utah	3 days	14 calendar days	$45.00	$1,038.00	312 weeks	66 2/3% of the worker's AWW at the time of the injury not to exceed 85% of the SAWW	$882.00	PTD benefits are awarded for life, but PTD status may be re-examined by submitting employee to reasonable medical evaluations, rehabilitation and retraining efforts, disclosure of federal income tax returns	None	$692.00	312 Weeks	$882.00	312 weeks; however may be extended when beneficiary remains wholly dependent
Vermont	3 days	10 days	$514.00	$1,542.00	For the duration of temporary total disability; insurer must review after 2 years	66 2/3% of the worker's preinjury wage	$1,542.00	For duration of total disability and can be for life	None	$1,542.00	405 weeks for non-spinal; 550 weeks spinal	$1,542.00	Varies with dependent
Virginia	7 days	3 weeks	$298.75	$1,195.00	500 weeks	66 2/3% of the worker's preinjury wage	$1,195.00	Can be lifetime	Applicable compensation rate	$1,195.00	None	$1,195.00	500 weeks
Washington	The 3 days immediately following the date of injury (DOI)	14 calendar days immediately following the DOI	(41)	$1,790.95	For the duration of temporary total disability	Depends on the option chosen by employee	$1,790.95	For the length of disability and can continue for life.	There is a maximum payment for lump sums only, up to $8,500	$1,790.95	$214,222.98	$1,790.95	N/A
West Virginia	3 days	7 consecutive days	Federal minimum wage	$917.08	104 weeks	66 2/3% of the worker's preinjury weekly wage, not to exceed 100% of the average weekly wage in West Virginia	$917.08	Payable until age 70, for all PTD awards granted on or after 07/1/2003	None	$641.96	None	$917.08	

Table D continued

Workers' Compensation State Laws as of 2022, from the *WCRI/IAIABC Workers' Compensation Laws* Report

	Waiting Period		Temporary Total Disability (TTD)			Permanent Total Disability (PTD)				Permanent Partial Disability (PPD)		Death Benefits (DB)	
Jurisdiction	Waiting Period	Retro-active Period	Weekly Min	Weekly Max	Maximum Duration	Basis of PTD Calculation	Weekly Max	Maximum Duration	Monetary PTD Benefit Cap	Weekly Max	Max Benefit for "Unscheduled Injuries"	Weekly Max	Statutory Limit for Dependency Benefits
Wisconsin	3 days, not including day of injury	Waiting period paid if disability exists after 7 calendar days	$20.00(42)	$1,159.00	For the length of temporary total disability	66 2/3% of the worker's preinjury wage	$1,159.00	For length of disability and can be for life	None	$362.00	1,000 weeks	$1,159.00	$347,700.00
Wyoming	3 days	8 days	30% of the statewide average monthly wage or 2/3 of the actual monthly earnings at the time of injury, whichever is greater, but shall not exceed the lesser of 100% of the actual monthly earnings	$986(43)	24 months (ws. 27-14-404) or in extraordinary circumstances, may extend beyond to provide a reasonable recuperation period	66 2/3% of the worker's actual monthly wage, unless he or she earns less than 73% of the SWAMW—then it is 92% of the worker's actual monthly wages	$986(43)	Paid for 80 months, less the number of months previously paid PPI and/or PPD. Eligible for extended PTD following PTD, must apply annually	None	$986(43)	None	$986(43)	None

(1) Alaska - PPI is paid in a lump-sum amount unless the claimant is in a reemployment training program, in which case PPI benefits can be paid at the weekly TTD rate. In that case the TTD minimum ($308) and maximum ($1,398) rates apply.

(2) Alaska - Spouse 52 years of age or older, or permanently disabled, is not subject to 12-year limitation.

(3) Arkansas - Except for PTD, which is payable for life at the TTD rate.

(4) Arkansas - If total amount of weekly compensation is less than $7.00 per week.

(5) Colorado - Beginning January 1, 2012, the caps are adjusted each year. As of July 1, 2021, the caps are $106,911.08 for nonscheduled impairments of 25 percent or less and $213,819.45 for nonscheduled impairments of 26 percent or more.

(6) Connecticut - No unscheduled PPD since 1993.

(7) Delaware - Such compensation shall not be more than 66 2/3 percent of AWW. The rate is calculated the same as in Table 4A in the original WCRI/IAIABC report.

(8) Delaware - When minor dependents reach 18 years of age (or 25 if attending an accredited higher learning institution).

(9) District of Columbia - 2019 responses. No 2022 data were provided.

(10) Idaho - No maximum period—TTD continues while in the period of recovery.

(11) Idaho - If the injury occurred in 2022 and PPD is a factor, it would be paid at $499.40 per week.

(12) Kansas - Depending on the type of injury; also there may be a limitation of $130,000 or $155,000 for all indemnity benefits depending on types of benefits paid.

(13) Maine - Does not apply to firefighters.

(14) Minnesota - As of 10/1/21, the minimum under Minn. Stat. § 176.101, subd. 1 (c) is 20% of the maximum weekly benefit or the employee's actual weekly wage, whichever is less.

(15) Minnesota - PPD benefits are paid weekly at the TTD rate until the total PPD benefit amount is paid. The employee may elect to receive PPD benefits in a lump sum, in which case a discount rate of 5 percent per year is applied to the weekly benefits.

(16) Minnesota - For Oct. 1, 2021-Sept. 30, 2022, this is $1,256.64. See Table 4A in the original WCRI/IAIABC report.

(17) Mississippi - Any day on which a worker earns less than full wage because of injury is considered a day of disability for the waiting period, and neither the 5-day nor the 14-day period have to consist of consecutive calendar days.

(18) Missouri - 2019 responses. No 2022 data were provided.

(19) Missouri - Mo. Rev. Stat. § 287.010.11, effective 01/01/2014, defines "occupational diseases due to toxic exposure" as the following: mesothelioma, asbestosis, berylliosis, coal worker's pneumoconiosis, bronchiolitis obliterans, silicosis, silicotuberculosis, manganism, acute myelogenous leukemia, and myelodysplastic syndrome. Mo. Rev. Stat. § 287.200.4, effective 01/01/2014, provides enhanced benefits to employees with "occupational diseases due to toxic exposure" which result in a Permanent Total Disability or Death as follows: (a) For occupational diseases due to toxic exposure, but not including mesothelioma, an amount equal to 200% of the State's Average Weekly Wage (as of the date of diagnosis) shall be paid to the employee for 100 weeks. (b) If the employee is diagnosed with mesothelioma (and if the employer has accepted mesothelioma liability) an amount equal to 300% of the State's Average Weekly Wage shall be paid to the employee for 212 weeks—provided that any employee who obtains benefits for asbestosis and who later obtains an award for mesothelioma shall not receive more benefits than such employee would receive having only obtained benefits for mesothelioma. (c) The amounts due to the employee during his or her lifetime for an award of Permanent Total Disability due to any other compensable cause shall be paid to the employee after the enhanced benefits for "occupational diseases due to toxic exposure" have been exhausted. (d) Should the employee die before all of the enhanced benefits for "occupational diseases due to toxic exposure" have been paid, the remainder of the enhanced benefits are payable to the employee's spouse or children, natural or adopted, legitimate or illegitimate, in addition to the benefits provided for a death due to any other compensable cause. If there is no surviving spouse or children and the employee, in his or her lifetime, has not received all of the enhanced benefits for "occupational diseases due to toxic exposure," the remainder of such enhanced benefits shall be paid as a single payment to the estate of the employee.

(20) Missouri - PPD benefits are a lump sum based on the weekly statutory value assigned to the injured body part.

(21) Missouri - So long as there is one "total dependent" (such as the spouse or a minor child), the weekly death benefit payment is 66 2/3% of the worker's preinjury weekly wage, not to exceed 105% of state average weekly wage. Additional total or partial dependents do not increase the payment amount.

(22) Missouri - Dependency benefits end at various times depending upon a determination made in the award: spouses—lifetime or until remarriage; children—until they reach age 18 (22 years if a full-time student); and other situations described in §287.240 (4)(b), RSMo.

(23) Montana - 39-71-721, MCA.

(24) New York - Calculated by multiplying 525 (maximum number of weeks) by the maximum weekly rate ($1,063.05).

(25) New York - Benefits end for spouse upon remarriage or upon death and end for children upon turning 18 or, if still in school, 23 (if not blind or physically disabled). If blind or physically disabled, then the benefits end when the blindness or physical disability ends, after age 18 or 23 as appropriate. If benefits are paid to dependent parents or grandparents, they end upon death. For brothers, sisters, or grandchildren, they end at age 18, or if in school, 23.

(26) North Carolina - However, a surviving spouse may receive payments beyond 500 weeks unless and until the surviving spouse remarries if the surviving spouse is unable to support him/herself because of physical or mental disability that existed as of the date of the employee's death, and a child will receive weekly payments beyond 500 weeks and until turning age 18 if the child is not yet age 18 at the expiration of the 500 weeks.

(27) North Dakota - The minimum benefit is equal to 60 percent of the SAWW unless the amount exceeds the employee's net wages, in which case the employee receives net wages as a weekly compensation rate.

(28) North Dakota - An additional 20 weeks of benefits may be added if the employee is enrolled in a vocational rehabilitation program.

(29) North Dakota - ABP benefits are additional benefits payable. Benefit and amount are based on the duration of the disability prior to retirement (NDCC 65-05-9.4).

(30) Ohio - However, if the FWW or AWW is below the minimum, the TTD is 100 percent of the FWW or AWW.

(31) Ohio - If 72 percent of the FWW or 66 2/3 percent of the AWW is above the maximum, TTD is paid at the maximum amount.

(32) Ohio - The basis of PTD calculation is 66 2/3 percent of the worker's preinjury weekly wage not to exceed the maximum for the date of injury or date of disability in occupational disease claims.

(33) Ohio - Weekly minimum and maximum for claims with dates of injury in 2014. Minimum and maximum are determined based on date of injury or date of disability in occupational disease claims.

(34) Oregon - Oregon no longer has "scheduled" and "unscheduled" benefits. The maximum PPD award, for a worker qualifying for an award for impairment and work disability, is $478,011.84.

(35) Oregon - "Dependent" means any of the following relatives of the worker who, at the time of the accident, depended in whole or in part on the earnings of the deceased worker for support: parent, grandparent, stepparent, grandson, granddaughter, brother, sister, half-brother, half-sister, niece, or nephew. A dependent benefit is 50 percent of the average monthly support the dependent actually received from the worker during the 12 months preceding the injury. The maximum monthly benefit for all dependents may not exceed 4.35 times 10 percent of the state AWW. If the sum of the individual benefits exceeds this maximum, the benefit for each dependent must be reduced proportionally. However, the monthly benefit for a dependent without a surviving parent, who is 19 to 26 years of age and attending secondary or post-secondary education, is 4.35 times 66 2/3 percent of the state AWW, and this benefit is not subject to proportional reduction.

(36) Pennsylvania - Disability under PA law means loss of earning power. PA law allows the employer/insurer to request an impairment rating examination after the employee has received 104 weeks of full benefit payments. If the IRE shows less than 35 percent impairment based on the AMA 6th Edition Guide (2nd printing April 2009), then benefits are reclassified as partial disability compensation and are subject to a 500-week cap.

(37) Pennsylvania - However, wage-loss benefits may continue for life.

(38) South Carolina - Claimants rendered a paraplegic, quadriplegic, or who sustain physical brain damage because of a compensable injury are not subject to the 500 week limitation. S.C. Code Ann. § 42-9-10(C).

(39) South Dakota - If the weekly wage is below 50 percent of the SAWW, the calculation is wages, less income tax and Social Security.

(40) Texas - 104 weeks from the 8th day of disability. An exception to this amount could be made when an extension of maximum medical improvement based on spinal surgery is approved by DWC.

(41) Washington - The Washington State legislature has increased the minimum workers' compensation benefits for claims with dates of injury (DOI) or dates of manifestation (DOM) on or after July 2, 2008. This change results in three different possible minimum rates:

- 15 percent of the state average monthly wage (SAMW) + $10.00 for spouse + $10.00 for each dependent child up to five dependent children;
- 100 percent of the worker's gross monthly wage; and
- Minimum time-loss rate in effect prior to July 2, 2008.

(42) Wisconsin - The minimum AWW is $30 so the minimum TTD rate would be $20. However, this is obsolete and would only come up in circumstances in which the employer was licensed to pay subminimum wages (e.g., sheltered workers).

(43) Wyoming - Wyoming Workers' Compensation calculates all payments/wages based on a monthly rate, rather than a weekly rate. Each claimant's payment depends on their gross monthly wage on the date of injury and cannot exceed the statewide average monthly wage.

Appendix E: Comparing the NASI and Oregon Workers' Compensation Reports

Information on state workers' compensation costs can be compiled from a variety of sources, using various methods that are tailored to specific uses. There is no single method that is appropriate to all uses. Appendix E compares the sources and methods used to prepare two of the most widely known publications that relate to employer cost across states, done by NASI and the State of Oregon. It is important to note that neither study is designed to evaluate the effectiveness or efficiency of state systems, an analysis that would require a very different approach.

Comparing the NASI and Oregon Workers' Compensation Reports

Title/type of report	National Academy of Social Insurance, ***Workers' Compensation Benefits, Costs, and Coverage***	Oregon Dept. of Consumer and Business Services, ***Oregon Workers' Compensation Premium Rate Ranking***
Purpose of study	Provides information on annual worker's compensation benefits, costs, and coverage that SSA provided until 1995, at both the national and state levels, so that researchers, policymakers, others can assess trends etc.	To compare Oregon's worker's compensation premium rates with those of other states, initially because the state had one of the highest rates in the US. Results are reported to the Oregon legislature as a performance measure on the relative costs of doing business, and are used similarly by other states and business organizations.
Data/ information provided	As per the title, provides data on national- and state-level worker's compensation benefits, costs, and coverage	"Compares average manual rates, rates for expected claim costs plus factors for insurer expense and profit"
Frequency of Publication	Annual since 1997	Biannual (every other year) since 1986
Data source(s)	State agency surveys, A.M. Best, NCCI, estimates based on these and on state public reports	State rate-making data from NCCI and other rating agencies, and state insurance regulators.
50 states and DC	Yes	Yes
In which ways are data comparable across states?	For every state, the report provides benefits, costs, and coverage (and benefits and costs standardized to per $100 of wages)	Comparable based on Oregon's industry mix; uses NCCI classification codes to establish constant set of risk classifications for each state.*
Caveats in interpreting the data	This report aggregates costs to employers and benefits paid to employees and medical care providers. It does not include any adjustment for industrial mix across states, so it is impossible to know whether a state with lower costs is safer due to industrial mix, safer due to better safety practices within industries, more efficient in providing benefits, or poses greater barriers for injured workers to access workers'compensation benefits. With no standardization of differences in injury risk across states, assessing the impact of a state's laws on benefit and cost levels is difficult and not comparable across states.	This report compares base insurance rates between states for the same industries. It is impossible to know whether a state with lower rates has employers with better safety practices, is more efficient in providing benefits, or sets up greater barriers for injured workers to access workers' compensation benefits. Self-insured employers are not included, and benefits are beyond the scope of the study.

* In states that do not use the NCCI classification system, the report uses classes similar to the NCCI classes.

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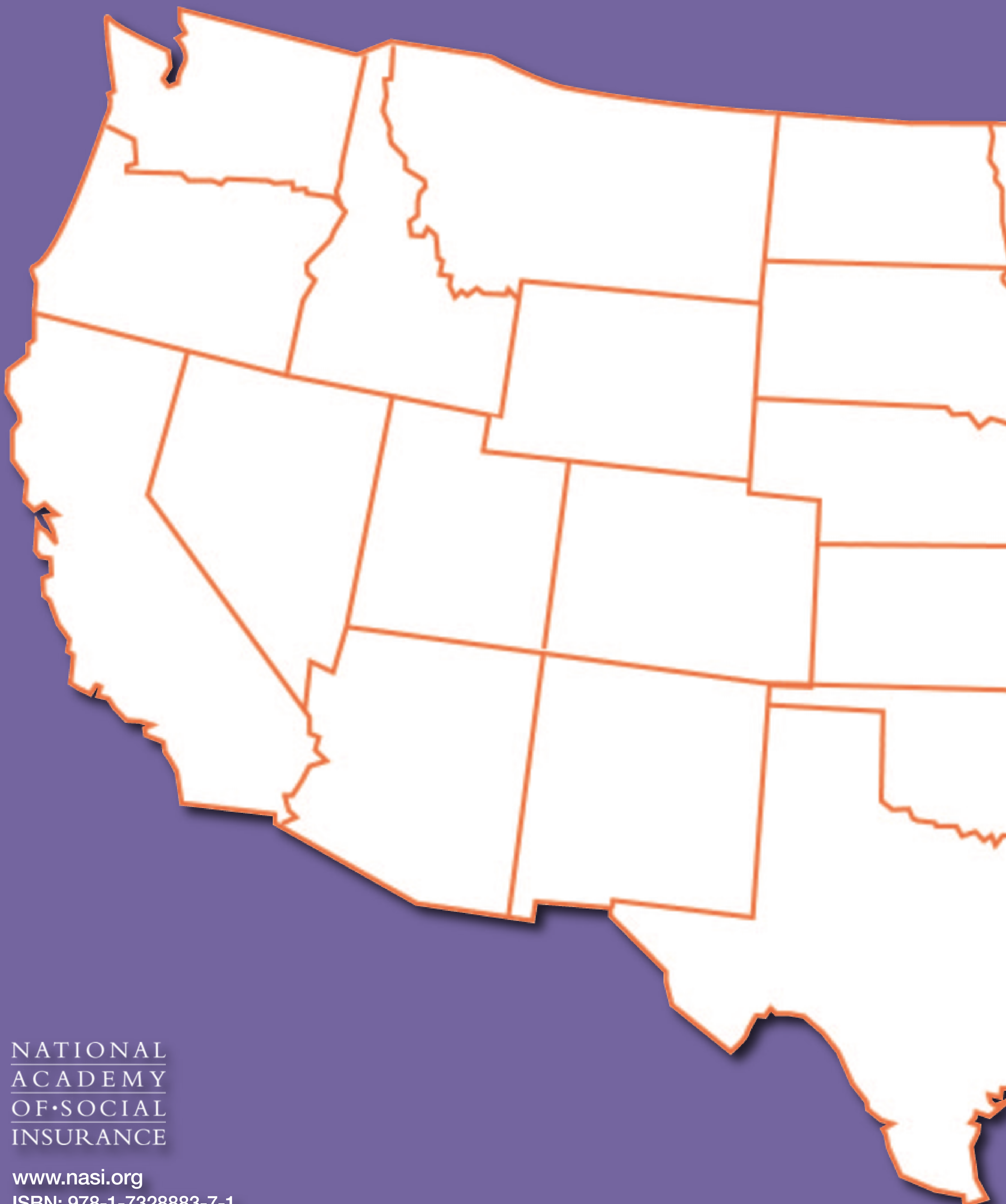

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