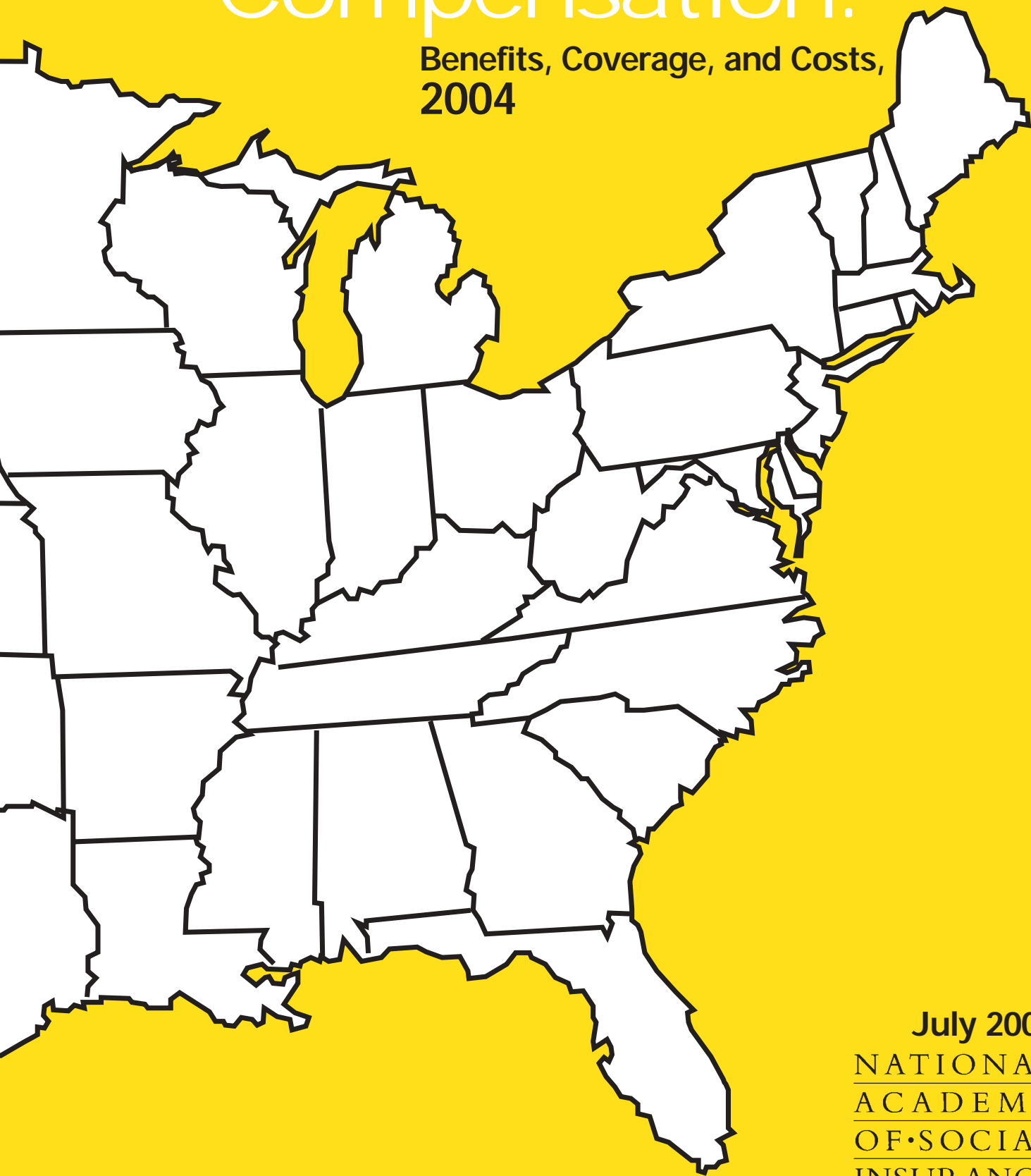


Workers' Compensation:

Benefits, Coverage, and Costs,
2004



July 2006

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

Washington, DC

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

Board of Directors

Lawrence H. Thompson

Chair

Marilyn Moon

President

Margaret C. Simms

Vice President

Janet L. Shikles

Secretary

Richard A. Hobbie

Treasurer

John F. Burton, Jr.

Kathleen A. Buto

Jack. C. Ebeler

Jennie Chin Hanson

Jerry L. Mashaw

Mark Novitch

Patricia M. Owens

Joseph F. Quinn

Anna M. Rappaport

William E. Spriggs

Andrew Stern

Founding Chair

Robert M. Ball

Executive Vice President

Pamela J. Larson

VP for Income Security

Virginia P. Reno

VP for Health Policy

Paul Van de Water

1776 Massachusetts Ave., NW

Suite 615

Washington, DC 20036-1904

Telephone (202) 452-8097

Facsimile (202) 452-8111

E-mail nasi@nasi.org

Website: www.nasi.org

The National Academy of Social Insurance is a nonprofit, nonpartisan organization made up of the nation's leading experts on social insurance. Its mission is to conduct research and enhance public understanding of social insurance, develop new leaders, and provide a nonpartisan forum for exchange of ideas on important issues in the field of social insurance. Social insurance, both in the United States and abroad, encompasses broad-based systems for insuring workers and their families against economic insecurity caused by loss of income from work and the cost of health care. The Academy's research covers social insurance systems such as Social Security, Medicare, workers' compensation and unemployment insurance, and related social assistance and private employee benefits.

The Academy convenes steering committees and study panels that are charged with conducting research, issuing findings and, in some cases, reaching recommendations based on their analyses. Members of these groups are selected for their recognized expertise and with due consideration for the balance of disciplines and perspectives appropriate to the project. The findings and any recommendations are those of the Study Panel and do not represent an official position of the National Academy of Social Insurance or its funders.

This research report presents new data and does not make recommendations. It was prepared with the guidance of the Workers' Compensation Steering Committee and the Study Panel on National Data on Workers' Compensation. In accordance with procedures of the Academy, it has been reviewed by a committee of the Board for completeness, accuracy, clarity, and objectivity.

This project received financial support from the Social Security Administration, the Centers for Medicare & Medicaid Services, and the Office of Workers' Compensation Programs of the U.S. Department of Labor. It also received in-kind support in data from the National Council of Compensation Insurance, and the National Association of Insurance Commissioners.

© 2006 National Academy of Social Insurance

ISBN: 1-884902-46-4

Workers' Compensation:

Benefits, Coverage, and Costs,

2004

by

Ishita Sengupta, Virginia Reno, and John F. Burton, Jr.

with advice of the

**Study Panel on National Data on
Workers' Compensation**

and the

Steering Committee on Workers' Compensation

July 2006

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

Preface

Because workers' compensation statutes are enacted and administered at the state level, it is difficult to get a complete picture of national developments. Until 1995, the U.S. Social Security Administration (SSA) produced the only comprehensive national data on workers' compensation benefits and costs. For more than four decades, the research office of SSA filled part of the void in workers' compensation data by piecing together information from various sources to estimate the number of workers covered and, for each state and nationally, the aggregate benefits paid. SSA discontinued the series in 1995 after publishing data for 1992–93.

The SSA data on workers' compensation were a valuable reference for employers, insurance organizations, unions, and researchers, who relied on them as the most comprehensive and objective information available. Users of the data turned to the National Academy of Social Insurance as a reliable and independent source to continue and improve upon the data series. The need to continue the series remains particularly urgent as workers' compensation programs are changing rapidly.

In February 1997, the Academy received start-up funding from The Robert Wood Johnson Foundation to launch a research initiative in workers' compensation with its first task to develop methods to continue the national data series. Funding to continue the project came from the Social Security Administration, the Centers for Medicare & Medicaid Services, the Department of Labor, the Liberty Mutual Insurance Company, the Workers' Compensation Research Institute, and the Labor Management Group. In addition, the National Council on Compensation Insurance provides access to important data for the project. Without support from these sources, continuing this vital data series would not be possible.

To set its agenda and oversee its activities in workers' compensation, the Academy convened the Workers' Compensation Steering Committee, listed on page iii. The Study Panel on National Data on Workers' Compensation, listed on page iv, provides technical expertise for the data report.

This is the ninth report the Academy has issued on workers' compensation national data. In December

1997, it published a report that extended the data series through 1995. Jack Schmulowitz, a retired SSA analyst, prepared the report and provided the Academy with full documentation of the methods used to produce the estimates. Subsequent reports published by the Academy through 2005 extended the data series through 2003. Those reports used the same basic methodology followed in prior reports but incorporated several innovations. In particular, the Academy reports:

- Provide state-level information separating medical and cash benefits;
- Place workers' compensation in context with other disability insurance programs;
- Compare the recent trends in the benefit spending for workers' compensation to those for Social Security disability insurance;
- Discuss the relative advantages and drawbacks of using calendar year benefits paid *vis-à-vis* accident year incurred losses to measure benefit trends;
- Estimate benefits paid under deductible provisions for individual states;
- Present state-level estimates of the number of covered workers and total covered wages;
- Report estimates of benefits relative to total wages in each state;
- Provide information on special federal programs that are similar to workers' compensation, but are not included in national totals in the Academy's series;
- Compare trends in workers' compensation claims frequency for privately insured employers with trends in incidence of work-related injuries reported by private employers to the Bureau of Labor Statistics;
- Update estimates for the past five years of workers' compensation benefits, costs, and coverage in each report; and
- Provide more complete documentation of methods for collecting data and estimating coverage, deductibles, and self-insured benefits and costs.

This data report benefited from the expertise of members of the Study Panel on National Data on

Workers' Compensation, who gave generously of their time and knowledge in advising on data sources and presentation, interpreting results, and carefully reviewing the draft report. We would like to especially acknowledge Barry Llewellyn, Senior Divisional Executive and Actuary with the National Council on Compensation Insurance, Eric Nordman, Director of Research, National Association of Insurance Commissioners, Greg Krohm, Executive Director, International Association of Industrial Accident Boards and Commissions, and Allan Hunt, Assistant

Executive Director, W.E. Upjohn Institute, who provided the Academy with data and their considerable expertise on many data issues. This report also benefited from helpful comments during Board review by Christine Baker, Paul Cullinan and Paul Van de Water.

John F. Burton, Jr.
Chair, *Study Panel on National Data on Workers' Compensation*

Steering Committee for Workers' Compensation

Robert Steggert, Chair
Vice President of Casualty
Claims, Marriott International,
Inc.

H. Allan Hunt, Vice Chair
Assistant Executive Director
W.E. Upjohn Institute

James N. Ellenberger,
Vice Chair
Former Deputy Commissioner
Virginia Employment
Commission

Christine Baker
Executive Officer
California Commission
on Health and Safety and
Workers' Compensation

Marjorie Baldwin
Professor, W.P. Carey
School of Business, School of
Health Management and Policy,
Arizona State University

Peter S. Barth
Professor of Economics,
Emeritus, University of
Connecticut

Keith Bateman
Vice President, Workers'
Compensation, Property
Casualty Insurers Association
of America

Leslie Boden
Professor, School of Public
Health, Boston University

John F. Burton, Jr.
Professor Emeritus
Labor Studies & Employment
Relations, School of
Management & Labor Relations
Rutgers University

Ann Clayton
Consultant on Workers'
Compensation

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

Jay S. Himmelstein, M.D.
Director, Robert Wood Johnson
Foundation, Workers'
Compensation Health Initiative
Center for Health Policy and
Research, University of
Massachusetts Medical School

William Johnson
Professor of Economics, W.P.
Carey School of Business School
of Health Management and
Policy, Arizona State University

Frederick W. Kilbourne
Independent Actuary
The Kilbourne Company

Kate Kimpan
Associate
Dade Moeller & Associates

Gregory Krohm
Executive Director
International Association of
Industrial Accident Boards and
Commissions

Barry Llewellyn
Senior Divisional Executive,
Regulatory Services
National Council on
Compensation Insurance, Inc.

Paul Mattera
Senior Vice President and Chief
Public Affairs Officer
Liberty Mutual Group

Eric Nordman
Director of Research
National Association of
Insurance Commissioners

Eric J. Oxfeld
President, UWC -Strategic
Services on Unemployment
and Worker's Compensation

Tom Rankin
Past President
California Labor Federation,
AFL-CIO

Robert Reville
Director, Institute for Civil
Justice, RAND

Emily A. Spieler
Dean and Edwin W. Hadley
Professor of Law, Northeastern
University School of Law

Allyn C. Tatum
Vice President of Claims
Tyson Foods

Richard A. Victor
Executive Director
Workers' Compensation
Research Institute

Edward M. Welch
Director, Workers'
Compensation Center
School of Labor and Industrial
Relations, Michigan State
University

Study Panel on National Data on Workers' Compensation

John F. Burton, Jr., Chair
Professor Emeritus
Labor Studies & Employment
Relations, School of
Management & Labor Relations
Rutgers University

Marjorie Baldwin
Professor, W.P. Carey School of
Business, School of Health
Management and Policy
Arizona State University

Peter S. Barth
Professor of Economics,
Emeritus, University of
Connecticut

Keith Bateman
Vice President, Workers'
Compensation
Property Casualty Insurers
Association of America

Leslie Boden
Professor, School of Public
Health, Boston University

Aaron Catlin
Economist, National Health
Statistics Group, Office of the
Actuary, Centers for Medicare
and Medicaid Services

James N. Ellenberger
Former Deputy Commissioner
Virginia Employment
Commission

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

Jay S. Himmelstein, M.D.
Director, Robert Wood Johnson
Foundation, Workers'
Compensation Health Initiative
Center for Health Policy and
Research, University of
Massachusetts Medical School

H. Allan Hunt
Assistant Executive Director
W.E. Upjohn Institute

Kate Kimpan
Associate
Dade Moeller & Associates

Gregory Krohm
Executive Director
International Association of
Industrial Accident Boards and
Commissions

Katharine Levit
Senior Research Leader,
Thomson-Medstat

Barry Llewellyn
Senior Divisional Executive,
Regulatory Services
National Council on
Compensation Insurance, Inc.

Paul Mattera
Senior Vice President and Chief
Public Affairs Officer
Liberty Mutual Group

Eric Nordman
Director of Research
National Association of
Insurance Commissioners

Eric J. Oxfeld
President, UWC -Strategic
Services on Unemployment
and Worker's Compensation

Robert Reville
Director, Institute for Civil
Justice, RAND

John Ruser
Associate Director for Regional
Economics, Bureau of Economic
Analysis

Emily A. Spieler
Dean and Edwin W. Hadley
Professor of Law, Northeastern
University School of Law

Robert Stegert
Vice President of Casualty
Claims, Marriott International,
Inc.

Richard A. Victor
Executive Director, Workers'
Compensation Research Institute

Alex Wasarhelyi
Project Officer, Social Security
Administration

Benjamin Washington
Statistician, National Health
Statistics Group, Office of the
Actuary, Centers for Medicare
and Medicaid Services

Edward M. Welch
Director, Workers'
Compensation Center
School of Labor and Industrial
Relations, Michigan State
University

William J. Wiatrowski
Associate Commissioner
Office of Compensation &
Working Conditions
U.S. Department of Labor,
Bureau of Labor Statistics

Table of Contents

Preface	i
Highlights	1
Need for this Report	1
Target Audience	1
Workers' Compensation and Other Disability Benefits	1
Trends in Workers' Compensation Benefits and Costs	3
Reasons for Trends in Workers' Compensation Benefits	4
Overview of Workers' Compensation	6
Types of Workers' Compensation Benefits	7
Covered Employment	8
Coverage Rules	8
Method for Estimating Coverage	9
Changes in State Coverage	12
Benefit Payments	12
Method for Estimating Benefits	13
Sources of Insurance Coverage	13
Trends in Deductibles and Self-Insurance	14
Changes in State Benefits	16
Medical Payments in States	16
State Benefits Relative to Wages	17
Employer Costs	26
Trend in Benefit and Cost Ratios	29
Work Injuries, Occupational Illness and Fatalities	29
Fatalities at Work	29
Nonfatal Injuries and Illnesses	29
Workers' Compensation Claims	31
Comparing Workers' Compensation with Other Disability Benefit Programs	32
Other Disability Benefits	32
Social Security Disability Insurance and Medicare	33
Incurred Losses Compared with Benefits Paid	36
Glossary	39
Appendix A: Coverage Estimates	41
Appendix B: Questionnaire for State Agencies	47
Appendix C: Data Availability	49
Private Carrier Benefits	49
State Fund Benefits	49
Self-Insured Benefits	49
Medical Benefits	49
Employer Costs	49
Appendix D: Revised Data for 2000–2003	53
Appendix E: Self-Insurer Benefit Estimates	63
Appendix F: Medical Benefit Estimates	65
Appendix G: Deductible Benefit Estimates	67
Appendix H: Federal Programs	69

Tables

Table 1	Comparison of Workers' Compensation Benefits, Coverage, and Costs, 2003-2004: Summary	.2
Table 2	Number of Workers Covered under Workers' Compensation Programs and Total Covered Wages, 1989-2004	.9
Table 3	Number of Workers Covered by Workers' Compensation and Total Covered Wages, By State, 2000- 2004	.10
Table 4	Workers' Compensation Benefits, by Type of Insurer, 1987-2004 (in millions)	.12
Table 5	Total Amount and Percentage Distribution of Workers' Compensation Benefit Payments by Type of Insurer, 1990-2004	.14
Table 6	Estimated Employer-Paid Benefits under Deductible Provisions for Workers' Compensation, (in millions), 1992-2004	.15
Table 7	Workers' Compensation Benefits by State, 2000-2004 (in thousands)	.18
Table 8	Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2004 (in thousands)	.20
Table 9	Medical, Cash, and Total Benefits, by State, 2003-2004 (in thousands)	.22
Table 10	State Workers' Compensation Benefits Per \$100 of Covered Wages, by State, 2000-2004	.24
Table 11	Employer Costs for Workers' Compensation by Type of Insurer, 1987-2004 (in millions)	.27
Table 12	Workers' Compensation Benefit and Cost Ratios, 1989-2004	.28
Table 13	Number of Fatal Occupational Injuries, 1992-2004	.30
Table 14	Private Industry Occupational Injury and Illness: Total Non-fatal Cases and Incidence Rates, 1987-2004	.31
Table 15	Number of Workers' Compensation Claims per 100,000 Insured Workers: Private Carriers in Thirty-six Jurisdictions, 1992-2001	.32
Table 16	Social Security Disability Insurance (DI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefit (PDB) Involvement, December 2005	.34
Table 17	Comparison of Accident-Year Incurred Losses with Calendar-Year Benefits Paid by Private Carriers and State Funds in Thirty-six States, 2000-2004	.36
Table A1	Documenting Workers' Compensation Coverage Estimates, 2004 Annual Averages	.42
Table A2	Covered Payroll 1989-1999 (in millions)	.44
Table C1	Workers' Compensation Data Provided by States for 2004	.51
Table D1	Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2003 (in thousands)	.54
Table D2	Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2002 (in thousands)	.56
Table D3	Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2001 (in thousands)	.58

Table D4	Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2000 (in thousands) . . . . .	.60
Table E1	Self-Insurer Estimation Results, 1997–2004 . . . . .	.63
Table H1	Federal Employees' Compensation Act, Benefits and Costs, 1997–2004 (in thousands) . . . . .	.70
Table H2	Longshore and Harbor Workers' Compensation Act, Benefits and Costs, 1997–2004 (in thousands) . . . . .	.70
Table H3	Black Lung Benefits Act, Benefits and Costs, 1997–2004 (in thousands) . . . . .	.72
Table H4	Energy Employees Occupational Illness Compensation Program Act, Part B, Benefits and Costs, 2001-2004 (in thousands) . . . . .	.72
Table H5	Radiation Exposure Compensation Act, Benefits Paid as of March 7, 2006 (benefits in thousands) . . . . .	.74
Table H6	Federal Veterans' Compensation Program, Compensation Paid in September, 2005 (benefits in thousands) . . . . .	.74

Figures

Figure 1	Workers' Compensation Benefits and Costs Per \$100 of Covered Wages, 1989–2004 . . . . .	.3
Figure 2	Workers' Compensation Medical and Cash Benefits per \$100 of Covered Wages, 1989-2004 . . . . .	.4
Figure 3	Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 2001 . . . . .	.7
Figure 4	Nature of Injury or Illness: Percent of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work, US Private Industry, 2004 . . . . .	.30
Figure 5	Social Security Disability Insurance and Workers' Compensation Benefits as a Percent of Wages, 1970-2004 . . . . .	.35

Highlights

The purpose of this report is to provide a benchmark of the benefits and costs of workers' compensation to facilitate policy-making and comparisons with other social insurance and employee benefit programs. Workers' compensation pays for medical care, rehabilitation and cash benefits for workers who are injured on the job or who contract work-related illnesses. It also pays benefits to families of workers who die of work-related causes. Each state has its own workers' compensation program.

Need for this Report

The lack of uniform reporting of states' experiences with workers' compensation makes it necessary to piece together data from various sources to develop estimates of benefits paid, costs to employers, and the number of workers covered by workers' compensation. Unlike other U.S. social insurance programs, state workers' compensation programs have no federal involvement in financing or administration. And, unlike private pensions or employer-sponsored health benefits that receive favorable tax treatment, no federal laws set standards for "tax-qualified" plans or impose any reporting requirements. Consequently, states vary greatly in the data they have available to assess the performance of workers' compensation programs.

For more than forty years, the research office of the U.S. Social Security Administration produced national and state estimates of workers' compensation benefits, but that activity ended in 1995. In response to requests from stakeholders and scholars in the workers' compensation field, the National Academy of Social Insurance took on the challenge of continuing that data series. This is the Academy's ninth annual report on workers' compensation benefits, coverage, and costs. This report presents new data on developments in workers' compensation in 2004 and updates estimates of benefits, costs, and coverage for the years 2000–2003. The revised estimates in this report replace estimates in the Academy's prior report, *Workers' Compensation: Benefits, Coverage, and Costs, 2003*.

Target Audience

The audience for the Academy's reports on workers' compensation includes journalists, business and labor leaders, insurers, employee benefit specialists,

federal and state policymakers, and researchers in universities, government, and private consulting firms. The data are published in the *Statistical Abstract of the United States* by the U.S. Census Bureau; are used in the annual report of the National Safety Council, *Injury Facts*, are reported in *Employee Benefit News*, which tracks developments for human resource professionals; and are reported in *Fundamentals of Employee Benefits* by the Employee Benefit Research Institute. The U.S. Social Security Administration publishes the data in its *Annual Statistical Supplement to the Social Security Bulletin* and uses the findings in its estimates of national social welfare expenditures in the United States. The federal Centers for Medicare & Medicaid Services use the data in their estimates and projections of health care spending in the United States. The National Institute for Occupational Safety and Health uses the data to track the cost of workplace injuries in the United States. In addition, the International Association of Industrial Accident Boards and Commissions (the organization of state and provincial agencies that oversee workers' compensation in the United States and Canada) uses the information to track and compare the performance of workers' compensation programs in the United States with similar systems in Canada.

The report is produced under the oversight of the Academy's Steering Committee on Workers' Compensation and its expert Study Panel on National Data on Workers' Compensation, both of which are listed in the front of this report. The Academy and its expert advisors are continually seeking ways to improve the report and to adapt estimation methods to new developments in the insurance industry and in workers' compensation programs.

Workers' Compensation and Other Disability Benefits

Workers' compensation is an important part of American social insurance. As a source of support for disabled workers, it is surpassed in size only by Social Security disability insurance. Workers' compensation programs in the fifty states, the District of Columbia, and federal programs paid \$56.0 billion in benefits in 2004. Of the total, \$26.1 billion were for medical care and \$29.9 billion were for cash benefits (Table 1).

Table 1**Comparison of Workers' Compensation Benefits*, Coverage, and Costs**, 2003-2004
Summary**

Aggregate Amounts	2003	2004	Change In percent
Covered workers (in thousands)	124,685	125,863	0.9
Covered wages (in billions)	4,717	4,953	5.0
Workers' compensation benefits paid (in billions)	\$ 54.7	\$ 56.0	2.3
Medical benefits	\$25.5	\$26.1	2.3
Cash benefits	\$29.2	\$29.9	2.3
Employer costs for workers' compensation (in billions)	\$81.7	\$87.4	7.0
Amount per \$100 of covered Wages			In amount
Benefits paid	\$1.16	\$1.13	-\$0.03
Medical payments	\$0.54	\$0.53	-\$0.01
Cash payments to workers	\$0.62	\$0.60	-\$0.02
Employer costs	\$1.73	\$1.76	\$0.03

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

** Costs are employer expenditures in the calendar year for workers' compensation benefits, administrative costs, and/or insurance premiums. Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.

Source: National Academy of Social Insurance estimates based on Tables 2, 8, 9, 11, 12 and D1.

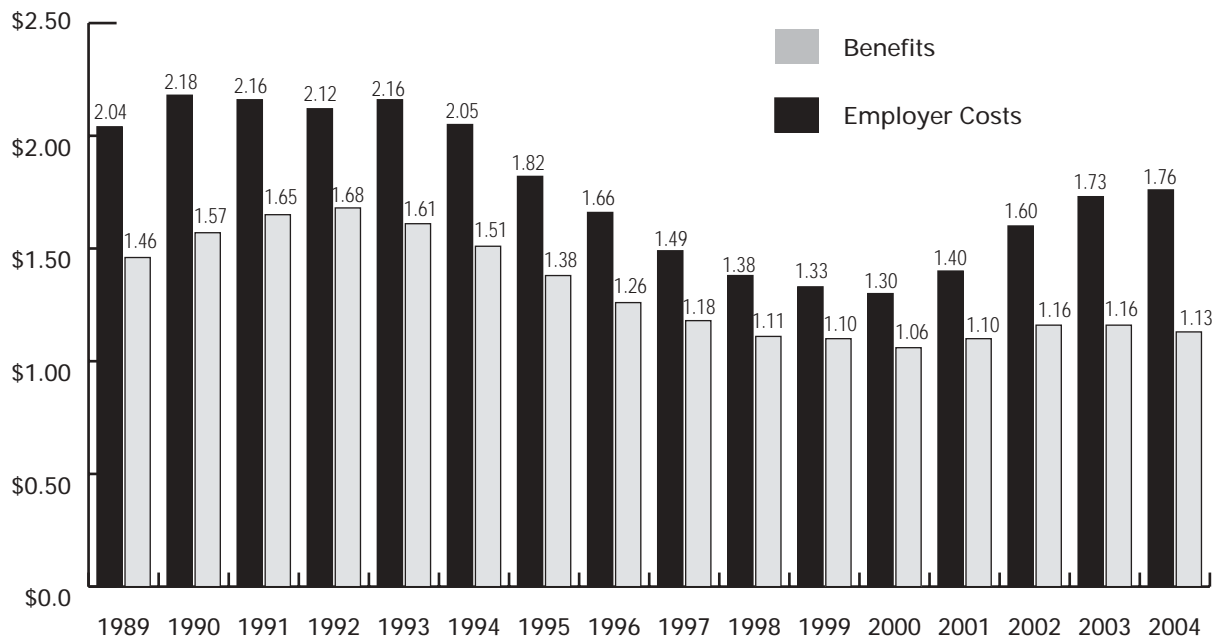
Workers' compensation differs from Social Security disability insurance and Medicare in important ways. Workers' compensation pays for medical care for work-related injuries beginning immediately after the injury occurs; it pays temporary disability benefits after a waiting period of three to seven days; it pays permanent partial and permanent total disability benefits to workers who have lasting consequences of disabilities caused on the job; it pays rehabilitation and training benefits for those unable to return to pre-injury careers; and it pays benefits to survivors of workers who die of work-related causes. Social Security and Medicare, in contrast, pay benefits to workers with long-term disabilities of any cause, but only when the disabilities preclude work. Social Security begins after a five-month waiting period and Medicare begins twenty-nine months after the onset of medically verified inability to engage in

employment. In 2004, Social Security paid \$78.2 billion in cash benefits to disabled workers and their dependents, while Medicare paid \$43.8 billion for health care for disabled persons under age 65 (SSA 2006 and CMS, 2005).

Paid sick leave, temporary disability benefits, and long-term disability insurance for non-work-related injuries or diseases are also available to some workers. About 70 percent of private sector employees have sick leave or short-term disability coverage, while 30 percent have no income protection for temporary incapacity other than workers' compensation. Sick leave typically pays 100 percent of wages for a few weeks. Long-term disability insurance that is financed, at least in part, by employers covers about 30 percent of private sector employees and is usually paid after a waiting period of three to six months, or

Figure 1

Workers' Compensation Benefits* and Costs Per \$100 of Covered Wages, 1989–2004**



Source: National Academy of Social Insurance estimates.

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

** Costs are employer expenditures in the calendar year for workers' compensation benefits, administrative costs, and/or insurance premiums. Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.

after short-term disability benefits end. Long-term disability insurance is generally designed to replace 60 percent of earnings and is reduced if the worker receives workers' compensation or Social Security disability benefits.

Trends in Workers' Compensation Benefits and Costs

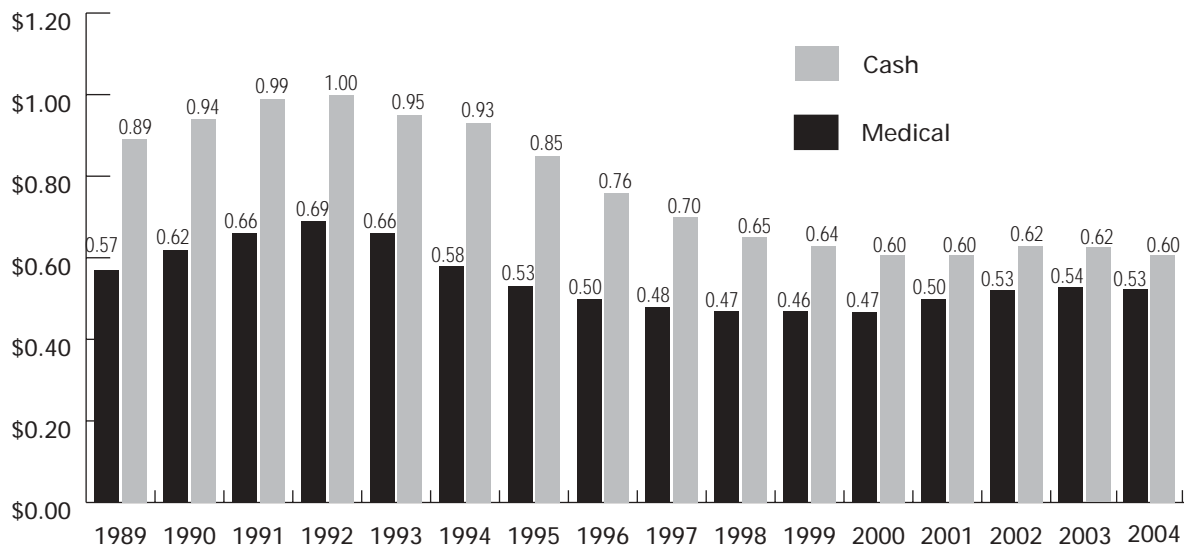
In 2004, employers' costs for workers' compensation grew faster than combined payments for cash benefits and medical treatment for injured workers. Total cash benefits and medical payments were \$56.0 billion in 2004, an increase of 2.3 percent over the 2003 amount of \$54.7 billion (Table 1). At the same time, employer costs rose to \$87.4 billion from \$81.7 billion in 2003, an increase of 7.0 percent. For self-insured employers, costs are benefits plus administrative costs. For employers who buy insurance, costs

are payments for premiums and for benefits paid under insurance policies with large deductibles. Premiums paid in a given year do not necessarily correspond to benefits paid in the year because premiums reflect future liabilities for injuries that occur in the year.

When measured relative to aggregate wages of covered workers, the cost to employers rose by three cents per \$100 of wages, to \$1.76 in 2004 from \$1.73 in 2003 (Table 1). In contrast, total workers' compensation payments to workers fell by three cents for every \$100 of wages to \$1.13 in 2004 from \$1.16 in 2003 (Figure 1). The fall occurred in payments for medical care, which fell from \$0.54 to \$0.53 per \$100 of wages, and in cash benefits paid to injured workers, which fell from \$0.62 to \$0.60 per \$100 of wages in 2004 (Figure 2).

Figure 2

Workers' Compensation Medical and Cash Benefits per \$100 of Covered Wages, 1989-2004



Source: National Academy of Social Insurance estimates.

During the extended time period shown in Figure 1, workers' compensation costs relative to wages fell steadily from 1993 to 2000, when workers' compensation costs relative to wages were at their lowest point in the last 15 years. Since 2000 this measure of costs has been rising. Over the four-year period from 2000-2004, employer costs per \$100 of payroll rose by 46 cents, from \$1.30 in 2000 to \$1.76 in 2004. This measure of costs remains well below the peak figure reached in 1990, when employer's costs were \$2.18 per \$100 of payroll.

Benefits relative to wages were also at their lowest point in the last 15 years in 2000 and then increased yearly until 2003, only to decline somewhat in 2004 (Figure 1). Benefits per \$100 of payroll were \$1.13 in 2004, well below the peak of \$1.68 per \$100 of payroll reached in 1992. Over the entire period between 2000 and 2004, total payments on workers' behalf rose by 6 cents per \$100 of payroll. Of that 6-cent increase, all went for an increase in medical payments (Figure 2).

Reasons for Trends in Workers' Compensation Benefits

Fluctuations in payments for workers' compensation over the last two decades are influenced by policy

developments and the role of workers' compensation in the broader health care and disability income systems. Opinions often differ about the main causes of changes in spending.

In the second half of the 1980s, workers' compensation benefits and costs grew at double-digit rates and payments for medical treatment were a growing share of total payments. Some believe that rising workers' compensation medical benefits and costs reflected cost-shifting away from employment-based health insurance to workers' compensation as the regular health insurance system introduced managed care and other forms of cost controls in the 1980s (Burton, 1997).

The decline in workers' compensation benefits in the mid-1990s may have been caused by many factors. In response to rising workers' compensation costs in the late 1980s and early 1990s, employers and insurers expanded the use of disability management techniques with the aim of improving return-to-work rates for injured workers and lowering workers' compensation costs. At the same time, workers' compensation systems followed the general health care system in introducing managed care and other cost controls to reduce the growth in medical spending.

Business representatives believe that the adoption of more objective methods of rating permanent disability and controls against “doctor shopping” reduced claimants’ incentive to seek additional medical care in order to strengthen their permanent disability claims. On the other hand, worker representatives argue that a stricter adjudicative climate deterred legitimate claims, while restrictions on workers’ choice of their treating doctor made it more difficult to get legitimate claims documented and approved.

A decline in workplace accidents would also contribute to a decline in aggregate payments in the 1990s. According to surveys by the Bureau of Labor Statistics (BLS), private employers have reported fewer workplace injuries that result in days away from work. The number of reported injuries or illnesses per 100 full-time workers declined from 3.0 in 1992 to 1.7 in 2001. It further fell to 1.4 in 2004 (U.S. DOL, 2005c). There is evidence that part of the decline in injury rates between 1991 and 1997, as measured in the BLS surveys, is the result of tighter eligibility standards and claims-filing restrictions for workers’ compensation (Boden and Ruser, 2003). Fewer cases reported to the workers’ compensation system could result in fewer injuries reported in the BLS survey. The National Council on Compensation Insurance (NCCI) reports a decline in the frequency of workers’ compensation claims during the 1990s (NCCI, 2002b). These findings suggest that workplaces are becoming safer.

In response to rapid growth in costs in the late 1980s, some jurisdictions made legislative changes that would reduce workers’ compensation payments, such as: (a) limiting compensability when a pre-existing condition is involved; (b) stricter evidentiary requirements; (c) limiting compensability for particular conditions, such as mental stress or cumulative trauma disorders; (d) stricter rules for permanent disability benefits; and (e) discouraging fraudulent claims (Burton and Spieler, 2001). For older workers, in particular, it may be difficult to discern the extent to which a condition is directly related to events on the job or to the cumulative impact of aging and other life experiences. In this gray area, changes in rules or practices with regard to compensability could have a significant impact, especially because a growing share of the workforce is over age 50.

Interaction with other disability benefit programs could also affect overall system benefits and costs. In the 1980s, when workers’ compensation grew rapidly as a share of covered wages, Social Security disability benefits declined as a share of covered wages, following retrenchments in that program in the early 1980s. On the other hand, in the 1990s, workers’ compensation declined while Social Security disability benefits rose as a share of covered wages. While most workers’ compensation recipients would not be eligible for Social Security because their disabilities are only temporary or partial, injured workers with significant long-term work incapacities might qualify for Social Security. A recent study finds that more than one third (36 percent) of persons ages 51-61 whose health limited the kind or amount of work they can do became disabled because of an accident, injury, or illness at work. Of the subset of those disabled individuals who were receiving Social Security disability insurance, a similar portion (37 percent) said they were disabled because of an accident, injury or illness at work. The study finds that workers who attribute their disabling conditions to their jobs are far more likely to be receiving Social Security disability insurance (29.0 percent) than to ever have received workers’ compensation (4.7 percent) (Reville and Schoeni, 2005). The interaction between workers’ compensation and Social Security disability insurance remains an important topic for further study.

While employer costs are affected by benefit payments to workers, shifts in employer costs as a share of payroll also reflect broader developments in the insurance industry and financial markets. The decline in employer costs in the 1990s occurred as insurance companies, spurred by favorable investment returns, cut the premiums they charged employers in order to expand their market shares. In the mid- and late-1990s, high investment returns contributed to profits in the workers’ compensation insurance industry. After 2000, low interest rates and poor stock market returns reversed that trend. The workers’ compensation insurance industry was unprofitable in 2001 and 2002. Employer costs rose as insurance carriers raised premiums in order to cover anticipated future benefit costs. The workers’ compensation insurance industry achieved profitability for the first time since 2000 in 2003 and profitability continued in 2004 (Yates and Burton, 2005).

Overview of Workers' Compensation

Workers' compensation provides benefits to workers who are injured on the job or who contract a work-related illness. Benefits include medical treatment for work-related conditions and cash payments that partially replace lost wages. Temporary total disability benefits are paid while the worker recuperates away from work. If the condition has lasting consequences after the worker heals, permanent disability benefits may be paid. In case of a fatality, the worker's dependents receive survivor benefits.

Germany enacted the first modern workers' compensation laws, known as Sickness and Accident Laws, in 1884, following their introduction by Chancellor Otto von Bismarck (Clayton, 2004). The next such laws were adopted in England in 1897. Workers' compensation was the first form of social insurance in the United States. The first workers' compensation law in the United States was enacted in 1908 to cover certain federal civilian workers. The first state laws were passed in 1911. The subsequent adoption of state workers' compensation programs has been called a significant event in the nation's economic, legal, and political history.

These laws were adopted throughout the nation, despite the great efforts required to reach agreements between business and labor on the specifics of the benefits to be provided and on which industries and employers would have to provide these benefits. Today, each of the fifty states and the District of Columbia has its own program. A separate program covers federal civilian employees. Other federal programs provide benefits to coal miners with black lung disease, longshore and harbor workers, employees of overseas contractors with the U.S. government, certain energy employees exposed to hazardous material, workers engaged in the manufacturing of atomic bombs, and veterans injured on active duty in the armed forces.

Before workers' compensation laws were enacted, an injured worker's only legal remedy for a work-related injury was to bring a tort suit against the employer and prove that the employer's negligence caused the injury. At the time, employers could use three common-law defenses to avoid compensating the worker: assumption of risk (showing that the injury resulted

from an ordinary hazard of employment); the fellow worker rule (showing that the injury was due to a fellow-worker's negligence); and contributory negligence (showing that, regardless of any fault of the employer, the worker's own negligence contributed to the accident).

Under the tort system, workers often did not recover damages and always experienced delays or high costs when they did. While employers generally prevailed in court, they nonetheless were at risk for substantial and unpredictable losses if the workers' suits were successful. Litigation created friction between employers and workers. Ultimately, both employers and employees favored legislation to insure that a worker who sustained an occupational injury or disease arising out of and in the course of employment would receive predictable compensation without delay, irrespective of who was at fault. As a *quid pro quo*, the employer's liability was limited. Under the exclusive remedy concept, the worker accepts workers' compensation as payment in full and gives up the right to sue.

Workers' compensation programs are designed and administered by the states. They vary across states in terms of who is allowed to provide insurance, which injuries or illnesses are compensable, and the level of benefits. Generally, state laws require employers to obtain insurance or prove they have the financial ability to carry their own risk (self-insure). Workers' compensation is financed almost exclusively by employers, although economists argue that workers pay for a substantial portion of the costs of the program in the form of lower wages (Leigh et al., 2000). The premiums paid by employers are based in part on their industry classifications and the occupational classifications of their workers. Many employers are also experience-rated, which results in higher (or lower) premiums for employers whose past experience demonstrates that their workers are paid more (or less) benefits than those of workers for similar employers in the same insurance classification. The employers' costs of workers' compensation can be affected by other factors, such as deviations, schedule rating, and dividends (Thomason, Schmidle, and Burton, 2001). NCCI data indicate that the size of these competitive pricing adjustments varies over the course of the insurance underwriting cycle.

Types of Workers' Compensation Benefits

Workers' compensation pays for medical care immediately and pays cash benefits for lost work time after a three to seven day waiting period. Most workers' compensation cases do not involve lost work time greater than the waiting period for cash benefits. In these cases, only medical benefits are paid. "Medical only" cases are quite common, but they represent a small share of benefit payments. Medical-only cases accounted for 78 percent of workers' compensation cases, but only 6 percent of all benefits paid, according to information about insured employers in thirty-eight states for policy years spanning 1998–2001 (NCCI, 2003a). The remaining 22 percent of cases that involved cash benefits accounted for 94 percent of benefits (for cash and medical care combined).

Cash benefits differ according to the duration and severity of the worker's disability. *Temporary total disability* benefits are paid when the worker is temporarily precluded from performing the pre-injury job or another job at the employer that the worker could have performed prior to the injury. Most states pay weekly benefits for temporary total disability

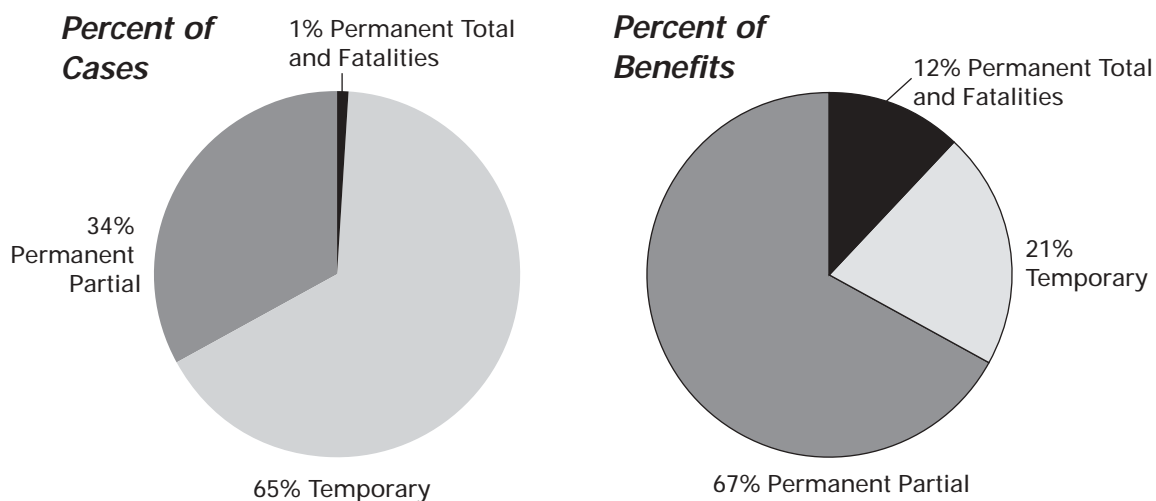
that replace two-thirds of the worker's pre-injury wage, subject to a dollar maximum that varies from state to state. In most cases, workers fully recover, return to work, and benefits end. In some cases, they return to work before they reach maximum medical improvement and have reduced responsibilities and a lower salary. In those cases, they receive *temporary partial disability* benefits. Temporary disability benefits are the most common type of cash benefits. They account for 65 percent of cases involving cash benefits and 21 percent of benefits incurred (Figures 3).

If a worker has very significant impairments that are judged to be permanent after he or she reaches maximum medical improvement, *permanent total disability* benefits might be paid. These cases are relatively rare. Permanent total disabilities, together with fatalities, account for 1 percent of all cases that involve cash benefits, and 12 percent of total benefit spending.

Permanent partial disability benefits are paid when the worker has impairments that, although permanent, do not completely limit the workers' ability to work. States differ in their methods for determining whether a worker is entitled to permanent partial

Figure 3

Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 2001



Medical only cases are excluded. The data include only privately insured employers in thirty-eight states. Benefits are incurred losses.

Source: NCCI 2004b, Exhibits X and XII.

benefits, the degree of partial disability and the amount of benefits to be paid (Barth and Niss, 1999; Burton, 2005). Cash benefits for permanent partial disability are frequently limited to a specified duration or an aggregate dollar limit. Permanent partial disabilities account for 34 percent of cases that involve any cash payments and for 67 percent of spending.

A recent in-depth study examined the likelihood that workers' compensation claimants would receive permanent partial disability benefits. It focused on individuals in six states who had experienced more than seven days of lost work time. Those who subsequently received permanent partial benefits ranged from about 3 in 10 in one state, to more than half of cases with at least one week of lost work time in two other states (Barth et al., 2002).

Methods for compensating permanent impairments fall into several broad categories (Barth, 2004). About 43 jurisdictions use a *schedule*—a list of body parts that are covered. Typically, a schedule appears in the underlying statute and lists benefits to be paid for specific losses, for example, the loss of a finger. These losses invariably include the upper and lower extremities and may also include an eye. Most state schedules also include the loss of hearing in one or both ears. Injuries to the spine that are permanently disabling are typically not scheduled, nor are injuries to internal organs, head injuries, and occupational diseases.

For unscheduled conditions, the approaches used can be categorized into four methods:

- An *impairment-based approach*, used in 19 states, is most common. In approximately 14 of those states, the worker with an unscheduled permanent partial disability receives a benefit based entirely on the degree of impairment. Any future earnings losses of the worker are not considered.
- A *loss-of-earning-capacity* approach is used in 13 states. This approach links the benefit to the worker's ability to earn or to compete in the labor market and involves a forecast of the economic impact that the impairment will have on the worker's future earnings.
- In a *wage-loss approach*, used in 10 states, benefits are paid for the actual or ongoing losses

that a worker incurs. In some states, the permanent partial disability benefit begins after maximum medical improvement has been achieved. In some cases permanent disability benefits can simply be the extension of temporary disability benefits until the disabled worker returns to employment.

- In a *bifurcated approach* used in nine jurisdictions, the benefit for a permanent disability depends on the worker's employment status at the time that the worker's condition is assessed, after the condition has stabilized. If the worker has returned to employment with earnings at or near the pre-injury level, the benefit is based on the degree of impairment. If the worker has not returned to employment, or has returned but at lower wages than before the injury, the benefit is based on the degree of lost earning capacity.

Covered Employment

In 2004, workers' compensation covered an estimated 125.9 million workers, an increase of 0.9 percent from the 124.7 million workers covered in 2003 (Table 2). Total wages of covered workers were \$5.0 trillion in 2004, an increase of 5.0 percent from 2003. The increases in covered workers and wages in 2004 reflect the recovery process from the recession that began in March 2001. Covered employment in 2004 remained below the peak reached in 2000, and the increase in covered wages in 2004 was smaller than in most years in the 1990s. These developments reflect the condition of the overall economy. Workers' compensation coverage rules did not change significantly during the last decade.

Coverage Rules

Every state except Texas mandates coverage under workers' compensation for almost all private employees (U.S. DOL, 2004). In Texas, coverage is voluntary, but employers not offering coverage are not protected from tort suits. An employee not covered by workers' compensation insurance is allowed to file suit claiming the employer is liable for his or her work-related injury or illness.

Other states exempt from mandatory coverage certain categories of workers, such as those in very small firms, certain agricultural workers, household work-

ers, employees of charitable or religious organizations, or employees of some units of state and local government. Employers with fewer than three workers are exempt from mandatory workers' compensation coverage in Arkansas, Colorado, Georgia, Michigan, New Mexico, North Carolina, Virginia, and Wisconsin. Employers with fewer than four workers are exempt in Florida and South Carolina. Those with fewer than five employees are exempt in Alabama, Mississippi, Missouri, and Tennessee.

The rules for agricultural workers vary among states. In sixteen states (in addition to Texas), farm employers are exempt from mandatory workers' compensation coverage altogether. In other states, coverage is compulsory for some or all farm employers.

Method for Estimating Coverage

Because no national system exists for counting workers covered by workers' compensation, the number of covered workers and their covered wages must be

estimated. The Academy's methods for estimating coverage are described in Appendix A. In brief, we start with the number of workers and total wages in each state that are covered by unemployment insurance (UI). About 96 or 97 percent of all U.S. wage and salary workers are covered by UI (NASI, 2002). We subtract from UI coverage the estimates of the workers and wages that are not required to be covered by workers' compensation because of exemptions for small firms and farm employers and because coverage for employers in Texas is voluntary.

Using these methods we estimate that in 2004, 97.4 percent of all UI-covered workers and wages were covered by workers' compensation. They account for about 96 percent of all wage and salary workers in the United States, self-employed persons are not covered by Unemployment Insurance or by workers' compensation.

Table 2

Number of Workers Covered under Workers' Compensation Programs and Total Covered Wages, 1989–2004

Year	Total Workers		Total Wages	
	(in thousands)	Percent Change	(in billions)	Percent Change
1989	103,900		\$ 2,347	
1990	105,500	1.5	2,442	4.0
1991	103,700	-1.7	2,553	4.5
1992	104,588	0.9	2,711	6.2
1993	106,503	1.8	2,810	3.7
1994	109,582	2.9	2,955	5.2
1995	112,377	2.6	3,132	6.0
1996	114,773	2.1	3,328	6.2
1997	118,145	2.9	3,591	7.9
1998	121,485	2.8	3,885	8.2
1999	124,349	2.4	4,151	6.8
2000	127,141	2.2	4,495	8.3
2001	126,972	-0.1	4,604	2.4
2002	125,603	-1.1	4,615	0.2
2003	124,685	-0.7	4,717	2.2
2004	125,863	0.9	4,953	5.0

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

Table 3

Number of Workers Covered by Workers' Compensation and Total Covered Wages, By State, 2000- 2004

	Covered Workers (in thousands)					Covered Wages (in millions)					
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2003-2004 % Change
Alabama	1,747	1,726	1,704	1,698	1,720	\$49,852	\$51,057	\$52,037	\$53,617	\$56,310	5.0
Alaska	259	266	270	275	279	8,856	9,391	9,786	10,098	10,582	4.8
Arizona	2,172	2,195	2,191	2,222	2,304	70,313	72,747	73,890	77,118	83,541	8.3
Arkansas	1,074	1,071	1,064	1,061	1,073	27,952	28,874	29,515	30,246	32,014	5.8
California	14,591	14,728	14,588	14,553	14,706	599,367	606,472	601,288	616,879	653,145	5.9
Colorado	2,132	2,148	2,101	2,064	2,074	78,692	80,930	79,093	79,589	82,643	3.8
Connecticut	1,651	1,644	1,627	1,605	1,611	75,132	77,254	76,191	77,519	82,095	5.9
Delaware	400	400	396	396	406	14,612	15,331	15,654	16,166	17,209	6.4
District of Columbia	454	452	458	459	467	22,539	23,788	24,634	25,560	27,418	7.3
Florida	6,664	6,754	6,765	6,840	7,039	201,923	211,244	217,178	227,172	245,133	7.9
Georgia	3,691	3,682	3,624	3,597	3,663	125,329	128,313	128,121	130,129	137,088	5.3
Hawaii	523	527	528	538	554	15,545	15,994	16,694	17,564	18,893	7.6
Idaho	550	558	558	562	578	15,054	15,301	15,515	15,890	16,988	6.9
Illinois	5,840	5,793	5,679	5,606	5,611	221,437	225,549	224,324	226,180	235,915	4.3
Indiana	2,882	2,822	2,785	2,774	2,802	88,942	89,178	90,220	91,998	96,522	4.9
Iowa	1,423	1,410	1,393	1,385	1,404	39,490	40,418	41,038	42,247	44,770	6.0
Kansas	1,279	1,286	1,270	1,251	1,263	37,198	38,411	38,730	38,953	40,854	4.9
Kentucky	1,720	1,696	1,676	1,673	1,688	49,178	50,503	51,360	52,803	55,423	5.0
Louisiana	1,832	1,835	1,812	1,820	1,831	50,542	52,870	53,956	55,315	57,648	4.2
Maine	577	579	577	577	583	15,715	16,445	16,887	17,450	18,282	4.8
Maryland	2,277	2,295	2,299	2,306	2,332	80,676	85,056	87,514	90,465	95,769	5.9
Massachusetts	3,218	3,222	3,150	3,089	3,087	142,548	144,680	141,163	142,621	150,515	5.5
Michigan	4,428	4,325	4,242	4,175	4,152	163,500	161,252	161,193	163,935	166,930	1.8
Minnesota	2,572	2,576	2,552	2,542	2,567	90,818	93,929	95,206	97,750	103,238	5.6

Mississippi	1,056	1,033	1,027	1,020	1,026	0.6	26,207	26,364	26,900	27,629	28,730	4.0
Missouri	2,501	2,482	2,457	2,447	2,466	0.8	77,872	79,804	80,636	81,917	85,074	3.9
Montana	366	371	374	380	390	2.7	8,637	9,102	9,482	9,935	10,542	6.1
Nebraska	995	1,021	850	850	866	1.8	23,596	24,190	24,792	25,571	26,990	5.6
Nevada	865	866	1,027	1,062	1,127	6.1	32,084	33,784	34,677	37,255	41,514	11.4
New Hampshire	598	602	595	596	605	1.5	20,695	21,267	21,418	22,135	23,566	6.5
New Jersey	3,809	3,809	3,792	3,787	3,812	0.6	166,150	168,391	170,802	174,951	182,512	4.3
New Mexico	660	673	680	688	703	2.1	17,725	18,801	19,441	20,187	21,420	6.1
New York	8,325	8,287	8,135	8,089	8,142	0.7	374,687	387,229	375,634	381,651	405,898	6.4
North Carolina	3,710	3,660	3,607	3,577	3,633	1.6	114,729	116,573	117,180	119,091	125,399	5.3
North Dakota	298	300	300	302	309	2.2	7,249	7,593	7,843	8,221	8,811	7.2
Ohio	5,426	5,352	5,252	5,202	5,214	0.2	175,162	176,803	178,285	181,304	188,314	3.9
Oklahoma	1,404	1,417	1,393	1,366	1,382	1.2	37,061	38,877	38,991	39,576	41,442	4.7
Oregon	1,577	1,567	1,543	1,533	1,565	2.1	51,322	51,598	51,496	52,299	55,191	5.5
Pennsylvania	5,444	5,444	5,396	5,364	5,390	0.5	184,030	189,065	191,743	196,858	206,104	4.7
Rhode Island	437	439	439	443	447	0.9	14,096	14,563	15,058	15,906	16,576	4.2
South Carolina	1,729	1,698	1,677	1,679	1,697	1.1	48,345	49,306	49,868	51,154	53,504	4.6
South Dakota	353	354	352	353	358	1.5	8,592	8,881	9,101	9,413	9,930	5.5
Tennessee	2,516	2,479	2,455	2,453	2,494	1.7	76,065	77,275	78,948	81,411	86,074	5.7
Texas	7,573	7,705	7,386	7,102	6,949	-2.2	263,100	276,163	265,805	260,476	265,326	1.9
Utah	1,011	1,017	1,006	1,006	1,037	3.1	29,109	30,124	30,233	30,732	32,742	6.5
Vermont	290	292	290	288	292	1.4	8,325	8,758	8,896	9,148	9,610	5.1
Virginia	3,202	3,216	3,186	3,191	3,268	2.4	110,232	115,570	115,504	119,804	128,706	7.4
Washington	2,637	2,622	2,575	2,583	2,625	1.6	97,245	97,512	97,585	99,821	102,162	2.3
West Virginia	664	664	661	656	665	1.4	17,491	18,187	18,483	18,738	19,689	5.1
Wisconsin	2,646	2,630	2,604	2,602	2,626	1.0	80,913	82,627	84,191	86,579	90,812	4.9
Wyoming	222	228	230	232	240	3.6	5,859	6,295	6,564	6,833	7,373	7.9
Total non-federal	124,269	124,219	122,602	121,920	123,123	1.0	4,361,787	4,469,716	4,470,740	4,565,857	\$4,796,160	5.0
Federal employees	2,871	2,753	2,758	2,764	2,740	-0.9	132,731	134,712	144,329	150,819	\$158,294	5.0
TOTAL	127,141	126,972	125,360	124,685	125,863	0.9	4,494,518	4,604,428	4,615,069	4,716,676	\$4,953,089	5.0

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

Changes in State Coverage

Because workers' compensation coverage rules did not change between 2003 and 2004, differences in growth rates among states generally reflect changes in the states' overall employment and wages. In Texas, where workers' compensation is voluntary for employers, coverage declined from 84 percent of workers in 2001 to 76 percent in 2004 according to surveys in Texas. Estimates for 2003-2004 in Table 3 phase in this decline in Texas coverage (Appendix A). In other states, only Massachusetts and Michigan experienced a decline in the number of covered workers due to decline in overall employment, other jurisdictions experienced an increase in covered jobs

in 2004. With regard to wages covered under workers' compensation, all jurisdictions registered increases in 2004 over 2003 (Table 3).

Benefit Payments

Workers' compensation payments for medical treatment and cash benefits combined were \$56.0 billion in 2004, an increase of 2.3 percent from \$54.7 billion in 2003 (Table 4). These are benefits paid to all workers in a given year, regardless of the year their injuries occurred or their illnesses began. This measure is known as *calendar year paid benefits*. That is, in 2004 \$56.0 billion in benefits were paid for all workers' compensation cases, whether workers were

Table 4

Workers' Compensation Benefits, by Type of Insurer, 1987–2004 (in millions)

Year ^a	Total	Percent Change in Total	Private Carriers	State Funds	Self- Insured	Federal ^b	Medical	Percent Medical
1987	27,317	11.0	\$15,453	\$4,084	\$5,082	\$2,698	\$9,912	36.3
1988	30,703	12.4	17,512	4,687	5,744	2,760	11,507	37.5
1989	34,316	11.8	19,918	5,205	6,433	2,760	13,424	39.1
1990	38,237	11.4	22,222	5,873	7,249	2,893	15,187	39.7
1991	42,170	10.3	24,515	6,713	7,944	2,998	16,832	39.9
1992	45,668	8.3	25,280	7,506	9,724	3,158	18,664	40.9
1993	45,330	-.7	24,129	7,400	10,623	3,178	18,503	40.8
1994	44,586	-1.6	22,306	7,587	11,527	3,166	17,194	38.6
1995	43,373	-2.7	21,145	7,893	11,232	3,103	16,733	38.6
1996	41,837	-3.5	20,392	7,603	10,775	3,066	16,567	39.6
1997	42,314	1.1	21,645	7,266	10,623	2,780	17,306	40.9
1998	43,278	2.3	22,966	7,241	10,203	2,868	18,121	41.9
1999	45,581	5.3	25,726	6,883	10,109	2,862	19,059	41.8
2000	47,695	4.6	26,866	7,422	10,449	2,957	20,927	43.9
2001	50,533	6.0	27,970	7,991	11,503	3,069	22,844	45.2
2002	53,309	5.5	28,783	9,327	12,046	3,154	24,480	45.9
2003	54,715	2.6	28,547	10,457	12,525	3,185	25,510	46.6
2004	55,968	2.3	28,346	11,044	13,321	3,256	26,099	46.6

(a) Estimated benefits paid under deductible provisions are included beginning in 1992.

(b) In all years, federal benefits includes those paid under the Federal Employees' Compensation Act for civilian employees and the portion of the Black Lung benefit program that is financed by employers and are paid through the federal Black Lung Disability Trust fund. In years before 1997, federal benefits also include the other part of the Black Lung program that is financed solely by federal funds. In 1997–2003, federal benefits also include a portion of employer-financed benefits under the Longshore and Harbor Workers Compensation Act that are not reflected in state data—namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

Source: National Academy of Social Insurance estimates. See Appendices B and H.

injured in 2004 or in a previous year, from 2003 to 2004 share of total payments that were for medical care remained constant at 46.6 percent.

Method for Estimating Benefits

Our estimates of workers' compensation benefits paid are based on three main sources: responses to the Academy's questionnaire from state agencies, data from National Association of Insurance Commissioners (NAIC), and data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies.

The A.M. Best data used for this report show benefits paid in each state for 2000 through 2004. They include information for all private carriers in every state and for nineteen of the twenty-six state funds, but do not include any information about self-insured employers or about benefits paid under deductible arrangements. Under deductible policies written by private carriers or state funds, the insurer pays all of the workers' compensation benefits, but employers are responsible for reimbursing the insurer for those benefits up to a specified deductible amount. Deductibles may be written into an insurance policy on a per-injury basis, or an aggregate basis, or a combination of a per-injury basis with an aggregate cap. States vary in the maximum deductibles they allow. In return for accepting a policy with a deductible, the employer pays a lower premium.

Appendix C summarizes the kinds of data each state reported. States had the most difficulty reporting amounts of benefits paid under deductible arrangements. The Academy's methods for estimating these benefits are described in Appendix G. If states were unable to report benefits paid by self-insured employers, these amounts had to be estimated; the methods for estimating self-insured benefits are described in Appendix E. A detailed, state-by-state explanation of how the estimates in this report are produced is in *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2004* on the Academy's website at www.nasi.org.

Sources of Insurance Coverage

Private insurance carriers remain the largest source of workers' compensation benefits. In 2004, they accounted for 50.6 percent of benefits paid, a decline from 52.2 percent of total benefits in 2003 (Table

5). Private carriers are allowed to sell workers' compensation insurance in all but five states that have exclusive state funds—Ohio, North Dakota, Washington, West Virginia, and Wyoming.

When benefits paid under deductible arrangements are excluded, privately insured benefits account for 36.9 percent of total benefits paid. This is the lowest share for privately insured benefits in this time series. For the first time privately insured benefits paid are a smaller share of total benefits than are benefits paid directly by employers (38.4 percent) through self-insurance (23.8 percent) and employer paid deductibles (14.6 percent) combined (Table 5). Employers are allowed to self-insure for workers' compensation in all states except North Dakota and Wyoming, which require all employers to obtain insurance from the state fund. In other states, employers can self-insure their risk for workers' compensation benefits if they prove they have the financial capacity to do so. Many large employers choose to self-insure. Some states permit groups of employers in the same industry to self-insure through group self-insurance. Benefits provided under group self-insurance are included with the self-insured benefits in this report.

The share of benefits provided by state funds rose to 19.7 percent in 2004, from 19.1 percent in 2003. A total of twenty-six states have state funds that provide workers' compensation insurance. They include the five exclusive state fund states and twenty-one others. In general, state funds are established by an act of the state legislature, have at least part of their board appointed by the governor, are usually exempt from federal taxes, and typically serve as the insurer of last resort—that is, they do not deny insurance coverage to employers who have difficulty purchasing it privately. Not all state funds meet all these criteria, however. In some cases, it is not altogether clear whether an entity is a state fund or a private insurer, or whether it is a state fund or a state entity that is self-insuring workers' compensation benefits for its own employees. Consequently, the Academy's expert panel decided to classify as state funds all twenty-six entities that are members of the AASCIF (American Association of State Compensation Insurance Funds) (AASCIF, 2006). This includes the South Carolina fund, which is the required insurer for state employees and is available to cities and counties to insure their employees, but does not insure private employers.

Table 5**Total Amount and Percentage Distribution of Workers' Compensation Benefit Payments by Type of Insurer, 1990–2004**

Year	Total Benefits (in millions)	Percentage Distribution							
		Total	Private Carriers		State Funds		Federal ^b	Self-Insured	Self-Insured plus Deductibles
			All	Deductibles ^a	All	Deductibles ^a			
1990	38,237	100.0	58.1	n/a	15.4	n/a	7.6	19.0	19.0
1991	42,170	100.0	58.1	n/a	15.9	n/a	7.1	18.8	18.8
1992	45,668	100.0	55.4	2.7	16.4	*	6.9	21.3	24.0
1993	45,330	100.0	53.2	4.4	16.3	*	7.0	23.4	27.9
1994	44,586	100.0	50.0	5.9	17.0	0.4	7.1	25.9	32.2
1995	43,373	100.0	48.8	7.1	18.2	0.7	7.2	25.9	33.7
1996	41,837	100.0	48.7	8.3	18.2	0.9	7.3	25.8	35.0
1997	42,314	100.0	51.2	8.6	17.2	0.7	6.6	25.1	34.4
1998	43,278	100.0	53.1	9.0	16.7	0.6	6.6	23.6	33.1
1999	45,581	100.0	56.4	10.2	15.1	0.7	6.3	22.2	33.1
2000	47,695	100.0	56.3	12.4	15.6	0.6	6.2	21.9	34.9
2001	50,533	100.0	55.3	12.1	15.8	0.6	6.1	22.8	35.4
2002	53,309	100.0	54.0	13.0	17.5	0.7	5.9	22.6	36.3
2003	54,715	100.0	52.2	14.0	19.1	0.8	5.8	22.9	37.7
2004	55,968	100.0	50.6	13.7	19.7	0.9	5.8	23.8	38.4

* Negligible
n/a Not available

(a) The percentage of total benefits paid by employers under deductible provisions with this type of insurance.
(b) Reflects federal benefits included in Table 4.

Source: National Academy of Social Insurance estimates based on Tables 4 and 6.

Federal programs accounted for 5.8 percent of benefits paid in 2004. These benefits include payments under the Federal Employee' Compensation Act for civilian employees and the portion of the Black Lung benefit program that is financed by employers and paid through the federal Black Lung Disability Trust Fund. Finally, the federal benefits include benefits under the Longshore and Harbor Workers' Compensation Act that are paid by self-insured employers and by special funds under that Act. More detail about federal programs is in Appendix H.

Trends in Deductibles and Self-Insurance

Prior to the 1990s, deductible policies were not common, but their popularity grew in the mid-1990s. In 1992, benefits under deductible policies totaled \$1.3 billion, or about 2.7 percent of total benefits (Table

6). By 2000, they had risen to \$6.2 billion, or 13.0 percent of total benefits. In 2004 deductibles totaled \$8.2 billion, which was 14.6 percent of total benefits paid.

In Tables 4 and 5, benefits reimbursed by employers under deductible policies are included with private carrier or state fund benefits, depending on the type of insurer. Table 6 shows separately the estimated dollar amount of benefits that employers paid under deductible provisions with each type of insurance.

Employers who have policies with deductibles are, in effect, self-insuring up to the amount of the deductible. That is, they are bearing that portion of the financial risk. Adding deductibles to self-insured benefit payments shows the share of the total market where employers are assuming financial risk. This

Table 6**Estimated Employer-Paid Benefits under Deductible Provisions for Workers' Compensation, (in millions), 1992–2004**

Year	Total	Private Carriers	State Funds	Deductibles as a % of Total Benefits
1992	\$1,250	\$1,250	*	2.7
1993	2,027	2,008	\$ 19	4.5
1994	2,834	2,645	189	6.4
1995	3,384	3,060	324	7.8
1996	3,859	3,492	367	9.2
1997	3,928	3,650	278	9.3
1998	4,114	3,873	241	9.5
1999	4,961	4,661	300	10.9
2000	6,201	5,931	270	13.0
2001	6,411	6,130	281	12.7
2002	7,326	6,935	391	13.7
2003	8,088	7,639	450	14.8
2004	8,157	7,659	497	14.6

* Negligible

Note: Data on deductible benefits were available from five states. Five states do not allow policies with deductibles. For thirteen states data were computed by subtracting various components from total benefit figures provided. For the other twenty-seven states and the District of Columbia, deductible benefits were computed using a ratio of the manual equivalent premiums.

share of total benefit payments rose from 19.0 percent in 1990 to 35.0 percent in 1996, and then remained between 33 and 36 percent of total benefits through 2001. In 2004, this share increased to 38.4 from the 2003 share of 37.7 percent of benefit payments (Table 5).

The growth in self-insurance and in deductible policies in the early 1990s, as well as the down-turn in self-insurance later in the 1990s, probably reflects dynamics of the insurance market that altered the relative cost to employers of purchasing private insurance *vis-à-vis* self insuring.

In the late 1980s and early 1990s, when workers' compensation benefits and costs rose rapidly, many states had administrative pricing systems that set the premium levels that insurance companies could charge, and often states limited the rate of increase in premiums. As a result, premiums did not rise as fast as costs. Growing numbers of employers were not

able to buy insurance in the voluntary market because insurers did not want to sell insurance at premiums that were less than their expected costs.

Because states require that employers have insurance, they provide ways for high-cost employers to buy it. In some states, the state fund insures all applicants. Some states use a *residual market* for high-risk employers and then require that insurers underwrite a share of the residual market as a condition for doing business in the state. During the late 1980s and early 1990s, some states set premiums in the residual market that did not recognize the higher cost associated with residual market employers. To cover the gap between premiums charged to employers in the residual market and their actual losses, residual market pools assessed fees on insurance companies based on the insurer's share of aggregate premiums written in the voluntary market in the state. (Similar fees generally were not assessed on self-insured employers in the state. Also lowering

premiums through the use of high deductibles could reduce assessments.) As costs rose during the late 1980s, more employers ended up in the residual market, residual market losses grew, and rising fees assessed on insurers drove up the price of premiums charged to employers who were not in the residual market.

The combination of rising costs and the structure of administered prices in the private insurance market encouraged employers to set up self-insured plans, which did not share in assessments to cover the cost of the residual market. Similarly, insurers and employers turned to hybrid plans that combine large deductibles with private insurance as a way to lower their aggregate premiums, and consequently, their share of assessments for the operating losses in the residual market.

Declining workers' compensation benefits and costs in the mid-1990s combined with a vibrant economy and high financial market returns enabled insurance companies to earn more from invested premiums. The combination of improved underwriting results and higher returns on reserves led to high profits by historical standards within the workers' compensation insurance industry (Yates and Burton, 2005). These relatively high profits led to fierce underwriting competition. Insurance companies began offering multi-year guaranteed cost programs that locked in low premium rates for employers, thus greatly reducing the employers' cost and risk. Tax advantages inherent in the purchase of insurance also made it attractive—that is, employers can take an immediate tax deduction for premiums they pay for insurance, while when they self-insure, tax deductions accrue only later as they pay claims. These factors led to a shift away from self-insurance in favor of the purchase of insurance later in the 1990s.

Since 1999, the share of benefits paid directly by employers (through self-insurance and large deductibles combined) has been rising. In 2004, the share of benefits paid by employers reached 38.4 percent, the highest recorded in this data series. For the first time, the share of benefits paid by employers (through self-insurance or deductibles) exceeded the share paid by private carriers excluding deductibles, which was 36.9 percent in 2004 (Table 5).

Changes in State Benefits

On a national level, total benefits (cash plus medical) were 2.3 percent higher in 2004 than in 2003. Focusing only on national growth conceals a great deal of variation among states. Table 7 shows annual changes in state benefit payments between 2000 and 2004.

In nine states: Benefits declined between 2003 and 2004. Alabama, Delaware, Florida, Hawaii, Massachusetts, Nebraska, New Hampshire, Texas, and West Virginia. The rest of the states showed an increase in benefits.

Benefits vary within a state from year to year for many reasons, including:

- Changes in workers' compensation statutes, new court rulings, or new administrative procedures;
- Changes in the mix of occupations or industries, because jobs differ in their rates of injury and illness;
- Fluctuations in employment, because more people working means more people at risk of a job-related illness or injury;
- Changes in wage rates to which benefit levels are linked;
- Variations in health care practice patterns across states, which influence the costs of medical care;
- Fluctuations in the number and severity of injuries and illnesses for other reasons (for example, in a small state, one industrial accident involving many workers in a particular year can show up as a noticeable increase in statewide benefit payments); and
- Changes in reporting procedures (for example, as state agencies update their record keeping systems, the type of data they are able to report often changes, and new legislation can also affect the data a state is able to provide).

Medical Payments in States

The share of benefits for medical care varies among states. In 2004 the share of benefit spending for medical care ranged from lows of less than 40 percent—in the District of Columbia, Connecticut,

Hawaii, Massachusetts, Michigan, New York, Rhode Island and Washington—to highs of over 60 percent in Alabama, Arizona, Arkansas, Indiana, South Dakota, Texas, and Utah (Table 8). Many factors in a state can influence the relative share of benefits for medical care as opposed to cash wage-replacement or survivor benefits. Among them are:

- Different levels of earnings replacement provided by cash benefits, which mean that, all else being equal, states with more generous cash benefits have a lower share of benefits used for medical care;
- Differences in medical costs, medical practices, and the role of workers' compensation programs in regulating allowable medical costs;
- Differences in waiting periods for cash benefits and in statutes determining permanent disability awards; and
- The industry-mix in each state, which influences the types of illnesses and injuries that occur, and thus the level of medical costs.

Some states were not able to report the portion of their total benefits that were for medical care. In those cases, medical benefits were estimated based on information from the National Council on Compensation Insurance and from other states. These states are footnoted in Table 8. Methods for estimating medical benefits are described in Appendix F.

In twenty-two jurisdictions medical benefits rose faster than cash benefits. In three states, medical and cash benefits increased at the same rates. In five states, medical benefits rose but cash benefits fell. In contrast, in nine states cash benefits to workers grew faster than medical payments. In six states, cash benefits rose but medical benefits actually decreased. Finally, in five states, cash and medical benefits decreased, which included Delaware where they fell at the same rates. In Ohio, medical and cash benefits did not change from 2003 (Table 9).

State Benefits Relative to Wages

One way to standardize state benefit payments to take account of states' differing population sizes is to divide each state's benefits by the number of workers covered by the state's workers' compensation pro-

gram. A second way is to divide total benefits by total wages of covered workers. The latter takes account of both the number of workers and prevailing wage levels in the state. The measure of benefits as a percent of covered wages helps show whether large growth in benefits payments may be due to growth in the state's population of covered workers and covered payroll. Benefits per \$100 of covered payroll in 2000 through 2004 are shown in Table 10. In 2004, employment began to recover from the 2001 recession. As new jobs were created, covered payroll rose by 5.0 percent between 2003 and 2004 (Table 3). In eight jurisdictions covered payroll rose more than seven percentage points—Arizona, District of Columbia, Florida, Hawaii, Nevada, North Dakota, Virginia and Wyoming. Consequently, when benefits are standardized relative to covered payroll, the state patterns of change are somewhat different from those revealed by looking only at dollar changes in benefits.

While benefit payments that are standardized relative to wages in a state provide a useful perspective for looking at changes within particular states over time, the data do not provide meaningful comparisons of the adequacy of benefits across states. Measures of benefit adequacy would compare benefits injured workers received with their actual wage loss. A state with relatively high payments as indicated in Table 10 may in fact be replacing a relatively low portion of injured workers' actual earnings losses.

Alternatively, a state with relatively low benefits as indicated in Table 10 may be replacing a relatively high portion of actual earnings losses. By the same token, these figures do not show the comparative cost to employers of locating their business in one state versus another. Some reasons for cautioning against using these data to compare the adequacy of benefits for workers or the costs to employers across states are set out below.

Caveats on comparing benefit adequacy across states. As discussed in the Academy's study panel report titled *Adequacy of Earnings Replacement in Workers' Compensation Programs* (Hunt, 2004), an appropriate study of adequacy compares the benefits disabled workers actually receive with the wages they lose because of their injuries or occupational diseases. Such data are not available on a consistent basis across states. Aggregate benefits relative to aggregate

Table 7

Workers' Compensation Benefits by State, 2000–2004
(in thousands)

State	2000	2001	2002	2003	2004	2000-2001	2001-2002	2002-2003	2003-2004	2000-2004
Alabama ²	\$529,189	\$562,773	\$565,264	\$580,184	\$575,697	6.3	0.4	2.6	-0.8	8.8
Alaska ²	139,378	163,111	180,046	184,379	194,195	17.0	10.4	2.4	5.3	39.3
Arizona ^{1,5,6}	497,955	436,037	505,278	531,240	584,750	-12.4	15.9	5.1	10.1	17.4
Arkansas ¹	213,969	217,719	221,474	225,061	225,689	1.8	1.7	1.6	0.3	5.5
California ^{2,6}	9,449,145	10,082,580	11,582,431	12,403,729	12,459,638	6.7	14.9	7.1	0.5	31.9
Colorado ^{1,5,6}	810,301	566,354	760,958	757,041	834,594	-30.1	34.4	-0.5	10.2	3.0
Connecticut ^{1,5}	638,435	641,341	675,895	674,747	684,930	0.5	5.4	-0.2	1.5	7.3
Delaware ^{1,5,7}	137,737	138,371	152,933	160,264	158,190	0.5	10.5	4.8	-1.3	14.8
District of Columbia ^{1,5,7}	85,909	91,148	93,960	89,108	98,443	6.1	3.1	-5.2	10.5	14.6
Florida ^{1,5}	2,576,875	3,033,955	2,678,082	2,811,302	2,759,712	17.7	-11.7	5.0	-1.8	7.1
Georgia ^{1,5,7}	964,995	1,029,374	974,661	1,061,969	1,127,654	6.7	-5.3	9.0	6.2	16.9
Hawaii ^{2,6}	231,359	248,100	267,827	274,922	271,290	7.2	8.0	2.6	-1.3	17.3
Idaho ^{1,5,6,7}	113,598	179,640	185,688	196,394	210,326	58.1	3.4	5.8	7.1	85.1
Illinois ^{1,4,5}	1,948,330	2,079,768	2,123,878	2,103,658	2,213,372	6.7	2.1	-1.0	5.2	13.6
Indiana ^{1,4,5}	528,901	524,111	547,305	559,421	608,717	-0.9	4.4	2.2	8.8	15.1
Iowa ^{1,4,5}	342,930	390,235	400,226	424,198	445,832	13.8	2.6	6.0	5.1	30.0
Kansas ^{1,5}	322,707	340,483	341,606	293,473	365,546	5.5	0.3	-14.1	24.6	13.3
Kentucky ^{1,4,5,6}	575,292	671,875	708,424	724,291	763,050	16.8	5.4	2.2	5.4	32.6
Louisiana ^{1,5,6}	546,544	587,855	562,812	585,480	589,209	7.6	-4.3	4.0	0.6	7.8
Maine ¹	244,714	245,145	261,734	239,777	269,917	0.2	6.8	-8.4	12.6	10.3
Maryland ^{1,5,6}	641,044	681,633	664,282	701,297	767,576	6.3	-2.5	5.6	9.5	19.7
Massachusetts ^{1,5}	800,837	881,417	902,840	1,057,175	1,045,747	10.1	2.4	17.1	-1.1	30.6
Michigan ²	1,474,058	1,477,986	1,512,457	1,476,850	1,517,386	0.3	2.3	-2.4	2.7	2.9
Minnesota ³	797,787	904,451	921,518	885,006	933,975	13.4	1.9	-4.0	5.5	17.1
Mississippi ^{1,5}	292,677	284,729	290,378	291,014	305,516	-2.7	2.0	0.2	5.0	4.4
Missouri ²	779,786	958,708	1,115,832	1,080,870	1,119,871	22.9	16.4	-3.1	3.6	43.6
Montana ²	154,797	179,613	177,877	200,857	211,059	16.0	-1.0	12.9	5.1	36.3
Nebraska ^{1,4,5}	229,644	247,616	282,844	290,419	283,148	7.8	14.2	2.7	-2.5	23.3
Nevada ²	323,567	309,321	324,597	326,556	357,937	-4.4	4.9	0.6	9.6	10.6
New Hampshire ^{1,4,5}	178,522	215,158	211,734	219,629	213,964	20.5	-1.6	3.7	-2.6	19.9
New Jersey ^{1,7}	1,182,644	1,255,974	1,328,650	1,379,235	1,398,358	6.2	5.8	3.8	1.4	18.2

New Mexico ²	143,592	159,050	175,845	189,427	196,123	10.8	10.6	7.7	3.5	36.6
New York ²	2,909,115	2,978,224	3,142,392	3,220,398	3,337,490	2.4	5.5	2.5	3.6	14.7
North Carolina ^{1,4,5}	872,669	905,253	987,731	1,066,611	1,159,117	3.7	9.1	8.0	8.7	32.8
North Dakota ^{3,9}	69,966	71,267	73,515	78,453	83,237	1.9	3.2	6.7	6.1	19.0
Ohio ⁸	2,098,545	2,248,369	2,388,186	2,442,187	2,442,137	7.1	6.2	2.3	0.0	16.4
Oklahoma ^{1,5,6}	485,371	526,070	508,931	553,922	572,001	8.4	-3.3	8.8	3.3	17.8
Oregon ³	425,460	472,691	474,547	471,307	506,813	11.1	0.4	-0.7	7.5	19.1
Pennsylvania ³	2,378,828	2,406,272	2,478,709	2,565,344	2,594,238	1.2	3.0	3.5	1.1	9.1
Rhode Island ^{1,5,6,7}	126,721	135,703	141,066	130,865	142,268	7.1	4.0	-7.2	8.7	12.3
South Carolina ³	515,381	532,374	592,530	656,935	688,115	3.3	11.3	10.9	4.7	33.5
South Dakota ²	63,165	70,660	73,382	73,767	76,472	11.9	3.9	0.5	3.7	21.1
Tennessee ^{1,4,5}	780,534	843,062	777,264	842,647	895,808	8.0	-7.8	8.4	6.3	14.8
Texas ^{1,5,6,7}	2,160,372	2,212,275	2,307,054	1,856,942	1,574,451	2.4	4.3	-19.5	-15.2	-27.1
Utah ^{1,4,5,6}	172,870	197,606	211,883	186,344	218,264	14.3	7.2	-12.1	17.1	26.3
Vermont ^{1,4,5}	101,985	97,654	119,329	119,961	128,076	-4.2	22.2	0.5	6.8	25.6
Virginia ^{2,4}	602,035	604,383	626,954	701,593	762,067	0.4	3.7	11.9	8.6	26.6
Washington ⁸	1,526,514	1,638,997	1,716,107	1,800,076	1,836,097	7.4	4.7	4.9	2.0	20.3
West Virginia ^{6,7,8}	693,057	713,130	832,608	828,913	741,034	2.9	16.8	-0.4	-10.6	6.9
Wisconsin ^{4,5,8}	768,282	923,761	896,556	840,354	1,042,725	20.2	-2.9	-6.3	24.1	35.7
Wyoming ^{6,8,9}	89,041	100,076	107,475	114,252	120,062	12.4	7.4	6.3	5.1	34.8
Non-federal total	44,737,130	47,463,457	50,155,557	51,529,845	52,711,882	6.1	5.7	2.7	2.3	17.8
Federal ^a	2,957,404	3,069,267	3,153,626	3,184,685	3,256,239	3.8	2.7	1.0	2.2	10.1
Federal employees	2,118,859	2,223,088	2,317,325	2,367,757	2,445,077	4.9	4.2	2.2	3.3	15.4
TOTAL	47,694,534	50,532,724	53,309,183	54,714,530	55,968,121	6.0	5.5	2.6	2.3	17.3

(a) Includes federal benefits as included in Table 8.

1) Deductible data were not available. Deductibles were estimated using the a ratio based on Manual Equivalent premiums.

2) Deductible data were estimated by subtracting the AM Best data from Agency data.

3) Deductible data was given by the Agency.

4) Self-insurance data were not available and were imputed. Method is outlined in Appendix E.

5) AM Best data are used for private carrier benefit estimates for all the five years.

6) A.M. Best or NAIC data used for the State fund data.

7) The Self-insurance data for 2004 was imputed using 2003's available data.

8) Deductibles not allowed.

9) Self-Insurance is not allowed.

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

Table 8**Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2004
(in thousands)**

State	Total	Private Carriers	State Funds	Self-Insured ^b	Medical	Percent Medical
Alabama	\$ 575,697	\$ 277,585		\$ 298,112	\$ 357,739	62.1 ^c
Alaska	194,195	142,286		51,910	108,348	55.8 ^c
Arizona	584,750	185,882	295,598	103,270	375,591	64.2 ^c
Arkansas	225,689	160,642		65,047	136,946	60.7 ^c
California	12,459,638	5,562,020	3,202,628	3,694,990	6,072,398	48.7
Colorado	834,594	271,253	416,618	146,723	406,930	48.8 ^c
Connecticut	684,930	433,077		251,853	271,039	39.6 ^c
Delaware	158,190	113,948		44,242	75,711	47.9 ^d
District of Columbia	98,443	75,415		23,029	38,089	38.7 ^c
Florida	2,759,712	2,219,913		539,799	1,637,270	59.3 ^c
Georgia	1,127,654	768,478		359,176	538,764	47.8 ^c
Hawaii	271,290	150,840	34,015	86,436	103,900	38.3 ^c
Idaho	210,326	74,896	122,429	13,001	124,277	59.1 ^c
Illinois	2,213,372	1,646,713		566,659	1,073,614	48.5 ^c
Indiana	608,717	489,351		119,366	413,979	68.0 ^c
Iowa	445,832	337,824		108,008	230,117	51.6 ^c
Kansas	365,546	241,025		124,522	200,913	55.0 ^c
Kentucky	763,050	422,506	72,097	268,447	411,837	54.0 ^c
Louisiana	589,209	297,493	163,733	127,984	297,065	50.4 ^c
Maine	269,917	94,800	84,269	90,847	113,359	42.0 ^c
Maryland	767,576	448,756	196,097	122,723	317,621	41.4 ^c
Massachusetts	1,045,747	900,741		145,006	358,708	34.3
Michigan	1,517,386	827,277		690,109	569,855	37.6
Minnesota	933,975	576,232	120,488	237,255	455,248	48.7
Mississippi	305,516	172,433		133,083	170,668	55.9 ^c
Missouri	1,119,871	684,950	114,560	320,361	564,841	50.4 ^c
Montana	211,059	67,757	103,559	39,743	113,201	53.6 ^c
Nebraska	283,148	218,113		65,035	166,863	58.9 ^c

Nevada	357,937	239,619	118,317	175,796	49.1 ^c
New Hampshire	213,964	167,868	46,096	119,685	55.9 ^c
New Jersey	1,398,358	1,278,746	119,612	669,265	47.9 ^d
New Mexico	196,123	87,748	32,170	115,830	59.1 ^c
New York	3,337,490	1,732,841	829,503	1,127,178	33.8
North Carolina	1,159,117	844,199	314,919	512,146	44.2 ^c
North Dakota ^a	83,237	260	82,977	46,870	56.3
Ohio ^a	2,442,137	37,509	1,935,728	1,141,082	46.7
Oklahoma	572,001	241,921	212,864	263,451	46.1 ^c
Oregon	506,813	234,700	228,642	270,253	53.3 ^c
Pennsylvania	2,594,238	1,803,792	226,158	1,068,661	41.2
Rhode Island	142,268	40,504	85,096	49,990	35.1 ^c
South Carolina	688,115	461,543	49,629	318,811	46.3 ^c
South Dakota	76,472	72,749	3,723	48,122	62.9 ^c
Tennessee	895,808	649,333	246,475	462,466	51.6 ^c
Texas	1,574,451	991,865	297,235	958,631	60.9 ^c
Utah	218,264	56,281	122,905	149,240	68.4 ^c
Vermont	128,076	106,192	21,884	58,611	45.8 ^c
Virginia	762,067	554,397	207,670	419,955	55.1 ^c
Washington ^a	1,836,097	30,766	1,323,410	636,211	34.7
West Virginia ^a	741,034	7,317	629,617	354,665	47.9 ^d
Wisconsin	1,042,725	840,423	202,302	499,057	47.9 ^d
Wyoming ^a	120,062	3,534	116,528	57,463	47.9 ^d
Non-federal total	52,711,882	28,346,310	11,044,194	25,228,333	47.9
Federal ^e	3,256,239			870,872	26.7
Federal employees	2,445,077			701,110	28.7
TOTAL	55,968,121			26,099,205	46.6

(a) States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from two sources: companies with group policies that overlap states and the fact that some companies include excess workers' compensation coverage in their reports of workers' compensation benefits to A.M. Best.

(b) Self-insurance includes individual self-insurers and group self-insurance.

(c) Medical percentages based on data provided by NCCI, see Appendix F.

(d) Medical percentage based on the weighted average of states where medical data were available, see Appendix F.

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

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

Table 9**Medical, Cash and Total Benefits, by state, 2003-2004^a**
(in thousands)

State	2003			2004			2003-2004 Percent Change		
	Medical	Cash	Total	Medical	Cash	Total	Medical	Cash	Total
Alabama	364,616	215,568	580,184	357,739	217,958	575,697	-1.9	1.1	-0.8
Alaska	101,417	82,962	184,379	108,348	85,848	194,195	6.8	3.5	5.3
Arizona	337,056	194,184	531,240	375,591	209,159	584,750	11.4	7.7	10.1
Arkansas	139,779	85,282	225,061	136,946	88,742	225,689	-2.0	4.1	0.3
California	6,329,029	6,074,701	12,403,729	6,072,398	6,387,240	12,459,638	-4.1	5.1	0.5
Colorado	332,713	424,327	757,041	406,930	427,663	834,594	22.3	0.8	10.2
Connecticut	288,356	386,392	674,747	271,039	413,891	684,930	-6.0	7.1	1.5
Delaware	76,703	83,561	160,264	75,711	82,479	158,190	-1.3	-1.3	-1.3
District of Columbia	32,973	56,135	89,108	38,089	60,354	98,443	15.5	7.5	10.5
Florida	1,631,140	1,180,162	2,811,302	1,637,270	1,122,442	2,759,712	0.4	-4.9	-1.8
Georgia	502,974	558,995	1,061,969	538,764	588,890	1,127,654	7.1	5.3	6.2
Hawaii	105,503	169,420	274,922	103,900	167,390	271,290	-1.5	-1.2	-1.3
Idaho	112,159	84,235	196,394	124,277	86,049	210,326	10.8	2.2	7.1
Illinois	975,428	1,128,229	2,103,658	1,073,614	1,139,757	2,213,372	10.1	1.0	5.2
Indiana	378,310	181,111	559,421	413,979	194,738	608,717	9.4	7.5	8.8
Iowa	205,463	218,734	424,198	230,117	215,715	445,832	12.0	-1.4	5.1
Kansas	160,283	133,190	293,473	200,913	164,633	365,546	25.3	23.6	24.6
Kentucky	392,111	332,180	724,291	411,837	351,213	763,050	5.0	5.7	5.4
Louisiana	297,357	288,122	585,480	297,065	292,144	589,209	-0.1	1.4	0.6
Maine	110,790	128,987	239,777	113,359	156,558	269,917	2.3	21.4	12.6
Maryland	292,542	408,755	701,297	317,621	449,955	767,576	8.6	10.1	9.5
Massachusetts	350,931	706,245	1,057,175	358,708	687,039	1,045,747	2.2	-2.7	-1.1
Michigan	542,574	934,276	1,476,850	569,855	947,531	1,517,386	5.0	1.4	2.7
Minnesota	413,726	471,280	885,006	455,248	478,726	933,975	10.0	1.6	5.5
Mississippi	162,553	128,461	291,014	170,668	134,848	305,516	5.0	5.0	5.0
Missouri	534,615	546,255	1,080,870	564,841	555,029	1,119,871	5.7	1.6	3.6
Montana	105,286	95,571	200,857	113,201	97,859	211,059	7.5	2.4	5.1

Nebraska	171,361	119,058	290,419	166,863	116,286	283,148	-2.6	-2.3	-2.5
Nevada	150,151	176,406	326,556	175,796	182,141	357,937	17.1	3.3	9.6
New Hampshire	123,981	95,648	219,629	119,685	94,278	213,964	-3.5	-1.4	-2.6
New Jersey	660,107	719,128	1,379,235	669,265	729,093	1,398,358	1.4	1.4	1.4
New Mexico	107,936	81,491	189,427	115,830	80,293	196,123	7.3	-1.5	3.5
New York	1,039,503	2,180,894	3,220,398	1,127,178	2,210,311	3,337,490	8.4	1.3	3.6
North Carolina	480,925	585,686	1,066,611	512,146	646,971	1,159,117	6.5	10.5	8.7
North Dakota	43,102	35,352	78,453	46,870	36,367	83,237	8.7	2.9	6.1
Ohio	1,140,541	1,301,646	2,442,187	1,141,082	1,301,055	2,442,137	0.0	0.0	0.0
Oklahoma	262,953	290,970	553,922	263,451	308,550	572,001	0.2	6.0	3.3
Oregon	245,975	225,332	471,307	270,253	236,559	506,813	9.9	5.0	7.5
Pennsylvania	1,040,169	1,525,175	2,565,344	1,068,661	1,525,577	2,594,238	2.7	0.0	1.1
Rhode Island	40,579	90,286	130,865	49,990	92,278	142,268	23.2	2.2	8.7
South Carolina	312,056	344,879	656,935	318,811	369,305	688,115	2.2	7.1	4.7
South Dakota	46,331	27,436	73,767	48,122	28,350	76,472	3.9	3.3	3.7
Tennessee	445,703	396,944	842,647	462,466	433,342	895,808	3.8	9.2	6.3
Texas	1,169,889	687,053	1,856,942	958,631	615,820	1,574,451	-18.1	-10.4	-15.2
Utah	121,849	64,495	186,344	149,240	69,023	218,264	22.5	7.0	17.1
Vermont	58,147	61,813	119,961	58,611	69,465	128,076	0.8	12.4	6.8
Virginia	393,992	307,601	701,593	419,955	342,112	762,067	6.6	11.2	8.6
Washington	619,553	1,180,523	1,800,076	636,211	1,199,886	1,836,097	2.7	1.6	2.0
West Virginia	241,676	587,237	828,913	354,665	386,369	741,034	46.8	-34.2	-10.6
Wisconsin	402,196	438,158	840,354	499,057	543,668	1,042,725	24.1	24.1	24.1
Wyoming	72,090	42,161	114,252	57,463	62,599	120,062	-20.3	48.5	5.1
Non-federal total	24,667,151	26,862,694	51,529,845	25,228,333	27,483,548	52,711,882	2.3	2.3	2.3

a) In states with a note, there was a difference in methods between the two years being compared for at least one component of the estimates. Some of the percent change in benefits, therefore, might be due to the differing methods. The notes are given in Table 8. For more detail on state by state methodologies, see, Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2004 section of the Academy's website at www.nasi.org.

Source: National Academy of Social Insurance estimates based on data from state agencies and A.M. Best.

Table 10**State Workers' Compensation Benefits Per \$100 of Covered Wages, by State, 2000–2004**

	2000	2001	2002	2003	2004	Dollar Amount Change ^a	
						2003-2004	2000-2004
Alabama	1.06	1.10	1.09	1.08	1.02	-.06	-.04
Alaska	1.57	1.74	1.84	1.83	1.84	.01	.26
Arizona	0.71	0.60	0.68	0.69	0.70	.01	-.01
Arkansas	0.77	0.75	0.75	0.74	0.70	-.04	-.06
California	1.58	1.66	1.93	2.01	1.91	-.10	.33
Colorado	1.03	0.70	0.96	0.95	1.01	.06	-.02
Connecticut	0.85	0.83	0.89	0.87	0.83	-.04	-.02
Delaware	0.94	0.90	0.98	0.63	0.92	.29	-.02
District of Columbia	0.38	0.38	0.38	0.55	0.36	-.19	-.02
Florida	1.28	1.44	1.23	1.24	1.13	-.11	-.15
Georgia	0.77	0.80	0.76	0.82	0.82	.01	.05
Hawaii	1.49	1.55	1.60	1.57	1.44	-.13	-.05
Idaho	0.75	1.17	1.20	1.24	1.24	.00	.48
Illinois	0.88	0.92	0.95	0.93	0.94	.01	.06
Indiana	0.59	0.59	0.61	0.61	0.63	.02	.04
Iowa	0.87	0.97	0.98	1.00	1.00	-.01	.13
Kansas	0.87	0.89	0.88	0.75	0.89	.14	.03
Kentucky	1.17	1.33	1.38	1.37	1.38	.01	.21
Louisiana	1.08	1.11	1.04	1.06	1.02	-.04	-.06
Maine	1.56	1.49	1.55	1.37	1.48	.10	-.08
Maryland	0.79	0.80	0.76	0.78	0.80	.03	.01
Massachusetts	0.56	0.61	0.64	0.74	0.69	-.05	.13
Michigan	0.90	0.92	0.94	0.90	0.91	.01	.01
Minnesota	0.88	0.96	0.97	0.91	0.90	.00	.03
Mississippi	1.12	1.08	1.08	1.05	1.06	.01	-.05
Missouri	1.00	1.20	1.38	1.32	1.32	.00	.31
Montana	1.79	1.97	1.88	2.02	2.00	-.02	.21
Nebraska	0.97	1.02	1.14	1.14	1.05	-.09	.07
Nevada	1.01	0.92	0.94	0.88	0.86	-.01	-.15
New Hampshire	0.86	1.01	0.99	0.99	0.91	-.08	.05
New Jersey	0.71	0.75	0.78	0.79	0.77	-.02	.05
New Mexico	0.81	0.85	0.90	0.94	0.92	-.02	.11
New York	0.78	0.77	0.84	0.84	0.82	-.02	.05
North Carolina	0.76	0.78	0.84	0.90	0.92	.03	.16
North Dakota	0.97	0.94	0.94	0.95	0.94	-.01	-.02
Ohio	1.20	1.27	1.34	1.35	1.30	-.05	.10
Oklahoma	1.31	1.35	1.31	1.40	1.38	-.02	.07
Oregon	0.83	0.92	0.92	0.90	0.92	.02	.09
Pennsylvania	1.29	1.27	1.29	1.30	1.26	-.04	-.03
Rhode Island	0.90	0.93	0.94	0.82	0.86	.04	-.04
South Carolina	1.07	1.08	1.19	1.28	1.29	.00	.22

continued on p.27

Table 10 continued**State Workers' Compensation Benefits Per \$100 of Covered Wages, by State, 2000–2004**

	2000	2001	2002	2003	2004	Dollar Amount Change	
						2003-2004	2000-2004
South Dakota	0.74	0.80	0.81	0.78	0.77	-.01	.03
Tennessee	1.03	1.09	0.98	1.04	1.04	.01	.01
Texas	0.82	0.80	0.87	0.71	0.59	-.12	-.23
Utah	0.59	0.66	0.70	0.61	0.67	.06	.07
Vermont	1.23	1.11	1.34	1.31	1.33	.02	.11
Virginia	0.55	0.52	0.54	0.59	0.59	.01	.05
Washington	1.57	1.68	1.76	1.80	1.80	-.01	.23
West Virginia	3.96	3.92	4.50	4.42	3.76	-.66	-.20
Wisconsin	0.95	1.12	1.06	0.97	1.15	.18	.20
Wyoming	1.52	1.59	1.64	1.67	1.63	-.04	.11
Total non-federal	1.03	1.06	1.12	1.13	1.10	-.03	.07
Federal Employees ^a	1.60	1.65	1.61	1.57	1.54	-.03	-.05
Total	1.06	1.10	1.16	1.16	1.13	-.03	.07

(a) includes FECA only.

Source: National Academy of Social Insurance estimates based on Tables 3, 8, D1, D2, D3 and D4.

covered wages or employment could be high or low in a given state for a number of reasons unrelated to the adequacy of benefits that injured workers receive.

First, a state with more workers in high-risk industries—such as mining or construction—may pay more benefits simply because they have a higher proportion of injured workers and more workers with serious, permanent disabilities that occurred on the job.

Second, states differ considerably in their compensability rules—that is, the criteria they use for determining whether an injury is work-related and therefore will be paid by the workers' compensation program. A state with a relatively lenient compensability threshold might pay more cases, and therefore have higher aggregate benefits relative to the total number of workers in the state, yet pay below average benefits to workers with serious injuries.

Third, states have different policies about how they pay permanent disabilities. Some pay benefits for life or until retirement age. Others limit benefits for per-

manent disabilities to a few years or to a specified dollar amount. Still others have policies that permit or encourage lump-sum settlements for permanent disabilities. Differences in these policies can have a major impact on the benefits a state actually pays in a given year, relative to the size of its total workforce or total covered wages.

Fourth, benefits actually paid in the year (which are the data reported here) will be influenced by injuries that occurred in prior years. A state with a disproportionately large number of injured workers who are being compensated for permanent disabilities that occurred in the past would appear to pay above average benefits, when, in fact, the actual benefits for recently injured workers may not be above average. Alternatively, a state with a long period of future benefit payments for current-year injuries may appear to be below average on the basis of the current year's payments when in fact the ultimate benefits required to be paid for recent injuries may be above average.

Fifth, variations in state wages can lead to cross-state differences in benefits per covered worker. In a state, the mix of industries and occupations influences wages. Because the cash component of benefits paid is linked to wages, states with higher wages will tend to pay higher benefits all else being equal. To some extent, this is controlled for when using benefits relative to covered wages. However, because benefits are capped to not exceed a maximum dollar amount, states with many highly paid workers could have lower benefits relative to covered wages.

Sixth, the demographic composition of the workforce varies among states. Younger workers are more likely to experience injuries, but older workers are prone to certain chronic conditions that are relatively expensive.

Seventh, state economic activity can influence benefits per covered worker in other ways apart from differing wage rates. A state experiencing a recession will have fewer workers and fewer people working overtime. Furthermore, the reductions in hours worked will probably not be distributed evenly across industries or occupations. This will affect those who are working, what they are earning, and the distribution of the type of injury or illness occurring.

Eighth, variations among states in both the price of medical care services and the variations in use of services and practice patterns will have an impact on the amount of medical benefits paid.

Ninth and finally, in-migration or out-migration in a state will affect benefits per covered worker. For example, a state that is paying a large number of permanently disabled workers from past years would have rising benefits relative to its current work force if it experienced substantial out-migration of healthy workers, but could have declining benefits per worker if it experienced substantial in-migration of uninjured workers. Yet the benefits actually received by permanently injured workers in that state may not have changed.

Caveats on comparing employer costs across states. An employer's costs for workers' compensation in different states is best compared by knowing the premiums that comparable employers are charged in each state (Thomason et al., 2001). These

premiums would be affected by the employer's insurance classification and its own experience with past injury rates and the severity of injuries its workers sustained. Data on aggregate benefits per worker, or relative to total wages in the state do not provide this information for the following reasons.

First, a company in a high-risk industry would not necessarily experience lower costs if it moved to a state with predominantly low-risk industries, since the migrating company will still be in the high-risk insurance classification.

Second, changes in state policies would affect new employers, but these changes are not fully reflected in our data on benefits relative to wages. Premiums charged to employers in a given year are based on the costs of injuries it is expected to incur in that year under policies in effect that year. If a state had changed its policies either to lower future costs or to make future benefits more adequate, those policies would not be fully reflected in benefits currently being paid to workers in that state as shown in Table 10. For example, a state that tightened its rules would be expected to have lower future costs for new employers, yet it would not show lower benefits per worker immediately because it would continue to pay workers who were permanently disabled in the past under the old rules.

Third, employers' costs for workers' compensation nationally exceed the benefits paid to workers because of factors such as administrative costs and profits (or losses) of private carriers. The relationship of employers' costs relative to workers' benefits varies among states because of various factors, such as the extent of competition in the workers' compensation insurance market.

In brief, state-level benefits paid per worker or relative to total wages in the state are a way to standardize aggregate benefit payments between large and small states. However, much more refined data and analyses are needed to assess the adequacy of benefits that individual workers receive, or the costs that particular employers would incur in different states.

Employer Costs

Employer costs for workers' compensation in 2004 were \$87.4 billion, an increase of 7.0 percent from

Table 11**Employer Costs for Workers' Compensation by Type of Insurer, 1987–2004
(in millions)**

Year	Total	% Change	Private Carriers		State Funds		Federal ^a		Self-Insurance	
			Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total
1987	\$38,095	*	\$25,448	66.8	\$5,515	14.5	\$1,728	4.5	\$5,404	14.2
1988	43,284	13.6	28,538	65.9	6,660	15.4	1,911	4.4	6,175	14.3
1989	47,955	10.8	31,853	66.4	7,231	15.1	1,956	4.1	6,915	14.4
1990	53,123	10.8	35,054	66.0	8,003	15.1	2,156	4.1	7,910	14.9
1991	55,216	3.9	35,713	64.7	8,698	15.8	2,128	3.9	8,677	15.7
1992	57,395	3.9	34,539	60.2	9,608	16.7	2,454	4.3	10,794	18.8
1993	60,819	6.0	35,596	58.5	10,902	17.9	2,530	4.2	11,791	19.4
1994	60,517	-0.5	33,997	56.2	11,235	18.6	2,490	4.1	12,795	21.1
1995	57,089	-5.7	31,554	55.3	10,512	18.4	2,556	4.5	12,467	21.8
1996	55,293	-3.1	30,453	55.1	10,190	18.4	2,601	4.7	12,049	21.8
1997	53,544	-3.2	29,862	55.8	8,021	15.0	3,358	6.3	12,303	23.0
1998	53,431	-0.2	30,377	56.9	7,926	14.8	3,471	6.5	11,657	21.8
1999	55,386	3.7	32,631	58.9	7,552	13.6	3,496	6.3	11,708	21.1
2000	58,565	5.7	35,673	60.9	8,823	15.1	3,620	6.2	10,449	17.8
2001	64,663	10.4	37,930	58.7	11,453	17.7	3,778	5.8	11,503	17.8
2002	73,870	14.2	41,589	56.3	14,552	19.7	3,898	5.3	13,832	18.7
2003	81,667	10.6	45,384	55.6	17,642	21.6	3,970	4.9	14,671	18.0
2004	87,402	7.0	48,695	55.7	19,157	21.9	4,073	4.7	15,478	17.7

(a) In all years, federal costs include those paid under the Federal Employees' Compensation Act for civilian employees and the portion of the Black Lung benefit program that is financed by employers and are paid through the federal Black Lung Disability Trust Fund, including interest payments on past Trust Fund advances from the U.S. Treasury. In years before 1997, federal costs also include the other part of the Black Lung program that is financed solely by federal funds. In 1997–2003, federal costs also include a portion of employer-financed benefits under the Longshore and Harbor Workers Compensation Act that are not reflected in state data—namely, costs paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

Source: 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 costs are based on information from the National Association of Insurance Commissioners.

\$81.7 billion in 2003 (Table 11). Relative to total wages of covered workers, employer costs increased by three cents to \$1.76 per \$100 of covered wages in 2004, up from \$1.73 per \$100 of covered wages in 2003 (Table 12).

For self-insured employers, the costs include benefit payments made during the calendar year and the administrative costs associated with providing those benefits. Because self-insured employers often do not separately record administrative costs for workers'

compensation, their administrative costs must be estimated. They are assumed to be the same share of benefits as administrative costs for other insurers. This percentage is based on the ratio of administrative costs to total benefits as reported by private insurers to the National Association of Insurance Commissioners. This ratio is based on direct loss adjustment expenses and expense for taxes, licenses, and fees. For more information on the self-insurance costs estimates, see Appendix C. For the federal

Table 12**Workers' Compensation Benefit* and Cost** Ratios, 1989–2004**

Year	Costs per \$100 of Wages	Benefits per per \$100 of Wages	Benefits per \$1 in Cost	Medical Benefits per \$100 of Wages	Cash Benefits per \$100 of Wages
1989	\$2.04	\$1.46	\$0.72	\$0.57	\$0.89
1990	2.18	1.57	0.72	0.62	0.94
1991	2.16	1.65	0.76	0.66	0.99
1992	2.12	1.68	0.80	0.69	1.00
1993	2.16	1.61	0.75	0.66	0.95
1994	2.05	1.51	0.74	0.58	0.93
1995	1.82	1.38	0.76	0.53	0.85
1996	1.66	1.26	0.76	0.50	0.76
1997	1.49	1.18	0.79	0.48	0.70
1998	1.38	1.11	0.81	0.47	0.65
1999	1.33	1.10	0.82	0.46	0.64
2000	1.30	1.06	0.81	0.47	0.60
2001	1.40	1.10	0.78	0.50	0.60
2002	1.60	1.16	0.72	0.53	0.62
2003	1.73	1.16	0.67	0.54	0.62
2004	1.76	1.13	0.64	0.53	0.60

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

** Costs are employer expenditures in the calendar year for workers' compensation benefits, administrative costs, and/or insurance premiums. Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.

Source: National Academy of Social Insurance estimates based on Tables 2, 4, and 11.

employee program, employer costs are benefits paid plus administrative costs (U.S. DOL, 2005a). For employers who purchase insurance from private carriers and state funds, costs consist of premiums written in the calendar year plus payments of benefits made under deductible provisions. The growing use of large deductible policies complicates the measurement of benefits and costs. Under deductible policies, the insurer pays all of the workers' compensation insured benefits, but employers are responsible for reimbursing the insurers for those benefits up to a specified deductible amount. In return for accepting a policy with a deductible, the employer pays a lower premium. Our industry sources of data do not

provide separate information on deductibles and many states lack data on deductible payments. Consequently, these benefits had to be estimated, as described in Appendix G.

According to these estimates, costs for employers insuring through private carriers were \$48.7 billion in 2004, or approximately 55.7 percent of total costs. Self-insurers accounted for 17.7 percent of total employer costs, state funds represented 21.9 percent of costs, and federal programs were 4.7 percent (Table 11).

Trend in Benefit and Cost Ratios

Table 12 shows the trend in benefits paid and employer costs per \$100 of covered wages over the last 16 years. For the first time since 2000, workers' compensation benefits relative to covered wages fell. Employers' costs per \$100 of covered wages have increased continuously since 2000. Nonetheless, employer costs of \$1.76 per \$100 of covered wages in 2004 remain well below their peak level of \$2.18 per \$100 of wages in 1990.

What accounts for the difference between benefits paid to workers and costs to employers? For self-insured employers (or the federal employee program), the difference reflects our estimates of administrative costs (or actual reported costs in the case of the federal program). For self-insuring employers, the costs in a calendar year pertain to benefits paid in the same year.

For insured benefits, the difference between employer costs and benefits to workers reflects additional factors. One major factor is that the premiums in a calendar year must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years. Thus, the premiums for 2004 include benefit payments during the year for 2004 injuries, plus reserves for payment of benefits for the 2004 injuries in 2005 and after. In addition, premiums must cover expenses such as administrative and loss adjustment costs, taxes, profits or losses of insurance carriers, and contributions for special funds, which can include the support of workers' compensation agencies.

Premiums paid by employers and benefits paid to workers do not change at the same rate from year to year for a number of reasons. First, benefits and premiums do not reflect the same time period in the same way. Benefits are those actually paid to workers in a given year, including benefits paid for injuries that occurred in prior years. Premiums written in a given year reflect the insurer's expected future liabilities for injuries that occur in the year. From the employer's perspective, the premiums written reflect the employer's cost for the year. From the insurer's perspective, the premiums reflect all future costs the insurer expects to incur for injuries that occur in the

year. Thus, an increase in expected liabilities could lead to an increase in premiums and a decline in expected liabilities could lead to a decline in premiums. Second, premiums can be influenced by insurers' past and anticipated investment returns on reserves that they set aside to cover future liabilities. Thus, a decline in investment returns would contribute to an increase in premiums, while an improvement in investment returns could lead to a decline in premiums. Finally, premiums reflect insurers' profits (or losses), since the profitability (or lack thereof) will affect the extent of dividends, schedule ratings, and deviations offered by the insurers.

Work Injuries, Occupational Illness and Fatalities

While national data are not available on the number of persons who file workers' compensation claims or receive benefits in a given year, the Bureau of Labor Statistics collects information about work-related fatalities and nonfatal work injuries or occupational illnesses and the NCCI has information on workers' compensation claims in thirty-nine states (NCCI, 2005).

Fatalities at Work

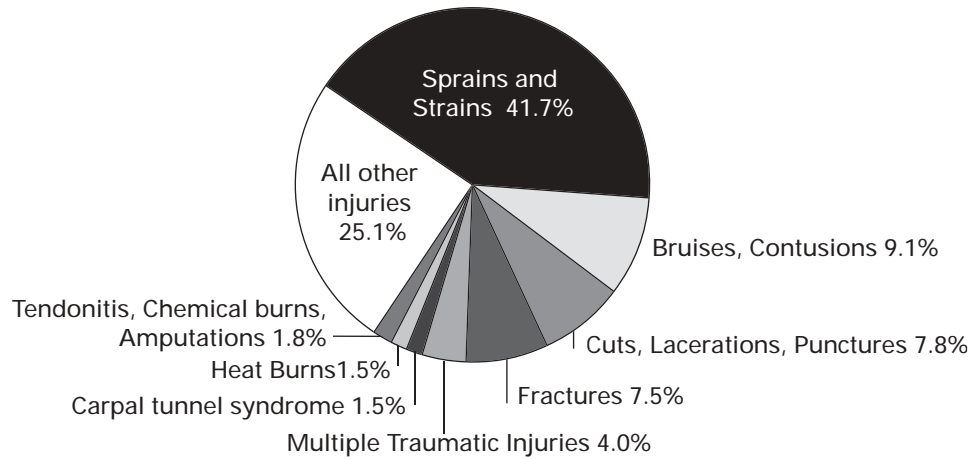
A total of 5,764 fatal work injuries occurred in 2004 (Table 13), which represent a 3.4 percent increase in the number of fatalities from 2003. Transportation incidents continued to be the leading cause of on-the-job fatalities in 2004, accounting for 45 percent of the total. Violent acts (homicides, suicides and animal attacks), falls, and contact with objects and equipment were the other leading causes of death, accounting for 18 percent, 15 percent, and 14 percent respectively (U.S. DOL, 2005b).

Nonfatal Injuries and Illnesses

A total of 4.3 million nonfatal workplace injuries and illnesses were reported in private industry workplaces during 2004, resulting in a rate of 4.8 cases per one hundred full-time equivalent workers, according to a Bureau of Labor Statistics survey of private sector employers (U.S. DOL, 2005c). Many of these cases involved relatively minor injuries that did not result in lost workdays. The frequency of all injuries and illnesses declined from 8.9 per 100 full-

Figure 4

Nature of Injury or Illness: Percent of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work, U.S. Private Industry, 2004



Source: Bureau of Labor Statistics, U.S. Department of Labor, March, 2005f

Table 13
Number of Fatal Occupational Injuries, 1992–2004

Year	Number of Injuries
1992	6,217
1993	6,331
1994	6,632
1995	6,275
1996	6,202
1997	6,238
1998	6,055
1999	6,054
2000	5,920
2001	8,801
September 11 events	2,886
Other	5,915
2002	5,534
2003	5,575
2004	5,764

Source: U.S. DOL 2005c.
<http://www.bls.gov/iif/oshcfoi1.htm>

time workers in 1992 to 4.8 per 100 in 2004 (Table 14).

A total of 1.3 million workplace injuries or illnesses that required recuperation away from work beyond the day of the incident were reported in private industry in 2004 (U.S. DOL, 2005d). The number of reported injuries or illnesses per one hundred full-time workers declined from 3.0 in 1992 to 1.4 in 2004 (Table 14). The median time away from work beyond the day of the injury was eight days. About one in four would not have met a three-day waiting period, and about 40 percent would not have met a six-day waiting period (U.S. DOL, 2005f).

A recent study indicates that the current national system for work-related injuries and illnesses, administered by the BLS, markedly undercounts the total number of injuries with chronic or acute conditions (Rosenman et al, 2006). The authors suggest a more comprehensive surveillance system, not solely dependant on employer-based data sources, is needed for informed decision-making on the allocation of public health resources.

Women are somewhat less likely than men to have reported workplace injuries that involve days away

from work. While women make up 41.1 percent of the total hours worked (U.S. DOL, 2006b), they account for 33.8 percent of reported injuries that involved days away from work (U.S. DOL, 2005a).

The most common causes of reported injuries or illnesses were: Sprains and strains, most often involving the back (41.7 percent); bruises and contusions (9.1 percent); cuts, lacerations and punctures (7.8 percent); fractures (7.5 percent); carpal tunnel syndrome (1.5 percent); heat burns (1.5 percent); and tendonitis, chemical burns and amputations (1.8 percent) (Figure 4).

Workers' Compensation Claims

The National Council on Compensation Insurance reports on the frequency of workers' compensation claims for privately insured employers and some state funds in thirty-six states (Table 15). These data show declining trends similar to national trends in workplace injuries reported by the Bureau of Labor Statistics. Claims per 100,000 insured workers declined steadily between 1992 and 2001.

Temporary total disability claims are those in which days away from work exceeded the three- to seven-day waiting period. The frequency of these claims declined by about 41 percent (Table 15). This

Table 14

Private Industry Occupational Injury and Illness: Total Non-fatal Cases and Incidence Rates, 1987–2004

Year ^a	Number of Cases (in millions)		Incidence Rate ^b	
	All Cases	Cases with Any Days Away from Work	All Cases	Cases with Any Days Away from Work
1987	6.0	2.5	8.3	3.4
1988	6.4	2.6	8.6	3.5
1989	6.6	2.6	8.6	3.4
1990	6.8	2.6	8.8	3.4
1991	6.3	2.6	8.4	3.2
1992	6.8	2.3	8.9	3.0
1993	6.7	2.3	8.5	2.9
1994	6.8	2.2	8.4	2.8
1995	6.6	2.0	8.1	2.5
1996	6.2	1.9	7.4	2.2
1997	6.1	1.8	7.1	2.1
1998	5.9	1.7	6.7	2.0
1999	5.7	1.7	6.3	1.9
2000	5.7	1.7	6.1	1.8
2001	5.2	1.5	5.7	1.7
2002 ^c	4.7	1.4	5.3	1.6
2003	4.4	1.3	5.0	1.5
2004	4.3	1.3	4.8	1.4

a Data after 1991 exclude fatal work-related injuries and illnesses.

b The incidence rate is the number of cases per one hundred full-time workers.

c Data for 2002 and beyond are not strictly comparable to prior year data due to changes in OSHA recordkeeping requirements.

Source: U.S. DOL 2005e.

<http://www.bls.gov/iif/home.htm>

decline is very similar to the decline in injuries reported by the BLS that involved days away from work. Between 1992 and 2001, the incidence of injuries that involved days away from work declined by about 43 percent (from 3.0 per one hundred full-time workers in 1992 to 1.7 per one hundred full-time workers in 2001) (Table 14).

The frequency of total workers' compensation claims—including medical-only cases that involve little or no lost work time—declined by about 36 percent between 1992 and 2001. This rate of decline is also very similar to the 36 percent decline in the incidence rate for all injuries reported to the BLS in the same period (from 8.9 to 5.7 per one hundred full-time workers between 1992 and 2001). Various studies indicate that some workplace injuries and diseases do not show up as workers' compensation claims because workers don't know they are eligible or do not file for other reasons (Leigh and Robbins, 2004; Leigh et al, 2000; Azaroff et al., 2002; Shannon and Lowe 2002; and Biddle et al., 1998). Other research suggests that tighter eligibility standards and claims filing restrictions for workers' com-

pensation may explain part of the decline in injury rates as measured in BLS surveys. Boden and Ruser (2003) find that between 7.0 and 9.4 percent of the decline in injury rates measured by BLS between 1991 and 1997 is an indirect result of tighter eligibility standards and claims filing restrictions for workers' compensation. Fewer cases entered into the workers' compensation system could result in fewer injuries reported to the BLS

Comparing Workers' Compensation with Other Disability Benefit Programs

Other sources of support for disabled workers include sick leave, short-term and long-term disability benefits, Social Security disability insurance, and Medicare. Unlike workers' compensation, these programs are not limited to injuries or illnesses caused on the job.

Table 15

Number of Workers' Compensation Claims per 100,000 Insured Workers: Private Carriers in Thirty-six Jurisdictions, 1992-2001

Policy Period	Temporary Total	Permanent partial	Total (including medical only)
1992	1,358	694	8,504
1993	1,331	644	8,279
1994	1,300	565	7,875
1995	1,217	459	7,377
1996	1,124	419	6,837
1997	1,070	414	6,725
1998	977	452	6,474
1999	909	459	6,330
2000	862	430	5,903
2001	797	417	5,431
Percent decline, 1992–2001	-41.3	-39.9	-36.1

Source: NCCI 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003a; 2004b, 2005

Other Disability Benefits

Sick leave is the most common form of wage replacement for short-term absences from work due to illness or injury. Benefits typically pay 100 percent of wages for a few weeks. Laws in five states require short-term disability insurance: California, Hawaii, New Jersey, New York, and Rhode Island. These state programs generally pay benefits that replace half of the worker's lost earnings, subject to a maximum weekly benefit. Most programs pay benefits for up to twenty-six weeks, although California pays for up to fifty-two weeks. In California and Rhode Island, the benefits are financed solely by employee contributions. In Hawaii, New Jersey, and New York, employers also contribute. Workers in other states may have short-term disability insurance that is offered and financed, at least in part, by employers. Benefits usually last for up to twenty-six weeks and typically replace about half of the worker's prior earnings. About 39 percent of private sector employees were covered by short-term disability insurance in 2004 (U.S. DOL, 2005f).

An estimated 70 percent of all private sector workers have some coverage for temporary sickness or disability other than workers' compensation. They include 26 percent who have only sick leave, 20 percent who have only temporary disability insurance, and 24 percent who have both (Mashaw and Reno, 1996). Thus, about 30 percent of private sector employees have no provision other than workers' compensation for wage replacement during temporary absence from work due to sickness or disability.

Long-term disability insurance that is financed, at least in part, by employers, covers about 30 percent of private sector employees. Such coverage is most common among white-collar workers. About 40 percent of white-collar workers, 21 percent of blue-collar workers, and 11 percent of service workers had this coverage as of March 2005 (U.S. DOL, 2005d). Long-term disability insurance 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 between 50 percent and 66 percent are also common. Almost all long-term disability insurance is coordinated with Social Security disability benefits and workers' compensation benefits. That is, the

long-term disability benefits are reduced dollar for dollar by the social insurance benefits. For example, if Social Security benefits replaced 40 percent of the worker's prior earnings, the long-term disability benefit would pay the balance to achieve a 60 percent replacement. Long-term disability insurance is also sold in individual policies, typically to high-earning professionals. Such individual policies are not included in these data.

Retirement benefits may also be available to workers who become disabled. Most defined benefit pension plans have some disability provision; benefits may be available at the time of disability or may continue to accrue until retirement age. Defined contribution plans will often make funds in the employee's account available to a disabled worker without penalty.

Social Security Disability Insurance and Medicare

Workers' compensation is surpassed in size only by the federal Social Security disability insurance program and the accompanying Medicare program in providing cash and medical benefits to disabled workers.

While Social Security disability benefits and workers' compensation are the nation's two largest work-based disability benefit programs, the two programs differ, in many respects. Workers are eligible for workers' compensation benefits from their first day of employment, while Social Security disability benefits require workers to have a substantial work history. Workers' compensation provides benefits for both short-term and long-term disabilities, and for partial as well as total disabilities. These benefits cover only those disabilities arising out of and in the course of employment. Social Security disability benefits are paid only to workers who have long-term impairments that preclude any gainful work. Social Security disability benefits are provided whether the disability arose on or off the job. By law, the benefits are paid only to workers who are unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment that is expected to last a year or result in death. The impairment has to be of such severity that the worker is not only unable to do his or her prior work, but is unable to do any substantial gainful work that exists in the national economy. Social Security dis-

Table 16**Social Security Disability Insurance (DI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefit (PDB) Involvement, December 2005**

Type of Case	Beneficiaries					
	Total		Workers		Auxillaries	
	Number	Percent	Number	Percent	Number	Percent
All disability insurance beneficiaries	8,305,702	100.0	6,518,989	100.0	1,786,713	100.0
Total with some connection to WC or PDB	1,440,772	17.3	1,065,004	16.3	375,768	21.0
Current connection to WC or PDB	798,476	9.6	590,658	9.1	207,818	11.6
DI reduced by cap	192,948	2.3	128,852	2.0	64,096	3.6
DI not reduced by cap	346,707	4.2	269,567	4.1	77,140	4.3
Reverse jurisdiction	59,695	.7	45,179	.7	14,516	0.8
Pending decision on WC or PDB	199,126	2.4	147,060	2.3	52,066	2.9
DI previously offset for WC or PDB	642,296	7.7	474,346	7.3	167,950	9.4

Source: Quarterly Workers' Compensation Extract and the Disabled Beneficiaries and Dependents files, SSA, 2005b

ability benefits begin after a five-month waiting period. Medicare coverage begins for those on Social Security disability benefits after a further twenty-four-month waiting period, or twenty-nine months after the onset of disability.

Many who receive Social Security disability benefits have impairments associated with aging. The portion of insured workers who receive benefits rises sharply at older ages, from less than 1 percent of the youngest insured workers to about 15 percent of insured workers age 60–64 (Reno and Eichner, 2000). Relatively few individuals who receive Social Security disability benefits return to work. Typically, they leave the disability benefit rolls when they die or reach retirement age and shift to Social Security retirement benefits.

While workers' compensation paid \$29.9 billion in cash benefits and \$26.1 billion for medical care in 2004, Social Security paid \$78.2 billion in wage replacement benefits to disabled workers and their dependents and Medicare paid \$37.9 billion for medical and hospital care for disabled persons under age 65 (SSA 2006 and CMS, 2005). Thus, aggregate workers' compensation cash benefits were less than

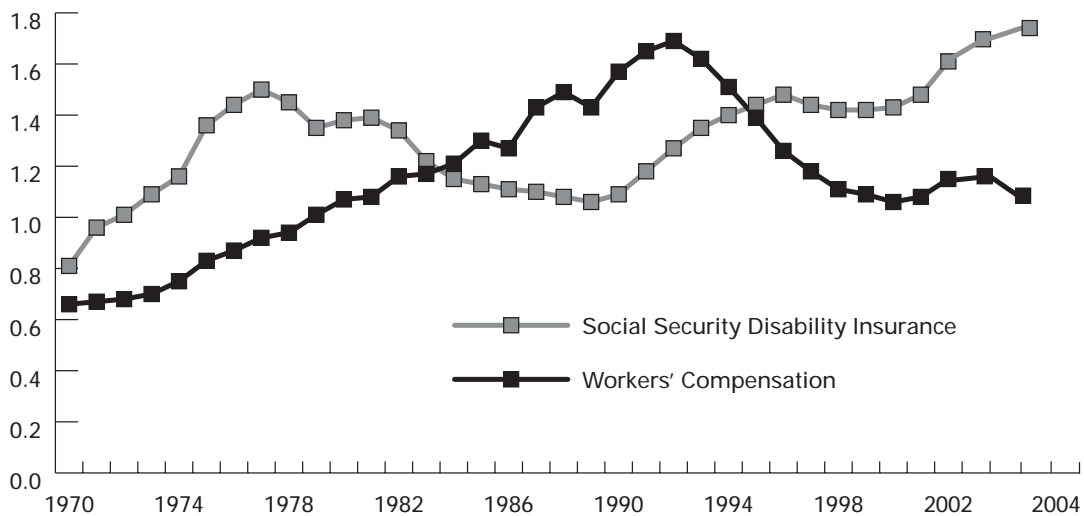
half the total amount of Social Security disability benefits, and workers' compensation medical benefits were less than three-fourth of the total amount paid by Medicare. Medicare benefits are less comprehensive than medical care under workers' compensation. Medicare requires beneficiary cost sharing in the form of deductibles and co-insurance, and it does not cover certain services. At the same time, Medicare covers all medical conditions, not just work-related injuries or illnesses. When a worker receiving workers' compensation is also Medicare eligible, Medicare is the secondary payer under the Medicare Secondary Payer Act.

Coordination between workers' compensation and Social Security disability benefits

If a worker becomes eligible for both workers' compensation and Social Security disability benefits, one of the programs will limit benefits in order to avoid excessive payments relative to the worker's past earnings. The Social Security amendments of 1965 required that Social Security disability benefits be reduced, so that the combined total of workers' compensation and Social Security disability benefits

Figure 5

Social Security Disability Insurance and Workers' Compensation Benefits as a Percent of Wages, 1970-2004



* Starting in 1989, a new method was used to estimate covered wages for the workers' compensation program that accounts for the decrease of benefits as a percent of covered wages in that year.

Source: National Academy of Social Insurance and the Office of the Chief Actuary, Social Security Administration.

would not exceed 80 percent of the workers' prior earnings.¹ States, however, were allowed to establish reverse offset laws, whereby workers' compensation payments would be reduced if the worker received Social Security disability benefits. The reverse offset shifts costs to Social Security that would otherwise fall upon the employer or insurer. Legislation in 1981 eliminated the states' option to adopt reverse offset laws, but the sixteen states that already had such laws were allowed to keep them.²

As of December 2005, about 8.3 million disabled workers and their dependents received Social Security disability benefits (Table 16). About 1.4 million of these individuals (or 17.3 percent) had some connection to workers' compensation or some form of public disability benefits. Of these, 0.8 million (or 10 percent of the total) had their social secu-

rity benefits reduced at some time on account of the offset.

Trends in Social Security Disability Benefits and Workers' Compensation

Figure 5 illustrates the long-term trend in Social Security disability benefits and workers' compensation as a share of covered wages. Social Security disability benefits grew rapidly in the early 1970s and then declined through the late 1980s, after policy changes in the late 1970s and early 1980s reduced benefits and tightened eligibility rules. From 1990 to 1996, Social Security benefits again rose as claims and allowances increased, particularly during the economic recession of 1990–1991. Between 1996–2001, disability insurance benefits relative to covered wages leveled off and then rose again following the recession of 2001.

1 The current cap remains at 80 percent of the worker's average indexed earnings before disability. However, in the relatively few cases where Social Security disability benefits alone, for the worker and dependents, amount to more than the 80 percent of prior earnings, the benefits are not reduced below the DI amount.

2 States with reverse offset laws are: California, Colorado, Florida, Hawaii, Illinois, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Washington, and Wisconsin.

The trend in workers' compensation benefits as a share of covered wages followed a different pattern. Total workers' compensation benefits (cash and medical combined) were less than Social Security disability benefits during the 1970s, but grew steadily throughout the 1970s and surpassed Social Security disability benefits in the mid-1980s. When Social Security benefits flattened out during the mid-1980s, workers' compensation payments continued to grow at a rapid rate. Then, as workers' compensation payments declined as a share of covered wages in 1992–2000, Social Security benefits rose.

The opposite trends in workers' compensation and Social Security disability benefits during much of the last twenty-five years raise the question of whether retrenchments in one program increase demands placed on the other, and vice versa. The substitutability of Social Security disability benefits and workers' compensation for workers with severe, long-term disabilities that are, at least arguably, work relat-

ed, or might be exacerbated by the demands of work, has received little attention by researchers and is not well understood (Burton and Spieler, 2001). A recent study finds that work-related disabilities are much more common than might previously have been thought, both among older persons in general and among recipients of Social Security disability benefits in particular (Reville and Schoeni, 2005). Based on reports in the 1992 Health and Retirement Study, more than one third (36 percent) of 51-61 year olds whose health limits the amount of work they can do became disabled because of an accident, injury, or illness at work. Of those receiving Social Security disability insurance, a similar portion (37 percent) attributed their disability to an accident, injury or illness at work. The study also finds that the 51–61 year olds who attribute their disabling conditions to their jobs are far more likely to receive Social Security disability insurance (29.0 percent) than to report ever having received workers' compensation (12.3 percent).

Table 17

Comparison of Accident-Year Incurred Losses with Calendar-Year Benefits Paid by Private Carriers and State Funds in Thirty-six States, 2000–2004

Year	Accident year incurred losses ^a		Calendar year benefits paid ^b	
	Billions of dollars	Percent Change	Billions of dollars	Percent change
2000	12.0		12.5	
2001	12.3	2.4	12.8	2.6
2002	12.0	-2.7	13.0	1.1
2003	11.9	-.8	13.2	1.9
2004	12.4	4.4	13.1	-.8
Cumulative % change from 2000-2004		3.2	4.8	

(a) These data are for the thirty-seven states reported in the *Calendar-Accident Year Underwriting Results* of the National Council on Compensation Insurance, page 17. They include private carrier and state fund (where relevant) losses incurred in Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, the District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, and Virginia.

Accident year data exclude benefits paid under the following categories: underground coal mining, F-classification, national defense project, and excess business. The accident year data also exclude benefits paid under deductible policies.

(b) Based on National Academy of Social Insurance data in this report for the states listed in note (a). These data are for private carriers and states funds (where relevant) and excludes benefits paid under deductible policies.

Source: NCCI 2005 and calendar year benefits estimated by the National Academy of Social Insurance.

Incurred Losses Compared with Benefits Paid

The Academy's estimates of workers' compensation benefits in this report are the amounts paid to workers in a calendar year regardless of whether the injuries occurred in the current year or a past year. This measure, *calendar year benefits paid*, is commonly used in reporting about other social insurance, private employee benefits, and other income security programs. A different measure, *accident year incurred losses*, is commonly used for workers' compensation insurance that is purchased from private carriers and some state funds. It measures benefit liabilities incurred by the insurer for injuries that occur in a particular year, regardless of whether the benefits are paid in the current year or a future year. (The term losses and benefits are used interchangeably because benefits to the worker are losses to the insurer.) Both measures, calendar year benefits paid and accident year losses incurred, reveal important information.³

For the purpose of setting insurance premiums, it is vital to estimate the incurred losses that the premiums are to cover. When an employer purchases workers' compensation insurance for a particular year, the premiums cover current and future benefit liabilities for all injuries that occur during the policy year. State rating bureaus and the National Council on Compensation Insurance, which provides advisory ratemaking and statistical services in thirty-six states, focus on accident year (or policy year) incurred losses.

Accident year incurred losses are considered more sensitive at picking up ultimate benefits that will be owed to newly injured workers in response to policy changes. For example, if a state lowered benefits or tightened compensability rules for new injuries as of a given date, then future benefits would be expected

to decline. Similarly, if a state raised benefits or expanded the range of injuries that would be compensated by workers' compensation, then future benefits would be expected to increase. The policy change would show up immediately in estimates of accident year incurred losses, but it would show up more slowly in measures of calendar year benefits paid because the latter measure includes payments for past injuries that would not be affected by the policy change.

A disadvantage of relying solely on accident year incurred losses is that it takes many years before the losses from a particular year are actually known; in the meantime, estimates for the losses for that accident year are updated annually. The National Council on Compensation Insurance updates accident year incurred losses for sixteen years before the data for a particular year are considered final. In contrast, calendar year benefits paid are final at the end of the calendar year.

Accident year incurred losses are estimated for insurance policies purchased from private carriers and from some state funds, but this information is not routinely available for other state funds and for self-insured employers. In addition, accident year data exclude benefits under large deductible policies and all benefits of certain categories of privately insured employers. For the years 2000 through 2004, Table 17 compares *accident year losses incurred* reported by the National Council on Compensation Insurance and *calendar year benefits paid* estimated by the National Academy of Social Insurance for private carriers and state funds in the thirty-seven states included in the NCCI data. From year to year, the two measures change at different rates, although over an extended period, the two measures tend to be similar. Between 2000 and 2004, the cumulative increase in benefits paid was 4.8 percent compared to a 3.2 percent increase for accident year incurred losses.

3 A fuller discussion of these measures is in Thomason et al. 2001, Appendix B.

Glossary

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

Accident Year: The year in which an injury occurred, or the year of onset of an illness. Accident year benefits refer to the benefits associated with all injuries and illnesses occurring in that year, regardless of the year they were actually paid.

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 benefits: Benefits paid to workers in a given year, regardless of when the injury or illness occurred.

Combined operating ratio: The ratio of underwriting results to premiums. It is the ratio of payments made by insurers to premiums collected. It does not take into account income that insurers receive from the investment of their reserves.

Covered employment: Jobs that are covered by workers' compensation programs.

CPS: The Current Population Survey (CPS) is a monthly survey of about U.S. 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. It is the primary source of information on the labor force characteristics of the U.S. population. For more information, visit www.bls.census.gov/cps.

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

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

FECA: The Federal Employees' Compensation Act (FECA) provides workers' compensation coverage to three million federal civilian and postal workers around the world for employment-related injuries and occupational diseases.

Incurred losses: Losses paid to date plus liabilities for future benefits for injuries that occurred in a specified period.

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

Losses: Benefits paid by insurers.

Managed Care: A system of health care payment or delivery arrangements where the health plan attempts to control or coordinate use of health services by its enrolled members in order to contain health expenditures, improve quality, or both. Arrangements often involve a defined delivery system of providers with some form of contractual arrangement with the plan.

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

NCCI: National Council on Compensation Insurance, Inc. (NCCI) is a national organization that assists private carriers and insurance commissioners in setting workers' compensation rates in thirty-seven states. For more information, visit www.ncci.com.

Overall Operating Ratio: The ratio of [(1) the total of all carrier expenditures, including losses, loss adjustment expenses, underwriting expenses, and dividends (2) minus investment income earned by carriers on their reserves] (3) divided by premiums.

Permanent Partial Disability (PPD): A disability that, although permanent, does not completely limit a person's ability to work.

Permanent Total Disability (PTD): A permanent disability that precludes all work.

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

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

SSDI: Social Security disability insurance (SSDI) pays benefits to insured workers who sustain severe, long-term work disabilities of any cause. Also, DI.

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

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

Underwriting expenses: Commissions, brokerage expenses, general expenses, taxes, licenses, and fees.

Underwriting results: The sum of losses, loss adjustment expenses, and underwriting expenses.

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.

USDOL: The U.S. Department of Labor Department administers a variety of Federal labor laws including those that guarantee workers’ rights to safe and healthful 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.

Work related injury-illness: An injury or illness that arises out of and in the course of employment. The definition of a work-related injury or disease that is compensable under a state’s workers’ compensation program can be quite complex and varies across states.

Appendix A: Coverage Estimates

The National Academy of Social Insurance's estimates of workers' compensation coverage start with the number of workers in each state who are covered by Unemployment Insurance (UI) (U.S. DOL, 2005e). Almost 92 or 93 percent (U.S. DOL, 2005b) of workers are covered by UI. Those who are not required to be covered include: Some farm and domestic workers who earn less than a threshold amount from one employer; some state and local employees, such as elected officials; employees of some non-profit entities, such as religious organizations, for whom coverage is optional in some states; unpaid family workers; and railroad employees who are covered under a separate unemployment insurance program. Railroad workers are also not covered by state workers' compensation because they have other arrangements (NASI, 2002).

The largest groups of workers who are not covered under either unemployment insurance or workers' compensation are self-employed individuals who have not incorporated their businesses.

All U.S. employers who are required to pay unemployment taxes must report quarterly to their state employment security agencies information about their employees and payroll covered by unemployment insurance. These employer reports are the basis for statistical reports prepared by the U.S. Bureau of Labor Statistics, known as the ES-202 data. These data are a census of the universe of U.S. workers who are covered by unemployment insurance.

Key assumptions underlying NASI estimates of workers' compensation coverage are: (1) Workers whose employers do not report that they are covered by UI are not covered by workers' compensation. (2) Workers that report they are covered by UI are generally covered by workers' compensation as well, except in the following cases:

- (a) Workers in small firms (which are required to provide UI coverage in every state) are not covered by workers' compensation if the state law exempts small firms from mandatory workers' compensation coverage.
- (b) Employees in agricultural industries (who may be covered by UI) are not covered by workers'

compensation if the state law exempts agricultural employers from mandatory workers' compensation coverage.

- (c) In Texas, where workers' compensation coverage is elective for almost all employers, estimates are based on periodic surveys conducted by the Texas Research and Oversight Council.

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

Small Firm Exemptions. NASI assumes that workers are not covered by workers' compensation if they work for small firms in the fourteen states that exempt small employers from mandatory coverage. Private firms with fewer than three employees are exempt from mandatory coverage in eight states: Arkansas, Colorado, Georgia, Michigan, New Mexico, North Carolina, Virginia, and Wisconsin. Those with fewer than four employees are exempt in two states: Florida, and South Carolina. Finally, firms with fewer than five employees are exempt from mandatory coverage in Alabama, Mississippi, Missouri, and Tennessee (U.S. DOL, 2004; AFL-CIO, 2003).

The number of employees in small firms is estimated using data from the U.S. Small Business Administration for each state, which show the proportion of employees in all private firms who worked for firms with fewer than five employees in 2002 (the most recent year for which data are available). Those percentages for the fourteen states with numerical exemptions are: Alabama, 5.1 percent; Arkansas, 5.2 percent; Colorado, 6.0 percent; Florida, 6 percent; Georgia, 4.7 percent; Michigan, 4.6 percent; Mississippi, 5.3 percent; Missouri, 4.9 percent; New Mexico, 6.1 percent; North Carolina, 4.8 percent; South Carolina, 5.0 percent; Tennessee, 4.3 percent; Virginia, 4.7 percent; and Wisconsin, 4.5 percent (U.S. SBA, 2002).

To estimate the proportion of workers in firms with fewer than three or four employees, we used national data on small firms from the U. S. Census Bureau (U.S. Census Bureau, 1999). Of workers in firms with fewer than five employees, 78.6 percent worked in firms with fewer than four employees and 56.5 percent worked in firms with fewer than three

Table A1

Documenting Workers' Compensation Coverage Estimates, 2004 Annual Averages

State	UI Covered Jobs ^a		Workers' Compensation Exemptions			WC Covered Jobs	WC as a % of UI
	Total	Private, non-farm firms	Small Firm	Agriculture	Texas		
Alabama	1,800,817	1,503,425	74,669	5,821	-	1,720,327	95.5
Alaska	279,109	220,337	-	-	-	279,109	100.0
Arizona	2,303,558	1,966,286	-	-	-	2,303,558	100.0
Arkansas	1,108,379	934,416	27,642	7,767	-	1,072,970	96.8
California	14,705,788	12,404,480	-	-	-	14,705,788	100.0
Colorado	2,089,688	1,788,730	15,480	-	-	2,074,208	99.3
Connecticut	1,611,112	1,393,149	-	-	-	1,611,112	100.0
Delaware	405,915	354,847	-	-	-	405,915	100.0
District of Columbia	466,907	429,192	-	-	-	466,907	100.0
Florida	7,337,314	6,361,959	297,949	-	-	7,039,365	95.9
Georgia	3,747,433	3,191,766	84,177	-	-	3,663,256	97.8
Hawaii	553,655	461,889	-	-	-	553,655	100.0
Idaho	578,030	467,976	-	-	-	578,030	100.0
Illinois	5,610,848	4,883,026	-	-	-	5,610,848	100.0
Indiana	2,812,610	2,441,065	-	10,679	-	2,801,931	99.6
Iowa	1,404,198	1,184,882	-	-	-	1,404,198	100.0
Kansas	1,270,893	1,051,175	-	7,805	-	1,263,088	99.4
Kentucky	1,692,099	1,435,468	-	3,726	-	1,688,373	99.8
Louisiana	1,831,037	1,494,838	-	-	-	1,831,037	100.0
Maine	583,228	495,317	-	-	-	583,228	100.0
Maryland	2,332,478	2,010,674	-	-	-	2,332,478	100.0
Massachusetts	3,086,566	2,736,028	-	-	-	3,086,566	100.0
Michigan	4,246,261	3,644,920	94,167	-	-	4,152,094	97.8
Minnesota	2,566,853	2,216,711	-	-	-	2,566,853	100.0
Mississippi	1,080,480	862,770	46,076	8,507	-	1,025,897	94.9
Missouri	2,573,559	2,205,575	107,843	-	-	2,465,716	95.8

Montana	389,598	320,851	-	389,598	100.0
Nebraska	865,721	721,943	-	865,721	100.0
Nevada	1,129,260	1,008,319	1,948	1,127,312	99.8
New Hampshire	605,449	528,268	-	605,449	100.0
New Jersey	3,811,742	3,266,765	-	3,811,742	100.0
New Mexico	730,905	574,103	19,614	703,011	96.2
New York	8,142,195	6,835,427	-	8,142,195	100.0
North Carolina	3,718,541	3,119,642	85,248	3,633,293	97.7
North Dakota	311,017	255,826	2,200	308,817	99.3
Ohio	5,213,956	4,521,102	-	5,213,956	100.0
Oklahoma	1,381,678	1,124,964	-	1,381,678	100.0
Oregon	1,564,814	1,314,355	-	1,564,814	100.0
Pennsylvania	5,389,852	4,761,470	-	5,389,852	100.0
Rhode Island	465,893	411,517	19,049	446,844	95.9
South Carolina	1,761,336	1,469,878	57,714	1,696,837	96.3
South Dakota	358,397	298,014	-	358,397	100.0
Tennessee	2,594,690	2,242,106	95,999	2,493,884	96.1
Texas	9,143,161	7,650,101	2,194,359	6,948,802	76.0
Utah	1,037,075	881,130	-	1,037,075	100.0
Vermont	292,207	246,276	-	292,207	100.0
Virginia	3,344,141	2,849,735	76,054	3,268,087	97.7
Washington	2,625,241	2,134,989	-	2,625,241	100.0
West Virginia	665,125	549,620	-	665,125	100.0
Wisconsin	2,685,370	2,321,014	-	2,626,356	97.8
Wyoming	240,450	185,810	-	240,450	100.0
U.S. non-federal	126,546,629	107,734,126	1,160,696	123,123,249	97.3
Federal	2,739,610	-	-	2,739,610	100.0
U.S. TOTAL	129,286,239	107,734,126	1,160,696	125,862,859	97.4

a UI-covered employment reported in the ETA-202 data produced by the United States Bureau of Labor Statistics.

b Data not available for 2004, applied 2002 data.

Source: National Academy of Social Insurance estimates.

Table A2**Covered Payroll 1989-1999 (in millions)**

State	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alabama	27,510	29,359	30,675	32,825	34,396	36,452	38,784	40,723	43,240	45,631	48,038
Alaska	6,039	6,378	6,665	6,981	7,223	7,530	7,659	7,661	7,913	8,256	8,382
Arizona	29,399	30,845	31,926	33,962	36,181	39,852	43,949	48,310	52,928	58,957	63,711
Arkansas	14,141	15,240	16,071	17,521	18,335	19,657	21,025	22,091	23,482	25,048	26,505
California	313,946	336,862	340,434	349,677	350,286	360,471	380,560	405,942	442,333	482,120	528,468
Colorado	30,537	32,717	34,759	37,582	40,313	43,293	47,012	51,234	56,376	63,161	69,591
Connecticut	44,884	46,171	46,442	48,190	49,164	50,656	53,272	56,302	61,195	65,507	69,550
Delaware	7,736	8,199	8,451	8,720	9,014	9,495	10,215	11,039	11,926	12,980	13,858
District of Columbia	13,549	14,196	14,256	14,828	15,132	15,643	15,991	16,629	17,402	18,650	20,622
Florida	98,308	105,201	108,024	114,856	121,822	129,044	137,876	147,388	158,197	173,808	184,929
Georgia	56,926	60,537	62,047	66,573	70,792	75,950	82,607	89,627	96,779	106,548	115,703
Hawaii	10,072	11,347	12,062	12,894	13,208	13,341	13,409	13,521	13,893	14,239	14,733
Idaho	6,309	6,981	7,487	8,207	8,844	9,687	10,463	11,053	11,776	12,586	13,620
Illinois	120,739	127,962	131,379	139,116	144,370	151,763	161,181	170,070	182,787	196,468	208,109
Indiana	48,929	51,540	53,282	56,761	59,691	63,959	67,662	71,000	75,456	81,180	85,340
Iowa	20,802	22,222	23,183	24,763	25,895	27,713	29,455	31,112	33,242	35,841	37,919
Kansas	19,315	20,573	21,466	22,872	23,677	24,943	26,620	28,409	30,708	33,188	35,149
Kentucky	25,007	26,944	28,021	30,276	31,695	33,767	35,938	38,098	40,948	43,729	46,638
Louisiana	28,498	30,837	32,551	34,087	35,299	37,495	39,888	41,824	44,916	48,110	48,844
Maine	9,729	10,101	9,975	10,391	10,687	11,155	11,684	12,196	13,011	13,883	14,856
Maryland	45,555	48,389	48,693	50,396	51,859	54,369	56,955	59,996	64,619	69,410	74,498
Massachusetts	75,054	76,178	75,283	79,046	81,826	86,005	92,056	98,519	106,521	115,732	126,249
Michigan	91,138	94,637	95,353	101,384	106,335	115,425	123,160	129,757	135,520	146,142	154,893
Minnesota	43,808	46,631	48,461	52,349	54,597	58,004	62,045	66,960	72,012	78,552	83,995
Mississippi	13,816	14,639	15,228	16,260	17,416	19,092	20,206	21,209	22,577	24,269	25,396
Missouri	42,982	45,052	46,007	48,624	50,567	53,878	57,645	60,896	65,278	69,556	73,380

Montana	4,471	4,761	5,088	5,496	5,836	6,175	6,515	6,930	7,302	7,767	8,147
Nebraska	11,674	12,625	13,274	14,198	14,876	15,935	17,104	18,227	19,598	20,885	22,254
Nevada	11,996	13,443	14,013	15,259	16,540	18,388	20,316	22,742	24,781	27,218	29,774
New Hampshire	10,921	10,971	10,874	11,565	11,926	12,729	13,732	14,674	16,003	17,473	18,663
New Jersey	94,353	98,598	99,256	105,062	108,327	112,822	118,145	124,132	132,496	142,862	152,386
New Mexico	8,901	9,553	10,126	10,785	11,612	12,557	13,499	14,173	15,055	16,378	17,023
New York	217,345	228,706	227,914	241,082	245,465	251,587	264,621	281,032	298,391	323,095	343,628
North Carolina	55,811	59,305	60,889	65,559	69,469	74,261	79,727	85,056	92,460	100,070	107,166
North Dakota	3,816	4,060	4,260	4,572	4,823	5,138	5,467	5,829	6,203	6,591	6,908
Ohio	100,872	106,082	108,047	114,462	118,935	126,720	134,144	140,796	150,027	159,602	167,351
Oklahoma	20,878	22,275	23,229	24,318	25,180	26,257	27,414	29,075	31,057	33,482	34,825
Oregon	23,269	25,358	26,555	28,423	30,101	32,451	35,322	38,507	41,999	44,522	47,365
Pennsylvania	108,001	114,127	116,536	123,148	126,453	131,504	137,993	144,904	154,476	164,776	173,798
Rhode Island	8,976	9,207	8,923	9,394	9,736	10,036	10,547	10,904	11,620	12,447	13,152
South Carolina	25,479	27,490	28,055	29,633	31,167	32,986	35,338	37,287	39,931	43,100	45,806
South Dakota	3,853	4,204	4,513	4,936	5,288	5,725	6,159	6,531	6,967	7,490	8,052
Tennessee	38,365	40,549	42,205	45,930	48,868	52,610	56,555	59,367	64,031	68,299	72,255
Texas	112,630	121,984	129,338	138,073	144,789	152,849	164,311	176,984	197,495	220,446	238,031
Utah	11,771	12,846	13,805	15,039	16,152	17,722	19,559	21,551	23,607	25,461	27,143
Vermont	4,845	5,011	5,032	5,324	5,543	5,769	6,082	6,415	6,786	7,245	7,726
Virginia	54,664	57,393	58,252	61,481	64,405	68,113	72,454	77,441	84,341	94,485	102,718
Washington	41,673	46,281	49,346	53,796	55,302	58,133	61,656	66,747	74,353	82,863	91,575
West Virginia	11,203	11,991	12,319	12,987	13,353	14,139	14,682	15,200	15,712	16,305	16,815
Wisconsin	41,905	44,912	46,744	50,424	52,984	56,406	59,821	63,113	67,847	72,333	76,769
Wyoming	3,340	3,593	3,781	3,940	4,132	4,345	4,465	4,601	4,875	5,133	5,448
US, non-federal	2,269,320	2,408,829	2,465,377	2,609,047	2,705,538	2,849,854	3,029,176	3,220,284	3,472,447	3,763,879	4,027,755
Federal	90,977	97,500	102,035	109,595	113,449	114,995	113,568	116,470	118,959	121,490	123,286
US TOTAL	2,360,297	2,506,330	2,567,412	2,718,642	2,818,987	2,964,850	3,142,744	3,336,753	3,591,406	3,885,370	4,151,040

Source: National Academy of Social Insurance Estimates.

employees. These ratios were applied to the percentage of workers in firms with fewer than five employees in the respective states. For example, the proportion of Arkansas private sector workers in firms with fewer than three employees is: (5.4 percent) x (56.5 percent) = 3.05 percent. These ratios are applied to the number of UI covered workers in private, non-farm firms in each state. In the fourteen States together, we estimate that 1.2 million workers were excluded from workers' compensation coverage in 2004 because of the small employer exclusion from mandatory coverage.

Agricultural Exemptions. We estimate agricultural workers to be excluded from workers' compensation coverage if they work in the sixteen states where agricultural employers are exempt from mandatory coverage. These states are: Alabama, Arkansas, Delaware, Georgia, Indiana, Kansas, Kentucky, Missouri, Mississippi, North Dakota, Nebraska, New Mexico, Nevada, Rhode Island, South Carolina, and Tennessee. In each of these jurisdictions, we subtract from UI coverage those workers employed in agricultural industries.

Texas. In Texas, where workers' compensation coverage is elective for almost all employers, the NASI

estimate of coverage is based on periodic surveys conducted by the Texas Workers' Compensation Research Institute and the Texas Department of Insurance, which found 76.0 percent of Texas employees were covered in 2004 (TDI et al, 2004). This ratio was applied to all UI-covered Texas employees other than federal government workers (who were not included in the surveys cited above). A prior survey in 2001 found that 84.0 percent of non-federal workers in Texas were covered (Shields and Campbell, 2001). We revised our past coverage estimate in Texas to 78.6 percent in 2003 and 81.3 in 2002 to phase in the decline from 84.0 percent in 2001 to 76.0 percent in 2004.

Table A2 provides estimates of covered wages by state for the period 1989-1999. Estimates for 1997-1999 follow methods described in this appendix to estimate coverage in each state. For earlier years, the 1997 ratio (of workers' compensation covered payroll to total UI covered payroll) in each state is used to estimate workers' compensation covered payroll, drawing on UI-covered payroll data provided by the U.S. Bureau of Labor Statistics.

Appendix B: Questionnaire for State Agencies

Annual Data Survey - Project on National Data for Workers' Compensation
National Academy of Social Insurance

Page 1

Your Name: _____ Agency/Organization: _____
 E-mail: _____ State: _____ Phone: _____ Fax: _____

Calendar Year Paid Data -- Please provide the information requested below for calendar years 2000-2004. Calendar year paid data refer to all payments made that year, regardless of accident year and regardless of whether the case was closed or remains open. If you are unable to report calendar year data, please indicate the 12-month period of the data you are reporting. Please be sure to list benefits paid, not incurred. If your agency does not have the data to fill out this questionnaire, please send NASI the contact information for the entity or person in your state that may have the information.

	CY 2004 Payments	CY 2003 Payments	CY 2002 Payments	CY 2001 Payments	CY 2000 Payments
1) INDIVIDUAL SELF-INSURERS					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Is Group Self-insurance allowed in your state?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Does the total above include Group Self insured?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
If not, fill in 2)					
2) GROUP SELF-INSURERS					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL					
3) PRIVATE CARRIERS					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Are deductibles allowed for private carriers?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Does the amount above include deductible payments by employers?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
How much was paid under the deductible amounts?					
4) STATE FUNDS (if state has competitive or exclusive fund)					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Are deductibles allowed for the state fund?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Does the amount above include deductible payments by employers?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
How much was paid under the deductible amounts?					

Annual Data Survey - Project on National Data for Workers' Compensation
 National Academy of Social Insurance
 Page 2

	CY 2004 Payments	CY 2003 Payments	CY 2002 Payments	CY 2001 Payments	CY 2000 Payments
5) SPECIAL FUNDS (including second injury, and other)					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL					
Is this amount included in items 3 and/or 4?	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>
Is so, which and how much?					
6) INSURANCE GUARANTY FUNDS					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL					
7) SELF-INSURED GUARANTY FUNDS					
Medical Payments					
Cash Payments					
Compromise "lump sum settlements" (if not included above)					
TOTAL					
8) CALENDAR YEAR TOTAL BENEFITS PAID (should equal the sum of items #1-7)					
Medical Payments					
Cash Payments					
Compromise lump sum settlements (if not included above)					
TOTAL					

Are you attaching additional information?

Please e-mail your response to NASI at isengupta@nasi.org or fax to 202-452-8111 by October 14, 2005
 For more information contact Ishita Sengupta by e-mail at isengupta@nasi.org or by phone at 202-452-8097.

Appendix C: Data Availability

Estimates of benefits paid and employer costs for workers' compensation by the National Academy of Social Insurance (NASI) rely on two main sources: Responses to the NASI survey questionnaire from state agencies and data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies.

The A.M. Best data show the experience of private carriers in every state, but do not include any information about self-insured employers or about benefits paid under deductible arrangements. The A.M. Best data show total "direct losses" (that is, benefits) paid in each state in 2000–2004, by private carriers and by twenty-one entities that we classify as state funds, based on their membership in the American Association of State Compensation Insurance Funds. A.M. Best did not provide information on the state fund in Colorado, Montana, Oklahoma, South Carolina, or on exclusive state funds in Ohio, North Dakota, Washington, West Virginia, and Wyoming.

The 2004 NASI survey questionnaire for state agencies asked states to report data for five years, from 2000 through 2004. These historical data were used to revise and update estimates for these past years.

In Table C-1, the shaded areas indicate the information provided by each state in response to the survey.

Private Carrier Benefits

Of the fifty-one jurisdictions, forty-six allow private carriers to write workers' compensation policies. Of these, twenty-three jurisdictions were able to provide data on the amount of benefits paid by private carriers. In the other states, A.M. Best data were used to estimate private carrier benefits. An estimate of benefits paid under deductible policies were added to benefits paid reported by A.M. Best to estimate total private carrier benefits in these states. Methods for estimating deductible amounts are described in Appendix G.

State Fund Benefits

Twenty-six states have a state fund for writing workers' compensation policies. Of these, thirteen were able to provide benefit data. A.M. Best data and NAIC (National Association of Insurance Commissioners) data were used to estimate state

fund benefits in states unable to provide the data. An estimate of benefits paid under deductible policies was added to benefits reported by A.M. Best to estimate total state fund benefits in these states.

Self-Insured Benefits

All jurisdictions except North Dakota and Wyoming allow employers to self-insure. Twenty-eight of these jurisdictions were able to provide data on benefits paid by self-insurers. Self-insurance benefits were imputed for the twenty-one states that were unable to provide data. The self-insurance imputation methods are described in Appendix E.

Benefits under Deductible Policies

Forty-six jurisdictions allow carriers to write deductible policies for workers compensation. Of These jurisdictions, five were able to provide the amount of benefits paid under deductible policies. Benefits under deductible arrangements were estimated for another thirteen states by subtracting A.M. Best data on benefits paid (which do not include deductible benefits) from data reported by the state agency (which, in these cases, included deductible benefits). Deductible benefits in the remaining states were estimated using a ratio of Manual Equivalent Premiums, as described in Appendix G.

Medical Benefits

The agency data for medical share were used in nine states. The National Council on Compensation Insurance estimates of the medical share of the benefits were used in thirty-seven jurisdictions. Other methods were used for five states for which no information was available from the state or NCCI. More detail on methods to estimate medical benefits is in Appendix F.

Employer Costs

NASI estimates of employer costs for benefits paid under private insurance and state funds are the sum of "direct premiums written" as reported by A.M. Best and the NAIC, plus our estimate of benefits paid under deductible arrangements (which are not reflected in premiums). In some cases, data provided by state agencies are used instead of A.M. Best data. State fund premium data for Minnesota, Montana,

North Dakota, and Washington were provided by the state agencies.

For self-insured employers, the costs include benefit payments and administrative costs. Because self-insured employers often do not separately record administrative costs for workers' compensation, their administrative costs must be estimated. They are assumed to be the same share of benefits as administrative costs for other insurers. This percentage is based on the ratio of administrative costs to total benefits as reported by private insurers to the National Association of Insurance Commissioners

(NAIC, 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005). This ratio is based on direct loss adjustment expenses and their expense for taxes, licenses, and fees. The ratios were:

1997: 15.7 percent
1998: 14.5 percent
1999: 15.8 percent
2000: 14.0 percent
2001: 14.6 percent
2002: 14.8 percent
2003: 17.1 percent
2004: 16.19 percent

Table C1

Workers' Compensation Data Provided by States for 2004^a

Calendar Year Paid					
State	Private Carriers	State Funds	Self-Insureds	Deductibles	Medical
Alabama		NA		Note 1	Note 4
Alaska		NA		Note 1	Note 4
Arizona				Note 2	Note 4
Arkansas		NA		Note 2	Note 4
California				Note 1	
Colorado		Note 7		Note 2	Note 4
Connecticut		NA		Note 2	Note 4
Delaware		NA	Note 8	Note 2	Note 5
District of Columbia		NA	Note 3	Note 2	Note 4
Florida	Note 6	NA		Note 2	Note 4
Georgia		NA	Note 2	Note 2	Note 4
Hawaii				Note 1	Note 4
Idaho			Note 8	Note 2	Note 4
Illinois		NA	Note 3	Note 2	Note 4
Indiana		NA	Note 3	Note 2	Note 4
Iowa		NA	Note 3	Note 2	Note 4
Kansas	Note 6	NA		Note 2	Note 4
Kentucky	Note 6		Note 3	Note 2	Note 4
Louisiana				Note 2	Note 4
Maine				Note 2	Note 4
Maryland				Note 2	Note 4
Massachusetts		NA		Note 2	
Michigan		NA		Note 1	
Minnesota					
Mississippi		NA		Note 2	Note 4
Missouri				Note 1	Note 4
Montana				Note 1	Note 4
Nebraska	Note 6	NA	Note 3	Note 2	Note 4
Nevada		NA		Note 1	Note 4
New Hampshire		NA	Note 3	Note 2	Note 4
New Jersey		NA	Note 8	Note 1	Note 5
New Mexico				Note 1	Note 4
New York			Note 3	Note 1	
North Carolina		NA	Note 3	Note 2	Note 4
North Dakota	NA		NA		
Ohio	NA			NA	
Oklahoma				Note 2	Note 4
Oregon					Note 4
Pennsylvania					
Rhode Island			Note 8	Note 2	Note 4
South Carolina					Note 4
South Dakota		NA		Note 1	Note 4
Tennessee		NA	Note 3	Note 2	Note 4
Texas			Note 3	Note 2	Note 4
Utah			Note 3	Note 2	Note 4
Vermont		NA	Note 3	Note 2	Note 4
Virginia		NA	Note 3	Note 1	Note 4
Washington	NA			NA	
West Virginia	NA	Note 7	Note 8	NA	Note 5
Wisconsin	Note 6	NA	Note 3	NA	Note 5
Wyoming	NA		NA	NA	Note 5

■ Shaded areas correspond with reported data

□ White areas correspond with data reported by A.M. Best

(a) Data was provided by state workers' compensation agencies, insurance rating boards, departments of labor, and industrial commissions.

NA: Not applicable.

Note 1: Data were not directly available but could be computed by subtracting various components from total benefit figures provided.

Note 2: Computed from information provided on premiums.

Note 3: Self-insured benefits as described in Appendix E.

Note 4: Medical data provided by NCCI .

Note 5: Medical data estimated based on data provided by NCCI.

Note 6: Data provided by agency either was not complete or provided accident year data hence AM Best data were used.

Note 7: Data provided by National Association of Insurance Commissioners (NAIC).

Note 8: Self-insured data was imputed using last years data.

Appendix D: Revised Data for 2000–2003

In preparing the 2004 estimates for workers' compensation benefits, the National Academy of Social Insurance reviewed and revised all data for calendar years 2000-2003. The revision process began by requesting historical data from state workers' compensation agencies and from AM Best. The revised benefit estimates are reported in the following tables. Revisions to the historical data increase consistency in historical methodology and enhance comparability between years. The following are key revisions made to the historical data:

- Revised data consistently use the same medical benefit estimation methodology described in Appendix F.
- Revised data consistently use the same deductible estimation methodology described in Appendix G.

- Self-insurance benefit imputations were revised using historical data as reported in Appendix E.
- Changes in data reported by state agencies were captured by the revised data questionnaire and are reflected in the revised estimates.
- Administrative costs for self-insurance were re-estimated based on updated information from the National Association of Insurance Commissioners as described in Appendix C.

The revised data in this Appendix should be used in place of previously published data. Historical data displayed in the body of this report incorporate these revisions.

Table D1**Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2003
(in thousands)**

State	Total	Private Carriers ^a	State Funds	Self-Insured ^b	Medical Benefits	Percent Medical
Alabama	\$580,184	\$294,746	0	\$285,438	\$364,616	62.8 ^c
Alaska	184,379	140,585	0	43,794	101,417	55.0 ^c
Arizona	531,240	173,290	270,071	87,878	337,056	63.4 ^c
Arkansas	225,061	158,057	0	67,004	139,779	62.1 ^c
California	12,403,729	5,903,920	2,917,587	3,582,223	6,329,029	51.0
Colorado	757,041	250,276	357,848	148,917	332,713	43.9 ^c
Connecticut	674,747	458,665	0	216,082	288,356	42.7 ^c
Delaware	160,264	115,442	0	44,822	76,703	47.9 ^d
District of Columbia	89,108	68,263	0	20,845	32,973	37.0 ^c
Florida	2,811,302	2,274,185	0	537,117	1,631,140	58.0 ^c
Georgia	1,061,969	723,715	0	338,254	502,974	47.4 ^c
Hawaii	274,922	162,168	24,652	88,102	105,503	38.4 ^c
Idaho	196,394	67,239	117,483	11,672	112,159	57.1 ^c
Illinois	2,103,658	1,623,893	0	479,765	975,428	46.4 ^c
Indiana	559,421	472,930	0	86,491	378,310	67.6 ^c
Iowa	424,198	335,330	0	88,868	205,463	48.4 ^c
Kansas	293,473	230,247	0	63,226	160,283	54.6 ^c
Kentucky	724,291	432,080	67,050	225,162	392,111	54.1 ^c
Louisiana	585,480	292,156	147,558	145,766	297,357	50.8 ^c
Maine	239,777	96,727	67,961	75,089	110,790	46.2 ^c
Maryland	701,297	431,677	165,061	104,559	292,542	41.7 ^c
Massachusetts	1,057,175	904,215	0	152,960	350,931	33.2
Michigan	1,476,850	877,007	0	599,843	542,574	36.7
Minnesota	885,006	549,184	113,629	222,193	413,726	46.7
Mississippi	291,014	165,513	0	125,501	162,553	55.9 ^c
Missouri	1,080,870	657,912	124,147	298,811	534,615	49.5 ^c
Montana	200,857	74,009	91,932	34,917	105,286	52.4 ^c
Nebraska	290,419	212,485	0	77,934	171,361	59.0 ^c
Nevada	326,556	214,946	0	111,610	150,151	46.0 ^c
New Hampshire	219,629	178,968	0	40,661	123,981	56.5 ^c

New Jersey	1,379,235	1,261,258	0	117,976	660,107	47.9 ^d
New Mexico	189,427	92,448	28,269	68,709	107,936	57.0 ^c
New York	3,220,398	1,631,501	788,496	800,401	1,039,503	32.3
North Carolina	1,066,611	814,291	0	252,320	480,925	45.1 ^c
North Dakota ^a	78,453	296	78,157	0	43,102	54.9
Ohio ^a	2,442,187	23,858	1,936,354	481,975	1,140,541	46.7
Oklahoma	553,922	256,387	180,586	116,949	262,953	47.5 ^c
Oregon	471,307	220,585	206,878	43,844	245,975	52.2 ^c
Pennsylvania	2,565,344	1,820,527	180,677	564,140	1,040,169	40.5
Rhode Island	130,865	36,667	79,107	15,090	40,579	31.0 ^c
South Carolina	656,935	441,662	52,085	163,188	312,056	47.5 ^c
South Dakota	73,767	70,843	0	2,924	46,331	62.8 ^c
Tennessee	842,647	634,071	0	208,576	445,703	52.9 ^c
Texas	1,856,942	1,269,428	222,312	365,202	1,169,889	63.0 ^c
Utah	186,344	50,802	109,462	26,081	121,849	65.4 ^c
Vermont	119,961	104,961	0	15,000	58,147	48.5 ^c
Virginia	701,593	541,701	0	159,892	393,992	56.2 ^c
Washington ^a	1,800,076	26,671	1,309,550	463,855	619,553	34.4
West Virginia ^a	828,913	3,274	708,497	117,142	241,676	29.2
Wisconsin	840,354	704,268	0	136,086	402,196	47.9 ^d
Wyoming ^a	114,252	2,169	112,083	0	72,090	63.1
<u>Non-federal total</u>	<u>\$51,529,845</u>	<u>\$28,547,498</u>	<u>\$10,457,491</u>	<u>\$12,524,856</u>	<u>\$24,667,151</u>	<u>47.9</u>
Federal ^e	3,184,685				842,779	26.5
Federal employees	2,367,757				669,484	28.3
TOTAL	54,714,530				25,509,930	46.6

8 States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from two sources: companies with group policies that overlap states and the fact that some companies include excess workers' compensation coverage in their reports of workers' compensation benefits to A.M. Best.

(b) Self-insurance includes individual self-insurers and group self-insurance.

(c) Medical percentages based on data provided by NCCI, see Appendix F.

(d) Medical percentage based on the weighted average of states where medical data were available.

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

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 D2

Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2002
(in thousands)

State	Total	Private Carriers ^a	State Funds	Self-Insured ^b	Medical Benefits	Percent Medical
Alabama	\$565,264	\$290,009	\$0	\$275,255	\$343,115	60.7 ^c
Alaska	180,046	138,454	0	41,592	97,225	54.0 ^c
Arizona	505,278	195,025	232,168	78,085	303,672	60.1 ^c
Arkansas	221,474	160,197	0	61,277	138,200	62.4 ^c
California	11,582,431	6,065,550	2,191,962	3,324,919	5,808,985	50.2
Colorado	760,958	299,716	322,249	138,993	343,192	45.1 ^c
Connecticut	675,895	467,522	0	208,373	280,497	41.5 ^c
Delaware	152,933	103,566	0	49,367	72,086	47.1 ^d
District of Columbia	93,960	71,905	0	22,055	34,013	36.2 ^c
Florida	2,678,082	2,208,833	0	469,249	1,523,829	56.9 ^c
Georgia	974,661	661,456	0	313,205	464,913	47.7 ^c
Hawaii	267,827	167,539	17,908	82,380	99,632	37.2 ^c
Idaho	185,688	77,068	97,545	11,075	105,285	56.7 ^c
Illinois	2,123,878	1,656,030	0	467,847	943,002	44.4 ^c
Indiana	547,305	462,687	0	84,618	359,032	65.6 ^c
Iowa	400,226	325,006	0	75,220	202,514	50.6 ^c
Kansas	341,606	235,253	0	106,353	185,151	54.2 ^c
Kentucky	708,424	454,427	56,283	197,714	381,840	53.9 ^c
Louisiana	562,812	265,187	153,769	143,857	296,602	52.7 ^c
Maine	261,734	99,212	75,470	87,051	103,647	39.6 ^c
Maryland	664,282	400,914	148,657	114,711	268,370	40.4 ^c
Massachusetts	902,840	762,324	0	140,517	294,359	32.6
Michigan	1,512,457	846,823	0	665,634	523,260	34.6
Minnesota	921,518	611,861	98,096	211,561	438,278	47.6
Mississippi	290,378	172,668	0	117,710	180,615	62.2 ^c
Missouri	1,115,832	715,537	112,786	287,509	554,568	49.7 ^c
Montana	177,877	70,099	75,860	31,918	95,342	53.6 ^c
Nebraska	282,844	206,943	0	75,901	161,504	57.1 ^c
Nevada	324,597	210,474	0	114,123	133,317	41.1 ^c
New Hampshire	211,734	175,188	0	36,545	117,724	55.6 ^c

New Jersey	1,328,650	1,225,172	0	103,477	626,268	47.1 ^d
New Mexico	175,845	89,258	24,948	61,638	99,880	56.8 ^c
New York	3,142,392	1,580,743	780,636	781,013	968,462	30.8
North Carolina	987,731	750,667	0	237,064	423,737	42.9 ^c
North Dakota ^a	73,515	220	73,295	0	39,204	53.3
Ohio ^a	2,388,186	37,652	1,878,257	472,277	1,106,572	46.3
Oklahoma	508,931	251,231	140,450	117,251	234,617	46.1 ^c
Oregon	474,547	238,333	192,157	44,057	240,121	50.6 ^c
Pennsylvania	2,478,709	1,761,444	157,299	559,966	990,861	40.0
Rhode Island	141,066	48,046	77,402	15,618	43,025	30.5 ^c
South Carolina	592,530	398,098	43,770	150,661	265,453	44.8 ^c
South Dakota	73,382	69,996	0	3,386	45,130	61.5 ^c
Tennessee	777,264	599,809	0	177,455	398,737	51.3 ^c
Texas	2,307,054	1,680,240	246,265	380,550	1,432,681	62.1 ^c
Utah	211,883	76,492	105,721	29,670	141,114	66.6 ^c
Vermont	119,329	107,329	0	12,000	62,886	52.7 ^c
Virginia	626,954	495,617	0	131,337	339,182	54.1 ^c
Washington ^a	1,716,107	28,768	1,225,007	462,332	590,036	34.4
West Virginia ^a	832,608	3,588	697,271	131,749	246,579	29.6
Wisconsin	896,556	756,599	0	139,957	422,598	47.1 ^d
Wyoming ^a	107,475	5,913	101,562	0	68,585	63.8
Non-federal total	\$50,155,557	\$28,782,692	\$9,326,792	\$12,046,073	\$23,639,498	47.1
Federal ^e	3,153,626				840,445	26.7
Federal Employees	2,317,325				665,378	28.7
TOTAL	53,309,183				24,479,943	45.9

(a) States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from two sources: companies with group policies that overlap states and the fact that some companies include excess workers' compensation coverage in their reports of workers' compensation benefits to A.M. Best.

(b) Self-insurance includes individual self-insurers and group self-insurance.

(c) Medical percentages based on data provided by NCCI, see Appendix F.

(d) Medical percentage based on the weighted average of states where medical data were available.

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

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 D3

**Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2001
(in thousands)**

State	Total	Private Carriers ^a	State Funds	Self-Insured ^b	Medical Benefits	Percent Medical
Alabama	\$562,773	\$ 304,347	\$	\$258,425	\$ 342,729	60.9 ^c
Alaska	163,111	125,678	0	37,434	86,123	52.8 ^c
Arizona	436,037	206,979	148,810	80,248	267,726	61.4 ^c
Arkansas	217,719	152,331	0	65,388	133,244	61.2 ^c
California	10,082,580	5,573,930	1,544,302	2,964,348	4,690,006	46.5
Colorado	566,354	307,516	117,809	141,029	246,930	43.6 ^c
Connecticut	641,341	450,892	0	190,449	268,080	41.8 ^c
Delaware	138,371	93,723	0	44,647	64,334	46.5 ^d
District of Columbia	91,148	74,570	0	16,578	36,186	39.7 ^c
Florida	3,033,955	2,441,956	0	591,999	1,720,253	56.7 ^c
Georgia	1,029,374	715,164	0	314,209	497,188	48.3 ^c
Hawaii	248,100	163,287	9,182	75,631	97,255	39.2 ^c
Idaho	179,640	82,400	87,829	9,411	100,957	56.2 ^c
Illinois	2,079,768	1,583,265	0	496,503	933,816	44.9 ^c
Indiana	524,111	443,079	0	81,032	342,768	65.4 ^c
Iowa	390,235	318,271	0	71,965	180,289	46.2 ^c
Kansas	340,483	240,527	0	99,956	194,416	57.1 ^c
Kentucky	671,875	431,884	43,755	196,237	372,891	55.5 ^c
Louisiana	587,855	310,407	132,804	144,643	310,975	52.9 ^c
Maine	245,145	97,219	60,926	87,000	109,825	44.8 ^c
Maryland	681,633	408,593	157,709	115,331	288,331	42.3 ^c
Massachusetts	881,417	746,409	0	135,008	286,093	32.5
Michigan	1,477,986	809,463	0	668,523	482,602	32.7
Minnesota	904,451	610,309	91,622	202,520	430,610	47.6
Mississippi	284,729	183,238	0	101,491	156,031	54.8 ^c
Missouri	958,708	609,400	91,486	257,822	508,256	53.0 ^c
Montana	179,613	79,446	70,987	29,180	95,195	53.0 ^c
Nebraska	247,616	183,668	0	63,948	141,884	57.3 ^c
Nevada	309,321	210,299	0	99,022	126,504	40.9 ^c
New Hampshire	215,158	167,096	0	48,062	122,210	56.8 ^c

New Jersey	1,255,974	1,135,842	0	120,132	583,949	46.5 ^d
New Mexico	159,050	81,884	21,218	55,948	93,204	58.6 ^c
New York	2,978,224	1,440,904	797,109	740,211	913,244	30.7
North Carolina	905,253	705,188	0	200,065	405,553	44.8 ^c
North Dakota ^a	71,267	468	70,799	0	38,138	53.5
Ohio ^a	2,248,369	33,376	1,762,622	452,371	999,435	44.5
Oklahoma	526,070	292,480	120,815	112,775	250,935	47.7 ^c
Oregon	472,691	253,207	179,395	40,089	225,946	47.8 ^c
Pennsylvania	2,406,272	1,700,651	144,523	561,097	943,970	39.2
Rhode Island	135,703	53,636	64,273	17,794	41,525	30.6 ^c
South Carolina	532,374	367,262	39,444	125,668	243,827	45.8 ^c
South Dakota	70,660	68,210	0	2,450	43,173	61.1 ^c
Tennessee	843,062	645,676	0	197,386	435,863	51.7 ^c
Texas	2,212,275	1,623,702	246,192	342,381	1,334,002	60.3 ^c
Utah	197,606	73,614	87,522	36,470	131,606	66.6 ^c
Vermont	97,654	81,246	0	16,409	44,042	45.1 ^c
Virginia	604,383	468,588	0	135,794	340,872	56.4 ^c
Washington ^a	1,638,997	27,538	1,187,235	424,224	564,061	34.4
West Virginia ^a	713,130	633	615,581	96,916	192,558	27.0
Wisconsin	923,761	787,332	0	136,429	536,705	58.1 ^c
Wyoming ^a	100,076	3,017	97,059	0	67,567	67.5 ^d
<u>Non-federal total</u>	<u>\$ 47,463,457</u>	<u>\$ 27,969,802</u>	<u>\$ 7,991,008</u>	<u>\$ 11,502,648</u>	<u>\$ 22,063,882</u>	<u>46.5</u>
Federal ^e	3,069,267				780,176	25.4
Federal employees	2,223,088				623,057	28.0
TOTAL	50,532,724				22,844,058	45.2

(a) States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from two sources: companies with group policies that overlap states and the fact that some companies include excess workers' compensation coverage in their reports of workers' compensation benefits to A.M. Best.

(b) Self-insurance includes individual self-insurers and group self-insurance.

(c) Medical percentages based on data provided by NCCI, see Appendix F.

(d) Medical percentage based on the weighted average of states where medical data were available.

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

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 D4**Workers' Compensation Benefits by Type of Insurer and Medical Benefits, by State, 2000
(in thousands)**

State	Total	Private Carriers ^a	State Funds	Self-Insured ^b	Medical Benefits	Percent Medical
Alabama	\$529,189	\$304,964	\$0	\$224,225	\$315,040	59.5 ^c
Alaska	139,378	109,467	0	29,911	74,531	53.5 ^c
Arizona	497,955	230,991	196,364	70,599	301,028	60.5 ^c
Arkansas	213,969	162,147	0	51,822	127,711	59.7 ^c
California	9,449,145	5,615,736	1,173,754	2,659,655	4,306,573	45.6
Colorado	810,301	339,521	264,636	206,144	356,634	44.0 ^c
Connecticut	638,435	452,501	0	185,934	247,240	38.7 ^c
Delaware	137,737	88,253	0	49,483	62,304	45.2 ^d
District of Columbia	85,909	63,485	0	22,424	43,998	51.2 ^c
Florida	2,576,875	2,350,035	0	226,840	1,395,609	54.2 ^c
Georgia	964,995	665,212	0	299,782	446,481	46.3 ^c
Hawaii	231,359	153,977	9,706	67,676	89,349	38.6 ^c
Idaho	113,598	50,841	53,562	9,195	63,783	56.1 ^c
Illinois	1,948,330	1,487,042	0	461,288	858,973	44.1 ^c
Indiana	528,901	447,129	0	81,772	343,603	65.0 ^c
Iowa	342,930	280,791	0	62,140	169,169	49.3 ^c
Kansas	322,707	225,234	0	97,473	193,093	59.8 ^c
Kentucky	575,292	397,030	29,797	148,465	309,219	53.7 ^c
Louisiana	546,544	283,913	117,001	145,631	272,728	49.9 ^c
Maine	244,714	105,099	50,024	89,591	104,864	42.9 ^c
Maryland	641,044	386,996	135,294	118,754	249,527	38.9 ^c
Massachusetts	800,837	677,122	0	123,716	246,854	30.8
Michigan	1,474,058	796,329	0	677,729	472,355	32.0
Minnesota	797,787	529,436	88,070	180,281	369,408	46.3
Mississippi	292,677	201,530	0	91,148	163,790	56.0 ^c
Missouri	779,786	507,713	60,290	211,782	376,084	48.2 ^c
Montana	154,797	63,437	66,736	24,624	81,160	52.4 ^c
Nebraska	229,644	180,838	0	48,806	126,340	55.0 ^c
Nevada	323,567	219,985	0	103,582	151,232	46.7 ^c
New Hampshire	178,522	141,197	0	37,325	80,753	45.2 ^d

New Jersey	1,182,644	1,087,702	0	94,941	534,961	45.2 ^d
New Mexico	143,592	74,752	13,865	54,974	77,197	53.8 ^c
New York	2,909,115	1,346,945	839,136	723,034	869,843	29.9
North Carolina	872,669	660,389	0	212,280	387,672	44.4 ^c
North Dakota ^a	69,966	432	69,534	0	37,866	54.1
Ohio ^a	2,098,545	28,216	1,630,453	439,876	871,623	41.5
Oklahoma	485,371	282,357	110,131	92,882	223,421	46.0 ^c
Oregon	425,460	235,228	158,660	31,572	207,921	48.9 ^c
Pennsylvania	2,378,828	1,660,330	154,580	563,919	906,449	38.1
Rhode Island	126,721	56,573	51,451	18,698	39,040	30.8 ^c
South Carolina	515,381	355,648	37,004	122,730	231,267	44.9 ^c
South Dakota	63,165	60,968	0	2,197	37,291	59.0 ^c
Tennessee	780,534	612,992	0	167,542	399,744	51.2 ^c
Texas	2,160,372	1,584,365	218,589	357,418	1,292,666	59.8 ^c
Utah	172,870	66,557	80,596	25,717	115,513	66.8 ^c
Vermont	101,985	86,984	0	15,001	48,869	47.9 ^c
Virginia	602,035	467,163	0	134,872	315,522	52.4 ^c
Washington ^a	1,526,514	20,742	1,135,120	370,652	533,628	35.0
West Virginia ^a	693,057	2,679	589,260	101,117	187,575	27.1
Wisconsin	768,282	656,232	0	112,050	453,275	59.0
Wyoming ^a	89,041	933	88,108	0	58,803	66.0
Non-federal total	\$44,737,130	\$26,866,140	\$7,421,719	\$10,449,272	\$20,229,579	45.2
Federal ^e	2,957,404				697,825	23.6
Federal employees	2,118,859				542,505	25.6
Total	47,694,534				20,927,404	43.9

(a) States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from two sources: companies with group policies that overlap states and the fact that some companies include excess workers' compensation coverage in their reports of workers' compensation benefits to A.M. Best.

(b) Self-insurance includes individual self-insurers and group self-insurance.

(c) Medical percentages based on data provided by NCCI, see Appendix F.

(d) Medical percentage based on the weighted average of states where medical data were available.

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

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.

Appendix E: Self-Insurer Benefits Estimates

This report uses a methodology that incorporates historical data to estimate self-insurance benefits in states that were not able to provide recent information. That methodology is as follows:

- 1) Collect total payroll of workers insured by private carriers and competitive state funds for calendar years 2000-2004. This information is available for 37 states from the NCCI.
- 2) For these 37 states, use NASI estimate of total covered payroll for calendar years 2000-2004. This procedure is outlined in Appendix A.
- 3) Use (1) and (2) to estimate the percent of payroll covered by self-insurers for all states where these data are available. The percentage of payroll covered by self-insurers is $[(2)-(1)]/(2)$.
- 4) Estimate the percent of total benefits paid by self-insurers in these 37 states by dividing self-insurance benefits by total benefits.
- 5) Determine the ratio of the percent of total benefits paid by self-insurers (4) to the percent of payroll covered by self-insurers (3) in each of these states. This ratio is $(4)/(3)$.
- 6) Estimate the average ratio of the percent of total benefits paid by self-insurers (4) to the percent of payroll covered by self-insurers (3) for these states.

- 7) Apply this ratio to the percent of payroll covered by self-insurers in states where self-insurance benefits need to be estimated, to obtain an estimate of self-insurance benefits in these states $[(6)*(3) = (4)]$.

Table E1

**Self-Insurer Estimation Results,
1997-2004**

(6) Average Ratio of the percent of total benefits paid by self-insurers to the percent of payroll covered by self-insurers, $(4)/(3)$

Year	Ratio
1997	54.2
1998	49.0
1999	51.2
2000	49.9
2001	54.1
2002	62.4
2003	63.1
2004	73.5

Appendix F: Medical Benefit Estimates

Estimates by the National Academy of Social Insurance (NASI) of the percent of total benefits paid that were for medical care are based on reports from state agencies and from estimates provided by the National Council on Compensation Insurance (NCCI).

For 2004, we used the NCCI data for the medical share for thirty-seven states.

The National Council on Compensation Insurance (NCCI) is a national organization that assists private carriers and insurance commissioners in setting workers' compensation rates in selected states. NCCI provided NASI estimates of the percent of private

carrier benefits paid that were for medical care in thirty-seven states. For nine states we used the agency information on medical share given to NASI by the state agencies. For 2004, we used these percentages to estimate the share of total benefits (including self-insured benefits) that were for medical care in five jurisdictions for which state reports of medical benefits were not available.

For five states, Delaware, New Jersey, West Virginia, Wisconsin and Wyoming neither state reports nor NCCI estimates of medical benefits were available. For these states, the weighted average of the share of total benefits that were for medical care in the other forty-six jurisdictions was used.

Appendix G: Deductible Benefit Estimates

NASI has six methods for estimating deductible benefits and total benefits, depending on what is reported by the state.

Method A:

State reports deductible amounts.

Method: Use deductible amount reported by state.
Five States: Minnesota, North Dakota, Oregon, Pennsylvania, and South Carolina.

Method B:

States say deductibles are included in their totals, but do not report amounts of deductibles.

Method: Estimate deductibles by subtracting Net Losses Paid as reported by A.M. Best from state report.

Thirteen States: Alabama, Alaska, California, Hawaii, Michigan, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, South Dakota and Virginia.

Note: Before using A.M. Best data, state fund and private carrier data are separated out from both data reported by A.M. Best and state agencies (where necessary, i.e., where A.M. Best or the state agency classify as private carrier an entity that we classify as a state fund).

Method C:

State reports benefit amounts and report their totals do not include deductibles, which are allowed in the state. State does not report deductible amounts.

Method: Estimate deductible amount, using a ratio of Manual Equivalent Premiums. Add the estimate to the state reported amount to estimate the total state private carrier benefits.

Two States: Arkansas and Maine.

Method D:

Deductibles are not allowed in the state.

Method: Use state reports as totals. Deductibles equal zero.

Five States: Ohio, Washington, West Virginia, Wisconsin, and Wyoming.

Method E:

State does not report benefit amounts. Deductibles are allowed.

Method: Use Net Losses Paid as reported by A.M. Best and add estimated deductibles, based on the ratio of Manual Equivalent Premiums.

Twenty-six Jurisdictions: Arizona, Colorado, Connecticut, Delaware, the District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Nebraska, New Hampshire, North Carolina, Oklahoma, Rhode Island, Tennessee, Texas, Utah and Vermont.

Appendix H: Federal Programs

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

Federal Employees. The Federal Employees' Compensation Act of 1916, which superseded previous workers' compensation laws for federal employees, provided the first comprehensive workers' compensation program for federal civilian employees. In 2004, total benefits were \$2,445 million, of which 29 percent were for medical care. The share of benefits for medical care is lower than in most state programs because federal cash benefits, particularly for higher-wage workers, replace a larger share of pre-injury wages than is the case in most state programs. Administrative costs of the program were \$132 million in calendar year 2004, or 5.4 percent of total benefits (U.S. DOL, 2006a). Table H-1 reports benefits and administrative costs for federal civilian employees under the Federal Employees' Compensation Act in 1997 through 2004. These benefits to workers and costs to the federal government as employer are included in national totals in this report, and are classified with federal programs.

Longshore and Harbor Workers. The Longshore and Harbor Workers' Compensation Act (LHWCA) requires employers to provide workers' compensation protection for longshore, harbor, and other maritime workers. The original program, enacted in 1927, covered maritime employees injured while working over navigable waters because the Supreme Court held that the Constitution prohibits states from extending coverage to such individuals. The program

also covers other workers who fall outside the jurisdiction of state programs, such as employees on overseas military bases, those working overseas for private contractors of the United States, and private employees engaged in offshore drilling enterprises.

Private employers cover longshore and harbor workers by purchasing private insurance or self-insuring. In fiscal year 2004, about 300 self-insured employers and 250 insurance companies reported a total of 22,646 lost-time injuries to the federal Office of Workers' Compensation Programs. Total benefits paid under the Act in 2004 were \$747 million, which included \$279 million paid by private insurance carriers, \$322 million paid by self-insured employers, \$135 million paid from the federally administered special fund for second injuries and other purposes, and \$11 million for the District of Columbia Workers' Compensation Act (DCCA) Fund. Federal direct administrative costs were \$12.6 million or about 1.7 percent of benefits paid (Table H2). The Academy's data series on benefits and costs of workers' compensation includes at least part of the benefits paid by private carriers under the LHWCA in the states where the companies operate. The benefits are not identified separately in the information provided by A.M. Best and state agencies. Benefits paid by private employers who self-insure under the Longshore and Harbor Workers' Compensation Act are not reported by states or A.M. Best. Consequently, these benefits and employer costs are included with federal programs in this report.

Table H-2 shows benefits reported to the U.S. Department of Labor by insurers and self-insured employers under the Longshore and Harbor Workers' Compensation Act in 1997 through 2004. Ideally, benefits and employer costs under the LHWCA would be counted in the states where the employee is located, because our estimates of covered employment and covered workers count these workers and wages in the states where they work. We believe that at least part of LHWCA benefits paid through private insurance carriers are included in state data that are reported to us by A.M. Best or the states. At the same time, self-insured employers under the LHWCA are not included in A.M. Best data and are unlikely to be included in state reports; benefits paid from the LHWCA special funds are not included in state data. Thus, for 1997–2004

Table H1**Federal Employees' Compensation Act, Benefits and Costs, 1997–2004 (in thousands)**

	1997	1998	1999	2000	2001	2002	2003	2004
Total Benefits	\$1,900,779	\$2,009,862	\$1,999,915	\$2,118,859	\$2,223,088	\$2,317,325	\$2,367,757	\$2,445,077
Compensation Benefits	1,440,867	1,536,430	1,474,168	1,576,354	1,600,031	1,651,947	1,698,273	1,743,967
Medical Benefits	459,912	473,432	525,747	542,505	623,057	665,378	669,484	701,110
% Medical	24	24	26	26	28	29	28	29
Direct Administrative Costs	80,893	80,235	87,425	91,532	109,326	115,226	130,672	131,920
Total Costs	1,981,672	2,090,097	2,087,340	2,210,391	2,332,414	2,432,551	2,498,429	2,576,997
Indirect Administrative Costs ^a	6,835	5,750	5,584	6,197	5,056	4,596	4,806	4,587

(a) Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General. Funded by General Revenues.

Source: U.S. DOL 2006b.

Table H2**Longshore and Harbor Workers' Compensation Act, Benefits and Costs, 1997–2004 (in thousands)**

	1997	1998	1999	2000	2001	2002	2003	2004
Total Benefits	\$617,927	\$642,321	\$659,800	\$671,991	\$689,149	\$700,563	\$716,218	\$747,358
Insurance Carriers	219,352	238,464	232,778	249,671	236,726	246,603	262,753	278,887
Self-Insured Employers	263,255	261,559	283,991	278,952	307,708	310,940	309,843	322,520
LHWCA Special Fund	123,772	129,777	131,152	131,564	133,374	131,684	132,504	135,073
DCCA Special Fund	11,548	12,521	11,879	11,804	11,341	11,336	11,118	10,878
Total Annual Assessments	121,300	122,000	141,300	145,700	145,000	136,000	135,800	148,500
LHWCA	110,000	111,000	130,000	133,000	133,000	125,000	125,000	137,000
DCCA	11,300	11,000	11,300	12,700	12,000	11,000	10,800	11,500
Administrative Expenses ¹	9,356	9,821	10,822	11,144	11,713	11,970	12,314	12,611
General Revenue	8,378	8,596	8,947	9,373	9,807	9,988	10,297	10,495
Trust Fund	978	1,225	1,875	1,771	1,906	1,982	2,017	2,116
Indirect Administrative Costs ²	1,799	2,107	2,247	1,787	2,207	2,514	2,347	2,396

1 Longshore program administrative funding is divided between two sources. Industry oversight and claims activities are funded from general tax revenues. The program also exercises fiduciary responsibility for a Special Fund, which draws its revenue primarily from annual industry assessments based on anticipated benefit liabilities. This Fund makes direct benefits payments for certain categories of claims and provides funding for the program's rehabilitation staff and Special Fund oversight activities.

2 Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General. Funded by General Revenues.

Source: U.S. DOL 2006b.

data, our estimates of total federal benefits include benefits paid by self-insured employers and the special funds under the LHWCA. Without other information, we assume that privately insured benefits under the program are included in state reports. Whether and how LHWCA benefits can be reflected in state reports is a subject for analysis.

Coal Miners with Black Lung Disease. The Black Lung Benefits Act, enacted in 1969, provides compensation for coal miners with pneumoconiosis, or black lung disease, and their survivors. The program has two parts. Part B is financed by federal general revenues, and was administered by the Social Security Administration until 1997 when administration shifted to the U.S. Department of Labor. Part C is paid through the Black Lung Disability Trust Fund, which is financed by coal-mine operators through a federal excise tax on coal that is mined and sold in the United States. In this report, only the Part C benefits that are financed by employers are included in national totals of workers' compensation benefits and employer costs in 1997–2004. Total benefits in 2004 were \$714 million, of which \$371 million was paid under Part B and \$343 million was paid under Part C. Part C benefits include \$53 million for medical care.

Medical benefits are available only to Part C beneficiaries and only for diagnosis and treatment of black lung disease. Medical benefits are a small share of black lung benefits because many of the recipients of benefits are deceased coal miners' dependents, whose medical care is not covered by the program. Federal direct administrative costs were \$38.1 million or about 5.3 percent of benefit payments.

Table H-3 shows benefits under the Black Lung Benefit program in 1997 through 2004 for both parts of the program. Its benefits are paid directly by the responsible mine operator or insurer or from the federal Black Lung Disability Trust Fund. 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 H-3 and are not included in national estimates.

Energy Employees. The Energy Employees Occupational Illness Compensation Program provides lump-sum payments up to \$150,000 to civilian workers (and/or their survivors) who became ill as a result of exposure to radiation, beryllium, or silica in

the production or testing of nuclear weapons. This is Part B of the program, which went into effect in July 2001. It provides smaller lump-sum payments to individuals found eligible for an award under the Radiation Exposure Compensation Act. Medical benefits are awarded for the treatment of covered conditions. Total benefits in 2004 were \$276 million, of which \$250 million were paid as compensation benefits (U.S. DOL, 2006b). These general revenue financed benefits are not included in our national totals. Table H-4 provides information on Part B of the Energy Employees Occupational Illness Compensation Program Act of 2000.

Workers Exposed to Radiation. The Radiation Exposure Compensation Act of 1990 provides lump-sum compensation payments to individuals who contracted certain cancers and other serious diseases as a result of exposure to radiation released during above ground nuclear weapons tests or during employment in underground uranium mines. The lump-sum payments are specified in law and range from \$50,000 to \$100,000. From the beginning of the program through March 2006, 15,127 claims were paid for a total of \$1,003 million, or roughly \$66,314 a claim (U.S. DOJ, 2006). The program is financed with federal general revenues and is not included in national totals in this report. Table H-5 shows cumulative payments under the Radiation Exposure Compensation Act since its enactment in 1990.

Veterans of Military Service. U.S. military personnel are covered by the federal veterans' compensation program of the Department of Veterans Affairs, which provides cash benefits to veterans who sustained total or partial disabilities while on active duty. In September 2005, 2.6 million veterans were receiving monthly compensation payments for service-connected disabilities. Of these, 45 percent of the veterans had a disability rating of 30 percent or less, while the others had higher-rated disabilities. Total monthly payments for the disabled veterans and their dependents were \$1.9 billion as of September 2005, or about \$23.4 billion on an annual basis (U.S. Department of Veterans Affairs, 2005). Veterans' compensation is not included in our national estimates of workers' compensation.

Table H-6 provides information on the Veterans' Compensation program. This program is somewhat similar to workers' compensation in that it is

Table H3**Black Lung Benefits Act, Benefits and Costs, 1997–2004
(In thousands)**

	1997	1998	1999	2000	2001	2002	2003	2004
Total Benefits	\$1,095,585	\$1,000,383	\$982,787	\$929,690	\$872,787	\$826,980	\$771,149	\$713,932
Part C Compensation	388,656	373,707	360,470	346,903	332,620	316,585	303,724	289,699
Medical Benefits	92,041	80,450	74,776	69,322	61,136	65,756	59,739	52,992
Part B Compensation	614,888	546,226	547,541	513,465	479,031	444,639	407,686	371,241
Total Direct Administrative Costs	25,759	31,030	33,246	32,866	34,657	36,123	37,393	38,062
Part C (DOL)	25,759	26,698	29,023	28,591	29,897	31,488	31,991	32,157
Part B (SSA)	*	4,332	4,223	4,275	4,760	4,635	5,402	5,905
Trust Fund Advances from U.S. Treasury ^b	370,000	360,000	402,000	490,000	505,000	465,000	525,000	497,000
Interest Payments on Past Advances	470,635	494,726	515,016	541,117	567,814	595,589	620,582	650,579
Coal Tax Revenues Received by the Black Lung Trust Fund	635,342	634,270	569,704	512,799	511,520	588,000	480,080	577,575
Indirect Administrative Costs ^a	19,903	20,115	20,882	21,348	22,207	23,050	23,459	23,914

* information not available

(a) 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). (Note: OALJ and BRB costs are not included for any other program, but cannot be separately identified for Coal Mine Workers' Compensation).

(b) Total Trust Fund debt (cumulative advances) at the end of CY 2004 was \$8,740,557,000. In the recent past, most, if not all, of these advances were necessary to pay interest charges on past debt.

Source: U.S. DOL 2006b.

financed by the employer (the federal government) and compensates for injuries or illness caused on the job (the armed forces). It is different from other workers' compensation programs in many respects. With cash benefits of about \$23.4 billion in 2005, veterans' compensation is about 78.3 percent of the size of total cash benefits in other workers' compensation programs, which were \$29.9 billion in 2004. Because it is large and qualitatively different from other programs, veterans' compensation benefits are reported, but they are not included in national totals to measure trends in regular workers' compensation programs.

Railroad Employees and Merchant Seamen.

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

This report includes in national totals for workers' compensation those federal programs that are financed by employers and that are not otherwise included in workers' compensation benefits reported

by states in 1997 through 2004. The accompanying tables provide detailed information on federally administered programs, including some that are not included in national totals in this report.

Table H4

**Energy Employees Occupational Illness Compensation Program Act, Part B Benefits and Costs, 2001-2004
(in thousands)**

	2001	2002	2003	2004
Total Benefits	\$67,341	369,173	303,981	275,727
Compensation Benefits	67,330	363,671	288,274	250,123
Medical Benefits	11	5,502	15,707	25,604
Direct Administrative Costs	30,144	68,777	65,589	94,077
Total Costs	97,485	437,950	369,570	369,804

Source: U.S. DOL 2006b.

Table H5

Radiation Exposure Compensation Act, Benefits Paid as of March 7, 2006 (benefits in thousands)

Claim Type	Claims	Benefits
Downwinder	9,634	481,670
Onsite Participant	945	67,370
Uranium Miner	3,726	371,899
Uranium Miller	686	68,600
Ore Transporter	136	13,600
TOTAL	15,127	\$1,003,139

Source: U.S. DOJ 2006.

Table H6**Federal Veterans' Compensation Program, Compensation Paid in September, 2005
(benefits in thousands)**

Class of Dependent	Number	Monthly Value
Veteran Recipients - total	2,636,979	\$1,953,621
Veterans less than 30 percent disabled (no dependency benefit)	1,199,271	171,956
Veterans 30 percent or more disabled	1,437,708	1,781,665
Without dependents	455,347	525,079
With dependents	982,361	1,256,586
Spouse only	666,815	890,165
Spouse, child or children	247,650	282,806
Spouse, child or children, and parents or parents	847	1,584
Spouse, parent or parents	1,160	2,374
Child or children only	63,208	74,149
Child or children, and parent or parents	374	672
Parent or parents only	2,307	4,837
Total dependents on whose account additional compensation was being paid	1,465,485	-
Spouse	916,472	-
Children	543,849	-
Parents	5,164	-

Source: U.S. Department of Veterans Affairs 2005, Table 12.

References

A.M. Best. 2005. Private data request. Oldwick, NJ: A.M. Best.

American Association of State Compensation Insurance Funds (AASCIF), *AASCIF Fact Book*, 2005, www.aascif.org

Azaroff, Lenore S., Charles Levenstein, and David Wegman. 2002. "Occupational Injury and Illness Surveillance: Conceptual Filters Explain Underreporting." *American Journal of Public Health*, 92, no. 9 (September): 1421-1429. Washington, DC: American Journal of Public Health.

Barth, Peter. 2004. "Compensating Workers for Permanent Partial Disabilities." *Social Security Bulletin*, 65, no.4.

Barth, Peter, Mike Helvacian, and Te-Chun Liu. 2002. *Who Obtains Permanent Partial Disability Benefits: A Six State Analysis*. Cambridge, MA: Workers Compensation Research Institute.

Barth, Peter, and Michael Niss. 1999. *Permanent Partial Disability Benefits: Interstate Differences*. Cambridge, MA: Workers Compensation Research Institute.

Biddle, Jeff, Karen Roberts, Kenneth D. Rosenman, and Edward M. Welch. 1998. "What Percentage of Worker with Work-Related Illness Receive Workers' Compensation Benefits?" *Journal Of Occupational and Environmental Medicine* 40, no. 4 (April): 325-331. East Lansing, MI: American College of Occupational and Environmental Medicine.

Boden, Leslie I., and John W. Ruser. 2003. "Workers' Compensation 'Reforms,' Choice of Medical Care Provider, and Reported Workplace Injuries." *Review of Economics and Statistics* 85, no. 4 (November): 923-929. Cambridge, MA: The MIT Press.

Burton Jr., John F. 1997. Workers' Compensation, Twenty-Four-Hour Coverage, and Managed Care. In *Disability: Challenges for Social Insurance, Health Care Financing, and Labor Market Policy*. Edited by Virginia P. Reno, Jerry L. Mashaw, and Bill Gradison. Washington, DC: National Academy of Social Insurance.

Burton Jr., John F. 2005. Permanent Partial Disability Benefits. In *Workplace Injuries and Diseases: Prevention and Compensation; Essays in Honor of Terry Thomason*. Edited by Karen Roberts, John F. Burton, Jr., and Matthew M. Bodah. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Burton Jr., John F., and Emily Spieler. 2001. "Workers' Compensation and Older Workers." *Health and Income Security for an Aging Workforce*, no. 3. Washington, DC: National Academy of Social Insurance.

Clayton, Ann. (2004) "Workers' Compensation: A Background for Social Security Professionals." *Social Security Bulletin* 65, No. 4.

Centers for Medicare & Medicaid Services (CMS). 2005. Private data request.

Hunt, H. Allan ed. 2004. *Adequacy of Earnings Replacement in Workers' Compensation Programs*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research and NASI.

Leigh, J. Paul, Steven Markowitz, Marianne Fahs, and Philip Landrigan. 2000. *Costs of Occupational Injuries and Illnesses*. Ann Arbor, MI: The University of Michigan Press.

Leigh, J. Paul and John A. Robbins, (2004), "Occupational Disease and Workers' Compensation: Coverage and Costs, and Consequences." *The Milbank Quarterly*, Vol. 82(4): pp 689-721.

Mashaw, Jerry L., and Virginia P. Reno. 1996. *The Environment of Disability Income Policy: Programs, People, History, and Context*. Washington, DC: National Academy of Social Insurance

National Academy of Social Insurance (NASI). 2002. "Workers' Compensation Coverage: Technical Note on Estimates." *Workers' Compensation Data Fact Sheet*, no. 2. Washington, DC: National Academy of Social Insurance.

National Association of Insurance Commissioners (NAIC). 1998. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 1997*. Kansas City, MO: NAIC.

———. 1999. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 1998*. Kansas City, MO: NAIC.

———. 2000. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 1999*. Kansas City, MO: NAIC.

———. 2001. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 2000*. Kansas City, MO: NAIC.

———. 2002. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 2001*. Kansas City, MO: NAIC.

———. 2003. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 2002*. Kansas City, MO: NAIC.

———. 2004. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 2003*. Kansas City, MO: NAIC.

———. 2005. *Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 2004*. Kansas City, MO: NAIC.

National Council on Compensation Insurance, Inc. (NCCI). 1996. *Annual Statistical Bulletin, 1996 Edition*. Boca Raton, FL: NCCI.

———. 1997. *Annual Statistical Bulletin, 1997 Edition*. Boca Raton, FL: NCCI.

———. 1998. *Annual Statistical Bulletin, 1998 Edition*. Boca Raton, FL: NCCI.

———. 1999. *Annual Statistical Bulletin, 1999 Edition*. Boca Raton, FL: NCCI.

———. 2000. *Annual Statistical Bulletin, 2000 Edition*. Boca Raton, FL: NCCI.

———. 2001. *Annual Statistical Bulletin, 2001 Edition*. Boca Raton, FL: NCCI.

———. 2002. *Annual Statistical Bulletin, 2002 Edition*. Boca Raton, FL: NCCI.

———. 2002b. *Workers' Compensation Issues Report 2002*, Boca Raton, FL: NCCI.

———. 2003a. *Annual Statistical Bulletin, 2003 Edition*. Boca Raton, FL: NCCI.

———. 2003b. Private data request. Hoboken, NJ: NCCI.

———. 2004a. *Workers' Compensation Issues Report 2004*, Boca Raton, FL: NCCI.

———. 2004b. *Annual Statistical Bulletin, 2004 Edition*. Boca Raton, FL: NCCI.

———. 2004c. *Calendar-Accident Year Underwriting Results*. Boca Raton, FL: NCCI.

———. 2005. *Annual Statistical Bulletin*. Boca Raton, FL: NCCI.

Reno, Virginia, and June Eichner. 2000. "Ensuring Health and Income Security for an Aging Workforce." *Health and Income Security for an Aging Workforce*, no. 1. Washington, DC: National Academy of Social Insurance.

Reville, Robert T and Robert F. Schoeni, (2005), "The Fraction of Disability Caused at Work," *Social Security Bulletin*, 65, no.4.

Rosenman, Kenneth D, Alice Kalush, Mary Jo Reilly, Joseph C. Gardiner, Matthew reeves and Zhewui Luo. 2006. "How Much Work-Related Injury and Illness is Missed By the Current National Surveillance System?" *Journal of Occupational Environmental Medicine*, 48(4), pp357-365.

Shannon, Harry S., and Graham S. Lowe. 2002. "How Many Injured Workers Do Not File Claims for Workers' Compensation Benefits?" *American Journal of Industrial Medicine* 42:467-473. Hoboken, NJ: Wiley-Liss, Inc.

Shields, J., and D.C. Campbell. 2001. *Nonsubscription to the Texas Workers' Compensation System: 2001 Estimates*. Texas Monitor 6, no. 4 (winter): 1-6. Austin, TX: Texas Research and Oversight Council on Worker's Compensation.

Social Security Administration (SSA). Office of Research, Evaluation, and Statistics. 2004a. Annual Statistical Supplement, 2005. Washington, DC: SSA.

———. 2005b. Unpublished data from the Office of Disability. Baltimore, MD: SSA.

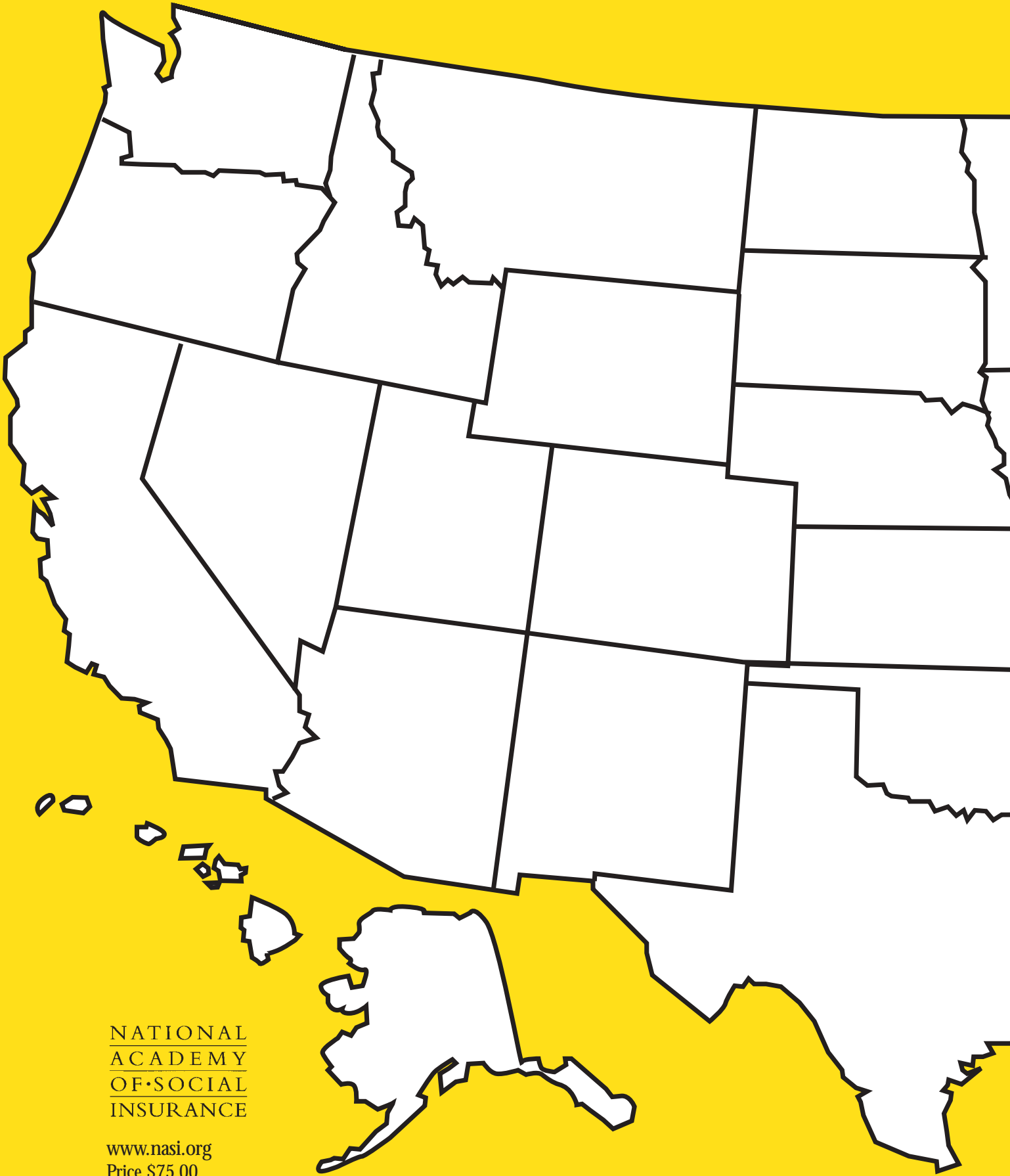
———. 2005c. Unpublished data from the Office of the Chief Actuary. Baltimore, MD: SSA.

———. 2006. *The 2005 Annual Report of the Board of Trustees of the Federal Old Age and Survivors Insurance and Disability Insurance Trust Funds*. Washington, DC: SSA.

TDI (Texas Department of Insurance) and Workers' Compensation Research Group. 2004. *Employer Participation in the Texas Workers' Compensation System: 2004 Estimates* <http://www.tdi.state.tx.us/wc/regulation/roc/pdf/wc0904est.pdf>

Thomason, Terry, Timothy P. Schmidle, and John F. Burton Jr. 2001. *Workers' Compensation: Benefits, Costs, and Safety under Alternative Insurance Arrangements*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

- U.S. Census Bureau. 1999. *The Number of Firms and Establishments, Employment, Annual Payroll, and Receipts in 1997 by Industry and Employment Size of Enterprise*. Washington, DC: U.S. Census Bureau.
- U.S. Chamber of Commerce. 2002. *2002 Analysis of Workers' Compensation Laws*. Washington, DC: U.S. Chamber of Commerce.
- U.S. Department of Justice (U.S. DOJ). 2006. Private Data Request. Washington, DC: U.S. DOJ.
- U.S. Department of Labor (U.S. DOL). Employment Standards Administration. Office of Workers' Compensation Programs.
- . 2004. *State Workers' Compensation Laws*. Washington, DC: U.S. DOL.
- . 2005a. Bureau of Labor Statistics. *Geographic Profile of Employment and Unemployment, 2004*. Washington, DC: U.S. DOL.2
- . 2005b. Bureau of Labor Statistics. *National Census of Fatal Occupational Injuries in 2004*. News USDL 04-1830 (August). Washington, DC: U.S. DOL.
- . 2005c. Bureau of Labor Statistics. *Workplace Injuries and Illnesses in 2004*. News USDL 04-2486 (November). Washington, DC: U.S. DOL.
- . 2005d. Bureau of Labor Statistics. *Employee Benefits in Private Industry, 2004*. News USDL 04-2296 (November). Washington, DC: U.S. DOL.
- . 2005e. *ES 202 Report*. Washington, DC: U.S. DOL.
- . 2005f. Bureau of Labor Statistics. *Lost-Worktime Injuries and Illnesses: Characteristics and Resulting Days Away From Work, 2004*. News USDL 05-521 (December). Washington, DC: U.S. DOL.
- . 2006a. Employment Standards Administration. Office of Workers' Compensation Programs. Private data request. Washington, DC: U.S. DOL.
- . 2006b. Bureau of Labor Statistics. *Employment, Hours, and Earnings from the Current Employment Statistics survey* (National)
- U.S. Department of Veterans Affairs. Veterans Benefit Administration. 2004. *VA Administrative Report, RCS 20-0239*. Washington, DC: U.S. Department of Veterans Affairs.
- U.S. Small Business Administration (U.S. SBA). Office of Advocacy. 2002. *Employer Firms, Establishments, Employment, and Annual Payroll by Firm Size and State, 2002*. Washington, DC: U.S. SBA.
- Williams, C. Arthur and Peter S. Barth. 1973. *Compendium on Workmen's Compensation, National Commission on State Workmen's Compensation Laws*. Washington, DC: Government Printing Office.
- Sengupta I, Virginia Reno and John F. Burton Jr., and. 2005. *Workers' Compensation: Benefits, Coverage, and Costs, 2003*. Washington, DC: National Academy of Social Insurance.
- Yates, Elizabeth, and John F. Burton Jr. 2005. "Workers' Compensation Insurance Industry Increases Profitability in 2004." *Workers' Compensation Policy Review* 5, no. 4 (July/August): 2-8. Princeton, NJ: Workers' Disability Income Systems.



NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

www.nasi.org
Price \$75.00
ISBN: 1-884902-46-4
<union bug>