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# Workers' Compensation: Coverage, Benefits, and Costs, 1982

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Workers' compensation provides medical care and income maintenance protection to workers disabled from work-related injury or illness. This program is of considerable interest to the Social Security Administration (SSA) from several perspectives. For example, since 1965 Social Security Disability Insurance (DI) benefits and workers' compensation payments have been integrated. Information on the experience under workers' compensation provides a framework for examining questions concerning gaps and overlaps in the Nation's social insurance system. In addition, since December 1969 SSA has administered claims filed through 1973 under part B of the Black Lung program—the program providing income maintenance protection to coal miners disabled by pneumoconiosis. The workers' compensation experience reported here consists of information on benefits for work-related injury and disease, including data on the combined benefits paid under the entire Federal Black Lung program administered by the Labor Department and SSA.

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In 1982, the main development in workers' compensation was the turnabout in the total cost of the program to employers. Unlike the other major social insurance programs in the United States, workers' compensation is almost entirely funded by employers. Total premium costs to employers in 1982 were \$22.5 billion, a decline of 1.9 percent from the previous year. This was the first such decline since 1949. Lower employer costs were also apparent in the cost-payroll ratio. Premium costs fell from \$1.84 per \$100 of covered payroll in 1981 to \$1.72 in 1982. This ratio declined 12 cents in both 1981 and 1982 after a decade of increases.

Benefit payments to disabled workers and survivors increased to \$16.1 billion in 1982. Although aggregate costs showed a decline between 1981 and 1982, 1982 benefits were 7.5 percent higher than a year earlier. However, an examination of the changes in the previous few years shows that the 1982 benefit growth slowed down considerably when compared with the large annual increments during much of the 1970's. Included in the 1982 total was \$1.7 billion in Federal Black Lung payments, slightly less than the amount paid in 1981.

Since benefits continued to rise while premium costs

declined, the ratio of benefits to premiums or "loss ratio" rose in 1982—to 66.1 percent, from 58.7 percent in 1981. This was the highest loss ratio in the 32 years of this series. Generally, the loss ratio has been within a few percentage points of 60 percent, although it declined to 51 percent in 1978.

## Coverage

About 77.8 million workers were covered by workers' compensation laws in 1982. This figure includes protection under the laws of 50 States, the District of Columbia, and two Federal programs (the Federal Employees Compensation Act and the Longshoremen's and Harbor Workers' Compensation Act). In addition, the Federal Coal Mine Health and Safety Act established the Black Lung program for coal miners and their survivors. The number of covered workers in 1982 was 1.6 million fewer than in 1981, in line with the fact that fewer persons were employed in 1982 than in 1981. In 1982, the number of covered workers as a proportion of all wage and salary workers was 86.5 percent, a proportion similar to that of previous years. Also in 1982, 18 States made changes in their laws affecting coverage. Some of these new provisions included workers, some excluded

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workers, but overall no changes occurred for major groups of workers.

Total payroll for those covered under workers' compensation laws amounted to \$1,309 billion in 1982. This amount was 5.0 percent above the 1981 level, and represented a composite effect of the 2.0-percent decline in covered employment, and a 7.1-percent increase in average annual wages for those under workers' compensation.<sup>1</sup> The 1982 wage increase was somewhat lower than those for the previous 3 years, which ranged from 8.6 to 9.4 percent. Covered payroll as a proportion of total payroll for all wage and salary workers was 85.7 percent. Like the covered worker proportion, the covered payroll proportion has also remained stable for several years.

## Benefits

In 1982, workers' compensation payments, including those for the Black Lung program, came to \$16.1 billion. This total included \$14.5 billion under regular programs (all programs except Black Lung) and \$1.7 billion under the Black Lung program (table 1). The following tabulation lists payments by Federal programs in 1982. The \$2.9 billion paid through Federal laws represented a little more than one-sixth the national total in 1982.

Program	Benefits <sup>1</sup> (in millions)
Total.....	\$2,855
Black Lung.....	1,667
Federal employees' compensation.....	899
Longshoremen's and Harbor Workers <sup>2</sup> .....	283
Other.....	6

<sup>1</sup> Payments for calendar year 1982 for the Black Lung and Longshoremen's programs; fiscal year ending September 1982 for the Federal employees' compensation and Other programs.

<sup>2</sup> Includes payments under the Defense Base Compensation Act

and Nonappropriated Fund Instrumentalities Act.

In 1982, benefits rose 7.5 percent, the smallest rate of increase reported since 1965. The accelerating growth of workers' compensation benefits in the 1970's culminated in 1979 with a 22.8-percent rise in that year, and it has moderated in each of the 3 years since then.

The 1982 increase in benefits paid was largely due to the effects of increases in wages and medical care costs over the 1981 levels. As indicated above, the average annual wage of workers rose 7.1 percent in 1982. This continuing growth in wages and medical costs was reflected in increases in statutory maximum weekly benefit levels in most States. Only in 5 jurisdictions was the maximum benefit for temporary total disability the same in 1982 as in 1981. The average maximum weekly benefit for temporary total disability rose 10.3 per-

<sup>1</sup> For this series, "wages" are defined as wages covered by unemployment insurance, the closest available measure. In 1982, the average annual wage was \$16,820.

cent—from \$240.65 in 1981 to \$265.47 in 1982. Further, the Bureau of Labor Statistics reported that its medical care index for all urban consumers rose 11.6 percent over the 1981 level. It had gone up 10.8 percent between 1980 and 1981. The growth in this index has been reflected in rising medical care benefits under workers' compensation.

Another measure affecting the amount of benefits paid is the extent of injury and illness at the workplace. The Bureau of Labor Statistics' annual survey of non-farm private industry employment showed a rate of occupationally caused disability of 7.7 per 100 full-time equivalent workers in 1982. This rate was a slight decrease from the corresponding 8.3 rate in 1981. However, the severity rate, that is, the average number of workdays lost among workers who have lost at least one workday, rose slightly—from 16.3 days in 1981 to 16.9 days in 1982. The net result was a modest decrease in the number of workdays lost.

Besides the statutory increases in maximum benefit amounts that occurred because wages rose, a number of other changes in State laws affected the 1982 benefit levels: (1) coverage was extended in a number of States to volunteers, certain government workers, and other small groups in 1981 and 1982, (2) increases were enacted in burial or funeral allowances in 12 States in either 1981 or 1982, and (3) some States changed benefit formulas for various benefits—in some cases the States raised benefits available to disabled workers, in other cases the States lowered them.

One measure of the role of workers' compensation in the economy is the relationship of aggregate benefits paid to workers' wages. The ratio of the two is an indicator of the magnitude of workers' compensation as an income source. In 1982, workers' compensation benefits as a proportion of covered payroll came to 1.14 percent of \$114 per \$100 of payroll. This figure was 0.98 percent

**Table 1.—Estimates of workers' compensation payments by type of benefits, 1981-82**

Type of benefits	Amount of payments (in millions)		Percentage change
	1981	1982	
Total.....	\$15,016	\$16,145	7.5
Regular.....	13,281	14,478	9.0
Black Lung.....	1,735	1,667	-3.9
Medical and hospitalization.....	4,420	4,820	9.0
Regular.....	4,385	4,774	8.9
Black Lung.....	35	46	31.4
Compensation.....	10,596	11,325	6.9
Regular.....	8,896	9,704	9.1
Black Lung.....	1,700	1,621	-4.6
Disability.....	9,196	9,825	6.8
Regular.....	8,166	8,909	9.1
Black Lung.....	1,030	916	-11.1
Survivor.....	1,400	1,500	7.1
Regular.....	730	795	8.9
Black Lung.....	670	705	5.2

above the \$1.08 amount in 1981. Even though there have not been many statutory liberalizations in the States for several years, the benefit-payroll ratio has continued to rise in each year after 1969. In addition to the effects of statutory changes in the program, benefit-payroll ratios can be affected by trends in incidence of occupational disability, occupational composition of the labor force, the effectiveness of safety and rehabilitation programs, regional differences in medical care costs and accessibility, and administrative procedures in processing claims.

### Types of Benefits and Insurers

Cash benefits are payable under workers' compensation to replace lost wages during periods of temporary or permanent total disability and to provide compensation for partial disabilities such as those resulting from loss of body members. Cash benefits are also payable to survivors of workers who die because of work-related causes. In addition, workers' compensation pays for medical care and hospitalization in connection with these workplace disabilities. (Medical benefits may be paid even if no cash award is made.) In 1982, \$11.3 billion was paid in cash benefits. Most of these payments (\$9.8 billion) went to disabled workers, and the remainder (\$1.5 billion) went to survivors. Compensation payments represented 70.1 percent of all workers' compensation benefits in 1982, and the remaining \$4.8 billion, or 29.9 percent, was for medical and hospital care benefits.

The experience under regular programs was quite different from that under the Black Lung program in 1982 (as it has been in preceding years as well). Medical care benefits represented a much higher fraction of regular program benefits than of Black Lung program benefits, and survivor benefits represented a lower share of benefits under the regular program than under the Black Lung program. Although the cash compensation of \$9.7 billion paid under regular programs was 67.0 percent of the total benefits paid by the regular program, the \$1.6 billion in cash compensation under Black Lung represented 97.2 percent of its total. And, while the \$795 million paid to survivors under regular programs represented 5.5 percent of the regular program total, survivor benefits paid through the Black Lung program accounted for 42.3 percent of its total. Another significant difference in the two programs is the fact that total expenditures under the regular program increased 9.0 percent in 1982, while those under the Black Lung program declined by 3.9 percent. The increase in the regular program reflected increases of roughly 9 percent each for medical and hospitalization reimbursement, disability cash benefits, and survivor cash benefits. In contrast, under the Black Lung program, costs for disabled-worker benefits declined about 11 percent, survivor benefits increased by 5.2 percent, and costs for medical reimbursements showed an increase of 31.4 percent.

The medical benefit rise in the Black Lung program had relatively little impact because it is such a small proportion of total Black Lung benefits.

The \$46 million paid in Black Lung medical care benefits is noteworthy in one respect, however. Although this amount was still less than 3 percent of all Federal Black Lung benefit expenditures in 1982, the annual data for medical expenditures during 1979-82 showed a rapidly changing pattern from the 1973-78 period when medical benefits were a small fraction of 1 percent each year. (Data recently available indicate that this trend accelerated in 1983, when medical care under the Black Lung program was reported as \$121 million, or 7 percent of all Federal Black Lung payments.)

The rapid acceleration in medical benefit costs since 1978 represents both an increase in the number of persons eligible for those benefits and an increased awareness of the availability of the benefits among those eligible for them. SSA administers claims for cash benefits payable before July 1, 1973, and the Department of Labor administers claims payable after that date. Since then, the Department of Labor has also administered medical care benefits for Black Lung beneficiaries. Only since passage of the 1977 Black Lung Amendments, however, have claimants who were beneficiaries before 1973 been eligible for medical benefits. In addition to this extension of coverage, awareness of eligibility had increased among claimants and insurance carriers. An indication of the increasing medical care component in the Black Lung program following the 1977 amendments was the doubling of the number of medical appointments scheduled for beneficiaries in 1978 over the number in 1977, and the doubling again in 1979 to a total of 54,000 in that year. In 1982, there were 170,000 medical care beneficiaries (those receiving diagnostic services as well as those receiving medical care for the treatment of Black Lung disease).

Generally, employers may insure workers for the required protection under workers' compensation laws by three different methods: private insurance, publicly operated State insurance funds, and self-insurance. In 1982, \$8.6 billion of the benefit total was paid through private insurance carriers, \$4.8 billion through public funds (including benefits under the Federal Black Lung program), and \$2.8 billion through self-insurance (table 2). These insurance categories represented 53.5 percent, 29.4 percent, and 17.1 percent of the 1982 benefit total, respectively. Excluding the Federal Black Lung program (since the main part of its payments are financed from general revenues, not insurance premiums), the distribution of benefits paid by type of insurer in 1982 was: private carriers—59.7 percent, public funds—21.3 percent, and self-insurance—19.0 percent.

This distribution of regular program benefits remained stable for many years, until the recent increase of several percentage points in self-insurance and a cor-

responding decline in the other two methods of insurance.

### State Variation in Benefits Paid

As might be expected, there was a considerable range in the amount of benefits paid by States in 1982. The largest amount was paid to workers in California (\$2.0 billion) and the smallest amount was in South Dakota (\$17 million). This range reflects a number of influences, such as variation in State benefit formulas and maximum benefits, the differences in methods of administration, extent of litigation, occupational distributions and incidence of disability, and, most important, the overall size of the labor force. Thus, the eight States in which the most workers' compensation benefits were paid were also those with the largest number of covered employees. Together these States accounted for \$7.2 billion, or 53 percent of the total, excluding the Black Lung and Federal employees programs. Similarly, seven of the eight States in which the smallest aggregate

amount of benefits were paid in 1982 were also those with the smallest number of covered employees. The importance of other factors is illustrated by the fact that Alaska had the second smallest number of employees covered by workers' compensation, but a larger total of benefits paid in 1982 than in 10 other States. Alaskan wage levels and statutory maximum weekly benefits payable are far higher than those in any other State. These factors explain the high aggregate workers' compensation payments relative to those in other States.

Benefit payments rose in most States from 1981 to 1982. Oklahoma had the largest increase—30.5 percent. But in three States benefits declined. These figures indicate some slackening from the benefit growth in 1981 when the highest State benefit increase was 38.1 percent and only one State had lower benefit totals than it had in 1980.

The slowdown in benefit growth in 1982 is evident from table 3, which distributes States and the percentage of covered workers by the annual percentage change

**Table 2.—Estimates of workers' compensation payments, by State and type of insurance, 1981-82<sup>1</sup>**

[In thousands]

Jurisdiction	1981				1982				Percentage change in total payments from 1981 to 1982
	Total	Insurance losses paid by private insurance <sup>2</sup>	State and Federal fund disbursements <sup>3</sup>	Self-insurance payments <sup>4</sup>	Total	Insurance losses paid by private insurance <sup>2</sup>	State and Federal fund disbursements <sup>3</sup>	Self-insurance payments <sup>4</sup>	
Total .....	\$15,016,042	\$7,868,482	\$4,613,511	\$2,534,049	\$16,145,101	\$8,637,272	\$4,751,214	\$2,756,615	7.5
Alabama .....	122,362	87,362	...	35,000	132,422	94,422	...	38,000	7.3
Alaska .....	62,179	51,779	...	10,400	63,876	51,576	...	12,300	2.7
Arizona .....	133,051	68,101	52,850	12,100	144,799	74,310	57,289	13,200	8.8
Arkansas .....	102,169	77,969	...	24,200	94,563	72,163	...	22,400	-7.4
California .....	1,809,323	1,068,512	242,811	498,000	2,003,827	1,192,510	259,317	552,000	10.8
Colorado .....	141,884	48,058	73,426	20,400	180,498	65,210	90,888	24,400	27.2
Connecticut .....	158,796	138,696	...	20,100	181,459	156,659	...	24,800	14.3
Delaware .....	21,714	16,914	...	4,800	27,066	20,916	...	6,150	24.6
District of Columbia ..	78,839	64,779	...	14,060	80,468	65,738	...	14,730	2.1
Florida .....	400,165	322,715	...	77,450	458,447	360,947	...	97,500	14.6
Georgia .....	215,867	182,467	...	33,400	239,955	202,855	...	37,100	11.2
Hawaii .....	74,849	54,399	...	20,450	92,578	66,578	...	26,000	23.7
Idaho .....	42,175	29,465	7,610	5,100	44,880	30,389	8,191	6,300	6.4
Illinois .....	658,527	553,527	...	105,000	673,032	565,032	...	108,000	2.2
Indiana .....	119,433	98,533	...	20,900	121,363	100,163	...	21,200	1.6
Iowa .....	108,500	88,600	...	19,900	110,768	93,568	...	17,200	2.1
Kansas .....	95,219	80,489	...	14,730	105,148	88,348	...	16,800	10.4
Kentucky .....	164,243	123,075	...	41,168	167,752	125,752	...	42,000	2.1
Louisiana .....	350,923	292,423	...	58,500	384,419	320,319	...	64,100	9.5
Maine .....	110,601	85,201	...	25,400	123,724	90,824	...	32,900	11.9
Maryland .....	212,943	143,690	24,503	44,750	239,067	159,805	29,062	50,200	12.3
Massachusetts .....	341,505	312,780	...	28,725	368,982	338,565	...	30,417	8.0
Michigan .....	692,978	379,424	36,554	277,000	672,881	372,319	31,562	269,000	-2.9
Minnesota .....	301,758	253,558	...	48,200	335,750	282,150	...	53,600	11.3
Mississippi .....	66,707	60,507	...	6,200	70,671	63,471	...	7,200	5.9
Missouri .....	137,537	113,737	...	23,800	151,640	125,240	...	26,400	10.3
Montana .....	45,253	15,659	5 24,162	5,432	55,880	20,957	5 28,189	6,734	23.5
Nebraska .....	48,768	43,168	...	5,600	52,648	46,548	...	6,100	8.0
Nevada .....	80,899	930	77,620	2,349	87,712	724	83,638	3,350	8.4
New Hampshire .....	54,911	49,287	...	5,624	60,129	53,679	...	6,450	9.5

See footnotes on next page.

in payments. In addition to 3 States experiencing decreases in aggregate benefit totals during 1982, 11 recorded increases of less than 5 percent. These two categories together included 14 States in 1982, compared with only 3 States a year earlier. There was a corresponding drop in 1982 in the number of States that had large percentage increases in benefits, particularly in the number of those with increases of 15-19.9 percent.

The distribution of covered workers by the percentage change in State benefit payments showed approximately the same results. For example, in 1982, 27.0 percent of the workers were in States where benefits declined, or rose by less than 5 percent. In 1981, only 6.7 percent were in such States.

The geographic pattern of changes in aggregate benefit payments in 1982 was quite similar to that of 1981.

That is, the lowest average increases in payments during 1982, as during 1981, were experienced in the East South Central States<sup>2</sup> (3.3 percent) and East North Central States<sup>3</sup> (1.2 percent). The highest average increases in 1982 occurred in the West South Central States<sup>4</sup> (17.4 percent) and the Mountain States<sup>5</sup> (17.0 percent). In 1981, only New England experienced higher average increases than these latter two regions. These regional percentages can be compared with the United States average benefit increase of 9.0 percent in 1982 (excluding payments for the Black Lung program).

<sup>2</sup> Alabama, Kentucky, Mississippi, and Tennessee.

<sup>3</sup> Illinois, Indiana, Michigan, Ohio, and Wisconsin.

<sup>4</sup> Arkansas, Louisiana, Oklahoma, and Texas.

<sup>5</sup> Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

**Table 2.—Estimates of workers' compensation payments, by State and type of insurance, 1981-82<sup>1</sup>—Continued**  
[In thousands]

Jurisdiction	1981				1982				Percentage change in total payments from 1981 to 1982
	Total	Insurance losses paid by private insurance <sup>2</sup>	State and Federal fund disbursements <sup>3</sup>	Self-insurance payments <sup>4</sup>	Total	Insurance losses paid by private insurance <sup>2</sup>	State and Federal fund disbursements <sup>3</sup>	Self-insurance payments <sup>4</sup>	
New Jersey .....	334,173	298,223	...	35,950	350,042	311,492	...	38,550	4.7
New Mexico .....	68,751	64,851	...	3,900	80,794	76,194	...	4,600	17.5
New York .....	688,815	373,791	193,524	121,500	760,225	412,008	214,217	134,000	10.4
North Carolina .....	146,806	118,806	...	28,000	159,873	126,473	...	33,400	8.9
North Dakota .....	18,564	137	18,427	...	22,128	86	22,042	...	19.2
Ohio .....	904,918	2,840	587,078	315,000	924,263	2,887	600,376	321,000	2.2
Oklahoma .....	153,416	110,485	24,831	18,100	200,267	150,267	26,300	23,700	30.5
Oregon .....	298,349	90,669	144,243	63,437	307,276	92,114	150,962	64,200	3.0
Pennsylvania .....	636,681	447,204	62,386	147,091	722,948	496,198	62,250	164,500	10.1
Rhode Island .....	64,805	58,405	...	6,400	70,565	63,565	...	7,000	8.9
South Carolina .....	90,603	75,535	...	15,068	98,902	82,618	...	16,284	9.2
South Dakota .....	15,226	13,226	...	2,000	16,706	14,506	...	2,200	9.7
Tennessee .....	149,852	133,752	...	16,100	149,098	133,098	...	16,000	-5
Texas .....	808,617	808,617	...	...	981,735	981,735	...	...	21.4
Utah .....	45,722	12,880	25,592	7,250	59,197	16,905	33,042	9,250	29.5
Vermont .....	18,600	17,100	...	1,500	19,297	17,747	...	1,550	3.7
Virginia .....	218,385	157,085	...	61,300	249,362	171,962	...	77,400	14.2
Washington .....	370,461	16,636	272,667	81,158	419,178	15,578	310,000	93,600	13.2
West Virginia .....	201,764	1,813	132,694	67,257	211,655	725	134,880	76,050	4.9
Wisconsin .....	191,464	157,164	...	34,300	205,811	169,011	...	36,800	7.5
Wyoming .....	32,831	3,459	29,372	...	37,234	366	36,868	...	13.4
Federal:									
Civilian employee program <sup>6</sup> .....	842,053	...	842,053	...	899,080	...	899,080	...	6.8
Black Lung benefits program <sup>7</sup> .....	1,734,592	...	1,734,592	...	1,666,908	...	1,666,908	...	-3.9
Other <sup>8</sup> .....	6,516	...	6,516	...	6,153	...	6,153	...	-5.6

<sup>1</sup> Data for 1982 preliminary. Calendar year figures, except that data for Montana and West Virginia, for Federal civilian employees and "other" Federal workers' compensation, and for State Fund disbursements in Maryland, Nevada, North Dakota, and Wyoming represent fiscal years ended in 1981 and 1982. Includes benefit payments under the Longshoremen's and Harbor Workers' Compensation Act and extensions for the States in which such payments are made.

<sup>2</sup> Net cash and medical benefits paid during the calendar year by private insurance carriers under standard workers' compensation policies. Data primarily from A. M. Best Company, a national data-collecting agency for private insurance.

<sup>3</sup> Net cash and medical benefits paid by State funds compiled from State reports (published and unpublished); estimated for some States.

<sup>4</sup> Cash and medical benefits paid by self-insurers, plus the value of medical

benefits paid by employers carrying workers' compensation policies that do not include the standard medical coverage. Estimated from available State data.

<sup>5</sup> Includes payment of supplemental pensions from general funds.

<sup>6</sup> Payments to civilian Federal employees (including emergency relief workers) and their dependents under the Federal Employees' Compensation Act.

<sup>7</sup> Includes \$653,332,000 in 1981 and \$590,871,000 in 1982 paid by the Department of Labor.

<sup>8</sup> Primarily payments made to dependents of reservists who died while on duty in the Armed Forces, to individuals under the War Hazards Act, War Claims Acts, and Civilian War Benefits Act, and to Civil Air Patrol and Reserve Officers Training Corps personnel, persons involved in maritime war risks, and law enforcement officers under Public Law 90-921.

## Employer Costs

### Trends

The direct cost to employers of workers' compensation (excluding lost productivity, and rehabilitation and retraining efforts) is the premium for insurance. The premium consists of the amount needed to pay benefits and to administer the insurance operation and corresponding hypothetical premiums of self-insured employers. Benefits funded from general revenues, such as much of the Federal Black Lung benefits program, are excluded here.

Employers paid \$22.5 billion in workers' compensation premiums in 1982. This amount was \$433 million, or 1.9 percent, less than in 1981, a notable departure from the trend throughout this series. Only once before (in 1949) have premiums paid in a year been lower than the previous year's total. The change from 1981-82 contrasted strongly with the large annual increases throughout most of the 1970's (chart 1). In 1977, at the height of the acceleration, total premiums increased 27.0 percent over the 1976 amount.

The 1982 experience represents a continuation of a trend since 1977. Annual growth in premiums during 1978-81 was at a successively slower pace each year. Just as the large statutory improvements in workers' compensation protection early in the 1970's and the inflationary pressures in wage and medical care costs resulted in accelerating premium increments, so the later leveling off of major statutory changes and the initiation of cost containment measures decreased the pressure on premium growth. Declines in premium totals were reported in several States during the 1980-81 period; these decreases culminated in the national decrease of 1982.

Premiums consist of amounts paid to private insurers, to State and Federal funds, and equivalent hypothetical amounts paid by self-insurers. Table 4 shows

**Table 3.—Distribution of States and workers, by percentage change in workers' compensation benefits, 1980-81 and 1981-82<sup>1</sup>**

Percentage change in benefits	Number of States		Percentage distribution of covered workers	
	1980-81	1981-82	1980-81	1981-82
Total .....	52	52	100.0	100.0
Decrease .....	1	3	5.3	5.9
Increase:				
0.0-4.9 .....	2	11	1.4	21.1
5.0-9.9 .....	9	15	21.3	19.4
10.0-14.9 .....	19	14	41.9	43.9
15.0-19.9 .....	11	2	21.5	.8
20.0 or more .....	10	7	8.6	8.9

<sup>1</sup> Includes programs in all States and the District of Columbia, and the program for Federal civilian employees.

that private carrier and State fund premiums declined in 1982, but that substantial increases were recorded by the other two groups.

The Federal sector includes the share of the Black Lung program being financed by employer contributions to the trust fund. This amount grew dramatically from \$265 million in 1981 to \$564 million in 1982, as more Black Lung benefits were being funded by employers and less from general revenues. Employer contributions rose because excise tax rates for financing the Coal Mine Disability Trust Fund were doubled under the Black Lung Amendments of 1981. The premium amounts shown for Federal employees' compensation and for self-insurers are, of course, hypothetical premiums based largely on benefit expenditures. These estimated premiums could be expected to have somewhat different patterns than private and State insurance premiums that are required to be actuarially funded.

### Cost Ratios

Premiums as a proportion of payrolls in covered employment help measure the significance of workers' compensation costs to employers. Data in the most recent 2 years further emphasize the turnabout in cost trends. Expressed in dollar terms, the ratio was \$1.72 per \$100 of payroll in 1982. That level was 12 cents less than in 1981, which, in turn, was 12 cents lower than the all-time high of \$1.96 in 1980. For the 25 years before 1970, the cost-payroll ratio had slowly and irregularly moved upward from 91 cents to \$1.08 in 1969; then it rapidly increased by 88 cents to reach its 1980 level.

Benefits can be related to premiums to examine how much of the employer's contribution is being paid as benefits to disabled workers. The national ratio of benefits paid to premiums written in 1982 was 66.1 percent. This ratio, also called the loss ratio, was up from 58.7 percent in 1981, continuing the pattern of consecutive annual increases since 1979. The 1982 level was the highest yet attained for this statistic, which previously had been as high as 64.1 percent in 1962. The current swing in the loss ratio seems to be an adjustment, returning to more typical levels that prevailed before the large drop

**Table 4.—Workers' compensation premiums paid, by type of insurer, 1981-82**

Year	Premiums paid (in millions)				
	Total	Private carriers	State funds	Federal programs <sup>1</sup>	Self-insurers <sup>2</sup>
1981 .....	\$22,962	\$16,164	\$2,900	\$1,174	\$2,724
1982 .....	22,529	15,398	2,659	1,509	2,963
Percentage change .....	-1.9	-4.7	-8.3	28.6	8.8

<sup>1</sup> Includes Federal employee compensation program and the portion of the Federal Black Lung program financed from employer contributions.

<sup>2</sup> Benefit payments plus 5-10 percent (the estimated cost of administration).

during the 1976-78 period. The effects of program expansions and inflation on cost-premium ratios have been reversed in the 1979-82 period.

Mirroring the overall experience for all types of carriers, the loss ratio for private carriers went up from 48.7 percent in 1981 to 56.1 percent in 1982. Like the overall ratio, the private carrier loss ratio is based on benefits paid and premiums written. It fell by 10 points in the mid-1970's, then rose again in the most recent 3 years. When computed on the basis of benefits incurred and premiums earned, the benefit-cost ratio for private carriers was 64.1 percent. The ratio based on losses incurred is an important measure since it is commonly used by insurance organizations in evaluating and revising their premium rates. The measure takes into account growing amounts of premium income that must be set aside to cover liabilities for payments in future years. The 1982 incurred loss ratio was almost 2 percentage points below that of 1981 and was within the "normal" range of the period before the 1970's.

State funds, the other sector for which benefit-cost

data are available, reported trends consistent with private insurance. Benefits paid as a percent of premiums written were 82.1 percent, representing a considerable increase over the 69.8 percent level of 1981. A year later, the ratio was higher than in any other year in the series (which began in 1950). Loss ratios among State funds have fluctuated even more than corresponding ratios for private carriers during the 1970's. The ratio varied between 49.9 percent in 1978 and 76.2 percent in 1975.

The loss ratios for both private carriers and State funds are understated to the extent that they do not take into account premium income returned to employers as dividends. Private mutual insurance companies pay particularly significant dividend amounts. In 1982, they returned 16.3 percent of premiums earned as dividends. For all insurance companies, dividends averaged 11.5 percent of earned premiums in 1982. On the other hand, investment income has also become recognized as an important factor not explicitly included in the loss ratios. Net investment gain among insurance companies in 1982 was 17.2 percent.

**Chart 1.**—Estimated premium costs of workers' compensation to employers in the United States, selected years, 1940-82

