

# Cash Benefits for Short-Term Sickness, 1948-74

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*In 1974, income loss due to short-term non-work-related disabilities totaled \$21.7 billion, and workers received cash benefits of \$7.9 billion to replace such losses. The aggregate rate of income replacement has increased slowly over the years to the point where it now accounts for 36 percent of lost earnings.*

*Much of the historical statistics published in this article has been revised to conform with new wage and employment data compiled by the Department of Commerce, changes in statistics on private insurance worker coverage available from the Health Insurance Association of America, and revised self-insurance benefits and premiums estimated by the Social Security Administration.*

CASH BENEFITS for short-term nonoccupational disability in 1974 amounted to \$7.9 billion, or 9.6 percent more than the total for the previous year. The rise was reflected in all of the sick-pay components—individual insurance policies, group coverage under publicly operated cash sickness funds, private group cash sickness insurance and self-insurance, and sick leave—but was most pronounced under private group insurance plans.

The \$2.0 billion paid through private group insurance included private insurance allowed under compulsory temporary disability insurance programs and voluntary self-insurance. This amount was almost \$290 million, or 16.6 percent, above the 1973 level. Self-insurance payments in the voluntary sector totaled \$78 million for the year—a figure almost triple what it would have been had major statistical revisions not been made this year but still the smallest component among the various types of benefits discussed here. Payments under individual insurance policies amounted to \$851.0 million, and the publicly operated compulsory temporary disability insurance programs accounted for \$485.3 million of the total.

Sick-leave payments totaled \$4.3 billion in 1974 and represented the major share of all benefits received. For many workers, sick leave is a full replacement benefit but sickness insurance plans

replace only part of income loss. The sick-leave payments for government workers rose by only 4.8 percent during the year (to \$2.8 billion) compared with a 9.8-percent rise (to \$1.5 billion) recorded for sick-leave pay to workers in private industry.

The amount of income lost due to sickness in 1974 rose at a more moderate rate (3.2 percent) than benefits. Contributing factors were a declining sickness index (from 101 to 97) and a comparatively stable labor force covered by sickness benefit plans. Because benefits rose more quickly than income loss, the benefit-loss ratios developed in this analysis showed an increase. In particular, the large increase in private insurance benefits helped boost the benefit-loss ratio for private industry workers in areas outside jurisdictions with mandatory temporary disability insurance from 22.1 percent in 1973 to 24.3 percent in 1974.

The estimated number of workers under formal plans providing cash benefits for short-term disability in 1974 was 49.4 million, or about two-thirds of all those in wage and salary employment. As has been the case for a number of years, however, less than half of the private industry workers in States without temporary disability insurance laws were under voluntary sick-leave or sickness insurance plans.

## MEASURING INCOME LOSS

### Concepts

The estimates of income loss used in this series are designed to reflect the loss of current earnings during the first 6 months of a nonoccupational illness or injury, including income lost during the first 6 months of a long-term disability. The term income loss, as used in this article, refers to the value of potential as well as actual income. It includes, for example, earnings that would have been lost had they not been replaced under a sick-leave plan that continues wages and salaries during periods of illness or under another type

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of arrangement. Payments under such plans are counted as benefits that offset the worker's potential wage loss.

Employing this concept, the Social Security Administration has estimated that wage and salary workers in private industry lose an average of 7.0 workdays a year, Federal Government workers lose 8.0 days, State and local government employees, 7.5 days, and the self-employed, 7.0 days. These averages have been modified annually, starting with 1959, to reflect trends in morbidity rates as reported by the Health Interview Survey of the Public Health Service. The averages in this series have been higher than those derived from the Health Interview Survey. The main reasons were that the survey excludes the noninstitutionalized population and the work loss experienced by individuals no longer currently employed.<sup>1</sup>

In this article, as in a couple of earlier reports in the series, Health Interview Survey data for several years are presented for comparison. As table 1 shows, the average number of days lost from work in 1974, as reported by the Health Interview Survey, was 5.0 for private industry workers, 5.1 for Federal employees, 5.2 for State and local government employees, and 4.3 for the self-employed. During the period 1968-74, however, the Public Health Service has reported no consistent patterns of change by sex or class of worker.

Other data from the Health Interview Survey showing patterns of work-loss days have been published.<sup>2</sup> A higher number of work-loss days annually per employed person has been noted for older workers than for younger ones, for workers in families with lower family income than for those with higher family income, for women than for men, and for blacks than for whites. These differences often reflect a variety of characteristics and underlying causes. Women have higher work-loss rates than men overall, for example, but, among those aged 45 and older, the experience of women is similar to that of men. The effect of child-bearing is no doubt reflected

in the higher average work loss shown for women under age 45. Similarly, the difference in averages by race is probably much influenced by the higher prevalence of work-loss days associated with low family income, which is more commonly found among blacks than whites.

Each year the Social Security Administration derives a rate of sickness from the data on average work-loss days for all currently employed workers (table 1) and other Health Interview Survey statistics used as trend indicators. Expressed as an index with 1958 as the base of 100, the rate for 1974 has been computed as 97. As the following figures show, this is the second consecutive yearly decline.

1970	-----	105
1971	-----	101
1972	-----	105
1973	-----	101
1974	-----	97

A recent estimate of all the costs of illness<sup>3</sup> put the 1972 income loss attributable to the sickness of currently employed workers at \$17.6 billion. That figure differs conceptually from the \$19.6 billion estimate in the revised series presented here, the former amount is lower because it excludes income loss for the first 6 months of disability for individuals no longer in the labor force. Still, the degree of closeness between the two estimates is notable since they were computed by using considerably different approaches. The Cooper-Rice estimate involves application of average earnings by age and sex to estimated work-loss years for those groups, but the approach followed in this article is to measure work-loss and average earnings by using data on industry and class of worker.

### Trends

Short-term sickness resulted in an estimated income loss of about \$21.7 billion in 1974 (table 2). The lost earnings of wage and salary workers continued to account for more than 90 percent of the total, as has generally been the case since 1970. The loss suffered by the self-employed, 9

<sup>1</sup> For a discussion of factors responsible for the differences in the two series, see Daniel N. Price, "Cash Benefits for Short-Term Sickness, 1948-72," *Social Security Bulletin*, January 1974.

<sup>2</sup> See Mary H. Wilder and Alice N. Pearson, *Disability Days, United States, 1971*, U.S. Department of Health, Education, and Welfare, Public Health Service, June 1974.

<sup>3</sup> Barbara S. Cooper and Dorothy P. Rice, "The Economic Cost of Illness Revisited," *Social Security Bulletin*, February 1976.

TABLE 1—Number of work-loss days per person for currently employed workers aged 17 and over, by type of employment and sex, 1968-74

Period	Total <sup>1</sup>	Private wage and salary	Federal Government	State and local government	Self-employed
Total					
1968	5.4	5.4	6.8	5.4	5.0
1969	5.2	5.2	6.6	5.1	4.6
1970	5.4	5.5	6.1	4.5	5.1
1971	5.1	5.2	5.3	5.5	3.9
1972	5.3	5.4	7.5	5.0	4.4
1973	5.4	5.3	5.7	6.2	5.2
1974	4.9	5.0	5.1	5.2	4.3
Men					
1968	5.2	5.1	6.4	5.3	5.1
1969	5.2	5.2	5.9	5.1	4.9
1970	5.1	5.1	5.1	4.5	5.5
1971	4.9	5.1	4.8	5.1	3.7
1972	5.2	5.2	7.6	5.0	4.5
1973	5.2	5.0	5.3	6.1	5.1
1974	4.8	4.8	5.3	5.6	4.2
Women					
1968	5.9	6.0	7.6	5.6	4.3
1969	5.2	5.2	8.1	5.2	3.7
1970	5.9	6.3	8.2	4.6	3.5
1971	5.5	5.5	6.1	5.9	4.9
1972	5.5	5.7	7.3	4.9	4.2
1973	5.8	5.8	6.6	6.3	5.4
1974	5.1	5.3	4.8	4.9	4.6

<sup>1</sup> Includes nonpaid workers  
Source: National Center for Health Statistics, Public Health Service, unpublished data from the Health Interview Study

percent of the total in 1974, covered a larger share in earlier years—as high as 21 percent in 1948

The 1974 loss from short-term sickness was above the level of income loss in 1973 by only 3.2 percent. The two previous annual increases in income loss were much greater—7.6 percent in 1973 and 14.0 percent in 1972.

The modest increase in 1974 was attributable primarily to a considerable reduction in morbidity that year as well as to the slowing of growth in employment among wage and salary workers that accompanied the economic downturn. In 1974, full-time equivalent civilian employment reported by the Department of Commerce rose to slightly less than 74 million workers—only 1.5 percent above the 1973 total. This growth compares with increases of 4.5 percent for 1973 and 3.1 percent for 1972.

Another factor influencing growth of income loss due to sickness is the wage level. Average annual full-time civilian earnings have risen by 6-7 percent each year since 1967. In 1974, average annual earnings went up by 7.6 percent to \$10,010.

The effect of this somewhat greater-than-average rise in earnings on the estimated income loss was offset, however, by the small rise in employment and the drop in morbidity experience.

## PROTECTION AGAINST INCOME LOSS

### Coverage

Protection against loss of earnings in periods of nonoccupational disability is provided in a number of ways. For wage and salary workers in private industry, the most common method is through group or individual insurance policies sold by insurance companies that pay cash amounts during specified periods of disability. Employers may also self-insure, providing either cash benefits or paid sick leave. Some unions, union-management trust funds, fraternal societies, and mutual benefit associations also pay cash disability benefits. These methods are not mutually exclusive. Employers often use a paid-sick-leave plan to supplement benefits under insurance plans, and workers may, as individuals, purchase insurance policies to supplement the protection provided through their jobs.

This privately insured protection may be obtained through voluntary action by the employer or the employee, or—as in California, Hawaii, New Jersey, New York, and Puerto Rico—it may come about as the result of a law requiring compulsory temporary disability insurance. Some of the protection required by law in these jurisdictions (except Hawaii) may be provided by publicly operated funds. Under the other two compulsory programs—that of Rhode Island and the Federal program for railroad employees—all the mandatory protection comes from publicly operated funds, though private plans may supplement the government-paid benefits.

Excluded here is protection afforded by group-credit accident insurance<sup>4</sup> and by informal sick leave or other informal employment-related plans. Group-credit accident policies are not provided as part of an employment relationship, nor are they issued primarily for the benefit of the in-

<sup>4</sup> This type of insurance is issued through a lender or lending agency to cover payment of a loan or installment purchase if the insured becomes disabled.

TABLE 2—Estimated income-loss from nonoccupational short-term sickness,<sup>1</sup> by type of employment, 1948-74<sup>2</sup>

[In millions]

Year	Total	Wage and salary workers					Self-employed persons <sup>3</sup>
		In private employment <sup>4</sup>		In public employment		State and local <sup>7</sup>	
		Total	Covered by temporary disability insurance laws <sup>4</sup>	Other <sup>5</sup>	Federal <sup>6</sup>		
1948	\$4 582	\$3,632	\$391	\$2 809	\$174	\$258	\$950
1949	4 445	3 602	483	2,644	190	285	843
1950	4 815	3 921	712	2 703	201	305	895
1951	5,494	4 495	1,059	2,843	259	334	999
1952	5,834	4 832	1 132	3,040	291	369	1,002
1953	6 163	5 199	1 213	3 295	290	401	964
1954	6 114	5 162	1,212	3,233	280	437	952
1955	6,565	5,574	1 299	3,508	297	470	991
1956	7 052	6 035	1,430	3 774	313	518	1 017
1957	7,386	6,336	1,612	3,931	323	570	1,050
1958	7 477	6,371	1 507	3 884	352	628	1 106
1959	7,749	6 680	1,680	4 090	356	654	1 069
1960	8 591	7 427	1,773	4,526	403	760	1 129
1961	8,664	7 527	1 770	4,524	420	813	1 137
1962	9,653	8 425	1 963	5 051	467	925	1,227
1963	10 213	8 959	2,084	5 359	504	1 009	1 257
1964	10,299	9 065	2 065	5,435	506	1 039	1 231
1965	11,333	9 971	2 244	6 017	548	1,162	1 362
1966	12 208	10 833	2 408	6 553	597	1,275	1,435
1967	12 844	11,407	2,529	6,928	638	1 312	1 437
1968	14 620	13 067	2 852	7 904	733	1 578	1,553
1969	15 315	13 755	3,025	8 394	765	1 631	1 560
1970	16,799	15 203	3 261	9,147	883	1 912	1 599
1971	17,154	15,558	3 273	9 321	905	2,059	1,596
1972	19 555	17 689	3,653	10,649	1,069	2 378	1,866
1973	21 045	18 893	3 797	11,517	1,036	2 533	2 162
1974	21,723	19,797	4 001	12,055	1,084	2,657	1,926

<sup>1</sup> Short term or temporary non work connected disability (lasting not more than 6 months) and the first 6 months of long term disability

<sup>2</sup> Beginning 1960, data include Alaska and Hawaii Beginning 1959, data adjusted to reflect changes in sickness experience (average number of disability days), as reported in the Health Interview Survey of the Public Health Service

<sup>3</sup> Annual payrolls of wage and salary workers in private employment, multiplied by 7 (estimated average workdays lost per year due to short-term sickness) and divided by 255 (estimated workdays in year). Data for 1948-74 from unpublished advance tables in *Benchmark Revision of National Income and Product Accounts* (Department of Commerce)

<sup>4</sup> Total annual payrolls of wage and salary workers in industries covered by temporary disability insurance laws in Rhode Island, California, New Jersey, and New York and in the railroad industry, multiplied by 7 and divided by 255

<sup>5</sup> Difference between total loss for all wage workers in private employment and for those covered by temporary disability insurance laws

<sup>6</sup> Federal civilian payrolls in the United States from U S Civil Service Commission, multiplied by 8 (estimated average workdays lost per year due to short term sickness) and divided by 260 (scheduled workdays in year)

<sup>7</sup> Annual wage and salary payrolls of State and local government employees from Department of Commerce data (see footnote 3), multiplied by estimated average workdays lost per year due to short term sickness (for 1948-66, 7.5 days for 1967-75 days, for 1968, 7.2 days and for 1969 to date, 7.0 days) and divided by 255 (estimated workdays in year)

<sup>8</sup> Annual farm and nonfarm proprietors income from Department of Commerce data (see footnote 3) multiplied by 7 (estimated income loss days per year due to short term sickness) and divided by 300 (estimated workdays in year)

Insured Informal sick-leave protection is also excluded, since such arrangements for continuation of pay at the discretion of the employer are rarely specified publicly in advance It is therefore difficult to estimate either the number of workers who could actually receive payments of this nature when they are sick or the magnitude of such benefits

The extent of cash-benefit protection for short-term disability has been stable for some time

Less than two-thirds (49.4 million) of the 77.2 million wage and salary workers in private industry and government employment were covered under some formal cash sickness plan at the end of 1974 About 34 million of those protected in that year were covered under insurance plans that generally provided partial wage replacement after a waiting period of 3-5 days This estimate includes those protected through mandatory as well as voluntary coverage and funded self-insured plans as well as commercial insurance The remaining group with income protection during sickness is the almost 16 million workers in government and private industry whose primary benefits are through a sick-leave or wage continuation program<sup>8</sup>

A much higher proportion of public than private workers is protected under sick-pay plans When government workers are excluded, as in table 3, an estimated 36.9 million workers, or just short of three-fifths of all those employed in private industry, are covered The total number of workers under formal programs and the coverage rate went down slightly from 1973, in part because of the declining economy during that period

*Voluntary protection*—Table 3 shows the number of workers with income-maintenance protection against short-term sickness with revisions back to 1962 The revisions are attributable primarily to two sets of changes in the voluntary sector

First, in line with continuing efforts by the Social Security Administration to improve its estimates, new figures have been compiled on the number of workers with cash-sickness benefits under self-insured plans in private industry With 1972 data from the Department of Labor files on welfare plans and unpublished information from administrative agencies on the statutory temporary disability insurance programs, the number of workers under private self-insured plans in 1972 was revised upward to 2.7 million, from 1.1 million An estimated 1.7 million workers (excluding those protected under mandatory programs) had coverage in the voluntary sector

<sup>8</sup> For a discussion of the differing characteristics of the two major forms of protection, see Daniel N Price, "Income-Loss Protection Against Illness, 1948-67," *Social Security Bulletin*, January 1969

TABLE 3—Degree of income-loss protection against short-term sickness for all employed wage and salary workers in private industry and for those not under temporary disability insurance laws, selected years 1954-74

December	Total number (in thousands) <sup>1</sup>	With protection	
		Number (in thousands) <sup>2</sup>	Percent of total
All wage and salary workers			
1954	43 000	25 600	59.5
1956	46 000	27,700	60.2
1958	45 900	26 900	58.6
1960	47 000	28,200	60.0
1962	48 900	29 800	60.9
1964	51,200	28 700	56.1
1966	54,800	30 700	56.0
1968	56 800	33 500	59.0
1970	58 000	35 300	60.9
1971	58,900	35 800	60.8
1972	61 400	36,500	59.4
1973	63 800	38,200	59.9
1974	62 800	36,900	58.8
Wage and salary workers not under temporary disability insurance laws			
1954	31,400	15 000	47.8
1956	34 200	16 400	48.0
1958	33 600	16 000	47.6
1960	34 300	16 800	49.0
1962	35 900	17 400	48.5
1964	38 100	16 000	42.0
1966	41,000	17 000	41.5
1968	42,600	19 300	45.3
1970	43 300	20,600	47.6
1971	44 300	21,200	47.9
1972	46 500	21 600	46.5
1973	47 700	22,100	46.3
1974	47 700	21,800	45.7

<sup>1</sup> Number in private industry. For areas not under temporary disability insurance laws, total excludes railroad workers and is adjusted by ratio of private industry employees on nonagricultural payrolls in the States with temporary disability insurance laws to all such employees. Data from Bureau of Labor Statistics, *Employment and Earnings and Monthly Report on the Labor Force*. Beginning with 1968, data not strictly comparable with that for earlier years. Labor force information for 1968 and thereafter excludes those aged 14-15 and includes certain workers previously classified as self-employed.

<sup>2</sup> Estimated number of private-industry workers (1) with group accident and sickness insurance (except group credit insurance) (2) under paid sick-leave plans (3) under union and mutual association plans, and (4) under State-operated temporary disability insurance funds. Beginning with 1964, group accident and sickness insurance coverage has been adjusted to exclude those with long term benefit policies that usually do not provide short term benefits. Estimates of private protection based on data from Health Insurance Association of America and from State administrative agencies.

Revised estimates tying into the last benchmark were also compiled back to 1962 (See the technical note, page 33, for the derivation of the new coverage figures.)

The second factor affecting the data in table 3 was the revision of coverage statistics on commercial group insurance plans. The Health Insurance Association of America (HIAA) provided revised information for the years 1963-73, raising the previous figures for some years but lowering them for other years.

The net result of these improved estimates was an increase in the number of workers protected in private industry for each year starting with 1962, along with corresponding improvements in

the coverage rates, which rose from less than 1 percentage point in 1962 to 3 percentage points in 1972. In 1974, 21.8 million workers, or almost 46 percent of those employed by private industry in nontemporary disability insurance areas were covered under sick-leave or insurance plans. The difference between the 46-percent rate of coverage in the voluntary sector and the 59-percent rate for private industry as a whole reflects the nearly universal coverage of private employees in jurisdictions with temporary disability insurance.

*Public programs*—In California, Hawaii, New Jersey, New York, Puerto Rico, and Rhode Island, coverage is provided through a compulsory State temporary disability insurance law. In the railroad industry, workers are protected under a Federal act. More than four-fifths of the employees in the five States and Puerto Rico and all railroad workers are protected against wage loss by these laws. The protection provided, like that under the unemployment insurance laws in these States, is extended mainly to employees in industrial and commercial firms. California, Hawaii, and Puerto Rico also cover hired farm workers. Domestic workers and employees of governments and nonprofit organizations are generally not covered.

Many of those not protected by statutory programs in these jurisdictions, however, have disability insurance or sick leave provided by their employers. Most State and local government workers and many employees of nonprofit firms are covered under such income-maintenance programs. In all, 15 million—or more than 9 out of 10 of all wage and salary workers in these States—are eligible for some form of income maintenance when they are ill.

## PREMIUMS AND BENEFITS

Except for benefits paid through compulsory temporary disability insurance programs and in the form of Federal employee sick leave, most of the payment figures from 1962 onward have been revised. The changed coverage estimates for self-insurance and voluntary private commercial insurance discussed above gave rise to corresponding changes in benefits and contributions. In addi-

tion, private and State and local government sick-leave estimates were affected by revisions in earnings and employment data for 1948-73 resulting from the periodic review by the Department of Commerce of its National Income Accounts

### Private Insurance

Table 4 presents data on the insurance protection provided through private arrangements with nongovernmental agencies. The table shows separately the dollar amounts of private insurance

TABLE 4—Premiums and benefit payments for private insurance against income loss, 1948-74<sup>1</sup>

[In millions]

Year	Total	Under voluntary provisions				Under public provisions		
		Total	Group insurance <sup>2</sup>	Individual insurance <sup>3</sup>	Self insurance <sup>4</sup>	Total	Group insurance <sup>2</sup>	Self insurance <sup>4</sup>
1948	\$558.9	\$545.8	\$162.2	\$350.0	\$33.6	\$13.1	\$12.7	\$0.4
1949	603.6	564.8	177.8	355.0	32.0	38.8	31.9	6.9
1950	685.3	609.4	225.6	360.0	23.8	75.9	58.3	17.6
1951	804.7	660.9	259.4	366.0	25.5	143.8	102.9	40.9
1952	874.0	718.2	286.2	405.4	26.6	155.8	112.8	43.0
1953	1,026.0	839.5	321.5	494.8	23.2	186.5	136.2	50.3
1954	1,074.1	896.0	340.1	534.2	21.7	178.1	129.8	48.3
1955	1,133.9	955.1	386.2	547.8	21.1	178.8	128.3	50.5
1956	1,206.3	1,029.2	418.3	591.2	19.7	177.1	128.5	48.6
1957	1,346.9	1,129.7	453.7	654.4	21.6	217.2	157.9	59.3
1958	1,417.9	1,185.6	449.6	714.6	21.4	232.3	167.8	64.5
1959	1,520.4	1,293.6	484.1	787.8	21.7	232.8	169.1	66.7
1960	1,561.9	1,323.1	516.8	783.0	23.3	238.8	168.2	70.6
1961	1,630.5	1,375.2	516.0	835.9	23.3	255.3	179.1	76.2
1962	1,695.9	1,440.5	559.9	856.5	27.1	255.4	179.6	75.8
1963	1,704.3	1,459.9	560.0	870.0	29.9	244.4	161.0	83.4
1964	1,825.1	1,587.1	620.8	933.0	33.3	238.0	153.2	84.8
1965	1,940.9	1,682.5	710.9	933.1	38.6	258.4	163.0	95.4
1966	2,153.9	1,873.8	810.6	1,018.5	44.7	280.1	175.9	104.2
1967	2,265.8	1,955.2	853.1	1,048.6	53.5	310.6	194.3	116.3
1968	2,727.7	2,385.7	1,131.8	1,198.0	55.9	342.0	209.2	132.8
1969	3,076.7	2,677.3	1,304.6	1,304.5	68.2	399.4	243.9	155.5
1970	3,308.6	2,891.2	1,512.7	1,299.7	78.8	417.4	249.6	167.8
1971	3,583.7	3,140.9	1,597.3	1,454.2	89.4	442.8	262.5	180.3
1972	3,918.7	3,419.4	1,853.8	1,459.0	106.6	499.3	279.2	220.1
1973	4,240.8	3,718.6	1,942.0	1,671.0	105.6	522.2	286.0	236.2
1974	4,618.1	4,101.0	2,119.4	1,871.0	110.6	517.1	270.6	246.5
Benefit payments								
1948	\$296.8	\$277.5	\$115.0	\$141.0	\$21.5	\$9.3	\$9.0	\$0.3
1949	322.0	294.9	124.7	150.0	20.2	27.1	22.8	4.8
1950	383.8	329.5	161.3	153.0	15.2	54.3	41.7	12.6
1951	500.8	387.5	212.4	157.0	18.1	113.3	81.1	32.2
1952	559.1	431.3	234.6	177.0	19.7	127.8	92.5	35.3
1953	606.2	466.5	241.0	209.0	16.5	139.7	102.0	37.7
1954	629.1	497.1	251.8	230.0	15.3	132.0	96.2	35.8
1955	692.4	557.2	292.0	250.0	15.2	135.2	97.0	38.2
1956	802.5	651.3	357.3	278.0	16.0	151.2	109.7	41.5
1957	874.4	696.3	372.3	307.2	16.8	178.1	129.5	48.6
1958	909.1	725.4	355.9	353.4	16.1	183.7	132.7	51.0
1959	990.1	800.6	394.2	389.6	16.8	189.5	135.2	54.3
1960	1,031.2	835.1	424.1	392.8	18.2	196.1	138.1	58.0
1961	1,051.6	850.2	406.8	425.9	17.5	201.4	141.3	60.1
1962	1,089.2	884.9	445.8	418.5	20.6	204.3	143.7	60.6
1963	1,122.6	924.4	454.2	447.2	23.0	198.2	139.6	67.6
1964	1,199.6	1,008.2	498.9	483.9	25.4	191.4	123.2	68.2
1965	1,249.7	1,052.1	541.6	482.6	27.9	197.6	124.8	72.8
1966	1,356.1	1,147.7	603.2	512.9	31.6	208.4	130.9	77.5
1967	1,396.7	1,174.3	610.5	527.4	36.4	222.4	139.1	83.3
1968	1,732.8	1,481.1	832.9	609.1	39.1	251.7	154.0	97.7
1969	1,882.1	1,600.9	919.9	635.4	45.6	281.2	171.7	109.5
1970	2,169.6	1,862.4	1,113.6	693.7	55.1	307.2	183.7	123.5
1971	2,219.9	1,909.5	1,119.1	730.9	59.5	310.4	184.0	126.4
1972	2,386.4	2,057.9	1,219.3	772.0	66.6	328.5	183.7	144.8
1973	2,530.8	2,177.3	1,314.4	795.0	67.9	353.5	193.6	159.9
1974	2,875.4	2,493.8	1,565.3	851.0	77.5	381.6	199.7	181.9

<sup>1</sup> Beginning 1960, data include Alaska and Hawaii

<sup>2</sup> Data on premiums earned and losses incurred by commercial companies (including fraternal) as provided by the Health Insurance Association of America for the United States, by type of insurance benefits adjusted to include accidental death and dismemberment provisions in individual policies that insure against income loss to offset understatement arising from the omission of current short-term income loss insurance in automobile,

resident liability, life, and other policies. For 1956-74, dividends deducted from earned premiums (2-3 percent for group, 1 percent for individual)

<sup>3</sup> Company and union management trust fund, trade-union, and mutual benefit association plans. Excludes unfunded plans included in table 5

<sup>4</sup> Company, union, and union management plans under California, New Jersey, and New York laws, whether or not funded

written under voluntary arrangements and that written in compliance with State temporary disability insurance laws in California, New Jersey, and New York. Benefits through self-insurance plans are also presented. In States without compulsory laws, however, benefits paid through self-insured, employer-administered plans that are unfunded are considered separately in table 6 (along with sick leave) and are excluded from table 4.

More than \$4.6 billion was paid in premiums for cash sickness insurance in 1974. This amount represented a 9-percent rise from 1973, similar to the 8-9 percent annual increase of the past several years. It should be noted that the 1973 data for voluntary insurance are somewhat lower than those previously recorded for the year, due to refinements in premiums and benefits reported by the HIAA for 1973, as well as for 1972. Premiums under voluntary provisions rose more than 10 percent in contrast to the slight decline from 1973 to 1974 in premiums paid through the public programs.

Benefits paid through private insurance in 1974, totaling \$2.9 billion, were up 13.6 percent from the corresponding amount a year earlier. This rate was at least double the annual growth in the previous 3 years, and was well above the growth in premium income. Thus, in spite of a lower rate of sickness in 1974, inflation of wages and/or improved benefit scales pushed benefit payments up at an accelerated pace.

Premiums and benefits under self-insured plans were higher for all the years 1962-73 than they were before revision. Total benefits paid for 1973 under self-insured plans outside jurisdictions with mandatory temporary disability insurance programs were, for example, previously calculated at \$26.4 million. The revised benefit payment for 1973 is now shown in table 4 at \$67.9 million. The technical note (page 33) describes the sources and the procedures followed to produce these new data.

### Temporary Disability Insurance Benefits

Benefits paid for temporary disability under statutory programs in four States—California, New Jersey, New York, and Rhode Island—and the Federal statutory program for railroad em-

TABLE 5—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948-74<sup>1</sup>

[In millions]

Year	Total	Type of insurance arrangement		
		Private plans <sup>2</sup>		Publicly operated funds <sup>4</sup>
		Group insurance	Self insurance <sup>3</sup>	
1948	\$66.4	\$9.0	\$0.3	\$57.1
1949	89.2	22.3	4.8	62.1
1950	117.4	41.7	12.6	63.1
1951	174.2	81.1	32.2	60.9
1952	202.3	92.5	35.3	74.5
1953	230.2	102.0	37.7	90.5
1954	235.1	96.2	35.8	103.1
1955	244.6	97.0	38.2	109.4
1956	265.0	109.7	41.5	113.8
1957	305.3	129.5	48.6	127.2
1958	325.1	132.7	51.0	141.4
1959	353.2	135.2	54.3	163.7
1960	386.2	136.1	58.0	172.1
1961	396.6	141.3	60.1	195.2
1962	416.3	143.7	60.6	212.0
1963	442.2	130.6	67.6	243.9
1964	455.8	123.2	68.2	264.4
1965	466.7	124.8	72.8	269.1
1966	481.6	130.9	77.5	273.2
1967	507.1	139.1	83.3	284.7
1968	571.9	154.0	97.7	320.2
1969	654.9	171.7	109.5	373.7
1970	717.8	183.7	123.5	410.6
1971	721.3	184.0	126.4	410.9
1972	740.5	183.7	144.8	412.0
1973	799.3	193.6	159.9	445.8
1974	866.9	199.7	181.9	485.3

<sup>1</sup> Programs under the Railroad Unemployment Insurance Act and the laws of Rhode Island, California, New Jersey (beginning 1949), and New York (beginning 1950). Data for Hawaii not available. Excludes benefits in Puerto Rico (\$5.6 million in 1974) for consistency with wage loss data in table 1 and elsewhere. Excludes hospital benefits in California and hospital, surgical, and medical benefits in New York.

<sup>2</sup> Under the laws of California, New Jersey, and New York. Includes some union plans whose provisions come under the law.

<sup>3</sup> Employers may self insure by observing certain stipulations of the law.

<sup>4</sup> Includes State-operated plans in Rhode Island, California, and New Jersey, the State Insurance Fund and the special fund for the disabled unemployed in New York, and the railroad program.

ployees totaled \$867 million in 1974 (table 5).<sup>6</sup> The 85-percent increase in temporary disability insurance benefits between 1973 and 1974 was due largely to the growth of payments by public carriers and by private self-insurers. Among the three benefit components shown in table 5, self-insurers can be seen to have increased their share of the total over the years (from 15 percent to 21 percent in the period 1964-74) while private commercial insurance payments have declined (from 27 percent to 23 percent in the same span) and the publicly operated funds have continued to account for about the same share (56 percent in 1974, compared with 58 percent in 1964).

The share of national wage loss represented by the jurisdictions with temporary disability in-

<sup>6</sup> Data for Hawaii were not available and data for Puerto Rico were excluded in order to ensure consistency with work-loss statistics appearing elsewhere in this article.

insurance laws (adjusted to exclude the loss protected by sick leave) has declined slightly over the years from a high of 28 percent in the early 1960's to 26 percent in 1974. The benefit relationship, however, has been far more variable, depending on changes in statutory coverage and benefit provisions and on the effects (in areas without such laws) of economic fluctuations on growth in voluntary insurance coverage. Benefits paid under the temporary disability insurance laws accounted for as much as 46 percent of insurance benefit payments for short-term sickness nationally in 1963, but the proportion has fallen irregularly since then to the 1974 level of 35 percent.

State legislative activity relating to disability insurance laws was moderate in 1974, as it had been previously. Probably the most significant changes affecting aggregate benefits paid were the increases in maximum weekly amounts that became effective during 1974 from \$75 to \$95 in New York and from \$105 to \$119 in California. The latter State also raised its taxable wage base (to \$9,000), as did New Jersey (to \$4,800, effective in 1975). In January 1976, New Jersey joined Hawaii in providing for automatic increases in the taxable wage base under its temporary disability insurance program.

### **Paid Sick Leave**

Sick-leave payments in 1974 totaled \$4.3 billion, 6.4 percent above the 1973 level (table 6). The growth in such payments continued to be greater in private industry (9.8 percent) than in government (4.8 percent), as had also been true during the previous 2 years. Patterns have been changing in the two sectors. From 1950-60, total sick leave rose 162 percent in Federal and State and local government and 122 percent in private industry, from 1960-70, such payments increased by 167 percent in both sectors, and since 1970, private industry sick-leave pay has gone up 41 percent, while government benefits have risen 29 percent.

The major difference between the private and government sectors in the growth of sick-leave benefit payments occurred between 1950 and 1952, when government sick-leave pay rose 44 percent while private industry benefits rose 21 percent. This pattern reflected, among other factors, an

accelerated growth in Federal employment during the period associated with the Korean Conflict. Since then, however, the growth of State and local government sick leave has been much greater than that for Federal workers, a reflection of fast-growing employment and improved sick-leave provisions in the former sector.

In terms of the total amount paid, sick-leave plans in the public sector continue to dominate this type of income-loss protection against short-term disability. Practically all Federal workers are entitled to sick leave, and it has been estimated that 90 percent of all full-time State and local government employees have this protection. In 1974, 65 percent of all sick-leave benefits was accounted for by government workers.

Income-loss protection provided entirely through sick leave (that is, exclusive sick leave) totaled \$3.5 billion in 1974 and covered about 75 percent of the wage-loss incurred (table 7). Exclusive sick leave is more prevalent among government workers than among those in private industry. Though government workers accounted for only about two-thirds of all paid sick leave in 1974, four-fifths of the total paid out in exclusive sick-leave benefits went to these workers. The difference is attributable to the fact that most government workers are covered by exclusive sick-leave programs. Among workers in industry and commerce, however, paid sick leave as a supplement to other forms of group disability protection is more common. On the basis of the Bureau of Labor Statistics (BLS) labor-market studies for selected communities, it is estimated that 60 percent of those private employees covered by paid sick-leave plans in 1974 were also covered on their jobs by other sick-pay programs.

### **Summary of Protection**

Total sickness benefits paid by group and individual insurance, self-insurance, and sick-leave plans reached almost \$7.9 billion in 1974 (table 8). The high rate of inflation reflected in wage increases was largely responsible for the 9.6-percent growth in benefit payments from the 1973 amount. This rate of growth was somewhat higher than that recorded generally in the series—a rate exceeded, for example, in just 3 of the last 10 years. The increase in 1974 was as little as 4.8 percent.



TABLE 6—Estimated value of formal paid sick leave in private industry and in Federal, State, and local government employment, 1948-74<sup>1</sup>

[In millions]

Year	Total	Workers in private industry <sup>2</sup>			Government workers		
		Total	Not covered by temporary disability insurance laws	Covered by temporary disability insurance laws <sup>3</sup>	Total	Federal <sup>4</sup>	State and local <sup>5</sup>
1948	\$418	\$158	\$146	\$12	\$259	\$148	\$111
1949	464	164	149	16	300	173	127
1950	495	180	156	24	315	172	143
1951	591	201	166	35	390	221	169
1952	670	218	181	37	453	154	199
1953	716	235	196	38	482	262	220
1954	745	245	205	40	500	252	248
1955	818	273	228	45	545	269	176
1956	889	299	248	50	591	280	311
1957	956	330	275	55	627	290	337
1958	1,043	346	290	57	696	315	381
1959	1,082	359	301	58	724	315	408
1960	1,226	400	334	66	826	348	478
1961	1,314	420	352	68	894	376	518
1962	1,475	472	394	79	1,003	414	589
1963	1,631	526	439	87	1,105	450	655
1964	1,637	505	424	91	1,133	445	677
1965	1,830	566	475	91	1,264	488	776
1966	2,008	619	519	100	1,389	523	866
1967	2,211	680	572	109	1,531	569	962
1968	2,570	803	676	128	1,767	643	1,124
1969	2,805	930	786	144	1,874	668	1,206
1970	3,2 <sup>8</sup>	1,066	903	163	2,202	786	1,416
1971	3,408	1,097	931	165	2,311	814	1,497
1972	3,908	1,290	1,094	196	2,618	896	1,720
1973	4,081	1,369	1,169	200	2,712	885	1,827
1974	4,344	1,503	1,285	218	2,841	906	1,935

<sup>1</sup> Beginning 1960, data include Alaska and Hawaii. Beginning 1959, data adjusted to reflect changes in sickness experience (average number of disability days), as reported in the Health Interview Survey of the Public Health Service.

<sup>2</sup> Sum of estimated value of formal paid sick leave for employees with (1) sick leave but no other group protection and (2) sick-leave supplemental to group insurance or other forms of group protection, including publicly operated funds. Under each category, number of employees was adapted from Health Insurance Council, *Annual Survey of Accident and Health Coverage in the United States, 1948-64*, after reducing estimates of exclusive sick leave coverage in early years by a third to allow for exclusion of informal sick leave plans and conversion of exclusive protection to supplemental protection under temporary disability insurance laws. Later year estimates based on nationwide projection of formal paid sick leave coverage reported for plant and office workers in the community wage surveys of the Bureau of Labor Statistics. Assumes that workers in private industry receive an average of 4 days of paid sick leave a year, excluding other protection, and 3 2 days when they have other group protection. Daily wages obtained by dividing average annual earnings per full time private employee as reported in table 6 7 in *The National Income and Product Accounts of the United States, 1929-74, Statistical Tables* (to be published), and in the annual *Survey of*

*Current Business National Income Issue* (Department of Commerce), by 225 (estimated workdays in a year).

<sup>3</sup> Assumes that some workers entitled to cash benefits under temporary disability insurance laws have sick leave in addition to their benefits under the laws, but only to the extent needed to bring up to 80 percent the replacement of their potential wage loss.

<sup>4</sup> Based on studies showing that Federal employees use paid sick leave of 7 7 days on the average for nonoccupational sickness equivalent to 3 percent of payroll. Payroll data derived by multiplying number of paid civilian full time employees in all branches of the Federal Government in the United States, by their mean earnings, as reported in *Pay Structure of the Federal Civil Service, Annual Report* (U S Civil Service Commission). Practically all full time employees are covered by paid sick leave protection.

<sup>5</sup> Assumes that number of State and local government employees covered by formal sick leave plans has increased gradually from 65 percent of the total number employed full time in 1948 to 90 percent in 1974, and that workers covered by such plans received on the average paid sick leave ranging from 5 2 days in 19 8 to 6 1 in 1974. Number of full time employees from *Public Employment, Annual Reports* (Bureau of the Census). Daily wages obtained by dividing average annual earnings per full time State and local employee as reported in Department of Commerce data (see footnote 2), by 255 (estimated workdays in a year).

for government sick-leave payments and as high as 16 6 percent for payments under private insurance and self-insurance. Each of the forms of cash sickness payments rose at a faster rate than it had in the previous year.

Table 8 also highlights the fact that sick leave accounts for the major part of all short-term disability benefits. In 1974, government and private sick leave combined paid 55 percent of all such benefits, if only the benefits under group protection are taken into account, the share for government and private sick leave is 62 percent. This benefit pattern exists even though the large majority of workers are protected for cash sick-

ness benefits by insurance plans rather than by sick leave, because sick leave is generally a full-wage-replacement benefit. The share of all sickness benefits provided by each type of protection has been rather stable over the past 26 years, except for the decline in payments under individual insurance policies from almost 19 percent of the total in 1948 to 11 percent in 1974.

## MEASURING THE EXTENT OF PROTECTION

Examining benefits in relation to the income loss they replace offers a useful way of evaluating the effectiveness of programs providing cash bene-

TABLE 7—Estimated value of formal paid sick leave in relation to income loss due to short-term sickness among workers covered by exclusive formal sick-leave plans,<sup>1</sup> 1948-74

[Amounts in millions]

Year	Income loss	Value of sick leave under exclusive plans	Ratio (percent) of sick leave to income loss
1948	\$569	\$378	66.4
1949	605	417	68.9
1950	639	434	67.9
1951	726	509	70.1
1952	808	578	71.5
1953	850	614	72.2
1954	879	636	72.4
1955	958	694	72.4
1956	1 030	748	72.6
1957	1,113	804	72.2
1958	1 211	879	72.6
1959	1,213	910	75.0
1960	1 394	1,038	74.5
1961	1 495	1,121	75.2
1962	1 667	1 254	75.2
1963	1 811	1 385	75.2
1964	1 855	1 401	75.9
1965	2 057	1,566	76.1
1966	2 252	1 711	76.0
1967	2 463	1 882	76.4
1968	2 816	2 178	76.5
1969	3 042	2,320	76.3
1970	3 490	2 693	77.2
1971	3,625	2 812	77.6
1972	4,227	3 200	76.7
1973	4 462	3 376	75.7
1974	4 682	3 530	75.4

<sup>1</sup> Sick leave plans that do not supplement any other form of group protection, including publicly operated plans

fits during sickness Tables 9 through 11 provide data with which to measure this relationship

Overall, compensation was received for an estimated 36.2 percent of the 1974 income loss from short-term sickness—the highest ratio ever achieved in the series. One factor that may account for the rise of more than 2 percentage points over the 1973 figure (34.1 percent) was the economic decline that cost many workers their jobs. Typically, workers with low seniority or in marginal jobs, and hence with fewer fringe benefits like accident and sickness insurance or sick leave, are the most likely to be laid off when unemployment first begins to rise.

The 17-percent replacement rate for 1948 given in table 9 has more than doubled over the years—a rise traceable to the establishment of mandatory benefit programs in 1949 and 1950, new plans for groups of workers in private and government employment, and improvements in benefit levels. The \$13.9-billion income loss not protected in 1974 should be recognized as including the earnings of workers not covered under any income-replacement plan as well as earnings lost during

TABLE 8—Benefits provided as protection against income loss, summary data, 1948-74

[In millions]

Year	Total <sup>1</sup>	Benefits provided through individual insurance	Group benefits provided as protection against wage and salary loss					
			Total <sup>1</sup>	Workers in private employment				
				Total	Private cash sickness insurance and self insurance <sup>2</sup>	Publicly operated cash sickness funds	Sick leave	Sick leave for government employees
1948	\$761.4	\$141.0	\$620.4	\$361.3	\$145.8	\$57.1	\$158.4	\$259.1
1949	882.2	150.0	698.2	398.3	172.0	62.1	164.2	299.9
1950	941.8	153.0	788.8	473.7	230.8	63.1	179.6	315.1
1951	1,152.9	157.0	995.9	605.8	343.8	60.9	201.1	390.1
1952	1,303.9	177.0	1,120.9	674.1	382.1	74.5	217.5	452.8
1953	1,412.7	209.0	1,203.7	722.4	397.2	90.5	234.7	481.3
1954	1,477.6	230.0	1,247.6	717.3	399.1	103.1	251.6	500.3
1955	1,619.6	250.0	1,369.6	821.9	442.4	109.4	273.1	544.7
1956	1,805.7	278.0	1,527.7	936.9	524.5	113.8	298.6	590.8
1957	1,957.9	307.2	1,650.7	1,024.3	567.2	127.2	329.9	628.4
1958	2,093.2	353.4	1,739.8	1,043.5	555.7	141.4	346.4	696.3
1959	2,236.3	389.6	1,846.7	1,122.9	600.5	163.7	358.7	723.8
1960	2,429.6	392.8	2,036.8	1,210.6	638.4	172.1	400.1	826.2
1961	2,560.7	425.9	2,134.8	1,241.0	625.7	195.2	420.1	893.8
1962	2,776.3	418.5	2,357.8	1,355.0	670.7	212.0	472.3	1,002.8
1963	2,997.3	447.2	2,550.1	1,444.9	675.4	213.9	525.6	1,105.2
1964	3,101.3	483.9	2,617.4	1,484.8	715.7	264.4	501.7	1,132.6
1965	3,349.0	482.6	2,866.4	1,602.3	767.1	269.1	566.1	1,264.1
1966	3,636.8	512.9	3,123.9	1,735.1	843.2	273.2	618.7	1,388.8
1967	3,892.6	527.4	3,365.2	1,834.4	869.3	281.7	680.4	1,500.8
1968	4,622.9	609.1	4,013.8	2,216.9	1,123.7	320.2	803.0	1,766.9
1969	5,060.6	635.4	4,425.2	2,550.7	1,246.7	373.7	900.3	1,874.5
1970	5,808.0	693.7	5,114.3	2,952.5	1,475.9	410.6	1,066.0	2,201.8
1971	6,038.5	730.9	5,307.6	2,957.7	1,489.0	410.9	1,095.8	2,310.9
1972	6,706.4	772.0	5,934.4	3,316.5	1,614.4	412.0	1,290.1	2,617.9
1973	7,167.8	795.0	6,372.8	3,550.9	1,735.8	445.9	1,369.2	2,711.9
1974	7,855.0	851.0	7,004.0	4,012.6	2,024.4	485.3	1,502.9	2,811.4

<sup>1</sup> Beginning 1973, includes benefits for the sixth month of disability payable under the old age, survivors, and disability insurance program (not shown separately)

<sup>2</sup> Includes a small but undetermined amount of group disability insurance benefits paid to government workers and to self-employed persons through farm, trade, or professional associations

TABLE 9—Extent of protection against income loss, 1948-74

[Amounts in millions]

Year	Income loss and protection			Income loss not protected	Net cost of providing insurance <sup>4</sup>
	Income loss <sup>1</sup>	Protection provided <sup>2</sup>	Protection as percent of loss		
1948	\$4,582	\$761	16.6	\$3,821	\$277
1949	4,445	848	19.1	3,597	267
1950	4,816	942	19.6	3,874	307
1951	5,494	1,153	21.0	4,341	311
1952	5,834	1,304	22.4	4,530	322
1953	6,163	1,413	22.9	4,750	428
1954	6,114	1,478	24.2	4,636	453
1955	6,565	1,620	24.7	4,945	450
1956	7,052	1,806	25.6	5,246	413
1957	7,386	1,958	26.5	5,428	482
1958	7,477	2,093	28.0	5,384	519
1959	7,749	2,236	28.9	5,513	548
1960	8,591	2,430	28.3	6,161	542
1961	8,664	2,561	29.6	6,103	592
1962	9,653	2,776	28.8	6,877	621
1963	10,213	2,997	29.3	7,216	597
1964	10,296	3,101	30.1	7,195	642
1965	11,333	3,349	29.6	7,984	708
1966	12,268	3,637	29.6	8,631	815
1967	12,844	3,893	30.3	8,951	887
1968	14,620	4,623	31.6	9,997	1,014
1969	15,315	5,061	33.0	10,254	1,214
1970	16,709	5,818	34.8	10,891	1,160
1971	17,154	6,038	35.2	11,116	1,386
1972	19,555	6,706	34.3	12,849	1,556
1973	21,045	7,168	34.1	13,877	1,734
1974	21,723	7,855	36.2	13,868	1,768

<sup>1</sup> From table 1.

<sup>2</sup> Total benefits, including sick leave (from table 8).<sup>3</sup>

<sup>3</sup> Beginning 1973, includes benefits for the sixth month of disability under the old age, survivors, and disability insurance program.

<sup>4</sup> Includes retention costs (for contingency reserves, taxes, commissions, acquisition, claims settlement, and underwriting gains) of private insurance companies (from table 4) and administrative expenses for publicly operated plans and for supervision of the operation of private plans. Excludes costs of operating sick leave plans, data not available.

waiting periods and after benefits are used up and the difference between wages and weekly benefits under plans providing partial replacement.

Table 9 also indicates the net cost of providing short-term sickness benefits through insurance, exclusive of the costs of administering sick-leave plans, for which data are not available. Under commercial insurance and self-insurance, these costs—\$1.8 billion in 1974—represent mainly the difference between insurance premiums and benefit payments and are made up of selling and administrative expenses, premium taxes, additions to reserves, and underwriting gains and profits.

Benefit-income loss ratios can be examined with respect to benefits provided through the job to wage and salary workers by excluding self-employment income on the earnings-loss side, and payments from individual insurance policies on the benefit side. Of the \$19.8 billion wage and salary loss incurred by workers in 1974, 35.4 percent was replaced by group sickness insurance (or self-insurance) or sick leave. Beginning in 1970, this ratio has been at least one-third, but

it remains to be seen whether the recent economic downturn has had any long-term effect on the high benefit-loss replacement rate reached in 1974.

The wage-replacement ratio is much higher for all wage and salary workers than for those in private industry (25.0 percent) because the former includes government workers' sick-leave payments, which replace income at a much higher proportion than insurance benefits.

To analyze the effectiveness of insurance benefits in making up for income lost during short-term illnesses, sick leave can be excluded and allowance made for that part of the income loss not normally considered insurable and compensable under prevailing insurance practices. The relationship of benefits to such hypothetical levels of compensable-income loss offers a means of judging the extent to which insurance policies are achieving their goals (table 11).

Under the typical insurance plan, there is an initial waiting period (except for injury or hospitalization cases, ordinarily) before benefits are payable, and the benefit level is set below the worker's full wage. These limitations are designed to prevent malingering, they may also allow more substantial payments for long-term illnesses by not insuring the indispositions of shortest duration. In addition, establishment of benefit levels below a worker's wage takes into account the fact that insurance benefits, unlike wages, are not subject to Federal income tax. The alternative waiting periods shown here and the two-thirds level of weekly wage replacement are in line with provisions of some of the more progressive plans now in operation.

In table 11, the total income loss is reduced for (1) a 3-day uncompensated waiting period, which requires a 30-percent reduction, and (2) a 7-day uncompensated waiting period, calling for a 45-percent reduction. The potentially insurable income loss is further reduced by one-third to allow for the portion of the loss that is not indemnified after the waiting period. It is assumed that two-thirds of wages are to be replaced.

Benefits payable under exclusive sick-leave programs and the income loss associated with such programs (shown in table 7) are excluded from table 11. Sick-leave benefits under plans that generally supplement insurance benefits are also excluded since the wage loss generally protected by this sick leave (that is, the first 3-7 days)

TABLE 10 — Group protection provided in relation to wage and salary loss, 1948-74

[Amounts in millions]

Year	Wage and salary workers in private industry											
	All wage and salary workers			Wage and salary workers in private industry								
				Total			Covered by temporary disability insurance laws			Not covered by temporary disability insurance laws		
	Income loss	Protection provided		Income loss	Protection provided		Income loss	Protection provided		Income loss	Protection provided	
Amount		Percent of income loss	Amount		Percent of income loss	Amount		Percent of income loss	Amount		Percent of income loss	
1948	\$3 632	\$620	17 1	\$3,199	\$361	11 3	\$391	\$79	20 2	\$2 809	\$282	10 0
1949	3,602	698	19 4	3 127	398	12 7	483	105	21 7	2 644	293	11 1
1950	3,921	789	20 1	3,415	474	13 9	712	141	19 8	2 703	333	12 3
1951	4 495	996	22 2	3 902	606	15 5	1 059	209	19 7	2 843	397	14 0
1952	4,832	1 127	23 3	4 172	674	16 2	1 132	239	21 1	3 040	435	14 3
1953	5 199	1,204	23 2	4 508	722	16 0	1 213	269	22 2	3 295	453	13 7
1954	5,162	1 218	24 2	4 445	747	16 8	1 212	276	22 8	3 233	471	14 6
1955	5,574	1 370	24 6	4,807	825	17 2	1,299	290	22 3	3 508	535	15 3
1956	6 035	1 528	25 3	5,204	937	18 0	1 430	316	22 1	3 774	621	16 5
1957	6 336	1,651	26 1	5,443	1 024	18 8	1 512	360	23 8	3,931	664	16 9
1958	6 371	1 740	27 3	5 391	1 044	19 4	1 507	362	25 3	3,884	662	17 0
1959	6 680	1,817	27 6	5 670	1,123	19 8	1 580	411	26 0	4 090	712	17 4
1960	7 462	2 037	27 3	6 299	1,211	19 2	1,773	425	24 5	4 526	776	17 1
1961	7,527	2 135	28 4	6,294	1 241	19 7	1 770	465	26 3	4 524	776	17 2
1962	8 426	2 358	28 0	7 034	1 355	19 3	1 983	495	25 0	5 051	860	17 0
1963	8 956	2 550	28 5	7,443	1,445	19 4	2,081	529	25 4	5 359	916	17 1
1964	9,065	2 617	28 9	7,520	1 485	19 7	2 085	537	25 8	5 435	918	17 4
1965	9 971	2,866	28 7	8 281	1 602	19 4	2 214	558	24 9	6 017	1 044	17 4
1966	10 833	3 124	28 8	8 991	1,735	19 4	2,108	581	24 1	6 553	1,154	17 6
1967	11,407	3 365	29 4	9,457	1,834	19 4	2,529	616	24 4	6 928	1,218	17 6
1968	13,067	4 014	30 7	10,755	2 247	20 9	2,852	699	24 5	7 904	1,548	19 6
1969	13 755	4 425	32 2	11 359	2 551	22 5	3 025	799	26 4	8 334	1 752	21 0
1970	15 203	5,154	33 9	13 408	2 953	23 8	3 261	860	27 0	9 147	2 073	22 7
1971	15 558	5 308	34 1	12 594	2 997	23 8	3 273	887	27 1	9 321	2 110	22 6
1972	17 689	5,934	33 5	14 302	3 317	23 2	3 653	937	25 6	10 649	2,390	22 3
1973	18 883	6,373	33 7	15,314	3 551	23 2	3 797	1 000	26 3	11,517	2 551	22 1
1974	19 797	7,004	35 4	16,056	4 013	25 0	4 001	1,085	27 1	12,055	2 928	24 3

is also excluded. The remaining income loss is not excluded since such sick-leave provisions do not give any appreciable protection against the portion of the loss resulting from sickness that is considered insurable under prevailing provisions.

Under the type of plan with a 3-day waiting period that provides a two-thirds replacement of income loss, the \$3.5 billion paid by insurance benefits in 1974 would have protected about 44 percent of the aggregate loss incurred. The degree of partial income replacement by insurance increased noticeably from 1973 to 1974—from almost 3 percentage points to 5.5 percentage points, according to the level of income loss compared. These increases followed the pattern already noted for other benefit replacement ratios.

For all of the various groups of workers and types of benefits provided, it can be concluded that cash payments for short-term sickness rose substantially in 1974, in large part because of inflationary pressures on wage levels. The income-loss level, on the other hand, went up somewhat less, reflecting lower sickness rates during the

year. Benefit-income loss ratios showed a corresponding upward movement in comparison with 1973 levels.

### Technical Note

Self-insured plan premiums and benefits for 1962-73 in plans outside jurisdictions with compulsory temporary disability insurance have been revised upward on the basis of (1) examination of employment data for such plans as reported to the Department of Labor under the Welfare and Pension Plans Disclosure Act and (2) revisions by the HIAA in certain commercial insurance data used in estimating self-insured premiums and benefits. Premium estimates for self-insurance are derived primarily from two components. Covered employment in self-insured plans and premiums per employed worker under commercial cash-sickness insurance adjusted to apply as imputed premiums for self-insurance. Premiums obtained by multiplying these two components

TABLE 11—Insurance benefits as percent of estimated potentially insurable and compensable income loss<sup>1</sup> for workers without exclusive formal sick leave, 1948-74

(Amounts in millions)

Year	Amount of insurance benefits <sup>2</sup>	As a percent of income loss—			
		After first 3 days <sup>3</sup>		After first 7 days <sup>4</sup>	
		Total	Two thirds	Total	Two thirds
1948	\$343	12.2	18.3	15.5	23.3
1949	384	14.3	21.4	18.2	27.3
1950	447	15.3	22.9	19.5	29.2
1951	562	18.8	25.2	21.4	32.1
1952	634	18.0	27.0	22.9	34.4
1953	697	18.7	28.1	23.9	35.8
1954	733	20.0	30.0	25.5	38.2
1955	802	20.4	30.6	26.0	39.0
1956	917	21.8	32.6	27.7	41.5
1957	1,002	22.8	34.2	29.0	43.5
1958	1,050	23.9	35.9	30.5	45.7
1959	1,154	25.2	37.8	32.1	48.1
1960	1,204	23.9	35.8	30.4	45.6
1961	1,247	24.9	37.3	31.6	47.4
1962	1,301	23.3	34.9	29.6	44.4
1963	1,366	23.3	34.9	29.7	44.5
1964	1,464	24.7	37.1	31.5	47.2
1965	1,519	23.4	35.1	29.8	44.6
1966	1,629	23.2	34.8	29.6	44.3
1967	1,682	23.1	34.7	29.4	44.2
1968	2,053	24.9	37.3	31.7	47.5
1969	2,256	26.3	39.4	33.4	50.1
1970	2,580	27.7	41.5	35.2	52.8
1971	2,630	27.8	41.6	35.3	53.0
1972	2,798	26.1	39.1	33.2	49.8
1973	3,087	26.6	39.9	33.8	50.7
1974	3,511	29.4	44.1	37.5	56.2

<sup>1</sup> The portion of income loss that may be considered insurable or compensable under prevailing insurance practices

<sup>2</sup> Excludes sick leave payments

<sup>3</sup> Based on 70 percent of total income loss (from table 2), after exclusion of income loss of workers covered by exclusive sick leave plans (from table 7)

<sup>4</sup> Based on 55 percent of total income loss (from table 2), after exclusion of income loss of workers covered by exclusive sick leave plans (from table 7)

were used to estimate benefits by applying an appropriate loss ratio

The number of workers covered by self-insured cash sickness plans throughout the United States in 1972 was obtained from data representing 50,000 welfare plans in private industry on file at the Department of Labor. Samples of actual welfare plan records were also reviewed in order to (1) account for workers in plans utilizing commercial insurance for some welfare benefits and self-insurance for others and (2) determine whether the file included workers in self-insured plans in temporary disability insurance jurisdictions. In addition, though the estimates were

primarily for coverage in union and jointly administered plans, workers covered under self-insured employer-administered plans were also included because the Labor Department files show evidence of substantial benefit funding for such plans. Finally, the resulting worker-coverage estimates were interpolated back to the previous benchmark year of 1961. The new estimates of coverage under self-insured plans were substantially higher than the earlier estimates—2.7 million workers nationally in 1972, for example, compared with the 1.1-million estimate previously used.

Coverage under self-insured plans in temporary disability insurance jurisdictions was then subtracted from the United States total. This step was accomplished primarily by using unpublished data on self-insurance provided by State agencies that administer the temporary disability insurance programs. For the benchmark year of 1972, the revised estimate of the number of workers in private industry under self-insured sickness benefit plans in the voluntary sector was 1.7 million.

Per capita premiums under self-insured plans were derived from data published by the HIAA. Aggregate premiums for group cash sickness insurance were divided by the number of workers protected. At the beginning of 1976, the HIAA revised downward the number of workers under these group plans for 1964-73, creating higher premium amounts per worker. These premiums were then multiplied by the estimated number of workers under self-insured plans in jurisdictions without compulsory temporary disability insurance to produce the revised dollar amount for 1964-73 shown under voluntary provisions in table 3. Corresponding benefit estimates in the table were compiled by applying group insurance loss ratios to the premium totals, after applying a factor developed earlier to convert the ratios to self-insurance.