Cash Benefits for Short-Term Sickness, 1948-71

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The Social Security Administration has compiled estimates annually since 1950 on the cash benefits paid to workers to replace the income lost when they are sick or hurt away from their job. The historical series presented here provides data on the amount of income loss, the amount of benefits paid by major type of program (private voluntary insurance, legally mandated insurance, and sick leave), and information for recent years on the number of workers protected. Emphasis is primarily on group benefit programs provided through the worker's place of employment. The major generalization that can be made about 1971 is that it was a year of no marked changes: the number of workers protected, the amount of income lost, and the cash benefits paid for work lost for short-term sickness were all at levels similar to those of 1970.

BOTH INCOME LOSS resulting from short-term sickness and the cash benefits to replace that loss increased only slightly in 1971 over 1970 levels. Countering the higher wage levels, which tend to raise the estimates of income loss and benefits paid, were improved health experience and lack of growth in the employed labor force in 1971. Consequently, the $5.7 billion paid to workers in 1971 for days lost from work in the first 6 months of non-work-connected disability was only 3 percent above the amount paid in 1970, the lowest rate of increase since the series began. The $15.9 billion in earnings lost in 1971 was higher than the 1970 amount by about the same percentage. Accordingly, the ratio of benefits to earnings loss, which measures the overall extent of protection offered by current programs, remained at 36 percent in 1971.

The benefits paid through the major forms of group protection (including private cash sickness insurance, public insurance, and sick leave) each advanced by small amounts in 1971, but payments made to individual insurance policyholders declined by close to 6 percent. Although sick leave was received by considerably fewer workers than by those who received insurance benefits, this type of protection continues to account for more than half the group benefits paid (62 percent). The proportion remained high because much of the $3.1 billion paid as sick leave in 1971 was in the form of full-wage-replacement benefits.

In 1971, the number covered by sickness insurance or formal sick-leave plans also remained stable, due largely to the virtual standstill in the number of workers in the labor force. About 48 million (two-thirds) of the employed labor force were under such plans in 1971. The extent of protection varies widely, however, with industry, area, and type of job held. In private industry, excluding States with mandatory temporary disability insurance programs, a little more than half the workers were covered by formal sickness benefit plans. Low-paid workers, those of minority races, and workers in low-skill occupations were protected against income loss due to sickness to a lesser extent than other workers, as their much lower rates of income-loss replacement indicate.

CONCEPTS AND ESTIMATES OF INCOME LOSS

The income loss estimated in this series is limited to losses in self-employment and wage and salary earnings during the first 6 months of disability (part-day and full-day) arising from sickness and nonoccupational injury. The estimates encompass the short-term disability of the institutionalized population and the first 6 months of long-term disability. For this series, the estimates include potential income loss as well as actual. That is, they treat as a component of wage loss the income that would be lost if it were not for sick-leave plans that continue wages and salaries during illness. Accordingly, payments made by these plans are included in the benefit data.

Estimates of income loss, as defined here, are calculated by assigning a fixed number of workdays or income days lost to each class of worker (private, government, self-employed, etc.), which is then converted to dollar amounts by use of Department of Commerce earnings data. The aggregates thus developed are further adjusted to account for changes in sickness rates that occur

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TABLE 1.—Estimated income loss from nonoccupational short-term sickness,[1] by type of employment, 1948–71[2]

[In millions]

Year	Total	Wage and salary workers					Self-employed persons[8]
		Total	In private employment[3]		In public employment		
			Covered by temporary disability insurance laws[4]	Other[5]	Federal[6]	State and local[7]	
1948	$4,568	$3,630	$391	$2,807	$174	$258	$938
1949	4,421	3,601	483	2,663	190	285	823
1950	4,795	3,921	712	2,703	201	305	874
1951	5,473	4,494	1,059	2,852	259	334	979
1952	5,814	4,831	1,132	3,039	291	369	983
1953	6,144	5,199	1,213	3,295	290	401	945
1954	6,094	5,161	1,212	3,232	280	437	933
1955	6,546	5,573	1,299	3,507	297	470	973
1956	7,031	6,034	1,430	3,773	313	518	997
1957	7,363	6,335	1,512	3,930	323	570	1,028
1958	7,458	6,371	1,507	3,884	352	628	1,087
1959	7,724	6,671	1,580	4,079	356	656	1,053
1960	8,555	7,445	1,773	4,507	403	762	1,110
1961	8,639	7,498	1,770	4,492	420	816	1,141
1962	9,622	8,383	1,983	5,005	467	928	1,239
1963	10,178	8,905	2,084	5,306	504	1,011	1,273
1964	10,278	9,015	2,085	5,383	506	1,041	1,233
1965	11,278	9,902	2,244	5,915	548	1,165	1,376
1966	12,205	10,746	2,408	6,462	597	1,279	1,459
1967	12,582	11,146	2,479	6,688	626	1,353	1,436
1968	13,698	12,215	2,689	7,344	691	1,491	1,483
1969	14,172	12,698	2,815	7,650	712	1,521	1,474
1970	15,462	13,950	3,013	8,352	816	1,769	1,512
1971	15,877	14,342	3,047	8,557	813	1,895	1,535

[1] Short-term or temporary non-work-connected disability (lasting not more than 6 months) and the first 6 months of long-term disability.

[2] 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.

[3] 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 1948–64 from table 6.2 of *The National Income and Product Accounts of the United States, 1929–1965, Statistical Tables: A Supplement to the Survey of Current Business, 1966* (Department of Commerce). Comparable data for 1965–71 from annual *Survey of Current Business, National Income Issue.*

[4] 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.

[5] Difference between total loss for all wage workers in private employment and for those covered by temporary disability insurance laws.

[6] Federal civilian payroll in 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).

[7] 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, 7.35 days; for 1968, 7.2 days; and for 1969–71, 7.0 days) and divided by 255 (estimated workdays in year).

[8] 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).

each year, as reported by the annual Health Interview Survey of the Public Health Service. The fixed number of work-loss or income-loss days assigned to each class of worker was derived early in the history of the series by using a variety of government and nongovernment special studies on sickness and absenteeism. The Health Interview Survey data are used as a measure of year-to-year variations rather than as a measure of aggregate amount of worktime or average number of income days lost, because there are several significant conceptual differences between that survey and the Social Security Administration series.[1]

The 1971 data from the Health Interview Survey show a 3-percent drop from 1970 in the number of workdays lost per worker. With 1958 as the benchmark year, equal to an index of 100, the applicable sickness rate (or index) was computed at 97 for 1970 and 94 for 1971. This index was then applied across the board to the estimates of income loss derived through the use of fixed work-loss days for the various labor-force components (table 1).

The total income-loss incurred for short-term nonoccupational disability in 1971 is estimated at $15.9 billion. Except for the wage loss of State and local government workers, which was 7 percent above the 1970 amount, the 1971 loss of each of the groups shown in table 1 was only slightly above the 1970 level (1–3 percent). The modest increase in income loss for short-term sickness in 1971 occurred in the face of continued inflationary movement of earnings levels. Average annual civilian employee wages and salaries rose more than 6 percent in 1971 to $8,100, according to Department of Commerce data. The number of full-time civilian employees declined slightly, however, from 68.5 million to 68.4 million between 1970 and 1971. These developments were similar to those of the previous year.

PROTECTION AGAINST INCOME LOSS

Coverage

No national statutory program offers protection against loss of earnings from short-term nonoccupational disability. Most of the protection that is available is provided through the worker's place of employment. Some employers insure their workers against this risk by purchasing group policies from commercial companies under

[1] For full discussion of the factors responsible for the differences between the two series, see Alfred M. Skolnik, "Income-Loss Protection Against Illness, 1948–66," *Social Security Bulletin*, January 1968.

TABLE 2.—Degree of income-loss protection against short-term sickness for employed wage and salary workers in private industry not under temporary disability insurance laws, selected years, 1954–71

Year	Wage and salary workers		
	Total number (in thousands)[1]	With protection	
		Number (in thousands)[2]	Percent of total
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	17,300	48.2
1964	38,100	18,500	48.6
1966	41,000	18,400	44.9
1967	41,700	18,800	45.1
1968	42,600	20,900	49.1
1969	43,900	22,000	50.1
1970	43,300	22,100	51.0
1971	44,300	22,500	50.8

[1] Number in private industry (excluding railroad employees), as adjusted by ratio of private industry employees on nonagricultural payrolls in the four 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 1967, data not strictly comparable with that for earlier years. Labor-force information for 1967 and thereafter excludes those aged 14 and aged 15 and includes certain workers previously classified as self-employed.

[2] Estimated number of private-industry workers (1) with group accident and sickness insurance (except group credit insurance); (2) under paid sick-leave plans; and (3) under union and mutual association plans, after subtraction of the number of workers with such protection in jurisdictions with temporary disability laws. Beginning with 1966, group accident and sickness insurance coverage has been adjusted to exclude those with long-term benefit policies, which 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.

which cash benefits are paid during specified periods of disability, or they provide similar payments by self-insuring. Others establish formal paid sick-leave plans that provide for continuation of wages (usually full wages) for a certain number of days. Still others combine the two methods and establish both sick-leave and group insurance plans that supplement each other.

The number of workers protected by some form of income-maintenance plan for short-term sickness has grown as the labor force increased, and the proportion with protection has gone up slowly as new and more extensive plans have been instituted. At the end of 1971, 48.3 million—or 67 percent of the average number of wage and salary workers—were under some kind of formal sick-leave or insurance plan providing cash sickness benefits, as the following tabulation shows. Since about nine-tenths of all State and local government employees and almost all Federal employees have this protection, the greatest gap is among those in private industry. More than 3 out of 5 workers in private industry have some formal plan for income replacement during sickness, but this rate is influenced by the fact that protection is mandatory for most workers in five States and Puerto Rico and in the railroad industry. As table 2 indicates, only about half the private labor force is covered when the areas with mandatory programs are excluded.

December	Number with protection	
	Total (in millions)	As a percent of all workers
1967	41.5	62
1968	44.2	65
1969	46.8	66
1970	47.2	67
1971	48.3	67

Public programs.—In 1971, almost 15 million workers in six of the seven jurisdictions with temporary disability insurance laws had this protection. (Puerto Rico's program statistics on coverage and benefits are discussed on pages 25–26 under the heading "Benefits Paid.") Temporary disability programs operate in California, Hawaii, New Jersey, New York, Puerto Rico, and Rhode Island, and railroad workers are under a federally established national program. Protection provided under these programs, like that under the State unemployment insurance laws, is extended mainly to employees in industrial and commercial firms. The temporary disability programs generally do not cover domestic service workers or employees of governments and nonprofit organizations. Farm workers are included under the California, Hawaii, and Puerto Rico programs. Virtually all railroad workers are included in the Federal statutory program for that industry.

Many of the workers not protected by statutory programs in these jurisdictions nevertheless have sickness benefit plans provided voluntarily by their employers, especially in State and local government employment and in nonprofit organization employment. Altogether, few wage and salary workers in these areas are not under some formal sick-leave or sickness and accident insurance program.

All benefits provided under the statutory programs in Rhode Island and in the railroad industry are paid through publicly operated disability funds. In California, Puerto Rico, and New Jersey, employers may "contract out" of the public plan by providing an approved private plan, usually one insured by a commercial company or financed on a self-insured basis. The New York law requires employers to provide sickness

TABLE 3.—Premiums and benefit payments for private insurance against income loss, 1948–71[1]

[In millions]

Year	Total	Under voluntary provisions				Under public provisions		
		Total	Group insurance[2]	Individual insurance[2]	Self-insurance[3]	Total	Group insurance[2]	Self-insurance[4]
	Premiums							
1948	$558.9	$545.8	$162.2	$350.0	$33.6	$13.1	$12.7	$0.4
1949	613.6	567.8	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	269.4	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	1,526.4	1,293.6	484.1	787.8	21.7	232.8	166.1	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	255.2	179.1	76.2
1962	1,692.6	1,437.2	556.9	856.5	23.8	255.4	179.6	75.8
1963	1,697.7	1,453.3	560.0	870.0	23.3	244.4	161.0	83.4
1964	1,815.6	1,577.6	620.8	933.0	23.8	238.0	153.2	84.8
1965	1,927.1	1,668.7	710.9	933.1	24.7	258.4	163.0	95.4
1966	2,134.9	1,854.8	810.6	1,018.5	25.7	280.1	175.9	104.2
1967	2,237.4	1,926.8	853.1	1,048.6	25.1	310.6	194.3	116.3
1968	2,697.9	2,355.9	1,131.8	1,198.0	26.1	342.0	209.2	132.8
1969	3,037.9	2,638.5	1,301.6	1,301.5	29.4	399.4	243.9	155.5
1970	3,261.4	2,844.0	1,512.7	1,299.7	31.6	417.4	249.6	167.8
1971	3,514.5	3,061.4	1,730.2	1,297.2	34.0	453.1	268.6	184.5
	Benefit payments							
1948	$286.8	$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	22.3	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	1,086.7	882.4	445.8	418.5	18.1	204.3	143.7	60.6
1963	1,117.5	919.3	454.2	447.2	17.9	198.2	130.6	67.6
1964	1,192.4	1,001.0	498.9	483.9	18.2	191.4	123.2	68.2
1965	1,239.7	1,012.1	541.6	482.6	17.9	197.6	124.8	72.8
1966	1,342.7	1,134.3	603.2	512.9	18.2	208.4	130.9	77.5
1967	1,377.4	1,155.0	610.5	527.4	17.1	222.4	139.1	83.3
1968	1,711.9	1,460.2	832.9	609.1	18.2	251.7	154.0	97.7
1969	1,856.6	1,575.4	919.9	635.4	20.1	281.2	171.7	109.5
1970	2,136.6	1,829.4	1,113.6	693.7	22.1	307.2	183.7	123.5
1971	2,172.8	1,862.4	1,185.1	654.9	22.4	310.4	184.0	126.4

[1] Beginning 1960, data include Alaska and Hawaii.

[2] 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 types 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 1956–71, dividends deducted from earned premiums (2–3 percent for group; 1 percent for individual).

[3] Company and union-management trust fund, trade-union, and mutual benefit association plans.

[4] Company, union, and union-management plans under California, New Jersey, and New York laws, whether or not funded.

protection of a specified value for their employees by establishing a privately insured or self-insured plan or insuring with a State fund that itself has many characteristics of a private carrier. All covered workers are under private plans in Hawaii. Except in Rhode Island and the railroad industry, union or union-management plans may provide the type of benefits required by law.

Voluntary protection.—The protection available to workers not under the statutory programs is provided primarily through labor-management contracts or voluntary employer fringe-benefit programs. The two major forms of such protection are insurance (including self-insurance) and sick leave. It is estimated that voluntary insurance plans covered more than 17 million workers in 1971, excluding private insurance in jurisdictions with mandatory protection. These plans, like those under the legally required temporary disability insurance programs, generally provide partial wage replacement of one-half to two-thirds after a waiting period ranging from 3 days to a week. Potential duration of benefits may vary by length of work experience or, more commonly among the voluntary plans, may be for some fixed number of weeks for all workers under the plan, with the maximum set from 13 to 26 weeks.

In contrast, sick leave, the other major means of maintaining a worker's wage when he cannot work because of illness or accident, is commonly paid in full replacement of earnings without a waiting period for a maximum of 5–15 days a year. About 15 million workers in private industry and in government were under sick-leave plans rather than an insurance plan in 1971.

Note that three other forms of voluntary protection are excluded from the estimates made for this series. The data for voluntary group insurance coverage exclude persons with protection only under credit insurance arrangements since this type of insurance does not generally stem from an employment relationship. Credit insurance is purchased by lending institutions to protect their loans against the risk of nonpayment because of disability.

In addition, no attempt is made to include in either the coverage or benefit data compiled here those workers who receive benefits through informal plans. Informal plans, by their nature, do not provide assurance of any definite protection against the hazard of income loss from disability. Moreover, because of the lack of a clear commitment to provide specified benefits, there is no ready means of estimating how many might re-

ceive such benefits, under what conditions, or what amounts are paid.

The number of employed or self-employed workers covered by individual insurance are also excluded from this series. It would be difficult to eliminate the duplication arising because some persons have more than one policy or have an individual policy in addition to some form of group protection. Furthermore, individual policies are not necessarily related to participation in the labor force (those that provide flat-rate periodic cash benefits upon proof of hospitalization, for example). The benefits paid by individual insurance, however, are included in table 2 and the following tables.

Benefits Paid

Private insurance.—Premiums paid under private insurance in 1971 rose to $3.5 billion—almost 8 percent higher than the 1970 total. This rate of increase was similar to that for the preceding year and probably can be associated with the continued brisk upward movement of workers' earnings in 1971. As in 1970, the largest increase in premiums for 1971, in both absolute and percentage terms, occurred with respect to voluntary group insurance, which rose by $218 million, or 14 percent, to a total of $1.7 billion (table 3). Individual insurance premiums remained at about the same level in 1971—$1.3 billion. Private commercial insurance purchased under temporary disability insurance programs increased almost 8 percent—about three times the rate of the previous year's growth but still below that of premiums for voluntary policies.

Although private insurance benefit payments grew at a faster rate (and by a greater dollar amount) than premiums between 1969 and 1970, the reverse was true from 1970 to 1971. Private insurance benefits totaled $2.2 billion in 1971, representing an increase of only $36 million; premium payments rose $253 million, however. Each of the group insurance categories in table 3 showed small increases in aggregate benefits paid; individual insurance showed a decline. The drop in the morbidity rate in 1971 influenced the benefit totals considerably, no doubt.

Benefits under temporary disability insurance laws.—Table 4 shows the total amount of cash benefits paid under the temporary disability insurance programs. To the extent that the protection is provided through commercial insurance companies or other private arrangements, the data overlap those in table 3. Cash benefits of $721 million were paid in 1971 under the laws of California, New Jersey, New York, and Rhode Island, and the Federal program for railroad workers. This amount was only $3.5 million (less than ½ of 1 percent) above the 1970 total—the smallest dollar and percentage increase recorded since the programs began. The increases were similarly small for each type of insurance arrangement shown in table 4, and for each of the individual State programs as well. Benefits paid under the program for railroad workers ($45 million) were 21 percent lower than the corresponding amount in 1970, continuing the long-term trend associated with reduced employment in that industry.

TABLE 4.—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948–71[1]

[In millions]

Year	Total	Type of insurance arrangement		
		Private plans [2]		Publicly operated funds [4]
		Group insurance	Self-insurance [3]	
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	368.2	138.1	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

[1] Programs under the Railroad Unemployment Insurance Act and the laws of Rhode Island, California, New Jersey (beginning 19 9), and New York (beginning 1950). Data for Hawaii not available. Puerto Rico benefits ($3.4 million in 1971) excluded for consistency with wage loss data in table 1 and elsewhere, for which data on Puerto Rico are not available. Excludes hospital benefits in California and hospital, surgical and medical benefits in New York.

[2] Under the laws of California, New Jersey, and New York.

[3] Employers may self insure by observing certain stipulations of the law. Includes some union plans whose provisions come under the law.

[4] 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.

The jurisdictions with mandatory programs accounted for 37 percent of insurance cash sickness benefits paid through place of employment, though the wage loss in these areas was only 27 percent of the Nation's total wage loss. Their benefit payments were 39 percent of the total in 1970 and 41 percent in 1969. The proportion of the national wage loss attributable to workers in temporary disability insurance areas was about the same, however, in each of those years (28 percent). The declining amount of benefits paid in areas with these programs, in relation to voluntary insurance benefits elsewhere, may reflect either (1) improvements in present voluntary benefit plans and establishment of new plans in the voluntary sector and/or (2) lagging benefit levels in these areas as wages rise.

Puerto Rico has one of the two recently established temporary disability insurance programs.[2] Data on the operation of the Puerto Rican program for 1971 are briefly described here. These data are not incorporated in the regular series of tables in the article because of inconsistencies that would result when relating these data to other statistics and key indicators. In particular, work-loss estimates in this series depend upon labor force, earnings, and disability data that do not include Puerto Rico. Premium and benefits information for private health insurance are not readily available for Puerto Rico. Summary information on coverage, benefits, and financing for Puerto Rico and the other jurisdictions are published yearly in the *Social Security Bulletin, Annual Statistical Supplement.*

Puerto Rico's program began paying benefits on July 1, 1969. The maximum weekly benefit payable was $78 under the original law but was raised to $90 in 1972. The 1972 amendments include raising the taxable wage base from $7,800 to $9,000 and extending coverage to certain commission drivers, salesmen, and home workers. New provisions concern eligibility—such as the denial of benefits to claimants receiving retirement pensions who do not have subsequent insured employment—and the repeal of the waiting period requirement for agricultural workers who become disabled while unemployed.

In Puerto Rico, about 460,000 workers were covered during 1971 under the publicly operated program and 250,000 under a private plan. Total

TABLE 5.—Estimated value of formal paid sick leave in private industry and in Federal, State, and local government employment, 1948–71[1]

[In millions]

Year	Total	Workers in private industry[2]			Government workers		
		Total	Not covered by temporary disability insurance laws	Covered by temporary disability insurance laws[3]	Total	Federal[4]	State and local[5]
1948	$413	$157	$145	$12	$256	$148	$108
1949	462	162	147	15	300	173	127
1950	492	177	154	23	315	172	1 3
1951	588	198	164	34	390	221	169
1952	667	214	178	36	453	254	199
1953	713	231	193	38	482	262	220
1954	741	241	201	40	500	252	248
1955	813	268	224	44	545	269	276
1956	884	293	243	49	591	280	311
1957	951	324	270	54	627	290	337
1958	1,034	338	283	55	696	315	381
1959	1,076	351	295	56	725	315	410
1960	1,219	392	327	65	827	348	479
1961	1,310	410	344	67	900	376	524
1962	1,459	461	384	77	998	414	584
1963	1,624	513	428	85	1,110	450	660
1964	1,629	492	412	80	1,137	445	692
1965	1,822	553	464	90	1,269	488	781
1966	2,001	606	508	99	1,395	523	872
1967	2,159	656	551	105	1,503	558	945
1968	2,412	744	627	117	1,668	606	1,062
1969	2,596	849	720	130	1,747	622	1,125
1970	2,998	962	818	143	2,037	726	1,310
1971	3,136	998	850	148	2,138	758	1,381

[1] 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.

[2] Sum of estimated value of formal paid sick leave for employees with (a) sick leave but no other group protection and (b) 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, 1948–54*, 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 6.5 in *The National Income and Product Accounts of the United States, 1929–65, Statistical Tables: A Supplement to the Survey of Current Business, 1966*, and in the annual *Survey of Current Business, National Income Issue* (Department of Commerce), by 255 (estimated workdays in a year).

[3] 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.

[4] 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 as of June 30 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.

[5] 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 1971, and that workers covered by such plans received on the average paid sick leave ranging from 5.2 days in 1948 to 6.1 in 1971. 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).

[2] Puerto Rico's program began operations on July 1, 1969, Hawaii's program on January 1, 1970. Benefit data on the Hawaiian program are not available.

benefits paid in the first 2 years of operation were $3.0 million (1970) and $3.4 million (1971). In each year, about half of the benefits were paid through a publicly operated fund. The low amount of benefits paid in relation to the number of workers protected by the program reflects in part the low wages in Puerto Rico in comparison with those of the mainland, as the $35 average weekly benefit amount paid in 1971 suggests.

Paid sick leave.—Estimates of sick-leave payments made in private industry and government are shown in table 5. Government payments are, for the most part, full-pay-replacement benefits. Further, government sick leave is generally exclusive—that is, it does not supplement any other group sickness pay plan. The data for private industry sick leave, however, also include substantial amounts arising out of supplemental sick-leave plans, that is, sick leave paid during waiting periods before insurance benefits or as partial wage replacement in addition to the insurance benefit.

Like other types of benefits, sick-leave payments in 1971 were only moderately above the 1970 levels. The $3.1 billion paid in sick leave during 1971 was almost 5 percent more than the 1970 total, reflecting the reduced amount of sickness in 1971. The largest increase in 1971 sick-leave payments was the 5-percent rise of $71 million in sick-leave payments to State and local government workers, which totaled nearly $1.4 billion for the year. Sick leave paid to Federal and other government workers continued to account for the bulk of all such payments. In both 1970 and 1971, 68 percent of all sick leave went to government employees.

In 1971, $2.6 billion was paid under exclusive sick-leave plans (table 6). The degree of replacement of workers' income by exclusive sick leave remained within a narrow 72–74-percent range from 1953 through 1966. The rate since that period gradually rose, to 78 percent in 1971. In addition, the share that this form of benefit protection represented of all sick-leave payments was 83 percent in 1971, about the same proportion shown since the beginning of this series.

TABLE 7.—Benefits provided as protection against income loss, summary data, 1948–71

[In millions]

Year	Total	Benefits provided through individual insurance	Group benefits provided as protection against wage and salary loss					
			Total	Workers in private employment				Sick leave for government employees
				Total	Private cash sickness insurance and self-insurance [1]	Publicly operated cash sickness funds	Sick leave	
1948	$756.9	$141.0	$615.9	$359.9	$145.8	$57.1	$157.0	$256.0
1949	846.1	150.0	696.1	396.1	172.0	62.1	162.0	300.0
1950	938.9	153.0	785.9	470.9	230.8	63.1	177.0	315.0
1951	1,149.7	157.0	992.7	602.8	343.8	60.9	198.0	390.0
1952	1,300.6	177.0	1,123.6	670.6	382.1	74.5	214.0	253.0
1953	1,409.7	209.0	1,200.7	718.7	397.2	90.5	231.0	482.0
1954	1,473.2	230.0	1,243.2	743.2	399.1	103.1	241.0	500.0
1955	1,614.8	250.0	1,364.8	819.8	442.4	109.4	268.0	545.0
1956	1,800.3	278.0	1,522.3	931.3	524.5	113.8	293.0	591.0
1957	1,952.6	307.2	1,645.4	1,018.4	567.2	127.2	324.0	627.0
1958	2,084.5	353.4	1,731.1	1,035.1	555.7	141.4	338.0	696.0
1959	2,229.8	389.6	1,840.2	1,115.2	600.5	163.7	351.0	725.0
1960	2,422.3	392.8	2,029.5	1,202.5	638.4	172.1	392.0	827.0
1961	2,556.8	425.9	2,130.9	1,230.9	625.7	195.2	410.0	900.0
1962	2,757.7	418.5	2,339.2	1,341.2	668.2	212.0	461.0	998.0
1963	2,984.4	447.2	2,537.2	1,427.2	670.3	213.9	513.0	1,110.0
1964	3,085.8	483.9	2,601.9	1,464.9	708.5	264.4	492.0	1,137.0
1965	3,330.8	482.6	2,848.2	1,579.2	757.1	269.1	553.0	1,269.0
1966	3,616.9	512.9	3,104.0	1,709.0	829.8	273.2	606.0	1,395.0
1967	3,821.1	527.4	3,293.7	1,790.7	850.0	284.7	656.0	1,503.0
1968	4,444.1	609.1	3,835.0	2,167.0	1,102.8	320.2	744.0	1,668.0
1969	4,826.3	635.4	4,190.9	2,443.9	1,221.2	373.7	849.0	1,747.0
1970	5,546.2	693.7	4,852.5	2,815.5	1,442.9	410.6	962.0	2,037.0
1971	5,719.7	654.9	5,064.8	2,926.8	1,517.9	410.9	998.0	2,138.0

[1] 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 6.—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,[1] 1948–71

[Amounts in millions]

Year	Income loss	Value of sick leave under exclusive plans	Ratio (percent) of sick leave to income loss
1948	$567	$375	66.1
1949	601	416	69.2
1950	635	432	68.0
1951	723	507	70.1
1952	804	577	71.7
1953	846	612	72.3
1954	874	634	72.5
1955	952	691	72.6
1956	1,024	745	72.8
1957	1,107	800	72.3
1958	1,203	875	72.7
1959	1,242	908	73.1
1960	1,427	1,034	72.5
1961	1,536	1,125	73.2
1962	1,699	1,243	73.2
1963	1,875	1,384	73.8
1964	1,894	1,399	73.9
1965	2,114	1,564	74.0
1966	3,318	1,711	73.8
1967	2,460	1,841	74.8
1968	2,715	2,050	75.5
1969	2,817	2,153	76.4
1970	3,207	2,480	77.3
1971	3,344	2,594	77.6

[1] Sick-leave plans that do not supplement any other form of group protection, including publicly operated plans.

Summary of Protection Provided

Data on the benefits provided under both insurance and sick-leave provisions against income loss caused by sickness are summarized in table 7. Separate data are shown for benefits provided on a group basis, mostly through the worker's place of employment, and for individual insurance. Data for individual insurance benefits cannot be allocated between those going to the self-employed and those paid to employed persons.

Sickness benefits totaled $5.7 billion in 1971—an increase of 3.1 percent over the previous year. This was the smallest annual increase since the series began; only in 1954, 1964, and 1971 has the annual rate of increase in benefits for short-term sickness fallen below 5 percent. The drop in the morbidity rate and the lack of growth in the employed labor force in 1971 were the main factors for the overall benefit pattern in 1971. The range of percentage change from 1970 to 1971 for each type of benefit paid was narrow (0–5 percent), except for payments under individual insurance contracts, which actually declined, as noted earlier.

TABLE 8.—Extent of protection against income loss, 1948–71

[Amounts in millions]

Year	Income loss and protection provided			Income loss not protected	Net cost of providing insurance [3]
	Income loss [1]	Protection provided [2]	Protection as percent of loss		
1948	$4,568	$757	16.6	$3,811	$277
1949	4,424	846	19.1	3,578	287
1950	4,795	939	19 6	3,856	307
1951	5,473	1,150	21.0	4,323	311
1952	5,814	1,301	22.4	4,513	322
1953	6,144	1,410	22 9	4,734	428
1954	6,094	1,473	24.2	4,621	453
1955	6,546	1,615	24 7	4,931	450
1956	7,031	1,800	25.6	5,231	413
1957	7,363	1,953	26 5	5,410	482
1958	7,458	2,084	27.9	5,374	519
1959	7,724	2,230	28 9	5,494	548
1960	8,555	2,422	28 3	6,133	542
1961	8,639	2,557	29 6	6,082	592
1962	9,622	2,758	28.7	6,864	620
1963	10,178	2,984	29 3	7,194	596
1964	10,248	3,086	30 1	7,162	610
1965	11,278	3,331	29 5	7,947	704
1966	12,205	3,617	29 6	8,588	809
1967	12,582	3,821	30.4	8,761	878
1968	13,698	4,444	32.4	9,254	1,005
1969	14,172	4,826	34.1	9,346	1,201
1970	15,462	5,546	35.9	9,916	1,146
1971	15,877	5,720	36.0	10,157	1,364

[1] From table 1.
[2] Total benefits, including sick leave (from table 7).
[3] Includes retention costs (for contingency reserves, taxes, commissions, acquisition, claims settlement, and underwriting gains) of private insurance companies (from table 3) 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.

MEASURING THE EXTENT OF PROTECTION

Tables 8 through 10 bring together the information on income loss and benefits presented above separately. Examining benefits in relation to the income loss they replace offers a useful method of evaluating the effectiveness, in the aggregate, of programs that provide cash benefits during sickness. Ideally, an income-replacement analysis should also measure how individual workers actually receiving disability benefits fare in terms of lost wages, but such data are generally not available. A recent Public Health Service study[3] provides pertinent data on certain characteristics of workers, however, and these data are summarized in conjunction with discussion of table 9.

Table 8 relates the income loss experienced each year because of nonoccupational sickness to the dollar value of the various forms of protection against this loss. This dollar relationship provides a measure of the effective growth in economic security against the risk of income loss from illness, since the data automatically take into account labor-force expansion and any adjustment in benefits made to take care of rising earnings levels.

As might be expected in view of the small annual increases in both income loss and benefits paid, the ratio of benefits to earnings lost due to illness was about the same in 1971 (36.0 percent) as in 1970 (35.9 percent). This rate of protection pertains to the benefits and income loss of the self-employed, as well as wage and salary workers. As table 8 indicates, the costs of providing insurance increased by more than $200 million in 1971 after a decline between 1969 and 1970.

The extent of group income protection for sickness available to wage and salary workers is described in table 9. About a third of the wage loss of workers has been reimbursed in each of the last 3 years; the 1971 proportion reached 35.7 percent. The rate for private workers under voluntary programs and under temporary disability insurance, as well as for government

[3] Charles S. Wilder, *Time Lost From Work Among the Currently Employed Population, United States—1968*, Vital and Health Statistics Series 10, No. 71, U.S. Public Health Service, April 1972.

TABLE 9.—Group protection provided in relation to wage and salary loss, 1948–71

[Amounts in millions]

Year	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	$3,630	$616	17.0	$3,198	$360	11.3	$391	$78	19.9	$2,807	$282	10.0
1949	3,601	696	19.3	3,126	396	12.7	483	104	21.5	2,643	292	11.1
1950	3,921	786	20.0	3,415	471	13.8	712	140	19 7	2,703	331	12 2
1951	4,494	993	22.1	3,901	603	15.5	1,059	298	19 6	2,842	395	13 9
1952	4,831	1,124	23.3	4,171	671	16.1	1,132	238	21.0	3,039	433	14.2
1953	5,199	1,201	23.1	4,508	719	15 9	1,213	268	22.1	3,295	451	13 7
1954	5,161	1,243	24 1	4,444	743	16 7	1,212	275	22.7	3,232	468	14 5
1955	5,573	1,365	24.5	4,806	820	17.1	1,299	289	22.2	3,507	531	15.1
1956	6,034	1,522	25.2	5,203	931	17.9	1,430	314	22.0	3,773	617	16.4
1957	6,335	1,645	26.0	5,442	1,018	18.7	1,512	359	23.7	3,930	659	16.8
1958	6,371	1,731	27.2	5,391	1,035	19 2	1,507	380	25.2	3,884	655	16.9
1959	6,671	1,840	27.6	5,659	1,115	19.7	1,580	409	25.9	4,079	706	17.3
1960	7,445	2,030	27.3	6,280	1,203	19.2	1,773	433	24.4	4,507	770	17.1
1961	7,498	2,131	28 4	6,262	1,231	19.7	1,770	464	26 2	4,492	767	17.1
1962	8,383	2,339	27.9	6,988	1,341	19.2	1,983	493	24 9	5,005	848	16.9
1963	8,905	2,537	28.5	7,390	1,427	19.3	2,084	527	25 3	5,306	900	17.0
1964	9,015	2,602	28 9	7,468	1,465	19.6	2,085	536	25.7	5,383	929	17.3
1965	9,902	2,848	28 8	8,189	1,579	19.3	2,244	556	24 8	5,945	1,023	17.2
1966	10,746	3,104	28.9	8,870	1,709	19.3	2,408	580	24.1	6,462	1,129	17.5
1967	11,146	2,294	29.6	9,167	1,791	19.5	2,479	612	24.7	6,688	1,179	17.6
1968	12,215	3,835	31 4	10,033	2,167	21.6	2,689	689	25 6	7,344	1,478	20 1
1969	12,698	4,191	33.0	10,465	2,444	23.4	2,815	784	27 8	7,650	1,660	21.7
1970	13,950	4,853	34.8	11,365	2,816	24.8	3,013	861	28 6	8,352	1,955	23.4
1971	14,342	5,065	35.3	11,604	2,927	25.2	3,047	869	28 5	8,557	2,056	24.0

workers, remained about the same in 1971 as in 1970. The comparatively high rate of wage replacement under sick-leave plans for government workers (78 percent in 1971) is reflected in the much higher wage-replacement ratio for all wage and salary workers than the ratio for those in private industry.

An interesting set of data that measure the extent of protection to workers is available for 1968 from the Health Interview Survey of the Public Health Service.[4] The survey found a higher rate of income replacement by sickness benefits (45 percent) than the Social Security Administration estimate (31 percent) for the same period. The two sets of estimates have a number of methodological and conceptual differences described earlier in the article. In accounting for the discrepancy in income-replacement rates, one of the most important conceptual differences is that the Public Health Service study includes only the experience of those who still have a job at the time of the survey. The disabled who indicate they do not have a job (including the long-term disabled) are likely to have lower income-replacement rates than those who consider themselves currently employed. Furthermore, income replacement through informal arrangements is not included in the Social Security Administration series but is in the Public Health Service study.

In spite of the somewhat different scope of the studies, the Public Health Service data on income replacement by industry, occupation, age, color, and family income are relevant to the Social Security Administration series. The most notable finding on the characteristics of workers is that those least able to bear the burden of income loss during disability are most likely to be required to do so. Data from the Public Health Service study summarized below show that laborers, operatives, and private household workers had a much lower percent of pay reimbursed while they were sick than the rates for professional and technical workers and for managers and officials. For occupational groups not included here—such as clerical service and sales workers—the proportion of pay reimbursed fell within the range for the occupations shown. Workers with family income of less than $5,000 and workers other than white had considerably

[4] *Ibid.*

smaller proportions of their pay replaced than did workers whose family income was $10,000 or more and white workers. About half or more of the days lost from work for each of the low-replacement groups was not reimbursed.

Characteristic	Percent of pay reimbursed	Percent of work-loss days not reimbursed
Professional, technical, and kindred workers	88	14
Managers and officials	89	15
Private household workers	14	58
Operatives	23	50
Laborers (except farm and mine)	17	60
Aged 17–44	45	42
Aged 65 and over	50	65
White	48	41
All other	25	50
With family income:		
Less than $5,000	26	59
$10,000 or more	65	26

To analyze the effectiveness of benefits from insurance policies in making up for income lost during short-term illness, 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 10).

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 illness by not insuring the indispositions of shortest duration. The alternative waiting periods shown in this review and the two-thirds level of weekly wage replacement are in line with provisions of some of the better plans now in operation.

Under the assumption of the most modest income-replacement objective shown in table 10—that is, benefits paid after a 7-day waiting period at two-thirds of the wage—benefit payments took care of 56 percent of the compensable loss in 1971. This rate of replacement was about the same as that in 1970, resembling the other benefit and income-loss data described in this article in its stability.

TABLE 10.—Insurance benefits as percent of estimated potentially insurable and compensable income loss [1] for workers without exclusive formal sick leave, 1948–71

[Amounts in millions]

Year	Amount of insurance benefits [2]	As a percent of income loss—			
		After first 3 days [3]		After first 7 days [4]	
		Total	Two-thirds	Total	Two-thirds
1948	$344	12.3	18.4	15.6	23.4
1949	384	14.4	21.5	18.3	27.4
1950	447	15.4	23.0	19.5	29.3
1951	562	16.9	25.4	21.5	32.3
1952	634	18.1	27.1	23.0	34.5
1953	697	18.8	28.2	23.9	35.9
1954	732	20.0	30.0	25.5	38.2
1955	802	20.5	30.7	26.1	39.1
1956	916	21.8	32.7	27.7	41.6
1957	1,002	22.9	34.3	29.1	43.7
1958	1,050	24.0	36.0	30.5	45.8
1959	1,154	25.4	38.1	32.4	48.5
1960	1,203	24.1	36.2	30.7	46.0
1961	1,247	25.1	37.6	31.9	47.9
1962	1,299	23.4	35.1	29.8	44.7
1963	1,361	23.4	35.1	29.8	44.7
1964	1,457	24.9	37.4	31.7	47.6
1965	1,509	23.5	35.3	29.9	44.9
1966	1,616	23.3	35.0	29.7	44.6
1967	1,662	23.5	35.2	29.1	44.8
1968	2,032	26.4	39.6	33.6	50.5
1969	2,230	28.1	42.1	35.7	53.6
1970	2,548	29.7	44.6	37.8	56.7
1971	2,584	29.5	44.2	37.5	56.2

[1] The portion of income loss that may be considered insurable or compensable under prevailing insurance practices.
[2] Excludes sick-leave payments.
[3] Based on 70 percent of total income loss (from table 1), after exclusion of income loss of workers covered by exclusive sick-leave plans (from table 6).
[4] Based on 55 percent of total income loss (from table 1), after exclusion of income loss of workers covered by exclusive sick-leave plans (from table 6).

The $2.6 billion paid in insurance benefits in 1971 represented a considerably smaller portion of income loss if the most liberal replacement objective is considered—that is, if it were considered desirable for insurance to pay sickness benefits equal to workers' wages that would be lost after the first 3 days of sickness, then only a 30-percent benefit-loss rate was achieved in 1971. The gap between the amount actually paid and the amount that might have been paid under any of the hypothetical goals shown in table 10 results primarily from lack of coverage by many workers under any formal plan. To a lesser extent it results from limitations in the weekly benefit amount or maximum duration of benefits allowed.