

Income Replacement During Sickness, 1948-68

by DANIEL N. PRICE*

Estimates have been published for each year beginning with 1948 on cash benefits to replace the income loss associated with illness or accidents suffered away from work. In 1968, the proportion of potential income loss replaced by cash sickness benefits rose to almost 32 percent. During the 10 years before 1968, this benefit-income loss ratio had fluctuated narrowly from 28 to 30 percent, after having registered gradual increases in each of the earlier years of the series. As the third decade of this series starts, two new compulsory temporary disability insurance programs have been enacted. Puerto Rico in 1968 and Hawaii in 1969 passed such legislation—the first since 1949—bringing the number of jurisdictions with mandatory programs to seven.

CASH SICKNESS BENEFITS increased from 1967 to 1968 by a considerably larger margin—both absolutely and relatively—than they have in many years. The total amount of cash benefits paid was \$4.4 billion in 1968. This amount was 16 percent larger than the 1967 total and represented the second largest annual percentage increase since 1948.

Group accident and sickness policies of private insurance companies accounted for the greatest advance among the various forms of benefits. In particular, voluntary group insurance paid \$833 million in benefits in 1968, more than \$220 million or 36 percent above the 1967 figure. Largely responsible were inflationary influences and an increase in the number of workers protected. A change in the source of data that produced more comprehensive information was another contributing factor in the magnitude of the growth shown, accounting for perhaps as much as one-sixth of the increase shown for all voluntary group insurance during 1968, in comparison with the preceding year.

Benefit payments through publicly operated programs, individual insurance, formal sick leave,

and self-insurance also registered larger increments in 1968 than in the past few years but at considerably less than half the 36-percent increase in group insurance disbursements. In dollar terms, sick leave continued to contribute the largest portion of all sickness benefits paid. A little less than \$2.4 billion was paid out under formal sick-leave programs in 1968, with about two-thirds of the total going to employees of Federal, State, and local governments.

Since the amount of income lost because of nonoccupational short-term sickness did not rise nearly as fast as benefits paid in 1968, measures of the extent of benefit protection generally showed gains. This improvement was found only in the private sector, however. Benefit-wage replacement for workers in private industry increased two percentage points to 22 percent in 1968 under all forms of group protection. In contrast, the proportion of wage loss replaced under sick-leave plans for government employees declined by more than one percentage point, to 71 percent.

Formal protection against wage loss from short-term nonoccupational disability extended to 44 million wage and salary workers in private industry and government in 1968. This number represented almost two-thirds of all the wage and salary workers who potentially could be covered. In 1967, 42 million workers—or slightly more than three-fifths of the wage and salary labor force—were covered under some form of plan for income-loss protection against short-term illness.

MEASURING INCOME LOSS

Concepts of Income Loss

The Social Security Administration estimates that wage and salary workers in private industry lose an average of 7.0 days of work a year, Federal Government workers 8.0 days a year, State and local government employees 7.5 days, and the self-employed 7.0 days—because of ill-

* Division of Economic and Long-Range Studies, Office of Research and Statistics.

ness and accidents off the job. These averages have been modified annually, starting with 1959, to reflect trends in morbidity rates as reported by the Health Interview Survey of the U.S. Public Health Service.

The work-loss estimates, which are used to compute income loss for this series, are designed to cover the loss of current earnings during the first 6 months of nonoccupational illness or injury, including loss during the first 6 months of a long-term disability. This concept of short-term income loss is based on traditional usage developed in connection with accident and sickness insurance practices and later adopted by government disability insurance programs. In designing various types of insurance policies and programs, the 6-month period was considered a useful administrative device for distinguishing between short-term and long-term disability. Disability that has already lasted such a substantial period of time is customarily dealt with under plans designed for long-continued or permanent disability. The first 6 months of any illness are thus included in the short-term category regardless of the eventual span of illness.

The estimates also include potential loss of income—that is, income that might be lost if it were not for formal sick-leave plans that continue wages and salaries during periods of illness. Payments under such plans are counted in this series as benefits that offset the potential wage loss.

Data on worker disability are collected annually by the Public Health Service in its Health Interview Survey. The number of income-loss days compiled from that survey have generally been lower than those used in this series. The concept of workdays lost that is used in the Health Interview Survey differs from that used here in that the former (1) pertains only to workers aged 17 and over who are currently employed, (2) excludes disability among persons in institutions, (3) counts only full days of sickness, and (4) includes occupational as well as nonoccupational disability.¹

Because of these differences between the Social Security Administration series and the Health Interview Survey data, the latter have been used

TABLE 1.—Estimated income loss from nonoccupational short-term sickness,¹ by type of employment, 1948-68²

(In millions)

Year	Total	Wage and salary workers					Self-employed persons ⁴
		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	\$301	\$2,807	\$174	\$258	\$938
1949	4,424	3,601	483	2,643	190	285	823
1950	4,795	3,921	712	2,703	201	305	874
1951	5,473	4,494	1,059	2,842	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	10,248	9,015	2,085	5,383	506	1,041	1,233
1965	11,278	9,902	2,244	5,945	548	1,165	1,376
1966	12,205	10,746	2,408	6,462	597	1,279	1,459
1967	12,613	11,184	2,479	6,686	626	1,393	1,429
1968	13,751	12,278	2,689	7,339	691	1,559	1,473

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 1965-68 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 7.5 (estimated average workdays lost per year due to short-term sickness) 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).

as a measure of year-to-year variations rather than as a measure of the aggregate amount of work time or average number of workdays lost. With 1958 as the base year—that is, 1958 equals 100—the applicable sickness rate (or index) has been computed in each subsequent year. These annual adjustments are then applied across the board to the estimates of income loss derived through the regular methods for the various labor-force components (see table 1). The index for 1968 is 99—an indication of slightly less illness than that in the base year.

¹ For full discussion of these and other 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.

Trends

Income loss arising from nonoccupational disability was estimated to be more than \$1.1 billion higher in 1968 than in 1967 (table 1). The \$13.8 billion total in 1968 was 9 percent greater than the previous year's dollar loss; the increase between 1966 and 1967 had been only 3 percent. Percentage increases in income loss for all types of employment were higher from 1967 to 1968 than from 1966 to 1967. The largest relative increase in wage loss in 1968 occurred among State and local government workers (12 percent) as it has each year since 1959.

Workers' income loss rose in 1968 despite similar levels of illness in 1967 and 1968. The sickness index compiled by the Social Security Administration for adjusting income-loss estimates was 99 in both years. The higher 1968 income-loss levels can be attributed to the usual annual increase of numbers of workers in the labor force and, even more important, the growth in earnings levels. Symptomatic of the increased rate of inflation in 1968 throughout the economy, workers' earnings rose at a quicker rate than in the preceding year. The upward movement in average annual earnings per full-time employee was at a rate of 6.7 percent from 1967 to 1968, in contrast to a 4.5 percent rise from 1966 to 1967.

PROTECTION AGAINST INCOME LOSS

Workers Covered and Types of Protection

Protection against income loss in the event of non-work-connected disability can be provided through the worker's place of employment, through the purchase of individual sickness insurance policies from insurance companies, or through membership in fraternal societies. Most protection of this type comes through the employment relationship. Some employers insure their workers against this risk by purchasing group policies from commercial companies under 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. Among other sources of employment-connected protection against income loss resulting from sickness are mutual benefit associations and union or union-management plans, often on a regional or industrywide basis.

In 1968, 44.1 million workers—out of a total of 67.8 million wage and salary employees who are subject to this risk—had income protection for short-term sickness. Since more than four-fifths of State and local government employees and almost all Federal employees have this protection, the greatest gap is among those in private industry. Over 3 out of 5 workers in private industry have some formal plan for income replacement during sickness, but the rate is that high because protection is mandatory for almost all workers in four States and in the railroad industry. Only about half the private labor force is covered when the areas with mandatory programs are excluded.

Note that the following types of income-loss protection are not included in the coverage estimates described here: individual insurance policies purchased by some employees; group credit accident policies; and informal sick-leave or wage continuation plans.

Estimates of the number of employed or self-employed workers covered by individual insurance policies are difficult to make. Some persons may have more than one insurance policy or may have group protection as well as an individual plan. The extent of this duplication is not readily measured. The available information about individual policies that provide income maintenance is also complicated by the inclusion of contracts that insure against long-term illness starting at the end or extending beyond the 6-month span covered in the concept of short-term income loss considered here.

Furthermore, individual policies are not necessarily related to an individual's participation in the labor force (those that provide flat-rate periodic cash benefits upon proof of hospitalization, for example). Because of these considerations no estimate of the number of workers with individual insurance is attempted here. (A measure of income-loss protection under individual insurance policies is presented in the form of dollar value of benefits in table 3.)

Group credit accident policies are not provided

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, 1954–68

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	58.0
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
1965.....	40,000	19,500	48.7
1966.....	41,000	18,400	44.9
1967 ³	41,700	18,800	45.1
1968 ³	42,600	20,800	48.8

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*.

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.

³ Data not strictly comparable with that for earlier years. Labor-force information for 1967 and 1968 excludes those aged 14 and aged 15 and includes certain workers previously classified as self-employed.

as part of an employment relationship. Moreover, such policies are provided primarily not for the benefit of the insured but to assure financial institutions the repayment of a loan if the borrower becomes disabled. Protection through informal sick-leave plans is also excluded here since such informal arrangements for continuation of pay at the discretion of the employer are rarely specified publicly in advance. It is, therefore, hard to estimate either the number of workers who would actually receive payments of this nature when they are sick or the amount of such benefits.

Public programs.—At the end of 1968 four States (California, New Jersey, New York, and Rhode Island) and the railroad industry had in operation compulsory laws that protected workers against the loss of income incurred in the event of nonoccupational illness and accidents.

Two jurisdictions—Puerto Rico and Hawaii—have now joined these areas with programs enacted in 1968 and 1969, respectively.² Since the approximately 400,000 newly covered employees

² For descriptions of these programs, see the *Social Security Bulletin*, September 1968, page 24; October 1969, page 29 and February 1970 (in press).

in Puerto Rico and 200,000 in Hawaii were not eligible for benefits until July 1, 1969, and January 1, 1970, respectively, their experience is not included in this article.

The compulsory programs in California, New Jersey, New York, and Rhode Island safeguard more than four-fifths of the employees in these States. Protection provided for these programs, like that under the unemployment insurance laws in these States, is extended mainly to employees in industrial and commercial firms. The temporary disability programs generally do not cover hired farm workers (except in California), domestic service workers, or employees of governments and nonprofit organizations. 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 the benefits that are provided under the statutory programs in Rhode Island and in the railroad industry are paid through publicly operated disability funds. In California 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 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. In California, New Jersey, and New York, union or union-management plans may provide the sickness benefits required by law.

Voluntary protection.—The protection available to workers not under the statutory programs comes primarily through labor-management contracts or voluntary employer fringe-benefit programs. Of the 42.6 million wage and salary workers in 1968 not under temporary disability insurance laws, almost half (49 percent) were under the umbrella of a formal sick-leave or sick-

ness insurance plan. This proportion represented a considerable gain over the 45 percent so protected in 1967.

It can be observed in table 2 that the proportion with protection in 1968 is about the same as that recorded for the years before 1966, even though both 1967 and 1968 showed gains. The apparent reduction in the number of workers under sickness-benefit plans in 1966 actually represents a conceptual improvement in the information being reported. Before 1966 the Health Insurance Association of America (HIAA)—major source of information for these estimates—published in its survey of health insurance coverage the number of all insured workers with group income-maintenance policies for nonoccupational disabilities.

Starting with 1966 data, HIAA has separated this type of insurance coverage into policies assuring benefits for short-term sickness and policies paying benefits for at least 24 months, generally known as group long-term disability insurance. Generally, the latter type of policy does not pay benefits for the first several months of disability. Therefore, the count of persons protected by short-term sickness policies has been adjusted for this series to exclude workers covered by long-term policies. The exclusion does not result in any serious understatement of short-term coverage because most of those employees with group long-term disability insurance are already counted in table 2 by virtue of having other short-term protection, such as formal sick leave. Before 1966, such employees were counted twice.

Sick leave is the second major means of maintaining a worker's wage when he cannot work because of illness or accident. Although sickness insurance and sick leave have the same objectives of preventing the stoppage of income during temporary periods of incapacity, they operate in very different fashions. Sick leave generally is paid in full replacement of earnings from the first day of illness, for a specified number of days, usually between 5 and 15 a year, and sometimes unused leave can be accumulated from year to year. On the other hand, sickness insurance may pay up to 26 weeks of benefits after a waiting period of a week, at some fraction of weekly wages—between one-half and two-thirds—subject to a specified maximum amount.

Each type of protection has its advantages and disadvantages. The most significant advan-

tage of sick leave is that it assures little or no drop in income for many workers when they are sick, since most illnesses last only a few days, and since sick-leave benefits ordinarily consist of full wages. The chief advantage of sickness insurance is that it gives partial but substantial protection over many weeks and so precludes catastrophic income loss in the event of serious illness. Because the two types of plans differ in the kind of protection offered, however, the extent of wage replacement is not necessarily an adequate measure of their comparative advantages.

Benefits Paid

Private insurance.—Private insurance premiums rose by one-fifth in 1968 to \$2,698 million. Benefits rose at an even faster pace—to \$1,712 million or one-fourth again as high as they had been in 1967. Included in the term "private insurance" for purposes of table 3, besides the benefits and premiums of commercial insurance, are data for funded private plans such as union or company trust funds and mutual benefit associations and for unfunded plans in States with temporary disability insurance laws requiring the payment of benefits. Unfunded plans in other States, as well as all sick-leave plans, are not shown in table 3 but are part of table 5 which describes sick-leave benefits.

All categories of insurance premiums and benefits listed in table 3 were higher in 1968 than in 1967, but the size of the very large boosts in total private insurance premiums and benefits is attributable for the most part to changes in voluntary group insurance. A good part of the strikingly large growth from 1967 to 1968 in voluntary group insurance (33 percent for premiums, 36 percent for benefits) reflects the increased number of workers with this protection. In addition, a faster inflationary pace in 1968 was reflected in the higher earnings of covered workers and hence their higher benefits when they become ill.

Another factor is the changed method of reporting information for voluntary group and individual insurance now being employed by HIAA. Their 1968 estimates utilized an improved source of data (National Underwriting Company), which compiles information for a more

TABLE 3.—Premiums and benefit payments for private insurance against income loss, 1948-68¹

[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	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	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	518.8	783.0	23.3	238.8	168.2	70.6
1961	1,630.5	1,375.2	518.0	835.9	23.3	255.3	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	2,356.3	1,132.2	1,198.0	26.1	341.6	208.8	132.8
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	600.8	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	1,042.1	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	1,400.5	833.2	609.1	18.2	251.4	153.7	97.7

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 benefit, adjusted to include accidental death and dismemberment provisions in individual policies that insure against income loss to offset underpayment arising from the omission of current short-term income-loss insurance in automobile, resident liability, life, and other policies. For 1956-68, dividends deducted from earned premiums (2-3 percent for group; 1 percent for individual). Starting with 1956, all credit accident and health insurance classified under individual insurance.

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.

complete list of insurance companies than was formerly used. Hence, part of the higher premiums and benefits shown for 1968 is simply a matter of greater scope of information. A comparison between selected 1967 data from the present source and the previous one used by HIAA suggests that perhaps one-fifth to one-fourth of the increase in premiums and benefits

under voluntary group and individual insurance might be attributable to the change in the source of data.

Benefits under temporary disability insurance laws.—The relative jump in benefits paid in 1968 under voluntary group insurance (policies not written in compliance with temporary disability insurance laws) dwarfed corresponding increments among all the other sickness benefits programs. Nevertheless, the \$572 million paid in 1968 under statutory programs represented the largest annual dollar increase reported in the series for these jurisdictions (table 4). Even in terms of relative increases, the 13-percent rise from 1967 to 1968 in temporary disability benefits under law was the largest since that between 1956 and 1957.

Liberalization in benefit provisions of several of the laws accounts for much of this higher than usual growth in 1968 benefits. The statutory maximum weekly benefit was raised, effective during 1968, for covered workers in the railroad industry (\$63.50), in New Jersey (\$62.00), and

TABLE 4.—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948-68¹

[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	571.6	153.7	97.7	320.2

¹ Programs under the Railroad Unemployment Insurance Act and the laws of Rhode Island, California, New Jersey (beginning 1949), and New York (beginning 1950). 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.

in New York (\$65.00). The duration of benefits was also improved in the railroad industry. The benefit-wage replacement ratio rose in New Jersey to two-thirds for all workers, and the waiting week was made payable after 3 consecutive weeks of illness.

In each of the past 4 years, benefits paid by self-insurers have increased at a higher rate than benefits paid by private group insurers or publicly operated funds. In 1968, self-insurers' payments of \$98 million were 17 percent above the 1967 benefit level. Yet benefits paid by all private plans did not increase as a proportion of all benefits paid under law. Private-plan payments in 1968 were 44 percent of the total; they have represented between 42 percent and 44 percent of the total from 1964 to date.

The high proportion of workers protected in areas with temporary disability laws has a significant effect on the total amount of benefits paid in the Nation. Relating benefit payments to wage loss sustained by all workers shows that those covered by the five laws paying benefits in 1968 incurred only 27 percent of the total wage and salary loss in private employment. However, they received 40 percent of all cash sickness benefits (excluding sick leave) disbursed as group protection to private workers.

As the following tabulation indicates, the proportion of benefits received by workers under temporary disability laws declined substantially in 1968, primarily because of the particularly large rise described above in group insurance benefits in the voluntary sector. This comparison can be refined somewhat by excluding from wage and salary loss the loss replaced by sick leave. The result is a 1968 wage loss for areas with laws that is 28 percent of the national wage loss.

TABLE 5.—Estimated value of formal paid sick-leave in private industry and in Federal, State, and local government employment, 1948-68¹

[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	143
1961	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	1,621	492	412	80	1,129	445	684
1965	1,804	553	464	90	1,251	488	763
1966	1,971	606	507	99	1,365	523	842
1967	2,124	656	551	105	1,468	558	910
1968	2,351	744	627	117	1,607	606	1,001

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 for 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 Reports*, 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 85 percent in 1968 and that workers covered by such plans received on the average paid sick-leave ranging from 5.2 days in 1948 to 6.0 days in 1968. 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).

benefits paid and more than three-fifths of all benefits paid under group protection to wage and salary workers (see table 5). The predominance of sick leave must, of course, be considered in the light of its being a full-wage replacement benefit. The importance of sick leave is not necessarily

Year	For jurisdictions with temporary disability insurance laws	
	Wage and salary loss as percent of U.S. total	Group benefit payments as percent of U.S. total
1951	27	43
1962	28	47
1966	27	44
1967	27	45
1968	27	40

Paid sick leave.—Sick-leave payments were \$2,351 million in 1968, or more than half of all

proportional to its dollar value, either in terms of the number of workers who receive sickness benefits of some kind or in terms of the significance of benefits in preventing financial hardship.

The sick-leave estimates include the value of leave paid as a supplement to group insurance, publicly operated plans, or other types of group protection, as well as the value of exclusive sick leave (sick leave in lieu of any other type of group income-loss protection). Supplemental sick leave often takes the form of wage replacement for an initial waiting period before insurance benefits become available.

Sick-leave payments to government workers continue to dominate this type of sickness benefits. In 1968, as in most earlier years, sick-leave payments in the public sector have accounted for about two-thirds of the total. Within the government sector, however, the relative amounts received by State and local government workers on the one hand and Federal employees on the other have changed substantially. As a result of the growth in employment and in extent of coverage over the years, sick leave received by State and local employees rose from 29 percent of the total in 1951 to 43 percent in 1968. The corresponding relative decline in Federal employee sick-leave pay for the same period was from 38 percent to 26 percent.

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 1948-68

[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	1,883	1,391	73.9
1965	2,092	1,546	73.9
1966	2,282	1,681	73.7
1967	2,442	1,807	74.0
1968	2,703	1,988	73.5

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

It is of interest that the largest relative gain in sick-leave payments from 1967 to 1968 was the 14-percent increase experienced in private employment outside the jurisdictions providing benefits by law. Yet even this rate of increase was much less than that for cash-sickness payments in the private sector under insurance policies reported above.

As indicated in table 6, almost \$2 billion was paid in 1968 under exclusive sick-leave plans—that is, those furnishing benefits which are the sole means of income-loss protection provided by the employer. The degree of replacement of workers' income by exclusive sick leave remained within the narrow 72-74 percent range it has maintained since 1953. In addition, the share that this form of benefit protection represented of all sick-leave payments was 85 percent in 1968, about the same proportion shown since the beginning of this series.

Most exclusive sick leave goes to government workers. Deduction of the \$1,607 million in exclusive sick-leave payments to Federal, State and local government employees from the \$1,988 total in 1968 leaves a balance of under \$400 million paid to private industry employees.

Summary of Protection Provided

All the types of benefits described in this article are summarized in table 7 in order to readily examine the relationship of the various sources of benefits. The \$600 million increase in cash benefits paid in 1968 for short-term sickness was the largest since these estimates have been compiled. The annual rate of increase, 16 percent, was also the largest except for the 22 percent increase recorded in 1951. That increase, however, had been substantially augmented by benefits payable for the first full year under the New York temporary disability insurance law.

Benefits received through individual insurance plans are a significant part of the total—14 percent in 1968. It should be borne in mind that these payments are not necessarily made to persons in the labor force. In addition, the data on individual insurance in this article includes credit accident and health insurance, which does not derive from an employment relationship. Where payments under individual insurance which do

TABLE 7.—Benefits provided as protection against income loss, summary data, 1948–68

[In millions]

Year	Total	Benefits provided through individual insurance	Group benefits provided as protection against wage and salary loss					Sick leave for government employees
			Total	Workers in private employment			Sick leave	
				Total	Private cash sickness insurance and self-insurance ¹	Publicly operated cash sickness funds		
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	453.0
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	243.9	513.0	1,110.0
1964	3,077.8	483.9	2,593.9	1,464.9	708.5	264.4	492.0	1,129.0
1965	3,312.8	482.6	2,830.2	1,579.2	757.1	269.1	553.0	1,251.0
1966	3,586.9	512.9	3,074.0	1,709.0	829.8	273.2	606.0	1,365.0
1967	3,786.1	527.4	3,258.7	1,790.7	810.0	284.7	656.0	1,468.0
1968	4,383.1	609.1	3,774.0	2,167.0	1,102.8	320.2	744.0	1,607.0

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.

replace employment income, some help to replace wages and salaries of employees and some to replace self-employment income.

Each component of the benefit payments advanced in 1968 by at least 9 percent—at a much faster pace than in 1967. As noted earlier, benefits through private insurance showed the greatest growth. Private group insurance plus self-insurance (including private insurance written in compliance with statutory requirements) rose 30 percent to \$1,103 million in 1968.

MEASURING THE EXTENT OF PROTECTION

Tables 8 through 10 bring together the information on income loss and benefits presented above separately. Examination of benefits in relation to the income loss they replace offers a useful way of evaluating the effectiveness of programs providing cash benefits during sickness. Ideally, the degree of income replacement achieved by individual beneficiaries should also be reviewed, but such data are generally unavailable.

As table 8 shows, 1968 witnessed an upward

TABLE 8.—Extent of protection against income loss, 1948–68

[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	3,078	30.0	7,170	640
1965	11,278	3,313	29.4	7,967	704
1966	12,205	3,587	29.4	8,619	809
1967	12,613	3,786	30.0	8,827	878
1968	13,751	4,383	31.9	9,368	1,005

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.

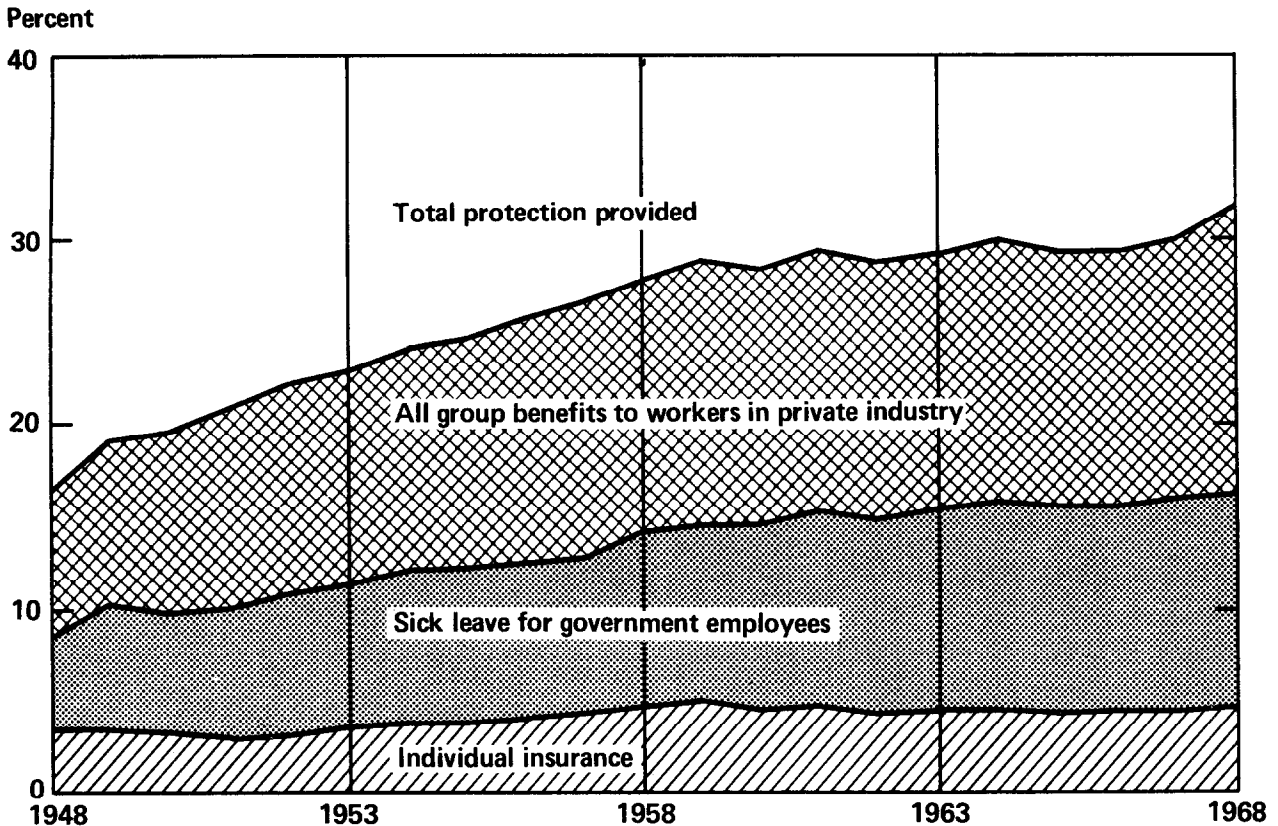
push in the proportion of income replaced under all forms of benefit programs for short-term sickness. The replacement ratio had hovered between 28 and 30 percent from 1959 through 1967, but benefits in 1968 restored almost 32 percent of lost income.

The share of aggregate income loss restored by individual insurance, government employees' sick leave, and group benefits to employees in private industry is illustrated in the accompanying chart. The relative stability in the wage-replacement ratio of each form of benefit since 1960 is seen, as well as the noticeable rise from 1967 to 1968 in the proportion of wages replaced by benefits paid through group plans to workers in the private sector. As indicated earlier, some of this increase was the result of more accurate reporting of benefit data from a new source.

Table 8 also shows the cost of operating the programs that provide temporary disability benefits under public and private insurance and self-insurance plans. The cost of providing commercial insurance is the difference between insurance premiums and benefit payments. The balance consists of selling and administrative expenses, premium taxes, additions to reserves, and underwriting gains.

A major cost element in administration of sick-

CHART 1.—Protection provided as percent of income loss from short-term illness, 1948–68



ness-benefit programs is not shown here for lack of data—that is, the costs involved in paying the \$2.4 billion in sick leave during 1968. It can perhaps be reasonably assumed that sick-leave administrative costs are low compared with those of either the public or private insurance program. A sick-leave plan can be added to an already established payroll operation, but an insurance program requires maintenance of a separate system for premium collections and benefit disbursements, and involves other costs not associated with sick leave, such as underwriting gains. The costs associated with administering sick-leave plans, however, are likely to be intermingled with the costs of maintaining a company's payroll and therefore difficult to compile separately.

The \$1.0 billion cost in 1968 of operating insurance and self-insurance programs for cash sickness benefits was 14 percent above that for 1967. Although the rate of increase was the second largest in a number of years, net cost as a percentage of premium payments declined from 1967 to 1968. In 1967 the net cost was almost 35 percent of premiums (including benefits plus

administrative expenses of publicly operated programs); in 1968, this ratio reduced to 33 percent.

Wage and Salary Workers

Individual insurance in large part protects against loss of self-employment income and to some extent against loss of income not derived from employment. Therefore, to get a clear-cut measure of the degree of protection afforded workers against the loss of wage and salary, table 9 relates only to benefits payable under group plans. As might be expected, the large increment in benefits from 1967 to 1968, especially with respect to private insurance payments, materially improved the degree of wage restoration attained by cash sickness benefits. For all wage and salary workers, whether in private or public employment, benefits in 1968 accounted for almost 31 percent of their potentially lost earnings. From 1961 through 1967, the benefit-wage ratio fluctuated between 28–29 percent.

TABLE 9.—Group protection provided in relation to wage and salary loss, 1948–68

(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	11.0
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	208	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	2,594	28.8	7,468	1,465	19.6	2,085	536	25.7	5,383	929	17.3
1965	9,902	2,830	28.6	8,189	1,579	19.3	2,244	557	24.8	5,945	1,022	17.2
1966	10,746	3,074	28.6	8,870	1,709	19.3	2,408	581	24.1	6,462	1,128	17.5
1967	11,184	3,259	29.1	9,165	1,791	19.5	2,479	613	24.7	6,686	1,178	17.6
1968	12,278	3,774	30.7	10,028	2,167	21.6	2,689	689	25.6	7,339	1,479	20.2

The 1968 ratio would have been somewhat higher if the influence of private insurance payments had not been countered by lower rates of increase in 1968 for payments in jurisdictions with legally established programs and under sick-leave plans. The degree of wage replacement achieved by sick leave for government workers, for example, actually declined in 1968 (71.4 percent) from its 1967 level (72.7 percent). Thus, because of the experience of the government sector, the extent of protection recorded for all wage and salary workers advanced at a slower pace (5 percent) from 1967 to 1968 than for workers in private industry (11 percent). The comparatively high rate of wage replacement under sick-leave plans for government workers (more than 70 percent) is reflected in the much higher wage-replacement ratio for all wage and salary workers than the ratio for those in private industry.

Most workers in private employment in jurisdictions with temporary disability laws are covered by sickness benefit programs, but only about half of the workers in other States. Thus in 1968, 26 percent of lost income was replaced in areas with these statutory programs, and the replacement rate was 20 percent in all other private employment. The difference in the rate of wage replacement between these two parts of the pri-

TABLE 10.—Insurance benefits as percent of estimated potentially insurable and compensable income loss¹ for workers without exclusive formal sick leave, 1948–68

(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	37.3	31.7	47.5
1965	1,509	23.6	35.2	29.9	44.8
1966	1,615	23.3	34.9	29.6	44.4
1967	1,662	23.3	35.0	29.7	44.6
1968	2,032	26.3	39.4	33.4	50.2

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).

ate sector would be greater if it were not for the more predominant role played by sick leave in areas not under statutory requirements.

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 on payments are to prevent malingering and may also allow more substantial payments for long illness by not insuring the indispositions of shortest duration. In this review the alternative waiting periods shown and the two-thirds level of weekly wage replacement are in line with provisions of some of the better plans now in operation.

With the assumption of complete income re-

placement, after a waiting period of 3 or 7 days, benefits substituted for 26 percent and 33 percent respectively of lost income in 1968. Benefits totaled 50 percent of insurable and compensable income lost under the most restrictive of the types of insurance plan in table 10—that is, under a policy replacing two-thirds of the wages after a 7-day waiting period. The 50 percent rate of replacement represents the highest level of protection attained in this series. The large upturn in this wage replacement rate in 1968 is a major change from recent years' experience.

Before 1968 the highest rate of partial wage replacement by insurance benefits (46–49 percent) occurred in 1959–61 and then fell to about 45 percent in most of the subsequent years. The encouraging rise in benefit protection in 1968 was partly due to a changeover in the reporting source for private insurance data discussed earlier. It remains to be seen whether the remaining part of the enhanced income-replacement ratio was caused by factors that will continue to operate in future years.