

# Income-Loss Protection Against Short-Term Sickness, 1948-64

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*The past 30 years have seen the development of nationwide social insurance programs and supplementary private plans protecting workers and their families against the hazards resulting from unemployment, long-term disability, old-age, and death. No nationwide program, however, offers protection against the risk of income loss resulting from nonoccupational short-term sickness. Workers in four States and the railroad industry do have the protection of temporary disability insurance laws, and in other States private cash sickness plans are operating that cover various segments of the work force. This is the seventeenth year that the Social Security Administration has published estimates of the extent of protection against income loss caused by short-term sickness.*

THE VALUE of time lost from work because of short-term sickness in 1964 is estimated at \$10.2 billion. Of this potential loss, about \$3.1 billion, or 30 percent, was replaced under various public and private insurance and sick-leave programs.

In 1964 the rate of illness among workers dropped considerably from 1963, when the incidence of illness was unusually high, and was close to the average rate for other recent years, according to estimates derived from the National Health Survey. As a result, even though the employment and payroll subject to loss were considerably greater, the value of time lost from work remained about the same as in 1963, rising only \$40 million. The total cash sickness benefits provided in 1964, including public and private insurance and sick leave, showed a relatively small increase (\$89 million), and there was a rise in the proportion of potential income loss replaced—from 29.3 percent to 30.0 percent. The growth in protection was attributable to small increases in insurance

benefits under individual, group, and public insurance plans.

The data on wage replacement in 1964 do not indicate any significant change in recent trends. From 1948 (the first year these data were compiled) until 1959, the replacement of income increased from 16.6 percent to 28.8 percent, rising at an average rate of more than 1 percentage point a year. Sick-pay protection thus improved substantially during this period. Since 1959 the wage-replacement ratio has fluctuated somewhat, with the net result an apparent leveling off in protection. The wage-replacement ratio for 1964 (30.0 percent), although the highest for the series, is only slightly higher than the 1961 ratio of 29.6.

## MEASURING INCOME LOSS

The estimates of income loss used in 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. The term income loss, as used here, refers to the value of potential as well as actual loss; it includes, for example, income that would have been lost if it were not replaced under a sick-leave plan that continues wages and salaries during periods of illness or under another type of arrangement. Sick leave is counted among the types of benefits that offset the potential wage loss.

Estimates of the number of days of work lost in the year are computed separately for the various components of the labor force—wage and salary workers in private employment, Federal civilian employees, State and local government workers, and self-employed persons. The standard disability rates for each group are modified to reflect year-to-year variations in sickness rates, based on an index derived from the National Health Survey data on days of disability. The sickness index uses 1958 as the base year, with an index number of 100.

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The estimates of the amount of income loss are obtained by applying the modified sickness rates for each employment group to income data for that group. The income data for private wage and salary workers, State and local government workers, and the self-employed are obtained from the national income accounts of the Department of Commerce, as published in the *Survey of Current Business*. The Department revised its income data in 1964, as part of a major revision of the national income accounts, to reflect various statistical and definitional changes. The income-loss series has been adjusted back to 1948 to reflect the new income data.

After 2 years of unusually high sickness rates—106 for 1962 and 107 for 1963—the sickness index fell to a more normal level of 101 for 1964. The rates are affected by the considerable variation in the incidence of respiratory conditions, which are an important factor in the data from the National Health Survey.

Primarily because of the lower sickness index, the total amount of income loss in 1964 (\$10,216 million) was only slightly higher—\$40 million or 0.4 percent—than that in 1963. For the preceding 5 years, in contrast, the average annual increase was about \$500 million or 6 percent. Although wages and other income subject to loss rose 6.2 percent in 1964, a somewhat greater rise than that of other recent years, the increase was balanced by the decline in the sickness rate. There was a small increase in the estimated income loss for each of the wage and salary groups—private, Federal, and State and local—but for self-employment the loss declined slightly.

## PROTECTION AGAINST INCOME LOSS

Most protection against loss of earnings for short-term nonoccupational disability is provided in connection with the worker's place of employment. Some employers insure their workers against this risk by purchasing group policies from commercial insurance companies under which cash benefits are paid during specified periods of disability, or they provide similar benefits 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 methods 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 industry-wide basis. Workers and self-employed persons may also obtain protection through the purchase of individual sickness insurance policies from insurance companies or through membership in fraternal societies.

In California, New Jersey, New York, and Rhode Island most employees are covered under a temporary disability insurance law; workers in the railroad industry are protected under a Fed-

TABLE 1.—Estimated income loss from nonoccupational short-term sickness,<sup>1</sup> by type of employment, 1948–64<sup>2</sup>

[In millions]

Year	Total	Wage and salary workers					Self-employed persons <sup>8</sup>
		Total	In private employment <sup>3</sup>		In public employment		
			Covered by temporary disability insurance laws <sup>4</sup>	Other <sup>5</sup>	Federal <sup>6</sup>	State and local <sup>7</sup>	
1948	\$4,568	\$3,630	\$391	\$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	1,026
1958	7,458	6,371	1,507	3,884	352	628	1,087
1959 <sup>9</sup>	7,724	6,671	1,580	4,079	356	656	1,053
1960 <sup>9</sup>	8,555	7,445	1,773	4,507	403	762	1,110
1961 <sup>9</sup>	8,639	7,498	1,766	4,496	420	816	1,141
1962 <sup>9</sup>	9,622	8,383	1,967	5,021	467	928	1,239
1963 <sup>9</sup>	10,176	8,908	2,067	5,322	504	1,015	1,268
1964 <sup>9</sup>	10,216	9,011	2,063	5,401	506	1,041	1,205

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

<sup>2</sup> Beginning 1960, data include Alaska and Hawaii.

<sup>3</sup> Annual payrolls of wage and salary workers in private employment from table 3, *Survey of Current Business*, Department of Commerce, August 1965 (which reflects 1965 revisions), multiplied by 7 (estimated average workdays lost per year due to short-term sickness) and divided by 255 (estimated workdays in year).

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

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

<sup>6</sup> Federal civilian 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).

<sup>7</sup> 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).

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

<sup>9</sup> Computed as for earlier years, then adjusted to reflect changes in sickness experience (average number of disability days) in 1959–64, as reported in the National Health Survey.

eral sickness insurance law. Under the programs in Rhode Island and the railroad industry, benefits are provided from publicly operated disability funds. In California and New Jersey, employers have the option to "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. Employers may meet this obligation by establishing a privately insured or self-insured plan or may insure with a State fund that itself has many characteristics of a private carrier.

As would be expected, the proportion of wage and salary workers in private industry with protection against the risk of short-term disability is substantially higher in the railroad industry and the four States that have compulsory temporary disability insurance laws than in States without such laws. As the following tabulation for December 1964 shows, 96 percent of private wage and salary workers in the five jurisdictions with laws were covered, in contrast to 49 percent in other areas. They accounted for about 40 percent of the total disability coverage, although representing only 26 percent of all paid employment in private industry. In the Nation as a whole, about 31 million workers, or 61 percent of the total private wage and salary labor force of 51.2 million, had protection under a government-operated program, a formal private plan, or both.

Jurisdiction	Wage and salary employment, December 1964 (in millions)		
	Total	Number with pro- tection	Percent with pro- tection
Total.....	51.2	31.3	61.1
With compulsory coverage.....	13.1	12.7	96.0
Without compulsory coverage.....	38.1	18.5	48.6

Most of the 31.3 million workers with protection were covered by group policies written by insurance companies. About 21.6 million workers were covered by private commercial insurance, including 6.2 million under plans written in accordance with the State temporary disability insurance laws. The five government-operated funds covered 6.3 million workers; union, union-management, and mutual benefit associations pro-

vided protection for about 1 million. The remaining workers were covered under formal sick-leave plans.

Both of the two major types of protection against income loss—insurance plans and paid sick-leave plans—replace income that would otherwise be lost. The kind of replacement, however, is different. Sick-leave plans usually provide for the continuation of wages for a specified number of days—5 to 15 days a year in most cases, sometimes varied with length of service. Some plans permit unused leave to be accumulated from year to year, with or without a maximum limit.

Short-term disability insurance plans (including the five government programs) commonly provide from 13 to 26 weeks of payments, usually after a waiting period of 1 week. Some private plans use a shorter waiting period, perhaps 3 days, and may start benefits on the first day in case of accident. The benefit is usually a stated percentage of the worker's recent wages, often one-half to two-thirds, but is usually subject to some specified maximum amount.

Each of the two types of protection has advantages and disadvantages. The sick-leave plans offer "first-day" benefits and usually full pay but may provide little protection in case of more extended illness or disability, especially if the sick leave is not cumulative. The insurance plans usually provide better protection for lengthier illness or disability, which often imposes the greatest financial hardship. If the plan pays 26 weeks of benefits, it will usually maintain a certain income for the worker until programs geared to long-term disability start paying benefits. Insurance plans, of course, give little or no protection for the most frequent types of illness—those that last only a few days—and then provide only partial wage replacement.

The fact that most illness lasts only one day, or a few, is important in interpreting the data on income replacement under sick-leave and insurance plans. Data on sick leave show replacement of a high proportion of income, probably about three-fourths for a typical group. Insurance plans show a much lower percentage, perhaps 20-40 percent under most plans. Because of the difference in the kind of protection offered, however, the extent of wage replacement is not necessarily an adequate measure of the comparative advantages of the two types of plans.

## PRIVATE INSURANCE

The data in table 2 show the extent of insurance protection against the risk of short-term illness provided through private arrangements with nongovernmental agencies. It includes separate data on private insurance written under voluntary arrangements and that provided in compliance with temporary disability laws in California, New Jersey, and New York. Data on sick-leave plans and, in States without compulsory laws, on self-insured, unfunded employer-

TABLE 2.—Premiums and benefit payments for private insurance against income loss, 1948-64<sup>1</sup>

Year	[In millions]							
	Total	Under voluntary provisions				Under public provisions		
		Total	Group insurance <sup>2</sup>	Individual insurance <sup>2</sup>	Self-insurance <sup>2</sup>	Total	Group insurance <sup>2</sup>	Self-insurance <sup>2</sup>
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	1,185.0	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	255.3	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.....	1,818.9	1,576.5	623.8	928.9	23.8	242.4	154.3	88.1
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.....	1,195.1	1,000.0	501.9	479.9	18.2	195.1	124.2	70.9

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

<sup>2</sup> Data on premiums earned and losses incurred by commercial companies (including fraternal) as provided by the Health Insurance Association of America for the United States, by types of insurance benefit, 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 1956-64, 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.

<sup>3</sup> Union-management trust fund, trade-union, and mutual benefit association plans.

<sup>4</sup> Company, union, and union-management plans under California, New Jersey, and New York laws.

administered plans are excluded from table 2 but are included in table 4.

In last year's article, the data were revised to classify credit accident and health insurance under "individual insurance" instead of being divided between group and individual insurance. Credit accident and health insurance is insurance sold to lending institutions that wish to protect their loans against the risk of nonpayment because of the borrower's disability. This year, premium data after 1955 for certain components of the estimates in table 2 were re-computed, using revised loss ratios based on the reclassification.

After comparatively little growth in 1963, private insurance enjoyed a spurt in 1964. Group and individual insurance shared almost equally in the overall 7.1-percent increase in premiums. (The average increase for the 4 preceding years was 3 percent.) All the commercial insurance growth, however, took place in the areas without compulsory disability laws, as insured private plans in California and New Jersey continued to decline in importance. The growth in group insurance under voluntary provisions was especially notable, with premiums rising \$63.8 million, or 11.4 percent, and benefits rising \$47.7 million, or 10.5 percent. Of the \$626.1 million paid in benefits under commercial group insurance, only 20 percent was paid under public provisions, compared with 22 percent in 1963 and 30 percent in 1953.

## PUBLIC PROVISIONS

In 1964, total benefits under the four State temporary disability insurance programs and the Federal program for railroad workers increased by \$17.3 million, or 3.9 percent, to a total of \$459.5 million (table 3). To the extent that the protection under these programs is provided through commercial insurance companies or other private arrangements, the data in table 3 overlap those in table 2.

The 1964 decline in the benefits paid under private plans written in accordance with law, mentioned previously, represented the seventh consecutive year that these benefits, as a proportion of the total paid under the programs, have

fallen and those paid under the publicly operated funds have increased. The role of self-insured plans has remained relatively small and stable for many years. In 1964, 57.5 percent of the benefits were paid from publicly operated funds and 42.5 percent under approved private plans (including 15.4 percent from self-insured plans). In 1957 the relationship had been almost the reverse, with approved private plans accounting for 58.3 percent of the benefits (including 15.9 percent from self-insured plans).

The 1964 decline in private plan benefits resulted mainly from developments in California. In that State, payments under insured private plans almost vanished during the year, accounting for only a fraction of 1 percent of all benefits; self-insured plans continued to provide about 4 percent of the total. In New Jersey, private plan benefits continued their year-to-year decline as a proportion of total benefits under the program but still represented 58 percent of the total paid in 1964. In New York State, private plans continued to dominate the program as they have since its beginning; they supplied 97 percent of the benefits paid to workers becoming sick while employed.

TABLE 3.—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948-64<sup>1</sup>

[In millions]

Year	Total	Type of insurance arrangement		
		Private plans <sup>2</sup>		Publicly operated funds <sup>4</sup>
		Group insurance	Self-insurance <sup>3</sup>	
1948.....	\$66.4	\$9.0	\$0.3	\$57.1
1949.....	89.2	22.3	4.8	62.1
1950.....	117.4	41.7	12.6	63.1
1951.....	174.2	81.1	32.2	60.9
1952.....	202.3	92.5	35.3	74.5
1953.....	230.2	102.0	37.7	90.5
1954.....	235.1	96.2	35.8	103.1
1955.....	244.6	97.0	38.2	109.4
1956.....	265.0	109.7	41.5	113.8
1957.....	305.3	129.5	48.6	127.2
1958.....	325.1	132.7	51.0	141.4
1959.....	353.2	135.2	54.3	163.7
1960.....	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.....	459.5	124.2	70.9	264.4

<sup>1</sup> Programs under the Railroad Unemployment Insurance Act and the laws of Rhode Island, California, New Jersey (beginning 1949), and New York (beginning 1950). Excludes hospital benefits in California and hospital, surgical, and medical benefits in New York.

<sup>2</sup> Under the laws of California, New Jersey, and New York.

<sup>3</sup> Employers may self-insure by observing certain stipulations of the law. Includes some union plans whose provisions come under the law.

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

## Sick Leave

Estimates of the total value of formal paid sick-leave benefits in private industry and government are shown in table 4. The data include the value of sick leave paid to some workers who are also covered under private or government insurance programs or other types of group protection. In these cases, the sick-leave plan frequently covers the waiting period (typically,

TABLE 4.—Estimated value of formal paid sick leave in private industry and in Federal, State, and local government employment, 1948-64<sup>1</sup>

[In millions]

Year	Total	Workers in private industry <sup>2</sup>			Government workers		
		Total	Not covered by temporary disability insurance laws	Covered by temporary disability insurance laws <sup>3</sup>	Total	Federal <sup>4</sup>	State and local <sup>5</sup>
1948.....	\$413	\$157	\$145	\$12	\$256	\$148	\$108
1949.....	463	163	147	16	300	173	127
1950.....	493	178	154	24	315	172	143
1951.....	589	199	165	34	390	221	169
1952.....	668	215	179	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.....	882	291	242	49	591	280	311
1957.....	949	322	268	54	627	290	337
1958.....	1,032	336	281	55	696	315	381
1959.....	1,073	348	292	56	725	315	410
1960.....	1,215	388	323	65	827	348	479
1961.....	1,306	406	340	66	900	376	524
1962.....	1,453	455	380	75	998	414	584
1963.....	1,618	506	423	83	1,112	450	662
1964.....	1,609	479	403	76	1,130	445	685

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

<sup>2</sup> 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 1948-1954*, 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 *Survey of Current Business* (see table 1, footnote 3), by 255 (estimated workdays in a year).

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

<sup>4</sup> Based on studies showing that Federal employees use paid sick leave of 7.7 days on the average for nonoccupational sickness, equivalent to 3 percent of payroll. Payroll data derived by multiplying number of paid civilian full-time employees 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* (Federal Employment Statistics Office, U.S. Civil Service Commission). Practically all full-time employees are covered by paid sick-leave provisions.

<sup>5</sup> Assumes that number of State and local government employees covered by formal sick-leave plans has increased gradually from 65 percent of the total number employed full time in 1948 to 85 percent in 1964 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 1964. Number of full-time employees from *State Distribution of 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).

<sup>6</sup> Computed as for earlier years, then adjusted to reflect changes in sickness experience (average number of disability days) in 1959-64 as reported in the National Health Survey.

TABLE 5.—Estimated value of formal paid sick leave in relation to income loss due to short-term sickness among workers covered by exclusive formal sick-leave plans,<sup>1</sup> 1948-64

[Amounts in millions]			
Year	Income loss	Value of sick leave under exclusive plans	Ratio (percent) of sick leave to income loss
1948.....	\$568	\$375	66.0
1949.....	602	416	69.1
1950.....	636	433	68.1
1951.....	724	508	70.2
1952.....	806	577	71.6
1953.....	846	612	72.3
1954.....	874	634	72.5
1955.....	951	691	72.7
1956.....	1,022	744	72.8
1957.....	1,104	799	72.4
1958.....	1,200	873	72.8
1959.....	1,239	906	73.1
1960.....	1,423	1,033	72.6
1961.....	1,531	1,122	73.3
1962.....	1,692	1,240	73.3
1963.....	1,870	1,382	73.9
1964.....	1,871	1,385	74.0

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

the first week of disability) before insurance benefits become available. The estimates of sick leave exclude leave granted informally at the employer's discretion.

The estimated value of sick leave for workers in private industry declined from \$506 million in 1963 to \$479 million in 1964, or 5.6 percent. These estimates are based, in part, on results from the annual community wage survey of supplemental wage benefits conducted by the Bureau of Labor Statistics. The BLS report on the 1964 survey attributed the apparent decline in the prevalence of sick leave "to sampling variability and, in case of sick leave for office workers, to a reevaluation of policies in some establishments regarding the formality of the plans."<sup>1</sup>

An additional factor affecting the sick-leave estimates for private industry and for government employees is the sickness index. The 1964 drop in the index accounted for a small decline (1.1 percent) in the value of sick leave for Federal civilian employees, which totaled \$445 million in 1964. This decline also slowed down the rate of increase in estimated sick leave for the fast-growing category of State and local government workers. In 1964, estimated sick leave for this group increased only 3.5 percent, to \$685 million, compared with increases of 9-13 percent during the 3 previous years.

<sup>1</sup> John E. Buckley, "Supplemental Wage Benefits in Metropolitan Areas, 1963-64," *Monthly Labor Review*, May 1965, page 553.

Workers employed by Federal, State, and local governments are the main beneficiaries of the formal sick-leave plans, and they rarely are entitled to other forms of protection. In 1964, an estimated 86 percent of all sick leave granted in public and private employment was under exclusive plans. As a result, most of the formal sick leave discussed in this article represents sick leave paid on an exclusive basis to workers without other protection. For workers under exclusive plans, sick leave replaced 74.0 percent of the potential income lost, about the same proportion as in 1963 (table 5).

### Summary of Protection Provided

A summary of the benefits—both insurance and sick leave—providing protection against income loss caused by sickness is given in table 6. Separate data are shown for benefits provided on a group basis, mostly through the worker's place of employment, and for individual insurance. Individual insurance benefits cannot be allocated between those going to the self-employed and those paid to employed persons.

Total benefits provided in 1964 amounted to

TABLE 6.—Benefits provided as protection against income loss, summary data, 1948-64

[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 <sup>1</sup>	Publicly operated cash sickness funds		
1948.....	\$756.9	\$141.0	\$615.9	\$359.9	\$145.8	\$57.1	\$157.0	\$256.0
1949.....	847.1	150.0	697.1	397.1	172.0	62.1	163.0	300.0
1950.....	939.9	153.0	786.9	471.9	237.8	63.1	178.0	315.0
1951.....	1,150.7	157.0	993.7	673.7	343.8	60.9	199.0	390.0
1952.....	1,301.6	177.0	1,124.6	671.6	382.1	74.5	215.0	453.0
1953.....	1,409.7	279.0	1,230.7	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.....	1,798.3	278.0	1,520.3	929.3	524.5	113.8	291.0	591.0
1957.....	1,959.6	377.2	1,643.4	1,016.4	567.2	127.2	322.0	627.0
1958.....	2,082.5	353.4	1,729.1	1,033.1	555.7	141.4	336.0	696.0
1959.....	2,226.8	389.6	1,837.2	1,112.2	630.5	163.7	348.0	725.0
1960.....	2,418.3	392.8	2,025.5	1,198.5	638.4	172.1	388.0	827.0
1961.....	2,552.8	425.9	2,126.9	1,226.9	625.7	195.2	406.0	900.0
1962.....	2,751.7	418.5	2,333.2	1,335.2	668.2	212.0	455.0	998.0
1963.....	2,979.4	447.2	2,532.2	1,427.2	670.3	243.9	506.0	1,112.0
1964.....	3,068.5	479.9	2,588.6	1,458.6	715.2	264.4	479.0	1,130.0

<sup>1</sup> Includes a small but undetermined amount of group disability insurance benefits paid to government workers and to self-employed persons through farm, trade, or professional associations.

TABLE 7.—Extent of protection against income loss, 1948–64

[Amounts in millions]

Year	Income loss and protection provided			Income loss not protected	Net cost of providing insurance <sup>3</sup>
	Income loss <sup>1</sup>	Protection provided <sup>2</sup>	Protection as percent of loss		
1948.....	\$4,568	\$757	16.6	\$3,811	\$277
1949.....	4,424	847	19.1	3,577	287
1950.....	4,795	940	19.6	3,855	307
1951.....	5,473	1,151	21.0	4,322	311
1952.....	5,814	1,302	22.4	4,512	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	1,798	25.6	5,233	413
1957.....	7,363	1,951	26.5	5,412	482
1958.....	7,458	2,082	27.9	5,376	510
1959.....	7,724	2,227	28.8	5,497	548
1960.....	8,555	2,418	28.3	6,137	542
1961.....	8,639	2,553	29.6	6,086	592
1962.....	9,622	2,752	28.6	6,870	620
1963.....	10,176	2,979	29.3	7,197	596
1964.....	10,216	3,068	30.0	7,148	640

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

<sup>2</sup> Total benefits, including sick leave (from table 6).

<sup>3</sup> Includes retention costs (for contingency reserves, taxes, commissions, acquisition, claims settlement, and underwriting gains) of private insurance companies (from table 2) 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.

\$3,068 million—3.0 percent more than in 1963; the average annual increase since 1960 was 6.2 percent. Sick-leave payments totaled \$1,609 million, and disability insurance benefits \$1,459 million. Sick leave represented 52.4 percent of total benefits, slightly less than in 1963.

The following tabulation shows the annual increase or decrease in the various types of benefits from 1963 to 1964 and for the period 1960–64.

Type of benefit	Average yearly percentage increase	
	1963–64	1960–64
Total.....	3.0	6.2
Individual insurance.....	7.3	5.2
Private group insurance and self-insurance.....	6.7	3.0
Publicly operated funds.....	8.4	11.4
Sick leave, private employment.....	-5.3	5.6
Sick leave, government employees.....	1.6	8.2

These data reflect some of the factors discussed previously, including the growth in private individual and group insurance in 1964, the lower estimates of private sick leave, and the growth of publicly operated funds.

### Measuring the Extent of Protection

Estimates of the extent of protection against income loss caused by sickness are obtained by

comparing total income loss and total benefits paid. The 1964 increase in benefits paid (\$89 million) was twice as great as that in income loss (\$40 million). As a result the proportion of income loss covered by cash sickness benefits advanced from 29.3 percent to 30.0 percent. The dollar amount of income loss not protected decreased slightly (\$49 million) to \$7,148 million.

Although the increase of 0.7 percentage points in the extent of protection followed a similar rise in 1963, it remains to be seen whether the 1948–59 pattern of improving protection is being resumed. The period since 1959 seems to be characterized by both upward and downward fluctuations, with the net result a leveling off in the extent of protection. The changes since 1948 are revealed more clearly by the data presented below, which show the percentage-point increase or decrease from the preceding year in the proportion of income loss replaced.

1949–54.....	1.3	1955–59.....	0.5	1960–64.....	0.2
1949.....	2.5	1955.....	.5	1960.....	-.5
1950.....	.5	1956.....	.9	1961.....	1.3
1951.....	1.4	1957.....	.9	1962.....	-1.0
1952.....	1.4	1958.....	1.4	1963.....	.7
1953.....	.5	1959.....	.9	1964.....	.7
1954.....	1.3				

The average annual increase during 1949–54 was 1.3 percentage points; it would have been 1.0 point even if the unusual 2.5-point rise in 1949 were excluded. Those years and the years 1955–59 (with an average annual gain of 0.9 percent) were both periods of consistent gains, ranging from 0.5 to 1.4 points a year (excluding 1949). In contrast, the years 1960–64 show both increases and decreases and a net gain for the entire period of only 0.2 percent.

The net cost of providing insurance consists mainly of the difference between insurance premiums and benefit payments under commercial and self-insurance. The balance or “retention,” for the most part, represents selling and administrative expenses, premium taxes, additions to reserves, and underwriting gains. In keeping with the increased volume of insurance business, net costs increased by \$44 million, to a total of \$640 million (table 7). The latter figure also includes the cost of administering public programs, which totaled \$16 million, slightly higher than in the preceding year.

The protection provided wage and salary work-

ers through their places of employment, as shown in table 8, includes group insurance—both private and public—and paid sick leave. Two major factors that influence the data for the various groups on the proportion of income loss replaced are (1) the extent of coverage of the group under some kind of cash sickness plan and (2) the degree to which the protection is provided under paid sick leave. The groups covered under temporary disability insurance laws, for example, have insurance coverage and relatively little sick-leave coverage. The income-replacement of 26.0 percent (table 8) reflects mainly the characteristics of the insurance plans, which replace a proportion of income lost, after a waiting period, up to a maximum benefit.

Only about half of all private industry employees in States not covered by disability insurance laws have any kind of insurance or formal sick-leave protection. For those with coverage, sick-leave protection is a fairly important factor, providing in 1964 about \$403 million of the \$923 million total. Nevertheless, because of the large number of wage earners without any type of formal protection, total benefits replaced only 17.1 percent of wages for the entire group. If the benefit data were confined to workers with some kind of protection, the extent of wage replacement would, of course, appear higher than for the

group under disability insurance laws. Because sick-leave plans serve somewhat different purposes than insurance plans, however, comparisons of wage-replacement ratios must be made with caution.

To measure the effectiveness of the insurance plans, the protection actually received is compared in table 9 with the protection that conceivably might be provided if insurance policies were more widespread and if all benefits were more nearly at the relatively high levels of some plans. Insurance plans (both private and government) are designed to compensate for a portion of the potential income loss after the first few days or the first week of sickness. Thus, when prevailing disability insurance provisions are taken into account, the potentially insurable or compensable income—the proportion of income that might be replaced—is less than the total income loss.

To arrive at a hypothetical income loss that is meaningful in terms of current insurance practices, two benchmarks are provided. The total income loss is reduced to allow for (1) a 3-day uncompensated waiting period, which requires a 30-percent reduction and (2) a 7-day uncompensated waiting period—a 45-percent reduction. The potentially insurable income loss is further reduced by one-third to allow for that

TABLE 8.—Group protection provided in relation to wage and salary loss, 1948-64

(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	697	19.4	3,126	397	12.7	483	105	21.7	2,643	292	11.0
1950	3,921	787	20.1	3,415	472	13.8	712	141	19.8	2,703	331	12.2
1951	4,494	994	22.1	3,901	604	15.5	1,059	208	19.6	2,842	396	13.9
1952	4,831	1,125	23.3	4,171	672	16.1	1,132	238	21.0	3,039	434	14.3
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	1,520	25.2	5,203	929	17.9	1,430	314	22.0	3,773	615	16.3
1957	6,335	1,643	25.9	5,442	1,016	18.7	1,512	359	23.7	3,930	657	16.7
1958	6,371	1,729	27.1	5,391	1,033	19.2	1,507	380	25.2	3,884	653	16.8
1959	6,671	1,837	27.5	5,659	1,112	19.7	1,580	409	25.9	4,079	703	17.2
1960	7,445	2,026	27.2	6,280	1,199	19.1	1,773	433	24.4	4,507	766	17.0
1961	7,498	2,127	28.4	6,282	1,227	19.6	1,766	463	26.2	4,496	764	17.0
1962	8,383	2,333	27.8	6,988	1,335	19.1	1,967	491	25.0	5,021	844	16.8
1963	8,906	2,532	28.4	7,389	1,420	19.2	2,067	525	25.4	5,322	895	16.8
1964	9,011	2,589	28.7	7,464	1,459	19.5	2,063	536	26.0	5,401	923	17.1



TABLE 9.—Insurance benefits as percent of estimated potentially insurable and compensable income loss<sup>1</sup> for workers without exclusive formal sick leave, 1948–64

[Amounts in millions]

Year	Amount of insurance benefits <sup>2</sup>	As a percent of income loss—			
		After first 3 days <sup>3</sup>		After first 7 days <sup>4</sup>	
		Total	Two-thirds	Total	Two-thirds
1948.....	\$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	35.9	30.5	45.8
1959.....	1,154	25.4	38.1	32.4	48.5
1960.....	1,203	24.1	36.1	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.....	1,459	25.0	37.5	31.8	47.7

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

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

<sup>3</sup> Based on 70 percent of total income loss (from table 1), after exclusion of income loss of workers covered by exclusive sick-leave plans (from table 5).

<sup>4</sup> 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 5).

portion of the income loss after the waiting period that is not to be indemnified. It is assumed that two-thirds of wages are replaced.

The table compares the dollar value of disability insurance benefits with these benchmarks of hypothetical income loss to show the propor-

tions of potentially insurable and compensable income loss that would be met by existing insurance plans. The wage loss of persons with exclusive sick leave (shown in table 5) is omitted from the computations to avoid inflating the benchmark base with income loss that is already covered by sick leave.<sup>2</sup>

In 1964 the \$1.5 billion paid in insurance benefits represented 37.5 percent of the hypothetical income loss compensable after a 3-day waiting period and 47.7 percent after a 7-day waiting period. The gap in income replacement reflects both the omission of benefits for those workers not covered and the extent to which workers under insurance plans receive less than the desired norm.

The income-replacement indexes show considerable improvement in 1964, reflecting the substantial increases in group and individual insurance benefits. They are not, however, the highest in the series, since they had been exceeded in 1959 and 1961. In fact, 1959 was the high point of the series. From 1948 to 1959 the index rose consistently each year, but since then it has fluctuated within a narrow range.

<sup>2</sup> The income loss of persons covered by sick-leave plans that supplement insurance benefits is not excluded, since such sick-leave provisions do not give any appreciable protection against that portion of the income loss resulting from sickness considered insurable under prevailing provisions.