

# Income - Loss Protection Against Short - Term Sickness, 1948-62

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*This article marks the fifteenth year that the Social Security Administration has reported on the extent of income-loss protection against the risk of short-term illness through public and private cash-sickness plans. From 1948 through 1959, this protection showed a steady growth, but since then benefits as a proportion of lost earnings have fluctuated, with little overall increase in the extent of protection afforded.*

FOR AMERICAN WORKERS in 1962, as in 1961, benefits under government and nongovernment disability insurance and formal sick-leave plans replaced slightly less than 30 percent of their aggregate earnings lost because of nonoccupational sickness. These benefits amounted to an estimated \$2,855 million in 1962, compared with \$757 million disbursed as benefits in 1948, when 17 percent of the estimated income loss was replaced. These figures exclude unknown amounts of informal sick leave granted to workers at the employer's discretion.

For the first 11 years of the period under review, the protection provided by cash-sickness plans showed a steady and relatively rapid year-to-year growth. In 1960 the pattern was broken, as the amounts paid out in benefits declined as a proportion of total income lost. The following 2 years saw ratios of benefits to income loss (29.5 percent and 29.6 percent) that were not much greater than that of 1959 (28.8 percent). When the data are confined to that part of the income loss that would normally be compensated by insurance, the 1961 and 1962 income-loss replacement ratios actually fall below that of 1959.

Total earnings lost because of short-term sickness in 1962 showed the largest increase for any year since 1948. A major factor contributing to the greater earnings loss was a rise in morbidity rates estimated, on the basis of the U. S. National Health Survey, at about 5 percent. This

development, coupled with the growth in the employed labor force and the rise in wage levels, resulted in an increase of \$994 million in the estimated value of time lost through illness and injury in 1962. The last year to see a rise of this magnitude was 1960 (\$842 million).

Unlike the situation in 1960, however, benefits in 1962 kept pace with the increase in lost earnings, so that there was no overall diminution in the protection received. The increase of \$302 million in benefit payments in 1962 was the largest ever recorded for the series. Almost half the rise was attributable to the growth in the aggregate amount of formal sick leave granted to public and private employees. The sick-leave figures in particular reflect the estimated increase in morbidity rates, since in deriving them a direct relationship is assumed between the number of days of sick leave used per worker and the amount of worktime lost. Benefits under individual insurance accounted for almost a third of the 1962 rise; in earlier years, such benefits usually made up less than a fifth of the annual increases.

## MEASURING INCOME LOSS

The income-loss estimate used in this series is designed to reflect the loss of current earning power during the first 6 months of a nonoccupational illness or injury. It thus encompasses practically all the work-time lost because of temporary disability and part of the loss (the first 6 months) attributed to long-term disability. The estimate also includes loss of income that is potential as well as actual—that is, income that might be lost if it were not for a sick-leave plan that continues wages and salaries during periods of illness. Payments under such plans are counted in this series as benefits that offset the potential wage loss.

Using this concept of income loss, it has been estimated that wage and salary workers in private industry lose an average of 7 days of work-

\*Division of Research and Statistics. Earlier articles in this series have appeared in the January issues of the *Bulletin*.

time a year, Federal Government workers 8 days a year, and State and local government employees, 7.5 days a year. These averages have been modified annually, starting with 1959, to reflect the actual year-to-year overall variations in sickness rates as reported by the National Health Survey.

The averages used in this series have generally been higher than those derived from the National Health Survey, though the averages from both sources show a fair amount of consistency with respect to differences among types of employment. For the 12-month period ended June 30, 1962, preliminary data from the National Health Survey show an estimated average of 5.8 days of work lost because of illness or injury by cur-

rently employed persons (including the self-employed) aged 17 or over. For wage and salary workers in private industry, the average was 5.7 days. For Federal workers the average was 6.5 days, and for State and local government employees it was 5.8 days.

The National Health Survey data are based on questions asked through a continuous-sample, household-interview survey. The number of days lost from work is determined only for persons aged 17 or over who reported that at any time during the 2-week period covered by the interview they either worked at or had a job or business.

This measure of work-loss days is more restrictive than that employed here by the Social Security Administration, since it tends to under-report the time lost from work during the first 6 months of a long-term disability. Many workers with prolonged illnesses would fail to have their work-loss days counted unless they specified their jobs were still open to them. The exclusion of such workers undoubtedly deflates the average number of workdays lost per worker as well as the aggregate amount.

Another factor that tends to deflate the average number of days lost is the exclusion from the National Health Survey of persons in institutions. It may be expected that these persons would have a greater-than-average prevalence of long-term disability.

As already pointed out, the intent in the Social Security Administration series is to include the first 6 months of long-term disability, regardless of whether or not the worker is institutionalized or still in the labor force.

On the other hand, the data from the National Health Survey include workdays lost because of occupational injuries, while the Social Security Administration series does not.

Because of the difficulty of reconciling the data from the two sources, the National Health Survey data have been used 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 benchmark year, equal to an index of 100, the applicable sickness rate (or index) was computed for 1959 at 97, 1960 at 103, 1961 at 101, and 1962 at 106. These adjustment factors were then applied across the board to the estimates of income loss

TABLE 1.—Estimated income loss from nonoccupational short-term sickness,<sup>1</sup> by type of employment, 1948-62<sup>2</sup>

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.....	\$4,566	\$3,628	\$391	\$2,805	\$174	\$258	\$938
1949.....	4,429	3,599	483	2,641	190	285	830
1950.....	4,789	3,913	712	2,695	201	305	876
1951.....	5,477	4,489	1,059	2,837	259	334	988
1952.....	5,814	4,829	1,132	3,037	291	369	985
1953.....	6,147	5,197	1,213	3,293	290	401	950
1954.....	6,104	5,160	1,212	3,231	280	437	944
1955.....	6,552	5,569	1,299	3,503	297	470	983
1956.....	7,056	6,036	1,430	3,775	313	518	1,020
1957.....	7,376	6,339	1,512	3,934	323	570	1,037
1958.....	7,451	6,376	1,507	3,889	352	628	1,075
1959 <sup>9</sup> .....	7,738	6,687	1,580	4,095	356	656	1,051
1960 <sup>9</sup> .....	8,580	7,469	1,773	4,531	403	762	1,111
1961 <sup>9</sup> .....	8,662	7,529	1,766	4,527	420	816	1,133
1962 <sup>9</sup> .....	9,656	8,424	1,966	5,063	467	928	1,232

<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 VI-2 in *U.S. Income and Output: A Supplement to the Survey of Current Business, 1958*, and in *Survey of Current Business, National Income Number*, July 1963 (Department of Commerce), 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 I-8 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 and then adjusted to reflect changes in sickness experience (average number of disability days) in 1959-62, as reported in the National Health Survey.

derived through the regular methods for the various labor-force components (see footnotes to table 1).

The National Health Survey collected for the fiscal year 1961-62, for the first time, data on work-loss days by class of worker. In general, these data support the assumptions in this series that wage and salary workers in private industry have, on the average, the smallest number of work-loss days, State and local government employees the next smallest, and Federal Government employees the greatest number.

No attempt has been made at this time to use the National Health Survey data to develop more refined relationships among the various types of employment with respect to work-loss averages. It was thought advisable that additional data be first accumulated to afford a somewhat better basis for such refinements.

The treatment of income loss for self-employed workers deserves special mention. The National Health Survey reported a work-loss average for the self-employed (6.2 days) that was somewhat closer to the average for Federal employees (6.5) than it was to that for wage and salary workers in private industry (5.7). In the Social Security Administration series, the estimate for the self-employed is made in terms of *income-loss* days rather than *work-loss* days.<sup>1</sup>

This approach is used because work-loss days caused by sickness do not necessarily result in income-loss days for many of the self-employed, especially farm operators and business proprietors who are engaged in operations that often continue to yield income despite their short-term absence. Thus, the series has assumed that the self-employed, like wage and salary workers in private industry, lose 7 days of earnings a year because of nonoccupational sickness, although the number of work-loss days may actually be closer to the average (8) that is used for Federal employees. The National Health Survey data now lend weight to this assumption.

Since 1948 the amount of earnings lost (actual and potential) through illness and injury of short-term duration has more than doubled to reach a record high of \$9.7 billion in 1962. For State and local government employees, the amount is three and one-half times what it was

<sup>1</sup> For a more detailed discussion, see the *Bulletin*, January 1960.

in 1948; for Federal employees, two and one-half times; and for workers in private industry, two and one-fifth times. The self-employed have had the smallest increase—only 31 percent—in lost earnings since 1948. These increases reflect, of course, the economic changes—changes in number of workers and in wage levels—that have occurred among the different types of employment.

## PROTECTION AGAINST INCOME LOSS

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

This privately insured protection may be obtained through voluntary action by the employer or the employee, or—as in California, New Jersey, and New York—it may come about as the result of a compulsory temporary disability insurance law. In addition, some of the protection required by law in these three States may be provided by publicly operated funds. Under the other two compulsory programs—Rhode Island's and the Federal program for railroad employees—all the protection required by law comes from publicly operated funds, though private plans may supplement the government-paid benefits.

Under the California and New Jersey laws the proportion of workers covered by private plans has been dropping rapidly in recent years. In 1962, private plans were in effect for about 21 percent of the covered workers in California in contrast to 44 percent in 1958. The corresponding proportions for New Jersey were 54 percent and 62 percent. In New York State, protection

is provided through private plans for about 96 percent of the covered employees.

For government workers, the most common method of providing protection is through paid-sick-leave plans. For the self-employed, protection is generally confined to individual accident and sickness insurance or fraternal policies.

### Private Insurance

Table 2 presents data on the insurance protection provided through private arrangements with nongovernmental agencies against the risk of in-

TABLE 2.—Premiums and benefit payments for private insurance against income loss, 1948-62<sup>1</sup>

[In millions]

Year	Total	Under voluntary provisions				Under public provisions		
		Total	Group insurance <sup>2</sup>	Individual insurance <sup>2</sup>	Self-insurance <sup>3</sup>	Total	Group insurance <sup>2</sup>	Self-insurance <sup>4</sup>
Premiums <sup>5</sup>								
1948.....	\$558.9	\$545.8	\$162.2	\$350.0	\$33.6	\$13.1	\$12.7	\$0.4
1949.....	603.6	564.8	177.8	355.0	32.0	38.8	31.9	6.9
1950.....	685.3	609.4	225.6	360.0	23.8	75.9	58.3	17.6
1951.....	804.7	660.9	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	366.2	547.8	21.1	178.8	128.3	50.5
1956.....	1,206.7	1,028.8	423.0	586.0	19.8	177.9	129.1	48.8
1957.....	1,347.4	1,128.6	460.9	646.0	21.7	218.8	159.1	59.7
1958.....	1,418.7	1,184.3	459.7	703.0	21.6	234.4	169.3	65.1
1959.....	1,527.4	1,292.0	497.0	773.0	22.0	235.4	168.0	67.4
1960.....	1,563.4	1,321.0	532.3	765.0	23.7	242.4	170.7	71.7
1961.....	1,632.0	1,372.8	534.1	815.0	23.7	259.2	181.9	77.3
1962.....	1,799.0	1,534.7	579.9	931.0	23.8	264.3	186.1	78.2
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	359.3	276.0	16.0	151.2	109.7	41.5
1957.....	874.4	696.3	375.5	304.0	16.8	178.1	129.5	48.6
1958.....	909.1	725.4	360.3	349.0	16.1	183.7	132.7	51.0
1959.....	990.1	800.6	399.8	384.0	16.8	189.5	135.2	54.3
1960.....	1,031.2	835.1	430.9	386.0	18.2	196.1	138.1	58.0
1961.....	1,051.6	850.2	414.7	418.0	17.5	201.4	141.3	60.1
1962.....	1,190.2	982.7	454.9	510.0	17.8	207.5	146.1	61.4

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

<sup>2</sup> Data on premiums earned and losses incurred by commercial companies (including fraternal) as provided by the Health Insurance Association of America for the United States, by type of insurance 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 1956-62, dividends deducted from earned premiums (2-3 percent for group; 1 percent for individual).

<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.

<sup>5</sup> Loss ratios applicable to all group insurance were applied to the benefits under voluntary provisions and under public provisions to obtain the premiums applicable to each.

come loss caused by short-term disability. The table shows separately the private insurance written under voluntary arrangements and that written in compliance with State temporary disability insurance laws in California, New Jersey, and New York. Data on paid-sick-leave plans and— in States without compulsory laws—on self-insured, unfunded, employer-administered plans are considered separately in table 4 and excluded from table 2.

Commercial carriers were responsible for almost 95 percent of the premiums and the benefits paid in 1962 under private insurance. The remaining amounts were paid under self-insured plans financed through prepaid arrangements by union and union-management trust funds, trade unions, and mutual benefit associations.

After several years of limited growth, in 1962 private insurance providing for partial cash replacement of lost income enjoyed a spurt. Premiums went up \$167 million—the largest gain for a single year since the series began, although the percentage increase was less than those registered in 1950, 1951, 1953, and 1957. Similarly, benefit payments for 1962 displayed the largest annual increase dollarwise and the fourth greatest percentage increase since 1948.

Premiums and benefit payments under individual wage-replacement policies purchased from commercial carriers led the way in the expansion. Such policies provided \$116 million of the \$167 million increase in earned premiums and \$92 million of the \$139 million increase in benefit outlays in 1962. As a result of this growth, individually purchased policies accounted for 55 percent of the total premiums paid to commercial carriers in 1962—the highest proportion since 1950.

Of the \$601 million paid out nationally in group disability benefits by commercial insurance companies in 1962, 24 percent was expended under the public provisions of California, New Jersey, and New York. The percentage had been as high as 30 in 1953. Since that year the amount of group insurance benefits paid under voluntary provisions has expanded at more than twice the rate of that paid under public provisions. For 1962, the gain from 1961 was 10 percent under voluntary provisions and 3 percent under public provisions. This development is influenced, of course, by the steady shift of coverage from private plans to the State plan in California and New Jersey.

## Public Provisions

Table 3 shows the total amount of protection provided by the four State temporary disability insurance programs and by the cash sickness provisions of the Railroad Unemployment Insurance Act. To the extent that the protection is provided through commercial insurance companies or other private arrangements, the data overlap those in table 2.

The California, Rhode Island, and railroad programs went into effect before the series began in 1948. The New Jersey law became effective January 1, 1949, and the New York act, July 1, 1950. Thus, the data for the first 3 years of the series are not strictly comparable with the data for the period beginning January 1951, when all five laws were fully in effect.

In 1962, workers covered by the five laws, although incurring only 28 percent of the Nation's total wage and salary loss in private employment, received benefits representing 47 percent of all cash sickness benefits (excluding sick leave) disbursed as group protection to private wage and salary workers. In 1951, benefits paid under these laws represented 43 percent of the Nation's sickness insurance benefits; the wage

TABLE 3.—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948-62<sup>1</sup>

Year	[In millions]			
	Total	Type of insurance arrangement		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.....	419.5	146.1	61.4	212.0

<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.

loss incurred amounted to 27 percent of the total private wage and salary loss for that year. The benefit ratios are dependent on such factors

(1) fluctuations in business activity, which influence the rate of growth of accident and sickness insurance in areas not having compulsory laws, and (2) statutory liberalizations in benefit provisions.

The proportion of compulsory benefits underwritten by private plans continued to decline and

TABLE 4.—Estimated value of formal paid sick leave in private industry and in Federal, State, and local government employment, 1948-62<sup>1</sup>

Year	[In millions]						
	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 <sup>6</sup> .....	1,073	348	292	56	725	315	410
1960 <sup>6</sup> .....	1,215	388	323	65	827	348	479
1961 <sup>6</sup> .....	1,306	406	340	66	900	376	524
1962 <sup>6</sup> .....	1,453	455	380	75	998	414	584

<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 table VI-15 in *U.S. Income and Output: A Supplement to the Survey of Current Business, 1958*, and in *Survey of Current Business, National Income Number, July 1963* (Department of Commerce) 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 84 percent in 1962 and that workers covered by such plans received on the average paid sick leave ranging from 5.2 days in 1948 to 5.9 days in 1962. 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 government 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 and then adjusted to reflect changes in sickness experience (average number of disability days) in 1959-62 as reported in the National Health Survey.

reached a low of 49 percent in 1962. This proportion had been as high as 65 percent in 1951 and 58 percent in 1957. The rise in the proportion of government-paid benefits has followed a significant shift in coverage from private plans to State-operated plans in California and New Jersey.

Of the \$208 million paid in 1962 by private plans under the compulsory laws, 70 percent was paid through group accident and sickness insurance policies and the balance from self-insured employer, union, union-management, and mutual benefit association plans. The share attributable to group policies has been dropping slowly from the high of 73 percent reached in 1956.

### Paid Sick Leave

Table 4 presents estimates of the amount of income replaced through formal paid sick-leave benefits in private industry and in government employment, including the value of sick leave paid as a supplement to group insurance, publicly operated plans, or other types of group protection. Sick leave paid informally by employers at their discretion is excluded.

As part of its continuous effort to develop new source material and refine existing estimating procedures, the Division of Research and Statistics undertook a review this year of its estimates of the value of paid sick leave for employees in government service. As a result the sick-leave estimates for State and local government employees for the years since 1956 were revised upward.

Among the sources examined were the data published annually by (1) the International City Managers' Association in their *Municipal Year Books* on sick-leave plans of municipalities; (2) the Council of State Governments in *The Book of the States* on sick-leave plans for State government employees; and (3) the Research Division of the National Education Association on city public school systems with sick-leave plans.

On the basis of these reports, it was estimated that the proportion of all full-time State and local government employees covered by sick-leave plans rose from 80 percent in 1956 (when the Division last reviewed fully the available data on sick-leave plans)<sup>2</sup> to 84 percent in 1962.

<sup>2</sup> *Social Security Bulletin*, January 1958, page 17.

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> 1948-62

[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

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

A comparison of the provisions of individual government sick-leave plans from the above sources also revealed a slow but steady growth from 1956 to 1962 in the number of plans that permit accumulation of leave from 1 year to another and in the maximum that can be accumulated. It was estimated that, as the result of such liberalization, the amount of sick leave used per covered State and local government employee rose from 5.8 days in 1956 to 5.9 days in 1962.

The combined effect of these modifications was to produce an estimate of \$584 million paid in sick-leave benefits in 1962 for State and local government employees. The revised estimate for 1961 was \$524 million—some \$12 million more than the estimate published in January 1963.

A new study by the Civil Service Commission of the sick-leave experience of the Federal Government was also considered in the current review.<sup>3</sup> This study shows that active Federal employees used an average of 8.3 days of sick leave during 1961. This average includes days of sick leave resulting from occupational injuries as well as nonoccupational sickness. When adjusted to exclude occupational injuries, the average becomes consistent with the 7.7 days of sick leave a year that has been assigned the average Federal employee in this series.

The combined 1962 estimate of sick leave for Federal and State and local government em-

<sup>3</sup> U. S. Civil Service Commission, *Draft Report, Government-Wide Sick Leave Study, 1961*, March 1963.

ployees was \$98 million greater than the total of \$900 million estimated for 1961; this was the second largest increase in the 14 years since 1948. The 1962 increase of 11 percent was, however, the same as the annual average gain for this period.

Paralleling the development in government, formal paid sick leave in private industry rose rapidly in 1962—to a new high of \$455 million. Both the dollar increase (\$49 million) and the percentage increase (12.1 percent) were the greatest recorded for private employees in the series.

TABLE 6.—Benefits provided as protection against income loss, summary data, 1948-62

[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				
				Total	Private cash sickness insurance and self-insurance <sup>1</sup>	Publicly operated cash sickness funds	Sick leave	
1948	\$756.9	\$141.0	\$615.9	\$359.9	\$145.8	\$57.1	\$157.0	\$256.0
1949	847.1	150.0	697.1	397.1	172.0	62.1	168.0	300.0
1950	939.9	153.0	786.9	471.9	230.8	63.1	178.0	315.0
1951	1,150.7	157.0	993.7	603.7	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	209.0	1,200.7	718.7	397.2	90.5	231.0	482.0
1954	1,473.2	220.0	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	276.0	1,522.3	931.3	526.5	113.8	291.0	591.0
1957	1,950.6	304.0	1,646.6	1,019.6	570.4	127.2	322.0	627.0
1958	2,082.5	349.0	1,733.5	1,037.5	560.1	141.4	336.0	696.0
1959	2,226.8	384.0	1,842.8	1,117.8	606.1	163.7	348.0	725.0
1960	2,418.3	386.0	2,032.3	1,205.3	645.2	172.1	388.0	827.0
1961	2,552.8	418.0	2,134.8	1,234.8	633.6	195.2	406.0	900.0
1962	2,855.2	510.0	2,345.2	1,347.2	680.2	212.0	455.0	998.0

<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.

A combination of factors is believed responsible for this unprecedented growth in sick-leave payments for workers in private industry. First, the number of days of sick leave used per covered worker presumably increased as the result of the rise of about 5 percent in sickness rates in 1962. Second, there was a 3.7-percent increase in wage and salary levels, to which the value of paid sick leave is closely allied. Third, the labor market area surveys of the Bureau of Labor Statistics showed a slight advance in the proportion of office and plant workers in establishments having formal sick-leave plans. Finally, it may be assumed that the 2.6-percent growth in the full-time, privately employed labor force resulted in

some increase in the number of workers covered by sick-leave plans.

Of the estimated \$455 million paid out in formal sick leave by private employers in 1962, about \$242 million or 53 percent was in the form of exclusive protection under plans, including publicly operated plans, that did not supplement any other group disability protection. The proportion granted as exclusive sick leave was as high as 76 percent in 1948. Since then, the rapid growth of private group insurance has resulted in the entitlement of a growing number of workers to both sick leave and disability insurance benefits.

In government employment, on the other hand, sick-leave plans are used as the basic and, for the most part, exclusive method for providing workers with income-loss protection against short-term sickness. It is estimated that government plans account for more than four-fifths of the exclusive protection attributable to sick-leave plans (table 5).

### Summary of Protection Provided

Data from tables 2, 3, and 4 have been summarized in table 6 to show the total value of all forms of protection against the loss of income incurred because of nonoccupational short-term illness. Since employee-benefit plans and temporary disability insurance laws have special pertinence for wage and salary workers, the group protection provided wage and salary workers is shown separately. Benefits paid under individually purchased disability insurance policies are also shown separately since they cannot be divided into those going to the self-employed and those that augment the group protection available to wage and salary workers.

Despite the growth of employee benefit plans, the group protection provided wage and salary workers in private industry has grown in recent years at a much slower pace than the protection provided through individual insurance or government sick-leave plans. From 1951—the first year all five compulsory laws were fully in effect—to 1962, group benefits for private workers increased 123 percent, contrasted with gains of 225 percent for individual insurance and 156 percent for government sick-leave plans.

TABLE 7.—Extent of protection against income loss, 1948–62

[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.....	\$4,566	\$757	16.6	\$3,809	\$277
1949.....	4,429	847	19.1	3,582	287
1950.....	4,789	940	19.6	3,849	307
1951.....	5,477	1,151	21.0	4,326	311
1952.....	5,814	1,302	22.4	4,512	322
1953.....	6,147	1,410	22.9	4,737	428
1954.....	6,104	1,473	24.1	4,631	453
1955.....	6,552	1,615	24.6	4,937	450
1956.....	7,056	1,798	25.5	5,258	413
1957.....	7,376	1,951	26.5	5,425	482
1958.....	7,451	2,082	27.9	5,369	520
1959.....	7,738	2,227	28.8	5,511	549
1960.....	8,580	2,418	28.2	6,162	544
1961.....	8,662	2,553	29.5	6,109	593
1962.....	9,656	2,855	29.6	6,801	623

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

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

<sup>3</sup> Includes amount retained (for contingency reserves, taxes, commissions, acquisition, claims settlement, and underwriting gains) by 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.

Among employees in private industry, a distinct trend has also developed in the type of group protection provided. Benefits paid under group insured and self-insured cash sickness plans about doubled from 1951 to 1962, those paid under publicly operated funds in 1962 were three and one-half times what they had been in the earlier year, and the amount paid under sick-leave plans was two and one-fourth times the earlier figure.

The income-replacement protection provided for the Nation's public and private workers in

1962 was almost equally divided between sick-leave benefits (\$1,453 million) and disability insurance benefits (\$1,402 million). This pattern has prevailed more or less for the past decade, with first one type of benefit and then the other supplying a larger share of protection.

### MEASURING THE EXTENT OF PROTECTION

The income loss experienced each year because of nonoccupational sickness is related in table 7 to the dollar value of the various forms of protection against this loss. It is thus possible to measure the effective growth in economic security against the risk of income loss from illness, since the data automatically take into account labor-force changes and any adjustments in benefits made to take care of rising earnings levels.

Since 1948, total income loss resulting from short-term sickness has been rising an average of 5.6 percent a year, while benefits (including sick leave) have been rising an average of 10.0 percent. In 1962, both income loss and benefits expanded at the above-average but similar rates of 11.5 percent and 11.8 percent. As a result, the proportion of lost earnings covered by cash sickness benefits hardly advanced at all during 1962, in contrast to an average annual increase of approximately 1.0 percentage points for the earlier years.

TABLE 8.—Group protection provided in relation to wage and salary loss, 1948–62

[Amounts in millions]

Year	Wage and salary workers in private industry											
	All wage and salary workers			Total								
	Income loss	Protection provided		Income loss	Protection provided		Income loss	Covered by temporary disability insurance laws		Income loss	Not covered by temporary disability insurance laws	
		Amount	Percent of income loss		Amount	Percent of income loss		Amount	Percent of income loss		Amount	Percent of income loss
1948.....	\$3,628	\$616	17.0	\$3,196	\$360	11.3	\$391	\$78	19.9	\$2,805	\$282	10.1
1949.....	3,599	697	19.4	3,124	397	12.7	483	105	21.7	2,641	292	11.1
1950.....	3,913	787	20.1	3,407	472	13.9	712	141	19.8	2,695	331	12.3
1951.....	4,489	994	22.1	3,896	604	15.5	1,059	208	19.6	2,837	396	14.0
1952.....	4,829	1,125	23.3	4,169	672	16.1	1,132	238	21.0	3,037	434	14.3
1953.....	5,197	1,201	23.1	4,506	719	16.0	1,213	268	22.1	3,293	451	13.7
1954.....	5,160	1,243	24.1	4,443	743	16.7	1,212	275	22.7	3,231	468	14.5
1955.....	5,569	1,365	24.5	4,802	820	17.1	1,299	289	22.2	3,503	531	15.2
1956.....	6,036	1,522	25.2	5,205	931	17.9	1,430	314	22.0	3,775	617	16.3
1957.....	6,339	1,647	26.0	5,446	1,020	18.7	1,512	359	23.7	3,934	661	16.8
1958.....	6,376	1,734	27.2	5,396	1,038	19.2	1,507	380	25.2	3,889	658	16.9
1959.....	6,687	1,843	27.6	5,675	1,118	19.7	1,580	409	25.9	4,095	709	17.3
1960.....	7,469	2,032	27.2	6,304	1,205	19.1	1,773	433	24.4	4,531	772	17.0
1961.....	7,529	2,135	28.4	6,293	1,235	19.6	1,766	463	26.2	4,527	772	17.1
1962.....	8,424	2,345	27.8	7,029	1,347	19.2	1,966	494	25.1	5,063	853	16.8

As a corollary to the failure of benefits to rise appreciably in relation to lost earnings, the amount of income loss not replaced by insurance or formal sick leave increased from \$6,109 million in 1961 to \$6,801 million in 1962. The rise of \$692 million was the largest recorded for the series and the third greatest in terms of percentages.

Table 7 also shows the secondary cost of operating the mechanism for providing cash disability insurance. The net cost of providing insurance represents the difference between the insurance benefit payments and premiums earned (both shown in table 2), plus the public cost of administering the temporary disability insurance laws.

Net costs were 5.1 percent greater in 1962 than in 1961, in contrast to the annual average rise of 6.3 percent registered since 1948. Two opposing forces were at work influencing net costs. On the one hand, the loss ratios (relation of benefits to income) under both group and individual insurance were higher in 1962 than in 1961, thus leaving proportionately less for retention—selling and administrative expenses, premium taxes, addition to reserves, and underwriting gains. On the other hand, there was a shift of some business from group to individual insurance, which had the effect of increasing the share of the total premium dollar retained by the carriers as payments for their services.

The effect of sick-leave provisions in government employment on the overall group protection received by wage and salary workers in the labor force is readily apparent from table 8. For wage and salary workers in private industry, who are primarily dependent upon insurance measures for protection, benefits paid out in 1962 equaled 19.2 percent of lost wages. When government employees with their extensive paid-sick-leave coverage are included in the computation, cash sickness benefits (including sick leave) jump to 27.8 percent of total wages lost.

These ratios have shown relatively little change in the past 4 years. For workers covered by the temporary disability insurance laws, the fact that the ratio of group benefits to wage loss in 1962 was the same as in 1958 (25 percent) indicates that recent statutory increases in the benefit formulas have kept these programs abreast of rising wage levels. For private wage and salary

workers in States without compulsory laws, the absence of change in the replacement ratio—about 17 percent—indicates a less favorable development, since the proportion of such workers who had some sort of formal protection against non-occupational disability rose from 50 percent to 53 percent during the 4 years.

As a final measure of the existing protection provided by disability insurance plans and policies, it is useful to examine that portion of the

TABLE 9.—Insurance benefits as percent of estimated potentially insurable and compensable income loss<sup>1</sup> for workers without exclusive formal sick leave, 1948–62

[Amounts in millions]

Year	Amount of insurance benefits <sup>2</sup>	As percent of—			
		Income loss, excluding first 3 days <sup>3</sup>	Two-thirds of income loss, excluding first 3 days	Income loss, excluding first 7 days <sup>4</sup>	Two-thirds of income loss, excluding first 7 days
1948.....	\$344	12.3	18.4	15.6	23.5
1949.....	384	14.3	21.5	18.2	27.4
1950.....	447	15.4	23.1	19.6	29.3
1951.....	562	16.9	25.3	21.5	32.2
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	26.0	39.0
1956.....	916	21.7	32.5	27.6	41.4
1957.....	1,002	22.8	34.2	29.0	43.6
1958.....	1,050	24.0	36.0	30.5	45.8
1959.....	1,154	25.4	38.0	32.3	48.4
1960.....	1,203	24.0	36.0	30.6	45.8
1961.....	1,247	25.0	37.5	31.8	47.7
1962.....	1,402	25.1	37.7	32.0	48.0

<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).

residue of lost income that might conceivably be recovered if insurance policies were more widespread and if all benefits were more nearly at the relatively high level of some plans.

Insurance plans undertake to compensate for only a part of the income loss. They pay less than the “take-home” wage in order to discourage malingering, and they usually do not cover the first few days or first week of illness in order to reduce the administrative burden of processing large numbers of short-period claims. Consequently the Nation’s potentially insurable and compensable income loss under prevailing disability insurance provisions is somewhat less than the total income loss that is under consideration in table 7.

(Continued on page 23)

TABLE 4.—Status of the unemployment trust fund, by specified period, 1960–63<sup>1</sup>

[In thousands]

Period	Assets at end of period <sup>2</sup>		State accounts				Transfers for Federal-State administration	Railroad unemployment insurance accounts <sup>5</sup>				
	Total assets	Invested in U.S. Government securities <sup>3</sup>	Deposits and transfers <sup>4</sup>	Interest	Withdrawals for benefits	Balance at end of period		Deposits and transfers	Net interest <sup>6</sup>	Withdrawals for benefits <sup>7</sup>	Withdrawals for administration	Balance at end of period
Calendar year:												
1960.....	\$6,652,737	\$6,638,357	\$2,299,539	\$194,510	\$2,748,243	\$6,625,843	\$203	\$204,118	-\$830	\$274,309	\$9,020	\$15,280
1961.....	5,841,099	5,823,427	2,525,845	176,137	3,511,974	5,815,850	594,766	283,475	-889	267,925	9,680	20,261
1962.....	6,287,022	6,264,910	2,987,783	173,428	2,725,505	6,251,556	421,070	212,096	-11,318	189,245	8,820	22,973
Fiscal year:												
1960-61.....	5,739,054	5,716,523	2,417,461	196,399	3,558,074	5,728,958	392,937	293,653	-657	283,037	9,415	7,588
1961-62.....	5,828,530	5,788,655	2,767,203	165,182	2,856,583	5,804,760	483,812	254,274	-12,060	226,100	8,990	14,713
1962-63.....	6,263,151	6,245,133	3,011,325	183,620	2,812,637	6,187,068	351,984	185,528	442	175,258	8,850	16,575
1962												
January-March.....	5,392,007	5,341,913	367,323	39,934	927,660	5,295,447	104,116	59,156	-676	66,245	2,085	10,411
April-June.....	5,828,530	5,788,755	1,119,486	40,767	650,940	5,804,760	177,574	53,901	-10,854	36,585	2,160	14,713
July-September.....	6,275,170	6,222,551	935,272	45,576	541,959	6,243,648	37,880	48,646	100	40,716	2,225	26,517
October-December.....	6,287,022	6,264,910	565,702	47,152	604,946	6,251,556	101,500	50,393	113	45,699	2,350	22,973
1963												
January-March.....	5,860,334	5,806,659	379,141	44,877	971,697	5,703,878	109,806	49,148	111	48,717	2,150	21,365
April-June.....	6,283,151	6,245,133	1,131,211	46,015	694,035	6,187,068	102,799	37,341	119	40,126	2,125	16,575
July-September.....	6,716,108	6,661,657	943,474	50,577	551,798	6,629,321	106,740	41,809	115	32,081	2,120	24,298

<sup>1</sup> On a ledger basis.

<sup>2</sup> Includes transactions and assets, not shown separately, of the Federal unemployment account, under the Employment Security Administrative Financing Act of 1954; of the employment security administration account under the Employment Security Act of 1960; and, beginning 1961, of the Federal extended compensation and temporary extended railroad unemployment insurance accounts.

<sup>3</sup> Includes accrued interest purchased, and repayments on account of accrued interest on bonds at time of purchase.

<sup>4</sup> Includes, when applicable, loans and transfers from the Federal un-

employment account and/or transfers from undistributed appropriations, and from the Federal extended compensation account.

<sup>5</sup> Includes temporary disability program, and transactions and assets of the railroad unemployment insurance administration fund and advances from repayments to railroad retirement account as well as temporary extended account transfers.

<sup>6</sup> Includes deduction of interest paid to railroad retirement account with loan repayments.

<sup>7</sup> Includes repayments of loans to railroad retirement account.

Source: Unpublished Treasury reports.

## INCOME LOSS PROTECTION AGAINST SHORT-TERM SICKNESS

(Continued from page 12)

To arrive at a hypothetical income loss that might be meaningful in terms of current insurance practices, two benchmarks are provided. The total income loss is reduced (1) by 30 percent to allow for a 3-day uncompensated waiting period and (2) by 45 percent to allow for a 7-day uncompensated waiting period. In each case this potentially insurable income loss is further reduced by one-third to allow for that portion of the income loss after the waiting period that is not indemnified under most current insurance policies.

Table 9 compares the dollar value of disability insurance benefits with these benchmarks of hypothetical income loss to show the proportions 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 bench-

mark base with income loss that is already covered by sick leave.<sup>4</sup>

In 1962, insurance benefits of \$1,402 million were meeting 37.7 percent of the theoretical income loss (after excluding the first 3 days of income loss and one-third of the wage loss after the waiting period), or little more than twice the 1948 proportion. When the first 7 days of sickness are excluded, the proportion of the potentially compensable income loss replaced by insurance in 1962 becomes 48.0 percent; in 1948 it was 23.5 percent.

In recent years, however, these indexes of the effectiveness of insurance in meeting the impact of illness have shown some tendency to level off. In fact, the indexes, while showing some gain from 1960 and 1961 to 1962, were still less than the highs reached in 1959.

<sup>4</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 insurance provisions.