

Income-Loss Protection Against Illness, 1948-66

by ALFRED M. SKOLNIK*

The Social Security Administration has published annually, starting with data for 1948, estimates of the extent of protection American workers have against income loss caused by short-term nonoccupational sickness. This protection, which is provided by law in four States and the railroad industry and by voluntary arrangements in other jurisdictions, replaced about 29 percent of aggregate earnings lost in 1966, a ratio that has shown little change in recent years. The methodology and sources used in making these estimates, as well as the detailed findings, are presented below.

DESPITE a greater-than-average increase in disability benefit payments in 1966, overall protection against the risk of short-term nonoccupational sickness showed no improvement over 1965 in terms of the proportion of lost earnings replaced. For both years, benefits paid out through government and nongovernment disability insurance and formal paid-sick-leave plans amounted to 29.4 percent of the potential income loss. For the last 8 years, this ratio has fluctuated between 28 and 30 percent, after advancing at an average rate of more than one percentage point a year during the period 1948-59. Excluded from these figures are unknown amounts of informal sick-leave benefits paid to workers at the employer's discretion.

Contributing to the continuation of the leveling off was an above-average increase in 1966 in the estimated value of time lost through illness and injury that brought the aggregate income loss to a new high of \$12.2 billion. The 1966 rise of \$914 million in lost earnings was the third largest in the series and reflects the rapid rate with which the level of wages and employment rose during the year. The increase took place in spite of a slight drop of about 1 percent in the average amount of sickness incurred per person, as estimated on the

basis of data from the Health Interview Survey of the U.S. Public Health Service.

Cash sickness benefits in 1966 totaled \$3.6 billion, of which more than half was attributable to paid sick-leave plans and the balance to insurance or self-insured plans. Sick-leave plans are increasingly providing a greater share of dollar outlays. Three-fifths of the \$264 million increase in benefit payments in 1966 represented formal sick leave granted to public and private employees.

After years of little change, the proportion of workers in private industry covered under cash sickness plans showed an increase in 1966. About 34.5 million workers, or 63 percent of the wage and salary employees in private industry, had some type of formal protection under private and public plans. In the 3 preceding years, the ratio had been 61 percent. Also showing an increase was the proportion of private wage and salary workers covered by voluntary cash sickness plans in the States without temporary disability insurance laws. In 1966, this proportion was 51 percent after remaining at 48-49 percent for the last decade.

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. This concept of short-term income loss is based on traditional usage developed in connection with accident and sickness insurance practices and later adopted by government disability insurance programs. In designing various types of insurance policies and programs, the 6-month period was considered a useful administrative device for distinguishing between short-term and long-term disability. Disability that has already lasted such a substantial period of time is customarily dealt with under plans designed for long-continued or permanent disability. The first 6 months of any illness are

*Office of Research and Statistics. The material was prepared with the assistance of Marilyn Katz.

thus included in the short-term category regardless of the eventual span of illness. From the viewpoint of the actual nature of disability, these distinctions are of course arbitrary. There is little evidence to indicate that the period of 6 months represents any significant point in the distribution of the duration of disabilities.

The term income loss, as used in this article, refers to the value of potential as well as actual loss. It includes, for example, income that would have been lost if 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.

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

The averages used in this series have been higher than those derived from the Health Interview 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, 1966, preliminary data from the Health Interview Survey show an estimated average of 5.8 days of work lost because of illness or injury by currently employed persons (including the self-employed) aged 17 or over. For wage and salary workers in private industry, the average was 5.6 days. For Federal workers the average was 6.4 days, and for State and local government employees it was 5.6 days.¹

The Health Interview Survey data are based on questions asked through a continuous-sample, household-interview survey of the noninstitutionalized population. The number of days lost from work is determined only for persons currently employed, defined as persons aged 17 and over

¹ Health Interview Survey data for an earlier year show little variance in these work-loss averages. For the 12-month period ended June 30, 1962, the overall average of work-loss days was 5.8; for private wage and salary workers, 5.7 days; for Federal workers, 6.5 days; and for State and local government employees, 5.7 days.

who worked at any time during the 2-week period covered by the interview and those temporarily absent from work (because of temporary illness, vacation, strikes, or bad weather) who would be expected to return.

This measure of work-loss days is more restrictive than that employed here by the Social Security Administration, since it tends to underreport the time lost from work during the first 6 months of a long-term disability. Many workers with prolonged illnesses that may keep them from

TABLE 1.—Estimated income loss from nonoccupational short-term sickness,¹ by type of employment, 1948-66²

[In millions]

Year	Total	Wage and salary workers					Self-employed persons ⁸
		Total	In private employment ³		In public employment		
			Covered by temporary disability insurance laws ⁴	Other ⁵	Federal ⁶	State and local ⁷	
1948....	\$4,568	\$3,630	\$391	\$2,807	\$174	\$258	\$938
1949....	4,424	3,601	483	2,643	190	285	823
1950....	4,795	3,921	712	2,703	201	305	874
1951....	5,473	4,494	1,059	2,842	259	334	979
1952....	5,814	4,831	1,132	3,039	291	369	983
1953....	6,144	5,199	1,213	3,295	290	401	945
1954....	6,094	5,161	1,212	3,232	280	437	933
1955....	6,546	5,573	1,299	3,507	297	470	973
1956....	7,031	6,034	1,430	3,773	313	518	997
1957....	7,363	6,335	1,512	3,930	323	570	1,028
1958....	7,458	6,371	1,507	3,884	352	628	1,087
1959....	7,724	6,071	1,580	4,079	356	656	1,053
1960....	8,555	7,445	1,773	4,507	403	762	1,110
1961....	8,639	7,498	1,766	4,496	420	816	1,141
1962....	9,622	8,383	1,967	5,021	467	928	1,239
1963....	10,178	8,905	2,067	5,323	504	1,011	1,273
1964....	10,248	9,015	2,063	5,405	506	1,041	1,233
1965....	11,270	9,907	2,219	5,975	548	1,165	1,363
1966....	12,184	10,773	2,369	6,500	622	1,282	1,411

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

² Beginning 1960, data include Alaska and Hawaii.

³ Annual payrolls of wage and salary workers in private employment, 1948-1964, from table 6.2 in *The National Income and Product Accounts of the United States, 1929-1965, Statistical Tables: A Supplement to the Survey of Current Business, 1966*, and in *Survey of Current Business, July 1967* (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).

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

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

⁶ Federal civilian payroll in United States from U.S. Civil Service Commission, multiplied by 8 (estimated average workdays lost per year due to short-term sickness) and divided by 260 (scheduled workdays in year).

⁷ Annual wage and salary payrolls of State and local government employees from Department of Commerce data (see footnote 3), multiplied by 7.5 (estimated average workdays lost per year due to short-term sickness) and divided by 255 (estimated workdays in year).

⁸ Annual farm and nonfarm proprietors' income from table 1.10 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).

⁹ Computed as for earlier years, then adjusted to reflect changes in sickness experience (average number of disability days) in 1959-66, as reported in the Health Interview Survey.

returning to work would consider themselves no longer attached to the labor market (not "currently employed") and would not have their work-loss days counted. The exclusion of such workers undoubtedly deflates the average number of work-days lost per worker as well as the aggregate amount.

Another factor that tends to deflate that average is the exclusion from the Health Interview Survey of persons in institutions. It is to be expected that these persons, many of whom are confined to tuberculosis and mental hospitals, would have a greater-than-average prevalence of long-term disability and consequently a disproportionately large number of work-loss days per person.

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.

Other factors that increase the gap between the Health Interview Survey estimates of work-loss days and those of the Social Security Administration are (1) exclusion of less than full days of sickness from the Health Interview Survey data; and (2) possible underreporting of work-loss days in the Health Interview Survey as a result of "proxy respondents" and normal errors of response characteristic of household surveys. On the other hand, the data from the Health Interview Survey include workdays lost because of occupational injuries, and the Social Security Administration series does not.

Because of the difficulty of reconciling the data from the two sources, the Health Interview 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, equaling an index of 100, the applicable sickness rate (or index) was computed for the subsequent years. These annual adjustments were then applied across the board to the estimates of income loss derived through the regular methods for the various labor-force components (see footnotes to table 1).

The rate of sickness among workers, as measured by the sickness index, dropped from 103 in 1965 to 102 in 1966. The sickness rate has been as high as 107 in 1963 and as low as 97 in 1959.

The treatment of income loss for self-employed

TABLE 1a.—Number of work-loss days per person per year, for currently employed persons aged 17 and over, by class of worker, sex, and age, July 1965–June 1966

Age	Private wage and salary workers	Federal government employees	State and local government employees	Self-employed
Total				
Total.....	5.6	6.4	5.6	7.0
17-24.....	4.2	5.3	3.6	2.9
25-44.....	5.3	6.2	6.0	5.8
45-64.....	6.6	7.0	6.1	7.9
65 and over.....	8.7	(1)	6.3	7.5
Men				
Total.....	5.7	5.8	5.6	7.3
17-24.....	4.2	7.1	3.6	2.9
25-44.....	4.9	6.1	5.0	5.6
45-64.....	7.0	5.4	7.0	8.6
65 and over.....	11.2	(1)	5.9	8.3
Women				
Total.....	5.5	8.1	5.7	5.7
17-24.....	4.1	3.7	3.6	(1)
25-44.....	6.1	6.3	7.3	6.7
45-64.....	5.8	12.1	5.2	5.6
65 and over.....	4.8	(1)	7.1	4.2

¹ Does not meet standards of reliability.

Source: Public Health Service, National Center for Health Statistics (unpublished data from the Health Interview Survey).

workers deserves special mention. The Health Interview Survey reported a work-loss average for the self-employed that was higher than that for other classes of workers (table 1a). In the Social Security Administration series, however, this difference is not reflected in the data because the estimates are designed to measure *income-loss* days rather than *work-loss* days.

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 lose the same number of days of earnings as wage and salary workers in private industry (7), although the number of work-loss days exceeds the average number reported for other groups of workers.

Despite a drop in sickness rates, the total estimated amount of income loss in 1966 (\$12,184 million) was 8.1 percent larger than that of 1965 (table 1). The \$914 million increase in earnings lost was the third highest for the series and

reflects a substantial growth in the amount of earnings subject to loss during 1966, a year characterized by a relatively high level of employment and earnings.

Among the components of the labor force, the government sector has shown the largest percentage increase since 1948. The estimated wage loss from short-term nonoccupational sickness for Federal employees was three and one-half times the amount estimated in 1948. For State and local employees, the 1966 wage loss was five times that in 1948. The self-employed have had the smallest increase—only 50 percent—in lost earnings since 1948.

The Health Interview Survey data for fiscal year 1966 reveal interesting age and sex differences in work-loss averages (table 1a). Work-loss averages increased with age for all classes of workers except the self-employed who showed a lower average for those aged 65 and over than for those aged 45–64. When the data are distributed by sex, however, different patterns emerge. For example, women aged 25–44 had higher work-loss averages than women in other age categories. This pattern was true for all classes of workers except Federal employees. Among the latter, women aged 45–64 reported almost twice as many days of work-loss as those aged 25–44. As another example, higher work-loss averages were reported for Federal men employees in the younger age brackets than for the older groups. Among State and local men employees, the highest averages were shown for those aged 45–64.

Men wage earners reported a greater number of work-loss days than women wage earners in private industry but fewer than women in government service. This difference was not consistent among age groups. Thus, women workers had higher work-loss averages than men aged 25–44 for all classes of workers.

PROTECTION AGAINST INCOME LOSS

Most of the protection against loss of earnings from short-term nonoccupational disability is provided through the worker's place of employment. Some employers insure their workers against this risk by purchasing group policies from commercial companies under which cash benefits are

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

Among other sources of employment-connected protection against income loss resulting from sickness are mutual benefit associations and union or union-management plans, often on a regional or industrywide basis. 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, coverage is provided through a compulsory State temporary disability law, and in the railroad industry workers are protected under a Federal cash sickness law. In Rhode Island and the railroad industry, all benefits are provided from publicly operated disability funds. In California and New Jersey, employers may "contract out" of the public plan by providing an approved private plan, usually one insured by a commercial company or financed on a self-insured basis. The New York law requires employers to provide sickness protection of a specified value for their employees by establishing a privately insured or self-insured plan or insuring with a State fund that itself has many characteristics of a private carrier. In California, New Jersey, and New York, union or union-management plans may provide the sickness benefits required by law.

The coverage provisions of the temporary disability laws in the four States, which are similar to the unemployment insurance laws of those States, cover most employees in industrial and commercial firms. They generally do not cover hired farm workers (except in California), domestic service workers, or employees of governments and nonprofit organizations. Despite these exemptions, the overwhelming majority of wage and salary workers in these States are protected against short-term sickness.

In the jurisdictions without temporary disability insurance laws a different picture emerges. In 1966, about half the private wage and salary

labor force in States without laws (excluding railroad employees) had some type of sickness benefit protection. As the following tabulation shows, such protection has shown hardly any growth in the last decade as the number of protected workers has little more than kept up with increases in the private labor force. The data

Year	Total number (in thousands)	With protection	
		Number (in thousands)	Percent of total
1954.....	31,400	15,000	47.8
1956.....	34,200	16,400	48.0
1958.....	33,600	16,000	47.6
1960.....	34,300	16,800	49.0
1962.....	35,900	17,300	48.2
1964.....	38,100	18,500	48.6
1965.....	40,000	19,500	48.7
1966.....	41,000	20,800	50.7

exclude persons with protection only under group credit insurance arrangements since this type of insurance does not generally stem from an employment relationship. (Credit insurance is insurance purchased by lending institutions to protect their loans against the risk of nonpayment because of the borrowers' disability.)

These data also exclude workers with informal sick-leave protection. Such informal arrangements for continuation of pay at the discretion of employers are rarely specified publicly in advance. It is therefore difficult to estimate either the number of workers who would actually receive payments of this nature when they are sick or the magnitude of such benefits.

When the data on the protection offered by both public and private income-loss programs are combined, an estimated 34.5 million wage and salary workers or about 63 percent of the Nation's private labor force were covered in 1966. Most of the 34.5 million workers with protection were covered by group policies written by insurance companies. About 24.1 million workers were covered by private commercial insurance, including 6.6 million under plans written in accordance with the State temporary disability insurance laws. The five government-operated funds provided protection for 6.8 million workers; union, union-management, and mutual benefit associations for about 1 million. The remaining workers were covered exclusively under formal sick-leave plans.

Characteristics of Plans

Both the major types of protection against income loss—insurance plans and paid sick-leave plans—replace income that would otherwise be lost, but the method of replacement is of course very different. Sick-leave plans usually provide for the continuation of wages for a specified number of days, usually 5–15 days a year, sometimes varying 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 include private insurance and self-insurance and the five government programs whose benefit structures are similar to that of voluntary insurance plans. The disability insurance plans commonly provide 13–26 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 cases of more extended illness or disability, especially if the sick leave is not cumulative. The insurance plans usually provide better protection for the lengthier illness or disability that 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 a single 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 amount of insurance protection against the risk of short-term illness provided through insurance companies and other private organizations is shown in table 2. The table 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. As for previous years, credit accident and health insurance has been included in the individual insurance category. Data on sick-leave plans and, in States without compulsory laws, on self-insured, unfunded employer-administered plans are excluded from table 2 but are included in table 4.

Premiums for private insurance providing for partial cash replacement of lost income amounted to \$2.1 billion in 1966, some \$208 million higher than the 1965 total. This increase was the largest absolute gain for a single year in the history of the series and the largest percentage gain since 1957.

The 10.8-percent increase in premium income was not quite matched by benefit payments, which rose 8.3 percent to a total of \$1.3 billion in 1966. The benefit increase, however, was the largest since the late 1950's, both in absolute and relative terms.

As in the previous year, premiums and benefit payments under group accident and insurance sickness policies purchased from commercial carriers led the way in the expansion. Such policies provided \$113 million of the \$208 million increase in earned premiums and \$68 million of the \$103 million rise in benefit outlays in 1966. As a result of this growth, group insurance policies under voluntary and public provisions accounted for 55 percent of total benefit payments under private insurance in 1966, compared with 52 percent in 1964. Individually purchased insurance as a proportion of the total dropped from 41 percent to 38 percent during this period, and benefits under self-insured and other private plans accounted for the balance.

Of the \$734 million paid out nationally in

TABLE 2.—Premiums and benefit payments for private insurance against income loss, 1948–66¹

(In millions)

Year	Total	Under voluntary provisions				Under public provisions		
		Total	Group insurance ²	Individual insurance ²	Self-insurance ³	Total	Group insurance ²	Self-insurance ⁴
Premiums								
1948.....	\$558.9	\$545.8	\$162.2	\$350.0	\$33.6	\$13.1	\$12.7	\$0.4
1949.....	603.6	564.8	177.8	355.0	32.0	38.8	31.9	6.9
1950.....	685.3	609.4	225.6	360.0	23.8	75.9	58.3	17.6
1951.....	804.7	660.9	269.4	366.0	25.5	143.8	102.9	40.9
1952.....	874.0	718.2	286.2	405.4	26.6	155.8	112.8	43.0
1953.....	1,026.0	839.5	321.5	494.8	23.2	186.5	136.2	50.3
1954.....	1,074.1	896.0	340.1	534.2	21.7	178.1	129.8	48.3
1955.....	1,133.9	955.1	386.2	547.8	21.1	178.8	128.3	50.5
1956.....	1,206.3	1,029.2	418.3	591.2	19.7	177.1	128.5	48.6
1957.....	1,346.9	1,129.7	453.7	654.4	21.6	217.2	157.9	59.3
1958.....	1,417.9	1,185.6	449.6	714.6	21.4	232.3	167.8	64.5
1959.....	1,526.4	1,293.6	484.1	787.8	21.7	232.8	166.1	66.7
1960.....	1,561.9	1,323.1	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.....	1,815.6	1,577.6	620.8	933.0	23.8	238.0	153.2	84.8
1965.....	1,927.1	1,668.7	710.9	933.1	24.7	258.4	163.0	95.4
1966.....	2,134.9	1,854.4	810.2	1,018.5	25.7	280.5	176.3	104.2
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	357.3	278.0	16.0	151.2	109.7	41.5
1957.....	874.4	696.3	372.3	307.2	16.8	178.1	129.5	48.6
1958.....	909.1	725.4	355.9	353.4	16.1	183.7	132.7	51.0
1959.....	990.1	800.6	394.2	389.6	16.8	189.5	135.2	54.3
1960.....	1,031.2	835.1	424.1	392.8	18.2	196.1	138.1	58.0
1961.....	1,051.6	850.2	406.8	425.9	17.5	201.4	141.3	60.1
1962.....	1,086.7	882.4	445.8	418.5	18.1	204.3	143.7	60.6
1963.....	1,117.5	919.3	454.2	447.2	17.9	198.2	130.6	67.6
1964.....	1,192.4	1,001.0	498.9	483.9	18.2	191.4	123.2	68.2
1965.....	1,239.7	1,042.5	542.0	482.6	17.9	197.2	124.4	72.8
1966.....	1,342.7	1,134.0	602.9	512.9	18.2	208.7	131.2	77.5

¹ Beginning 1960, data include Alaska and Hawaii.

² Data on premiums earned and losses incurred by commercial companies (including fraternal) as provided by the Health Insurance Association of America for the United States, by types of insurance benefit, adjusted to include accidental death and dismemberment provisions in individual policies that insure against income loss to offset understatement arising from the omission of current short-term income-loss insurance in automobile, resident liability, life, and other policies. For 1956-66, dividends deducted from earned premiums (2-3 percent for group; 1 percent for individual). Starting with 1956, all credit accident and health insurance classified under individual insurance.

³ Union-management trust fund, trade-union, and mutual benefit association plans.

⁴ Company, union, and union-management plans under California, New Jersey, and New York laws.

group disability benefits by commercial insurance companies in 1966, 18 percent was expended under the public provisions of California, New Jersey, and New York. This ratio has declined continuously since 1953 when it was as high as 30 percent. The decline has been influenced, of course, by developments under the California temporary disability insurance law. In that State, payments under insured private plans have

almost vanished as the result of 1963 regulations that bar substantial adverse selection of risks by insurance carriers according to age, sex, and wage level. California's privately insured plans, which accounted for almost one-fifth of the total group insurance benefits paid under public provisions in 1962, had less than 2 percent in 1966.

Public Provisions

The total amount of protection under the five temporary disability insurance laws, by type of insurance arrangement, is presented in table 3. To the extent that the protection is provided through commercial insurance companies or other private arrangements the data in table 3 overlap those in table 2.

The dominating element of table 3 is the declining role of private plans and the growing role of publicly operated funds in providing the mandated disability benefits. From 1957 to

1966, the share of benefits provided by publicly operated funds rose from 42 percent to 57 percent. As noted earlier, there has been a drastic shift in coverage away from group insurance under private plans in California. In New Jersey also the proportion of workers covered by privately insured plans has been steadily dropping. Offsetting this development to some extent has been the continual growth of private group insurance under the New York law.

This change has been most pronounced during the period 1962-66 when the proportion of total payments provided through group insurance policies dropped from 34 percent to 27 percent. A small part of the shift in coverage away from group insurance private plans in California and New Jersey has been to self-insured plans, rather than to publicly operated funds. Self-insured plans accounted for 16 percent of the benefits disbursed in 1966 under the five temporary disability insurance laws, compared with 15 percent in 1962.

In 1966 workers covered by the disability insurance laws, though they incurred only 27 percent of the Nation's wage loss in private employment, received 44 percent of all cash-sickness benefits (excluding sick leave) paid as group protection to private wage and salary workers. This percentage has been dropping in recent years, largely as a result of the steady decline in benefits under the Federal program for railroad workers that reflects the decline in railroad employment. Sickness benefits under the railroad program reached a peak of \$66.2 million in 1959 and have subsequently fallen each year. The further decline of \$2 million in 1966 reduced the railroad payments to a low of \$38.8 million.

Paid Sick Leave

Estimates of the amount of income replaced through formal paid sick-leave benefits in private industry and in government are given in table 4. The estimates include the value of sick-leave benefits paid as a supplement to group insurance, publicly operated plans, or other types of group protection. In these cases the sick-leave plan frequently covers the waiting period (typically

TABLE 3.—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948-66¹

Year	Total	Type of insurance arrangement		
		Private plans ²		Publicly operated funds ⁴
		Group insurance	Self-insurance ³	
1948.....	\$66.4	\$9.0	\$0.3	\$57.1
1949.....	89.2	22.3	4.8	62.1
1950.....	117.4	41.7	12.6	63.1
1951.....	174.2	81.1	32.2	60.9
1952.....	202.3	92.5	35.3	74.5
1953.....	230.2	102.0	37.7	90.5
1954.....	235.1	96.2	35.8	103.1
1955.....	244.6	97.0	38.2	109.4
1956.....	265.0	109.7	41.5	113.8
1957.....	305.3	129.5	48.6	127.2
1958.....	325.1	132.7	51.0	141.4
1959.....	352.2	135.2	54.3	163.7
1960.....	368.2	138.1	58.0	172.1
1961.....	396.6	141.3	60.1	195.2
1962.....	416.3	143.7	60.6	212.0
1963.....	442.2	130.6	67.6	243.9
1964.....	455.8	123.2	68.2	264.4
1965.....	466.3	124.4	72.8	269.1
1966.....	481.9	131.2	77.5	273.2

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

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

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

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

the first week of disability) before insurance benefits become available.

The value of sick leave provided in 1966 showed a substantial rise despite improved morbidity experience. The increase of 8.7 per-

TABLE 4.—Estimated value of formal paid sick leave in private industry and in Federal, State, and local government employment, 1948–66¹

(In millions)							
Year	Total	Workers in private industry ²			Government workers		
		Total	Not covered by temporary disability insurance laws	Covered by temporary disability insurance laws ³	Total	Federal ⁴	State and local ⁵
1948.....	\$413	\$157	\$145	\$12	\$256	\$148	\$108
1949.....	462	162	147	15	300	173	127
1950.....	492	177	154	23	315	172	143
1951.....	588	198	164	34	390	221	169
1952.....	667	214	178	36	453	254	199
1953.....	713	231	193	38	482	262	220
1954.....	741	241	201	40	500	252	248
1955.....	813	268	224	44	545	269	276
1956.....	884	293	243	49	591	280	311
1957.....	951	324	270	54	627	290	337
1958.....	1,034	338	283	55	696	315	381
1959 ⁶	1,076	351	295	56	725	315	410
1960 ⁶	1,219	392	327	65	827	348	479
1961 ⁶	1,310	410	344	66	900	376	524
1962 ⁶	1,459	461	385	76	998	414	584
1963 ⁶	1,623	513	429	84	1,110	450	660
1964 ⁶	1,621	492	413	79	1,129	445	684
1965 ⁶	1,804	553	465	88	1,251	488	763
1966 ⁶	1,961	605	509	96	1,356	523	834

¹ Beginning 1960, data include Alaska and Hawaii.

² Sum of estimated value of formal paid sick leave for employees with (a) sick leave but no other group protection and (b) sick leave supplemental to group insurance or other forms of group protection, including publicly operated funds. Under each category, number of employees was adapted from Health Insurance Council, *Annual Survey of Accident and Health Coverage in the United States, 1948–54*, after reducing estimates of exclusive sick-leave coverage in early years by a third to allow for exclusion of informal sick-leave plans and for conversion of exclusive protection to supplemental protection under temporary disability insurance laws. Later-year estimates based on nationwide projection of formal paid sick-leave coverage reported for plant and office workers in the community wage surveys of the Bureau of Labor Statistics. Assumes that workers in private industry receive an average of 4 days of paid sick leave a year, excluding other protection, and 3.2 days when they have other group protection. Daily wages obtained by dividing average annual earnings per full-time private employee as reported in table 6.5 in *The National Income and Product Accounts of the United States, 1929–1965, Statistical Tables: A Supplement to the Survey of Current Business 1966*, and in *Survey of Current Business, July 1967* (Department of Commerce), by 255 (estimated workdays in a year).

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

⁴ Based on studies showing that Federal employees use paid sick leave of 7.7 days on the average for nonoccupational sickness, equivalent to 3 percent of payroll. Payroll data derived by multiplying number of paid civilian full-time employees as of June 30 in all branches of the Federal Government in the United States, by their mean earnings, as reported in *Pay Structure of the Federal Civil Service, Annual Reports*, U.S. Civil Service Commission. Practically all full-time employees are covered by paid sick-leave protection.

⁵ Assumes that number of State and local government employees covered by formal sick-leave plans has increased gradually from 65 percent of the total number employed full-time in 1943 to 85 percent in 1966 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 1966. Number of full-time employees from *Public Employment, Annual Reports* (Bureau of the Census). Daily wages obtained by dividing average annual earnings per full-time State and local employee as reported in Department of Commerce data (see footnote 2) by 255 (estimated workdays in a year).

⁶ Computed as for earlier years, then adjusted to reflect changes in sickness experience (average number of disability days) in 1959–66 as reported in the Health Interview Survey.

cent can be attributed to a 4-percent rise in wage and salary levels, to which the value of paid sick leave is closely allied, and to an estimated 5-percent increase in the number of workers covered by formal sick-leave plans.

In contrast to earlier years, sick-leave payments in 1965 and 1966 rose at a faster rate in private industry than in government. Nevertheless, government sick-leave plans accounted for 69 percent of the estimated \$1,961 million paid in sick-leave in 1966, a ratio that has changed little in the 1960's.

Within the public sector, State and local government sick-leave plans again, as in every year since 1952, experienced greater dollar growth than those of the Federal government. The difference can be attributed to the greater relative increase in State and local government employment and to the liberalization and extension of their sick-leave plans. The Federal sick-leave plan has not been changed since 1952.

Of the total of \$1,961 million paid as formal sick leave in 1966 to workers in public and private employment, about 85 percent or \$1,671 million represented exclusive protection under plans that do not supplement any other group protection (including protection under publicly operated cash sickness plans). Four-fifths of this exclusive protection is attributable to sick-leave plans for

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,¹ 1948–66

(Amounts in millions)			
Year	Income loss	Value of sick leave under exclusive plans	Ratio (percent) of sick leave to income loss
1948.....	\$567	\$375	66.1
1949.....	601	416	69.2
1950.....	635	432	68.0
1951.....	723	507	70.1
1952.....	804	577	71.7
1953.....	846	612	72.3
1954.....	874	634	72.5
1955.....	952	691	72.6
1956.....	1,024	745	72.8
1957.....	1,107	800	72.3
1958.....	1,203	875	72.7
1959.....	1,242	908	73.1
1960.....	1,427	1,034	72.5
1961.....	1,536	1,125	73.2
1962.....	1,699	1,243	73.2
1963.....	1,875	1,384	73.8
1964.....	1,883	1,391	73.9
1965.....	2,092	1,546	73.9
1966.....	2,294	1,671	72.8

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

government workers, few of whom rely upon group disability insurance to meet their wage-loss problems arising from ill health.

In private industry a growing number of workers have become entitled to both sick-leave and disability insurance. In 1966, almost half the \$605 million paid out in sick leave by private employers represented protection supplementing other types of group disability insurance.

Table 5 shows the extent of protection afforded workers covered by exclusive sick-leave provisions. In 1966 these workers had approximately 73 percent of their potential income loss met through sick leave. The ratio has varied little in recent years.

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 insur-

ance. Data for individual insurance benefits cannot be allocated between those going to the self-employed and those paid to employed persons.

Sickness benefits totaled \$3,577 million in 1966, an increase of 8.0 percent over the previous year, slightly higher than the annual rate of increase of 6.5 percent during the previous 5-year period. Insurance benefits, including those paid under private group and individual insurance and public disability insurance programs, amounted to \$1,616 million, and the value of sick leave granted was \$1,961 million. The sick leave represented 55 percent of all sickness benefits in 1966, a ratio that has been gradually edging up since 1960.

Among employees in private industry, a distinct trend has developed in the type of group protection provided in the past decade. In 1956, private cash sickness insurance and self-insurance plans accounted for 56 percent of the benefits received by such employees, the publicly operated funds accounted for 12 percent, and the sick-leave plans for 32 percent. By 1966, private insurance and self-insurance benefits had dropped to 49 percent of total benefits, and benefits from government funds and from sick-leave plans made up 16 percent and 35 percent, respectively.

TABLE 6.—Benefits provided as protection against income loss, summary data, 1948-66

[In millions]

Year	Total	Benefits provided through individual insurance	Group benefits provided as protection against wage and salary loss					
			Total	Workers in private employment			Sick leave for government employees	
				Total	Private cash sickness insurance and self-insurance ¹	Publicly operated cash sickness funds		Sick leave
1948...	\$756.9	\$141.0	\$615.9	\$359.9	\$145.8	\$57.1	\$157.0	\$256.0
1949...	846.1	150.0	696.1	396.1	172.0	62.1	162.0	300.0
1950...	938.9	153.0	785.9	470.9	230.8	63.1	177.0	315.0
1951...	1,149.7	157.0	992.7	602.7	343.8	60.9	198.0	390.0
1952...	1,300.6	177.0	1,123.6	670.6	382.1	74.5	214.0	453.0
1953...	1,409.7	209.0	1,200.7	718.7	397.2	90.5	231.0	482.0
1954...	1,473.2	230.0	1,243.2	743.2	399.1	103.1	241.0	500.0
1955...	1,614.8	250.0	1,364.8	819.8	442.4	109.4	268.0	545.0
1956...	1,800.3	278.0	1,522.3	931.3	524.5	113.8	293.0	591.0
1957...	1,952.6	307.2	1,645.4	1,018.4	567.2	127.2	324.0	627.0
1958...	2,084.5	353.4	1,731.1	1,035.1	555.7	141.4	338.0	696.0
1959...	2,229.8	389.6	1,840.2	1,115.2	600.5	163.7	351.0	725.0
1960...	2,422.3	392.8	2,029.5	1,202.5	638.4	172.1	392.0	827.0
1961...	2,556.8	425.9	2,130.9	1,230.9	625.7	195.2	410.0	900.0
1962...	2,757.7	418.5	2,339.2	1,341.2	668.2	212.0	461.0	998.0
1963...	2,984.4	447.2	2,537.2	1,427.2	670.3	243.9	513.0	1,110.0
1964...	3,077.8	483.9	2,593.9	1,464.9	708.5	264.4	492.0	1,129.0
1965...	3,312.8	482.6	2,830.2	1,579.2	757.1	269.1	553.0	1,251.0
1966...	3,576.9	512.9	3,064.0	1,708.0	829.8	273.2	605.0	1,356.0

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

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. This dollar relationship provides a measure of the effective growth in economic security against the risk of income loss from illness, since the data automatically take into account labor-force expansion and any adjustment in benefits made to take care of rising earnings levels.

The income loss due to short-term sickness and the benefits provided as protection against the risk rose at the same rate in 1966. The proportion of the potential income loss replaced thus remained the same for the two years—29.4 percent. Since 1959, the wage-replacement ratio has stayed at a fairly stable level of 28-30 percent, indicating little improvement in overall sickness protection. Before that time, the gain in protection exceeded one percentage point a year.

As a result of the leveling off in protection

TABLE 7.—Extent of protection against income loss, 1948–66

(Amount in millions)

Year	Income loss and protection provided			Income loss not protected	Net cost of providing insurance ³
	Income loss ¹	Protection provided ²	Protection as percent of loss		
1948.....	\$4,568	\$757	16.6	\$3,811	\$277
1949.....	4,424	846	19.1	3,578	287
1950.....	4,795	939	19.6	3,856	307
1951.....	5,473	1,150	21.0	4,323	311
1952.....	5,814	1,301	22.4	4,513	322
1953.....	6,144	1,410	22.9	4,734	428
1954.....	6,094	1,473	24.2	4,621	453
1955.....	6,546	1,615	24.7	4,931	450
1956.....	7,031	1,800	25.6	5,231	413
1957.....	7,363	1,953	26.5	5,410	482
1958.....	7,458	2,084	27.9	5,374	519
1959.....	7,724	2,230	28.9	5,494	548
1960.....	8,555	2,422	28.3	6,133	542
1961.....	8,639	2,557	29.6	6,082	592
1962.....	9,622	2,758	28.7	6,864	620
1963.....	10,178	2,984	29.3	7,194	596
1964.....	10,248	3,078	30.0	7,170	640
1965.....	11,270	3,313	29.4	7,957	704
1966.....	12,184	3,577	29.4	8,607	809

¹ From table 1.

² Total benefits, including sick leave (from table 6).

³ 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.

in recent years, the amount of income loss not replaced by insurance or formal sick leave has shown substantial increases during this period. In 1966, the rise of \$650 million in unreplaced income loss—the third largest for the series—brought the aggregated amount of uncompensated income loss to \$8.6 billion.

The actual income loss incurred by disabled individuals and the amount specified as uncompensated income loss are not necessarily the same. On the one hand, certain work-connected expenses (such as carfare, meals, and clothing), income taxes, and OASDHI contributions are reduced, if not eliminated, during sickness. Since disability insurance benefits are not taxable, they replace a greater proportion of take-home pay than of gross pay. On the other hand, the worker often suffers a loss of fringe benefits, as well as wages. In addition he may be faced with unreimbursed medical expenses for his illness that may be greater than any reduction in expenses or taxes.

Table 7 also shows the secondary cost of operating the mechanism for providing cash disability insurance. The net cost of providing insurance fluctuates from year to year because of a combination of factors. First, the distribution of business between individual and group policies affects the aggregate amount and proportion of the premium retained by the carriers as payments for their services. Group insurance has higher benefit ratios and lower retention ratios than insurance sold on an individual basis. Second, since the net cost of providing insurance in the private sector is considered to be the difference between insurance losses incurred (benefit payments) and the premiums earned, it follows that

TABLE 8.—Group protection provided in relation to wage and salary loss, 1948–66

(Amounts in millions)

Year	All wage and salary workers			Wage and salary workers in private industry								
				Total			Covered by temporary disability insurance laws			Not covered by temporary disability insurance laws		
	Income loss	Protection provided		Income loss	Protection provided		Income loss	Protection provided		Income loss	Protection provided	
		Amount	Percent of income loss		Amount	Percent of income loss		Amount	Percent of income loss		Amount	Percent of income loss
1948.....	\$3,630	\$616	17.0	\$3,198	\$360	11.3	\$391	\$78	19.9	\$2,807	\$282	10.0
1949.....	3,601	696	19.3	3,126	396	12.7	483	104	21.5	2,643	292	11.0
1950.....	3,921	786	20.0	3,415	471	13.8	712	140	19.7	2,703	331	12.2
1951.....	4,494	993	22.1	3,901	603	15.5	1,059	208	19.6	2,842	395	13.9
1952.....	4,931	1,124	23.3	4,171	671	16.1	1,132	238	21.0	3,039	433	14.2
1953.....	5,199	1,201	23.1	4,508	719	15.9	1,213	268	22.1	3,295	451	13.7
1954.....	5,161	1,243	24.1	4,444	743	16.7	1,212	275	22.7	3,232	468	14.5
1955.....	5,573	1,365	24.5	4,806	820	17.1	1,299	289	22.2	3,507	531	15.1
1956.....	6,034	1,522	25.2	5,203	931	17.9	1,430	314	22.0	3,773	617	16.4
1957.....	6,335	1,645	26.0	5,442	1,018	18.7	1,512	359	23.7	3,930	659	16.8
1958.....	6,371	1,731	27.2	5,391	1,035	19.2	1,507	380	25.2	3,884	655	16.9
1959.....	6,671	1,840	27.6	5,659	1,115	19.7	1,580	409	25.9	4,079	706	17.3
1960.....	7,445	2,030	27.3	6,280	1,203	19.2	1,773	433	24.4	4,507	770	17.1
1961.....	7,498	2,131	28.4	6,262	1,231	19.7	1,766	463	26.2	4,496	768	17.1
1962.....	8,383	2,339	27.9	6,988	1,341	19.2	1,967	492	25.0	5,021	849	16.9
1963.....	8,935	2,537	28.5	7,390	1,427	19.3	2,067	526	25.4	5,323	901	16.9
1964.....	9,015	2,594	28.8	7,468	1,465	19.6	2,063	535	25.9	5,405	930	17.2
1965.....	9,907	2,830	28.6	8,194	1,579	19.3	2,219	554	25.0	5,975	1,025	17.2
1966.....	10,773	3,064	28.4	8,869	1,708	19.3	2,369	578	24.4	6,500	1,130	17.4

any variation in loss ratios (relation of benefits to income) directly affects retention ratios and the amounts making up net costs.

In 1966 net costs rose by more than \$100 million to a new high of \$809 million. This was the second largest dollar increase in the series and the third largest percentage-wise. The reason for the 1966 boost was the decline in loss ratios under private insurance (from 76 percent to 74 percent for group insurance and from 52 percent to 50 percent for individual insurance). This decline was sufficient to offset the shifting of some business from individual to group insurance.

Table 8 presents data on the extent of the protection that wage and salary workers receive through their place of employment. In interpreting these data, it should be recalled that the income-replacement ratio reflects both (1) the extent to which the group has some type of protection and (2) the degree to which the protection is provided on an insurance basis or by sick-leave plans. The replacement ratio is greater for all wage and salary workers than it is for those in private industry because of the extensive coverage of government workers by sick-pay plans and the high percentage of income replacement that characterizes these plans. The workers in private industry who are covered by temporary disability insurance laws have income replaced to a greater extent than do those not covered, partly because only about half the workers in the noncovered group have any type of formal sickness protection.

In 1966, the proportion of wage loss replaced for private workers not covered by temporary disability laws rose slightly—to 17.4 percent—probably because the proportion of wage and salary workers having voluntary protection in the States without compulsory laws was higher. For workers covered by the temporary disability laws, the ratio of protection to income loss dropped from 25.0 percent in 1965 to 24.4 percent in 1966. This is an indication of the failure of the laws to keep their benefits schedules, especially their maximums on weekly benefits, abreast of rising wage levels.

In deriving benchmarks against which to assess the effectiveness of insurance in meeting the impact of illness, it is useful to examine that portion of the 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. To discourage malingering, insurance plans (both private and government) ordinarily undertake to compensate for only a part of the weekly wage or salary loss and cover the first few days or first week of disability only when the disability results from an accident. The amount of income loss potentially insurable and compensable under the common forms of disability insurance is therefore somewhat less than the total income loss considered in table 7.

In table 9 the total income loss is reduced for (1) a 3-day uncompensated waiting period, which requires a 30-percent reduction, and (2) a 7-day uncompensated waiting period (with a 45-percent reduction). The potentially insurable income loss is further reduced by one-third to allow for the portion of the loss after the waiting period that is not indemnified. It is assumed that two-thirds of wages are to be replaced.

The table 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 adequate insurance plans. The wage loss of persons with

TABLE 9.—Insurance benefits as percent of estimated potentially insurable and compensable income loss¹ for workers without exclusive formal sick leave, 1948-66

[Amounts in millions]

Year	Amount of insurance benefits ²	As a percent of income loss—			
		After first 3 days ³		After first 7 days ⁴	
		Total	Two-thirds	Total	Two-thirds
1948.....	\$344	12.3	18.4	15.6	23.4
1949.....	384	14.4	21.5	18.3	27.4
1950.....	447	15.4	23.0	19.5	29.3
1951.....	562	16.9	25.4	21.5	32.3
1952.....	634	18.1	27.1	23.0	34.5
1953.....	697	18.8	28.2	23.9	35.0
1954.....	732	20.0	30.0	25.5	38.2
1955.....	802	20.5	30.7	26.1	39.1
1956.....	916	21.8	32.7	27.7	41.6
1957.....	1,002	22.9	34.3	29.1	43.7
1958.....	1,050	24.0	36.0	30.5	45.8
1959.....	1,154	25.4	38.1	32.4	48.5
1960.....	1,303	24.1	36.2	30.7	46.0
1961.....	1,247	25.1	37.6	31.9	47.9
1962.....	1,299	23.4	35.1	29.8	44.7
1963.....	1,361	23.4	35.1	29.8	44.7
1964.....	1,457	24.9	37.3	31.7	47.5
1965.....	1,509	23.5	35.2	29.9	44.8
1966.....	1,616	23.3	35.0	29.7	44.6

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

² Excludes sick-leave payments.

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

⁴ Based on 55 percent of total income loss (from table 1), after exclusion of income loss of workers covered by exclusive sick-leave plans (from table 5).

exclusive sick leave (shown in table 5) is omitted from the computations to avoid inflating the benchmark base with income loss already covered by sick leave.²

In 1966, insurance benefits of \$1,616 million were meeting 35.0 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). When the first 7 days of

² 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 the portion of the loss resulting from sickness that is considered insurable under prevailing provisions.

sickness are excluded, the proportion of the potentially compensable income loss replaced by insurance in 1966 becomes 44.6 percent. The gap in income replacement reflects both the omission of benefits for those workers not covered and the extent to which the benefit amounts under insurance plans are less than the desired norm.

These indexes of the effectiveness of insurance in meeting the impact of illness are the lowest registered since 1957. Highs for the series were registered for 1959 when the income loss replaced by insurance after a 3-day waiting period was 38.1 percent and that after a 7-day waiting period was 48.5 percent.

Notes and Brief Reports

Workmen's Compensation Payments and Costs, 1966 *

Cash payments and medical services under workmen's compensation programs in the United States increased in 1966 by \$190 million—the largest dollar increase recorded for any year. The estimated total of \$1,975 million paid out in 1966 under State and Federal work-injury laws was 10.6 percent higher than the 1965 aggregate of \$1,785 million and represented the greatest annual rate of growth since the years of the Korean conflict. Twenty years earlier, workmen's compensation payments amounted to less than one-fourth the 1966 total and 10 years ago to slightly more than one-half.

Contributing to the record-high spurt in benefit payments were unusual advances in covered employment, wage levels, and medical care prices. An estimated 53.4–53.6 million workers were covered in an average week in 1966, a gain

*Prepared in the Office of Research and Statistics by Alfred M. Skolnik and Julius W. Hobson. Annual estimates of workmen's compensation payments in recent years have appeared in the January issues of the *Bulletin*.

of almost 3 million from the year before. This was the largest absolute and relative increase since the 1940's.

Average wages on which cash benefits are based advanced more than 4 percent from 1965 to 1966, compared with a rise of slightly more than 3 percent in the preceding year. The 1966 rate of increase has been exceeded in only two other years during the past decade. The combination of higher wage rates and increased coverage resulted in an unprecedented jump of \$30 billion in payrolls in covered employment. The estimated covered payroll of \$320 billion for 1966 was more than 10 percent larger than the estimate of \$290 billion for the preceding year and represented the greatest proportionate increase since 1951.

Medical care prices also experienced a rise that had not been surpassed in almost a decade. According to the consumer price index of the Bureau of Labor Statistics, hospital and medical care prices rose 4.4 percent in the calendar year 1966 compared with 2.4 percent in 1965.

Other factors contributing to the accelerated benefit payments were a reported increase in work accident rates and statutory changes in workmen's compensation provisions. Injury rates rose roughly 5 percent in 1966, as projected from data compiled by the Bureau of Labor Statistics for the first half of the year. (Complete data for