
Cash Benefits for Short-Term Sickness, 1948-81

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At least three-fifths of all workers are under some kind of formal plan offering income replacement during temporary periods of illness, even though there is no national sick-pay program. In 1981, income loss due to short-term non-work-related disabilities totaled \$41.3 billion. Sick-pay benefits were \$15.6 billion, representing 38 percent of the income that otherwise would have been lost. The replacement rate has been fairly stable since 1974, following earlier periods of uneven increases from the 17 percent recorded for 1948, the first year of this series. This article includes estimates for 1980 and 1981 and revisions for 1978 and 1979 of the income loss and benefits arising from short-term sickness. Also included are the losses and benefits for the first 6 months of long-term disability.

The Social Security Disability Insurance program provides monthly benefits to severely disabled insured workers and their dependents after a waiting period of 5 calendar months.¹ Income replacement for short-term disability is available generally through private employment plans and through public mandatory programs in a few States. This article describes the types of short-term disability protection available and the benefit experience under such formal plans available through workers' employment.

Cash benefits for short-term nonoccupational disability in 1981 amounted to \$15.6 billion—3.9 percent more than in 1980. This modest rate of increase reflects mixed trends among the various types of benefits available. For example, the nearly \$3.5 billion in benefits paid through private group insurance and self-insurance in 1981 was 10.7 percent less than in the previous year. At the other end of the range, publicly operated insurance funds paid almost \$1.0 billion in 1981, 23.8 percent above 1980's level.

Besides insurance, sick-leave programs provide the other main form of income maintenance protection for short-term sickness. Sick-leave payments totaled \$9.7 billion in 1981, or 9.1 percent more than the 1980 figure. Most of the payments for this type of sick pay are to Federal and to State and local government workers.

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¹ Disability is defined as the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death, or that has lasted or can be expected to last for a continuous period of at least 12 months.

Other highlights of 1981 experience under sick-pay programs and for income loss due to sickness include:

- About 56 million workers in private industry and government employment were under a formal sick-pay plan in 1981. These workers were 63 percent of all wage and salary workers. This proportion has been stable for many years.
- In 1981, the total income loss due to sickness among workers with and without sickness plan protection was estimated at \$41.3 billion. Most of this total (\$38.6 billion) was among wage and salary workers, and \$2.7 billion was experienced by the self-employed.
- Benefits paid in 1981 as a percentage of total income loss were 37.9 percent, a rough aggregate measure of the loss workers incurred either because they were in plans that only replaced part of their lost wage while sick or they were not protected by a formal plan.

Income Loss and Protection

One of the key measures developed in this series is the amount of wages, salaries, and self-employment income lost during short-term illness. This section examines the issue of income loss and provides the current estimates. The types of protection against such loss are detailed, including an evaluation of the available protection as measured by the benefit-loss ratio.

Income-Loss Estimates

During 1981, pay lost by workers unable to work due to sickness amounted to an estimated 41.3 billion (table

1). This figure includes wages that potentially would have been lost by some workers had they not been under sick-leave or continuation-of-pay plans. The sick leave received is counted among the benefits that offset this potential wage loss. This series measures income loss for short-term sickness and for the first 6 months of long-term disability. (See the Appendix on page 37 for further information on the wage loss concepts and methodology used in this series.)

The \$41.3 billion income loss in 1981 was 7 percent

higher than the 1980 level, about the same annual change as from 1979 to 1980. A lower sickness rate in 1980 and in 1981 (compared with that of each previous year) was one factor accounting for these moderate annual percentage changes. In contrast, income lost due to sickness grew rapidly (by 16 percent) between 1977 and 1978, at the same time that sickness rates rose.

Other factors affecting income-loss levels are the number of employees and wage levels. The number of full-time equivalent civilian employees reported by the

Table 1.—Estimated income-loss from nonoccupational short-term sickness,¹ by type of employment, 1948–81²

[In millions]

Year	Wage and salary workers						Self-employed ⁸
	Total	In private employment ³		In public employment			
		Total	Covered by temporary disability insurance laws ⁴	Other ⁵	Federal ⁶	State and local ⁷	
1948	\$4,582	\$3,632	\$391	\$2,809	\$174	\$258	\$950
1949	4,445	3,602	483	2,644	190	285	843
1950	4,816	3,921	712	2,703	201	305	895
1951	5,494	4,495	1,059	2,843	259	334	999
1952	5,834	4,832	1,132	3,040	291	369	1,002
1953	6,163	5,199	1,213	3,295	290	401	964
1954	6,114	5,162	1,212	3,233	280	437	952
1955	6,565	5,574	1,299	3,508	297	470	991
1956	7,052	6,035	1,430	3,774	313	518	1,017
1957	7,386	6,336	1,512	3,931	323	570	1,050
1958	7,477	6,371	1,507	3,884	352	628	1,106
1959	7,749	6,680	1,580	4,090	356	654	1,069
1960	8,591	7,462	1,773	4,526	403	760	1,129
1961	8,664	7,527	1,770	4,524	420	813	1,137
1962	9,653	8,426	1,983	5,051	467	925	1,227
1963	10,213	8,956	2,084	5,359	504	1,009	1,257
1964	10,298	9,065	2,085	5,435	506	1,039	1,231
1965	11,333	9,971	2,244	6,017	548	1,162	1,362
1966	12,268	10,833	2,403	6,553	597	1,275	1,435
1967	12,838	11,401	2,529	6,928	632	1,312	1,437
1968	14,585	13,032	2,852	7,904	698	1,578	1,553
1969	15,307	13,747	3,025	8,334	757	1,631	1,560
1970	16,757	15,161	3,201	9,147	841	1,912	1,596
1971	17,146	15,550	3,273	9,321	897	2,059	1,596
1972	19,507	17,641	3,653	10,649	961	2,378	1,866
1973	21,059	18,881	3,881	11,441	1,026	2,533	2,178
1974	21,804	19,852	4,026	12,059	1,118	2,649	1,952
1975	23,595	21,565	4,270	13,036	1,213	3,045	2,030
1976	26,447	24,320	4,771	14,884	1,301	3,364	2,127
1977	28,225	25,933	5,242	15,813	1,395	3,483	2,290
1978	32,811	30,052	5,892	18,695	1,523	3,942	2,759
1979	36,072	33,021	6,576	20,640	1,621	4,184	3,051
1980	38,529	35,844	7,324	22,173	1,774	4,573	2,685
1981	41,278	38,586	7,904	23,952	1,885	4,845	2,692

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

² Beginning 1960, data include Alaska and Hawaii. Beginning 1959, data adjusted to reflect changes in sickness experience (average number of disability days), as reported in the Health Interview Survey of the Public Health Service.

³ Annual payrolls of wage and salary workers in private employment, multiplied by 7 (estimated average workdays lost per year due to short-term sickness) and divided by 255 (estimated workdays in year). Data for 1948–72 from unpublished advance tables, *Benchmark Revision of National Income and Product Accounts*, Department of Commerce. Comparable data since 1972 from *Survey of Current Business*, *National Income Issue* published annually.

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 Office of Personnel Management, multiplied by 8 (estimated average workdays lost per year due to short-term sickness) and divided by 260 (scheduled workdays in year).

⁷ Annual wage and salary payrolls of State and local government employees from Department of Commerce data (see footnote 3) multiplied by estimated average workdays lost per year due to short-term sickness (for 1948–66, 7.5 days; 1967, 7.35 days; for 1968, 7.2 days; and for 1969 to date, 7.0 days) and divided by 255 (estimated workdays in year).

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

Department of Commerce was about the same in 1980 as in 1979, and rose by less than 1 percent in 1981 to a total of 84.4 million. Average wages for civilian workers in 1981 were \$17,268, or 9 percent above the 1980 level. The percentage increase in 1981, though high, was almost 1 percentage point less than in the preceding year.

As can be seen in the tabulation below, the distribution of income loss from sickness by type of employment underwent some important changes during the 1950-81 period. The most notable changes have been the relative decline in income loss experienced in the self-employment sector, the growth in the State and local government sector, and the growth among wage and salary workers generally. For example, in 1981, 7 percent of income loss from sickness was attributable to self-employed workers, well under half of the 18 percent in 1950.

Sector	Percent of income lost	
	1950	1981
Total	100	100
Wage and salary workers, total	82	94
Private employees:		
Covered by Temporary Disability Income laws ..	15	19
Other	56	58
Federal employees	4	5
State and local employees	6	12
Self-employed workers	18	7

These changes largely reflect trends in the amount of income derived from each of these sectors, relative to the rest of the economy. With respect to State and local government, for example, there was a large growth in the services provided by governments and a corresponding increase in the number of government workers. Income loss from sickness associated with the private industry sector (especially excluding States with temporary disability insurance laws) and Federal employment can be seen to have been relatively stable over the years.

Benefit Protection

Types of plans. 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 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, Hawaii, New Jersey, New York, and Puerto Rico—it may come about as the result of a law requiring compulsory temporary disability insurance. Some of the protection required by law in these jurisdictions (except Hawaii) may be provided by publicly operated funds. Under two other compulsory programs—that of Rhode Island and the Federal program for railroad employees—all mandatory protection comes from publicly operated funds, although private plans may supplement the government-paid benefits.

Excluded here is protection afforded by group-credit accident insurance² and by informal sick leave or other informal employment-related plans. Informal sick-leave protection is excluded, since such arrangements for continuation of pay at the discretion of the employer are rarely specified publicly in advance. It is therefore difficult to estimate either the number of workers who could actually receive payments of this nature or the magnitude of such benefits.

Workers covered. Of the 88.5 million wage and salary workers in December 1981, an estimated 55.7 million, or 63 percent, were under a formal plan providing income replacement during periods of illness. This protection included group insurance, self-insurance, and sick-leave or wage continuation programs—as provided through labor management negotiations, through employer sponsored fringe benefits, or as mandatory social insurance protection in some jurisdictions. In December 1980, the rate of coverage had been almost 64 percent. The proportion protected has remained stable for many years.

About 38.7 million persons protected in December 1981 were covered by insurance plans that provided partial wage replacement benefits. In most cases, these benefits begin after a waiting period of 3-5 days. Insurance plans provide maximum durations of varying lengths, the most typical being 26 weeks. The estimated number covered includes protection under temporary disability insurance (TDI) laws as well as voluntary commercial policies and funded self-insurance plans. The remaining group with income protection during sickness is the 19.8 million workers in government and private industry whose primary sick-pay plan is sick leave. Sick-leave plans generally provide full wage replacement. However, sick leave is usually payable for limited periods of time, for example, a maximum of 15 days annually.

Since a higher proportion of government workers than of private industry employees are protected against loss of pay due to sickness, the rate of protection for private industry alone is lower than for all wage and salary employees. About 41.6 million private industry

² This type of insurance is issued through a lender or lending agency to cover payment of a loan or installment purchase if the insured debtor becomes disabled. These policies are not provided as part of the employment relationship.

workers (57 percent) were under sick-pay plans in December 1981. This proportion was slightly lower than the 58 percent recorded for 1980. As seen in table 2, the number of private industry workers grew slightly while the estimated number with protection declined slightly. But, over the years from 1954, it is apparent that there has been no consistent trend in coverage rates.

Table 2 also shows the extent of voluntary protection among private industry workers not under TDI laws. TDI laws mandate protection for most workers under their jurisdiction so the rate of protection in the non-TDI sector—43 percent in December 1981—is, of course, lower than among all private industry workers. In the voluntary sector, most of the 24.2 million workers in 1981 were protected by insurance plans, some by combined insurance and sick-leave protection, and some under the recently developed Administrative Service Only (ASO) plans.³

In California, Hawaii, New Jersey, New York, Puerto Rico, and Rhode Island, coverage is provided through compulsory State TDI laws. In the railroad industry, workers are protected under a Federal act. About 17.4 million workers—more than four-fifths of the employees in the five States and Puerto Rico and all railroad workers—are protected against wage loss by these laws. The protection provided has been extended to employees in industrial and commercial firms, to hired farm workers (except in New York), and to other groups to differing degrees.

Domestic workers and employees of governments and nonprofit organizations are less likely to be protected than are other groups. In recent years, more government workers have been included. For example, in 1980 State employees were brought under TDI in New Jersey and local governments were given the option to cover their workers.

Many of those not protected by statutory programs in these jurisdictions, however, have disability insurance or sick leave provided by their employers. Most State and local government workers and many employees of nonprofit firms are covered under such programs. In all, more than 9 out of 10 wage and salary workers in these States are eligible for some form of income maintenance when they are ill.

Replacement of Income Loss

Workers received \$15.6 billion in benefits during 1981 to replace the wages and self-employment income they otherwise would have lost when they were out of work due to sickness (table 3). The resulting benefit-income loss rates were slightly lower than the 1980 figure. Bene-

³ Under the Administrative Service Only plans, the employer retains the risk of loss and contracts with an insurer only to perform certain administrative tasks related to workers' claims, including payment of claims out of employer funds.

Table 2.—Degree of income-loss protection against short-term sickness for all employed wage and salary workers in private industry and for those not under temporary disability insurance laws, selected years, 1954–81

December	Total number (in thousands) ¹	With protection	
		Number (in thousands) ²	Percent of total
All wage and salary workers			
1954	43,000	25,600	59.5
1956	46,000	27,700	60.2
1958	45,900	26,900	58.6
1960	47,000	28,200	60.0
1962	48,900	29,800	60.9
1964	51,200	28,700	56.1
1966	54,800	30,700	56.0
1968	56,800	33,500	59.0
1970	58,000	35,300	60.9
1971	58,900	35,500	60.3
1972	61,400	36,500	59.4
1973	63,800	38,100	59.7
1974	62,800	36,900	58.8
1975	62,700	36,000	57.4
1976	65,400	38,700	59.2
1977	68,700	40,200	58.5
1978	71,600	42,600	59.5
1979	73,500	42,100	57.3
1980	72,500	42,200	58.2
1981	73,000	41,600	57.0
Wage and salary workers not under temporary disability insurance laws			
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	17,400	48.5
1964	38,100	16,000	42.0
1966	41,000	17,000	41.5
1968	42,600	19,300	45.3
1970	43,300	20,600	47.6
1971	44,300	20,900	47.2
1972	46,500	21,600	46.5
1973	47,700	22,000	46.1
1974	47,700	21,800	45.7
1975	48,000	21,300	44.4
1976	50,200	23,500	46.8
1977	52,700	24,200	45.9
1978	54,700	25,700	47.0
1979	56,200	24,800	44.1
1980	55,400	25,100	45.3
1981	55,600	24,200	43.5

¹ Number in private industry. For the areas not under temporary disability insurance laws, total excludes railroad workers and is adjusted by ratio of private industry employees on nonagricultural payrolls in the States with temporary disability insurance laws to all such employees. Data from Bureau of Labor Statistics, *Employment and Earnings*. Beginning with 1968, data not strictly comparable with those for earlier years. Labor-force information for 1968 and thereafter excludes those aged 14–15 and includes certain workers previously classified as self-employed.

² Estimated number of private-industry workers (1) with group accident and sickness insurance (except group credit insurance), (2) under paid sick-leave plans, (3) under union and mutual association plans, and (4) in State-operated temporary disability insurance funds. Beginning with 1964, group accident and sickness insurance coverage has been adjusted to exclude those with long-term benefit policies, which usually do not provide short-term benefits. Estimates of private protection based on data from Health Insurance Association of America and from State administrative agencies.

fit-loss rates have fluctuated within a 4-point range since 1970.

Table 3.—Extent of protection against loss, 1948–81

[Amounts in millions]

Year	Income loss and protection			Income loss not protected	Net cost of providing insurance ⁴
	Income loss ¹	Protection provided ^{2,3}	Protection as percent of loss		
1948	\$4,582	\$761	16.6	\$3,821	\$277
1949	4,445	848	19.1	3,597	287
1950	4,816	942	19.6	3,874	307
1951	5,494	1,153	21.0	4,341	311
1952	5,834	1,304	22.4	4,530	322
1953	5,163	1,413	22.9	4,750	428
1954	6,114	1,478	24.2	4,636	453
1955	6,565	1,620	24.7	4,945	450
1956	7,052	1,806	25.6	5,246	413
1957	7,386	1,958	26.5	5,428	482
1958	7,477	2,093	28.0	5,384	519
1959	7,749	2,236	28.9	5,513	548
1960	8,591	2,430	28.3	6,161	542
1961	8,664	2,561	29.6	6,103	592
1962	9,653	2,776	28.8	6,877	621
1963	10,213	2,997	29.3	7,216	597
1964	10,296	3,101	30.1	7,195	642
1965	11,333	3,349	29.6	7,984	708
1966	12,268	3,637	29.6	8,631	815
1967	12,838	3,898	30.4	8,940	887
1968	14,585	5,622	31.7	9,963	1,014
1969	15,307	5,104	33.3	10,203	1,214
1970	16,757	5,888	35.1	10,869	1,160
1971	17,146	6,137	35.8	11,009	1,386
1972	19,507	6,874	35.2	12,633	1,556
1973	21,059	7,461	35.4	13,598	1,740
1974	21,804	8,232	37.8	13,572	1,774
1975	23,595	9,002	38.2	14,592	2,232
1976	26,447	9,819	37.1	16,628	2,234
1977	28,225	10,559	37.4	17,666	2,452
1978	32,811	11,751	35.8	21,060	3,459
1979	36,072	13,371	37.1	22,701	2,394
1980	38,529	15,058	39.1	23,472	2,023
1981	41,278	15,638	37.9	25,640	2,055

¹ From table 1.

² Total benefits, including sick leave.

³ Beginning 1973, includes benefits for the 6th month of disability under the Old-Age, Survivors, and Disability Insurance program.

⁴ Includes retention costs (for contingency reserves, taxes, commissions,

acquisition, claims settlement, and underwriting gains) of private insurance companies (from table 7) 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.

Another part of the resources spent on providing income maintenance for sickness beyond the benefits themselves is the cost of providing insurance. About \$2 billion was expended in 1981 as part of the premiums paid for insurance. Comparable information is not available for the costs of operating sick-leave plans but, in general, it can be expected that their cost-benefit ratio is proportionately smaller than for insurance plans.

The extent of wage loss replacement for several major groups of workers is given in table 4. This replacement rate was lower in 1981 than in 1980 in most of the categories shown. Private industry workers had 26.8 percent of lost wages replaced by sickness benefits in 1981—a slight decrease of 1.2 percent from the previous year. This decline brought the replacement rate for private industry workers closer to the 24–26 percent prevalent throughout the 1970's. Because coverage is required by law and so is more complete in jurisdictions with TDI programs, replacement rates have over time been some-

what higher in TDI areas than in non-TDI areas. In 1981, for example, benefits paid replaced 29.2 percent of workers' wage loss in TDI areas.

The 1980 replacement rate in TDI areas was lower than the 1981 rate. In fact, in 1980 the TDI replacement rate was lower than the non-TDI area rate. These figures reflect some unusual patterns of reported data for voluntary insurance. The voluntary sector has been undergoing substantial change for several years, including the emergence of different types of plans such as ASO and Minimum Premiums Plans.⁴ Future years' data may show more clearly whether the 1980 results were an aberration or part of a changing pattern, but, as of this writing, 1980 patterns do not seem to be in line with the rest of the estimates.

⁴ Under Minimum Premiums Plans, the plan administrator pays a premium to an insurance company to pay any benefits payable to an individual beyond an agreed upon amount.

Table 4.—Group protection of wage and salary workers in relation to wage and salary loss, 1948–81

[Amounts in millions]

Year	Total			Private industry									Government		
				Total			Covered by temporary disability insurance laws			Not covered by temporary disability insurance laws					
	Protection provided		Percent of income loss	Protection provided		Percent of income loss	Protection provided		Percent of income loss	Protection provided		Percent of income loss	Protection provided		
	Income loss	Amount		Income loss	Amount		Income loss	Amount		Income loss	Amount		Income loss	Amount	Income loss
1948	\$3,632	\$620	17.1	\$3,199	\$361	11.3	\$391	\$79	20.2	\$2,890	\$282	10.1	\$432	\$259	60.0
1949	3,602	698	19.4	3,127	398	12.7	483	105	21.7	2,644	293	11.1	475	300	63.2
1950	3,921	789	20.1	3,415	474	13.9	712	141	19.8	2,703	333	12.3	506	315	62.3
1951	4,495	996	22.2	3,902	606	15.5	1,059	209	19.7	2,843	397	14.0	593	390	65.8
1952	4,832	1,127	23.3	4,172	674	16.2	1,132	239	21.1	3,040	435	14.3	660	453	68.6
1953	5,199	1,204	23.2	4,508	722	16.0	1,213	269	22.2	3,295	453	13.7	691	481	69.6
1954	5,162	1,248	24.2	4,445	747	16.8	1,212	276	22.8	3,233	471	14.6	719	500	69.7
1955	5,574	1,651	24.6	4,807	825	17.2	1,299	290	22.3	3,508	535	15.3	767	545	71.1
1956	6,035	1,528	25.3	5,204	937	18.0	1,430	316	22.1	3,774	621	16.5	831	591	71.1
1957	6,336	1,651	26.1	5,443	1,024	18.8	1,512	360	23.8	3,931	664	16.9	893	626	70.1
1958	6,371	1,740	27.3	5,391	1,044	19.4	1,507	382	25.3	3,884	662	17.0	980	696	71.0
1959	6,680	1,847	27.6	5,670	1,123	19.8	1,530	411	26.0	4,090	712	17.4	1,010	724	71.7
1960	7,462	2,037	27.3	6,299	1,211	19.2	1,773	435	24.5	4,526	776	17.1	1,163	826	71.0
1961	7,527	2,135	28.4	6,294	1,241	19.7	1,770	465	26.3	4,524	776	17.2	1,233	894	72.5
1962	8,426	2,358	28.0	7,034	1,355	13.3	1,983	495	25.0	5,051	860	17.0	1,392	1,003	72.1
1963	8,956	2,550	28.5	7,443	1,445	19.4	2,084	529	25.4	5,359	916	17.1	1,513	1,105	73.0
1964	9,065	2,617	28.9	7,520	1,485	19.7	2,085	537	25.8	5,435	948	17.4	1,545	1,133	73.3
1965	9,971	2,866	28.7	8,261	1,602	19.4	2,244	558	24.9	6,017	1,044	17.4	1,710	1,264	73.9
1966	10,833	3,124	28.8	8,961	1,735	19.4	2,408	581	24.1	6,553	1,154	17.6	1,872	1,389	74.2
1967	11,401	3,371	29.6	9,457	1,834	19.4	2,529	616	24.4	6,928	1,218	17.6	1,944	1,536	79.0
1968	13,032	4,013	30.8	10,756	2,247	20.9	2,852	699	24.5	7,904	1,548	19.6	2,276	1,766	77.6
1969	13,742	4,469	32.5	11,359	2,551	22.5	3,025	799	26.4	8,334	1,752	21.0	2,388	1,918	80.3
1970	15,161	5,194	34.3	12,408	2,953	23.8	3,261	880	27.0	9,147	2,073	22.7	2,753	2,242	81.4
1971	15,550	5,406	34.8	12,594	3,030	24.1	3,273	900	27.5	9,321	2,130	22.9	2,956	2,376	80.4
1972	17,641	6,102	34.6	14,302	3,390	23.7	3,653	969	26.5	10,649	2,421	22.7	3,339	2,712	81.2
1973	18,881	6,666	35.3	15,322	3,650	23.8	3,881	1,066	27.5	11,441	2,584	22.6	3,559	2,906	81.7
1974	19,852	7,351	37.2	16,085	4,144	25.8	4,026	1,154	28.7	12,059	2,990	24.8	3,767	3,107	82.5
1975	21,565	8,030	37.2	17,306	4,328	25.0	4,270	1,239	29.0	13,036	3,089	23.7	4,259	3,542	83.2
1976	24,320	8,938	36.8	19,655	4,900	24.9	4,771	1,348	28.3	14,884	3,552	23.9	4,665	3,868	82.9
1977	25,933	9,606	37.0	21,055	5,282	25.1	5,242	1,432	27.4	15,813	3,847	24.3	4,904	4,144	84.4
1978	30,052	10,541	35.1	24,587	5,782	23.5	5,892	1,580	26.8	18,695	4,202	22.5	5,465	4,579	83.8
1979	33,021	12,049	36.5	27,216	6,987	25.7	6,576	1,763	26.8	20,640	5,224	25.3	5,805	4,892	84.3
1980	35,844	13,778	38.4	29,497	8,265	28.0	7,324	2,010	27.4	22,173	6,255	28.2	6,347	5,338	84.1
1981	38,586	14,347	37.2	31,856	8,536	26.8	7,904	2,306	29.2	23,952	6,230	26.0	6,730	5,641	83.8

¹ Beginning 1973, includes benefits for the 6th month of disability payable under the Old-Age, Survivors, and Disability Insurance program (not shown separately).

The substantially higher replacement rate in 1981 for government workers (83.8 percent) is commensurate with the fact that the protection for most government workers is sick leave, which generally replaces a high proportion of lost wages. This rate has been 83–84 percent since 1974.

The role of individual insurance, group benefits in the private sector, and government sick leave is illustrated in chart 1, which shows the long-term upward trend in total protection as well as the relative share of each component. As would be expected, group benefits in the private sector account for the major part of all sick-pay protection. The chart also shows that group protection has continued to grow over the years while individual insurance has remained fairly stable. Individual insurance

benefits replaced 3.1 percent of total income loss in 1948—the same percent as in 1981. In contrast, private sector group benefits accounted for 7.9 percent in 1948 and 20.7 percent in 1981, while government employee benefits amounted to 5.7 percent and 13.7 percent.

A summary of all the benefits paid is presented in table 5. Between 1980 and 1981, benefits rose in each category shown except private sickness insurance, which experienced a 10.7-percent decrease. In 1979 and 1980, private insurance benefits rose by unusually large amounts (21.4 percent and 33.8 percent, respectively). As already noted, private sickness insurance benefits have shown irregular patterns in recent years. The wide range of percentage changes in benefits paid from 1980 to 1981 is shown in the following tabulation:

Source	Percent change
Total	3.9
Individual insurance9
Group benefits, total	4.1
Private employment	3.3
Private insurance	-10.7
Public funds	23.8
Sick leave	14.1
Government sick leave	5.7

Benefit Experience by Payment Type

Temporary Disability Insurance

Almost \$1.6 billion was paid in benefits under TDI laws in 1981 (table 6). This amount was 16.3 percent more than the 1980 figure. Thus, TDI benefits in 1981 rose at a considerably faster rate than the 3.9-percent annual increase in all sickness benefits. The impetus for

the large rise in TDI benefits was the 23.8-percent growth in publicly operated funds. These publicly operated funds totaled \$953 million during 1981. TDI benefits provided through private insurance increased at more moderate rates—8.6 percent for self-insured plans and 3.8 percent for commercial insurance. Publicly operated funds accounted for 56–58 percent of all TDI payments in most years from 1964 to 1980, but this share rose to 60.5 percent in 1981. The main factor accounting for the change was a large increase in benefits paid from California's public fund—from \$539 million in 1980 to \$718 million in 1981. Much of this spurt in benefits no doubt was due to major statutory liberalizations initiated in 1980: (1) absence for work because of maternity became payable under TDI on the same basis as for other types of absence, and (2) the maximum duration of benefits rose from 26 to 39 weeks.

Table 5.—Benefits provided as protection against income loss, summary data, 1948–81

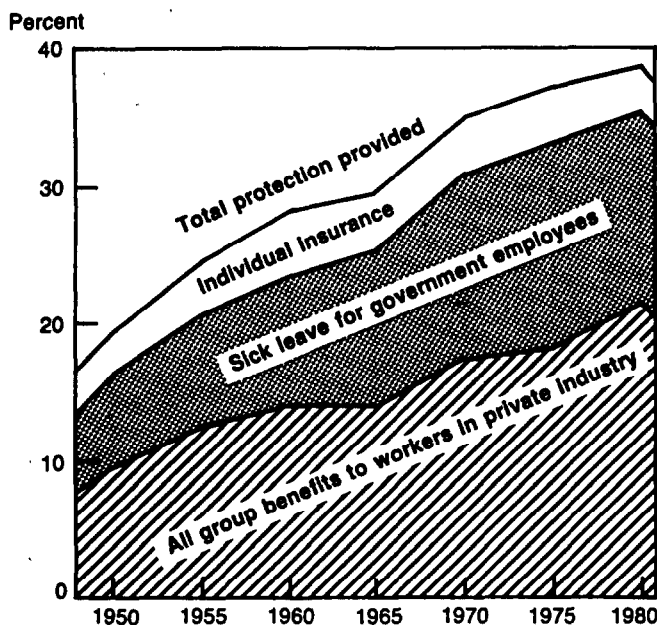
[In millions]

Year	Total ¹	Benefits provided through individual insurance	Group benefits provided as protection against wage and salary loss					Sick leave for government employees
			Total ¹	Workers in private industry				
				Total	Private cash sickness insurance and self-insurance ²	Publicly operated cash sickness funds	Sick leave	
1948	\$761.4	\$141.0	\$620.4	\$361.3	\$145.8	\$57.1	\$158.4	\$259.1
1949	848.2	150.0	698.3	398.3	172.0	62.1	164.2	299.9
1950	941.8	153.0	788.8	473.7	230.8	63.1	179.8	315.1
1951	1,152.9	157.0	995.9	605.8	343.8	60.9	201.1	390.1
1952	1,303.9	177.0	1,126.9	674.1	382.1	74.5	217.5	432.8
1953	1,412.7	209.0	1,203.7	722.4	397.2	90.5	234.7	481.3
1954	1,477.6	230.0	1,247.6	747.3	399.1	103.1	245.1	500.3
1955	1,619.6	250.0	1,369.6	824.9	442.4	109.4	273.1	544.7
1956	1,805.7	278.0	1,527.7	936.9	524.5	113.8	298.6	590.8
1957	1,957.9	307.2	1,650.7	1,024.3	567.2	127.2	329.9	626.4
1958	2,093.2	353.4	1,739.8	1,043.5	555.7	141.4	346.4	696.3
1959	2,236.3	389.6	1,846.7	1,122.9	600.5	163.7	358.7	723.8
1960	2,429.6	392.8	2,036.8	1,210.6	638.4	172.1	400.1	826.2
1961	2,560.7	425.9	2,134.8	1,241.0	625.7	195.2	420.1	893.8
1962	2,776.3	418.5	2,357.8	1,355.0	670.7	212.0	472.3	1,002.8
1963	2,997.3	447.2	2,550.1	1,444.9	675.4	243.9	525.6	1,105.2
1964	3,101.3	483.9	2,617.4	1,484.8	715.7	264.4	504.7	1,132.6
1965	3,349.0	482.6	2,866.4	1,602.3	767.1	269.1	566.1	1,264.1
1966	3,636.8	512.9	3,123.9	1,735.1	843.2	273.2	618.7	1,388.8
1967	3,898.3	527.4	3,370.9	1,834.4	869.3	284.7	680.4	1,536.5
1968	4,622.9	609.1	4,012.8	2,246.9	1,123.7	320.2	803.0	1,765.9
1969	5,104.2	635.4	4,468.8	2,550.7	1,246.7	373.7	930.3	1,918.1
1970	5,888.1	693.7	5,194.4	2,952.5	1,475.9	410.6	1,066.0	2,241.9
1971	6,137.2	730.9	5,406.3	3,030.1	1,489.0	410.9	1,130.2	2,376.2
1972	6,873.8	772.0	6,101.8	3,390.1	1,614.4	412.0	1,363.7	2,711.7
1973	7,460.8	795.0	6,665.8	3,650.3	1,735.8	445.9	1,468.6	2,905.3
1974	8,231.7	851.0	7,380.7	4,143.5	2,024.4	485.3	1,633.8	3,107.2
1975	9,002.5	973.0	8,029.5	4,327.5	2,010.6	538.3	1,778.6	3,542.0
1976	9,819.4	881.0	8,938.4	4,900.4	2,267.3	580.9	2,052.2	3,868.0
1977	10,559.0	940.0	9,619.0	5,284.5	2,344.0	581.8	2,358.7	4,144.5
1978	11,751.0	1,210.0	10,541.0	5,781.7	2,403.1	609.1	2,769.5	4,579.3
1979	13,371.0	1,322.0	12,049.0	6,986.8	3,216.1	699.0	3,071.7	4,892.2
1980	15,057.5	1,280.0	13,777.5	8,265.2	3,902.9	769.6	3,592.7	5,337.3
1981	15,637.7	1,291.0	14,346.7	8,536.3	3,484.4	952.6	4,099.3	5,640.4

¹ Beginning 1973, includes benefits for the 6th month of disability payable under the Old-Age, Survivors, and Disability Insurance program (not shown separately).

² 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.

Chart 1.—Relative proportion of protection provided by various sources as a percent of income loss from short-term illness, 1948–81



Other TDI states also had statutory changes that affected 1981 benefit levels. In 1980, State employees were covered in New Jersey and local governments were given the option of covering their workers. Effective in July 1981, absence based on pregnancy was covered in New York and Rhode Island on the same basis as other disabling conditions. In three States, increases in maximum weekly benefits became effective under automatic “flexible” maximum provisions:

State	Previous maximum	New maximum	
		Effective date	Amount
Hawaii.....	\$144	January 1981	\$157
New Jersey.....	123	January 1981	145
Rhode Island.....	107	July 1981	1140

¹ Besides an increase due to a rise in wages, this amount incorporates an increase in the formula from 50 percent to 60 percent of the State average weekly wage.

Although only 7 jurisdictions have TDI laws, these areas cover 24.8 percent of the national private employment wage loss for sickness. This occurs because the two largest States (California and New York) have TDI laws. The TDI areas contribute a still higher proportion of sickness insurance benefits paid to all workers throughout the United States. In 1981, TDI benefits were 35.5 percent of the \$4.4 billion paid in all group insurance benefits nationally. The higher benefit rates compared with wage loss rates are due to the fact that most workers are covered mandatorily in the TDI jurisdictions whereas protection is voluntary and so is less extensive in areas without TDI programs. However, the

ratio of TDI area benefits to national benefits has declined irregularly from a high of 48.1 percent in 1963, in large part as a result of improved benefits in the voluntary sector.

Private Insurance

Protection against income loss from sickness for the majority of workers is furnished through insurance policies. Table 7 shows premiums and benefits under insurance. The \$4.8 billion in insurance benefits paid during 1981 represented a decrease of 7.9 percent from the 1980 level. In contrast, in each of the 2 previous years insurance benefits rose substantially (by 25.6 percent in 1979 and 14.2 percent in 1980). Most of the 1981 drop occurred in voluntary private insurance benefits, which, as already indicated, have been subject to unusual trends in recent years. In non-TDI areas, only individual insurance showed stability in benefit disbursements during 1981—rising by less than 1 percent to \$1.3 billion.

Insurance benefits in the public sector—that is, under TDI laws—totaled \$621 million in 1981. This figure includes self-insurance payments in the five jurisdictions that allow them (all except the programs for railroad workers and Rhode Island). Self-insurance benefits exceeded the commercial insurance benefits—\$350 million versus \$272 million. This has been the case since 1976. Throughout this series, self-insurance in TDI jurisdictions has accounted for a fairly stable proportion of all insurance payments. For instance, in 1955 self-insurance was 5.5 percent of all insurance payments, and it was 7.3 percent of the 1981 total. Group insurance benefits under TDI were as high as 14 percent in 1955, but declined to 5.7 percent by 1981. Starting in the 1960’s, statutory benefit standards in TDI jurisdictions have made it difficult for insurance companies to compete with other forms of protection.

Premiums paid for insurance illustrate another aspect of the plans used to protect workers against income loss when they are ill. Namely, it provides a perspective on the total cost to employers to maintain worker protection. In 1981, premiums were \$6.8 billion. Like benefits paid by insurance, premiums also declined in 1981, by 5.3 percent. Premiums increased moderately in 1980 (3.8 percent), declined slightly in 1979 (2.0 percent), and increased considerably in 1978 (23.4 percent). These irregular movements from year to year are not readily accounted for and probably are more usefully viewed over the long run.

In the decade ending in 1980, premiums rose by 116.1 percent—less than the corresponding increase in insurance benefits of 138.9 percent. Benefits in 1980 were 72.5 percent of premium expenditures, whereas in 1970 they had been 65.6 percent. This ratio fell in 1981 to 70.5 percent.⁵ Thus, in 1981, about three-tenths of the

⁵ The lowest benefit-premium rate recorded in this series was 51.3 percent in 1948.

Table 6.—Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948–81¹

[In millions]

Year	Total	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	35.2	74.5
1953	230.2	102.0	37.7	90.5
1954	235.1	96.2	35.8	103.1
1955	244.6	97.0	38.2	109.4
1956	265.0	109.7	41.5	113.8
1957	305.3	129.5	48.6	127.2
1958	325.1	132.7	51.0	141.4
1959	353.2	135.2	54.3	163.7
1960	368.2	138.1	58.0	172.1
1961	396.6	141.3	60.1	195.2
1962	416.3	143.7	60.6	212.0
1963	442.2	130.6	67.6	243.9
1964	455.8	123.2	68.2	264.4
1965	466.7	124.8	72.8	269.1
1966	481.6	130.9	77.5	273.2
1967	507.1	139.1	83.3	284.7
1968	571.9	154.0	97.7	320.2
1969	654.9	171.7	109.5	373.7
1970	717.8	183.7	123.5	410.6
1971	721.3	184.0	126.4	410.9
1972	740.5	183.7	144.8	412.0
1973	799.3	193.6	159.9	445.9
1974	866.9	199.7	181.9	485.3
1975	932.3	203.7	190.3	538.3
1976	994.4	200.6	213.0	580.9
1977	1,007.3	203.8	221.7	581.8
1978	1,089.6	231.5	249.0	609.1
1979	1,214.8	242.9	272.9	699.0
1980	1,353.1	261.6	321.9	769.6
1981	1,573.6	271.5	349.5	952.6

¹ Programs under the Railroad Unemployment Insurance Act and the laws of Rhode Island, California, New Jersey (beginning 1949), and New York (beginning 1950). Data for Hawaii included beginning 1980. Puerto Rico benefits (\$9.9 million in 1981) excluded for consistency with wage-loss data in table 1 and elsewhere. Excludes hospital benefits in California and hospital, surgical, and medical benefits in New York.

² Under the laws of California, Hawaii, 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 funds for the disabled unemployed in Hawaii and New York, and the railroad program.

premiums were for operating the insurance system. It should be noted that the rates are based on several kinds of insurance in which the relationship of benefits to premiums may vary and so must be examined with caution. For example, in 1981, there was a large decrease in group insurance business under voluntary provisions. This decline was responsible for most of the reduction in the benefit-premium rates from 1980 to 1981, reflecting the fact that group insurance benefit-premium rates were higher than those for individual insurance.

Benefits under insurance plans can be related to the income loss of workers covered under these plans. However, such examination must consider that insurance plans undertake to compensate for only part of the income loss and so pay less than the "take-home" wage (a feature sometimes referred to as co-insurance). This helps prevent claims abuse. Insurance plans usually do

not cover the first few days or first week of an illness. This deductible provision is included to reduce premium costs and to lessen the administrative burden of processing large numbers of short-period claims.

A way to measure the extent of protection provided by disability insurance plans then is to relate the benefits paid to that portion of income loss that is intended to be replaced under current insurance practices. Certain adjustments in the given income-loss estimates must be made. First, the total income loss is reduced by 30 percent to allow for a 3-day uncompensated waiting period, or by 45 percent to allow for a 7-day uncompensated waiting period. Second, a further reduction of one-third is made to allow for that portion of the income loss after the waiting period that is not indemnified under most current insurance policies.

Total benefits paid through insurance in 1981 totaled

Table 7.—Premiums and benefit payments for private insurance as protection against income loss, 1948–81¹

[In millions]

Year	Total	Under voluntary provisions (not covered by TDI laws)			Under public provisions (covered by TDI laws)			
		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	76.8
1962	1,695.9	1,440.5	556.9	856.5	27.1	255.4	179.6	75.8
1963	1,704.3	1,459.9	560.0	870.0	29.9	244.4	161.0	83.4
1964	1,825.1	1,587.1	620.8	933.0	33.3	238.0	153.2	84.8
1965	1,940.9	1,682.5	710.9	933.1	38.5	258.4	163.0	95.4
1966	2,153.9	1,873.8	810.6	1,018.5	44.7	280.1	175.9	104.2
1967	2,265.8	1,955.2	853.1	1,048.6	53.5	310.6	194.3	116.3
1968	2,727.7	2,385.7	1,131.8	1,198.0	55.9	342.0	209.2	132.8
1969	3,076.7	2,677.3	1,304.5	1,304.5	68.2	399.4	243.9	155.5
1970	3,308.6	2,891.2	1,512.7	1,299.7	78.8	417.4	249.6	167.8
1971	3,583.7	3,140.9	1,597.3	1,454.2	89.4	442.8	262.5	180.3
1972	3,918.7	3,419.4	1,853.8	1,459.0	106.6	499.3	279.2	220.1
1973	4,240.8	3,718.6	1,942.0	1,671.0	105.6	522.2	286.0	236.2
1974	4,618.1	4,101.0	2,119.4	1,871.0	110.6	517.1	270.6	246.5
1975	5,172.3	4,592.1	2,214.2	2,257.0	120.9	580.2	304.8	275.4
1976	5,341.4	4,742.8	2,552.7	2,054.0	136.1	598.6	290.3	308.3
1977	5,690.7	5,029.9	2,833.5	2,044.0	152.4	660.8	316.5	344.3
1978	7,022.3	6,057.4	3,682.1	2,189.0	186.3	964.9	464.9	500.0
1979	6,884.7	6,156.0	3,653.8	2,331.0	171.2	728.7	343.2	385.5
1980	7,148.5	6,443.0	3,846.7	2,422.0	174.3	705.5	316.3	389.2
1981	6,772.2	5,990.1	3,463.7	2,376.0	151.0	782.1	341.9	440.2

See footnotes at end of table.

\$5.9 billion (table 8). This figure is a composite of short-term insurance under voluntary auspices, TDI, individual insurance, benefits in the sixth month under the Social Security Disability Insurance program, and self-insurance (whether in TDI or other areas). These benefits compensated 50.9 percent of income lost when the objective of the plan was to provide for two-thirds income replacement after a 7-day waiting period. When the objective was more generous—for example, two-thirds replacement after just a 3-day waiting period—then total insurance benefits replaced 40.0 percent of income lost in 1981.

As can be seen from table 8, the replacement rates under each of the specified objectives declined in 1981, as a consequence of the 3.8-percent decline in the amount of benefits actually paid. In 1979 and 1980, replacement rates increased as benefits rose—by 22.8 percent and 13.3 percent, respectively. Historically, the

degree of replacement attained rose until the early 1970's. Since then it has not shown a long-term consistent trend. In recent years, ASO and MPP plans have replaced many conventional insurance policies and sick-leave plans have increased. Elimination of this coverage from insurance policy data may affect trends in income loss replacement under insurance to the extent that the plans terminating their insurance policies will have different loss and premium experience than groups that maintain their policies.

Sick Leave

Although more workers are protected by the various insurance and self-insurance programs for sickness benefits than are protected by sick-leave plans, the latter pay a larger aggregate amount of benefits each year. In

Table 7.—Premiums and benefit payments for private insurance as protection against income loss, 1948-81¹—Continued

[In millions]

Year	Total	Under voluntary provisions (not covered by TDI laws)			Under public provisions (covered by TDI laws)			
		Total	Group insurance ²	Individual insurance ²	Self insurance ³	Total	Group insurance ²	Self insurance ⁴
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	35.2
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	1,089.2	884.9	445.8	418.5	20.6	204.3	143.7	60.6
1963	1,122.6	924.4	454.2	447.2	23.0	198.2	130.6	67.6
1964	1,199.6	1,008.2	498.9	483.9	25.4	191.4	123.2	68.2
1965	1,249.7	1,052.1	541.6	482.6	27.9	197.6	124.8	72.8
1966	1,356.1	1,147.7	603.2	512.9	31.6	208.4	130.9	77.5
1967	1,396.7	1,174.3	610.5	527.4	36.4	222.4	139.1	83.3
1968	1,732.8	1,481.1	832.9	609.1	39.1	251.7	154.0	97.7
1969	1,882.1	1,600.9	919.9	635.4	45.6	281.2	171.7	109.5
1970	2,169.6	1,862.4	1,113.9	693.4	55.1	307.2	183.7	123.5
1971	2,219.9	1,090.5	1,119.1	730.9	59.5	310.4	184.0	126.4
1972	2,386.4	2,057.9	1,219.3	772.0	66.6	328.5	183.7	144.8
1973	2,530.8	2,177.3	1,314.4	795.0	67.9	353.5	193.6	159.9
1974	2,875.4	2,493.8	1,565.3	851.0	77.5	381.6	199.7	181.9
1975	2,983.6	2,582.7	1,530.4	973.0	79.3	400.9	210.6	190.3
1976	3,148.3	2,734.7	1,764.4	881.0	89.3	413.6	200.6	213.0
1977	3,284.0	2,858.2	1,825.2	940.0	93.3	425.5	203.8	221.7
1978	3,613.1	3,132.6	1,834.5	1,210.0	88.1	480.5	231.5	249.0
1979	4,538.1	4,022.2	2,585.0	1,322.0	115.2	515.9	243.0	272.9
1980	5,182.9	4,599.4	3,182.4	1,280.0	137.0	583.5	261.6	321.9
1981	4,775.4	4,154.4	2,749.5	1,291.0	113.9	621.0	271.5	349.5

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 type of insurance benefits, adjusted to include accidental death and dismemberment provisions in individual policies that insure against income loss to offset understatement arising from the omission of current short-term income-loss insurance in automobile, resident liability, life, and

other policies. For 1956-71 dividends deducted from earned premiums (2-3 percent for group; 1 percent for individual).

³ Company and union-management trust fund, trade-union, and mutual benefit association plans. Excludes unfunded plans (included in table 9).

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

1981, sick leave accounted for \$9.7 billion, or 62.3 percent of the total. The preponderance of sick-leave payments in absolute dollars paid is, of course, a function of the different types of benefit formulas characterizing sick leave and insurance plans. That is, most sick leave is a full pay benefit with no waiting period, and insurance is a partial wage replacement benefit payable after a specified waiting period. The sick-leave estimates include the value of leave paid as a supplement to group insurance, publicly operated plans, or other types of group protection, as well as the value of exclusive sick leave (sick leave in lieu of any other type of group income-loss protection). Supplemental sick leave often

takes the form of wage replacement for an initial waiting period before insurance benefits become available.

Unlike the unusual decline observed in insurance benefits from 1980 to 1981, sick-leave payments continued to grow in 1981—by 9.1 percent. This increase was on the heels of a still larger percentage increase (12.1 percent) from 1979 to 1980. As a result of these different trends in insurance and sick-leave payments, sick leave continued to become a larger share of all sickness benefits. The tabulation that appears at the top of the next column outlines the shares of sickness benefits over the past 30 years.

Year	Total percent	Percent paid by—	
		Insurance	Sick leave
1950	100	47.4	52.6
1960	100	49.5	50.5
1970	100	43.8	56.2
1980	100	40.7	59.3
1981	100	37.7	62.3

As can be seen in table 9, each type of sick-leave payment increased in 1981. The largest relative increase was recorded for payments to private industry workers not in TDI jurisdictions (14.7 percent). The smallest rise was in sick leave to State and local government workers (5.4 percent). If all private industry sick leave is compared with that received by all government workers (Federal as well as State and local), it is evident that sick-leave pay rose in 1981 considerably faster for the former (14 per-

cent) than for the latter (less than 6 percent). This pattern follows a consistent trend for 1980 and for each year after 1975.

As a result of the change in directions in the late 1970's, government sick leave accounted for 57.9 percent of all sick leave in 1981, a decline from 66.6 percent in 1975. In distinction to the most recent period, State and local government sick leave had grown greatly through the 1950's and early 1960's, reflecting the expansion of education and other government services in those years. Before 1955, Federal sick leave had been predominant.

As indicated, sick-leave benefits shown in table 9 include payments under supplemental as well as exclusive plans. The importance of exclusive plans is readily observed from table 10. In 1981, more than \$7.4 billion was paid through exclusive sick leave, which was 76.2

Table 8.—Insurance benefits as percent of hypothetically insurable and compensable income loss¹ for workers without exclusive formal sick leave, 1948–81

Year	Amount of insurance benefits ² (in millions)	Percent of income loss—			
		After first 3 days ³		After first 7 days ⁴	
		Total	Two-thirds	Total	Two-thirds
1948	\$343	12.2	18.3	15.5	23.3
1949	384	14.3	21.4	18.2	27.3
1950	447	15.3	22.9	19.5	29.2
1951	562	16.8	25.2	21.4	32.1
1952	634	18.0	27.0	22.9	34.4
1953	697	18.7	28.1	23.9	35.8
1954	733	20.0	30.0	25.5	38.2
1955	802	20.4	30.6	26.0	39.0
1956	917	21.8	32.6	27.7	41.5
1957	1,002	22.8	34.2	29.0	43.5
1958	1,050	23.9	35.9	30.5	45.7
1959	1,154	25.2	37.8	32.1	48.1
1960	1,204	23.9	35.8	30.4	45.6
1961	1,247	24.9	37.3	31.6	47.4
1962	1,301	23.3	34.9	29.6	44.4
1963	1,366	23.3	34.9	29.7	44.5
1964	1,464	24.7	37.1	31.5	47.2
1965	1,519	23.4	35.1	29.8	44.6
1966	1,629	23.2	34.8	29.6	44.3
1967	1,681	23.1	34.7	29.5	44.1
1968	2,053	24.9	37.3	31.7	47.5
1969	2,256	26.3	39.4	33.4	50.1
1970	2,580	27.7	41.6	35.3	52.9
1971	2,631	27.9	41.8	35.5	53.2
1972	2,799	26.3	39.4	33.4	50.1
1973	3,087	26.8	40.2	34.1	51.2
1974	3,491	29.5	44.3	37.6	56.3
1975	3,682	29.2	43.7	37.1	55.7
1976	3,899	27.4	41.1	34.9	52.3
1977	4,056	26.9	40.3	34.2	51.3
1978	4,402	25.0	37.4	31.8	47.7
1979	5,407	27.8	41.7	35.3	53.0
1980	6,128	29.6	44.5	37.7	56.6
1981	5,898	26.7	40.0	34.0	50.9

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 (from table 10).

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 10).

Table 9.—Estimated value of formal paid sick leave in private industry and in Federal and State and local government employment, 1948–81¹

[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.....	\$418	\$158	\$146	\$12	\$259	\$148	\$111
1949.....	464	164	149	16	300	173	127
1950.....	495	180	156	24	315	172	143
1951.....	591	201	166	35	390	221	169
1952.....	670	213	181	37	453	254	199
1953.....	716	235	196	38	482	262	220
1954.....	745	245	205	40	500	252	248
1955.....	818	273	228	45	545	269	276
1956.....	889	299	248	50	591	280	311
1957.....	956	330	275	55	627	290	337
1958.....	1,043	346	290	57	696	315	381
1959.....	1,082	359	301	58	724	315	408
1960.....	1,226	400	334	66	826	348	478
1961.....	1,314	420	352	68	894	376	518
1962.....	1,475	472	394	79	1,003	414	589
1963.....	1,631	526	439	87	1,105	450	655
1964.....	1,637	505	424	81	1,133	445	687
1965.....	1,830	566	475	91	1,264	488	776
1966.....	2,008	619	519	100	1,389	523	866
1967.....	2,217	680	572	109	1,536	574	962
1968.....	2,569	803	676	128	1,766	642	1,124
1969.....	2,848	930	786	144	1,918	712	1,206
1970.....	3,308	1,066	903	163	2,242	810	1,432
1971.....	3,506	1,130	951	179	2,376	863	1,514
1972.....	4,075	1,364	1,135	228	2,712	925	1,787
1973.....	4,374	1,469	1,201	267	2,906	987	1,918
1974.....	4,741	1,634	1,347	287	3,107	1,076	2,031
1975.....	5,321	1,779	1,472	307	3,542	1,168	2,374
1976.....	5,920	2,052	1,698	354	3,868	1,253	2,615
1977.....	6,503	2,359	1,930	429	4,144	1,343	2,802
1978.....	7,349	2,770	2,279	491	4,579	1,466	3,113
1979.....	7,964	3,072	2,523	549	4,892	1,560	3,332
1980.....	8,930	3,593	2,935	657	5,337	1,708	3,630
1981.....	9,740	4,099	3,366	733	5,640	1,814	3,826

¹ Beginning 1960, data include Alaska and Hawaii. Data adjusted to reflect changes in sickness experience (average number of disability days), as reported in the Health Interview Survey of the Public Health Service after 1958. Beginning 1967, no adjustment made in Federal worker data.

² Sum of estimated value of formal paid sick leave for employees with (1) sick leave but no other group protection and (2) sick leave supplemental to group insurance or other forms of group protection, including publicly operated funds. Under each category, number of employees was adopted from Health Insurance Council, *Annual Survey of Accident and Health Coverage in 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 conversion of exclusive protection to supplemental protection under temporary disability insurance laws. Later-year estimates based on nationwide projection 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 6.7 in *The National Income and Product Accounts of the United States, 1929–74 Statistics Tables, 1977*, and in the *Survey of Current Business, National Income Issue* published annually, 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. Payroll data for 1948–66 derived by multiplying number of paid civilian full-time employees in all branches of the Federal Government in the United States by their mean earnings, as reported in *Pay Structure of the Federal Civil Service, Annual Report*, Office of Personnel Management. From 1967 to date, payroll for all employees (full- and part-time) obtained from *Federal Civilian Manpower Statistics*, Office of Personnel Management.

⁵ Assumes that number of State and local government employees covered by formal sick-leave plans has increased gradually from 65 percent of the total number employed full-time in 1948 to 96.0 percent currently, and that workers covered by such plans received on the average paid sick leave ranging from 5.2 days in 1948 to 6.3 currently. 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).

percent of all sick leave for that year. Sick leave for government workers accounted for 76.0 percent of the exclusive leave total in that year. Government leave as a percentage of all exclusive leave has declined since the mid-1970's. Before 1977, this proportion had been about 79 percent or more in most years from 1953.

The moderate, but consistent, decline in the relative importance of government exclusive sick leave is traceable to different rates of growth in coverage in recent years. Private industry sick-leave coverage grew somewhat faster than that of government employment. Within the private sector, surveys of the Bureau of Labor

Table 10.—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 1948–81

[Amounts in millions]

Year	Income loss	Value of sick leave under exclusive plans	Ratio (percent) of sick leave to income loss
1948.....	\$569	\$378	66.4
1949.....	605	417	68.9
1950.....	639	434	67.9
1951.....	726	509	70.1
1952.....	808	578	71.5
1953.....	850	614	72.2
1954.....	879	636	72.4
1955.....	958	694	72.4
1956.....	1,030	748	72.6
1957.....	1,113	804	72.2
1958.....	1,211	879	72.6
1959.....	1,213	910	75.0
1960.....	1,394	1,038	74.5
1961.....	1,495	1,124	75.2
1962.....	1,667	1,254	75.2
1963.....	1,841	1,385	75.9
1964.....	1,845	1,401	75.9
1965.....	2,057	1,566	76.1
1966.....	2,252	1,711	76.0
1967.....	2,257	1,888	76.8
1968.....	2,811	2,178	77.5
1969.....	3,033	2,364	77.9
1970.....	3,448	2,717	78.9
1971.....	3,642	2,873	78.2
1972.....	4,235	3,296	77.4
1973.....	4,605	3,612	78.4
1974.....	4,907	3,855	78.6
1975.....	5,559	4,396	79.1
1976.....	6,112	4,821	78.9
1977.....	6,693	5,237	78.2
1978.....	7,614	5,895	77.4
1979.....	8,262	6,361	77.0
1980.....	9,003	6,935	77.0
1981.....	9,703	7,424	76.5

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

Statistics indicate that much of the recent growth was in exclusive sick-leave plans.

The degree of replacement of workers' income from exclusive sick-leave plans in 1981 was 76.5 (table 10). The rate has been stable for many years despite different growth patterns of each sector comprising the total. Until recently, for example, slowly growing replacement rates for State and local workers offset a declining Federal employee rate. Since the mid-1970's, replacement rates have been steady for both groups of government workers: in 1981 the rates were 96.2 percent for Federal workers and 79.0 percent for State and local government workers.

Maternity Benefits—Update

Short-term sickness benefit plans have been part of the broad spectrum of benefits affected by the growing

concern in recent years for equal treatment of women in the work place. Generally, cash sickness benefit plans, whether voluntary or under TDI laws, have tended to exclude pregnancy and childbirth from the types of disabilities covered. Sometimes limited duration benefits were offered or other special arrangements, such as a single lump sum benefit rather than full-term periodic payments. Most commonly, however, female workers did not have income-loss protection for maternity.

As recently as 1974, only about 1 percent of private industry workers with health insurance plans had coverage providing the same benefits for maternity leave as for the time lost because of sickness. Supreme Court decisions in 1974 and 1976 upheld the exclusion or restriction of maternity benefits from both voluntary plans and plans established under State TDI laws. However, some sickness benefits programs before the 1970's were providing full benefits for maternity, such as the sick-leave plan of Federal employees and the TDI program for railroad workers. At that time the New Jersey TDI program allowed 8 weeks of maternity benefits.

Even before any Federal statutory or judicial changes occurred, some plans began providing degrees of protection for maternity. TDI laws provided the following maximum durations for maternity benefits, as of January 1, 1978:

Jurisdiction	Maximum duration
California.....	3 weeks before and 3 weeks after termination of pregnancy
Hawaii.....	26 weeks (same as for other disabilities)
New Jersey.....	4 weeks before and 4 weeks after termination of pregnancy
New York.....	8 weeks
Puerto Rico.....	None
Railroad program....	26 weeks (same as for other disabilities)
Rhode Island.....	Not applicable (lump sum of up to \$250 payable at birth)

Also by 1978, more sickness plans in the voluntary sector were also paying some maternity benefits. According to one study, "40 percent of companies surveyed now pay mothers while on maternity leave."⁶

A basic change occurred during 1978 in the status of maternity benefits under sick-pay plans (as well as under other health benefits plans). In October 1978, Congress enacted the Pregnancy Discrimination Act, which amended the Civil Rights Act of 1964. The new law declared that disabilities caused or contributed to by pregnancy, childbirth, or related medical conditions were to be treated the same as any other disability under a health insurance, disability insurance, or sick-leave plan offered through employment.⁷

This law applies to fringe benefit programs provided

⁶ Elizabeth M. Foulter, "Concerns," *New York Times*, November 29, 1978.

⁷ The major exception to this rule is that benefits arising from abortion are not required to be paid by an employer, except where the life of the mother would be endangered if the fetus were carried to term or where medical complications have arisen from an abortion.

by employers, whether through labor-management contracts or otherwise. Thus, the potential maximum duration for maternity benefits was increased by law to match that for all other types of sick-pay claims. But, also corresponding to other types of sick-pay claims, benefits for maternity are intended to cover only the actual period of incapacity. Further, an employer has to abide by the new provisions even if the employment is in a State with a TDI law that does not authorize full maternity benefits. As a result, by 1981 all TDI jurisdictions had revised their programs to provide full duration benefits for pregnancy.

When the Pregnancy Discrimination Act became law, the Department of Labor estimated that it would cost employers \$191.5 million annually in direct benefits (based on an average benefit duration of 7.5 weeks and an average weekly benefit amount of \$80). This represented a rise of 3.5 percent in the cost of temporary disability plans.

Some data are available on the actual costs subsequent to implementation. Information from TDI programs reveals the effect of full maternity benefits on short-term sickness programs. The following tabulation shows maternity benefits as a percentage of total TDI benefits in New Jersey and Rhode Island.

Year	New Jersey (State plan)	Rhode Island
1977.....	12.5	5.1
1978.....	12.4	5.1
1979.....	14.8	5.1
1980.....	16.9	7.6
1981.....	18.1	10.5
1982.....	(1)	10.2

¹ Data not available.

A limited benefit had been payable in earlier years, and then allowable weeks under maternity were increased in New Jersey in 1979 and in Rhode Island in 1981. The proportion of maternity benefits to total TDI benefits went up in each State as full maternity benefits became available.

Limited data are available from a 1982 survey of voluntary plans in private industry.⁸ The survey disclosed that the cost for short-term disability benefits rose in 40 out of 68 private voluntary plans. Although information was not reported on the average cost and change in costs for benefits among the 68 firms, the average increase in costs for those 40 plans reporting increases was 25.8 percent. If, for purposes of constructing a rough estimate for all 68 firms, it can be assumed that on the average those not reporting increases paid an amount of aggregate benefits proportionate to that paid by the others before implementation of full maternity benefits, the average cost increase among all those in the study was 15 percent. However, it must be recognized

⁸ Katherine J. McIntyre, "Pregnancy Law Hikes Short-Term Disability Costs," *Business Insurance*, February 8, 1982.

that an increase in maternity benefits was only one of the reasons for the cost increases reported. If effects of inflation and other factors causing benefit costs to rise were deducted, the net increase due to higher maternity benefits could be expected to have been well under 15 percent.

Appendix—Measuring Income Loss

The Social Security Administration estimates that wage and salary workers in private industry lose an average of 7.0 days of work a year, Federal government workers 8.0 days a year, State and local government employees 7.5 days, and the self-employed 7.0 days because of illness and accidents off the job. These averages have been modified annually starting with 1959 to reflect trends in morbidity rates as reported by the Health Interview Survey of the Public Health Service. However, the annual adjustments were discontinued for the Federal employee sector beginning in 1967 because recent data from the Office of Personnel Management indicate that morbidity rates do not reflect Federal worker experience adequately. Federal workers are distributed unevenly throughout the Nation so their sickness experience is not well represented by an index for all workers throughout the United States.

The work-loss estimates used to compute income loss for this series are designed to cover the loss of current earnings during the first 6 months of nonoccupational illness or injury, including loss during the first 6 months of a long-term disability. This concept of short-term income loss is based on traditional usage developed in connection with accident and sickness insurance practices and later adopted by government disability insurance programs. In designing various types of insurance policies and programs, the 6-month period was considered a useful administrative device for distinguishing between short-term and long-term disability.

Disability that has already lasted such a substantial period of time is customarily dealt with under plans designed for long-continued or permanent disability. The first 6 months of any illness are thus included in the short-term category regardless of the eventual span of illness.

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

Data on worker disability are collected annually by the Public Health Service in its Health Interview Survey. The number of income-loss days compiled from that survey have generally been lower than those used in this series. The concept of workdays lost that is used in the Health Interview Survey differs from that used here in

that the former (1) pertains only to workers aged 17 and over who are currently employed, (2) excludes disability among persons in institutions, (3) counts only full days of sickness, and (4) includes occupational as well as nonoccupational disability.

Because of these differences between the Social Security Administration series and the Health Interview Survey data, the latter 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 base year—that is, 1958 equals 100—the applicable sickness rate (or index) has been computed by the Social Security Administration in each subsequent year. These annual adjustments are then applied across the board to the estimates of income loss derived through the regular methods for the various labor-force components (see table 1). The index for 1981 was 96—an indication of slightly less illness than

that in the base year. The sickness index had fallen slowly from 101 in 1978, and varied narrowly around 100 for several years before that.

In this article, as in some earlier reports in the series, Health Interview Survey data for several years are presented for examination of trends. As table 11 shows, the average number of days lost from work in 1981, as reported by the Health Interview Survey, was 4.9 for private industry workers, 7.2 for Federal employees, 5.3 for State and local government employees, and 3.6 for the self-employed. During the 1968–81 period, these data indicate no consistent long-term patterns of change by sex or class of worker, except that work loss days for the self-employed have declined for men. However, even this pattern may not remain stable in the future given the fairly irregular movements reported for the other categories of workers in the components of this series.

Table 11.—Number of work-loss days per person for currently employed workers aged 17 or older, by type of employment and sex, selected years, 1968–81

Year	Total ¹	Private wage and salary	Federal Government	State and local government	Self employed
Total					
1968.....	5.4	5.4	6.8	5.4	5.0
1970.....	5.4	5.5	6.1	4.5	5.1
1972.....	5.3	5.4	7.5	5.0	4.4
1974.....	4.9	5.0	5.1	5.2	4.3
1976.....	5.3	5.2	8.5	5.5	(2)
1978.....	5.2	5.2	5.5	6.2	4.0
1980.....	5.0	5.0	6.7	5.3	3.7
1981.....	4.9	4.9	7.2	5.3	3.6
Men					
1968.....	5.2	5.1	6.4	5.3	5.1
1970.....	5.1	5.1	5.1	4.5	5.5
1972.....	5.2	5.2	7.6	5.0	4.5
1974.....	4.8	4.8	5.3	5.6	4.2
1976.....	5.2	5.0	8.3	5.6	(2)
1978.....	4.9	4.8	4.0	7.0	3.7
1981.....	4.6	4.6	6.5	4.9	3.6
Women					
1968.....	5.9	6.0	7.6	5.6	4.3
1970.....	5.9	6.3	8.2	4.6	3.5
1972.....	5.5	5.7	7.3	4.9	4.2
1974.....	5.1	5.3	4.8	4.9	4.6
1976.....	5.6	5.5	9.0	5.4	(2)
1978.....	5.7	5.8	8.5	5.6	5.0
1980.....	5.1	5.1	6.3	5.3	4.6
1981.....	5.4	5.4	8.5	5.6	3.7

¹ Includes nonpaid workers and workers for whom type of employment is not available—approximately 2 percent of 1981 total.

² Insufficient data for statistically reliable estimate.

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