Analyzing short-term disability benefits

For the first time, BLS has combined data on sick leave and sickness and accident insurance; results show that short-term disability benefits vary by length of service and between the private and public sectors

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Since 1979, the Bureau of Labor Statistics Employee Benefits Survey (EBS) has reported on the availability of benefit plans that replace earnings lost during periods of short-term disability. Through 1986, this annual survey was conducted on full-time workers in medium and large private-sector firms whose minimum employment ranged from 50 to 250, depending on industry. Industries covered included manufacturing; mining; construction; transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; and selected services.[1] In 1987 the survey was conducted in State and local governments,[2] and in 1988 it returned to the private-sector arena, for which survey findings are currently being tabulated. Regardless of year, the reports show that nearly all full-time employees of the sources surveyed have short-term protection, through either paid sick leave, paid sickness and accident insurance, or a combination of both. (See table 1.)[3]

All these EBS reports focused separately on the terms of sick leave and of sickness and accident insurance plans. This article, the first to look at combined benefits from the two sources, presents new measures of the number of days of paid time off available to employees for short-term disabilities.[4] By displaying the combined benefits of employees under more than one short-term disability plan, the new tabulations add to the existing data on individual sick leave and sickness and accident insurance plans. Beginning with the publication of the 1988 survey findings, the new measures will be regular features of EBS reports.

In the 1986 EBS, private-sector employees with 10 years of service had available an average of 127 days of short-term disability benefits. Since many of these days, particularly those from sickness and accident insurance plans, were paid at less than the regular rate of pay, the average number of full-pay equivalent days available was 76. The comparable averages for State and local government employees in 1987 were 47 days available and 28 full-pay equivalent days.

Short-term disability benefits

Of the two forms of short-term disability benefits, sick leave is often considered a continuation of salary and thus is most frequently found among salaried workers. As a result,

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it covers the large majority of public-sector workers, as well as white-collar workers in the private sector.[5] Sickness and accident insurance plans are more common among blue-collar workers in the private sector, who are often paid an hourly wage rather than a salary.

Sick leave provides income replacement through operating funds of the establishment. The employee's full salary is generally replaced for a specified number of workdays lost, such number often increasing with length of service. Additional days off at less than full salary may also be available. (In 1986, 2 percent of the private-sector workers covered by sick leave plans had only partial-pay benefits available.)

Sick leave plans typically specify a number of paid days off. (A few plans grant leave "as needed.") When such days are specified, they can be on either an annual or per-disability basis. Annual plans (for example, 12 days per year) may allow employees to cash in unused benefits or carry them forward to future years. Per-disability plans (for example, 60 days per illness) renew the entire benefit duration for successive disabilities, eliminating the need to carry days forward. As shown in table 2, annual plans are far more common than per-disability plans, particularly in the public sector. In both plans, benefits are seldom subject to a waiting period.

By contrast with sick leave, sickness and accident insurance plans provide less than full pay—either a dollar amount or a percent of wages—for a stated period, often 6 months. Moreover, benefits generally do not begin until after a waiting period, such as 1 week, is completed, thereby reserving payments for disabilities of longer duration. Typically, benefits do not vary with length of service.

Although most employees have only one source of short-term disability benefits, 25 percent of the full-time employees in medium and large private-sector firms and 14 percent in State and local governments could receive both sick leave and sickness and accident insurance. In these instances, benefits are coordinated by either starting insurance payments after sick leave pay ends or reducing sick leave pay by the amount of the insurance benefit.

Table 1. Percent of full-time employees in short-term disability benefit plans by type of plan, medium and large private firms, 1986, and State and local governments, 1987

Type of disability coverage	All employees	Professional and administrative employees	Technical and clerical employees	Production employees
Medium and large firms, 1986				
All employees	100	100	100	100
With short-term disability benefits	94	97	98	91
Sickness and accident insurance only	24	4	5	46
Paid sick leave only	46	69	63	23
Sickness and accident insurance and paid sick leave	25	24	30	22
Without short-term disability benefits	6	3	2	9
		Police and firefighters	**Teachers**	**All other employees**
State and local governments, 1987				
All employees	100	100	100	100
With short-term disability benefits	97	98	96	98
Sickness and accident insurance only	1	1	1	1
Paid sick leave only	83	84	91	79
Sickness and accident insurance and paid sick leave	14	13	5	18
Without short-term disability benefits	3	2	4	2

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 2. Percent of full-time employees in paid sick leave plans by type of plan, medium and large private firms, 1986, and State and local governments, 1987

Type of sick leave coverage	All employees	Professional and administrative employees	Technical and clerical employees	Production employees
Medium and large firms, 1986				
All employees	100	100	100	100
With paid sick leave	70	93	93	45
Annual sick leave only	51	59	68	37
Per-disability sick leave only	14	23	16	7
Both annual and per-disability sick leave	3	4	6	1
Other basis[2]	3	7	3	1
Without paid sick leave	30	7	7	55
		Police and firefighters	**Teachers**	**All other employees**
State and local governments, 1987				
All employees	100	100	100	100
With paid sick leave	97	97	95	97
Annual sick leave only	95	88	94	96
Per-disability sick leave only	(1)	(1)	(1)	(1)
Both annual and per-disability sick leave	(1)	(1)	(1)	(1)
Other basis[2]	1	8	(1)	(1)
Without paid sick leave	3	3	5	3

[1] Less than 0.5 percent.

[2] Sick leave provided "as needed," or switches from annual to per-disability sick leave after a stated period of service.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 3. Average number of days and percent of pay covered under formal short-term disability plans for full-time participants, medium and large private firms, 1986, and State and local governments, 1987[1]

Length of service	Medium and large private firms, 1986											
	All participants			Professional and administrative participants			Technical and clerical participants			Production participants		
	Days available	Full-pay equivalent days	Replacement ratio[2]	Days available	Full-pay equivalent days	Replacement ratio[2]	Days available	Full-pay equivalent days	Replacement ratio[2]	Days available	Full-pay equivalent days	Replacement ratio[2]
At 1 year	110	58	53	104	70	67	94	56	60	122	53	43
At 5 years	120	70	58	117	85	73	108	72	67	128	59	46
At 10 years	127	76	60	126	96	76	117	82	70	132	62	47
At 20 years	133	85	64	132	104	79	124	93	75	139	69	50
At 30 years	134	87	65	133	108	81	125	96	77	140	70	50
	State and local governments, 1987											
	All participants			Teachers			Police and firefighters			All other participants		
At 1 year	38	24	63	24	19	79	40	28	70	44	25	57
At 5 years	46	28	61	25	19	76	46	31	67	54	31	57
At 10 years	47	28	60	26	20	77	47	32	68	55	31	56
At 20 years	47	29	62	26	20	77	48	32	67	56	32	57
At 30 years	48	29	60	26	20	77	49	33	67	57	32	56

[1] Coverage includes annual and per-disability sick leave, sickness and accident insurance, and any combinations available. Averages are for the first illness of the year, with no benefits carried over from prior years. Benefits may or may not require a waiting period, either initially, or between various payments. Full-pay equivalent days take into account days available at full and partial pay. (For example, an employee receiving 30 days at full pay and 60 days at half pay would have 60 full-pay equivalent days (30 × 1.00 + 60 × .50).)

[2] Represents the percent of full pay replaced during the available short-term disability days. An employee with 110 days available and 60 full-pay equivalent days has a replacement ratio of 55 percent.

NOTE: Averages exclude workers covered by plans that do not specify the maximum number of days available, and workers not covered by short-term disability benefit plans.

The new data

The new data show that large numbers of short-term disability days are available to employees as a result of sickness and accident insurance and per-disability sick leave plans. In addition, because of sick leave provisions, the duration of short-term disability benefits varies markedly with length of service (table 3). In 1986, medium and large private-sector firms made available to full-time employees an average of 110 paid days off at 1 year of service, and 134 days off at 30 years. Private-sector averages also varied by occupational group, ranging, for example, from 117 days for technical and clerical workers with 10 years of service to 132 days for production workers with the same number of years of service.

Tables 4 and 5 show the wide variations in benefits provided by individual employer plans. For example, in the private sector in 1986, the number of days available commonly ranged from under 10 to more than 240 at each length-of-service period examined.

Short-term disability payments, particularly from sickness and accident insurance, may be less than the regular rate of pay. To account for this, table 3 shows the number of full-pay equivalent days available. For example, for an employee who is allowed to receive benefits for 130 workdays at 50 percent of pay, the tabulation would show 130 days available, but only 65 full-pay equivalent days available (50 percent of 130 days).

Table 3 also shows the replacement ratio, that is, the percent of an employee's regular pay that is received during available short-term disability days. Replacement ratios are computed by dividing the number of full-pay equivalent days by the number of days available. For example, for an employee who has 100 days available, but only 70 full-pay equivalent days, the replacement ratio is 70 percent.

Table 3 shows that at 10 years of service, private-sector workers have an average of 127 days of short-term disability leave available. But because many of these would be paid at partial pay, workers would be provided the equivalent of 76 days at full pay. Thus, if an employee who received average benefits were out of work for the entire 127-day period, 60 percent (76 divided by 127) of lost pay would be replaced. The flow of income, however, would not necessarily be constant over the disability period. If the initial days away from work were covered by paid sick leave (at full pay), and the remainder by sickness and accident insurance (at partial pay), the initial replacement rate would be higher than that subsequently received.

In this regard, full-pay equivalent days are highest in relation to total days available in occupational groups that receive predominantly sick leave benefits, such as private-sector professional and administrative workers. The ratio of full-pay equivalent days to all available days in 1986 was 79 percent for professional and administrative workers at 20

years of service, higher than for any other group shown in table 3 with comparable seniority. At the other extreme, the replacement rate was 50 percent for production workers, who rely more heavily on benefits from sickness and accident insurance.

Comparison of the data in table 3 for the private and public sectors yields two significant findings: private-sector workers have greater numbers of paid benefit days than do their public-sector counterparts, and their full-pay equivalent benefits vary more than those of public-sector employees by length of service.[6] These findings reflect both the availability and characteristics of benefit plans in the two sectors. First, private-sector workers are more likely to receive combined sick leave and sickness and accident insurance benefits, whereas government employees predominantly receive just annual sick leave benefits, commonly 12 or 13 days per year with no variation by years of service. Second, annual sick leave plans in the private sector provide greater benefits than do those in government, and the benefits often increase with employee service. In the private sector, average annual sick leave benefits in 1986 ranged from 15 days at 1 year of service to over 40 days at 25 years of service. Per-disability plans, while less common, were even more generous and also increased benefits with length of service. Under these plans, benefits averaged 52 days at 1 year, and 137 days at 25 years, of service.

The greater number of days in private-sector plans is counterbalanced by the more common provision in government plans for carrying over unused sick leave to future years. More than 9 out of 10 public-sector workers in short-term disability plans may carry forward unused sick leave benefits, while this feature is available to fewer than one out

Table 4. Percent of full-time participants in formal short-term disability benefit plans, by days of coverage,[1] medium and large private firms, 1986

Length of service and days of coverage	All participants		Professional and administrative participants		Technical and clerical participants		Production participants	
	Days available	Full-pay equivalent days	Days available	Full-pay equivalent days	Days available	Full-pay equivalent days	Days available	Full-pay equivalent days
Total	100	100	100	100	100	100	100	100
At 1 year:								
Under 10	12	15	13	13	14	15	10	15
10 and under 30	15	24	19	24	23	30	7	21
30 and under 60	4	20	6	12	6	17	2	27
60 and under 90	10	19	6	19	7	16	15	20
90 and under 120	2	8	3	11	2	7	3	6
120 and under 150	41	10	38	14	36	11	46	8
150 and under 180	1	2	3	3	1	2	(2)	2
180 and under 210	2	1	3	1	2	(2)	2	(2)
210 and under 240	(2)	1	(2)	2	(2)	1	—	(2)
240 and under 270	11	(2)	7	(2)	8	(2)	16	(2)
270 and over	1	(2)	2	(2)	1	(2)	1	—
At 5 years:								
Under 10	9	12	10	10	9	10	8	13
10 and under 30	10	18	13	16	17	20	5	18
30 and under 60	4	22	5	13	5	20	2	28
60 and under 90	12	19	8	18	11	17	15	20
90 and under 120	4	12	5	16	5	14	4	8
120 and under 150	42	9	40	15	37	9	46	6
150 and under 180	2	5	4	5	3	6	(2)	5
180 and under 210	2	1	4	3	2	1	2	1
210 and under 240	(2)	1	1	2	(2)	2	(2)	(2)
240 and under 270	12	(2)	8	1	9	1	16	(2)
270 and over	2	(2)	2	1	2	(2)	1	(2)
At 10 years:[3]								
Under 10	9	11	10	10	9	10	8	13
10 and under 30	10	17	12	15	16	19	5	17
30 and under 60	3	20	4	11	3	16	2	28
60 and under 90	11	16	8	14	10	15	14	19
90 and under 120	5	13	5	15	6	16	4	10
120 and under 150	42	11	38	18	37	11	47	6
150 and under 180	1	7	2	8	1	8	(2)	5
180 and under 210	3	2	4	4	3	2	3	1
210 and under 240	1	2	1	3	1	2	(2)	1
240 and under 270	14	1	12	2	12	2	17	(2)
270 and over	2	(2)	3	1	2	1	1	(2)

[1] Coverage includes annual and per-disability sick leave, sickness and accident insurance, and any combinations available. Data are for the first illness of the year, with no benefits carried over from prior years. Benefits may or may not require a waiting period, either initially, or between various payments. Full-pay equivalent days are weighted averages of days available at full and partial pay.

[2] Less than 0.5 percent.

[3] Provisions were virtually the same after longer years of service.

NOTE: Tabulations exclude workers covered by plans that do not specify the maximum number of days available, and also workers not receiving benefits. Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 5. Percent of full-time participants in formal short-term disability benefit plans, by days of coverage,[1] State and local governments, 1987

Length of service and days of coverage	All participants		Teachers		Police and firefighters		All other participants	
	Days available	Full-pay equivalent days	Days available	Full-pay equivalent days	Days available	Full-pay equivalent days	Days available	Full-pay equivalent days
Total	100	100	100	100	100	100	100	100
At 1 year:								
Under 10	5	5	6	6	3	3	5	5
10 and under 20	75	75	83	83	70	73	72	72
20 and under 30	3	3	3	2	8	7	3	3
30 and under 60	1	6	(2)	3	2	5	1	7
60 and under 90	1	6	1	3	(2)	5	1	8
90 and under 120	2	2	2	1	1	1	2	2
120 and under 150	11	1	4	(2)	13	4	14	1
150 and over	3	1	1	1	3	2	3	1
At 5 years:								
Under 10	4	4	6	6	2	2	4	4
10 and under 20	75	76	83	84	69	71	72	73
20 and under 30	2	2	1	1	7	7	2	2
30 and under 60	1	7	1	3	3	7	1	8
60 and under 90	2	6	1	3	1	4	2	7
90 and under 120	2	2	2	1	1	1	2	2
120 and under 150	10	1	5	(2)	12	4	12	2
150 and over	4	2	1	1	4	3	5	3
At 10 years:[3]								
Under 10	4	4	6	6	2	2	4	4
10 and under 20	73	74	83	83	67	69	70	70
20 and under 30	3	4	2	1	9	9	3	4
30 and under 60	1	6	(2)	3	2	6	1	7
60 and under 90	1	6	1	3	1	6	1	8
90 and under 120	3	2	2	1	2	1	3	2
120 and under 150	10	2	4	(2)	12	4	12	2
150 and over	4	2	2	1	4	3	5	3

[1] Coverage includes annual and per-disability sick leave, sickness and accident insurance, and any combinations available. Data are for the first illness of the year, with no benefits carried over from prior years. Benefits may or may not require a waiting period, either initially, or between various payments. Full-pay equivalent days are weighted averages of days available at full and partial pay.

[2] Less than 0.5 percent.

[3] Provisions were virtually the same after longer years of service.

NOTE: Tabulations exclude workers covered by plans that do not specify the maximum number of days available, and also workers not receiving benefits. Because of rounding, sums of individual items may not equal totals.

Table 6. Percent of short-term disability by source of payment and length of service, medium and large firms, 1986

Percent of days available	Length of service				
	At 1 year	At 5 years	At 10 years	At 20 years	At 30 years
All participants:					
Total days available	100	100	100	100	100
From sick leave only	34	38	41	42	42
From sickness and accident insurance	66	60	57	56	56
Combination[1]	1	1	2	2	2
Professional and administrative participants:					
Total days available	100	100	100	100	100
From sick leave only	59	64	67	68	68
From sickness and accident insurance	39	33	29	28	28
Combination[1]	2	3	4	4	4
Technical and clerical participants:					
Total days available	100	100	100	100	100
From sick leave only	49	55	58	59	60
From sickness and accident insurance	50	42	38	37	37
Combination[1]	2	3	3	4	4
Production participants:					
Total days available	100	100	100	100	100
From sick leave only	14	16	18	18	18
From sickness and accident insurance	86	84	82	82	81
Combination[1]	(2)	(2)	(2)	(2)	(2)

[1] Short-term disability benefit payments are provided from both sick leave and sickness and accident insurance plans for these days.

[2] Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 7. Percent of short-term disability days available by source of payment and length of service, State and local governments, 1987

Percent of days available	Length of service				
	At 1 year	At 5 years	At 10 years	At 20 years	At 30 years
All participants:					
Total days available	100	100	100	100	100
From sick leave only	37	34	35	36	37
From sickness and accident insurance	62	65	64	63	63
Combination[1]	1	1	1	1	1
Teachers:					
Total days available	100	100	100	100	100
From sick leave only	60	61	62	62	62
From sickness and accident insurance	40	39	38	38	38
Combination[1]	(2)	(2)	(2)	(2)	(2)
Police and firefighters:					
Total days available	100	100	100	100	100
From sick leave only	47	43	44	46	47
From sickness and accident insurance	53	56	55	54	53
Combination[1]	(2)	(2)	(2)	(2)	(2)
All other participants:					
Total days available	100	100	100	100	100
From sick leave only	31	29	29	30	31
From sickness and accident insurance	68	71	70	69	68
Combination[1]	1	1	1	1	1

[1] Short-term disability benefit payments are provided from both sick leave and sickness and accident insurance plans for these days.

[2] Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

of four private-sector plan participants. The effect of carry-over provisions could not be factored into the data of tables 3–5, but their greater presence in government plans must be considered when making comparisons between the two sectors.

Relative importance of components

The duration of short-term disability benefits available to employees at specific service intervals is composed of sick leave days, sickness and accident insurance days, and combined benefit days. (Combined benefit days are those days on which both sick leave and sickness and accident insurance benefits are received.) Tables 6 and 7 show the relative importance of these three components.

In the private sector, sick leave benefits make up about a half to two-thirds of the total days available for white-collar workers, depending upon length of service, but less than a fifth of the blue-collar total. This difference reflects the greater availability of sickness and accident insurance plans for blue-collar workers. As table 6 shows, in all three occupational groups, the importance of sick leave rises with seniority.

By contrast with the data for the private sector, public-sector figures are affected more by the large difference in the length of sick leave and that of sickness and accident insurance benefits than by variations in their incidence. Even though sickness and accident insurance plans are less common in the public sector, their large numbers of days available compared with relatively small numbers of sick leave days influence the distribution of days. Thus, sickness and accident insurance days make up nearly two-thirds of the total days available for all workers and predominate in all occupations except teaching (table 7). In both the private and public sectors, combined days, available to only a small percentage of workers, were a minor component of total days available. □

——FOOTNOTES——

[1] The most recent of these reports is *Employee Benefits in Medium and Large Firms, 1986*, Bulletin 2281, Bureau of Labor Statistics, 1987.

[2] Data are in *Employee Benefits in State and Local Governments, 1987*, Bulletin 2309, Bureau of Labor Statistics, 1988.

[3] For additional information on short-term disability benefits, see William J. Wiatrowski, "Employee income protection against short-term disabilities," *Monthly Labor Review*, February 1985, pp. 32–38.

[4] Income replacement for employees disabled for longer periods—generally in excess of 6 months or 1 year—is often available through employer-sponsored long-term disability insurance or disability provisions of defined benefit pension plans. See Diane Hill, "Employer-sponsored long-term disability insurance," *Monthly Labor Review*, July 1987, pp. 16–22, and Donald Bell and William Wiatrowski, "Disability benefits for employees in private pension plans," *Monthly Labor Review*, August 1982, pp. 36–40.

[5] Data are reported for full-time employees and for three broad occupational groupings constituting this total. In the survey of medium and large private firms, employees are classified as professional and administrative, technical and clerical, or production. (The first two groups are considered white-collar, the last blue-collar, employees.) State and local government workers are classified as teachers, police and firefighters, and all other employees (those not falling into the first two groups).

[6] A detailed comparison of benefits offered to private- and public-sector employees is available in a series of articles published in the December 1988 *Monthly Labor Review*. See William J. Wiatrowski, "Comparing employee benefits in the public and private sectors," pp. 3–8; Allan P. Blostin, Thomas P. Burke, and Lora M. Lovejoy, "Disability and insruance plans in the public and private sectors," pp. 9–17; and Lora Mills Lovejoy, "The comparative value of pensions in the public and private sectors," pp. 18–26.

APPENDIX: Counting disability days

The tabulations of total short-term disability benefits in this article include formal plans for paid time off through sick leave at full and partial pay, and sickness and accident insurance. Plans providing unlimited sick leave benefits and those providing benefits at the discretion of a supervisor were excluded because it was not possible to assign a specific duration to their benefits.

The tabulations presented project the benefits available to employees for their first disability of the year. Thus, the full sick leave benefit is assumed available. For plans that renew the entire benefit for successive disabilities (per-disability sick leave and sickness and accident insurance plans), the tabulations reflect the length of paid time off for a single spell of disability. For annual sick leave plans, the counts reflect the number of days available in a year and assume that no sick leave days were carried forward from prior years.

The tabulations take account of benefit coordination, in which employees are covered by both annual and per-disability sick leave plans or sick leave and sickness and accident insurance. For example, an employee may have available 30 days of annual sick leave and 130 days of sickness and accident insurance beginning after a 1-week waiting period. The total number of days available to the employee would then depend on how the benefits were coordinated. If the insurance plan begins benefits after 1 week away from work, regardless of the existence of sick leave, but sick leave is reduced by the amount of the in-

surance payments, the employee's maximum credit would be 135 days of short-term disability benefits. Conversely, if the insurance benefits begin at the end of the waiting period or the exhaustion of sick leave, whichever is later, the employee would be credited with 160 days.

It should be noted that waiting periods under sickness and accident insurance plans may be shortened, or eliminated entirely, for employees who have been in an accident or whose disability requires hospitalization. Waiting periods reflected in the tabulations are those for illnesses not requiring hospitalization.

The measures of full-pay equivalent days reported takes into account days available at full and partial pay. For instance, an employee with 30 sick leave days at full pay and 60 sick leave days at half pay is shown as having 90 days available, but only 60 full-pay equivalent days (30 *X* 1.00 + 60 *X* .50). For sickness and accident insurance plans that expressed benefits as a dollar amount per week, such as $200 per week, full-pay equivalent days were based on assumed earnings. For 1986, annual earnings of $23,192 were used; for 1987, $26,988. These figures are derived from BLS average earnings and employment cost index data.

Work sharing

The current advocacy of shorter hours and work sharing implies a large-scale response to the social and economic problems of mass unemployment. It therefore has to be distinguished from an old-established approach to work sharing: a temporary arrangement among workers at a firm or establishment in response to a downturn in business. In such cases, to avoid layoffs, all workers accept a reduced workweek at reduced pay: short-time working. This approach has been encouraged in some countries in recent times by the provision of state subsidies for short-time working to bring wages closer to their normal level. In all such cases, however, the arrangement is limited to a short period, and is to be replaced by normal working at normal wages once the business setback has been overcome, or by a reduction of the work force and resumption of normal hours if the business problem proves to be protracted.

—MICHAEL WHITE
Working Hours: Assessing the Potential for Reduction (Washington, International Labour Office, 1987), p. 27.