logical meanings, so that the sampling procedure can be characterized as stratified sampling.

The standard error is a measure of the extent to which an estimate based on a sample is likely to vary from the population value of the parameter being estimated For this type of sample, the probability is about 0.68 that an estimate of earnings, number of workers, or the respective proportions will differ from those population parameters by not more than one standard error. The probability of a difference not more than two standard errors is 0.95 and that of a difference not more than $2\frac{1}{2}$ standard errors is 0.99

One group of population parameters discussed in the present study is the proportion of SEI to taxable earnings in the various earnings intervals Another group of parameters being estimated is the extent and the direction (positive or negative) of the change in those proportions between each interval and the immediately following interval The direction of this change determines whether the average tax rate is progressing or regressing

For two given intervals, if the observed change between them is 196 times the standard error it can be said, with only a 5-percent probability of being mistaken, that there is some change in the SEI proportions between these two intervals in the whole population and that the population change is in the same direction as the change observed in the sample—that is, the change is statistically significant.

The standard errors of the ratio of wages and SEI to taxable earnings are about 0.001 except in the intervals with the largest number of workers, where they are somewhat smaller. The standard errors of the changes are approximately 0.0015 to 0.0016

Health Benefits for Laidoff Workers*

Most Americans have some degree of financial protection for hospital care costs and generally some type of medical care coverage for out-ofhospital costs through group or individual insurance plans The most common form of protection is through commercial group insurance or Blue Cross-Blue Shield plans provided at their place of employment to workers and their dependents One limitation of the majority of these plans, however, is that they terminate when or soon after the worker loses his job

A survey of about 52,000 private industry plans offering hospitalization and other health care coverage was made by the Bureau of Labor Statistics for the Social Security Administration at the beginning of 1974. The plans protected 28.4 million workers, of whom 11 1 million or 39 percent were in plans that continued to cover them for at least 1 month after a job loss These are plans filed at the Department of Labor in compliance with the Welfare and Pension Plans Disclosure Act The survey covered plans in most of private industry, excluding those with fewer than 26 participants and excluding plans of most nonprofit organizations These excluded workers plus government workers largely account for the differences between the 284 million workers in this survey and the estimated 564 million wage and salary workers with health plans at the end of 1973 in the annual series by the Social Security Administration ¹

This is the first of a series examining the characteristics of health care protection currently available through these plans Future analyses will examine benefit provisions, the administration and method of insuring health care plans, restrictions on coverage such as employment requirements, and types and amounts of contributions made to finance these benefits Sampling procedures and limitations will also be described

EXTENT AND PROVISIONS OF LAYOFF PLANS

Some 129 million workers participated in 28,000 health benefit plans that did not extend protection to employees who had been laid off Another 4 4 million workers were in 12,900 plans that provided no information on health benefits after layoff. The remaining 11.1 million workers in 10,700 plans reported definite provisions to continue health benefits for at least 1 month after layoff.

The degree of protection for those with layoff health benefits varied considerably. A little more

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¹See Alfred M Skolnik, "Revised Coverage Estimates for Employee-Benefit Plan Series," Social Security Bulletin, October 1975

than half the workers with layoff benefits were covered for at least 3 months. The remainder were in plans that either provided less than 3 months' protection or where length of protection depended on seniority, as the following data derived from table 1 show.

Length of layoff benefit protection	Workers with layoff benefits
Total number (in millions)	11 1
Total percent	
Less than 3 months	19
3-4 months	25
5 or more months	28
Varies by length of employment	22
Data not available	6

Health plans providing layoff benefits cover longer periods of hospitalization than those without layoff benefits Unreduced hospital benefits for 365 days or more, for example, are available to 47 percent of the workers in plans with layoff provisions Only 15 percent of those in plans without these provisions have such entitlement Similarly, workers with layoff health benefits are less likely to be in plans restricted by initial deductible or consurance requirements-that is, under comprehensive major medical plans-or dollar maximums on their hospital benefits The median number of days of hospitalization available can be derived from the following tabulation

	Workers with health care plans					
Duration of full basic hospital benefits (in days)	Total	With layoff benefit protection	Without layoff benefit protection			
Total number (in millions)	28 4	11 1	17 8			
Total percent	100	100	100			
Less than 31	3 6 2 15 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 8 (1) 10 1 21 1 40 7 13	8 7 8 19 2 2 3 2 11 11 4 20			

¹ Less than 0.5 percent ³ Represents workers without basic hospital benefits but with compre-hensive major medical plans (that is, workers with plans requiring an initial deductible and/or coinsurance payment by the beneficiary) or in plans in which the duration is subject to a dollar maximum

Among workers in plans with the number of days shown, the median was 365 days for those with layoff protection but only 120 days for other workers

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The tabulation also highlights the concentrations of workers in plans offering a specified number of days of hospital benefits Among workers covered by layoff provisions, those entitled to 31, 70, 120, and 365 days of full basic benefits constituted 87 percent of the total number of employees for whom hospital duration was stated in number of days.

The association of health care protection during unemployment with plans providing more generous duration of benefits is dramatically portrayed by the proportion of workers in plans with specified duration of hospital care who have layoff protection: 30 percent of those with up to 31 days of hospital care were protected during layoff, 37 percent of those with 120 days, and 67 percent of those with 365 days or more The pattern is most pronounced among workers in manufacturing where 41 million or 69 percent of the 59 million workers with hospital benefits of at least 365 days were entitled to benefits after layoff

Two-fifths of all workers protected by health benefit plans were eligible for benefits within 1 month of employment This proportion is identical with that for workers in plans with layoff provisions But, as the tabulation below shows, where there is an eligibility requirement of 1 month or more, workers in plans not providing benefits during layoff had to work somewhat longer to be eligible for health benefits Thus it can be seen that workers in plans with the more liberal benefit provisions and eligibility requirements also tend to be the ones with protection during layoff

	Workers with health care plans			
Employment requirement for health care benefits (in months)	With layoff benefit protection	Without layoff benefit protection		
Total number (in millions)	11 1	17 8		
Total percent	100	100		
None	41 32 7 20	41 21 6 82		

CHARACTERISTICS OF PLANS

The larger the health plan, the more likely it is to include a provision for health benefits during

TABLE 1 -- Number and percentage distribution of workers with health care benefits, by benefit status when laid off and specified plan characteristics, 1974

				Worke	rs with he	alth care b	enefits	+	
	Number of			Percentage	e distribut	ion, by lay	off benefit	protection	
Characteristic	health care plans	Total number		With		With lay	off benefit ;	protection	
-	(in thou sands)	(in mil- lions)	Total	out layoff benefit protec- tion	Total ¹	Covering 1-2 months	Covering 3-4 months	Covering 5 months or more	Varying by length of em- ployment
· Total	51 6	28 4	100	61	39	7	- 10	11	8
Duration of basic hospital benefits Less than 32	88 84 109 49 91 44 51	2 5 4 3 6 3 7 8 2 6 2 4 2 5	100 100 100 100 100 100 100	70 75 63 83 74 76 80	30 25 87 67 26 24 24 20	9 7 7 9 10 43 42	6 5 18 10 6 4 4 9	13 9 8 15 9 14 45	
Since of plan (number of workers)	22 5 11 3 4 6 9 9 3 3	117 71 18 49 29	100 100 100 100 100	61 50 58 77 61	39 50 42 23 39	6 8 15 8 5	9 15 46 3 12	10 14 10 7 15	
Less than 100	27 9 19 2 3 5 6	15 59 75 40 56 39	100 100 100 100 100 100	81 80 71 60 48 26	19 20 29 40 52 74	11 9 7 8 6 6	46 4 8 5 12 25	4 2 5 8 16 17 15	
Industry Manufacturing Construction Transportation Communications and public utilities Wholesale and retail trade Finance, insurance, and real estate Services Other (mining, farming, forestry)	11	15 0 1 9 1 8 1 7 3 4 1 9 1 6 1 1	100 100 100 100 100 3 100 100 100	55 65 47 44 74 88 74 77	45 36 53 56 26 12 28 23	48	7 8 28 42 8 41 9 9	13 24 44 46 8 42 47 17	
Single or multi employer plan Single employer Multi employer	47 1 4 5	20 6 7 8	100 100	62 57	38 43	8	9 12	8 20	
Collective bargaining status of plan Negotiated Nonnegotiated	12 8 39 1	15 5 12 8	100 100	45 80	55 20		· 13 5	16	
Wage status of worker Hourly Balaried Hourly and salaried Data not available	55	8 2 3 8 8 5 7 8	100 100 100 100	53 73 53 71	47 27 47 29	6 5 9 8	12 43 6 14	13 9 16 4	1
Type of insurer for hospital benefits Commercial insurance ⁴	43	18 3 15 4 2 3 8 4 1 7	100 100 100 100 100	61 59 77 61 55	39 41 23 39 45	11 11 43 2 41	8 8 4 14 10	12 12 15 6 21	

¹ Includes 700,000 workers for whom length of layoff benefit protection was not available Less than 0.5 percent

^a Hospital benefits have initial deductible and/or coinsurance feature, rather than full "basic" benefit

Based on less than 143,000 workers (0 5 percent of all workers surveyed) Includes 1 5 million workers with durations other than those shown,

layoff. Three-fourths of the workers in plans with 50,000 or more participants had health care protection for laid off members and their dependents (29 million). In contrast, about one-fifth of the workers (0.3 million) in plans with fewer than 100 individuals had this protection In health care plans with 5,000-9,999 participants, two-fifths of the workers had continued coverage after layoff,

all health care plans 1 1 Workers in larger plans were more apt than

about the same proportion as that for workers in

and 10 million workers for whom data were not available

* Less than 50 * Less than 50 Tincindes up to 1 percent of workers for whom data were not available # Includes 600,000 workers in health maintenance organizations, other in-dependent plans, or unfunded plans, and workers for whom data were not available

those in smaller plans to have at least 3 months during which benefits could become available while they were unemployed Interestingly, large plans were also more likely to extend protection for a period that varied according to seniority on the job.

Similarly, for both manufacturing and nonmanufacturing industries the period of health care protection during layoff was directly associated with size of plan In contrast, almost all the workers whose eligibility period varied with seniority

were in manufacturing employment (22 million of 24 million workers)

Considerable diversity by industry is evident in the prevalence of layoff health benefits More than half the workers with health plans in communications and public utilities (56 percent) and in transportation (53 percent) were protected by layoff provisions In manufacturing (with 45 percent), employee coverage was also above the 39percent all-industry average of workers with benefits during layoff At the low end of the coverage spectrum were retail and wholesale trade and service industries (26 percent each) and finance (12 percent) Generally, the industries in which higher proportions of the workers had layoff benefits were also the industries in which health benefits were available for longer periods after layoff An exception is the construction industry, where only 35 percent of the workers were in health plans with layoff protection but two-thirds of those covered were protected for at least 5 months Although the proportion of construction workers in plans with formal layoff provisions is low, many workers in this industry do have their health care extended into periods of unemployment if they have worked a specified number of hours just before being laid off

A higher proportion of workers in multi-employer plans (43 percent) were under layoff provisions than were workers in single-employer plans (38 percent). A much higher proportion of workers in multi-employer plans (20 percent) than in single-employer plans (8 percent) had layoff health benefits available for at least 5 months, in large part a reflection of the pattern in the construction industry Within both manufacturing and nonmanufacturing, workers in multi-employer plans with layoff provisions were much more likely to have at least 5 months of this protection than were workers in single-employer plans Such multi-employer industries as the construction and apparel industries are, for the most part, highly unionized and are noted for regularly recurring seasonal unemployment These factors may explain the prevalence of longer periods of protection during unemployment among multiemployer plans

Collective bargaining appears to have significant influence on the prevalence of layoff provisions in a plan A majority of workers in unionnegotiated health plans (55 percent) had health care protection during layoffs Only 20 percent of the workers in nonnegotiated plans had such coverage Furthermore, benefits were provided for a longer period of unemployment by negotiated plans than by nonnegotiated plans, as the figures that follow indicate Negotiated plans also ac-

1	Workers with layoff benefit protection							
Collective bargaining status of plan	Total ¹	Percentage distribution, by length of layoff benefit protection						
1	number (in mil- lions)	Total	1–2 months	8~4 months	5 or more months			
Negotiated	85 26	100 100	19 46	87 30	45 24			

¹ Excludes workers in plans not specifying length of protection

counted for almost all workers whose period of health care during unemployment varied with length of service And, as indicated above, these were for the most part employees in the manufacturing industry. The tendency for workers in negotiated plans to have longer layoff protection held true for those in both manufacturing and nonmanufacturing industries

Data to determine whether an individual was an hourly or salaried worker are available for about 205 million (72 percent) of the 284 million workers in the survey To the extent that the information on this characteristic is representative of the whole group surveyed,² it is evident that salaried workers were less likely to be eligible for health benefits when on layoff than were hourly paid employees Of the employees in health plans for salaried workers alone, 27 percent were under layoff provisions, 47 percent of workers in plans for hourly workers or in plans for both hourly and salaried workers were offered this protection. Perhaps the lower prevalence of layoff protection for salaried employee plans reflects their lower incidence of both collective bargaining and layoff No clear-cut pattern emerged concerning the length of time for which such benefits were available

Layoff health benefits were prevalent about equally under each of the two major types of msurers,³ commercial and Blue Cross-Blue Shield

⁴A future report from this study will review the representativeness of this characteristic in detail

⁵ Data on type of insurer apply to hospital benefit insurance Some plans may insure other health benefits differently

plans Workers in plans with worker-paid deductible costs and coinsurance in their hospital benefit (that is, those who have a comprehensive major medical plan, not basic hospital benefit that provides "first dollar coverage") are less likely to be covered by layoff provisions Less than onefourth had such coverage Workers in this group are more likely, however, to have benefits available for layoffs of 5 months or more than are workers with basic plan coverage It should be noted that in the absence of a specific provision for benefits during layoff, Blue Cross-Blue Shield plans generally permit a worker to obtain continued protection by converting to an individual policy that he pays for directly. This conversion privilege is less common among commercial insurance plans.

FINANCING OF LAYOFF BENEFITS

Health benefits were financed solely by employers for a little more than two-thirds of the workers in all surveyed plans, as the tabulation that follows shows Among plans providing

Type of financing	' A11	Plans with layoff benefit protection		
÷,	plans	Before layofi	During layoff	
Total number (in millions)	28 4	11 1	11 1	
Total percent	100	100	100	
Employer-financed Jointly by employer worker Worker-financed Other 9	68 28 1 3	(1) (1) (2) (2) (3)	50 13 87 (¹)	

Less than 0.5 percent
Data not available or financing varies by plant, union, or location

health protection during layoff, more than fourfifths of the workers were in plans in which the employer paid the whole cost while the worker was employed. Employers paid the premiums for health benefits during layoffs, however, in just half the plans with such protection-a reflection of the change in financing these benefits in many plans (table 2).

Where the financing of layoff health benefits changed, it switched to worker-paid protection Of those workers who had layoff benefits, 37 percent were solely responsible for paying for that protection. Almost none of these workers had to pay the health care premiums themselves while they were employed Only 1 percent of the workers under all health plans paid the entire cost themselves Some plans provided a delay (for a period most often determined by seniority) in the change of financing following layoff. About 16 million workers (40 percent) of those in plans with changed financing during layoff were provided a transition period

In terms of duration of hospital days available, a mixed pattern was seen for financing health benefits during layoff. Workers in plans with the shortest or longest maximum duration were less likely to have to pay for their own benefits while on layoff than were other workers for whom duration was reported. This pattern largely reflects financing in the nonmanufacturing sector where one-fourth of the workers in plans with layoff provisions of less than 32 days or of 365 days or more had benefits financed by employees, compared with seven-tenths in plans providing 70 days or 120 days

The larger plans, except those with 10,000-49,000 participants, showed more tendency to change their financing of layoff benefits to worker contributions than did smaller plans Thus almost half (46 percent) of the workers in plans with 50,000 or more workers financed their own layoff benefits entirely, compared with only 27 percent of those in plans with fewer than 1,000 participants

In both manufacturing and nonmanufacturing this pattern of difference between largest and smallest plans is seen. The financing pattern was not, however, consistent throughout the range of plans of various size for either of these industry groups The method of financing for plans of all size taken together was more apt to have changed (from the employer- or jointly-financed to workerfinanced) for workers in nonmanufacturing. The most striking instance occurred in the communications industry where close to 800,000 workers, or 84 percent of those under layoff provisions, had to finance these benefits themselves

Negotiated and nonnegotiated plans differ in their financing of layoff benefits For almost half the workers in negotiated plans and well over half in nonnegotiated plans, workers participated in paying for their benefits during layoff, either jointly with employers or by themselves. But, as table 2 shows, workers in negotiated plans were TABLE 2 -Number and percentage distribution of workers with health care benefits during layoff, by type of financing and specified plan characteristics, 1974

		v	Vorkers with he	alth care bene	fits during layo	đ	
	Number of		Percentage distribution, by type of financing during layoff				
Characteristic	health care plans (in thousands)	Total number (in millions)	e e e e e e e e e e e e e e e e e e e	With no benefit i	With change to		
~ 3	,		Total	Paid by employer	Paid jointly by employer and worker ¹	worker- financed enefit ^a	
Total	10 7	11 1	100	50	13	87	
Duration of basic hospital benefit (in days) Less than 32		8 11 28 52 7 11	100 100 100 100 100 100	51 83 29 60 53 56	\$ 17 22 18 3 6 81 20	31 45 55 38 * 14 24	
Employment requirement for health benefit (in months) None	29	45 36 8 11 11	100 100 100 100 100	50 51 43 50 50	15 14 *4 21 *1	85 85 52 28 49	
Less than 1,000	22	15 22 16 29 29	100 100 100 100 100 100	41 45 43 57 54	82 19 16 12 (*)	27 37 40 31 46	
Industry Manufacturing. Construction. Transportation. Communications and public utilities Wholesale and retail trade.	8 1 22 23	68 7.9 9 9	100 100 100 100 100 100	55 29 81 * 8 88 47	13 *3 *8 *8 24 26	82 68 • 11 84 87 27	
Single or multi-employer plan Single employer Multi-employer	93	78 88	, 100 , 100	44 63	16 6	89 81	
Collective bargaining status of plan Negotiated Nonnegotiated	8 2 7 5	85 26	100 100	, 52 , 43	6 39	42 17	
Wage status of worker Hourly Salaried Hourly and salaried Data not available Type of insurer for hospital benefits	20 13 84 40	38 10 40 22	100	56 46 55 81	4 26 14 20	40 28 80 48	
Type of insurer for hospital benefits Commercial insurance ^a Blue Cross Blue Shield	16	71		57 34 47	18 *3 *12	24 63 40	

Includes 200,000 workers with worker-financed benefits
Includes 100,000 workers with benefits financed jointly by employer

Based on less than 143,000 workers (0 5 percent of all workers surveyed)
Includes 200,000 workers with durations other than those shown, and 200,000 workers for whom data were not available

more likely to be in plans that required them to pay for their benefits while on layoff, exclusively. 42 percent, compared with 17 percent of those in nonnegotiated plans

Although the two major types of insurer did not differ much in prevalence of layoff provisions, a definite pattern emerged in financing of these benefits by insurer group Proportionately, more than two and one-half times as many workers under Blue Cross plans (63 percent) as under commercial insurance (24 percent) paid for their layoff benefit protection themselves Plans in manufacturing and nonmanufacturing demonstrated the same distribution by type of insurer. ⁵ Less than 50

Less than 0 5 percent Less than 0 5 percent I noludes up to 1 percent of workers for whom data were not available Includes 800,000 workers in health maintenance organizations, other independent plans, or unfunded plans, and workers for whom data were not available

About four-fifths of the workers with jointly financed layoff benefits were commercially insured

SUMMARY

Plans in the survey indicated that about 2 out of 5 workers in private industry with health care benefits were covered by such benefits when they were laid off These benefits were available for 3 months or more for about half the eligible workers, a fifth had protection for 1 or 2 months, and for the remainder the period of coverage varied with seniority or had not been reported.

(Continued on page 51)

TABLE M-6 Disabilit	y insurance t	trust fund	Status,	1957-75
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[In thousands]

-		Receipts		Expenditures				Assets at end of period		
Period	Net contribution income 1	Reimburse ments from general revenues ¹	Net interest •	Cash benefit payments *	Rehabil itation services for dis abled	Transfers to railroad retirement account 4	Net ad- ministra- tive expenses ⁴	Invested in U S Govern ment securities '	Cash balances •	Total assets
iscal year 1867	4 141,358	\$16,000 16,000 16,000 16,000 51,000 51,000 52,000 52,000	\$1,363 15 843 33 293 46,010 60,610 67,752 67,752 62,135 53,877 66,840 84,913 140 860 222,762 325,068 388,233 434,580 481,800 511,856	\$188,420 839 231 528,304 703,996 1,011,876 1,170 678 1,251,207 1,392,190 1,721,138 1,860,789 2,088 352 2,443,437 2,778,118 3,881,448 4,045,895 5,161,840 6,185,569 7,629,796	\$1 493 6,534 15,893 14 891 16,487 21,242 27,523 39,361 49,670 70,936		\$1,305 12,112 21,410 81,922 36,297 63,527 66,512 67,691 78,862 183,479 98,834 112 836 133,495 149,020 189,875 211,671 246 649 164,266 252,985	\$325,363 1,054,458 1,066,874 2,100,862 2,385,575 2,406,137 2,277,244 2,138,509 1,875,566 1,462,628 1,882,627 2,840,683 3,490,762 2,840,683 3,490,762 2,840,683 3,490,762 2,840,683 3,490,762 2,840,683 3,490,762 2,840,683 4,833,225 6,076,203 7,010,202 7,801,908 8,192,613 8,155,910	\$11, 695 44, 515 59, 747 66, 352 118, 809 100, 532 116, 466 125, 478 131, 133 223, 532 188, 978 235, 713 186, 778 270 372 332 126 380, 076 67, 565 60, 252 34 597	\$337,22 1,098,97 2,167,21 2,504,33 2,504,33 2,504,33 2,504,34 2,383,71 2,263,95 2,006,66 1,686,16 2,585,33 3,677,55 5,103,56 6,408,32 7,380,27 7,880,47 8,282,86 8,190,50
1974 eptember lotober lovember 1975	650 465 479 457 532,088 596,383		2 289 1 944 5,123 238,655	592,501 627,291 636 343 638 620	4,458 3,169 3,787 5,199		12 621 20,499 17,759 35,092	8 114,657 7,971,076 7,902,358 8,126, 34 6	75,996 50,019 -1,942 -17,803	8,190,68 8,021,09 7,900,41 8,108,54
ebruary ébruary farch pril tay une uly eptember	503, 576 622,069 775 113 719,239 626,220 725 997 533,046 596,888 749,744	·····	512 8,891 1 945 2,201 5,049 236,328 505 9,399 3,155	636, 717 647 676 659, 748 655, 645 689, 187 663, 861 720 694 783 485 870, 248	4 019 4 632 23,605 - 2 396 7 970 9,217 - 157,369	28,514	21,760 16,336 18,707 22,001 24,233 22,665 30 654 16 251 21,748	7,902,804 7,843 586 7,961,936 7,997,712 7,924,772 8,155,910 7,918,201 7,765,770 7,724 395	47, 531 69, 865 85 512 35, 837 27, 657 84, 597 54, 389 13, 459 73, 105	7,950,13 7 912 48 7,987,44 8,033,54 7,952,42 8 190,50 7,972,68 7,972,68 7,779,22 7,797,50

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LAIDOFF WORKERS

(Continued from page 45)

Workers in health plans providing the most generous hospital benefit duration (that is, 365 days or more) were more likely to have health benefit protection during layoff Workers in plans requiring fewer months of employment for benefit eligibility were also more likely to have layoff protection Employees were most likely to have health benefits available during layoff if they were in plans that (1) were for large numbers of participants, (2) were in transportation or communications and public utilities industries (and, to a lesser extent, manufacturing); (3) were unionnegotiated; (4) included hourly paid employees The same characteristics associated with higher prevalence of layoff benefits were usually associated with the availability of layoff benefits for longer periods of unemployment

1

Employers financed health care benefits during layoff for half the workers with this protection. Almost no workers with health care protection during layoff paid the entire premium for their health benefit while employed, but 37 percent financed their own benefits during layoff The remaining workers with layoff protection were in plans with joint employer-worker contributions Workers in large plans, plans insured through Blue Cross, and negotiated plans were more apt to be required to pay exclusively for their health benefits during layoff than were other workers