

**GROUP WEEKLY INDEMNITY CONTINUA-
TION TABLE STUDY**

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THIS paper presents the analysis of the group weekly indemnity continuation table data contributed by the seven companies listed in Section I. The work is primarily that of the author, although full appreciation and thanks are due to the other members of the Group Mortality and Morbidity Committee for their assistance in planning and carrying out the investigation. The paper is presented in the following eleven sections:

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SECTION I. GENERAL COMMENTS

Temporary disability insurance for the purpose of replacing earnings lost in the event of total disability that causes inability to work was first included in group policies about 1920. Since then, group weekly indemnity insurance has grown steadily and today has become one of the important means of providing security for employed persons against loss of income during sickness. At the end of 1949, the total number of persons in the United States who had some form of protection voluntarily provided against loss of income due to disability was in excess of 34,000,000.* Of these, more than 10,000,000 were protected by group weekly indemnity insurance, the remainder being covered through salary continuance by the employer, by individual accident and health policies, under union plans or employee mutual benefit associations or by other means.

* This figure is exclusive of some 2,500,000 persons estimated to be covered solely by the governmental disability insurance funds under the California, New Jersey, and Rhode Island cash sickness laws and under the Federal Railroad Unemployment Insurance Act. It does include those covered by voluntary plans in California and New Jersey. Benefits under the New York Disability Benefits Law did not become effective until July 1, 1950.

The plan of insurance in the policy contract specifies the amount of group weekly indemnity payable which is customarily expressed as a percentage of weekly earnings, usually not more than two-thirds, or alternatively in terms of an equivalent schedule of earnings classes. In the latter case, employees earning \$20 a week and less than \$30 a week might receive a weekly benefit of \$15; those earning \$30 and less than \$40 might receive a weekly benefit of \$20; those earning \$40 and less than \$50 a weekly benefit of \$30; and so on.

A short waiting period of total disability is required before benefits commence. In case of sickness this is at least three days, the most common period being seven days. In case of accident the waiting period may be the same as for sickness or benefits may commence as of the first day of disability. Benefits are payable for a specified maximum duration on account of any one accident or sickness. Maximum periods of 13 or 26 weeks are the most common, with plans of other maximum durations, sometimes as much as 52 weeks, being written occasionally. Benefits for female employees in case of maternity are usually included, but for a maximum duration of only 6 weeks. Group weekly indemnity policies ordinarily do not cover occupational accidents or occupational diseases which are covered under *workmen's compensation laws*. Otherwise the policies are generally free from exclusions of any kind.

The regular annual reports of the Group Mortality and Morbidity Committee include the investigation of experience under group weekly indemnity policies, the last such appearing in the 1950 report covering the period 1947 to 1949. Data as to aggregate claims and the corresponding exposed to risk for completed policy years furnish information concerning the cost per unit of benefits under different plans and enable analysis of the variation therein by sex, industry, size of group and geographical location. But, since the annual study does not deal with individual group weekly indemnity claims as such, no analysis of claim duration incidence is possible. The last presentation of a continuation table based on individual claims is contained in G. W. Fitzhugh's paper in *TASA XXXVIII*, "Recent Morbidity upon Lives Insured under Group Accident and Health Policies and Premiums Based Thereon," which was published in 1937 and was based on experience in the years 1931-1935. Because of the desirability of having more recent data, this special sample intercompany claim investigation was undertaken.

Each contributing company was asked to submit a sample of its group weekly indemnity claims for the calendar year 1949, or a proximate 12 months period. The sample was to be chosen proportionately from the claims during the 12 months period in such a way that the

study would be free from bias arising out of purely seasonal factors. The sample was limited to claims under plans with benefits beginning on the 4th or 8th day of disability in case of sickness and payable from the 1st, 4th or 8th day in case of accident, and with maximum limits of 13, 26 and 52 weeks for any one disability. Between 10% and 20% of the claims under the 1-8-13 and 8-8-13 plans, and if possible, all claims under the remaining less common plans were to be included. Maternity claims on female employees, claims under policies providing both occupational and nonoccupational coverage and claims occurring during the first policy year were to be excluded.

One punch card was prepared for each claim. The form of the card is shown in Appendix A. Punch cards for 161,693 group weekly indemnity claims were submitted by the seven contributing companies: Aetna Life Insurance Company, Connecticut General Life Insurance Company, The Equitable Life Assurance Society, John Hancock Mutual Life Insurance Company, Metropolitan Life Insurance Company, The Prudential Insurance Company of America and The Travelers Insurance Company. These companies underwrite 67% of the group weekly indemnity insurance in the United States.

SECTION II. VARIATION BY PLAN

The raw data are presented for males and females separately in the tables contained in Appendix B. The number of claims submitted by the contributing companies are tabulated under each plan for accident and sickness claims separately. For the first 35 days of disability the number of claims entering upon each day of disability are shown and thereafter the number entering upon each week of disability.

Theoretically, the pattern of termination of group weekly indemnity claims would be expected to be substantially the same regardless of the plan of the insurance. Thus, those remaining disabled on the 8th day under a plan where benefits began on the 4th day might be expected to correspond to those with respect to whom benefits would commence on the 8th day under a plan with a 7 day waiting period. This turns out not to be the case in practice.

The explanation probably lies in the somewhat indefinite selection process involved in the choice of plan at the time of purchase, both the self-selection by the policyholder as purchaser and the underwriting selection exercised by the insurance company. The result is a grouping of employers and employees by plan of benefit in such a way that the combined effect of such factors as the kind of establishment, locality, the type of employer administration, the age, education, economic level and

TABLE I
VARIATION BY PLAN

MALES						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Plan	Number of Claims	Average Remaining Weeks Duration	Plan	Number of Claims	Average Remaining Weeks Duration	Ratio (3)÷(6)
From the First Day (Accident Only)						
1-4-13	2,689	3.23	1-8-13	3,944	3.91	82.6%
1-4-26	704	3.99	1-8-26	2,140	3.64	109.6
1-4-52	385	3.84	1-8-52	205	4.54	84.6
Excluding the First Seven Days of Disability (Accident and Sickness)						
1-4-13	18,186	3.24	1-8-13	24,069	4.37	74.1
4-4-13	6,739	3.00	8-8-13	12,025	4.46	67.3
4-13	24,925	3.18	8-13	36,094	4.40	72.3
1-4-26	5,302	4.01	1-8-26	11,195	5.20	77.1
4-4-26	3,317	3.91	8-8-26	22,696	5.40	72.4
4-26	8,619	3.97	8-26	33,891	5.33	74.5
1-4-52	3,003	3.59	1-8-52	1,329	6.90	52.0
4-4-52	.....	.....	8-8-52	1,947	6.93	.....
4-52	3,003	3.59	8-52	3,276	6.92	51.9
Excluding the First 35 Days of Disability (Accident and Sickness)						
1-4-13	4,841	4.57	1-8-13	9,244	4.64	98.5
4-4-13	1,687	4.44	8-8-13	4,598	4.87	91.2
4-13	6,528	4.54	8-13	13,842	4.72	96.2
1-4-26	1,388	7.54	1-8-26	4,015	7.66	98.4
4-4-26	889	6.97	8-8-26	8,369	7.89	88.3
4-26	2,277	7.32	8-26	12,384	7.82	93.6
1-4-52	681	7.44	1-8-52	440	12.27	60.6
4-4-52	.....	.....	8-8-52	845	9.64	.....
4-52	681	7.44	8-52	1,285	10.54	70.6
Excluding the First 98 Days of Disability (Accident and Sickness)						
1-4-26	429	8.46	1-8-26	1,236	8.57	98.7
4-4-26	244	8.31	8-8-26	2,674	8.83	94.1
4-26	673	8.41	8-26	3,910	8.75	96.1
1-4-52	144	14.31	1-8-52	124	20.66	69.3
4-4-52	.....	.....	8-8-52	256	15.76	.....
4-52	144	14.31	8-52	380	17.36	82.4

TABLE I—Continued

FEMALES (NONMATERNITY ONLY)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Plan	Number of Claims	Average Remaining Weeks Duration	Plan	Number of Claims	Average Remaining Weeks Duration	Ratio (3)÷(6)
From the First Day (Accident Only)						
1-4-13	633	3.97	1-8-13	1,357	4.49	88.4%
1-4-26	260	3.89	1-8-26	515	4.83	80.5
1-4-52	37	2.37	1-8-52	36	3.23	73.4
Excluding the First Seven Days of Disability (Accident and Sickness)						
1-4-13	5,919	3.49	1-8-13	11,859	5.06	69.0
4-4-13	1,912	3.39	8-8-13	5,623	5.01	67.7
4-13	7,831	3.47	8-13	17,482	5.04	68.8
1-4-26	2,553	4.16	1-8-26	3,919	6.09	68.3
4-4-26	587	4.47	8-8-26	6,245	6.37	70.2
4-26	3,140	4.22	8-26	10,164	6.26	67.4
1-4-52	390	2.91	1-8-52	202	5.36	54.3
4-4-52	.....	.....	8-8-52	432	7.77	.....
4-52	390	2.91	8-52	634	7.00	41.6
Excluding the First 35 Days of Disability (Accident and Sickness)						
1-4-13	1,775	4.40	1-8-13	5,504	4.76	92.4
4-4-13	569	4.24	8-8-13	2,500	5.04	84.1
4-13	2,344	4.36	8-13	8,004	4.85	89.9
1-4-26	751	6.93	1-8-26	1,723	7.67	90.4
4-4-26	183	7.39	8-8-26	2,862	7.79	94.9
4-26	934	7.02	8-26	4,585	7.74	90.7
1-4-52	68	7.06	1-8-52	65	9.54	74.0
4-4-52	.....	.....	8-8-52	213	9.89	.....
4-52	68	7.06	8-52	278	9.81	72.0
Excluding the First 98 Days of Disability (Accident and Sickness)						
1-4-26	202	7.96	1-8-26	539	7.96	100.0
4-4-26	54	8.47	8-8-26	898	8.34	101.6
4-26	256	8.07	8-26	1,437	8.20	98.4
1-4-52	13	15.56	1-8-52	18	16.91	92.0
4-4-52	.....	.....	8-8-52	69	15.00	.....
4-52	13	15.56	8-52	87	15.40	101.0

other characteristics of the employed group, together with the specific plan provisions as to waiting period and maximum duration of benefits, produces the variations in incidence of claim continuance observed. Of the two plan variables, waiting period and maximum duration of benefits, the choice of the former seems to be the more important factor differentiating the resultant experience. The duration is of much less effect. Whereas the data show that it is not possible to represent the 4 day and 8 day plans by the same continuation table satisfactorily throughout, it is possible to combine the data for the same waiting period by duration.

Table I brings out the variation in plan by comparing the average remaining duration of disability at several different points. The comparison from the first day of disability is based on accident claims alone. In the other cases, excluding 7, 35 and 98 days of disability, accident and sickness claims have been combined, with the periods of sickness disability extending beyond the limit of benefits for first day accident claims excluded. In that way, accident and sickness claims are combined only over concurrent benefit periods. It should be noted that what would otherwise be the average remaining duration under the plan is reduced somewhat by virtue of the exclusion of these terminal periods of sickness disability.

It will be seen that, excluding the first 7 days of disability, the average duration for males under the 4 day 13 week plans is only 72.3% and for females only 68.8% of that under the 8 day 13 week plans. For the 26 week plans the figures are respectively 74.5% and 67.4%. The difference is even more marked under the 52 week plans where, however, the data are considerably less.

The difference between the 4 day and 8 day plans tends to disappear with advancing duration and is almost entirely gone at the end of about 13 weeks.

SECTION III. VARIATION BY SEX

Table IIA compares the continuation incidence of males and females. Table IIB summarizes the presentation contained in Table IIA. Periods of sickness disability beyond the limit for first day accident benefits have been excluded. It should be kept in mind that maternity claims for females are not included.

From Table IIB it will be seen that the average duration of claims for females exceeds that for males at the outset and continues to be greater through about the first 5 weeks of disability. Thereafter, the excess disappears. In fact, the average remaining duration of claims for females drops slightly below that of males. The excess duration for females is more marked under the 8 day plans than under the 4 day plans. Thus, exclud-

ing the first 7 days, the ratio of remaining durations for females to males is 114.5% on the 8 day 13 week plans and 117.4% on the 8 day 26 week plans as compared with 109.1% and 106.3% on the corresponding 4 day waiting period plans. The pattern under the 52 week plans is different but again the data on these plans are more limited.

SECTION IV. ACCIDENT AND SICKNESS CLAIMS

Table IIIA shows the proportion that accident claims bear to the total of accident and sickness claims and the variation in duration between accident and sickness claims. The comparison is summarized in Table IIIB. Periods of sickness disability beyond the limit for first day accident benefits have been excluded.

From Table IIIB, it will be seen that the proportion of accident claims is about 11% for males and about 8% for females. Excluding 7 days of disability, the proportion of accident claims under the 8 day plans is about one percentage point greater than under the 4 day plans. With regard to average duration, under the 4 day plans the accident claims are somewhat longer than the sickness claims, while under the 8 day plans they are 10% to 15% shorter.

It will be seen from the top two sections of Table IIIA that where there is first day accident coverage the proportion of accident claims is somewhat greater than when the waiting period for accidents and sicknesses is the same.

SECTION V. MONTH OF INCURRAL

The data submitted included an indication of the calendar month in which the disability giving rise to the claim commenced. Table IV shows the number of claims incurred each month, the ratio of each month's claims to 1/12 of the total number of claims, the average duration of the claims incurred each month and the ratio of the average duration of the claims of a given month to the average duration of all claims. These figures appear separately for the first day accident claims, for accident and sickness claims where benefits began on the 4th day, for accident and sickness claims where benefits began on the 8th day and for the total.

As might be expected, the incidence of claims over-all tends to be highest in the 4 months period, January, February, March and April. The reduction in the number of claims in February reflects the shortness of the month, as correction has not been made for the variation in the number of calendar days in each month. The first day accident claims seem to have a somewhat different incidence than do the aggregate, with some evidence, especially for males, of a higher proportion of claims in the summer months, June, July and August.

TABLE II A
VARIATION BY SEX

(1) PLAN	MALES		FEMALES (Nonmaternity Only)		(6) RATIO (5) ÷ (3)
	(2) Number of Claims	(3) Average Remaining Weeks Duration	(4) Number of Claims	(5) Average Remaining Weeks Duration	
From the First Day (Accident Only)					
1-4-13	2,689	3.23	633	3.97	122.9%
1-8-13	3,944	3.91	1,357	4.49	114.8
1-4-26	704	3.99	260	3.89	97.5
1-8-26	2,140	3.64	515	4.83	132.7
1-4-52	385	3.84	37	2.37	61.7
1-8-52	205	4.54	36	3.23	71.1
Total	10,067	3.69	2,838	4.34	117.6
Excluding the First Three Days of Disability (Accident and Sickness)					
1-4 and 4-4-13	30,129	3.18	9,251	3.48	109.4
1-4 and 4-4-26	10,507	3.80	3,809	4.02	105.8
1-4-52	3,700	3.46	531	2.67	77.2
Total	44,336	3.35	13,591	3.60	107.5
Excluding the First Seven Days of Disability (Accident and Sickness)					
1-4 and 4-4-13	24,925	3.18	7,831	3.47	109.1
1-8 and 8-8-13	36,094	4.40	17,482	5.04	114.5
1-4 and 4-4-26	8,619	3.97	3,140	4.22	106.3
1-8 and 8-8-26	33,891	5.33	10,164	6.26	117.4
1-4-52	3,003	3.59	390	2.91	81.1
1-8 and 8-8-52	3,276	6.92	634	7.00	101.2
Total	109,808	4.43	39,641	4.99	112.6
Excluding the First 21 Days of Disability (Accident and Sickness)					
1-4 and 4-4-13	10,605	4.38	3,693	4.39	100.2
1-8 and 8-8-13	21,403	4.69	11,598	5.04	107.5
1-4 and 4-4-26	3,773	5.99	1,454	6.12	102.2
1-8 and 8-8-26	19,094	6.68	6,578	7.10	106.3
1-4-52	1,195	5.77	135	5.03	87.2
1-8 and 8-8-52	1,916	8.94	393	8.64	96.6
Total	57,986	5.54	23,851	5.63	101.6

TABLE IIA—Continued

(1) PLAN	MALES		FEMALES (Nonmaternity Only)		(6) Ratio (5) ÷ (3)
	(2) Number of Claims	(3) Average Remaining Weeks Duration	(4) Number of Claims	(5) Average Remaining Weeks Duration	
Excluding the First 35 Days of Disability (Accident and Sickness)					
1-4 and 4-4-13.....	6,528	4.54	2,344	4.36	96.0%
1-8 and 8-8-13.....	13,842	4.72	8,004	4.85	102.8
1-4 and 4-4-26.....	2,277	7.32	934	7.02	95.9
1-8 and 8-8-26.....	12,384	7.82	4,585	7.74	99.0
1-4-52.....	681	7.44	68	7.06	94.9
1-8 and 8-8-52.....	1,285	10.54	278	9.81	93.1
Total.....	36,997	6.14	16,213	5.82	94.8
Excluding the First 63 Days of Disability (Accident and Sickness)					
1-4 and 4-4-13.....	3,308	3.24	1,125	3.15	97.2
1-8 and 8-8-13.....	7,247	3.41	4,345	3.33	97.7
1-4 and 4-4-26.....	1,152	8.77	464	8.29	94.5
1-8 and 8-8-26.....	6,629	9.06	2,576	8.35	92.2
1-4-52.....	309	10.24	28	10.56	103.1
1-8 and 8-8-52.....	640	14.74	151	12.62	85.6
Total.....	19,285	6.13	8,689	5.24	85.5
Excluding the First 98 Days of Disability (Accident and Sickness)					
1-4 and 4-4-26.....	673	8.41	256	8.07	96.0
1-8 and 8-8-26.....	3,910	8.75	1,437	8.20	93.7
1-4-52.....	144	14.31	13	15.56	108.7
1-8 and 8-8-52.....	380	17.36	87	15.40	88.7
Total.....	5,107	9.50	1,793	8.58	90.3
Excluding the First 154 Days of Disability (Accident and Sickness)					
1-4 and 4-4-26.....	399	3.78	148	3.63	96.0
1-8 and 8-8-26.....	2,369	4.22	796	3.98	94.3
1-4-52.....	73	17.01	8	16.26	95.6
1-8 and 8-8-52.....	204	19.97	45	18.89	94.6
Total.....	3,045	5.52	997	4.70	85.1

The average duration is longest for claims beginning in May, June and July, or November and December. Again, the first day accident claims do not correspond with the aggregate.

SECTION VI. VARIATION BY AGE

The data have also been tabulated by age at the time of claim in decennial age groups, omitting claims for which the age was not given. Table VA sets forth the results for 13 week plans and Table VB for plans of all durations. In both tables, data appear separately for first day accident claims, for claims commencing on the 4th day, for claims commencing on the 8th day, and for all claims. The number of claims in each

TABLE IIB
RATIO OF AVERAGE REMAINING WEEKS DURATION OF FEMALE
CLAIMS (NONMATERNITY ONLY) TO MALE CLAIMS

No. of Days Disability Excluded	1-4 and 4-4-13 Plans	1-4 and 4-4-26 Plans	1-4-52 Plan	1-8 and 8-8-13 Plans	1-8 and 8-8-26 Plans	1-8 and 8-8-52 Plans
0*	122.9%	97.5%	61.7%	114.8%	132.7%	71.1%
3	109.4	105.8	77.2			
7	109.1	106.3	81.1	114.5	117.4	101.2
21	100.2	102.2	87.2	107.5	106.3	96.6
35	96.0	95.9	94.9	102.8	99.0	93.1
63	97.2	94.5	103.1	97.7	92.2	85.6
98		96.0	108.7		93.7	88.7
154		96.0	95.6		94.3	94.6

* Accident claims only.

decennial group, the average duration for such claims and the ratio of their duration to the average of all claims are shown.

For males the pattern of average durations increases continuously with advancing age in both tables, until the claims at age 70 and over are 67.2% longer than the average for all claims and 58.2% longer in the case of 13 week plan claims alone. Among the females, the increase in average duration with age is somewhat less marked. For the 13 week plans at the high point for the age 70 and over group the duration is 24.8% greater than the average for all ages. When all plans for females are combined, the high point is in the 60 to 69 group where the duration exceeds the average for all ages by 28.2%. This figure becomes 18.8% for the 70 and over group, the decrease probably being explainable by the paucity of the data at the older ages and a difference in the age distribution of those covered under the longer duration plans. In both cases the figures at the extreme ages

would be affected by any remaining limitations on the duration of benefits for employees over age 60 such as were common at one time in group accident and health policies.

SECTION VII. GRADUATED CONTINUATION TABLES

As indicated in Section II, it is not possible for one continuation table to be applicable to both 4 day and 8 day plans throughout. Accordingly, separate continuation tables have been derived for 4 and 8 day plans. Tables have been prepared for males only; if there should be a need for separate tables for females they can be constructed from the male tables with the aid of the comparison of male and female durations in Table II.

After the 13th week, the data were combined without regard to waiting period. From the 13th to the 26th week the tables are therefore based upon the 26 week and 52 week plans combined, and after the 26th week upon the 52 week plans only. During the first 13 weeks, the data were separated by waiting period, but in each case the material for the 13, 26 and 52 week plans was combined. Reference was made to data for first day accident claims in extending the material backward to the first day.

The graduation was done free hand, working with the function representing the probability that an individual who was disabled and receiving benefit would remain so. Daily probabilities were used for the first 35 days of disability and thereafter weekly probabilities. A relatively smooth series of such probabilities was secured which would reproduce satisfactorily the average duration of disability as calculated from the crude data. In devising the graduated tables, certain characteristics of the data were smoothed out, such as the tendency evidenced for claims to terminate at the end of completed weeks of benefit payment during the first weeks of disability.

The result of the graduations appears in Table VI. The first column, which has been designated l_t by analogy with a mortality table, represents the number disabled at the beginning of the t th day or week of disability. The column l_t has been computed with a radix of 100,000 at the beginning of the 8th day of disability. The ratio l_{t+n}/l_t gives the probability that an individual disabled at duration t will still be disabled at duration $t+n$.

The next column, which has been designated s_t , is the summation column derived from l_t and is such that $s_t - s_{t+n}$ is the number of days of disability during the period from t to $t+n$ which might be expected from l_t individuals disabled at duration t . The ratio of $s_t - s_{t+n}$ to l_t is the average duration of disability in days to be expected among the l_t individuals during that period.

A comparison at several points between the graduated tables and the

TABLE IIIA
COMPARISON OF ACCIDENT AND SICKNESS CLAIMS

MALES						
(1) PLAN	ACCIDENT		SICKNESS		(6) RATIO (3) ÷ (5)	(7) RATIO (2) ÷ [(2) + (4)]
	(2) Number of Claims	(3) Average Remaining Weeks Duration	(4) Number of Claims	(5) Average Remaining Weeks Duration		
Excluding the First 3 Days of Disability						
1-4-13.....	2,513	3.00	19,487	3.26	92.0%	11.4%
4-4-13.....	721	3.46	7,408	3.00	115.3	8.9
1-4-26.....	637	3.94	5,883	3.79	104.0	9.8
4-4-26.....	457	4.34	3,530	3.73	116.4	11.5
1-4-52.....	361	3.64	3,339	3.44	105.8	9.8
Excluding the First 7 Days of Disability						
1-4 and 4-4-13.....	2,548	3.26	22,377	3.16	103.2	10.2
1-4 and 4-4-26.....	894	4.37	7,725	3.93	111.2	10.4
1-4-52.....	305	3.67	2,698	3.59	102.2	10.2
All 4 day.....	3,747	3.56	32,800	3.38	105.3	10.3
1-8-13.....	3,109	3.79	20,960	4.46	85.0	12.9
8-8-13.....	1,207	4.47	10,818	4.46	100.2	10.0
1-8-26.....	1,457	4.10	9,738	5.36	76.5	13.0
8-8-26.....	2,218	5.30	20,478	5.41	98.0	9.8
1-8-52.....	172	4.30	1,157	7.29	59.0	12.9
8-8-52.....	224	6.93	1,723	6.93	100.0	11.5
All 8 day.....	8,387	4.44	64,874	5.01	88.6	11.4
Excluding the First 35 Days of Disability						
1-4 and 4-4-13.....	690	4.50	5,838	4.53	99.3	10.6
1-4 and 4-4-26.....	272	7.42	2,005	7.31	101.5	11.9
1-4-52.....	72	7.63	609	7.43	102.7	10.6
All 4 day.....	1,034	5.49	8,452	5.40	101.7	10.9
1-8 and 8-8-13.....	1,511	4.49	12,331	4.74	94.7	10.9
1-8 and 8-8-26.....	1,304	6.83	11,080	7.92	86.2	10.5
1-8 and 8-8-52.....	148	8.83	1,137	10.77	82.0	11.5
All 8 day.....	2,963	5.74	24,548	6.45	89.0	10.8
Excluding the First 98 Days of Disability						
1-4 and 4-4-26.....	78	8.06	595	8.45	95.4	11.6
1-4-52.....	18	13.54	126	14.41	94.0	12.5
All 4 day.....	96	9.09	721	9.49	95.8	11.8
1-8 and 8-8-26.....	353	7.94	3,557	8.83	89.9	9.0
1-8 and 8-8-52.....	45	12.65	335	17.99	70.3	11.8
All 8 day.....	398	8.47	3,892	9.62	88.0	9.3

TABLE IIIA—Continued

FEMALES (NONMATERNITY ONLY)						
(1) PLAN	ACCIDENT		SICKNESS		(6) RATIO (3)+(5)	(7) RATIO (2)+ [(2)+(4)]
	(2) Number of Claims	(3) Average Remaining Weeks Duration	(4) Number of Claims	(5) Average Remaining Weeks Duration		
Excluding the First 3 Days of Disability						
1-4-13.....	595	3.77	6,406	3.47	108.6%	8.5%
4-4-13.....	170	4.09	2,080	3.37	121.4	7.6
1-4-26.....	237	3.81	2,893	3.94	96.7	7.6
4-4-26.....	34	4.89	645	4.39	111.4	5.0
1-4-52.....	34	2.13	497	2.70	78.9	6.4
Excluding the First 7 Days of Disability						
1-4 and 4-4-13.....	653	3.86	7,178	3.43	112.5	8.3
1-4 and 4-4-26.....	211	4.40	2,929	4.20	104.8	6.7
1-4-52.....	26	2.10	364	2.97	70.7	6.7
All 4 day.....	890	3.94	10,471	3.63	108.5	7.8
1-8-13.....	1,140	4.21	10,719	5.16	81.6	9.6
8-8-13.....	426	5.01	5,197	5.01	100.0	7.6
1-8-26.....	403	5.01	3,516	6.21	80.7	10.3
8-8-26.....	454	6.10	5,791	6.39	95.5	7.3
1-8-52.....	22	3.91	180	5.53	70.7	10.9
8-8-52.....	29	7.17	403	7.81	91.8	6.7
All 8 day.....	2,474	4.86	25,806	5.59	86.9	8.7
Excluding the First 35 Days of Disability						
1-4 and 4-4-13.....	227	4.41	2,117	4.35	101.4	9.7
1-4 and 4-4-26.....	62	7.89	872	6.95	113.5	6.6
1-4-52.....	5	2.69	63	7.40	36.4	7.4
All 4 day.....	294	5.11	3,052	5.16	99.0	8.8
1-8 and 8-8-13.....	625	4.59	7,379	4.87	94.3	7.8
1-8 and 8-8-26.....	349	7.35	4,236	7.78	94.5	7.6
1-8 and 8-8-52.....	25	5.99	253	10.18	58.8	9.0
All 8 day.....	999	5.59	11,868	6.02	92.9	7.8
Excluding the First 98 Days of Disability						
1-4 and 4-4-26.....	21	7.64	235	8.10	94.3	8.2
1-4-52.....			13	15.56		
All 4 day.....	21	7.64	248	8.49	90.0	7.8
1-8 and 8-8-26.....	98	8.65	1,339	8.16	106.0	6.8
1-8 and 8-8-52.....	8	4.32	79	16.52	26.2	9.2
All 8 day.....	106	8.32	1,418	8.63	96.4	7.0

crude data in terms of average remaining durations is shown in Table VII. Periods of sickness disability beyond the limit for first day accident benefits are excluded.

SECTION VIII. BASIC MORBIDITY TABLE

The continuation Table VI gives the termination incidence of group weekly indemnity claims that have been begun. There are also many uses for a table showing the cost of disability benefits per unit of weekly indemnity for plans with different waiting periods or for durations intermediate between those included in the Committee's regular annual study of group weekly indemnity experience. Accordingly, a basic morbidity

TABLE IIIB

DAYS OF DIS- ABILITY EX- CLUDED	PROPORTION OF ACCIDENT CLAIMS TO ACCIDENT AND SICKNESS CLAIMS				RATIO OF AVERAGE DURATION FOR ACCIDENT CLAIMS TO SICKNESS CLAIMS			
	Males		Females		Males		Females	
	4 Day Plans	8 Day Plans	4 Day Plans	8 Day Plans	4 Day Plans	8 Day Plans	4 Day Plans	8 Day Plans
	3.....	10.6%	7.9%	100.9%	106.4%
7.....	10.3	11.4%	7.8	8.7%	105.3	88.6%	108.5	86.9%
35.....	10.9	10.8	8.8	7.8	101.7	89.0	99.0	92.9
98.....	11.8	9.3	7.8	7.0	95.8	88.0	90.0	96.4

table setting forth the cost, per unit of weekly indemnity, of benefits payable with respect to each day or week of disability was derived by combining the results of this study with the results of the Committee's regular study. The experience of policy years ending in 1947, 1948 and 1949 under nonrated industries (*i.e.*, those rated standard for premium purposes by the contributing company) contained in Table Ia of the Committee's 1950 report was used to obtain net claim costs. The data of this investigation and Table VI were then employed to assist in subdividing the claim costs appropriately into the cost for days and weeks of disability.

Since the Committee's report shows only the aggregate experience of males and females combined by decimal percentages of females exposed, it was first necessary to determine graduated claim costs for males and females separately. A number of different methods were tried before arriving at one which gave consistent results. Preliminary male and female claim costs were calculated, as follows, from the data (unpublished) with

TABLE IV
VARIATION BY MONTH OF INCURRAL

MONTH	MALES				FEMALES (NONMATERNITY ONLY)			
	Number of Claims	Ratio of No. Claims to $\frac{1}{2}$ Total No.	Average Weeks Duration	Ratio Aver. Dur. to Aver. Dur. of Total	Number of Claims	Ratio of No. Claims to $\frac{1}{2}$ Total No.	Average Weeks Duration	Ratio Aver. Dur. to Aver. Dur. of Total
First Day Accident Claims								
Jan.....	917	109.3%	3.97	107.6%	288	121.8%	4.66	107.6%
Feb.....	779	92.9	3.73	101.1	237	100.2	4.66	107.6
Mar.....	725	86.4	3.80	103.0	230	97.3	4.11	94.9
Apr.....	707	84.3	3.84	104.1	213	90.1	4.23	97.7
May.....	811	96.7	3.46	93.8	208	87.9	3.91	90.3
June.....	904	107.8	3.57	96.7	229	96.8	4.53	104.6
July.....	1,033	123.1	3.54	95.9	261	110.4	3.84	88.7
Aug.....	951	113.4	3.59	97.3	232	98.1	4.20	91.0
Sept.....	771	91.9	3.74	101.4	238	100.6	3.94	91.0
Oct.....	908	108.2	3.59	97.3	243	102.7	4.44	102.5
Nov.....	696	83.0	3.70	100.3	204	86.3	4.63	106.9
Dec.....	865	103.1	3.80	103.0	255	107.8	4.74	109.5
Total...	10,067		3.69		2,838		4.33	
Accident and Sickness Claims Beginning on 4th Day								
Jan.....	4,406	132.2	3.13	92.9	1,446	136.4	3.31	91.7
Feb.....	4,151	122.0	3.13	92.9	1,276	120.3	3.31	91.7
Mar.....	4,426	130.1	3.13	92.9	1,343	126.6	3.26	90.3
Apr.....	3,729	109.6	3.29	97.6	1,185	111.7	3.51	97.2
May.....	2,989	87.9	3.47	103.0	964	90.9	3.87	107.2
June.....	2,776	81.6	3.79	112.5	847	79.9	3.99	110.5
July.....	2,863	84.2	3.71	110.1	829	78.2	4.39	121.6
Aug.....	2,922	85.9	3.44	102.1	938	88.5	3.76	104.2
Sept.....	2,887	84.9	3.40	100.9	890	83.9	3.73	103.3
Oct.....	3,179	93.4	3.34	99.1	1,071	101.0	3.69	102.2
Nov.....	2,975	87.4	3.57	105.9	941	88.7	3.57	98.9
Dec.....	3,432	100.9	3.44	102.1	995	93.8	3.51	97.2
Total...	40,825		3.37		12,725		3.61	
Accident and Sickness Claims Beginning on 8th Day								
Jan.....	7,221	126.5	4.87	96.8	2,718	122.1	5.37	94.9
Feb.....	6,272	109.8	4.70	93.4	2,414	108.4	5.31	93.8
Mar.....	7,232	126.6	4.74	94.2	2,679	120.3	5.24	92.6
Apr.....	6,035	105.7	5.01	90.6	2,430	109.6	5.90	104.2
May.....	5,113	89.5	5.21	103.6	2,095	94.1	6.09	107.6
June.....	4,938	86.5	5.46	108.5	1,963	88.2	6.06	107.1
July.....	5,146	90.1	5.24	104.2	2,005	90.1	6.26	110.6
Aug.....	5,161	90.4	4.89	97.2	2,213	99.4	5.66	100.0
Sept.....	5,046	88.4	4.93	98.0	2,048	92.0	5.49	97.0
Oct.....	5,547	97.1	5.00	99.4	2,225	99.9	5.51	97.3
Nov.....	4,852	85.0	5.49	109.1	1,930	86.7	5.69	100.5
Dec.....	5,960	104.4	5.16	102.6	1,986	89.2	5.63	99.5
Total...	68,523		5.03		26,715		5.66	
All Claims								
Jan.....	12,634	127.0	4.19	96.1	4,452	126.4	4.66	94.0
Feb.....	11,202	112.6	4.06	93.1	3,927	111.5	4.61	92.9
Mar.....	12,383	124.4	4.11	94.3	4,252	120.7	4.56	91.9
Apr.....	10,471	105.2	4.31	98.9	3,837	108.9	5.07	102.2
May.....	8,913	89.6	4.47	102.5	3,267	92.7	5.30	106.9
June.....	8,618	86.6	4.73	108.5	3,039	86.3	5.37	108.3
July.....	9,042	90.9	4.56	104.6	3,095	87.8	5.54	111.7
Aug.....	9,034	90.8	4.29	98.4	3,383	96.0	5.03	101.4
Sept.....	8,704	87.5	4.31	98.9	3,176	90.1	4.87	98.2
Oct.....	9,634	96.8	4.31	98.9	3,539	100.4	4.89	98.6
Nov.....	8,523	85.6	4.67	107.1	3,075	87.3	4.97	100.2
Dec.....	10,257	103.1	4.47	102.5	3,236	91.8	4.90	98.8
Total...	119,415		4.36		42,278		4.96	

TABLE VA
13 WEEK PLANS ONLY
VARIATION BY AGE

AGE	MALES			FEMALES (NONMATERNITY ONLY)		
	Number of Claims	Average Weeks Duration	Ratio Aver. Dur. to Aver. Dur. of Total	Number of Claims	Average Weeks Duration	Ratio Aver. Dur. to Aver. Dur. of Total
First Day Accident Claims						
10-19.....	195	4.13	113.8%	65	2.89	66.7%
20-29.....	1,507	3.27	90.1	412	3.71	85.7
30-39.....	1,702	3.16	87.1	463	3.83	88.5
40-49.....	1,373	3.67	101.1	500	4.59	106.0
50-59.....	1,024	4.06	111.8	347	4.94	114.1
60-69.....	652	4.49	123.7	156	5.71	131.9
70-79.....	119	5.53	152.3	21	5.89	136.0
Total....	6,572	3.63	.....	1,964	4.33	.....
Accident and Sickness Claims Beginning on 4th Day						
10-19.....	343	2.44	76.0	402	2.40	68.8
20-29.....	4,673	2.34	72.9	2,462	2.87	82.2
30-39.....	6,497	2.41	75.1	2,086	3.44	98.6
40-49.....	5,943	3.13	97.5	1,978	3.87	110.9
50-59.....	5,519	3.83	119.3	1,114	4.19	120.1
60-69.....	3,633	4.63	144.2	414	4.64	133.0
70-79.....	712	5.41	168.5	34	4.79	137.2
Total....	27,320	3.21	.....	8,490	3.49	.....
Accident and Sickness Claims Beginning on 8th Day						
10-19.....	383	3.43	75.6	579	3.83	73.7
20-29.....	4,716	3.43	75.6	4,140	4.31	82.9
30-39.....	6,793	3.69	81.3	4,224	5.26	101.2
40-49.....	6,977	4.21	92.7	3,968	5.77	111.0
50-59.....	7,174	5.10	112.3	2,324	5.79	111.3
60-69.....	5,268	5.93	130.6	753	6.00	115.4
70-79.....	1,085	6.74	148.5	71	6.11	117.5
Total....	32,396	4.54	.....	16,059	5.20	.....
All Claims						
10-19.....	921	3.20	82.1	1,046	3.21	69.9
20-29.....	10,896	2.94	75.4	7,014	3.77	82.1
30-39.....	14,992	3.07	78.7	6,773	4.60	100.2
40-49.....	14,293	3.70	94.9	6,446	5.10	111.1
50-59.....	13,717	4.51	115.6	3,785	5.24	114.2
60-69.....	9,553	5.34	136.9	1,323	5.54	120.7
70-79.....	1,916	6.17	158.2	126	5.73	124.8
Total....	66,288	3.90	.....	26,513	4.59	.....

TABLE VB
ALL PLANS
VARIATION BY AGE

AGE	MALES			FEMALES (NONMATERNITY ONLY)		
	Number of Claims	Average Weeks Duration	Ratio Aver. Dur. to Aver. Dur. of Total	Number of Claims	Average Weeks Duration	Ratio Aver. Dur. to Aver. Dur. of Total
First Day Accident Claims						
10-19.....	284	3.86	104.6%	112	2.76	63.6%
20-29.....	2,427	3.20	86.7	653	3.61	83.2
30-39.....	2,600	3.24	87.8	670	4.20	96.8
40-49.....	2,131	3.84	104.1	700	4.33	99.8
50-59.....	1,493	4.10	111.1	439	5.17	119.1
60-69.....	871	4.83	130.9	205	6.16	141.9
70-79.....	163	5.64	152.8	22	5.83	134.3
Total....	9,969	3.69	.....	2,801	4.34	.....
Accident and Sickness Claims Beginning on 4th Day						
10-19.....	458	2.64	78.3	572	2.24	61.7
20-29.....	6,776	2.40	71.2	3,968	3.03	83.5
30-39.....	10,394	2.56	76.0	3,087	3.66	100.8
40-49.....	9,281	3.37	100.0	2,788	4.10	112.9
50-59.....	7,925	4.14	122.8	1,513	4.27	117.6
60-69.....	4,678	5.00	148.4	497	5.10	140.5
70-79.....	813	5.64	167.4	39	4.40	121.2
Total....	40,325	3.37	.....	12,464	3.63	.....
Accident and Sickness Claims Beginning on 8th Day						
10-19.....	721	3.61	70.9	885	3.70	65.3
20-29.....	9,473	3.69	72.5	7,112	4.86	85.7
30-39.....	13,540	3.94	77.4	6,925	5.73	101.1
40-49.....	14,342	4.67	91.7	6,391	6.17	108.8
50-59.....	14,548	5.87	115.3	3,576	6.36	112.2
60-69.....	9,778	7.06	138.7	1,123	6.94	122.4
70-79.....	1,745	8.20	161.1	104	6.46	113.9
Total....	64,147	5.09	.....	26,116	5.67	.....
All Claims						
10-19.....	1,463	3.36	77.1	1,569	3.10	62.5
20-29.....	18,676	3.16	72.5	11,733	4.16	83.9
30-39.....	26,534	3.33	76.4	10,682	5.03	101.4
40-49.....	25,754	4.13	94.7	9,879	5.46	110.1
50-59.....	23,966	5.19	119.0	5,528	5.70	114.9
60-69.....	15,327	6.30	144.5	1,825	6.36	128.2
70-79.....	2,721	7.29	167.2	165	5.89	118.8
Total....	114,441	4.36	.....	41,381	4.96	.....

TABLE VI
CONTINUATION TABLE—MALES

4 DAY PLANS			8 DAY PLANS			4 DAY PLANS			8 DAY PLANS		
Duration <i>t</i>	No. Disabled at Beginning of Duration <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	No. Disabled at Beginning of Duration <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	Duration <i>t</i>	Duration <i>t</i>	No. Disabled at Beginning of Duration <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	No. Disabled at Beginning of Duration <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	Duration <i>t</i>
1 day	131,249	4,325,860	123,528	5,785,592	1 day	20 weeks	5,949	938,672	9,267	1,462,250	20 weeks
2 days	129,018	4,194,611	121,428	5,662,064	2 days	21 "	5,675	897,988	8,841	1,398,872	21 "
3 "	125,922	4,065,593	118,514	5,540,636	3 "	22 "	5,431	859,118	8,461	1,338,316	22 "
4 "	122,018	3,939,671	114,840	5,422,122	4 "	23 "	5,208	821,881	8,114	1,280,303	23 "
5 "	117,381	3,817,653	111,050	5,307,282	5 "	24 "	5,000	786,153	7,789	1,224,642	24 "
6 "	112,099	3,700,272	107,274	5,196,232	6 "	25 "	4,805	751,836	7,485	1,171,184	25 "
7 "	106,270	3,588,173	103,627	5,088,958	7 "	26 "	4,622	718,841	7,201	1,119,782	26 "
8 "	100,000	3,481,903	100,000	4,985,331	8 "	26 " , 4 days	4,549	705,232	7,087	1,098,578	26 " , 4 days
9 "	93,500	3,381,903	96,500	4,885,331	9 "	27 "	4,451	687,086	6,935	1,070,306	27 "
10 "	86,862	3,288,403	93,026	4,788,831	10 "	28 "	4,291	656,488	6,685	1,022,636	28 "
11 "	80,174	3,201,541	89,677	4,695,805	11 "	29 "	4,141	626,976	6,451	976,660	29 "
12 "	74,401	3,121,367	86,359	4,606,128	12 "	30 "	4,000	598,483	6,232	932,270	30 "
13 "	69,416	3,046,966	83,164	4,519,769	13 "	31 "	3,868	570,945	6,026	889,367	31 "
14 "	65,112	2,977,550	80,004	4,436,605	14 "	32 "	3,744	544,303	5,833	847,860	32 "
15 "	61,336	2,912,438	76,964	4,356,601	15 "	33 "	3,628	518,501	5,652	807,663	33 "
16 "	57,963	2,851,102	73,962	4,279,637	16 "	34 "	3,519	493,486	5,482	768,694	34 "
17 "	54,891	2,793,139	71,077	4,205,675	17 "	35 "	3,417	469,210	5,323	730,876	35 "
18 "	52,092	2,738,248	68,376	4,134,598	18 "	36 "	3,321	445,628	5,174	694,137	36 "
19 "	49,539	2,686,156	65,846	4,066,222	19 "	37 "	3,231	422,696	5,034	658,409	37 "
20 "	47,211	2,636,617	63,476	4,000,376	20 "	38 "	3,147	400,372	4,903	623,630	38 "
21 "	45,087	2,589,406	61,254	3,936,900	21 "	39 "	3,068	378,620	4,780	589,739	39 "
22 "	43,148	2,544,319	59,171	3,875,646	22 "	40 "	2,994	357,403	4,665	556,682	40 "
23 "	41,379	2,501,117	57,218	3,816,475	23 "	41 "	2,925	336,686	4,558	524,401	41 "
24 "	39,724	2,459,792	55,387	3,759,257	24 "	42 "	2,861	316,436	4,458	492,845	42 "
25 "	38,175	2,420,068	53,615	3,703,870	25 "	43 "	2,798	296,629	4,360	461,982	43 "

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TABLE VII

4 DAY PLANS				8 DAY PLANS				
Plan	Average Remaining Weeks Duration		Plan	Average Remaining Weeks Duration				
	Ungraduated	Graduated		Ungraduated	Graduated			
Excluding the First 3 Days of Disability								
1-4-13	3.23	3.18	3.16					
4-4-13	3.03							
1-4-26	3.80	3.80	3.81					
4-4-26	3.80							
1-4-52	3.46		4.47					
Excluding the First 7 Days of Disability								
1-4-13	3.24	3.18	3.20	1-8-13	4.37	4.40	4.37	
4-4-13	3.00			8-8-13	4.46			
1-4-26	4.01	3.97	3.99	1-8-26	5.20	5.33	5.60	
4-4-26	3.91			8-8-26	5.40			
1-4-52	3.59		4.80	1-8-52	6.90	6.92	6.86	
				8-8-52	6.93			
Excluding the First 35 Days of Disability								
1-4-13	4.57	4.54	4.50	1-8-13	4.64	4.72	4.66	
4-4-13	4.44			8-8-13	4.87			
1-4-26	7.54	7.32	7.50	1-8-26	7.66	7.82	7.83	
4-4-26	6.97			8-8-26	7.89			
1-4-52	7.44		10.59	1-8-52	12.27	10.54	11.09	
				8-8-52	9.64			
4 DAY AND 8 DAY PLANS COMBINED Excluding the First 98 Days of Disability								
1-4-26	8.46	8.70	8.71					
4-4-26	8.31							
1-8-26	8.57							
8-8-26	8.83							
1-4-52	14.31	16.52	18.77					
1-8-52	20.66							
8-8-52	15.76							
Excluding the First 189 Days of Disability								
1-4-52	16.41	17.61	17.87					
1-8-52	21.56							
8-8-52	16.34							

TABLE VI—Continued

4 DAY PLANS			8 DAY PLANS			4 DAY PLANS			8 DAY PLANS		
Duration <i>t</i>	No. Dis- abled at Begin- ning of Dura- tion <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	No. Dis- abled at Begin- ning of Dura- tion <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	Duration <i>t</i>	Duration <i>t</i>	No. Dis- abled at Begin- ning of Dura- tion <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	No. Dis- abled at Begin- ning of Dura- tion <i>t</i> <i>l_t</i>	No. Days of Disability on and after Duration <i>t</i> <i>s_t</i>	Duration <i>t</i>
26 days	36,724	2,381,893	51,953	3,650,255	26 days	44 weeks	2,736	277,260	4,264	431,798	44 weeks
27 "	35,365	2,345,169	50,342	3,598,302	27 "	45 "	2,679	258,308	4,174	402,265	45 "
28 "	34,092	2,309,804	48,832	3,547,960	28 "	46 "	2,623	239,750	4,086	373,355	46 "
29 "	32,899	2,275,712	47,367	3,499,128	29 "	47 "	2,571	221,572	4,004	345,040	47 "
30 "	31,780	2,242,813	45,993	3,451,761	30 "	48 "	2,520	203,753	3,924	317,292	48 "
31 "	30,731	2,211,033	44,659	3,405,768	31 "	49 "	2,470	186,288	3,846	290,097	49 "
32 "	29,748	2,180,302	43,364	3,361,109	32 "	50 "	2,423	169,162	3,773	263,430	50 "
33 "	28,826	2,150,554	42,150	3,317,745	33 "	51 "	2,377	152,362	3,701	237,272	51 "
34 "	27,932	2,121,728	40,970	3,275,595	34 "	52 "	2,332	135,881	3,631	211,610	52 "
35 "	27,094	2,093,796	39,864	3,234,625	35 "	52 " , 4 days	2,314	128,948	3,603	200,814	52 " , 4 days
6 weeks	26,281	2,066,702	38,788	3,194,761	6 weeks	53 "	2,290	119,704	3,566	186,420	53 "
7 "	21,577	1,899,198	32,427	2,945,508	7 "	54 "	2,249	103,818	3,502	161,682	54 "
8 "	18,125	1,760,242	27,595	2,735,432	8 "	55 "	2,209	88,214	3,439	137,388	55 "
9 "	15,515	1,642,502	23,842	2,555,402	9 "	56 "	2,171	72,884	3,381	113,518	56 "
10 "	13,498	1,540,956	20,862	2,398,938	10 "	57 "	2,134	57,817	3,324	90,051	57 "
11 "	11,905	1,452,046	18,463	2,261,300	11 "	58 "	2,098	43,005	3,267	66,982	58 "
12 "	10,631	1,373,170	16,524	2,138,846	12 "	59 "	2,064	28,438	3,215	44,296	59 "
13 "	9,600	1,302,361	14,938	2,028,729	13 "	60 "	2,031	14,106	3,164	21,969	60 "
13 " , 4 days	9,238	1,274,828	14,381	1,985,865	13 " , 4 days						
14 "	8,755	1,238,118	13,638	1,928,713	14 "						
15 "	8,063	1,179,256	12,561	1,837,016	15 "						
16 "	7,491	1,124,816	11,669	1,752,212	16 "						
17 "	7,012	1,074,056	10,922	1,673,143	17 "						
18 "	6,605	1,026,396	10,289	1,598,904	18 "						
19 "	6,255	981,386	9,744	1,528,789	19 "						

the experience on groups in the largest size category (size code 9—groups with weekly indemnity exposure totaling \$100,000 or more) omitted. Table XIII of the Committee's 1950 report shows the percentage of coverage actually exposed on females in each decimal bracket. With the appropriate percentage from this table for the proportion of female exposure and assuming the female claim costs to be double the male claim costs, preliminary male claim costs were obtained for each plan from the experience in the less than 11% female exposure bracket. Then these preliminary male claim costs were used as the basis for calculating the aggregate male claims under each plan. Subtracting the male claims so obtained and the corresponding male exposure, the female exposure divided

TABLE VIII

PLAN	AMOUNT OF EXPOSURE	AMOUNT OF CLAIMS	1947-49 GRADUATED ANNUAL CLAIM COST			RATIO OF ACTUAL TO EXPECTED CLAIMS	INTERCO. 1931-35 GRADUATED ANNUAL CLAIM COST		
			Male	Female	Ratio F/M		Male	Female	Ratio F/M
1-4-13 ...	20,218,980	14,012,662	.582	1.250	215%	100.5%			
4-4-13 ...	7,068,380	4,552,577	.553	1.223	221	97.7	.5973	1.0778	
1-8-13 ...	62,705,010	37,687,054	.493	1.077	218	98.4			
8-8-13 ...	51,478,500	31,479,719	.479	1.049	219	102.4	.4268	.9235	
1-8-26 ...	4,404,170	3,282,152	.672	1.299	193	97.8			
8-8-26 ...	11,578,320	8,524,932	.619	1.171	189	103.9	.6292	.9107	
Total	157,453,360	99,539,096			215%	100.4%		201%	

into the remainder of the claims produced an average female claim cost which became the preliminary female claim cost. Finally, the preliminary male and female claim costs were increased by the average percentage necessary to reproduce the actual claims for the entire nonrated experience including all size groups for the three calendar years combined. These last figures are the graduated 1947-49 annual claim costs per unit of weekly indemnity and appear in Table VIII for each plan together with the exposed to risk and actual claims on which they are based. It will be seen that the graduated annual claim costs reproduce the total actual claims almost exactly.

For purposes of comparison, the claim costs derived in the intercompany 1931-35 study of Mr. Fitzhugh are also shown, where available. In relation to the 1931-35 figures, the 1947-49 claim costs for males have gone down 7.4% on the 4-4-13 plan and up 12.2% on the 8-8-13 plan, while remaining about the same on the 8-8-26 plan. The 1947-49 claim costs for fe-

males, which include maternity benefits, are all up as compared with the 1931-35 figures. The figure of 215% shown for the average ratio of female to male cost was obtained by weighting the ratios for the individual plans by the exposed to risk. It compares with a similar figure of 201% for the 1931-35 experience and tends to confirm the customary assumption that where the six weeks maternity benefits are included in the plan the cost for females is on the average about double that for males.

No attempt has been made to prepare a basic morbidity table for females. The absence of adequate information would require the more or less

TABLE IX
BREAKDOWN OF GRADUATED ANNUAL CLAIM COST—MALES

PERIOD OF DISABILITY IN DAYS	PLAN											
	1-4-13		4-4-13		1-8-13		8-8-13		1-8-26		8-8-26	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
1- 3..	.009				.007				.009			
4- 7..	.011	.085	.009	.091	.009				.011			
8- 21..	.021	.174	.019	.169	.020	.152	.018	.157	.022	.170	.018	.162
22- 35..	.011	.089	.010	.087	.012	.092	.011	.093	.012	.099	.011	.095
36- 91..	.019	.158	.017	.146	.020	.169	.018	.169	.021	.187	.019	.180
92- 94..		.005	.001	.004		.005	.000	.005	.001	.006	.001	.006
95- 98..						.007	.001	.007	.001	.008	.001	.007
99-182..									.009	.109	.010	.103
183-185..										.003	.000	.003
186-189..										.004	.000	.003
Total..	.071	.511	.053	.497	.068	.425	.048	.431	.086	.586	.060	.559
		.071		.056		.068		.048		.086		.060
Total acc. and sick.		.582		.553		.493		.479		.672		.619

arbitrary determination of the division of the female claim costs shown in Table VIII into the maternity and nonmaternity portions.

The crude data contained in Appendix B were applied to subdivide the graduated male claim costs. The results are summarized in Table IX and further in Table XA and XB.

In Table XA, the figures for the 1-4-13 plan and 4-4-13 plan from Table IX have been combined in proportion to the exposed to risk under each plan. Similar combinations were made for the other plans.

From Table XA, it will be seen that from the 8th to the 92d day the claim costs for the 4 day 13 week plans and the 8 day 13 week plans are

identical, although the incidence during that period is not quite the same. The cost at the beginning of the period under the 4 day plans is greater than under the 8 day plans, but the excess is offset toward the end of the period. In relation to the continuation Table VI, this equality means that the shorter durations under the 4 day plans as compared with the 8 day plans are offset by an increased frequency under the former in such a way that the net claim cost is the same from the 8th to the 92d day.

TABLE XA
GRADUATED ANNUAL CLAIM COST FOR MALES
ACCIDENT AND SICKNESS COMBINED

Period of Disability in Days	1-4 and 4-4-13 Plans	1-8 and 8-8-13 Plans	1-8 and 8-8-26 Plans
4- 7.....	.097		
8- 21.....	.193	.173	.183
22- 35.....	.099	.104	.107
36- 91.....	.173	.188	.202
8- 91.....	.465	.465	.492
92-182.....			.130

TABLE XB
ACCIDENT CLAIM COSTS—MALES

PLAN	PERIOD OF DISABILITY IN DAYS	(1)	(2)	(3)	(4)
		GRADUATED ANNUAL CLAIM COST			RATIO (2) ÷ (3)
		Acc.	Acc. and Sick.		
1-4-13.....	4- 91	.062	.568		10.9%
4-4-13.....	4- 91	.055	.548		10.0
1-8-13.....	8- 91	.052	.465		11.2
8-8-13.....	8- 91	.047	.466		10.1
1-8-26.....	8-182	.066	.645		10.2
8-8-26.....	8-182	.060	.613		9.8

The claim cost under the 26 week plans during the period from the 8th to the 92d day is somewhat in excess of that for the 13 week plans. If the claim cost for the 13 week plans is taken as the cost from the 8th to 92d day, it is necessary to shift the excess for the 26 week plans during that period to the 92 to 183 day period in order that the total cost for the 26

week plans be reproduced. However, if this is done, it becomes possible to represent all the plans by the same basic morbidity table.

The cost for the first three days was taken as equal to the cost for the 4th to 7th days multiplied by the ratio of s_1-s_4 to s_4-s_8 from Table VI and the cost beyond the 183d day as equal to the cost for the period from the 92d to the 183d day multiplied by the ratio of $s_{92}-s_{183}$ to s_{183} .

With the assistance of Table VI the claim costs arrived at as described above were subdivided into days and weeks of disability. Some adjustments were necessary to make the resulting table flow smoothly and consistently from one section to another. The final basic morbidity table is set forth in Table XI. The function c_t designates the tabular cost per unit of weekly indemnity of the disability from the first day up to and including duration t . Consequently, $c_{t+n}-c_t$ gives the cost of disability for the period from duration t to $t+n$. Both annual and monthly figures are shown.

The claim experience underlying the basic morbidity table is the average of the seven contributing companies' separate experiences and so the table should not be considered to represent or necessarily to be applicable to any one company, whose experience may be at a different level from that of the average. As a matter of fact, there were indications of a considerable variation among the separate experiences of the contributing companies.

Group weekly indemnity experience from 1947 to 1949 was quite favorable generally, and particularly so in 1949. There was no serious epidemic or marked economic unsettlement during this three year period. Accordingly, it is in order to emphasize that the basic morbidity table does not reflect the experience which might arise in the event of such an adversity. The table cannot be regarded as including margins for epidemics, catastrophes or the effects of economic reverses or, in view of the favorable nature of the experience during 1947 to 1949, necessarily for average experience.

Furthermore, although the table purports to show the cost of benefits commencing with the first day of disability, it does not necessarily represent the experience which might prevail under a plan without a waiting period. While group weekly indemnity insurance may provide benefits in cases of accident from the first day, sickness benefits are payable only after a waiting period of at least three days. The beginning of the table therefore constitutes an extrapolation of the experience under the types of plans actually written. In particular, the short accident claims, for disabilities of 1, 2 or 3 days duration, are affected by the relationship between the benefit to which the claimant might be entitled and the cost to

TABLE XI
1947-49 BASIC MORBIDITY TABLE—MALES

DURATION <i>i</i>	TABULAR COST FOR DURATION OF DIS- ABILITY <i>f</i> OR LESS		DURATION <i>f</i>	TABULAR COST FOR DURATION OF DIS- ABILITY <i>f</i> OR LESS	
	Annual <i>c_i</i>	Monthly <i>c_i</i>		Annual <i>c_i</i>	Monthly <i>c_i</i>
1 day.....	.0279	.0023	20 weeks.....	.7402	.0617
2 days.....	.0553	.0046	21 ".....	.7515	.0626
3 ".....	.0820	.0068	22 ".....	.7623	.0635
4 ".....	.1078	.0090	23 ".....	.7726	.0644
5 ".....	.1326	.0110	24 ".....	.7825	.0652
6 ".....	.1564	.0130	25 ".....	.7920	.0660
7 ".....	.1790	.0149	26 ".....	.8011	.0668
8 ".....	.1999	.0167	26 " , 3 days...	.8049	.0671
9 ".....	.2191	.0183	27 ".....	.8099	.0675
10 ".....	.2365	.0197	28 ".....	.8184	.0682
11 ".....	.2519	.0210	29 ".....	.8266	.0689
12 ".....	.2659	.0222	30 ".....	.8345	.0695
13 ".....	.2788	.0232	31 ".....	.8422	.0702
14 ".....	.2908	.0242	32 ".....	.8496	.0708
15 ".....	.3021	.0252	33 ".....	.8568	.0714
16 ".....	.3129	.0261	34 ".....	.8638	.0720
17 ".....	.3233	.0269	35 ".....	.8706	.0725
18 ".....	.3333	.0278	36 ".....	.8772	.0731
19 ".....	.3430	.0286	37 ".....	.8836	.0736
20 ".....	.3524	.0294	38 ".....	.8899	.0742
21 ".....	.3615	.0301	39 ".....	.8960	.0747
22 ".....	.3703	.0309	40 ".....	.9020	.0752
23 ".....	.3788	.0316	41 ".....	.9078	.0756
24 ".....	.3870	.0322	42 ".....	.9135	.0761
25 ".....	.3949	.0329	43 ".....	.9191	.0766
26 ".....	.4025	.0335	44 ".....	.9246	.0770
27 ".....	.4099	.0342	45 ".....	.9300	.0775
28 ".....	.4171	.0348	46 ".....	.9352	.0779
29 ".....	.4241	.0353	47 ".....	.9403	.0784
30 ".....	.4309	.0359	48 ".....	.9453	.0788
31 ".....	.4375	.0365	49 ".....	.9502	.0792
32 ".....	.4439	.0370	50 ".....	.9550	.0796
33 ".....	.4501	.0375	51 ".....	.9598	.0800
34 ".....	.4561	.0380	52 ".....	.9645	.0804
35 ".....	.4619	.0385	52 " , 3 days...	.9665	.0805
6 weeks.....	.4977	.0415	53 ".....	.9691	.0808
7 ".....	.5265	.0439	54 ".....	.9736	.0811
8 ".....	.5505	.0459	55 ".....	.9780	.0815
9 ".....	.5718	.0476	56 ".....	.9824	.0819
10 ".....	.5914	.0493	57 ".....	.9867	.0822
11 ".....	.6099	.0508	58 ".....	.9909	.0826
12 ".....	.6274	.0523	59 ".....	.9950	.0829
13 ".....	.6440	.0537	60 ".....	.9991	.0833
13 " , 3 days...	.6508	.0542			
14 ".....	.6598	.0550			
15 ".....	.6749	.0562			
16 ".....	.6893	.0574			
17 ".....	.7030	.0586			
18 ".....	.7160	.0597			
19 ".....	.7284	.0607			

the claimant in procuring such a benefit. Since the claimant must be under a doctor's care to be eligible to receive benefits, he may tend not to present a claim in cases where the doctor's bill may be large in relation to the benefit payable for one or two days of disability.

Table XII contains a comparison between Table XI and the graduated claim costs used as a basis thereof. In determining the basic morbidity table costs for the first day accident plans, the accident portion of tabular

TABLE XII

MALES

PLAN	(1)	(2)	(3)	(4)	(5)	(6)
	AMOUNT EXPOSED	GRADUATED ANNUAL CLAIM COST		BASIC MORBIDITY TABLE ANNUAL CLAIM COST		RATIO (5) ÷ (3)
			Weighted by Exposed to Risk		Weighted by Exposed to Risk	
1-4-13 . . .	20,218,980	.582	.574	.577	.575	100.2%
4-4-13 . . .	7,068,380	.553		.569		
1-8-13 . . .	62,705,010	.493	.487	.499	.491	100.8
8-8-13 . . .	51,478,500	.479		.481		
1-8-26 . . .	4,404,170	.672	.634	.650	.636	100.3
8-8-26 . . .	11,578,320	.619		.631		

costs has been taken to be one-ninth of the total. Thus the basic mortality table cost for the 1-8-13 plan, for example, is

$$\frac{1}{9}c_{91} + \frac{8}{9}(c_{98} - c_7).$$

The factor of 1/9 is based upon the following considerations.

Table XB sets forth the relative cost of accident benefits under the respective plans. From the table it is seen that the cost of accident claims under first day plans is greater proportionately than under plans where accident and sickness claims are subject to the same waiting period. Weighting the percentages for each plan by the plan's exposed to risk separately for first day accident plans and the other plans gives an average percentage for the relative cost of accident benefits of 11.2% under first day plans and 10.0% under the other plans. The higher relative cost of accident benefits experienced under first day plans should be reflected in any factor used to calculate tabular costs for first day accident plans.

Consequently, the fractional factor of $\frac{1}{3}$ was chosen as equivalent to the percentage 11.2%.

It will be seen that the agreement between the basic morbidity table and the graduated claim cost figures is good. Table XIII compares the 1931-35 basic morbidity table with the 1947-49 basic morbidity table. In any consideration of the differences between the two tables, pages 359 to 369 of Mr. Fitzhugh's paper describing the derivation of the 1931-35 table should be referred to.

TABLE XIII
COMPARISON OF BASIC MORBIDITY
TABLES—MALES

PERIOD OF DIS- ABILITY IN DAYS	INTERCOMPANY	
	1931-35	1947-49
1- 3 . . . . .	.2860	.0820
4- 7 . . . . .	.1817	.0970
8- 91 . . . . .	.4070	.4650
92-182 . . . . .	.2103	.1571
183-420 . . . . .	.1536	.1980

TABLE XIV
ANNUAL CLAIM FREQUENCY—MALES

PLAN	(1)	(2)	(3)	(4) (2)÷(3)	(5)	(6)
	Number of Claims*	Graduated Annual Claim Cost per Unit of Benefit	Average Weeks Duration	Annual Claim Frequency		
				Total	Accident	Sickness
1-4-13	22,176 (2,689)	.582	3.27	.1780	.0216	.1564
4-4-13	8,129 (721)	.553	3.03	.1825	.0162	.1663
1-8-13	24,904 (3,944)	.493	4.47	.1103	.0175	.0928
8-8-13	12,025 (1,207)	.479	4.46	.1074	.0108	.0966
1-8-26	11,878 (2,140)	.672	5.10	.1318	.0237	.1081
8-8-26	22,696 (2,218)	.619	5.40	.1146	.0112	.1034

* Figures in parentheses are number of accident claims included in total.

SECTION IX. CLAIM FREQUENCIES

While information is not available directly as to the observed claim frequencies, it is possible to derive frequencies corresponding to the graduated claim costs for males. This has been done by dividing the male claim costs by the appropriate average durations obtained from the data in Appendix B. The results are shown in Table XIV. Similar figures for females would not be meaningful because the claim costs for females include maternity benefits, whereas the continuation data do not.

Annual claim frequencies are shown separately for accidents and sicknesses and in total. The division of the total frequencies into accident and sickness portions was made in proportion to the number of accident and sickness claims, respectively, set forth in Appendix B. For the first day accident plans, the frequencies are for a composite of accident claims which commenced on the first day and of sickness claims which commenced on the 4th or 8th day, as the case may be.

SECTION X. CONCLUSION

To a large extent this analysis involves the use of individual judgment in the development of the necessary actuarial technique and in the interpretation of the data, which was one of the major reasons for presenting the study in the form of a paper instead of a committee report. It was felt that the author's work would not then be regarded as conclusions of the Committee.

Furthermore, it was thought that in the form of a paper a greater opportunity would be afforded the members of the Society for review and comment, and for the addition of other experience that might be pertinent. It is the sincere hope of the author that this paper will receive the fullest possible discussion and critical review.

APPENDIX B—MALES

NUMBER OF CLAIMS ENTERING THE *t*TH DAY OF DISABILITY

<i>t</i> (DAYS)	PLAN											
	1-4-13		4-4-13		1-8-13		8-8-13		1-4-26		4-4-26	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
1	2,689				3,944				704			
2	2,647				3,892				686			
3	2,589				3,779				656			
4	2,513	19,487	721	7,408	3,661				637	5,883	457	3,530
5	2,416	19,162	713	7,305	3,547				597	5,746	453	3,473
6	2,301	18,378	695	7,068	3,427				564	5,502	445	3,319
7	2,163	17,275	668	6,714	3,307				534	5,154	426	3,132
8	1,921	16,265	627	6,112	3,109	20,960	1,207	10,818	493	4,809	401	2,916
9	1,765	15,343	575	5,726	2,943	20,737	1,196	10,675	454	4,540	367	2,743
10	1,606	13,932	523	4,887	2,764	20,246	1,162	10,387	412	4,082	348	2,519
11	1,490	12,849	496	4,396	2,632	19,693	1,129	10,099	395	3,772	329	2,325
12	1,419	12,025	470	4,062	2,528	19,076	1,097	9,732	369	3,559	310	2,173
13	1,347	11,303	451	3,793	2,443	18,396	1,058	9,367	352	3,336	290	2,043
14	1,286	10,680	430	3,570	2,338	17,679	1,031	8,968	340	3,158	276	1,956
15	1,196	10,071	402	3,385	2,198	16,788	978	8,490	322	2,958	259	1,814
16	1,124	9,638	372	3,241	2,077	16,192	932	8,203	294	2,842	244	1,733
17	1,053	8,952	347	3,012	1,939	15,298	875	7,752	271	2,678	230	1,603
18	999	8,423	327	2,827	1,861	14,658	849	7,413	260	2,532	222	1,503
19	958	8,021	319	2,697	1,794	14,106	831	7,141	250	2,429	210	1,436
20	920	7,691	307	2,598	1,736	13,620	819	6,930	238	2,309	201	1,370
21	878	7,384	297	2,489	1,693	13,187	802	6,703	228	2,214	197	1,310
22	824	7,089	286	2,406	1,617	12,626	758	6,402	219	2,118	189	1,247
23	789	6,860	270	2,335	1,551	12,306	723	6,207	203	2,044	180	1,203
24	751	6,524	259	2,221	1,477	11,820	684	5,966	194	1,944	170	1,164
25	727	6,230	249	2,142	1,424	11,417	662	5,754	193	1,846	164	1,115
26	705	5,995	244	2,062	1,380	11,081	645	5,582	190	1,752	157	1,085
27	693	5,774	233	1,989	1,348	10,795	629	5,412	187	1,693	154	1,040
28	676	5,585	226	1,924	1,319	10,511	621	5,243	184	1,637	150	1,005
29	648	5,421	217	1,871	1,273	10,099	592	5,036	181	1,574	146	964
30	624	5,271	210	1,829	1,231	9,856	568	4,906	174	1,538	142	932
31	593	5,054	205	1,769	1,183	9,492	549	4,724	169	1,468	139	899
32	582	4,846	197	1,701	1,157	9,182	535	4,575	166	1,419	136	871
33	565	4,682	188	1,651	1,128	8,949	524	4,462	161	1,363	135	840
34	549	4,554	186	1,603	1,101	8,728	509	4,351	157	1,324	132	817
35	541	4,430	178	1,555	1,071	8,506	498	4,242	154	1,287	130	786

APPENDIX B—MALES—Continued

i (DAYS)	PLAN									
	1-8-26		8-8-26		1-4-52		1-8-52		8-8-52	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
1	2,140				385		205			
2	2,039				380		203			
3	1,936				376		199			
4	1,819				361	3,339	196			
5	1,721				357	3,276	187			
6	1,641				342	3,132	183			
7	1,556				323	2,895	178			
8	1,457	9,738	2,218	20,478	305	2,698	172	1,157	224	1,723
9	1,363	9,596	2,159	19,895	274	2,548	158	1,129	223	1,712
10	1,256	9,245	2,100	19,212	254	2,307	146	1,062	222	1,680
11	1,183	8,863	2,016	18,490	231	2,123	138	1,024	219	1,627
12	1,124	8,504	1,954	17,779	220	1,959	131	968	207	1,576
13	1,076	8,152	1,897	17,030	202	1,821	125	911	201	1,524
14	1,025	7,796	1,839	16,283	181	1,688	121	867	193	1,473
15	961	7,426	1,745	15,519	173	1,581	115	821	185	1,424
16	890	7,152	1,670	14,932	162	1,524	108	788	175	1,375
17	829	6,685	1,569	14,092	145	1,395	99	750	164	1,313
18	797	6,378	1,501	13,529	138	1,311	94	714	159	1,245
19	773	6,173	1,447	13,004	133	1,245	91	684	157	1,198
20	749	5,976	1,408	12,543	128	1,177	87	652	153	1,165
21	721	5,755	1,358	12,075	126	1,118	85	625	150	1,124
22	695	5,515	1,298	11,586	122	1,073	81	598	143	1,094
23	661	5,357	1,242	11,213	114	1,043	75	575	140	1,062
24	631	5,110	1,188	10,720	112	984	72	547	135	1,027
25	615	4,926	1,159	10,388	106	933	71	532	130	997
26	600	4,772	1,128	10,090	102	897	71	519	128	978
27	584	4,633	1,101	9,797	99	864	68	502	126	951
28	567	4,508	1,071	9,495	99	829	64	487	124	930
29	538	4,368	1,035	9,171	92	776	58	471	120	903
30	525	4,261	999	8,957	86	752	58	454	117	882
31	509	4,106	959	8,631	83	721	57	443	114	847
32	497	3,952	933	8,337	80	695	53	431	111	824
33	487	3,845	915	8,108	77	670	49	424	108	806
34	483	3,742	900	7,916	74	648	49	413	106	786
35	473	3,656	879	7,735	74	633	48	403	105	762

APPENDIX B—FEMALES (NONMATERNITY ONLY)
NUMBER OF CLAIMS ENTERING THE *t*TH DAY OF DISABILITY

<i>t</i> (DAYS)	PLAN											
	1-4-13		4-4-13		1-8-13		8-8-13		1-4-26		4-4-26	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
1	633				1,357				260			
2	623				1,344				255			
3	609				1,320				247			
4	595	6,406	170	2,080	1,295				237	2,893	34	645
5	584	6,301	169	2,056	1,259				221	2,809	33	630
6	564	6,112	165	1,996	1,223				212	2,691	32	609
7	535	5,766	162	1,892	1,190				196	2,533	32	581
8	500	5,419	153	1,759	1,140	10,719	426	5,197	182	2,371	29	558
9	478	5,161	144	1,664	1,099	10,641	422	5,149	172	2,265	28	532
10	441	4,714	130	1,507	1,051	10,452	413	5,042	152	2,077	28	473
11	419	4,409	124	1,394	1,003	10,256	406	4,921	139	1,928	27	445
12	399	4,152	122	1,307	979	10,039	402	4,784	130	1,809	26	424
13	386	3,951	118	1,216	958	9,802	392	4,647	122	1,715	25	399
14	367	3,744	114	1,154	912	9,519	379	4,498	115	1,615	25	378
15	347	3,547	108	1,102	864	9,144	364	4,268	107	1,528	23	358
16	327	3,419	103	1,045	816	8,935	356	4,135	97	1,464	21	341
17	312	3,191	100	984	760	8,523	341	3,930	92	1,366	21	325
18	295	3,014	97	938	734	8,253	332	3,802	88	1,287	20	312
19	284	2,882	96	899	722	7,998	326	3,677	86	1,235	20	302
20	270	2,774	94	870	702	7,802	320	3,587	84	1,186	18	288
21	262	2,656	89	835	679	7,595	310	3,473	81	1,144	18	275
22	250	2,555	87	801	639	7,328	291	3,340	77	1,098	17	262
23	243	2,475	85	780	621	7,198	283	3,275	75	1,071	17	255
24	234	2,385	83	737	596	6,969	275	3,178	72	1,015	16	246
25	229	2,297	81	709	587	6,786	268	3,111	70	969	14	236
26	223	2,232	77	698	575	6,637	259	3,031	67	937	14	227
27	220	2,158	75	671	558	6,484	253	2,942	66	915	13	219
28	214	2,081	73	652	546	6,325	242	2,869	65	883	13	213
29	209	2,020	65	633	531	6,087	228	2,775	63	846	13	206
30	202	1,975	64	621	514	5,976	219	2,712	61	825	13	205
31	198	1,885	63	591	500	5,779	208	2,622	58	805	13	198
32	193	1,816	63	564	490	5,614	202	2,549	56	773	12	190
33	185	1,759	63	550	479	5,475	199	2,485	56	753	12	184
34	182	1,710	60	540	463	5,345	195	2,423	56	733	12	183
35	174	1,658	60	520	453	5,240	193	2,376	55	711	10	180

APPENDIX B—FEMALES (NONMATERNITY
ONLY)—Continued

t (DAYS)	PLAN									
	1-8-26		8-8-26		1-4-52		1-8-52		8-8-52	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
1.....	515				37		36			
2.....	503				37		35			
3.....	480				36		34			
4.....	463				34	497	32			
5.....	451				32	483	28			
6.....	435				29	448	24			
7.....	416				28	397	23			
8.....	403	3,516	454	5,791	26	364	22	180	29	403
9.....	381	3,483	449	5,739	22	342	21	177	29	399
10.....	359	3,400	440	5,604	19	291	19	170	29	391
11.....	340	3,286	430	5,458	17	259	18	162	29	385
12.....	329	3,196	421	5,280	15	242	18	151	29	373
13.....	311	3,108	411	5,112	15	217	18	139	29	364
14.....	303	2,992	399	4,940	15	197	16	134	28	350
15.....	289	2,865	380	4,747	12	185	16	124	28	334
16.....	266	2,788	359	4,652	12	179	15	120	28	326
17.....	248	2,652	345	4,427	11	161	14	113	26	313
18.....	239	2,559	335	4,289	10	148	13	112	25	305
19.....	233	2,473	325	4,169	10	146	13	106	24	300
20.....	228	2,403	316	4,046	9	143	12	102	24	291
21.....	221	2,338	311	3,930	9	133	12	95	23	279
22.....	216	2,256	293	3,813	9	126	11	91	22	269
23.....	209	2,217	289	3,736	8	118	11	87	22	268
24.....	201	2,140	279	3,597	7	111	10	83	22	258
25.....	198	2,088	270	3,516	7	109	10	79	21	250
26.....	194	2,033	266	3,432	7	103	9	75	21	245
27.....	188	1,985	263	3,359	6	102	8	74	20	244
28.....	184	1,938	254	3,279	6	94	8	69	20	238
29.....	178	1,876	243	3,179	6	91	8	67	20	231
30.....	175	1,842	232	3,129	6	88	8	66	20	230
31.....	170	1,788	227	3,006	5	79	8	63	19	220
32.....	169	1,736	221	2,925	5	77	8	63	19	215
33.....	161	1,697	220	2,851	5	73	7	60	19	210
34.....	157	1,670	214	2,767	5	67	7	60	19	206
35.....	153	1,622	206	2,713	5	65	6	59	19	202

APPENDIX B—MALES

NUMBER OF CLAIMS ENTERING THE tTH WEEK OF DISABILITY

t (WEEKS)	PLAN											
	1-4-13		4-4-13		1-8-13		8-8-13		1-4-26		4-4-26	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
6.	518	4,323	172	1,515	1,030	8,214	481	4,117	145	1,243	127	762
7.	442	3,624	142	1,259	853	6,897	387	3,403	126	1,011	113	622
8.	363	3,021	120	1,012	710	5,844	327	2,852	106	838	98	517
9.	308	2,596	104	849	603	5,002	274	2,451	97	737	84	430
10.	265	2,232	88	723	523	4,352	231	2,141	81	645	69	357
11.	228	1,967	74	633	454	3,830	201	1,892	75	574	53	313
12.	198	1,752	63	538	394	3,414	166	1,703	67	509	50	282
13.	168	1,584	60	483	354	3,044	154	1,533	57	466	44	260
13, 4th day	161	1,514	55	460	330	2,929	143	1,462	54	453	40	245
14.	140	1,440	53	436	300	2,734	130	1,367	53	432	35	233
15.									45	384	33	211
16.									41	358	31	195
17.									40	333	26	186
18.									35	311	24	169
19.									34	297	21	155
20.									32	284	21	142
21.									32	258	19	137
22.									30	243	16	127
23.									29	231	16	123
24.									27	216	15	121
25.									27	209	13	116
26.									25	203	13	109
26, 4th day									22	198	11	105
27.										191	11	102
28.												
29.												
30.												
31.												
32.												
33.												
34.												
35.												
36.												
37.												
38.												
39.												
40.												
41.												
42.												
43.												
44.												
45.												
46.												
47.												
48.												
49.												
50.												
51.												
52.												
52, 4th day												
53.												

APPENDIX B—MALES—Continued

t (WEEKS)	PLAN									
	1-8-26		8-8-26		1-4-52		1-8-52		8-8-52	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
6.....	458	3,557	846	7,523	72	609	46	394	102	743
7.....	370	2,996	703	6,349	61	496	37	311	86	612
8.....	293	2,536	599	5,388	48	409	33	261	70	501
9.....	247	2,180	503	4,680	35	339	28	226	62	428
10.....	210	1,914	423	4,082	29	280	22	194	52	372
11.....	183	1,724	368	3,632	26	237	20	171	48	332
12.....	163	1,541	337	3,252	24	212	20	152	42	306
13.....	145	1,395	309	2,953	19	176	20	136	39	281
13, 4th day.....	137	1,349	299	2,831	19	170	19	135	39	273
14.....	123	1,275	282	2,669	19	153	18	124	38	248
15.....	103	1,133	250	2,424	18	126	14	110	31	225
16.....	95	1,058	222	2,251	16	112	12	101	27	211
17.....	84	993	200	2,089	16	102	11	91	26	191
18.....	81	938	191	1,955	14	93	11	84	24	178
19.....	72	875	176	1,829	12	86	10	81	22	164
20.....	65	817	162	1,720	11	80	10	73	21	152
21.....	62	778	155	1,621	11	71	10	66	19	140
22.....	57	743	145	1,529	11	69	9	64	19	129
23.....	54	710	132	1,473	9	64	8	59	17	120
24.....	49	683	121	1,405	9	60	6	58	16	117
25.....	49	656	113	1,335	7	59	6	53	15	113
26.....	48	631	109	1,276	6	56	6	50	14	109
26, 4th day.....	47	624	108	1,254	6	56	6	50	14	105
27.....	.....	609	104	1,218	6	55	5	50	13	105
28.....	.....	.....	.....	.....	6	50	4	50	13	102
29.....	.....	.....	.....	.....	6	48	3	47	13	96
30.....	.....	.....	.....	.....	6	45	3	45	10	92
31.....	.....	.....	.....	.....	6	45	1	41	9	90
32.....	.....	.....	.....	.....	5	42	1	40	8	86
33.....	.....	.....	.....	.....	5	39	1	39	8	82
34.....	.....	.....	.....	.....	5	37	1	39	8	80
35.....	.....	.....	.....	.....	5	35	1	37	8	79
36.....	.....	.....	.....	.....	5	35	1	37	7	76
37.....	.....	.....	.....	.....	5	34	1	35	7	71
38.....	.....	.....	.....	.....	5	34	1	35	7	67
39.....	.....	.....	.....	.....	5	34	1	31	6	64
40.....	.....	.....	.....	.....	5	30	1	31	5	61
41.....	.....	.....	.....	.....	3	29	1	30	5	61
42.....	.....	.....	.....	.....	3	27	1	29	5	60
43.....	.....	.....	.....	.....	3	27	1	27	5	59
44.....	.....	.....	.....	.....	3	27	1	27	5	56
45.....	.....	.....	.....	.....	3	27	1	27	5	54
46.....	.....	.....	.....	.....	3	27	1	27	5	54
47.....	.....	.....	.....	.....	3	27	1	26	5	52
48.....	.....	.....	.....	.....	3	27	1	24	5	50
49.....	.....	.....	.....	.....	3	27	1	23	5	49
50.....	.....	.....	.....	.....	3	27	1	23	5	49
51.....	.....	.....	.....	.....	3	25	1	23	5	48
52.....	.....	.....	.....	.....	2	24	1	23	5	46
52, 4th day.....	.....	.....	.....	.....	2	24	1	22	5	45
53.....	.....	.....	.....	.....	.....	24	.....	22	5	45

APPENDIX B—FEMALES (NONMATERNITY ONLY)
NUMBER OF CLAIMS ENTERING THE #TH WEEK OF DISABILITY

# (WEEKS)	PLAN											
	1-4-13		4-4-13		1-8-13		8-8-13		1-4-26		4-4-26	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
6.	167	1,608	60	509	435	5,069	190	2,310	52	699	10	173
7.	145	1,337	47	414	375	4,396	158	1,973	43	589	9	149
8.	122	1,108	34	324	317	3,754	135	1,682	36	482	8	123
9.	101	928	28	281	261	3,219	115	1,447	34	399	7	99
10.	87	776	24	238	220	2,774	99	1,252	27	346	7	84
11.	78	656	20	198	181	2,412	89	1,090	25	311	7	75
12.	68	590	17	176	154	2,115	74	982	22	270	6	67
13.	58	526	15	160	142	1,875	67	872	22	241	5	63
13, 4th day.	55	498	15	149	132	1,776	64	824	22	230	4	62
14.		466	15	137		1,633	57	761	21	214	4	58
15.									18	184	3	51
16.									18	161	3	48
17.									17	150	3	44
18.									15	143	2	42
19.									12	132	1	40
20.									11	121	1	36
21.									11	116	1	34
22.									11	111	1	34
23.									11	105	1	31
24.									9	99		30
25.									9	93		29
26.									7	91		26
26, 4th day.									7	88		25
27.										79		25
28.												
29.												
30.												
31.												
32.												
33.												
34.												
35.												
36.												
37.												
38.												
39.												
40.												
41.												
42.												
43.												
44.												
45.												
46.												
47.												
48.												
49.												
50.												
51.												
52.												
52, 4th day.												
53.												

APPENDIX B—FEMALES (NONMATERNITY
ONLY)—Continued

I (WEEKS)	PLAN									
	1-8 26		8-8-26		1-4-52		1-8-52		8-8-52	
	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.	Acc.	Sick.
6	146	1,577	203	2,659	5	63	6	59	19	194
7	122	1,358	181	2,279	5	52	5	44	14	163
8	106	1,162	146	1,962	5	39	4	42	11	139
9	89	1,033	121	1,724	1	33	3	36	11	126
10	79	889	106	1,502	28	3	3	34	9	105
11	66	776	94	1,300	22	3	25	9	89	89
12	60	696	77	1,170	18	3	24	8	80	80
13	53	625	71	1,045	17	2	20	7	75	75
13, 4th day	50	594	67	1,001	17	2	20	6	72	72
14	46	551	62	942	16	2	17	6	70	70
15	41	498	57	841	13	2	16	6	63	63
16	36	456	56	772	12	1	16	6	57	57
17	34	426	50	711	9	1	14	4	51	51
18	30	391	42	663	9	1	13	4	46	46
19	28	362	39	618	8	1	13	3	41	41
20	26	330	36	579	8	1	9	2	39	39
21	26	308	35	529	8	1	8	2	38	38
22	26	282	34	494	8	1	8	1	38	38
23	25	270	34	467	8	8	8	1	36	36
24	25	258	34	435	8	8	8	1	36	36
25	24	245	34	395	7	8	8	8	34	34
26	24	231	34	356	7	8	8	8	34	34
26, 4th day	24	227	34	346	7	8	8	8	33	33
27	23	223	34	329	7	8	8	8	31	31
28					7	8	8	8	30	30
29					7	8	8	8	29	29
30					7	8	8	8	25	25
31					5	8	8	8	25	25
32					5	7	7	7	23	23
33					5	7	7	7	23	23
34					5	7	7	7	22	22
35					5	7	7	7	20	20
36					4	7	7	7	20	20
37					4	6	6	6	19	19
38					4	6	6	6	19	19
39					4	6	6	6	19	19
40					3	6	6	6	18	18
41					3	6	6	6	17	17
42					3	6	6	6	16	16
43					3	6	6	6	16	16
44					3	6	6	6	16	16
45					3	6	6	6	15	15
46					3	6	6	6	15	15
47					2	6	6	6	15	15
48					2	6	6	6	15	15
49					2	6	6	6	15	15
50					2	6	6	6	14	14
51					2	6	6	6	14	14
52					2	6	6	6	14	14
52, 4th day					2	6	6	6	14	14
53					2	6	6	6	13	13