

TRANSACTIONS OF SOCIETY OF ACTUARIES 1978 REPORTS

I. GROUP WEEKLY INDEMNITY INSURANCE

THIS is the thirty-first annual report on the continuing study of the morbidity experience of Group Weekly Indemnity insurance.

In compiling this report, the Committee has included the available experience of employer/employee groups and has excluded the experience of trusteeships and association cases insuring employees of the member employers and the experience of union cases, whether or not insurance depends upon continued employment. The experience of plans written under State Cash Sickness Laws and the experience of insured groups outside the United States also have been excluded.

RATIO OF ACTUAL TO TABULAR CLAIMS

This report contains two sets of tables. In the first set, experience is presented in the form of ratios of actual to tabular claims, based on the 1947-49 weekly indemnity tabulars as reported in the *1962 Reports* and reproduced in this report. In the second set, experience is presented in the same form as the first set, but the tabular claims used are the 1947-49 weekly indemnity nonmaternity tabulars and 40 percent of the 1947-49 weekly indemnity maternity tabulars. The 1947-49 weekly indemnity maternity tabulars do not reflect the substantial decline in birth rates since the tabulars were developed, with the result that the actual-to-tabular ratios for maternity benefits have been near 40 percent in most of the recent studies, while the actual-to-tabular ratios for nonmaternity benefits are generally near 100 percent or even higher; this wide difference is concealed in the first set of tables and may create distortions when the experience for maternity and that for nonmaternity are combined. For the second set of tables, changing the maternity tabulars to 40 percent of the 1947-49 weekly indemnity maternity tabulars results in actual-to-tabular maternity ratios close to 100 percent. Therefore, the maternity and nonmaternity combined experience in the second set of tables is not as distorted as in the first set of tables. The first set of tables is on the same basis as that used in previous reports and is shown in this report to facilitate comparison with prior years' reports. Caution must be used in interpreting the data contained in this report because, among other reasons, the 1947-49 tabulars may not reflect accurately the current claim patterns. The tabulars also do not reflect certain factors, such as age distribution, industry classification, or size of case, that may have a relevant effect on the experience results. The maternity experience contained in this report may not be

indicative of experience to be expected on new maternity benefits that comply with federal maternity legislation passed in 1978.

CONTRIBUTING COMPANIES

The Committee wishes to express its gratitude to the companies that generously contributed data to this study. The report contains experience for the years 1973, 1974, 1975, 1976, and 1977. Eight companies contributed data for some or all of these years. One company representing a large portion of the data for this study did not contribute experience in 1974. Because we use three-year totals of experience, there is some difficulty in comparing the results of this year's report with those of the previous three years. The results generally reflect the composite effect of variations in company practice in administration and claim procedures, as well as variations in experience among groups.

The majority of companies contribute exposures and claims based upon policy years ending in the calendar year designated. If the renewal dates for all cases included in the study were distributed uniformly over the year, then the central point of the exposure for each policy would be approximately January 1 of that year. However, this assumption may not be very precise because of a concentration of policy renewals in January and July.

The following companies contributed experience for the study:

Aetna Life Insurance Company
 Connecticut General Life Insurance Company
 Continental Assurance Company
 Equitable Life Assurance Society
 Metropolitan Life Insurance Company
 Occidental Life Insurance Company of California
 Prudential Insurance Company of America
 The Travelers Insurance Company

ANALYSIS OF EXPERIENCE

This year we are publishing two sets of tables as described above. The first set of tables (A) is based on the 1947-49 weekly indemnity tabulars. The second set of tables (B) is based on the 1947-49 weekly indemnity nonmaternity tabulars and 40 percent of the 1947-49 weekly indemnity maternity tabulars. The format of the tables is the same in both sets. We ordinarily publish a table showing actual-to-tabular ratios for each of the most recent five years of experience. We are not publishing that table this year because only three companies were able to contribute 1977 experience, one of which represented close to 100

percent of the total experience submitted for that year. For this reason, we felt that the experience for 1977 alone does not represent true inter-company experience.

Tables A1 and B1 show the experience for the period 1975-77 for each of eight plans (four different elimination periods; two different maximum benefit periods), all of which provide a six-week maternity benefit. All size groups are included. The corresponding experience of nonjumbo groups only (units with less than 1,000 insured employees) is displayed in Tables A2 and B2 for each of four plan combinations. For those nonjumbo units for which data were available, Tables A2 and B2 separate the combined experience into its nonmaternity and maternity segments. Also included in Tables A2 and B2 for each of the four plan combinations is the nonjumbo experience for the period 1975-77 of plans that do not provide a maternity benefit. Tables A3 and B3 show analyses of experience by size of experience unit. Results are shown separately for plans with and without maternity benefits. Table A4 analyzes the nonjumbo experience of plans with no maternity benefit by the female percent composition of the experience units. Tables A5 and B4 show the tabular claim costs used to calculate ratios for their respective sets of tables.

Table A1 shows results somewhat worse for thirteen-week plans and about the same for twenty-six-week plans compared with last year's report. The ratio for twenty-six-week plans in total is misleading when compared to last year's report, primarily because of a shift in distribution of exposure by waiting period. All plans combined also showed a higher ratio than in the last report and this is partially due to the shift of weekly indemnity exposed by waiting period. Actual-to-tabular ratios for twenty-six-week plans continue to run higher than those for thirteen-week plans. Ratios on Table B1 are higher than A1 as would be expected, but for thirteen-week plans the ratios for different waiting periods are closer together than on Table A1. Table A2 shows higher ratios for twenty-six-week plans than for thirteen-week plans for plans with maternity benefits. However, for plans with no maternity benefits the thirteen-week plans had ratios equal to those for twenty-six-week plans in Table A2.

For plans with maternity benefits, Table A3 results show materially worse experience than in last year's report and significantly worse experience than in reports prior to last year's report for groups of 500 or more lives. For nonjumbo business, ratios generally increase by size of group, a phenomenon consistent with prior year's experience. For plans with no maternity benefit, experience in each size group was about

TABLE A1
 GROUP WEEKLY INDEMNITY EXPERIENCE
 WITH SIX WEEKS' MATERNITY BENEFIT
 ALL SIZE GROUPS
 COMBINED 1975-77 POLICY YEARS' EXPERIENCE, BY PLAN
 TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY TABULARS

Plan	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims Including Maternity (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
1-4-13	283	2,592	2,034	111%
4-4-13	30	238	182	113
1-8-13	926	6,931	5,027	108
8-8-13	189	2,398	1,768	101
Total, 13-week plans...	1,428	12,159	9,011	107%
1-4-26	298	5,045	5,814	142%
4-4-26	18	640	584	111
1-8-26	1,037	15,729	16,071	133
8-8-26	131	2,720	2,276	89
Total, 26-week plans...	1,484	24,134	24,745	128%
Total, all plans.....	2,912	36,293	33,756	122%

TABLE A2

GROUP WEEKLY INDEMNITY EXPERIENCE
GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED
1975-77 POLICY YEARS' EXPERIENCE, BY PLAN
TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY TABULARS

PLAN	NONMATERNITY AND MATERNITY COMBINED EXPERIENCE*				NONMATERNITY AND MATERNITY SEPARATE EXPERIENCE*						
	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims		Ratio of Actual to 1947-49 Weekly Indemnity Tabular		
							Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined
Plans with 6 Weeks' Maternity Benefit											
13-week:											
4th-day sickness	304	1,987	1,391	101%	276	1,779	1,212	31	108%	35%	103%
8th-day sickness	1,095	7,520	5,319	104	803	5,826	3,923	275	115	45	104
Total	1,399	9,507	6,710	103%	1,079	7,605	5,135	306	113%	44%	104%
26-week:											
4th-day sickness	306	4,059	4,284	128%	272	3,390	3,443	67	130%	46%	126%
8th-day sickness	1,140	14,101	13,981	130	842	11,079	10,406	330	133	44	125
Total	1,446	18,160	18,265	129%	1,114	14,469	13,849	397	132%	44%	125%

* The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

TABLE A2 *Continued*

PLAN	NONMATERNITY AND MATERNITY COMBINED EXPERIENCE*				NONMATERNITY AND MATERNITY SEPARATE EXPERIENCE*						
	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims		Ratio of Actual to 1947-49 Weekly Indemnity Tabular		
							Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined
	Plans with No Maternity Benefits										
13-week:											
4th-day sickness					187	1,039	792		114%		
8th-day sickness					2,900	17,347	10,169		102		
Total					3,087	18,386	10,961		103%		
26-week:											
4th-day sickness					302	3,158	3,236		130%		
8th-day sickness					4,190	31,661	22,494		100		
Total					4,492	34,819	25,730		103%		

* The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

TABLE A3
GROUP WEEKLY INDEMNITY EXPERIENCE
ALL SIZE GROUPS
COMBINED 1975-77 POLICY YEARS' EXPERIENCE, BY SIZE OF EXPERIENCE UNIT
TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY TABULARS

Size	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims Including Maternity (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
Plans with Six Weeks' Maternity Benefit				
< 50 lives	841	1,427	997	96%
50-99	742	3,328	2,746	112
100-249	765	8,190	7,068	117
250-499	344	8,109	7,461	121
500-999	153	6,613	6,703	135
Total < 1,000	2,845	27,667	24,975	121%
1,000 or more	67	8,626	8,781	125%
Grand total	2,912	36,293	33,756	122%
Plans with No Maternity Benefit				
< 50 lives	3,108	6,268	3,755	90%
50-99	2,107	10,052	6,299	95
100-249	1,648	16,879	11,796	105
250-499	539	11,952	9,020	112
500-999	177	8,054	5,821	106
Total < 1,000	7,579	53,205	36,691	103%
1,000 or more	126	20,190	16,987	117%
Grand total	7,705	73,395	53,678	107%

TABLE A4
GROUP WEEKLY INDEMNITY EXPERIENCE
GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED
1975-77 POLICY YEARS' EXPERIENCE, BY FEMALE PERCENT
PLANS WITH NO MATERNITY BENEFIT, ALL BENEFIT PERIODS COMBINED
TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY TABULARS

Female Percent	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
<11%	3,129	22,087	15,134	110%
11-21%	1,331	9,537	5,858	94
21-31%	804	5,894	3,665	93
31-41%	644	4,302	2,830	95
41-51%	458	3,244	2,334	99
51-61%	373	2,714	2,223	109
61-71%	294	1,854	1,751	121
71-81%	254	1,844	1,366	93
81-91%	200	1,376	1,201	105
91-100%	92	353	349	119
Total	7,579	53,205	36,691	103%

TABLE A5
1947-49 WEEKLY INDEMNITY TABULAR
ANNUAL CLAIM COSTS PER \$10 WEEKLY BENEFIT

Plan	Male	Female (with Maternity Benefit)	Female (with No Maternity Benefit)
1-4-13	\$5.77	\$13.09	\$ 9.67
4-4-13	5.69	12.91	9.49
1-8-13	4.99	11.40	7.98
8-8-13	4.81	11.01	7.59
1-4-26	7.32	14.56	11.14
4-4-26	7.23	14.37	10.95
1-8-26	6.50	12.81	9.39
8-8-26	6.31	12.41	8.99

TABLE B1
 GROUP WEEKLY INDEMNITY EXPERIENCE
 WITH SIX WEEKS' MATERNITY BENEFIT
 ALL SIZE GROUPS
 COMBINED 1975-77 POLICY YEARS' EXPERIENCE, BY PLAN
 NONMATERNITY TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY
 NONMATERNITY TABULARS; MATERNITY TABULAR CLAIMS = 40 PERCENT
 OF 1947-49 WEEKLY INDEMNITY MATERNITY TABULARS

Plan	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims Including Maternity (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
1-4-13.....	283	2,592	2,034	117%
4-4-13.....	30	238	182	118
1-8-13.....	926	6,931	5,027	117
8-8-13.....	189	2,398	1,768	114
Total, 13-week plans...	1,428	12,159	9,011	117%
1-4-26.....	298	5,045	5,814	146%
4-4-26.....	18	640	584	115
1-8-26.....	1,037	15,729	16,071	140
8-8-26.....	131	2,720	2,276	100
Total, 26-week plans...	1,484	24,134	24,745	136%
Total, all plans....	2,912	36,293	33,756	130%

TABLE B2
 GROUP WEEKLY INDEMNITY EXPERIENCE
 GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED
 1975-77 POLICY YEARS' EXPERIENCE, BY PLAN
 NONMATERNITY TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY NONMATERNITY TABULARS;
 MATERNITY TABULAR CLAIMS = 40 PERCENT OF 1947-49
 WEEKLY INDEMNITY MATERNITY TABULARS

PLAN	NONMATERNITY AND MATERNITY COMBINED EXPERIENCE*				NONMATERNITY AND MATERNITY SEPARATE EXPERIENCE*							
	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims		Ratio of Actual to 1947-49 Weekly Indemnity Tabular			
							Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined	
Plans with 6 Weeks' Maternity Benefit												
13-week:												
4th-day sickness.....	304	1,987	1,391	106%	276	1,779	1,212	31	108%	88%	107%	
8th-day sickness.....	1,095	7,520	5,319	114	803	5,826	3,923	275	115	113	115	
Total.....	1,399	9,507	6,710	112%	1,079	7,605	5,135	306	113	110	113	
26-week:												
4th-day sickness.....	306	4,059	4,284	132%	272	3,390	3,443	67	130%	114%	130%	
8th-day sickness.....	1,140	14,101	13,981	136	842	11,079	10,406	330	133	110	132	
Total.....	1,446	18,160	18,265	135%	1,114	14,469	13,849	397	132%	111%	132%	

* The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

TABLE B2—Continued

PLAN	NONMATERNITY AND MATERNITY COMBINED EXPERIENCE*				NONMATERNITY AND MATERNITY SEPARATE EXPERIENCE*						
	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims		Ratio of Actual to 1947-49 Weekly Indemnity Tabular		
							Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined
Plans with No Maternity Benefits											
13-week:											
4th-day sickness.....					187	1,039	792		114%		
8th-day sickness.....					2,900	17,347	10,169		102		
Total.....					3,087	18,386	10,961		103%		
26-week:											
4th-day sickness.....					302	3,158	3,236		130%		
8th-day sickness.....					4,190	31,661	22,494		100		
Total.....					4,492	34,819	25,730		103%		

the same as in last year's report. Again, ratios tended to increase with size of group. Table B3 exhibits the same pattern by size.

Table A4 shows that, for nonjumbo groups with no maternity benefit, with all benefit periods combined, and with more than 10 percent female, there is a general tendency for the ratios to increase as the female percentage increases. The table shows a relatively higher

TABLE B3
GROUP WEEKLY INDEMNITY EXPERIENCE
ALL SIZE GROUPS
COMBINED 1975-77 POLICY YEARS' EXPERIENCE, BY SIZE OF EXPERIENCE UNIT
NONMATERNITY TABULAR CLAIMS = 1947-49 WEEKLY INDEMNITY NON-
MATERNITY TABULARS; MATERNITY TABULAR CLAIMS = 40 PERCENT OF
1947-49 WEEKLY INDEMNITY MATERNITY TABULARS

Size	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims Including Maternity (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
Plans with Six Weeks' Maternity Benefit				
< 50 lives	841	1,427	997	101%
50-99	742	3,328	2,746	119
100-249	765	8,190	7,068	123
250-499	344	8,109	7,461	129
500-999	153	6,613	6,703	143
Total <1,000	2,845	27,667	24,975	128%
1,000 or more	67	8,626	8,781	135%
Grand total	2,912	36,293	33,756	130%
Plans with No Maternity Benefit				
< 50 lives	3,108	6,268	3,755	90%
50-99	2,107	10,052	6,299	95
100-249	1,648	16,879	11,796	105
250-499	539	11,952	9,020	112
500-999	177	8,054	5,821	106
Total <1,000	7,579	53,205	36,691	103%
1,000 or more	126	20,190	16,987	117%
Grand total	7,705	73,395	53,678	107%

TABLE B4
 1947-49 WEEKLY INDEMNITY
 NONMATERNITY TABULARS
 40 PERCENT OF 1947-49 WEEKLY
 INDEMNITY MATERNITY TABULARS
 ANNUAL CLAIM COSTS PER \$10 WEEKLY BENEFIT

Plan	Male	Female (with Mater- nity Benefit)	Female (with No Maternity Benefit)
1-4-13.....	\$5.77	\$11.04	\$ 9.67
4-4-13.....	5.69	10.86	9.49
1-8-13.....	4.99	9.35	7.98
8-8-13.....	4.81	8.96	7.59
1-4-26.....	7.32	12.51	11.14
4-4-26.....	7.23	12.32	10.95
1-8-26.....	6.50	10.76	9.39
8-8-26.....	6.31	10.36	8.99

ratio for groups with less than 11 percent female. It is worth noting, however, that 42 percent of the exposures fall in the "less than 11 percent female" category. If groups of unknown percent female distribution have been coded in error as "less than 11 percent female" when, in fact, a higher classification is applicable, then the actual-to-tabular ratio for these cases would be high if normal experience prevailed. The actual claims would reflect the higher cost associated with female risks, and the tabular claims would reflect erroneously the more favorable experience expected for male risks. In recent years we have attempted to make sure that the female percentage was being coded correctly, so the experience in the less than 11 percent female category may be more accurate than in previous years. However, the possible problem described above may still apply to this data. Another possible explanation for this problem is that groups with less than 11 percent females are more likely to be engaged in occupations that are more hazardous than average. The *1975 Reports* contain the most recent five-year analysis of group weekly indemnity experience by industry. That analysis, coupled with United States Department of Labor statistics that show industry employment split by sex, indicates that many groups with less than 11 percent females have group weekly indemnity experience that is worse than the average for all industries combined.

