### TRANSACTIONS OF SOCIETY OF ACTUARIES 1976 REPORTS

#### I. GROUP WEEKLY INDEMNITY INSURANCE

This is the twenty-ninth 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 have been excluded.

#### RATIO OF ACTUAL TO TABULAR CLAIMS

Throughout this report, 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. Caution must be used in interpreting the data contained in this report because, among other reasons, the 1947–49 tabulars may not accurately reflect current claim patterns. The 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 well below 50 percent in recent studies, while the actual-to-tabular ratios for nonmaternity benefits are generally near 100 percent or even higher; this wide difference is concealed and may create distortions when the experience for maternity and that for nonmaternity are combined. The tabulars also do not reflect certain factors, such as age distribution, industry classification, or size of case, which may have a relevant effect on the experience results.

#### 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 1971, 1972, 1973, 1974, and 1975. Seven companies contributed data for all five years. One additional company contributed data for all years except 1974. This company represents a large portion of the data for this study, and because we use three-year totals of experience, there is some difficulty in comparing the results of both this year's and last year's study with those of prior 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 the 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 year 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

We have changed the content of some of the supporting tables for this year's study. Specifically, we are not reporting nonmaternity and maternity separate experience this year. We made this decision because of data errors in the maternity exposure and because the maternity separate experience is contributed largely by one company. The effect of the errors on the nonmaternity and maternity combined experience is estimated at less than one-half of 1 percent. This change affects Tables 2 and 3. Studies from prior years were not affected by these errors.

Table 1 shows the experience for the period 1973-75 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 Table 2 for each of four plan combinations. Also included in Table 2 for each of the four plan combinations is the nonjumbo experience for the period 1973-75 of plans that do not provide a maternity benefit. Table 3 is a five-year trend analysis of the Table 2 experience for each year 1971-75 inclusive. Particular care should be exercised in analyzing the year-by-year trend in experience because 1974 experience does not include the experience of our largest contributor. Table 4 is an analysis of experience by size of experience unit. Results are shown separately for plans with and without maternity benefits. Table 5 analyzes the nonjumbo experience of plans with no maternity benefit by the female percent composition of the experience units.

Table 1 shows results slightly better than the results of a year ago. Actual-to-tabular ratios for twenty-six-week plans continue to run higher than those for thirteen-week plans. The ratios shown in Tables 2 and 3 confirm this relationship for plans with maternity benefits, but for plans with no maternity benefits the thirteen-week plans actually had higher ratios than the twenty-six-week plans. Compared with the 1972–74 study, ratios for thirteen-week plans deteriorated, while ratios for twenty-six-week plans improved.

For plans with a maternity benefit, Table 4 results show some differences from Table 4 results in the 1972–74 study. Ratios for the smaller size groups have deteriorated, and the ratios do not generally increase by size of group. The ratios for plans with no maternity benefit generally increase with the size of the group. It is interesting to note that the experience on jumbo cases with six-week maternity benefits improved since last year's study, while the jumbo experience on plans with no maternity benefit deteriorated substantially. These results were both caused by substantial fluctuation in opposite directions in the 1972 and 1975 contributions.

Table 5 shows that, for nonjumbo groups with no maternity benefit, with all benefit periods combined, and with more than 10 percent female, there is a tendency for the ratios to increase as the female percentage increases. The table shows a relatively higher ratio for groups with less than 11 percent female. It is worth noting, however, that 47 percent of the exposures fall in the "less than 11 percent female" category. It is now known that the exposure coding by percent female is in error, at least for some cases. This was discovered too late for the cases to be identified and a correction made. The nature of the error is that some groups of varying female concentration have been coded as "less than 11 percent female" when in fact a higher classification is applicable. Therefore, the actual-totabular ratio for the "less than 11 percent" group shown is higher than it should be. The actual claims for the improperly coded groups reflect the higher cost associated with female risks, and the tabular claims reflect the more favorable experience expected for male risks. This error does not affect any of the groups with 11 percent or greater female content, although it does, of course, affect the total. Where possible, corrected percent female codings will be obtained and retabulated for the next report.

TABLE 1

GROUP WEEKLY INDEMNITY EXPERIENCE
PLANS WITH SIX WEEKS' MATERNITY BENEFIT
ALL SIZE GROUPS
COMBINED 1973-75 POLICY YEARS' EXPERIENCE, BY PLAN

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 4-4-13 1-8-13 8-8-13	270 145 1.198 279	2,061 723 8,353 2,409	$\begin{array}{c} 1,422 \\ 283 \\ 6,096 \\ 1,589 \end{array}$	97% 62 112 96
Total, 13-week plans	1,892	13,546	9,390	104%
1-4-26 4-4-26 1-8-26 8-8-26	181 21 1,114 146	3, 287 549 16, 462 6, 351	3,519 478 15,184 4,213	133% 105 124 80
Total, 26-week plans	1,462	26,649	23,394	113%
Total, all plans	3,354	40,195	32,784	111%

#### TABLE 2

# GROUP WEEKLY INDEMNITY EXPERIENCE GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED 1973-75 POLICY YEARS' EXPERIENCE, BY PLAN NONMATERNITY AND MATERNITY COMBINED EXPERIENCE

Plan	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
	Plans with 6 Weeks' Maternity Benefit			
13-week: 4th-day sickness	410 1,451	2,162 8,886	1,316 6,252	88%
Total	1,861	11,048	7,568	103%
26-week: 4th-day sickness 8th-day sickness	193 1,216	2,650 14,748	2,581 12,812	119% 117
Total	1,409	17,398	15,393	117%
	Plans with No Maternity Benefit			
13-week: 4th-day sickness 8th-day sickness	252 3,932	1,520 20,384	1,182 12,134	117% 104
Total	4,184	21,904	13,316	105%
26-week: 4th-day sickness 8th-day sickness	310 5,407	3,324 33,902	2,929 23,737	115% 99
Total	5,717	37,226	26,666	101%

TABLE 3

## GROUP WEEKLY INDEMNITY EXPERIENCE GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED 1971-75 POLICY YEARS' EXPERIENCE, BY PLAN NONMATERNITY AND MATERNITY COMBINED EXPERIENCE

PLAN	RATIOS OF ACTUAL TO 1947-49 TABULAR FOR POLICY YEAR ENDING IN:					
	1971	1972	1973	1974	1975	
	Plans with 6 Weeks' Maternity Benefit					
13-week 4th-day sickness 8th-day sickness	92% 108	93%	89% 104	70% 99	$\frac{104\%}{112}$	
Total	105%	101%	101%	94%	111%	
26-week: 4th-day sickness 8th-day sickness	124% 122	110% 120	110% 107	127% 120	135% 122	
Total	122%	118%	108%	122%	124%	
-	Plans with No Maternity Benefit					
13-week: 4th-day sickness 8th-day sickness	102% 102	97% 99	105% 100	119% 106	140% 108	
Total	102%	99%	100%	107%	110%	
26-week: 4th-day sickness 8th-day sickness	94% 105	87% 104	105% 98	118% 101	124% 100	
Total	103%	102%	99%	103%	102%	

TABLE 4

GROUP WEEKLY INDEMNITY EXPERIENCE
ALL SIZE GROUPS

COMBINED 1973-75 POLICY YEARS' EXPERIENCE,
BY SIZE OF EXPERIENCE UNIT

Size	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims Including Maternity (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
	Plans with 6 Weeks' Maternity Benefit			
<50 lives. 50–99. 100–249. 250–499. 500–999.	1,026 875 838 353 178	1,995 3,345 7,585 8,780 6,741	1,398 2,589 6,059 6,877 6,037	110% 110 111 108 123
Total <1,000	3,270	28,446	22,960	112%
1,000 or more	84	11,749	9,824	107%
Grand total	3,354	40,195	32,784	111%
	Plans with No Maternity Benefit			
<50 lives 50-99 100-249 250-499 500-999	4,445 2,666 1,930 648 212	8,557 11,501 17,672 12,906 8,494	5,127 6,903 12,144 9,551 6,257	93% 92 105 112 106
Total <1,000	9,901	59,130	39,982	102%
1,000 or more	144	18,788	15,308	116%
Grand total	10,045	77,918	55,290	106%

TABLE 5

GROUP WEEKLY INDEMNITY EXPERIENCE
GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED
1973-75 POLICY YEARS' EXPERIENCE, BY FEMALE PERCENT
PLANS WITH NO MATERNITY BENEFIT, ALL BENEFIT PERIODS COMBINED

Female Percent	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947–49 Weekly Indemnity Tabular
<11%	4.611	28,094	18,948	109%
11-21%	1,669	9,198	5,192	87
21–31%	938	5,871	3,668	93
31-41%	740	4,451	2,880	93
41-51%	544	3,478	2,544	100
51-61%	423	2,655	2,128	110
61–71%	353	1,994	1,622	106
71-81%	252	1,360	1,196	110
81-91%	252	1,505	1,376	111
91–100%	119	524	428	100
Total	9,901	59,130	39,982	102%