### TRANSACTIONS OF SOCIETY OF ACTUARIES 1971 REPORTS

#### II. GROUP WEEKLY INDEMNITY INSURANCE

This is the twenty-fourth 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 trusteeship 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 and Canada have been excluded. The United States experience and the Canadian experience have been reported separately.

#### 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 in recent years, with the result that the actual-to-tabular ratios for maternity benefits are generally somewhere near 50 per cent, while the actual-to-tabular ratios for nonmaternity benefits are generally somewhere near 100 per cent; 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. Data for policy years ending in 1969 and 1970 were contributed by ten companies, and data for earlier policy years were available for one additional company. The results reflect the composite effect of variations in company practice in administration and claim procedures, as well as variations in experience among groups. It is possible that the omission of one company's data from the two most recent exposure years may have a minor effect on the comparisons among years.

This report contains experience for years labeled 1966, 1967, 1968, 1969, and 1970. 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 investigation covered in this report:

Aetna Life Insurance Company
Connecticut General Life Insurance Company
Continental Assurance Company
Equitable Life Assurance Society
John Hancock Mutual Life Insurance Company
Metropolitan Life Insurance Company
The Mutual Life Assurance Company of Canada
Occidental Life Insurance Company of California
Prudential Insurance Company of America
Sun Life Assurance Company of Canada
The Travelers Insurance Company

#### ANALYSIS OF EXPERIENCE

Table 1 shows experience by plan for the three latest policy years combined, including all size groups. Only plans with a six-week maternity benefit are included. Table 2 shows comparable experience, excluding jumbo groups (those containing 1,000 or more insured employees); in addition, for those cases where separate experience is available, experience is also shown broken down into nonmaternity and maternity. Table 2 also shows separately the experience of plans with no maternity benefits. Table 3 displays the ratios of actual to tabular claims on nonjumbo groups for each of the last five years. Table 4 shows experience by size of case.

According to Table 1, over-all Canadian experience continues to be higher than comparable United States experience. Ratios in Tables 2 and 3, however, show mixed results by year and plan when Canadian experience and United States experience are compared. In Table 2 Canadian nonmaternity experience on plans with maternity appears to be lower than corresponding United States experience, while plans with no maternity appear to have higher ratios in Canada. From Table 4, the higher Canadian experience appears to result partly from the jumbo

TABLE 1

## GROUP WEEKLY INDEMNITY EXPERIENCE WITH SIX WEEKS' MATERNITY BENEFIT ALL SIZE GROUPS

#### COMBINED 1968-70 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					
		United State	es Experience						
1-4-13. 4-4-13. 1-8-13. 8-8-13.	1,030 297 3,651 647	5,962 1,559 22,098 5,420	4,374 823 15,840 3,692	99°; 81 110 102					
Total, 13-week plans	5,625	35,039	24.729	105°,					
1-4-26. 1-4-26. 1-8-26. 3-8-26.	389 56 2,274 310	6,672 1,038 32,662 8,822	7,158 1,190 31,878 5,681	132 144 128 88					
Total, 26-week plans	3,029	49,194	45,907	122%					
Total, all plans	8,654	84,233	70,636	116°;					
	Canadian Experience								
1-4-13. 4-4-13. 1 8-13. 8-8-13.	159 22 1,227 31	607 69 1,777 55	469 49 1,106 38	115% 103* 102 117*					
Total, 13-week plans	1,439	2,508	1,662	106%					
1-4-26 1-4-26 1-8-26 3-8-26	177 12 421 30	899 180 2,826 158	884 170 2,814 75	121% 115 139 64					
Total, 26-week plans	640	4,063	3,943	131%					
Total, all plans	2,079	6,571	5,605	122%					

<sup>\*</sup> Less than \$50,000 of actual claims.

TABLE 2

## GROUP WEEKLY INDEMNITY EXPERIENCE GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED 1968-70 POLICY YEARS' EXPERIENCE, BY PLAN

#### UNITED STATES EXPERIENCE

	No	NMATERNITY Combined E	AND MATERN	NITY				ERNITY AND I ARATE EXPER			
Plan	No.	Weekly Indemnity	Actual	Ratio of Actual to 1947–49	No.	Weekly Indemnity	Actual	Claims	Ratio of Actual to 1947–49 Weekly Indemnity Tabular		
	Experience Units	Exposed (000)	Claims (000)	Weekly Indemnity Tabular	Experience Units	Exposed (000)	Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined
			<u></u>	<u>'                                      </u>	Plans with 6	Weeks' Mat	ernity Benef	it	·	<u>,                                     </u>	<u></u>
13-week: 4th-day sickness 8th-day sickness	1,310 4,196	5,372 22,058	3,489 15,396	94% 107	1,030 2,824	4,193 15,102	2,841 10,039	91 654	106% 116	38% 50	100% 107
Total	5,506	27,430	18,885	104%	3,854	19,295	12,880	745	114%	48%	106%
26-week: 4th-day sickness 8th-day sickness	415 2,448	4,667 21,314	4,428 18,874	114% 116	305 1,555	3,230 14,337	3,010 12,756	75 479	119% 127	47% 51	114% 120
Total	2,863	25,981	23,302	116%	1,860	17,567	15,766	554	125%	50%	119%
					Plans with	No Materni	ly Benefits	·			<u>'</u>
13-week: 4th-day sickness 8th-day sickness					498 6,512	3,163 27,893	2,097 16,990		102% 105		
Total					7,010	31,056	19,087		104%		
26-week: 4th-day sickness 8th-day sickness					334 5,839	2,920 27,944	2,261 18,704		94% 95		
Total					6,173	30,864	20,965		95%		

<sup>\*</sup> The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

TABLE 2 Continued
CANADIAN EXPERIENCE

	No	NMATERNITY COMBINED F	and Matern Experience*	птч				ERNITY AND M			
Plan	No.	Weekly Indemnity	Actual	Ratio of Actual to 1947-49	No.	Weekly Indemnity	Actual	Claims	Ratio of Actual to 1947-49 Weekly Indemnity Tabular		
	Experience Units	Exposed (000)	Claims (000)	Weekly Indemnity Tabular	Experience Units	Exposed (000)	Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined
				·	Plans with (	Weeks' Mat	ernity Benef	it	<del>'</del>	<u>'                                      </u>	<u>'</u>
13-week: 4th-day sickness 8th-day sickness	179 1,257	584 1,794	426 1,108	107% 101	167 1,144	520 1,582	375 942	6 38	113% 108	23%† 40†	106% 101
Totai	1,436	2,378	1,534	103%	1,311	2,102	1,317	44	109%	36%†	103%
26-week: 4th-day sickness 8th-day sickness	188 443	1,009 1,807	1,023 1,402	124% 106	164 350	795 1,050	767 711	13 26	124% 97	40%† 44†	120%
Total	631	2,816	2,425	113%	514	1.845	1,478	39	110%	43%†	105%
		<u>'</u>	<u> </u>	<u> </u>	Plans with	No Maternii	ty Benefits	<u> </u>	<u> </u>	<u> </u>	<u> </u>
13-week: 4th-day sickness 8th-day sickness					112 971	.386 1,990	280 1,227		112% 109		
Total					1,083	2,376	1,507		110%		
26-week: 4th-day sickness 8th-day sickness					127 761	386 2,088	336 1,452		112% 99		
Total					888	2,474	1,788		101%		

<sup>\*</sup> The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

<sup>†</sup> Less than \$50,000 of actual claims.

#### TABLE 3—GROUP WEEKLY INDEMNITY EXPERIENCE GROUPS WITH LESS THAN 1,000 EMPLOYEES EXPOSED 1966-70 POLICY YEARS' EXPERENCE, BY PLAN

#### UNITED STATES

PLAN	R		UAL TO 1947- CY YEAR ENI	-49 TABULAR	
	1966	1967	1968	1969	1970
	Pl	ans with 6	Weeks' Mate	rnity Benefit	
Nonmaternity and maternity combined experience:					
4th-day sickness	90% 97	84% 96	92% 102	97% 109	94% 112
Total	95%	93%	100%	106%	108%
26-week: 4th-day sickness 8th-day sickness	101% 106	100% 107	112% 110	113% 121	118% 118
Total	105%	106° 6	111%	119%	118%
Nonmaternity and maternity separate experience:* Nonmaternity: 13-week: 4th-day sickness8th-day sickness	94% 106	91% 104	102% 110	109% 120	106°- 121
Total	103%	101%	108%	118%	117%
26-week: 4th-day sickness8th-day sickness	106% 113	106% 115	118% 123	118% 130	120% 127
Total	112%	113%	122%	127%	125%
Maternity (all plans)	54%	48%	51%	46%	51%
Combined: 13-week: 4th-day sickness 8th-day sickness	91% 99	87% 97	97% 102	104% 110	100% 112
Total	97%	94%	101%	109%	109%
26-week: 4th-day sickness 8th-day sickness	103% 109	103% 110	115% 117	114% 123	115% 120
Total	108%	108%	117%	121%	119%
-		Plans with	No Maternit	y Benefits	<del></del>
13-week: 4th-day sickness 8th-day sickness	102% 96	90% 98	99% 102	99% 105	107% 105
Total	96%	97%	102%	105%	106%
26-week: 4th-day sickness. 8th-day sickness.	89% 93	84% 89	80% 91	103% 97	91% 94
Total	92%	88%	90%	98%	94%

<sup>\*</sup> The nonmaternity and maternity separate experience is also included in the nonmaternity and maternity combined experience.

#### TABLE 3—Continued

#### CANADA

PLAN	RA		AL TO 1947- CY YEAR END		
	1966	1967	1968	1969	1970
	Pla	ans with 6 W	eeks' Mater	nity Benefit	
Nonmaternity and maternity combined experience:					
4th-day sickness	106% 98	120% 101	99% 106	103% 100	128% 95
Total	1915	106℃	104%	101%	103° €
26-week: 4th-day sickness 8th-day sickness	123°? 97	$\begin{array}{c c} 107 C_{\epsilon} \\ 116 \end{array}$	111 <i>©</i> 91	128 <sup>C</sup> <sub>e</sub>	140% 1 <b>2</b> 6
Total	106%	11207	1000	111%	131°,
Nonmaternity and maternity separate experience:* Nonmaternity: 13-week:			1056		1236
4th-day sickness 8th-day sickness	1137	124° c 100	105C, 111	112% 109	132°, 102
Total	105€	106°€	109€	110%	$109 \epsilon_{\epsilon}$
26-week: 4th-day sickness 8th-day sickness	135° 79	108% 101	111% 79	132% 103	135% 111
Total	103%	104%	95%	115%	122%
Maternity (all plans)	59%†	42%†	35%†	34%+	52° c
Combined: 13-week: 4th-day sickness 8th-day sickness	110% 97	118% 94	99% 104	104% 102	125%, 97
Total	101%	101%	102%	102%	1040
26-week: 4th-day sickness 8th-day sickness	132% 79	107% 98	108°; 75	127% 99	130% 108
Total	101%	102%	91%	109%	118%
-		Plans with	No Maternit	y Benefits	
13-week:					
4th-day sickness 8th-day sickness	75% 103	113% 99	100% 96	122% 109	118% 123
Total	98¢/c	101%	97%	111%	122%
26-week: 4th-day sickness 8th-day sickness	109% 90	109% 85	101% 84	100% 105	124% 105
Total	94%	89%	87%	104%	108%

<sup>\*</sup> The nonmaternity and maternity separate experience is also included in the nonmaternity and maternity combined experience.

<sup>†</sup> Less than \$50,000 of actual claims.

## TABLE 4—GROUP WEEKLY INDEMNITY EXPERIENCE ALL SIZE GROUPS COMBINED 1968-70 POLICY YEARS' EXPERIENCE, BY SIZE OF EXPERIENCE UNIT

	PLANS	with 6 Weeks'	MATERNITY BEN	EFIT	PL	ANS WITH NO MA	ATERNITY BENEF	IT
Size	No. Experience Units	Weekly Indemnitŷ Exposed (000)	Actual Claims Includ- ing Maternity (000)	Ratio of Actual to 1947–49 Weekly Indemnity Tabular	No. Experience Units	Weekly Indemnity Exposed (000)	Actual Claims (000)	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
				United State	s Experience			
<50 lives 50-99 100-249 250-499 500-999	2,565 2,223 2,163 942 476	2,787 6,596 15,184 14,405 14,440	1,622 3,998 11,330 11,960 13,277	86% 89 105 115 125	5,811 3,444 2,650 905 373	8,135 10,905 18,151 13,853 10,876	4,606 6,425 11,951 9,330 7,741	88°7 92 102 101 106
Total <1,000	8,369	53,412	42,187	111%	13,183	61,920	40,053	99%
1,000 or more	285	30,822	28,448	124%	199	19,419	16,163	120%
Grand total	8,654	84,234	70,635	116%	13,382	81,339	56,216	104%
		<u>'                                    </u>		Canadian	Experience	<u> </u>		
< 50 lives	1,489 282 196 74 26	1,194 812 1,397 998 792	613 592 1,142 904 708	80% 106 116 125 115	1,448 ,289 ,155 ,49 ,30	1,328 882 933 856 850	731 548 693 610 713	86% 96 112 111 129
Total <1,000	2,067	5,193	3,959	109%	1,971	4,849	3,295	105%
1,000 or more	12	1,378	1,645	174%	22	14,917	13,720	117%
Grand total	2,079	6,571	5,604	122%	1,993	19,766	17,015	114%

cases. However, it should be noted that Canadian experience is based on a relatively small number of experience units.

From Table 1 it also appears that the ratios on twenty-six-week plans are significantly higher than those on thirteen-week plans for both United States and Canadian experience. While the ratios in Tables 2 and 3 confirm this result for plans with maternity, the plans with no maternity show opposite results. There is no immediate explanation for this phenomenon or for the consistently lower ratios for plans without maternity. These may merely reflect a variety of factors, such as size, age, and industry characteristics.

After two years of sharply rising ratios, the United States Table 3 ratios changed only moderately in 1970. In Canada, however, the Table 3 ratios showed a marked increase in 1970 for several plans.

Table 4 shows an unmistakable pattern of increasing ratios with increase in size, on both United States and Canadian experience.

Table 5, which shows ratios of actual to tabular claims by female percentage, is included here primarily because it has been several years since we last published an analysis by female per cent. The United States experience shows relatively high tabulars for less than 11 per cent female, which may be attributable to industry or to other characteristics of these groups. Among the groups with more than 11 per cent female, there is perhaps some tendency for the higher female percentage groups to have higher ratios. In the Canadian experience there is a tendency for higher female percentage groups to have low ratios.

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# TABLE 5 GROUP WEEKLY INDEMNITY EXPERIENCE ALL SIZE GROUPS 1968-70 POLICY YEARS' EXPERIENCE, BY FEMALE PER CENT UNITED STATES

		PLANS WITH SEI	PARATE NONMATI	ERNITY AND M	ATERNITY EX	PERIENCE	PLANS WITH NO MATERNITY BENEFIT					
Plan and Female Per Cent	Number of	Weekly Indemnity	Actual (	Claims		f Actual to 1 Indemnity		Number of	Weekly	Actual	Ratio of Actual to	
	Experience Units	Exposed (000)	Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined	Experience Units	Indemnity Exposed (000)	Claims (000)	1947-49 Weekly Indemnity Tabular	
13-week, 4th-day sickness: Less than 11% female 11-41% 41-71% 71-100%	500 445 73 24	\$ 1,969 2,989 899 76	\$ 1,325 1,911 809 60	\$ 14 96 139 8	113% 96 114 89	40%* 41 83 37*	111% 90 108 77	278 154 58 18	\$ 1,813 1,498 791 198	\$ 1,129 637 748 192	104% 96 124 109	
Total	1,042	\$ 5,933	\$ 4,105	\$257	104%	56%	99%	508	\$ 4,300	\$ 2,706	107%	
13-week, 8th-day sickness: Less than 11% female. 11-41% 41-71% 71-100%	1,084 1,180 455 181	\$ 6,099 8,044 3,676 1,082	\$ 3,572 4,710 3,485 893	\$ 67 305 352 143	114% 104 146 112	64% 50 53 48	113% 97 126 94	2,441 2,366 1,158 634	\$11,131 12,263 7,223 3,687	\$ 5,618 7,064 5,296 3,178	99% 102 111 118	
Total	2,900	\$18,901	\$12,660	\$867	117%	52%	108%	6,599	\$34,304	\$21,156	105%	

<sup>\*</sup> Less than \$50,000 of actual claims.

TABLE 5- Continued
UNITED STATES—Continued

			PLANS WITH SEF	PARATE NONMATE	ERNITY AND M	ATERNITY EX	PERIENC)		PLA	NS WITH NO MA	TERNITY BENEF	IT
	Plan and Female Per Cent	Number of Weekly		Actual (	Claims	Ratio of Actual to 1947-49 Weekly Indemnity Tabular			Number of	Weekly Indemnity	Actual	Ratio of Actual to
	TEMALE TEX CONT	Experience Units	Indemnity Exposed (000)	Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined	Experience Units	Exposed (000)	Claims (000)	Weekly Indemnity Tabular
200	26-week, 4th-day sickness: Less than 11% female 11-41% 41-71% 71-100%	194 113 19	\$ 3,003 1,624 271	\$ 2,920 1,486 381	\$ 27 49 26	130% 113 155	52%* 44* 61*	128% 108 141	193 104 30 18	\$ 2,274 1,329 420 355	\$ 1,865 1,465 342 342	110% 137 88 91
	Total	326	\$ 4,898	\$ 4,787	\$102	126%	49%	122%	345	\$ 4,378	\$ 4,014	114%
	26-week, 8th-day sickness: Less than 11% female 11-41% 41-71% 71-100%	807 616 175 44	\$11,825 8,823 2,816 308	\$ 9,937 7,584 2,711 466	\$ 76 347 265 71	127% 121 121 172	37% 51 55 86	124% 114 109 152	2,836 2,149 667 277	\$14,036 16,668 4,997 3,139	\$ 9,429 11,236 4,457 3,220	101% 95 112 120
	Total	1,642	\$23,772	\$20,698	\$759	125%	$52\sigma_{\phi}$	119%	5,929	\$38,840	\$28,342	102%

TABLE 5—Continued
CANADA

			PLANS WITH SEI	PARATE NONMATI	ERNITY AND M	ATERNITY EX	EPERIENCE		PLANS WITH NO MATERNITY BENEFIT				
	Plan and Female Per Cent	Number of	Weekly	Actual (	Actual Claims		Ratio of Actual to 1947-49 Weekly Indemnity Tabular		Number of	Weekly Indemnity	Actual	Ratio of Actual to 1947-49	
		Experience Units	Indemnity Exposed (000)	Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined	Experience Units	Exposed (000)	Claims (000)	Weekly Indemnity Tabular	
30.	13-week, 4th-day sickness: Less than 11% female 11-41% 41-71% 71-100%	96 57 15	\$ 289 177 56	\$ 208 125 43	\$ 2 3 2	120% 107 99*	39%* 21* 17*	118% 98 84*	70 30 14 3	\$ 1,393 364 55 6	\$ 1,105 305 43 2	133% 129 98* 43*	
	Total	168	\$ 522	\$ 376	\$ 7	113%	23%*	106%	117	\$ 1,818	\$ 1,455	130%	
	13-week, 8th-day sickness: Less than 11% female 11-41% 41-71% 71-100%	667 381 81 15	\$ 777 605 178 22	\$ 414 379 129 20	\$ 4 16 16 1	104% 111 111 120*	31%* 38* 52* 13*	101% 103 98 90*	369 389 162 53	\$ 894 765 322 107	\$ 497 497 228 69	109% 115 109 87	
	Total	1,144	\$ 1,582	\$ 942	\$ 37	108%	40%*	101%	973	\$ 2,088	\$ 1,291	109%	

<sup>\*</sup>Less than \$50,000 of actual claims.

TABLE 5—Continued

CANADA—Continued

		PLANS WITH SEE	PARATE NONMATI	ERNITY AND M	ATERNITY E)	CPERIENCE		PLA	NS WITH NO MA	TERNITY BENEF	lT
Plan and Female Per Cent	Number of	er of Weekly	Actual (	Claims	1	of Actual to Indemnity		Number of	Weekly	Actual	Ratio of Actual to
	Experience Units	Indemnity Exposed (000)	Non- maternity (000)	Maternity (000)	Non- maternity	Maternity	Combined	Experience Units	Indemnity Exposed (000)	Claims (000)	1947-49 Weekly Indemnity Tabular
26-week, 4th-day sickness: Less than 11% female	109 52 3 1	\$ 611 215 38 2	\$ 532 225 36 4	\$ 4 7 2 1	116% 128 101* 277*	39%* 47* 30* 166*	114 °% 122 89* 253*	82 36 16	\$ 7,134 202 5,460	\$ 6,076 248 5,837	113% 147 118
Total	165	\$ 866	\$ 797	\$ 14	119%	42%*	115%	134	\$12,796	\$12,161	116%
26-week, 8th-day sickness: Less than 11% female 11-41%	221 110 17 3	\$ 570 382 105 35	\$ 415 233 83 21	\$ 3 11 12 7	110% 85 101 68*	32%* 35* 73* 81*	108% 80 96 71*	371 289 86 24	\$ 1,430 1,379 188 66	\$1,047 944 141 37	111% 96 93 64*
Total	351	\$ 1,092	\$ 752	\$ 33	99%	50%*	93%	770	\$ 3,063	\$ 2,169	101%