TRANSACTIONS OF SOCIETY OF ACTUARIES 1965 REPORTS

REPORTS OF THE COMMITTEE ON EXPERIENCE UNDER GROUP HEALTH INSURANCE

I. GROUP WEEKLY INDEMNITY INSURANCE AND GROUP HOSPITAL AND SURGICAL EXPENSE INSURANCE

His is the eighteenth annual report on the continuing study of the morbidity experience of Group Weekly Indemnity insurance and Group Employee and Dependent Hospital and Surgical Expense insurance.

In compiling these reports the Committee includes the available experience of employer-employee groups and excludes the experience of insured groups outside the United States, of trusteeship and association cases insuring employees of the member employers and of union cases, whether or not insurance depends on continued employment. The data for Group Weekly Indemnity insurance exclude the experience of plans written under State Cash Sickness laws.

The tables in this report show combined nonmaternity and maternity experience unless otherwise designated. Plans which contain maternity benefits other than those normally studied are designated as plans with "other" maternity benefits, and only the nonmaternity experience of these plans is shown. The 1963 policy year experience from one contributing company which was omitted from the 1964 report has been included in this report.

Data in the report for Weekly Indemnity and Employee Hospital Expense insurance are based on the experience of groups in those industrial classifications which the contributing companies individually rate standard for premium purposes; tables covering these plans are headed "Nonrated Industries." Data for Surgical Expense insurance, Employee or Dependent, and for Dependent Hospital Expense insurance are based on the experience of groups regardless of industrial classifications; tables covering these plans are headed "All Industries." This report also includes an analysis by industry classification of experience under Weekly Indemnity, Employee Hospital and Employee Surgical Expense insurance. The latest prior industry study is included in the 1960 Reports.

The tables in this report show the experience either for all exposure size groups combined, or, to minimize the effect that jumbo groups might have upon the ratio of actual to tabular claims, for all except the largest exposure size groups. In the latter instance, experience is derived from groups with exposures limited as shown below:

Weekly Indemnity—less than \$40,000 of weekly indemnity.

Hospital-less than \$10,000 of daily benefit.

Surgical—less than 2,000 exposure units of the \$150, \$200, or \$300 maximum benefit schedules.

Ratios of Actual to Tabular Claims

The results of the study are presented in the form of ratios of actual to tabular claims. The tabular factors as described and published in the 1961 and 1962 Reports have been expanded where necessary to reflect more liberal benefits, additional plans, and separate maternity benefits.

Current experience confirms the Committee's earlier views regarding certain characteristics of the tabulars, namely, that the relationship between male and female tabulars is satisfactory for weekly indemnity and hospital, but the male surgical tabular is relatively low and the female surgical tabular is relatively high; that the hospital tabulars yield consistent results when the actual to tabular ratios are examined by the amounts of daily benefit provided; and that there is a tendency for the ratio of actual to tabular to increase as the surgical maximum benefit increases.

The Committee wishes to point out that many factors affecting experience are not reflected by the tabulars. For example, the tabulars are not adjusted for variations in experience caused by the age distribution and the geographic location of employees. Also, the use of combined maternity and nonmaternity experience conceals the low ratio of actual to tabular for maternity benefits and the generally higher ratios of actual to tabular for nonmaternity benefits. These limitations, as well as other factors which may influence the results of an analysis according to a particular characteristic of the experience, would indicate that caution should be used when interpreting the data contained in these reports.

Contributing Companies

Nine companies have contributed to the investigation covered in this report. The results are the composite experience of variations in company practice, in underlying administration and claim procedures, as well as variations in experience among groups. It should be recognized that many groups may have significantly different claim costs from those indicated in this report.

This report contains experience for years labeled 1959, 1960, 1961, 1962, 1963, and 1964. The majority of the companies contribute exposure

and claims based upon policy years ending in the calendar year designated; others have contributed using different periods. The central point of the exposure for each policy year is approximately January 1 of that year. The assumption was made that each company's contribution was distributed uniformly over the period of exposure, which may be improper 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
Occidental Life Insurance Company of California
Prudential Insurance Company of America
The Travelers Insurance Company

WEEKLY INDEMNITY

The basic results of the study of Weekly Indemnity insurance are presented in Table 1, which includes all size groups for the three latest policy years combined. The exposure unit is one dollar of weekly benefit.

Experience for the 1964 policy year on groups with less than \$40,000 of weekly indemnity exposed is presented in Table 2. The experience of plans with six weeks' maternity benefits is shown on a combined basis and separately for nonmaternity and maternity components of a portion of this experience. The experience of plans with no maternity benefits is shown separately. The nonmaternity experience of plans with no maternity experience of plans with no maternity experience of plans with six weeks' maternity benefits. This difference may be due to the difference in the age of the group or other factors not measured by the tabular. The maternity portion of the 1947–49 Weekly Indemnity Tabular published in the 1962 Reports does not include any adjustment for the decline in the birth rate since 1957, as indicated by statistics published by the Department of Health, Education, and Welfare. As might be expected, the maternity tabulars appear to be too high when compared to the 1964 policy year maternity experience.

Ratios of actual to tabular claims for the six latest policy years are summarized in Table 3. These ratios indicate that combined maternity and nonmaternity experience (excluding experience on groups with no

maternity) has remained fairly constant over the period for all plans, except for the 1964 fluctuations in twenty-six-week plans.

The Committee wishes to point out that the 1947-49 Weekly Indemnity Tabular is based on rather old continuation data and may, therefore, be unsuitable for purposes other than the measurement of trends based on the plans studied by the Committee.

TABLE 1
GROUP WEEKLY INDEMNITY INSURANCE
WITH SIX WEEKS' MATERNITY BENEFIT
ALL SIZE GROUPS, NONRATED INDUSTRIES
COMBINED 1962-64 POLICY YEARS' EXPERIENCE, BY PLAN

Plan	Number of Experience Units	Weekly Indemnity Exposed	Actual Claims	Ratio of Actual to 1947-49 Weekly Indem- nity Tabular
1-4-13	2,015	10,383,770	7,188,353	99%
4-4-13	359	1,712,680	823,631	75
1-8-13	7,735	39,775,270	24,903,705	99
8-8-13	1,057	10,690,340	6,373,606	95
Total, 13-week plans: All size groups <\$40,000 W.I.*	11,166	62,562,060	39,289,295	97%
	10,972	42,450,260	25,512,472	93
1-4-26.	516	9,793,500	8,338,346	105%
4-4-26.	81	2,635,870	2,446,257	114
1-8-26.	2,989	50,350,010	41,277,306	113
8-8-26.	388	17,632,590	13,303,686	105
Total, 26-week plans: All size groups <\$40,000 W.I.*	3,974	80,411,970	65,365,595	110%
	3,665	25,203,150	18,638,945	98
Total, all plans: All size groups	15,140	142,974,030	104,654,890	105%
	14,637	67,653,410	44,151,417	95

^{*} Groups with less than \$40,000 of Weekly Indemnity.

HOSPITAL

The basic results of the study of Hospital Expense insurance are presented in Table 4 for plans grouped according to nonmaternity room-and-board duration and miscellaneous-fee benefit. The experience shown is for all size groups for the three latest policy years.

Experience for the 1964 policy year on groups with less than \$10,000 of daily benefit exposed is presented in Table 5. Experience of plans with maternity benefits is shown on a combined basis and separately for the nonmaternity and maternity components of a portion of this experience.

TABLE 2

GROUP WEEKLY INDEMNITY INSURANCE

GROUPS WITH LESS THAN \$40,000 WEEKLY INDEMNITY EXPOSED, NONRATED INDUSTRIES
1964 POLICY YEAR EXPERIENCE, BY PLAN

!	Nonma	TERNITY AND MATER	RNITY COMBINED F	Experience*	Nonmaternity and Maternity Separate Experience*						
Plan	Number of	Weekly	1	Ratio of Actual to 1947-49	Number of	Weekly	Nonmate	rnity	Maternity		
	Experience Units	Indemnity Exposed	Actual Claims	Weekly Indem- nity Tabular	Experience Indomnity Units Exposed		Actual Claims	Ratio A/T	Actual Claims	Ratio A/T	
				Plans w	ith 6 Weeks'	Maternity Benef	it		,	·	
13-week: 4th-day sickness 8th-day sickness	677 2,498	2,454,320 10,021,830	1,458,113 6,087,513	89% 95	538 1,659	1,867,900 6,608,840	1,087,355 3,749,584	92% 100	65,568 342,495	75% 66	
Total	3,175	12,476,150	7,545,626	94%	2,197	8,476,740	4,836,939	99%	408,063	67%	
26-week: 4th-day sickness 8th-day sickness	158 958	1,286,360 6,823,430	935,717 5,129,456	89% 101	118 594	915,830 3,981,170	662,437 2,897,756	93% 104	24,440 151,776	62% 67	
Total	1,116	8,109,790	6,065,173	99%	712	4,897,000	3,560,193	102%	176,216	66%	
				Plan	s with No Ma	ternity Benefits		`			
13-week: 4th-day sickness 8th-day sickness					193 2,152	913,020 7,110,940	589,374 3,807,000	98% 93			
Total					2,345	8,023,960	4,396,374	94%			
26 week: 4th-day sickness 8th-day sickness					99 1,044	467,800 4,179,850	336,411 2,588,808	92% 89			
Total					1,143	4,647,650	2,925,219	89%			

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

For the employee coverage, the combined experience is a mixture of $10 \times \text{ and } 14 + n \times \text{ maternity}$, while the separate experience is essentially all $10 \times \text{ maternity}$. The nonmaternity experience of plans with no maternity or "other" maternity benefits is shown separately. The maternity portion of the 1957 Hospital Tabular has not been adjusted to reflect the declining birth rate, and the maternity tabulars appear to be too high when compared to the 1964 policy year maternity experience, as indicated in the discussion of weekly indemnity experience. This appears to be confirmed by the declines since last year's report in the ratios of actual to tabular claims for separate maternity experience.

TABLE 3

GROUP WEEKLY INDEMNITY INSURANCE
WITH SIX WEEKS' MATERNITY BENEFIT
GROUPS WITH LESS THAN \$40,000 WEEKLY INDEMNITY EXPOSED
NONRATED INDUSTRIES
RATIOS OF ACTUAL CLAIMS TO 1947-49 WEEKLY INDEMNITY TABULAR
LATEST SIX POLICY YEARS. BY PLAN

Plan	1959	1960	1961	1962	1963	1964
13-week plans: 4th-day sickness 8th-day sickness	94% 90	96% 92	92% 93	91% 91	92% 96	89% 95
Total	91%	93%	93%	91%	95%	94%
26-week plans: 4th-week sickness 8th-day sickness	99% 97	95% 98	95% 95	94% 98	99% 97	89% 101
Total	97%	97%	95%	97%	97%	99%

Ratios of actual to tabular claims for the six latest years for groups with maternity benefits (except for a small amount of dependent experience with no maternity benefits) are summarized in Table 6. Although there are a few irregularities in the increasing claim costs by year of experience, the trend of annual increases is clearly evident. Because of the age of the data and the substantial increases in claim costs which have occurred in the past, caution should be used when projecting the data contained in these reports to estimate current or future claim costs.

The ratios in Table 6 also indicate that the use of the 1957 Hospital Tabular results in a higher ratio of actual to tabular claims as the size of the miscellaneous benefit increases. The 1957 Hospital Tabular is based upon an annual frequency of claim which does not vary by plan and an average miscellaneous benefit which does vary by plan. This average benefit is

TABLE 4 EMPLOYEE AND DEPENDENT GROUP HOSPITAL EXPENSE INSURANCE ALL SIZE GROUPS, EMPLOYEE-RATED INDUSTRIES EXCLUDED COMBINED 1962-64 POLICY YEARS' EXPERIENCE, BY PLAN

Plan	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual to 1957 Hospi tal Tabular
Employee: With maternity benefits:*				
31-day:				ļ
10×	2,484	4,440,825	8,503,450	111%
15×	934	1,752,004	3,660,429	119
20×	2,474	4,327,904	9,097,939	119
$20 \times +75\%$ of excess	777	1,188,501	2,868,759	126
70-day:				
10×	533	1,051,525	2,104,216	118
15×	418	1,273,860	2,686,124	125
20×.,,	2,821	4,950,285	10,662,529	120
$20 \times +75\%$ of excess	1,238	2,000,530	4,981,113	131
120-day:				1
10×	24	57,111	114,861	123
15×	59	324,789	497,925	98
20×		858,569	1,785,335	122
$20 \times +75\%$ of excess	147	356,660	851,347	128
20× +15/6 of excess	17/	330,000	651,547	120
Total	12,213	22,582,563	47,814,027	120%
Dependent:				
Dependent:				•
With maternity benefits:†				
31-day:	2.052	0.000 700		44407
10×	2,253	2,936,780	11,494,015	114%
15×	1,025	1,250,517	5,520,824	124
20×	3,237	3,701,709	17,041,279	128
$20 \times +75\%$ of excess	937	980,717	4,885,620	129
70-day:		<u> </u>		1
10×	456	734,514	2,686,201	106
15×	426	672,064	3,143,440	132
20×	3,944	4,181,492	19,725,072	132
$20 \times +75\%$ of excess	1,695	2,040,269	10,635,760	137
120-day:	1,020	2,040,209	10,000,100	1 10'
10×	26	61,422	201,875	99
	64		696,872	141
15×		145,878		1
20×	480	784,627	3,641,529	134
$20 \times +75\%$ of excess	225	298,055	1,635,886	147
Total	14,768	17,788,044	81,308,373	127%
11774b A 1 C :				
With no maternity benefits:]]
31-day:	١	1	0.00 500	420~
_10×	254	274,414	962,583	130%
70-day:				
10×	57	253,602	884,606	134
TD Av. I	214	520 014	1 047 100	12207
Total	311	528,016	1,847,189	132%

^{* 10×} or 14 + n×. Plans with "other" maternity benefits are excluded.

[†] $10 \times$, subject to a nine-month waiting period. Plans with "other" maternity benefits are excluded.

TABLE 5

EMPLOYEE AND DEPENDENT HOSPITAL EXPENSE INSURANCE
GROUP WITH LESS THAN \$10,000 DAILY BENEFIT EXPOSED, EMPLOYEE-RATED INDUSTRIES EXCLUDED 1964 POLICY YEAR EXPERIENCE, BY PLAN

		Nonmaternity / Combined E				No	ONMATERNITY AND SEPARATE EXP			
Plan	Number	Daile		Ratio of	Number		Nonmater	nity	Maternity	
	of Experi- ence Units	Daily Benefit Exposed	Actual Claims	Actual to 1957 Hospital Tabular	of Experi- ence Units	Daily Benefit Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T
			Em	ployee Plans	with 10× an	d 14+n× Mat	ernity Benefits			<u>'</u>
10×:		l								
31-day	669 165 11	884,062 221,578 23,632	1,696,854 420,628 45,406	115% 115 116	392 51 2	479,262 79,591 6,870	831,555 127,548 13,577	116% 107 143	53,259 10,633 700	70% 96 79
Total	845	1,129,272	2,162,888	115%	445	565,723	972,680	115%	64,592	73%
15×:									<u>'</u>	
31-day	276 140 35	408,775 228,746 77,482	839,021 465,695 127,242	119% 120 105	203 68 4	279,799 113,663 8,780	527,753 208,268 17,959	119% 120 137	20,389 9,075 484	59% 83 98
Total	451	715,003	1,431,958	118%	275	402,242	753,980	120%	29,948	66%
20×:		 [
31-day 70-day 120-day	738 912 137	1,099,169 1,332,246 258,610	2,297,923 3,087,989 537,134	120% 130 123	584 597 69	879,681 822,920 116,673	1,741,587 1,837,121 243,247	123% 138 134	86,546 85,055 10,395	75% 78 70
Total	1,787	2,690,025	5,923,046	125%	1,250	1,819,274	3,821,955	131%	181,996	76%
20×+75% of excess:										
31-day 70-day 120-day	220 348 42	311,479 477,294 74,815	799,093 1,192,009 197,414	135% 130 146	177 222 24	240,656 329,810 47,779	588,279 809,472 121,622	140% 138 147	25,650 29,680 2,165	73% 76 69
Total	610	863,588	2,188,516	133%	423	618,245	1,519,373	140%	57,495	74%
				Employee Pl	ans with "Ot	her'' Maternity	Benefits†			<u> </u>
Total				[128	233,608	423,999	120%		

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

[†] Nonmaternity experience only submitted for these plans.

		Nonmaternity Combined	and Maternit Experience*	Y		Ne	ONMATERNITY AN SEPARATE EXP		Y	
Plan	Number	-		Ratio of	Number	Daily	Nonmat	ernity	Matern	ity
	of Experi- ence Units	Daily Benefit Exposed	Actual Claims	Actual to 1957 Hospital Tabular	of Experi- ence Units	Benefit Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T
				Dependent	Plans with 1	0× Maternity	Benefits			
10×: 31-day	646 125 11	659,756 174,906 23,916	2,653,091 664,153 72,314	117% 113 91	447 66 1	411,937 104,471 3,020	1,442,876 330,130 8,851	134% 123 123	252,273 55,265 2,370	75% 66 100
Total	782	858,578	3,389,558	115%	514	519,428	1,781,857	131%	309,908	73%
15×: 31-day 70-day 120-day	309 147 41	320,641 190,487 79,750	1,430,561 913,871 382,085	126% 138 142	231 95 3	237,465 123,131 6,198	859,572 508,823 20,432	133% 159 133	184,578 98,668 2,811	95% 101 58
Total	497	590,878	2,726,517	132%	329	366,794	1,388,827	141%	286,057	96%
20×: 31-day	1,011 1,311 208	1,128,057 1,250,136 257,107	5,192,252 5,966,358 1,216,471	130% 135 139	751 862 111	852,609 804,187 110,260	3,311,257 3,228,345 455,461	143% 148 159	608,541 578,708 77,780	88% 90 89
Total	2,530	2,635,300	12,375,081	133%	1,724	1,767,056	6,995,063	146%	1,265,029	89%
20× +75% of excess: 31-day 70-day 120-day	259 522 69	273,695 529,451 94,496	1,409,284 2,862,545 552,495	136% 143 160	196 268 35	201,245 302,653 60,123	882,245 1,397,944 316,358	148% 157 180	145,210 243,210 49,681	88% 99 102
Total	850	897,642	4,824,324	142%	499	564,021	2,596,547	156%	438,101	96%
			'	Dependent Pla	ns with "Ot	her" Maternity	Benefits†			
Total					206	211,700	740,823	133%		
			·	Dependent	Plans with	No Maternity	Benefit			
Total			<u> </u>		71	64,600	222,269	129%		

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

[†] Nonmaternity experience only submitted for these plans.

based upon an actual distribution of miscellaneous benefit charges. No direct evidence is available to indicate whether the variations in actual to tabular by miscellaneous benefit are the result of inflation, the average miscellaneous benefit assumed by the tabular, an increased frequency of claim under plans with larger miscellaneous benefits, or of other factors.

Table 7 shows the results of an analysis of employee plus dependent experience for all plans included in Table 4 by state for the three latest policy years combined. The experience is presented for all exposure size groups combined and for groups with exposures of less than \$10,000 of

TABLE 6

EMPLOYEE AND DEPENDENT GROUP HOSPITAL EXPENSE EXPERIENCE
GROUPS WITH LESS THAN \$10,000 DAILY BENEFIT EXPOSED
EMPLOYEE-RATED INDUSTRIES EXCLUDED
RATIOS OF ACTUAL CLAIMS TO 1957 HOSPITAL TABULAR
LATEST SIX POLICY YEARS, BY PLAN

Plan	1959	1960	1961	1962	1963	1964
Employee:*						
10×	102%	104%	106%	107%	111%	115%
15×		107	106	109	117	118
20×	108	111	112	115	118	125
$20 \times +75\%$ of		ŀ	1	i		
excess		116	119	124	128	133
Dependent:*	1)	ì	1	ì	
10×	104	106	109	112	110	116
15×		113	116	122	120	132
20×	116	116	121	127	129	133
$20 \times +75\%$ of						
excess		122	129	129	135	142

^{*} Employee with 10× or 14 + n× maternity; dependent with 10× maternity or no maternity. Plans with "other" maternity benefits are excluded.

daily benefit. The groups included in the experience for any state are those groups with 75 per cent or more of the insured employees in that state. Where it was not possible to assign a group to a particular state, it was assigned to a region if 75 per cent or more of the insured employees were in that region.

When interpreting the variations in experience by area, it should be borne in mind that the hospital tabulars do not include an adjustment for the expected variation in costs by area. On the other hand, the tabulars do recognize that for any given dollar maximum miscellaneous-fee benefit the average benefit payable will increase as the dollar amount of daily benefit increases. For the 1957 Hospital Tabular to produce reasonably accurate miscellaneous-fee claim costs, it is necessary that the amount of daily

TABLE 7

EMPLOYEE AND DEPENDENT GROUP HOSPITAL EXPENSE INSURANCE
EMPLOYEE-RATED INDUSTRIES EXCLUDED
COMBINED 1962-64 POLICY YEARS' EXPERIENCE, BY STATE

				SS THAN \$10,000 FIT EXPOSED		ALL
LOCATION CODE	STATE OR REGION	Number of Ex- perience Units	Daily Benefit Exposed	Actual Claims	Ratio A/T*	Size Groups, Ratio A/T*
Mark 1/41	Total, all locations	26,798	31,031,716	101,360,640	124%	125%
20	Region Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	117 554 174 1,127 182 21 104	182,503 751,825 274,643 1,431,959 322,739 18,561 135,848	476,822 2,116,060 885,188 4,042,407 814,447 38,542 354,690	116% 113 127 117 104 89† 113	118% 118 127 117 104 89† 116
	Total	2,279	3,118,078	8,728,156	115%	116%
30	Region Delaware Dist. of Columbia New Jersey New York Pennsylvania	75 22 63 651 1,885 2,363	107,496 37,231 95,487 581,611 1,976,005 2,703,550	317,041 102,488 284,832 1,536,442 5,274,834 7,996,220	119% 119 126 105 110 116	119% 119 126 104 111 115
	Total	5,059	5,501,380	15,511,857	113%	112%
40	Region Illinois Indiana Kentucky Michigan Ohio Wisconsin West Virginia	376 2,118 1,150 202 1,372 1,556 621 386	483,951 2,419,892 1,543,196 201,609 1,764,358 2,122,968 883,928 329,043	1,656,201 8,195,440 4,687,947 626,683 5,906,723 6,857,100 3,050,631 1,239,094	131% 126 116 119 136 125 128 135	134% 125 117 130 134 126 129 135
	Total	7,781	9,748,945	32,219,819	126%	127%
50	Region Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	69 519 403 313 709 290 43 54	113,812 450,725 367,748 284,242 578,532 290,682 33,405 26,873	371,085 1,738,240 1,412,518 1,133,017 2,082,456 989,888 126,313 128,926	122% 132 137 139 126 126 141 156	122% 132 150 139 131 126 141 156
j	Total	2,400	2,146,019	7,982,443	131%	135%

^{*} Ratio of Actual to 1957 Hospital Tabular. Note that these ratios are not expressed as a percentage of the national average. For the distribution of experience in this table, the national average is shown in "Total, all locations."

[†] Less than \$50,000 of tabular claims.

TABLE 7—Continued

			GROUPS WITH LES DAILY BENE			ALL
LOCATION CODE	STATE OR REGION	Number of Ex- perience Units	Daily Benefit Exposed	Actual Claims	Ratio A/T*	Size Groups Ratio A/T*
60	Region Colorado Idaho Montana Nevada Utah Wyoming	8 95 43 18 17 69 6	22,956 77,354 38,507 44,060 12,047 87,801 4,309	59,738 306,366 108,236 132,532 46,691 236,751 16,120	101% 147 101 105 138† 113 129†	118% 152 106 103 160 127 129†
	Total	256	287,034	906,434	120%	131%
70 71 72 73	Region California‡ Oregon Washington	8 295 47 71	13,918 365,716 25,682 85,318	60,323 1,158,861 76,434 233,986	134%† 120 110 96	129% 123 110 95
	Total	421	490,634	1,529,604	115%	118%
80	Region Arizona Arkansas Louisiana New Mexico Oklahoma Texas	74 104 340 539 75 326 1,246	73,087 132,178 334,815 386,688 65,623 216,037 1,083,456	298,095 516,343 1,176,492 1,706,205 267,967 841,371 4,365,090	153% 146 123 158 137 131 142	153% 141 122 157 137 131 145
	Total	2,704	2,291,884	9,171,563	141%	142%
90	Region Alabama Florida Georgia Maryland Mississippi North Carolina South Carolina Tennessee Virginia	231 218 594 751 400 191 907 202 401 836	440,639 189,794 687,773 764,023 488,935 129,723 786,125 226,511 420,314 775,419	1,452,012 757,120 2,598,044 2,629,243 1,410,687 570,639 2,492,526 812,782 1,554,034 2,533,313	120% 147 137 127 111 152 117 136 136 124	120% 147 143 127 111 152 116 136 139 120
	Total	4,731	4,909,256	16,810,400	127%	127%
01 02	Hawaii Alaska	11 11	32,686 5,559	118,593 19,031	94% 109†	97% 109†
	Total, states and regions	25,653	28,531,475	92,997,900	124%	125%
	All other§	1,145	2,500,241	8,362,740	122%	124%

[†] The California experience above excludes plans integrated with UCD benefits. The corresponding California experience including plans integrated with UCD is as follows: 463 units, \$614,725 exposed, \$1,598,942 claims, 132 per cent A/T, and 134 per cent A/T.

[§] Less than 75 per cent of employees in one state or region.

benefit provided be reasonably related to the level of hospital room-and-board charges. The area variations in experience shown in Table 7 may be due to variations in the relationship of miscellaneous charges to room-and-board charges in an area, variations in frequency, or average duration of hospital confinement, or a combination of these factors. However, since the daily room-and-board benefit provided is limited to a dollar amount and the miscellaneous-fee benefits provided have aggregate dollar maximums, it is possible that a substantial part of the variations in experience for areas shown in Table 7 is due to the frequency of hospital confinement.

The volume of hospital experience shown for California is relatively small and may be atypical because of the exclusion of Employee Hospital plans which are integrated with California UCD Hospital benefits. The experience of these plans is included in a footnote to Table 7. To reflect the UCD Hospital benefit of \$12 for the first 20 days of confinement, the 1957 Hospital Tabulars were reduced by \$8.28 per male employee and \$9.24 per female employee.

The results of the area analysis can be presented only as a composite experience of groups having various industry classification, distributions of exposure by age, and different types of claim administration. Moreover, it should be understood that the experience of any particular area is affected by various social and economic factors and that variations in experience may be chance fluctuations resulting from an insufficient volume of experience. The analysis indicates a higher claim level in the Plains States and the Southwestern States. A lower claim level is indicated in the Middle Atlantic States and the New England States. The experience of some states within a given region varies considerably from the region average. There may also be marked variations within a given state.

SURGICAL

The basic results of the study of Surgical Expense insurance are presented in Table 8 for all size groups for the latest policy years combined. This is the first report for which three years' experience under the \$300 schedule has been available.

Experience for the 1964 policy year on groups with less than 2,000 surgical units exposed is presented in Table 9. Separate obstetrical and nonobstetrical experience is shown as in Tables 2 and 5 for weekly indemnity and hospital. As was noted with respect to the weekly indemnity and hospital maternity experience, the obstetrical portion of the 1957 Surgical Tabular appears to be too high when compared to the 1964 policy year obstetrical experience.

Ratios of actual to tabular claims for the six latest years are summarized in Table 10.

Table 11 contains an analysis of employee plus dependent surgical experience for all plans included in Table 8 by state for the three latest policy years corresponding to Table 7 for hospital experience. The experience is presented for all exposure size groups and for groups with less than 2,000 surgical units exposed. Some of the warnings given with respect to the interpretation of hospital experience by area also apply to the

TABLE 8

EMPLOYEE AND DEPENDENT GROUP SURGICAL EXPENSE INSURANCE
ALL SIZE GROUPS, ALL INDUSTRIES
COMBINED 1962-64 POLICY YEARS' EXPERIENCE, BY PLAN

Plan	Number of Experience Units	Maximum Indemnity Exposed per \$150, \$200, or \$300 Basic Units	Actual Claims	Ratio of Actual to 1957 Surgical Tabular
Employee: With obstetrical benefits:* \$150 schedule \$200 schedule	3,590	991,834	4,559,013	113%
	16,140	4,611,730	28,288,008	114
	2,427	515,413	4,181,790	114
Total	22,157	6,118,977	37,028,811	114%
Dependent: With obstetrical benefits:* \$150 schedule\$200 schedule	2,270	531,382	6,981,038	106%
	17,994	3,256,853	53,116,426	109
	3,691	431,392	10,082,561	115
Total	23,955	4,219,627	70,180,025	109%
No obstetrical benefits: \$150 schedule \$200 schedule \$300 schedule	275	63,304	573,909	118%
	2,939	395,409	5,243,905	129
	770	48,131	868,756	137
	3,984	506,844	6,686,570	129%

^{*} Plans with "other" obstetrical benefits are excluded. Dependent obstetrical benefits are subject to a nine-month waiting period.

surgical experience. The Committee would like to point out that the tabulars do not include a factor for variations in claim costs by area or by amount of schedule maximum.

The surgical analysis by area indicates a higher claim level in the Mountain States, the Pacific States, and the Southwestern States. A lower claim level is indicated in the Middle Atlantic States and the New England States. The experience of some states within a given region varies considerably from the region average. There may also be marked variations within a given state.

TABLE 9

EMPLOYEE AND DEPENDENT SURGICAL EXPENSE INSURANCE GROUPS WITH LESS THAN 2,000 SURGICAL UNITS EXPOSED, ALL INDUSTRIES 1964 POLICY YEAR EXPERIENCE, BY PLAN

	Nonobstete	ICAL AND OBSTET	rical Combined E	XPERIENCE*		Nonobstetri	CAL AND OBSTETE	ICAL SEPARA	TE EXPERIENCE*	
Plan	Number of	Maximum		Ratio of Actual to	Number of	Maximum	Nonobste	trical	Obst	etrical
	Experience Units	Surgical Indemnity Exposed	Actual Claims	1957 Surgical Tabular	Surgical Units	Surgical Indemnity Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T
				Employee P	lans with Sta	ndard Obstetric	al Benefits			
\$150 \$200 \$300	930 4,763 1,076	192,274 942,133 185,781	914,465 5,942,477 1,537,217	115% 115 114	2,812 713	91,632 544,436 138,617	374,895 3,109,578 1,046,152	122% 122 120	46,029 260,271 106,364	65% 74 79
Total	6,769	1,320,188	8,394,159	115%	4,064	774,685	4,590,625	121%	412,664	74%
				Employee P	lans with "Ot	her" Obstetrica	al Benefits†			<u> </u>
Total					120	19,287	117,868	127%		
				Dependent I	Plans with Sta	ındard Obstetri	cal Benefits			
\$150 \$200 \$300	598 5,572 1,705	108,223 791,421 175,507	1,370,876 12,893,591 4,069,926	102% 108 114	355 3,284 890	52,119 454,694 123,483	483,618 5,650,159 2,056,136	121% 121 127	167,030 1,711,228 745,532	67% 79 85
Total	7,875	1,075,151	18,334,393	109%	4,529	630,296	8,189,913	122%	2,623,790	80%
	·			Dependent l	Plans with "C	ther" Obstetric	al Benefits†			
Total					188	24,094	292,297	121%		
				Depende	nt Plans with	No Obstetrical	Benefit			
\$200					59 789 335	7,960 76,132 18,136	68,781 986,518 341,121	113% 126 143		
Total					1,183	102,228	1,396,420	129%		

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

[†] Nonmaternity experience only submitted for these plans.

The surgical variations in ratios of actual to tabular claims by area are probably due primarily to the variations in claim frequencies, since nearly all claim payments are for the maximum amount allowed by the procedure performed. If frequencies are the same, minor variations in the ratios by area may still occur because of differing frequency distributions of procedures performed, provided such distributions result in different average benefits.

TABLE 10

EMPLOYEE AND DEPENDENT SURGICAL EXPENSE INSURANCE
GROUPS WITH LESS THAN 2,000 SURGICAL UNITS EXPOSED, ALL INDUSTRIES
RATIOS OF ACTUAL CLAIMS TO 1957 SURGICAL TABULAR
LATEST SIX POLICY YEARS, BY PLAN

Plan	1959	1960	1961	1962	1963	1964
Employee: With obstetrical benefits:*						
\$150 schedule	109%	109%	106%	105%	110%	115%
\$200 schedule	107	106	107	108	111	115
\$300 schedule				125	107	114
Dependent:					i	
With obstetrical benefits:*				}		
\$150 schedule	104	100	101	100	102	102
\$200 schedule	104	104	107	107	108	108
\$300 schedule		<i></i>		113	114	114
With no obstetrical bene- fits:						
\$150 schedule	104	123	122	124	123	113
\$200 schedule	124	116	123	129	124	126
\$300 schedule				135	133	143

^{*} Plans with "other" obstetrical benefits are excluded.

EXPERIENCE BY INDUSTRY CLASSIFICATION

Table 12 shows the results of an analysis by industry classification of experience under Weekly Indemnity, Employee Hospital, and Employee Surgical Expense insurance for the 1960-64 policy years under plans including maternity or obstetrical benefits. The latest prior study is included in the 1960 Reports. The current study is the first to be based upon actual to tabular claims and to include surgical experience.

The complete industry classification list, of which the industries in Table 12 are a part, is included in the report of experience under Group Life insurance. As the volume of experience contained in some of the industrial classifications is extremely small, only those industries containing at least 100 experience units or 0.5 per cent of the total exposure for any benefit were included.

TABLE 11

EMPLOYEE AND DEPENDENT GROUP SURGICAL EXPENSE INSURANCE
ALL INDUSTRIES
COMBINED 1962-64 POLICY YEARS' EXPERIENCE, BY STATE

			GROUPS WITH L SURGICAL UN	ESS THAN 2,000	!	ALL
LOCATION CODE	of F	Number of Ex- perience Units	Maximum Surgical Indemnity Exposed	Actual Claims	Ratio A/T*	SIZE GROUPS RATIO A/T*
	Total, all locations	49,407	7,763,205	83,503,916	110%	112%
20	Region Connecticut Maine Massachusetts New Hampshire Rhode Island	260 1,076 235 1,834 232 80	44,686 215,891 34,851 292,886 49,930 9,797	422,387 2,193,088 382,365 2,976,330 450,722 68,660	96% 102 106 106 93 106	97% 103 106 107 94 106
26	Vermont	165	23,678	219,266	104	104
	Total	3,882	671, 719	6,712,818	103%	104%
30	Region Delaware Dist. of Columbia New Jersey New York Pennsylvania	174 26 144 993 3,264 3,804	39,985 4,034 22,953 123,241 458,687 588,759	401,127 48,304 209,610 1,196,773 4,309,056 5,820,867	99% 128† 96 97 98 105	100% 128† 96 103 102 105
	Total	8,405	1,237,659	11,985,737	101%	103%
40	Region Illinois Indiana Kentucky Michigan Ohio Wisconsin West Virginia	732 3,902 1,798 320 2,755 2,955 1,047 593	150,121 615,333 297,236 34,391 407,174 573,842 227,471 64,626	1,720,281 5,575,717 3,180,886 338,309 4,972,392 6,104,945 2,913,669 689,492	112% 96 113 108 119 110 119	113% 94 116 115 121 111 118 107
	Total	14,102	2,370,194	25,495,691	110%	110%
50	Region Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	128 855 658 746 1,116 412 113 115	36,873 116,329 85,273 118,558 163,766 41,743 9,772 8,811	447,395 1,340,690 951,007 1,779,338 1,625,765 474,104 106,392 112,330	120% 117 112 123 103 112 113 121	119% 117 114 125 104 112 113 121
	Total	4,143	581,125	6,837,021	114%	114%

^{*}Ratio of Actual to 1957 Surgical Tabular. Note that these ratios are not expressed as a percentage of the national average. For the distribution of experience in this table, the national average is shown in "Total, all locations."

[†] Less than \$50,000 of tabular claims.

TABLE 11-Continued

			GROUPS WITE L SURGICAL UN	ESS THHN 2,000 HTS EXPOSED		All
LOCATION CODE	STATE OF REGION	Number of Ex- perience Units	Maximum Surgical Indemnity Exposed	Actual Claims	Ratio A/T*	SIZE GROUPS RATIO A/T*
60	Region Colorado Idaho Montana Nevada Utah Wyoming	24 203 77 54 61 181 21	10,542 20,830 9,030 11,940 15,084 25,346 2,211	157,131 288,858 86,981 166,390 201,618 361,558 25,553	150% 132 111 133 134 133 94†	146% 139 114 133 134 141 94†
	Total	621	94,983	1,288,089	132%	137%
70 71 72 73	Region California Oregon Washington	43 2,985 169 212	14,228 382,729 22,888 29,257	205,849 4,486,063 271,074 369,403	130% 129 118 117	132% 130 116 109
	Total	3,409	449,102	5,332,389	127%	127%
80 81 82 83 84 85	Region Arizona Arkansas Louisiana New Mexico Oklahoma Texas	101 283 504 965 151 512 2,616	17,038 48,025 75,342 97,842 25,644 49,761 328,668	199,875 692,035 687,728 1,116,056 307,449 586,650 3,682,198	128% 133 106 118 122 123 123	128% 139 105 122 118 124 124
	Total	5,132	642,320	7,271,991	121%	123%
90	Region Alabama Florida Georgia Maryland Mississippi North Carolina South Carolina Tennessee Virginia	284 400 1,101 959 646 418 1,227 332 307 1,256	62,501 65,145 147,644 115,921 85,547 46,314 147,412 47,184 46,824 121,553	617,140 665,669 1,744,902 1,250,698 869,917 527,591 1,457,399 489,413 541,663 1,222,327	104% 114 117 107 102 113 104 111 118 105	103% 114 118 110 110 113 102 117 121 108
	Total	6,930	886,045	9,386,719	109%	110%
01 02	Hawaii Alaska	30 49	9,783 4,592	119,142 44,328	110% 111†	116% 111†
	Total, states and regions	46,703	6,947,522	74,473,925	110%	1119
	All other‡	2,704	815,683	9,029,991	111%	114%

[‡] Less than 75 per cent of employees in one state or region.

TABLE 12 Combined 1960, 1961, 1962, 1963, and 1964 Policy Years' Experience Industry Analysis

In- DUSTRY CODM		GROUP WEEKLY INDEMNITY INSURANCE							
	Industry Description		Experience Units with Less than \$40,000 of Actual W.I. Exposed						
		Number of Experi- ence Units	Actual Weekly Indemnity Exposed for Industry	Ratio of Exposure for Ind. to Total Exposure	Ratio of Actual to Tabular Claims	Ratio of Ind. A/T to Aggre- gate* A/T	Ratio of Ind. A/T to Aggregate*		
Total	All industries	29,103	268,443,790	100 . 0%	104°°	101° 0	100℃		
001 004	Agriculture: Florists and nurserymen General farming and all other agriculture Mining:	142 83	398,430 136,660	.196	8376 70	81° 68	87% 74		
022	Minerals (clay, shale, feldspar, phosphate,	81	1,052,230	.4	73	71	82		
023	tale, etc.) Quarries (state, stone, and marble)	107	809,720	.3	93	90	98		
030	(Ri: Mineral oil production, refining, and distribu- tion Construction:	324	1,211,140	. 5	67	65	71		
041 042 044	Wood, brick, and stone construction Shipbuilding (iron and steel) Roads (incl. sewers, bridges, etc.)—construction	238 29 164	977,870 3,957,920 733,960	1.5 3	84 135 92	82 131 89	74 139 97		
060	Iron and steel and other metal industries (except lead): Steel works (with or without rolling mills) Steel and iron foundries Steel rolling Tube, rod, and pipe mills Wire drawing and wire products Nonferrous metal foundries	138 550 61 165 154 199	10,684,670 4,160,560 1,604,010 1,823,810 1,653,690 1,961,410	4.0 1.5 .6 .7 .6	139 126 110 111 99 115	135 122 107 108 96 112	124 116 104 105 97 123		
079 080 081 082 083 084 085	Metal products: Airplane manufacturing Automobiles and agriculture implements Car and railroad shops Sheet metal products (stamping and pressing) Steel fabrication (excluding erecting) Drop forging Heavy machinery and other metal products Light metal prod, and mach. (tools, hardware,	67 270 40 605 341 109 1,188 4,453	2,547,730 12,750,190 1,263,590 3,353,070 3,417,800 1,066,170 16,936,210 41,663,590	.9 4.7 .5 1.2 1.3 .4 6.3 15.8	78 115 119 98 123 117 100 102	76 112 116 95 119 114 97 99	71 101 119 108 109 108 103 103		
088 089	instruments of precision, etc.) Boiler-making (heavy tanks, etc.) Mfg. radio, television, electronic equipment	106 192	1,167,170 3,253,290	.4 1.2	119 103	116 100	102 103		
111 113 117	Chemical and allied industries: Paint and varnish factories Explosives General chemical manufacturing	144 28 345	636,380 7,409,800 9,738,920	2.8 2.8 3.6	84 77 103	82 75 100	89 78 99		
130	Clay, glass, and stone: Brick, tile, terra cotta and pottery (other than glazed)	293	2,548,050	.9	95	92	91		
131 133	Glass factories (excl. polished plate glass) Lime, cement, and gypsum Clothing industries:	185 189	5,052,410 1,620,590	1.9 .6	125 94	121 91	118 92		
162	All other clothing, mattresses, bedding, wool, cotton, silk products Food and kindred industries:	427	1,620,650	.6	99	96	105		
180 181 184 186 187 191 194	Food and kindred industries: Dairy products Flour and grain mills and elevators Slaughter and packing houses and stock yards Mfg. and bottling bev. Cereals, prepared food, and all other foods Beer and other malt bev. and bottling Wholesale dealers in alcoholic beverages— food and kindred inds. Leather industries (excl. artificial leather): Shoes and other light leather goods	449 192 267 184 719 151 80	4,082,780 437,670 2,383,560 917,360 4,938,540 1,310,070 137,840	1.5 .9 .3 1.8 .5	82 78 112 64 100 105 71	80 76 109 62 97 102 69	78 82 106 67 85 119 75		

^{*} The aggregate A/T is based upon all nonrated industries; for the smaller size groups the aggregate A/T values are 95 per cent for Weekly Indemnity, 115 per cent for Hospital, 110 per cent for Surgical

TABLE 12-Continued

		GROUP WEEKLY INDEMNITY INSURANCE							
In- dustry Code	Industry Description		Experience Units with Less than \$40,000 of Actual W.I. Exposed						
		Number of Experi- ence Units	Actual Weekly Indemnity Exposed for Industry	Ratio of Exposure for Ind. to Total Exposure	Ratio of Actual to Tabular Claims	Ratio of Ind. A/T to Aggre- gate* A/T	Ratio of Ind. A/T to Aggre- gate* A/T		
221 222	Lumber and furniture: Lumber yds. and saw and planing mills Furniture and woodworking (carriages and musical instruments)	646 866	3,525,740 3,989,090	1.3% 1.5	94% 91	91% 88	87% 97		
240 242 243	Paper and pulp manufacturing: Paper and ground wood pulp mills Paper boxes—manufacturing All other paper mfg.—paper and pulp mfg. Printing:	253 317 431	9,894,890 2,691,210 5,614,890	3.7 1.0 2.1	134 112 101	130 109 98	100 103 113		
260	Printing, bookbinding, and publishing Textile industries:	1,005	5,822,580	2.2	90	87	94		
270 271 272	Bleaching, dyeing, printing, and finishing Hemp, jute, rope, and cordage All other textiles (wool, silk, etc.) Miscellaneous industries:	63 71 902	252,510 556,350 5,966,430	2 2.2	99 85 114	96 83 111	104 104 116		
289 291 292	Plastic products Cigars and tobacco Electric cables and supplies (not falling under	252 19 202	1,241,210 1,448,340 1,597,380	.5 .5 .6	100 101 110	97 98 107	104 95 112		
293 297	Industry Code No. 100) Rubber Drugs (sundries, incl. perfumes, chewing	297 61	9,444,670 1,188,400	3.5 .4	109 87	106 84	109 74		
300	gum, etc.) Miscellaneous mfg. and processing Transportation and public service:	719	6,303,230	2.3	90	87	100		
310 320	City employees (incl. more than one class) Electric and street railroads—population of city 500,000 or more	331 12	1,477,730 1,791,630	.6 .7	101 204	98 198	103 205		
325 326	Auto sales and service stations Taxicabs and busses—transportation and public service	1,346 271	2,822,900 3,025,020	1.1 1.1	77 115	75 112	81 133		
327 337 341	Truck, transfer, etc.—transportation Telephone Gas works	501 22 64	1,848,670 63,680 1,050,510	.7	79 71 94	77 69 91	89 75 115		
342 350	Electric light and power—public utilities Miscellaneous transportation and public serv- ice not otherwise classified Clerical and professional:	156 151	1,562,680 1,005,710	.6 .4	97 61	94 59	91 60		
360	Clerical (banks, insurance, and other office forces)	518	1,892,100	.7	80	78	86		
361 362	Medical, nurses, sanitaria, hospitals, etc. Theatrical—radio and TV broadcasting, elec- trical transcription, etc.	98 123	352,860 554,010	.1	92 91	89 88	97 96		
363	Conferences of Methodist Ministers and similar organizations Trades and service:	62	131,940		97	94	102		
370	Wholesale merchants and dealers—trades and service	,	3,286,860	1.2	75	73	80		
371 372	Retail merchants and dealers—trades and service Warehouses and cold storage plants—trades	1,525 141	7,206,560	2.7	78 77	76 75	81 81		
373	and service Hotels and restaurants—trades and service Laundries (incl. dry cleaning)	289 242	1,223,770 613,780	.5	94 98	91 95	100 109		
376	Delivery of coal, fuel oil, wood, or bottled gas Operation and maintenance of office and apartment buildings	122 65	1,057,700 211,770	.1	90 90	78 87	93 103		
380 390	Miscellaneous trade and service Miscellaneous not otherwise classified	568 189	2,637,970 1,314,300	1.0	95 85	92 83	87 86		
Total	All industries listed above	27,743	258,196,580	96.2%	104%	101%	100%		
	All other industries	1,360	10,247,210	3.8%	101%	98%	109%		

TABLE 12-Continued

		EMPLOTEE GROUP HOSPITAL EXPENSE INSURANCE						
In- dustry Code	Industry Description		Experience Units with Less than \$10,000 of Actual D.B. Exposed					
		of Daily Exposur Experi- Benefit for Ind. ence Exposed for to Total	Ratio of Exposure for Ind. to Total Exposure	Ratio of Actual to Tabular Claims	Ratio of Ind. A/T to Aggre- gate* A/T	Ratio of Ind. A/T to Aggre- gate* A/T		
Total	All industries	22,308	40,641,221	100.0℃	116℃	101%	100%	
001	Agriculture: Florists and nurserymen General farming and all other agriculture Mining:	83 87	135,975 194,204	.3% .5	108% 108	94% 94	103% 101	
022	Minerals (clay, shale, feldspar, phosphate, tale, etc.)	83	136,982	3	115	100	100	
023	Quarries (slate, stone, and marble)	71	157,819	.4	95	83	83	
030	Oil: Mineral oil production, refining, and distribu- tion Construction:	392	755,035	1.9	133	116	117	
041	Wood, brick, and stone construction	207	328,147	8	105	91	87	
042 044	Shipbuilding (iron and steel) Roads (incl. sewers, bridges, etc.)—construc-	176	10,921 $390,839$	10	150 139	130 121	130 103	
	tion Iron and steel and other metal industries (except lead):						,	
060 061	Steel works (with or without rolling mills) Steel and iron foundries	91 291	443,180 581,736	1.1	151 109	131 95	97 99	
062	Steel rolling	21	33,931	.1	99	86	86	
063 065	Tube, rod, and pipe mills Wire drawing and wire products	96 66	177,908 227,175	.6	124 109	108 95	110 92	
068	Nonferrous metal foundries Metal products: Airplane manufacturing	86 53	140,820 227,724	.6	113 161	98 140	98 87	
080	Automobiles and agriculture implements	159	540,521	1.3	133	116	102	
081 082	Car and railroad shops	292	5,793	i.o	106	92 97	92	
083	Sheet metal products (stamping and pressing) Steel fabrication (excluding erecting)	204	416,860 247,055	.6	111 119	103	97 103	
084	Drop forging	31	58,335	.1	128	111	111	
085	Heavy machinery and other metal products Light metal prod. and mach. (tools, hardware, instruments of precision, etc.)	494 2,481	1,365,089 5,746,308	3.4 14.3	127 115	110	105	
088	Boiler-making (heavy tanks, etc.) Mfg. radio, television, electronic equipment Chemical and allied industries:	45 163	60,065 589,812	1.5	117 115	102 100	102 103	
111	Paint and varnish factories Explosives	98 1	143,078 2,201	.4	113 170	98 148	93 148	
117	General chemical manufacturing	188	525,521	1.3	131	114	100	
130	Clay, glass, and stone: Brick, tile, terra cotta and pottery (other than glazed)	220	583,130	1.4	96	83	85	
131	Glass factories (excl. polished plate glass) Lime, cement, and gypsum	111 117	497,169 355,022	1 2	120 122	104 106	102 88	
162	Clothing industries: All other clothing, mattresses, bedding, wool, cotton, silk products	379	574,872	1.4	125	109	102	
100	Food and kindred industries:	000	000 705		1,,,	0.0	0.0	
180 181	Dairy products Flour and grain mills and elevators	288 155	288,705 178,811	.7	110 103	96 90	96 94	
184	Slaughter and packing houses and stockyards	233	261.848	.6	120	104	104	
186	Mfg, and bottling bev.	145 439	176,391 837,206	2.1	100 109	87 95	89 94	
191	Cereals, prepared food, and all other foods Beer and other malt bev. and bottling	57	215,617	.5	143	124	114	
194	Wholesale dealers in alcoholic beverages—	75	56,505	.1	132	115	115	
201	food and kindred inds. Leather industries (excl. artificial leather): Shoes and other light leather goods	157	499,386	1.2	121	105	100	

^{*}The aggregate A/T is based upon all nonrated industries; for the smaller size groups the aggregate A/T values are 95 per cent for Weekly Indemnity, 115 per cent for Hospital, 110 per cent for Surgical.

TABLE 12-Continued

		EMPLOYEE GROUP HOSPITAL EXPENSE INSURANCE						
In- DUSTRY CODE	Industry Description		Experience Units with Less than \$10,000 of Actual D.B. Exposed					
		Number of Experi- ence Units	Actual Daily Benefit Exposed for Industry	Ratio of Exposure for Ind. to Total Exposure	Ratio of Actual to Tabular Claims	Ratio of Ind. A/T to Aggre- gate* A/T	Ratio of Ind. A/T to Aggre- gate* A/T	
221 222	Lumber and furniture: Lumber yds. and saw and planing mills Furniture and woodworking (carriages and musical instruments)	473 863	500,415 1,252,001	1.2% 3.1	108% 10 6	94% 92	95% 92	
240 242 243	Paper and pulp manufacturing: Paper and ground wood pulp mills Paper boxes—manufacturing All other paper mfg.—paper and pulp mfg.	103 199 268	311,566 368,505 997,292	.8 .9 2.5	118 113 100	103 98 87	103 97 106	
260	Printing: Printing, bookbinding, and publishing	827	1,937,337	4.8	117	102	101	
270 271 272	Textile industries: Bleaching, dyeing, printing, and finishing Hemp, jute, rope, and cordage All other textiles (wool, silk, etc.) Miscellaneous industries:	77 91 577	162,686 65,577 1,420,019	.4 .2 3.5	106 105 110	92 91 96	90 91 96	
289 291 292	Plastic products Cigars and tobacco Electric cables and supplies (not falling under	138 43 157	208,340 146,209 549,833	.5 .4 1.4	115 129 119	100 112 103	100 126 98	
293 297	Industry Code No. 100) Rubber Drugs (sundries, incl. perfumes, chewing	86 73	168,035 77,998	.4 .2	121 123	10 5 107	105 107	
300	gum, etc.) Miscellaneous mfg. and processing	552	990,497	2.4	107	93	95	
310 320	Transportation and public service: City employees (incl. more than one class) Electric and street railroads—population of city 500,000 or more	283	417,530	1.0	131	114	116	
325 326	Auto sales and service stations Taxicabs and busses—transportation and public service	1,008 119	801,415 142,890	2.0 .4	116 165	101 143	97 116	
327	Truck, transfer, etc.—transportation Telephone Gas works Electric light and power—public utilities Miscellaneous transportation and public serv-	429 85 61 98 173	617,959 345,928 151,503 184,366 329,888	1.5 .9 .4 .5	115 99 119 129 119	100 86 103 112 103	103 90 101 108 104	
360	ice not otherwise classified Clerical and professional: Clerical (banks, insurance, and other office	1,414	2,864,560	7.0	111	97	103	
361 362	forces) Medical, nurses, sanitaria, hospitals, etc. Theatrical—radio and TV broadcasting, elec-	47 171	85,996 201,897	.2	122 127	106 110	103 102	
363	trical transcription, etc. Conferences of Methodist Ministers and similar organizations	125	139,732	.3	120	104	104	
370	Trades and service: Wholesale merchants and dealers—trades and	1,152	1,191,558	2.9	112	97	98	
371	service Retail merchants and dealers—trades and service	1,473	2,195,770	5.4	112	97	101	
372	Warehouses and cold storage plants—trades and service	114	92,718	.2	117	102	102	
373	Hotels and restaurants—trades and service Laundries (incl. dry cleaning)	381 195	547,571 222,942	1.3	115	100 90	108 91	
375	Delivery of coal, fuel oil, wood, or bottled gas Operation and maintenance of office and	91 47	76,285 78,844	.5 .2 .2	125 97	109 84	109 86	
380 390	apartment buildings Miscellaneous trade and service Miscellaneous not otherwise classified	654 376	627,578 431,934	1.5 1.1	120 125	104 109	105 103	
Total	All industries listed above	21,372	39,072,780	96.1%	116%	101%	100%	
	All other industries	936	1,568,441	3.9%	116%	101%	103%	

TABLE 12-Continued

		EMPLOTEE GROUP SURGICAL EXPENSE INSURANCE							
In- dustry Codm	Industry Description All industries			Experience Units with Less than 2,000 Ac- tual Sur- gical Units Exposed					
		Number of Experi- ence Units	Actual Surgical Indemnity Exposed for Industry	Ratio of Exposure for Ind. to Total Exposure	Ratio of Actual to Tabular Claims	Ratio of Ind. A/T to Aggre- gate* A/T	Ratio of Ind. A/T to Aggre- gate* A/T		
Total	All industries	39,767	10,960,870	100.0%	112%	100%	100℃		
001 004	Agriculture: Florists and nurserymen General farming and all other agriculture Mining:	128 134	18,523 35,850	. 20% . 3	100°7 106	89°2 95	91°7 91		
022	Minerals (clay, shale, feldspar, phosphate, talc, etc.)	127	36,310	.3	100	89	96		
023	Quarries (slate, stone, and marble)	100	19,912	. 2	90	80	82		
030	Mineral oil production, refining, and distribu- tion	867	244,497	2.2	132	118	119		
041 042 9 44	Construction: Wood, brick, and stone construction Shipbuilding (iron and steel) Roads (incl. sewers, bridges, etc.)—construction	329 38 264	57,293 159,644 55,054	. 5 1 5 . 5	110 119 112	98 108 100	98 121 98		
060	Iron and steel and other metal industries (except lead): Steel works (with or without rolling mills) Steel and iron foundries Steel rolling Tube, rod, and pipe mills Wire drawing and wire products Nonferrous metal foundries	208 487 54 193 158 214	166,653 150,100 13,010 62,680 66,815 81,416	1 5 1 4 .1 .6 .6	109 108 117 108 105 109	97 96 104 96 94 97	95 97 106 97 95 103		
079	Metal products: Airplane manufacturing Automobiles and agriculture implements Car and railroad shops Sheet metal products (stamping and pressing) Steel fabrication (excluding erecting) Drop forging Heavy machinery and other metal products Light metal prod. and mach. (tools, hardware,	125 417 27 594 391 105 1,149 4,786	361,418 332,841 2,918 143,911 83,496 22,864 559,895 1,544,925	3 3 3 3 3 0 1 3 3 8 2 2 5 1 14 3	120 123 127 112 117 111 123 116	107 110 113 100 104 99 110 104	118 107 115 98 107 101 102 105		
088 089	instruments of precision, etc.) Boiler-making (heavy tanks, etc.) Mfg. radio, television, electronic equipment Chemical and allied industries:	83 308	14,113 189,388	1.7	122 109	109 97	111 104		
111 113 117	Paint and varnish factories Explosives General chemical manufacturing	177 22 355	24,439 12,938 148,436	.2 .1 1.4	106 160 113	95 143 101	96 177 105		
130	Clay, glass, and stone: Brick, tile, terra cotta and pottery (other	320	54,819	.5	93	83	88		
131 133	than glazed) Glass factories (excl. polished plate glass) Lime, cement, and gypsum	178 325	105,182 116,424	1.0	125 101	112 90	105 95		
162	Clothing industries: All other clothing, mattresses, bedding, wool, cotton, silk products	637	133,603	1.2	110	98	95		
180	Food and kindred industries: Dairy products	551	80,254	.7	107	96	96		
181	Flour and grain mills and elevators Slaughter and packing houses and stockyards	249 360	51,958 58,194	.5	103	92 92	94 94		
184 186	Mfg. and bottling bev.	226	38,862	. 4	91	81	83		
187	Cereals, prepared food, and all other foods	835	206,327	1.9	104	93	95		
191 194	Beer and other malt bev. and bottling Wholesale dealers in alcoholic beverages— food and kindred inds.	182 104	90,588 7,370	.8	116 109	97	99		
2 01	Leather industries (excl. artificial leather): Shoes and other light leather goods	296	139,536	1.3	103	92	88		

^{*} The aggregate A/T is based upon all nonrated industries; for the smaller size groups the aggregate A/T values are 95 per cent for Weekly Indemnity, 115 per cent for Hospital, 110 per cent for Surgical.

		EMPLOYER GROUP SURGICAL EXPENSE INSURANCE							
IN- DUSTRY CODE	INDUSTRY DESCRIPTION		Experience Units of All Exposure Size Groupings						
		Number of Experi- ence Units	Actual Surgical Indemnity Exposed for Industry	Ratio of Exposure for Ind. to Total Exposure	Ratio of Actual to Tabular Claims	Ratio of Ind. A/T to Aggre- gate* A/T	Ratio of Ind. A/T to Aggre- gate* A/T		
221 222	Lumber and furniture: Lumber yds. and saw and planing mills Furniture and woodworking (carriages and musical instruments)	768 1,240	117,292 223,866	1.1%	106% 101	95% 90	96% 91		
240 242 243	Paper and pulp manufacturing: Paper and ground wood pulp mills Paper boxes—manufacturing All other paper mfg.—paper and pulp mfg.	263 367 430	136,063 80,882 160,128	1.2 .7 1.5	116 97 114	104 87 102	104 90 102		
260	Printing: Printing, bookbinding, and publishing	1,356	327,242	3.0	112	100	102		
270 271 272	Textile industries: Bleaching, dyeing, printing, and finishing Hemp, jute, rope, and cordage All other textiles (wool, silk, etc.) Miscellaneous industries:	135 135 1,058	27,735 25,040 448,265	.3 .2 4.1	104 117 111	93 104 99	95 104 94		
289 291 292	Plastic products Cigars and tobacco Electric cables and supplies (not falling under	275 58 307	44,226 22,967 120,996	.4 .2 1.1	113 104 110	101 93 98	103 96 98		
293 297	Industry Code No. 100) Rubber Drugs (sundries, incl. perfumes, chewing	204 141	71,531 120,951	.7 1.1	98 115	88 103	90 98		
300	gum, etc.) Miscellaneous mfg. and processing	1,097	269,200	2.5	109	97	97		
310 320	Transportation and public service: City employees (incl. more than one class) Electric and street railroads—population of	506 6	117,007 421	1.1	125 78	112 70	111 71		
325 326	city 500,000 or more Auto sales and service stations Taxicabs and busses—transportation and public service	1,667 232	142,725 31,734	1.3 .3	111 123	99 110	100 112		
327 337 341 342	Truck, transfer, etc.—transportation Telephone Gas works Electric light and power—public utilities	696 113 101 229	121,944 37,500 59,770 173,208	1.1 .3 .5 1.6	108 114 125 122	96 102 112 109	98 104 109 109		
350	Miscellaneous transportation and public serv- ice not otherwise classified	303	93,647	.9	119	106	109		
360	Clerical and professional: Clerical (banks, insurance, and other office forces)	2,351	585,525	5.3	109	97	100		
361	Medical, nurses, sanitaria, hospitals, etc. Theatrical—radio and TV broadcasting, elec-	102 346	11,849 44,972	.1	107 125	96 112	97 114		
363	trical transcription, etc. Conferences of Methodist Ministers and simillar organizations	164	25,952	.2	106	95	96		
370	Trades and service: Wholesale merchants and dealers—trades and service	1,887	224,505	2.0	111	99	99		
371	Retail merchants and dealers—trades and service	2,280	440,720	4.0	103	92	94		
372	Warehouses and cold storage plants—trades and service	221	25,278	.2	108	96	98		
373	Hotels and restaurants—trades and service	664	125,248	1.1	96 104	86 93	86 84		
374 375	Laundries (incl. dry cleaning) Delivery of coal, fuel oil, wood, or bottled gas	278 156	31,863 44,838	.3 .4	104	93	95		
376	Operation and maintenance of office and apartment buildings	110	29,705	.3	96	86	88		
380 390	Miscellaneous trade and service Miscellaneous not otherwise classified	1,048 576	131,631 82,079	1.2	112 111	100 99	101 93		
Total	All industries listed above	37,973	10,470,941	95.5%	112%	100%	100%		
	All other industries	1,794	489,929	4.5%	100%	98%	99%		

This analysis includes the accumulated experience of rated and nonrated industries for all exposure size groupings and shows the number of experience units, the exposure, the proportion to total exposure, the ratio of actual to tabular claims, and the ratio of actual to tabular claims for each industry to actual to tabular claims for the aggregate experience of all nonrated industries.

In addition to the analysis for all exposure size groupings as described in the above paragraph, Table 12 also contains the ratio of actual to tabular claims for each industry to actual to tabular claims for the aggregate experience of nonrated industries for the smaller size groups defined in the introduction to this report. These ratios are shown to illustrate the wide dispersion in claim costs which can arise from lack of homogeneity within an industry classification between large and small experience units and which should not be overlooked in the use of this industry analysis.

The results of the industry analysis are arranged in order of industry code for convenience in summarizing the data. When examining the data given, it should be understood that the experience of any particular industry depends to a great extent on factors other than those directly related to working conditions. For example, there is a wide variation in the age distribution of workers engaged in different industries. In addition, various social, economic, or geographical factors may underlie variations in the experience by industry, or these variations may be chance fluctuations resulting from an insufficient volume of experience. The effect of underwriting selection should also be kept in mind in reviewing the results of the industry analysis. If other standards of selection were applied in accepting individual risks, substantially different results might be obtained for some industries. Since the ratios of actual to tabular claims do vary by plan of benefits and since some industries tend to concentrate on certain plans of benefits, there may be a distortion in the ratios of actual to tabular shown in the industry table. The experience shown in Table 12 for any given industry, therefore, reflects the combined effect of all the above factors applicable to that industry.

This analysis is not entirely comparable to the industry table contained in the Group Life Insurance report. A larger proportion of Group Health plans is necessarily excluded from this investigation, because they do not provide one of the plans of benefits being studied, than is true in the case of the Group Life Insurance investigation. For example, experience under compulsory State Cash Sickness plans is excluded from the weekly indemnity data. This may have a marked effect on the experience exhibited by some of the industrial classifications included in this analysis.

Finally, the industrial classification itself is subject to some limitations. Up-to-date information is not always available for the assignment of each experience unit to its proper classification. Some experience units involve more than one industrial classification. Hence, it was necessary to assign such units to the classification which contained the largest number of insured employees, even though that classification might not contain a majority of such employees. This limitation probably affects the experience of relatively more of the units in the larger exposure size groupings than of the units in the smaller exposure size groupings.