# TRANSACTIONS OF SOCIETY OF ACTUARIES 1963 REPORTS

### REPORTS OF THE COMMITTEE ON EXPERIENCE UNDER INDIVIDUAL HEALTH INSURANCE

## I. EXPERIENCE UNDER INDIVIDUAL LOSS-OF-TIME POLICIES 1960–61

HIS report presents an analysis of morbidity experience under individual loss-of-time policies during calendar years 1960–61 and a comparison of this experience with results for the period 1955–59. The study is limited to experience during the full first year of the benefit period. Policies with benefit periods of less than one year are excluded from the study. The reporting system used for the 1960–61 experience is generally the same as that used for the earlier experience. This system is described in detail in the 1959 Reports (pp. 126–28).

The presentation of data follows the format used in the report covering 1955-59 experience. Accident and sickness disability experience are presented in separate tables (Tables 3 and 4). Total disability experience is also shown in a separate table (Table 5), together with comparable rates derived from the Conference Table.<sup>1</sup> Tables showing experience after a synthetic elimination period have been omitted because it was felt that relative values for 1960-61 would follow the pattern shown in the last report.

Each table contains the experience for males in Occupation Groups I and II and for females in Occupation Group I; for convenience, these three groups are referred to hereafter in the report as "Male I," "Male II," and "Female I." The amount of data on females in Occupation Group II was not large enough to warrant a study of this group.

Occupation Group I covers occupations that generally involve little exposure to an accident hazard. Occupation Group II consists of those occupations that involve a greater degree of exposure to accident hazards or duties where sickness or injury generally results in a longer period of disability than for Group I occupations. Many of these occupations are performed outdoors and involve a longer average period of disability because of the difficulty of returning to work in inclement weather. Persons whose work requires perfect, or near-perfect, physical condition would also be in Group II, since such persons may be disabled by a relatively minor injury. In the Bureau of A & H Underwriters classification system, Occu-

<sup>1</sup> Conference Modification of Class III Disability Table.

pation Group I consists of Classes A-D\* and Occupation Group II consists of Classes D-H. (See 1959 Reports, pp. 130-31 for a complete description.)

Tables 3-9 include (1) annual claim rates, (2) average claim duration in months, and (3) annual claim costs. The total disability annual claim rates and annual claim costs are simply a sum of the separate accident and sickness claim rates and claim costs and consequently may be based on experience from two different types of policies. Annual claim rates (or

	YEAR OF 1	196061	
Company =	1960	1961	COMBINED
Metropolitan.	26,844	24,130	50,974
Prudential	10,460	10,382	20,842
Pacific Mutual	6,559	6,155	12,714
loyal Protective	5,325	5,474	10,799
Business Men's Assurance.	5,086	5,117	10,203
<b>Fravelers</b> .	6,944		6,944
New York Life	2,100	2,123	4,223
Mutual, New York	1,520	2,298	3,818
ohn Hancock	923	1,205	2,128
Union Mutual	1,305	1	1,305
Guardian	604	632	1,236
Connecticut General	536	628	1,164
Continental Assurance	479	503	<b></b>
Beneficial Standard	397	475	872
Wisconsin National	408		408
Provident Mutual	194	207	401
Standard of Oregon	24	171	195
Total	69,708	59,500	129,208

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### CONTRIBUTING COMPANIES AND NUMBER OF CLAIMS

frequencies) have been calculated as the ratio of the amount of monthly indemnity on approved claims to the corresponding exposure. Annual claim costs (or amounts) have been calculated as the ratio of the aggregate benefits incurred on claims to the corresponding exposure. Durations of claims in months have been calculated by dividing the annual claim cost by the annual claim rate.

### VOLUME OF DATA

For the calendar year period 1960-61, the Committee has compiled an aggregate exposure of 2,200,000 policy years under which 129,000 claims were incurred. The companies that contributed to the study are shown in Table 1, together with the volume of each company's data for each of

the calendar years studied, measured by the number of claims reported on the exposure summary cards.

Table 2 shows the distribution of the number of claims reported on the exposure summary cards by type of coverage, sex, and occupation group. Number of claims has been used as the basis for measuring the volume of data, since it is a good measure of the reliability of the statistical results. This study has been confined to those coverages where there is a significant amount of data. These coverages are indicated by an asterisk in Table 2. It should be noted that in certain of the cells studied virtually

		Accu	DENT		Sickness						
Elim. Period (Days)	M	ale	Fem	ale	Ma	ale	Female				
	Occup'n Group I	Occup'n Group II									
0	26,695* 338*	17,120* 721*	1,708*	111 44	20,818* 2,107*		1,690*	150 183			
7	3,167*	3,962*	659*	31	13,401*		3,719*	228			
14	378*	134*	17	2	1,836*	415*	228	10			
21	0	0	0	0	22	0	0	0			
30	189	77	15	0	1,163*	319*	194	2			
60	15	4	1	0	97	9	21	0			
90	28	8	2	0	<b>99</b>	29	8	0			
Total	30,810	22,026	2,734	188	39,543	25,512	7,822	573			

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Number of Claims by Type of Coverage, Sex, and Occupation Group 1960–61 Experience Combined

\* Subsequent tables and discussion are based only on data indicated.

all the experience has been contributed by only one or a few companies. The coverages for which there is a reasonable cross-section of experience by company are the 0-day accident and 7-, 14-, and 30-day sickness coverages. In comparing the results for different elimination periods, this characteristic of the study should be kept in mind.

### DISABILITY EXPERIENCE

Tables 3, 4, and 5, respectively, give a summary of the accident, sickness, and total disability experience compiled in this report. Each table shows the three elements of disability—annual claim rate, duration of claim in months, and annual claim cost—by the four variables studied—sex, occupation group, elimination period, and attained age.

### TABLE 3

### ACCIDENT DISABILITY LOSS-OF-TIME EXPERIENCE 1960-61 LIMITED TO ONE-YEAR MAXIMUM BENEFIT PERIOD

									-		RATIO	os to Mal	e Occ. Gr	DUP I	
Attained	ΜΑΙ	le Occ. Gro	OUP I	MAL	e Occ. Gro	UP 11	Fema	le Occ. Gr	OUP I	Male Occ. Group II			Female Occ. Group I		
Age	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*
		iI			·		0-Day	Elimination	Period					·	
20-29 30-39 40-49 50-59 60-69	.048 .044 .045 .041 .041	.81 .84 .93 1.00 1.24	039 .037 .042 .041 .051	101 .087 .085 .075 .075	93 99 1.09 1.28 1.61	. 094 . 086 . 093 . 096 . 121	037 .034 .044 .053 .051	73 82 93 142 131	027 028 041 075 067	210年 198 189 183 183	115% 118 117 128 130	241% 232 221 234 237	77% 77 98 129 124	90% 98 100 142 106	69% 76 98 183 131
		<u> </u>		I			3-Day	Elimination	Period		·				
20–29 30–39 40–49 50–59 60–69	† .042 .036 .030 .037	† 1.10 1.03 1.20 1.49	t .046 .037 .036 .055	.064 .062 .064 .074 .071	1.09 .87 .92 1.38 1.49	.070 .054 .059 .102 .106	† (.025)‡ .031 .042 .019	† (72)‡ 1.68 1.64 1.53	+ ( 018)‡ 052 069 075	148% 178 247 192	79% 89 115 100	117% 159 283 193	60% 86 140 132	65% 163 137 103	39% 141 192 136
						!	7-Day	Elimination	Period				1		
20–29 30–39 40–49 50–59 60–69	. 021 . 034 . 035 . 035 . 026	1 19 1 12 1 20 1 34 1 27	025 038 042 047 033	.040 .044 .044 .050 .055	1.08 1.39 1.36 1.44 1.62	.043 .061 .060 .072 .089	( 008)‡ .019 .030 .039	(63) 1.68 1.43 1.33	$( \begin{array}{c} 005) \\ .032 \\ 043 \\ 052 \end{array}$	190''' 129 126 143 212	91 <i>%</i> 124 113 107 128	172% 161 143 153 270	38% 56 86 111	53% 150 119 99	20% 84 102 111
					·		14-Day	Eliminatio	n Period		<u> </u>			·	
20–29 30–39 40–49 50–59 60–69	(.009)‡ .010 .012 .021 (.018)‡	$(1.78) \ddagger 2.20 \\ 1.33 \\ 1.14 \\ (1.61) \ddagger$	( 016)‡ 022 016 024 ( 029)‡	(.021); .022 .025 (.031); †	$(1.57) \ddagger 1.55 \\ 2.36 \\ (1.13) \ddagger 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	(.033) .034 .059 (.035) †		· · · · · · · ·		2 33'[]. 220 208 148	88% 70 177 99	206% 155 369 146			

\* Per \$1 of monthly income benefit.

\* Rates in parentheses based on 10 to 24 claims, inclusive.

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<sup>†</sup> Less than 10 claims.

<u> </u>															
	Мат	e Occ. Gro	I num	Мат	e Occ. Gro	115 H	FEMA	le Occ. Gr	our I		RATI	os to Mai	le Occ. Gr	oup I	
ATTAINED AGE					E OCC. GRO	or m	I EMA	LE OCC. OK	.007 1	Male Occ. Group II			Female Occ. Group I		
nge	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (Months)	Annual Claim Cost*
		·			<u>.</u>		0-Day	Elimination	n Period		·	·	1	<u>.                                    </u>	
20-29 30-39 40-49 50-59 60-69	. 152 . 160 . 177 . 195 . 152	.62 .71 .98 1.41 1.80	.094 .114 .173 .275 .274	.203 .229 .242 .257 .270	.54 .64 .87 1.21 1.99	.110 .146 .211 .312 .538	.228 .234 .245 .217 .244	.53 .79 1.00 1.20 1.56	.120 .186 .245 .260 .381	134% 143 137 132 178	87% 90 89 86 111	117% 128 122 113 196	150% 146 138 111 161	85% 111 102 85 87	128% 163 142 94 139
		·······		·			3-Day	Eliminatior	Period	L	1	·			·
20–29 30–39 40–49 50–59 60–69	123 132 137 176 200	.74 .89 1.12 1.57 1.86	.091 .118 .154 .276 .372	.093 .109 .132 .154 .165	77 1.08 1.14 1.77 1.75	.072 .118 .150 .273 .289	168 236 225 220 207	.72 .98 1.16 1.30 1.74	.121 .232 .261 .287 .360	76% 83 96 88 83	104% 121 102 113 94	79% 100 97 99 78	137% 179 164 125 104	97% 110 104 83 94	133% 197 169 104 97
		<u> </u>					7-Day	Elimination	Period			·····	·		
20-29 30-39 40-49 50-59 60-69	.048 .063 .083 .113 .127	1.00 1.10 1.45 1.93 2.45	.048 .069 .120 .218 .311	.047 .067 .089 .127 .157	1.26 1.28 1.61 2.09 2.73	.059 .086 .143 .266 .429	.070 .107 .130 .149 t	1.23 1.31 1.52 1.56 †	.086 .140 .197 .232 t	98% 106 107 112 124	126% 116 111 108 111	123% 125 119 122 138	146% 170 157 132	123% 119 105 81	179% 203 164 106
		·					14-Day	Elimination	n Period		··	····	·		
20-29 30-39 40-49 50-59 60-69	. 020 . 030 . 044 . 075 . 096	1.25 1.40 1.70 1.92 2.17	.025 .042 .075 .144 .208	.032 .032 .049 .066 (.098)‡	1.34 1.03 2.00 2.33 (3.23)‡	.043 .033 .098 .154 (.317)‡	· · · · · · · · · · · · · · · · · · ·			160% 107 111 88 102	107% 74 118 121 149	172% 79 131 107 152			
				·	·		30-Day	Eliminatio	n Period	·	·			·	
20-29 30-39 40-49 50-59 60-69	.004 .009 .015 .032 .064	2.25 1.78 2.67 2.50 3.28	009 016 040 080 210	(.010)‡ .016 .025 .039 (.094)‡	(1.20) 1.63 2.16 3.05 (2.19) ‡	(.012)‡ .026 .054 .119 (.206)‡				250% 178 167 122 147	53% 92 81 122 67	133% 163 135 149 98			

TABLE 4-SICKNESS DISABILITY LOSS-OF-TIME EXPERIENCE 1960-61 LIMITED TO ONE-YEAR MAXIMUM BENEFIT PERIOD

\* Per \$1 of monthly income benefit.

# Rates in parentheses based on 10 to 24 claims, inclusive.

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<sup>†</sup> Less than 10 claims.

### TABLE 5

### TOTAL DISABILITY LOSS-OF-TIME EXPERIENCE 1960-61 LIMITED TO ONE-YEAR MAXIMUM BENEFIT PERIOD

	М	ALE OCC. GROU	гI	MA	LE Occ. GROU	P II	Fem	ALE OCC. GRO	ue J	Confere	NCE TABLE (SE	E NOTE)
Attained Age	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration on Months)	Annual Claim Cost*	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost*
				· · · · · · · · · · · · · · · · · · ·		0-Day Elimi	nation Period	1				
20-29 30-39 40-49 50-59 60-69	.200 204 222 236 193	67 74 97 1 34 1.68	133 151 215 316 325	. 304 . 316 . 327 . 332 . 345	.67 .73 .93 1.23 1.91	.201 .232 .304 .408 .659	24-5 268 289 210 295	.55 .80 .99 1.24 1.52	. 147 . 214 . 286 . 335 . 448	. 335 . 329 . 328 . 331 . 342	67 70 81 1 05 1 60	. 223 . 229 . 266 . 346 . 547
		<u> </u>		<u> </u>		3-Day Elimi	nation Period	·			·	
20–29 30–39 40–49 50–59 60–69	. 152 .174 .173 .206 .237	.77 .94 1.10 1.51 1.80	. 117 - 164 - 191 - 312 - 427	. 157 . 171 . 196 . 228 . 236	.90 1.01 1.07 1.64 1.67	. 142 . 172 . 209 . 375 . 395	179 201 256 202 356	80 96 1.22 1.36 1.70	144 250 313 356 435	.277 .275 .278 .286 .306	.69 .72 .85 1.10 1.68	192 199 235 315 515
				<u> </u>		7-Day Elimi	nation Period			<u>-</u> .	<u> </u>	
20–29 30–39 40–49 50–59 60–69	069 097 118 148 153	1.06 1.10 1.37 1.79 2.25	073 107 162 265 344	.087 .111 .133 .177 .212	1.17 1.32 1.53 1.91 2.44	. 102 . 147 . 203 . 338 . 518	018 146 160 188 †	1.17 (.37 1.50 (.51 †	.091 .172 .240 .284 †	. 201 . 200 . 204 . 218 . 250	. 80 . 84 1 00 1 29 1 92	. 160 . 167 . 203 . 281 . 479
					1	4-Day Elim	ination Perio	d				
20–29 30–39 40–49 50–59 60–69	.029 .040 .056 .096 .114	1.41 1.60 1.63 1.75 2.08	041 064 091 168 237	.053 .054 .074 .097 ( 134)‡	1.43 1.24 2.12 1.95 (2.76)‡	.076 .067 .157 .189 (.370)‡				. 131 . 129 . 132 . 146 . 187	. 92 1.00 1.24 1.64 2.30	. 121 . 129 . 164 . 240 . 431

\* Per \$1 of monthly income benefit.

† Less than 10 claims.

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‡ Rates in parentheses based on 10 to 24 claims, inclusive.

NOTE -- Conference Table values are those for central ages (25, 35, 45, 55, 65).

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It should be kept in mind that any comparison in these tables of claim rates, durations, or claim costs between different elimination periods may not be valid as the data may have come from different companies and accordingly may not be homogeneous.

### Accident Disability (Table 3)

Table 3 shows accident disability data for four elimination periods. Comments, however, are restricted to data for a 0-day elimination period because other data are rather limited or largely contributed by one company.

The significant points of interest brought out by this table are as follows:

- MALE I.—Annual claim rates show a slight decrease with age, and claim durations show an increase. The combined effect of decreasing rate and increasing duration produces costs which fluctuate but have a tendency to rise. The extent of this increase from the youngest to the oldest ages studied is about 30 per cent.
- MALE II.—Annual claim rates tend to decrease with age, while claim durations increase with age. Annual claim costs decrease from ages 20–29 to 30–39 and then slowly increase as the age increases.

The ratios of Male II to Male I rates and costs are similar to those developed from the 1955–59 data. At ages under 40, Male II annual claim rates are approximately twice as high as those for Male I. At higher ages, the ratio decreases slightly. Male II annual claim costs are from 221 per cent to 241 per cent of those for Male I.

FEMALE I.—Annual claim rates tend to increase with age. Claim durations increase more rapidly with age than Male I durations. The combined effect of increasing rates and durations produces claim costs with a steep slope by age.

As noted in the 1955-59 Report, Female I claim rates are less than those for Male I at ages under 50 but greater at ages 50 and over. However, ratios of female to male claim durations have decreased significantly at ages under 50, from about 120 per cent of Male I in 1955-59 to 95 per cent in 1960-61. Female experience data are not very extensive, however.

### Sickness Disability (Table 4)

The amount of sickness disability data for the 14-day and 30-day elimination periods is not very extensive, while the amount of data for the 0-day and 3-day elimination periods is concentrated among just a few contributors. Therefore comments are based primarily on the data for the 7-day elimination period, although differing characteristics of the experience of other elimination periods are also noted.

For sickness benefits with a 7-day elimination period, all annual claim

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rates, average durations, and annual claim costs increase with age. The combination of increasing rates and increasing average durations produces a very steep pattern of annual claim costs.

- MALE I.—The previous report noted the effect of elimination period on Male I claim rates and average durations. For the shorter elimination periods, claim rates are fairly level or increase slowly with age. For longer elimination periods, the increase is more rapid. On the other hand, claim durations generally behave in the opposite manner, increasing more rapidly for shorter elimination periods.
- MALE II.—For the 7-day elimination period, Male II annual claim rates are about 7 per cent higher than those for Male I. Unlike previous experience which showed a fairly constant relationship between rates, the ratios of Male II to Male I claim rates increase with age. Claim cost ratios, however, are similar to earlier experience—fairly level and averaging 20 per cent to 25 per cent higher than Male I.

Male II experience for other elimination periods is rather scanty. For the largest of these groups, 3-day sickness, Male II experience is more extensive and more favorable than for Male I.

FEMALE I.—For 0-day, 3-day, and 7-day elimination periods, annual claim rates are generally more than 50 per cent higher than for Male I at ages under 50, but this ratio drops significantly at ages 50 and over. Claim durations are also higher than for Male I at ages under 50 but drop below Male I at higher ages. Consequently, costs are much higher than for Male I at ages under 50 but comparable to Male I at ages 50 and over.

### Total Disability (Table 5)

Total disability annual claim rates and annual claim costs as derived in this study are the sum of the annual claim rates and annual claim costs for accident disability and sickness disability. Since sickness disability annual claim rates are generally much higher than accident disability annual claim rates, total disability claim rates tend to follow the pattern of claim rates for sickness disability. Because claim durations for accident disability and sickness disability are comparable, annual claim costs for total disability tend to follow the pattern of annual claim costs for sickness disability.

For convenience, total disability annual claim rates, claim durations, and annual claim costs derived from the Conference Modification of the Class 3 Table which is currently the accepted valuation standard for the disability benefit in noncancellable policies are also shown in Table 5. The Conference Table annual claim rates are significantly higher than 1960-61 experience in most areas. However, 1960-61 claim durations are generally longer than Conference Table durations. In certain cells, the combination of a longer duration with a lower claim rate produces annual claim costs in this experience which are greater than those in the Conference Table. This occurs in some of the Female I and Male II cells at ages 40 and over. A graphic comparison of Male I, Male II, Female I, and Conference Table total disability annual claim costs is shown in Charts 1 and 2.

### Ratios of Accident Disability to Total Disability (Table 6)

### TABLE 6

RATIOS OF ACCIDENT	TO TOTAL DISABILITY LOSS-OF-TIME 1	EXPERIENCE
	1960-61	

	0-Day	Elimination H	PERIOD	7-Day	Elimination H	ERIOD
Attained Age	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost
			Mai	LE I		
20-29 30-39 40-49 50-59 60-69	24.0% 21.6 20.3 17.4 21.2	121% 114 96 75 74	29.3% 24.5 19.5 13.0 15.7	30.4% 35.1 29.7 23.6 17.0	112% 102 88 75 56	34.2% 35.5 25.9 17.7 9.6
		<u> </u>	Mal	e II	<u> </u>	
20-29 30-39 40-49 50-59 60-69	33.2% 27.5 26.0 22.6 21.7	139% 136 117 104 84	46.1% 37.1 30.6 23.5 18.4	46.0% 39.6 33.1 28.2 25.9	92% 105 89 75 66	42.2% 41.5 29.6 21.3 17.2
		<u> </u>	Fema	LE I	/ac	
20-29 30-39 40-49 50-59 60-69	14.0% 12.7 15.2 19.6 17.3	133% 103 94 115 86	18.4% 13.1 14.3 22.4 15.0	10.3% 15.1 18.8 20.7	54% 123 95 88	5.5% 18.6 17.9 18.3

Total disability rates in this report are the sum of separate accident and sickness components. Since the two components are based on data contributed by different groups of companies, ratios of accident to total disability are limited in their validity. Table 6 is shown, however, so that

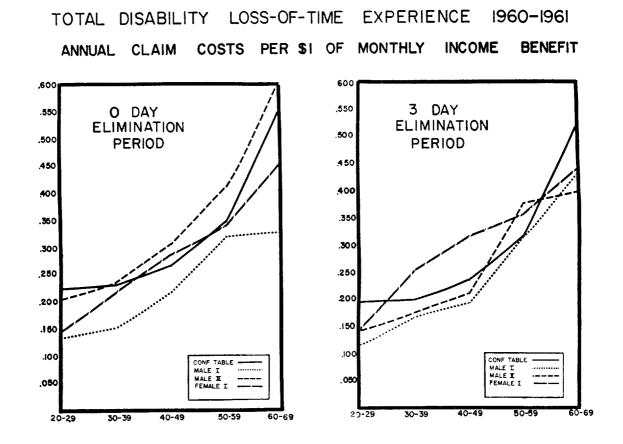
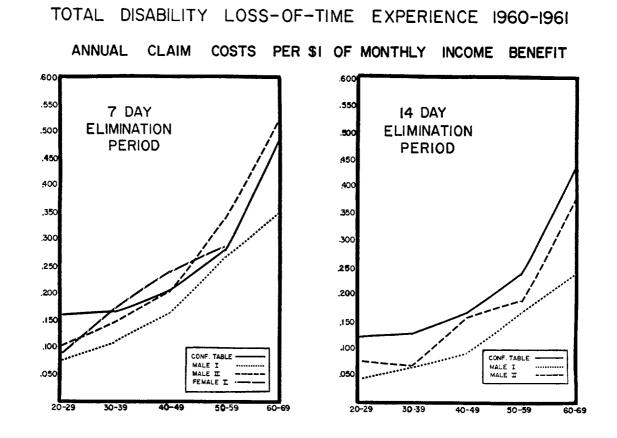


CHART I



# CHART 2



some idea may be obtained as to the relationship of accident to total disability rates. Only 0- and 7-day elimination periods are shown because of the even greater limitations of data for the other elimination periods.

The items of interest brought out by this table are as follows:

- MALE I.—For the 0-day elimination period, ratios of accident to total disability claim durations are close to the 1955–59 results, but accident annual claim rates have increased from 15 per cent of the total disability rate in 1955–59 to 20 per cent in 1960–61. For both the 0-day and the 7-day elimination periods, ratios of accident to total disability experience decrease by age.
- MALE II.—As would be expected, ratios of Male II accident to total disability experience generally exceed corresponding Male I ratios. Like the Male I experience, Male II ratios of accident to total disability experience decrease by age.
- FEMALE I.—Ratios of accident to total disability annual claim rates and costs show no consistent variation by age. Annual claim cost ratios average about 15 per cent to 20 per cent for both the 0-day and the 7-day elimination periods.

### COMPARISONS WITH 1955-59 EXPERIENCE

Tables 7, 8, and 9, respectively, compare 1960-61 accident, sickness, and total disability experience with experience during the period 1955-59. Table 10 compares experience during the three periods 1955-57, 1958-59, and 1960-61 for 0-day accident and 7-day sickness benefits.

### Accident Disability (Table 7)

### TABLE 7

### ACCIDENT DISABILITY LOSS-OF-TIME EXPERIENCE RATIOS OF 1960-61 EXPERIENCE TO 1955-59 EXPERIENCE LIMITED TO ONE-YEAR MAXIMUM BENEFIT PERIOD

	Male	CCC. GR	UP I	MALE	Occ. Gro	UP II	Femai	e Occ. Gi	ROUP I			
Attained Age	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost			
		0-Day Elimination Period										
20-29. 30-39. 40-49. 50-59. 60-69.	100% 96 94 93 105	111% 117 115 110 110	111% 112 108 103 116	95% 91 99 94 103	113% 106 108 112 118	108% 97 107 105 121	103% 94 105 96 91	88% 82 85 130 105	90% 78 89 125 96			
				3-Day I	Elimination	n Period	-	<u> </u>				
20-29. 30-39. 40-49. 50-59. 60-69.	* 92 83 103	* 133% 134 88 159	* 128% 123 73 162	79% 89 102 128 109	120% 93 90 129 138	95% 82 92 165 151	* ( 89%)† 86 108 88	* ( 91%)† 144 125 99	* ( 82%)† 124 135 87			
				7-Day F	limination	n Period						
20-29. 30-39. 40-49. 50-59. 60-69.	75% 106 92 100 70	119% 106 120 118 87	89% 112 111 118 61	83% 88 81 91 110	94% 114 106 95 88	78% 100 87 87 97	(47%)† 90 103 98 *	(37%)† 135 118 100 *	( 17%)† 123 123 98 *			
		·		14-Day I	Eliminatio	n Period						
20-29. 30-39. 40-49. 50-59. 60-69	( 64%)† 77 71 105 *	(124%)† 220 119 88 *	( 80%)† 169 84 92 *	( 57%)† 67 89 100 *	(157%)† 117 153 107 <b>*</b>	( 89%)† 77 137 106 *	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				

\* Less than 10 claims.

† Rates in parentheses based on 10 to 24 claims, inclusive.

In general, annual claim rates for accident disability have decreased since 1955–59, and claim durations have increased. An exception occurs at female ages below 50, 0-day elimination period, where claim durations show a substantial decrease.

Male costs for the 0-day elimination periods have risen since 1955–59, the greater relative increase occurring in Occupation Group I. For other elimination periods, the pattern is mixed with generally higher annual claim costs in 1960–61.

### Sickness Disability (Table 8)

### TABLE 8

### SICKNESS DISABILITY LOSS-OF-TIME EXPERIENCE RATIOS OF 1960–61 EXPERIENCE TO 1955–59 EXPERIENCE LIMITED TO ONE-YEAR MAXIMUM BENEFIT PERIOD

	Mali	e Oce. Gro	UP I	Male	Occ. GR	OUP II	Fema	le Occ. G	ROUP I			
Attained Age	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost			
				0-Day	Eliminatio	n Period						
20-29 30-39 50-59 00-69	66% 61 73 80 73	115% 113 117 114 113	75% 69 85 91 83	72% 97 105 122 116	113% 105 102 91 93	82% 101 108 112 108	66% 70 81 75 70	85% 101 109 121 99	56% 72 88 91 70			
	3-Day Elimination Period											
20-29 30-39 40-49 50-59 60-69	98% 106 94 107 98	123% 116 109 116 99	120% 123 103 124 96	85% 92 108 106 85	101% 111 90 109 85	86% 103 97 116 73	80/50 97 102 108 98	97% 102 104 107 119	77 <sup>6</sup> 99 105 116 117			
		7-Day Elimination Period										
20–29. 30–39. 40–49. 50–59. 60–69.	81% 88 91 93 100	109% 110 111 111 113	89% 96 101 103 114	72% 84 89 95 89	124% 112 111 110 116	89% 95 99 105 103	75% 89 90 95 192	108% 104 114 108 37	81% 93 103 103 72			
		·	1	14-Day	Eliminatio	on Period						
20-29 30-39 40-49 50-59 60-69	105% 94 92 112 100	88% 121 102 93 95	93% 114 94 104 95	128% 94 136 102 ( 87)†	$ \begin{vmatrix} 160\% \\ 100 \\ 127 \\ 93 \\ (132) \dagger \end{vmatrix} $	205% 94 172 94 (115)†		· · · · · · · · · · · · · · · · · · ·				
				30-Day	Eliminatio	n Period						
20–29. 30–39. 40–49. 50–59. 60–69.	100% 113 100 110 133	113% 89 121 97 129	113% 100 121 107 172	(250%)† 114 122 118 *	(120%)† 76 82 116 *	(300%)† 87 89 137 <b>*</b>						

\* Less than 10 claims.

† Rates in parentheses based on 10 to 24 claims, inclusive.

Like the accident experience, annual claim rates for sickness have decreased and claim durations have increased since 1955-59.

For the 7-day elimination period, annual claim costs have decreased

about 8 per cent at the younger ages and increased at ages over 40. The 0-day elimination period shows a substantial decrease in Male I and Female I costs. In other areas, costs show a general increase.

Total Disability (Table 9)

### TABLE 9

### TOTAL DISABILITY LOSS-OF-TIME EXPERIENCE RATIOS OF 1960–61 EXPERIENCE TO 1955-59 EXPERIENCE LIMITED TO ONE-YEAR MAXIMUM BENEFIT PERIOD

	Male	Occ. Gre	UP I	Male	Occ. Gr	OUP II	Fema	le Occ. Gi	ROUP I
Attained Age	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost	Annual Claim Rate	Claim Duration (In Months)	Annual Claim Cost
				0-Day E	liminatior	Period			
20-29. 30-39. 40-49. 50-59. 60-69	71% 66 77 82 78	118% 116 115 113 111	83% 76 89 92 87	78% 95 103 114 113	118% 104 104 96 97	92% 100 108 110 110	69% 72 84 78 73	86% 100 105 123 100	60% 73 89 97 73
				3-Day H	Elimination	n Period		·	
20–29. 30–39. 40–49. 50–59. 60–69.	103% 108 94 103 98	122% 115 113 111 103	126% 124 106 115 102	82% 91 106 112 91	108% 105 91 112 92	90% 95 96 126 84	79% 96 100 108 96	105% 102 108 111 116	83% 98 108 119 110
				7-Day H	Elimination	n Period			
20-29. 30-39. 40-49. 50-59. 60-69.	79% 93 91 95 93	113% 108 112 111 113	89% 101 103 106 105	77% 85 86 94 93	109% 113 170 107 109	84% 97 95 100 102	71% 89 92 95 *	95% 109 115 106 *	67% 97 106 102 *
				14-Day ]	Eliminatio	n Period			<u> </u>
20-29 30-39 40-49 50-59 60-69	88% 89 86 110 102	99% 144 107 93 101	87% 128 92 102 103	85% 81 116 101 (103)†	152% 105 136 96 (126)†	131% 85 157 96 (130)†			

\* Less than 10 claims.

† Rates in parentheses based on 10 to 24 claims, inclusive.

Total disability experience follows the pattern set by its separate accident and sickness components. In general, claim rates have decreased and claim durations have increased since 1955–59.

### Trends in Experience (Table 10)

### TABLE 10

### MALE 0-DAY ACCIDENT AND 7-DAY SICKNESS EXPERIENCE RATIOS OF 1958-59 AND 1960-61 EXPERIENCE TO 1955-57 EXPERIENCE

Attained Age	MALE OCC. GROUP I				MALE OCC. GROUP II			
	Annual Claim Rate		Annual Claim Cost		Annual Claim Rate		Annual Claim Cost	
	1958-59	1960-51	1958-59	1960-61	1958 50	1960-61	1958-59	1960-61
	U-Dav Accident							
20–29 30–39 40–49 50–59 60–69	96 92	$ 100\% \\ 94 \\ 90 \\ 89 \\ 105 $	115% 106 93 95 96	118% 116 105 100 113	96% 90 90 96 128	94% 87 94 93 115	100	112% 96 107 105 129
	7-Day Sickness							
20-29 30-39 40-49 50-59 60-69	92 91 94	75% 85 87 91 103	81% 106 103 92 94	83% 97 102 100 110	83% 89 91 95 93	68% 81 86 93 84	87% 100 99 105 137	86% 95 98 107 127

Table 10 shows ratios of 1958–59 and 1960–61 experience to experience in calendar years 1955–57 for males with 0-day accident and 7-day sickness benefits.

Except at ages 60 and over, the trend of annual claim rates has been uniformly downward. For annual claim costs, there is no definite pattern. At ages over 50, Male I claim costs dipped in 1958-59 and then rose in 1960-61, whereas Male II costs increased in each period.

Ratios of 1960-61 experience to the experience in 1955-57 indicate that claim rates have generally decreased and that the decrease is greater for 7-day sickness benefits than for 0-day accident benefits. Over the same

period claim costs have generally increased, except at ages under 40, for 7day sickness benefits.

### CONCLUSION

In interpreting the data presented in this report, one should keep in mind that the 1960–61 period studied was one of relative prosperity. The high level of employment and the high average annual income in relation to the maximum monthly income benefits in force were undoubtedly important factors in the favorable disability experience.

As mentioned above, in several cells virtually all the experience was contributed by one or a few companies. Even in the cells for which a reasonable cross-section of experience was available, variations in agency operations, marketing operations, and underwriting practices of the contributing companies may significantly affect the disability experience.