TRANSACTIONS OF SOCIETY OF ACTUARIES 1976 REPORTS

II. GROUP LONG-TERM DISABILITY INSURANCE

A TTENTION is directed to the following changes and additions that have been made in this year's report: The format of Tables 5-10 in the "Analysis of Rates of Disablement" section has been revised. A "Number of Claims" column has been added to the "Table 1 Experience—All Units" portion of each table. Tables D-1E and D-2E, which show ratios of actual to expected claim terminations for all ages combined by year of disability on plans having a six-month and a threemonth elimination period, respectively, have been added to the "Analysis of Rates of Termination" section.

The experience included in this report is predominantly that of employer-employee groups located in the United States and is largely for plans that appear not to have been the result of bargaining. Groups which a contributing company considers atypical or classifies as substandard because of industry hazards are excluded. Plans selected for the study provide occupational as well as nonoccupational coverage, but with benefits integrated with workmen's compensation. Virtually all the cases contributed also provide that gross monthly benefits be integrated with some or all of any social security benefits and frequently with other benefits payable as a result of the disability. Benefits are payable only on claims incurred prior to age 65 and generally cease at age 65.

The Committee recommends that care be used in the interpretation of the results and in their application on other than a broad basis, since a considerable volume of exposure shown in the tables could not be coded with respect to certain characteristics that may influence the level of rate of disablement or termination. The experience may not be representative of any particular group or plan.

The early experience years of the studies cover a period relatively free from severe economic disturbances. Experience of at least two of the more recent years (1970 and 1971), however, overlaps a period of economic recession.

CONTRIBUTING COMPANIES

Thirteen companies have contributed experience for the investigation covered in this report. The results are the composite experience of variations in company practices and administration and claim procedures, as well as variations in experience among groups.

> Aetna Life and Casualty Company Bankers Life Company

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Connecticut General Life Insurance Company Continental Assurance Company Continental Casualty Company Equitable Life Assurance Society John Hancock Mutual Life Insurance Company Metropolitan Life Insurance Company New England Mutual Life Insurance Company New York Life Insurance Company Provident Life & Accident Insurance Company Prudential Insurance Company of America Sun Life Assurance Company of Canada

ANALYSIS OF RATES OF DISABLEMENT

Many of the tables appearing in this section, specifically Tables 1B, 1C, 4–10, and I, include a column that shows the "number of experience units." A unit of experience represents the experience of a single group for one calendar year. For an experience cell that covers more than one calendar year of experience, a group would be included in the count of the number of experience units for the total number of separate calendar years for which experience was submitted. Furthermore, where the number of experience units in a cell is relatively small and no distinction is made by size, the experience for that cell could be influenced by the experience of but a few groups and, as such, may not be representative of all units in that cell.

Table 1 is based on the experience of all size groups for plans with a six-month elimination period. Crude rates of disablement based on number of lives are shown by sex and age group for the period 1970–74. Table 1A shows the experience of nonjumbo size units only, defined as groups with less than 5,000 lives insured. Experience of the calendar year of issue is excluded from both tables. About 22 percent of the exposure contributed could not be separated by sex. The first part of each of these two tables summarizes the experience for male, female, and sex-unknown exposure combined. The experience for which exposure was sex-coded is presented in the bottom two sections of each table.

It should be noted that the exposure and claim data shown in Table 1, and therefore in Tables 1B, 1C, 5–10, and I, relative to plans having a sixmonth elimination period have decreased. This reduction was caused mainly by a temporary reduction in the submission of one of the contributing companies. It is anticipated, however, that future submissions will be at a level comparable to prior years.

Tables 2 and 3 are similar to Table 1 but are based on the experience

GROUP LONG-TERM DISABILITY INSURANCE CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Six-Month Elimination Period; Calendar Year of Issue Excluded) Calendar Years of Experience 1970-74

ALL EXPERIENCE UNITS COMBINED

Attained Age	Life Years Exposed	Number of Claims	Rate of Disablement per 1,000 Lives				
	All Exper	ience: Males, Fo	emales				
		d Sex Unknown					
Under 40	1,578,150	1,466	0.93				
40-44	399,669	824	2.06				
45-49	397,614	1,381	3.47				
50-54	338,300	2,044	6.04				
55-59	259,989	2,753	10.59				
60-64	170,005	2,394	14.08				
All ages	3,143,727	10,862	3.46				
	Male Experience Only						
Under 40	841,639	734	0.87				
40-44.	233,940	398	1.70				
45-49	229,443	741	3.23				
50-54	195,846	1,201	6.13				
55-59	153,581	1,738	11.32				
60-64	101,408	1,587	15.65				
All ages	1,755,857	6,399	3.64				
	Femal	e Experience On	ly				
Under 40	381,404	405	1.06				
40-44	72,080	249	3.45				
45-49	80,734	337	4.17				
50-54	73,072	445	6.09				
55-59	54,307	485	8.93				
60-64	36,508	351	9.61				
All ages	698,105	2,272	3.25				

TABLE 1A

GROUP LONG-TERM DISABILITY INSURANCE CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Six-Month Elimination Period; Calendar

Year of Issue Excluded) Calendar Years of Experience 1970-74

NONJUMBO EXPERIENCE UNITS ONLY

Attained Age	Life Years Exposed	Number of Claims	Rate of Disablement per 1,000 Lives			
		rience: Males, F I Sex Unknown	emales,			
Under 40 40-44 45-49 50-54 55-59 60 64 All ages	1,150,105 286,420 286,957 246,889 190,550 122,494 2,283,415	1,056 604 963 1,407 1,898 1,694 7,622	$ \begin{array}{r} 0.92\\ 2.11\\ 3.36\\ 5.70\\ 9.96\\ 13.83\\ \hline 3.34 \end{array} $			
- are	Male Experience Only					
Under 40	600,078 159,167 157,416 135,563 105,598 69,546 1,227,368	523 287 488 778 1,138 1,053 4,267	0.87 1.80 3.10 5.74 10.78 15.14 3.48			
	Femal	e Experience O	nly			
Under 40	254,240 50,605 57,885 53,945 40,533 24,783	258 169 220 295 330 262	$ \begin{array}{c} 1.01\\ 3.34\\ 3.80\\ 5.47\\ 8.14\\ 10.57 \end{array} $			
All ages	481,991	1,534	3.18			

of plans with a three-month and a twelve-month elimination period, respectively.

Attention is called to the small number of claims underlying the disablement rate for some of the sex-age cells, especially for the three- and twelve-month plans.

The experience is based largely on a "his own occupation" definition of disability generally during the first two years following disablement. For plans with either a three- or a six-month elimination period, however, about 3 percent of the experience is based on an "any occupation" definition for the full period of disability. For twelve-month plans, approximately 11 percent of the experience uses the "any occupation" definition.

Claims were reported and included in rates of disablement, even though, because of the existence of social security or other disability income under plans with an offset provision, no benefit may have been payable.

For the six-month plans, accidents accounted for approximately 9 percent of the claims coded for a known cause of disablement. The corresponding figures for the three-month and twelve-month plans were 16 percent and 8 percent, respectively.

Table 1B analyzes by underlying calendar year of experience the crude rates of disablement from Tables 1 and 1A, respectively, for all ages and for males, females, and sex-unknown exposures combined. Some portion of the variation in the overall disablement rate from year to year is the result of changes in the distributions of exposed to risk by age groups.

If past reporting lag is any indication of the extent of claim underreporting, then the figures in Table 1B of claims reported as incurred for the most recent calendar year, 1974, may be understated. In particular, when the underlying data are adjusted for the addition of a new company's experience in last year's report and the decrease in the contribution of another company in the current report, the number of claims reported as incurred in 1973 included in the current report increased approximately 5 percent from that shown in last year's report.

Table 1B also shows ratios of actual claims to tabular claims. Tabular claims for each year were derived by applying to the actual exposures for each age group the corresponding age-disablement rates based on the experience of nonjumbo size groups for males, females, and sex unknown combined from Table 1A. The tabulars adjust only for age. No adjustment is made for the different proportions of males and females, if any, or for any other factors which might influence disablement rates.

Table 1B also gives some indication of the adverse impact of the 1970-71 recession on disablement rates. The ratios of actual to tabular for the years 1970 and 1971 are significantly higher than the levels for

years prior thereto. Table 1B also indicates that the effect of the recession was limited and that disablement rates in 1972, 1973, and 1974 appear to have retreated to prerecession levels.

Table 1C subdivides the Table 1 experience for all ages and for males, females, and sex-unknown exposures combined, by size of experience

TABLE 1B

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF RATES OF DISABLEMENT BY CALENDAR YEAR OF INCURRAL

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1962-74

_	NUMBER	-	Nu	BER OF CL.	1115	RATE OF DISABLI -	RATIO OF ACTUAL
Calendar Yea r of Incurral	OF EX- PERIENCE YEARS UNITS EXPOSED		Acci- dent	Sickness	Total (Incl. Unknown	MENI PER 1,000 LIVU	CLAIMS TO TABU- LAR CLAIMS*
ana M ^a laya an		A	ll Experie	nce Units C	ombined	<u> </u>	
1962-64	261	181,374	22	339	500	2.76	92%
1965-69	3,815	1,581,281	344	3,291	4,361	2.76	88%
1970 1971 1972 1973 1974 1970-74	1,477 1,690 2,255 2,193 2,122 9,737	526,114 530,492 629,042 728,398 729,681 3,143,727	181 209 209 231 161 991	1,578 1,923 1,966 2,185 1,939 9,591	2,003 2,150 2,183 2,417 2,109 10,862	3.81 4.05 3.47 3.32 2.89 3.46	116% 121 103 99 87 103%
		No	 mjumbo F	 xperience I	Jnits Only	1	1
1962-64	253	67,666	4	105	132	1.95	64%
1965-69	3,758	984,054	221	1,941	2,708	2.75	83%
1970. 1971. 1972. 1973. 1974.	1,458 1,677 2,237 2,169 2,102	366,912 420,338 457,861 502,490 535,814	111 180 158 166 120	913 1,415 1,340 1,520 1,468	1,229 1,604 1,505 1,687 1,597	3.35 3.82 3.29 3.36 2.98	100% 114 97 101 90
1970-74	9,643	2,283,415	735	6,656	7,622	3.34	100%

TABLE 1C

GROUP LONG-TERM DISABILITY INSURANCE

RATES OF DISABLEMENT AND RATIOS OF ACTUAL CLAIMS TO TABULAR CLAIMS, BY SIZE OF EXPERIENCE UNIT EXPOSED

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970-74

	NUMBER	· ··		RATE OF Disable-	Average	Nu	MBER OF EX	OPERIENCE U	INITS BY RA	.110 OF ACT	UAL TO TAE	ULAR CLAI	MS*
Size of Unit	OF Experience Units	LIFE YEARS Exposed	Number of Claims	MENT PER 1,000 Lives	А/Т Катіо*	0%	1- 50%	50- 75%	75- 100%	100- 150%	150- 200%	200- 500%	500% or More
Under 25 lives 25-49 50-99 100-249 250-499 500-999 1,000-2,499 2,500-4,999	2,053 829	20,457 69,811 159,363 317,782 289,110 349,018 624,544 453,330	54 224 519 1,104 911 1,099 2,118 1,593	2.64 3.21 3.26 3.47 3.15 3.15 3.39 3.51	78% 87 93 102 92 96 106 105	1,534 1,710 1,853 1,360 372 140 55 7	0 0 0 11 61 62 26	0 0 1 73 67 64 17	0 0 11 81 52 45 19	0 0 116 99 67 65 33	0 0 3 127 70 52 43 16	0 39 262 369 108 60 52 13	45 147 144 69 15 6 2 0
Under 5,000 5,000 or more	9,643	2,283,415 860,312	7,622	3.34	100%	7,031	160 18	222	208 14	380	311	903 8	428
Total	9,737	3,143,727	10,862	3.46	103%	7,034	178	229	222	408	327	911	428

ALL EXPERIENCE UNITS COMBINED

unit. Note that experience units of less than 100 lives accounted for over 59 percent of the total number of units. This explains the large number of units (over 72 percent of the total) that experienced no claims. This table also includes a dispersion-type analysis of ratios of actual claims to tabular claims. As in Table 1B, the tabulars adjust only for age. Because the experience is not adjusted for sex or for other characteristics that might have a measurable impact on the rate of disablement, such as differences among contributing companies in underwriting and claim administration practices, the extent to which employers use the longterm disability plan as an early retirement vehicle, the proportions of salaried and hourly, the extent of employer financial participation, the type of industry, the relationship to take-home pay of the amount of benefit payable under the plan, and so on, caution should be used in interpreting the results.

Table 4 shows exposures, claims, and rates of disablement by size of group for plans with either a three- or a twelve-month elimination period. Tabulars used for each elimination period in this table are based on the combined experience of all size groups.

The respective experiences underlying Tables 1 and 1A have been analyzed by employee class, industry, contributory status, and plan provisions with respect to preexisting conditions, rehabilitation, and indirect integration (whereby the long-term disability benefit may be reduced when the total income from all specified sources, including the long-term disability benefit, exceeds a specified percentage of salary). The respective results are displayed in Tables 5–10.

In examining Tables 5–10, it should be noted that many of the variables analyzed may be interrelated. This is especially true in Table 6, where the results shown in the various cells may be heavily influenced by the level of hourly versus salaried employees.

The portion of the Table 5 experience under units with at least a 75 percent salaried employees composition, the majority of whom were not executives (i.e., Code 2), was further analyzed to investigate the effect that such variables as (a) the relationship between the long-term disability benefit (before integration with other income sources) and salary at time of disablement, (b) the plan's integration provision, and (c) the extent to which a disability income is provided under employer-sponsored plans prior to qualification for long-term disability benefits appear to exert on disablement rates. The several classifications are somewhat broad. The various parameters may not be mutually exclusive. The respective sub-analyses are shown in Table 5A, separately for nonjumbo and for all experience units. It should be noted that the tabulars and the actual-to-

GROUP LONG-TERM DISABILITY INSURANCE CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Three-Month Elimination Period; Calendar Year of Issue Excluded) Calendar Years of Experience 1970–74

ALL EXPERIENCE UNITS COMBINED

Attained Age	Life Years Exposed					
		ence: Males, Fe l Sex Unknown	emales			
Under 40	428,159 97,792 92,713 77,496 58,637 36,913 791,710	856 381 587 733 857 748 4,162	2.00 3.90 6.33 9.46 14.62 20.26 5.26			
•	Male Experience Only					
Under 40	203,401 50,043 45,665 38,335 30,007 19,327 386,778	393 187 257 371 492 435 2,135	1.93 3.74 5.63 9.68 16.40 22.51 5.52			
•	Female	e Experience On	ly			
Under 40	82,827 14,980 15,728 14,239 10,274 6,606	190 94 130 130 120 94	2.29 6.28 8.27 9.13 11.68 14.23			
All ages	144,654	758	5.24			

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GROUP LONG-TERM DISABILITY INSURANCE CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Twelve-Month Elimination Period; Calendar Year of Issue Excluded) Calendar Years of Experience 1970–74

ALL EXPERIENCE UNITS COMBINED

Attained Age	Life Years Exposed	Rate Number of Claims . Disable per 1, Live				
		ence: Males, Fe l Sex Unknown	emales,			
Under 40	133,104 30,091 32,287 28,906 23,207 12,844 260,439	64 50 91 150 200 100 655	0.48 1.66 2.82 5.19 8.62 7.79 2.51			
-	Male Experience Only					
Under 40	72,475 17,197 18,477 16,319 13,488 8,125 146,081	29 21 43 64 99 65 321	0.40 1.22 2.33 3.92 7.34 8.00 2.20			
	Femal	e Experience O	nly			
Under 40	20,604 4,632 5,821 6,151 5,412 2,305	16 7 15 39 39 5	0.78 1.51 2.58 6.34 7.21 2.17			
All ages	44,925	121	2.69			

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF RATES OF DISABLEMENT BY SIZE OF EXPERIENCE UNIT EXPOSED (Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970-74

ALL EXPERIENCE UNITS COMBINED

	THREE-MONTH ELIMINATION PERIOD PLANS					TWELVE-MONTH ELIMINATION PERIOD PLANS					
Size of Unit	Number of Experience Units	Life Years Exposed	Number of Claims	Rate of Disable- ment per 1,000 Lives	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Rate of Disable- ment per 1,000 Lives	Ratio of Actual Claims to Tabular Claims†	
Under 25 lives.	1,810	22,460	123	5.48	102%	19	209	2	9.57	305%	
25-49		70,073	345	4.92	89	82	3,073	7	2.28	88	
50-99		110,949	586	5.28	96	97	3,073 6,831	12	1.76	63	
100-249	937	138,990	697	5.01	97	96	15,830	51	3.22	119	
250-499		114,147	601	5.27	100	61	22,126	56	2.53	98	
500-999		154,925	822	5.31	104	56	40,797	123	3.01	98	
1,000-2,499		107,626	654	6.08	121	35	49,994	125	2.50	86	
2,500-4,999	17	62,086	287	4.62	85	19	66,532	163	2.45	106	
Under 5,000	6,937	781,256	4,115	5.27	100%	465	205,392	539	2.62	98%	
5,000 or more	2	10,454	47	4.50	78%	8	55,047	116	2.11	112%	
Total	6,939	791,710	4,162	5.26	100%	473	260,439	655	2.51	100%	

* Tabular claims were calculated by applying to the actual age-group exposures the crude rates of disablement shown in Table 2 for males, females, and sex unknown combined.

† Tabular claims were calculated by applying to the actual age-group exposures the crude rates of disablement shown in Table 3 for males, females, and sex unknown combined.

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GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES 1 AND 1A EXPERIENCE BY EMPLOYEE CLASS

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Year of Experience 1970-74

		-	TABLE 17	A Experience- N	Ionjumbo Un	ITS ONLY	TABLE 1 EXPERIENCE-ALL UNITS			
	LOYEE ODE	EMPLOYEE CLASS	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
1 2 3 7		At least 75% salaried, majority executive At least 75% salaried, majority nonexecutive 50-75% salaried At least 50% salaried (exact percentage un-	169	147,054 1,150,975 40,512 10,890	649 3,361 164 27	137% 88 121 60	536 4,839 175 59	203,960 1,693,219 124,673 10,890	910 5,204 394 27	140% 94 95 60
6		known) At least 50% hourly (exact percentage un- known)	1,324	303,236	1,069	103	1,330	377,800	1,146	91
4 5 9		50-75% hourly At least 75% hourly Indeterminate	351 266 2,169	104,377 92,605 433,766	492 544 1,316	129 167 95	351 273 2,174	104,377 140,315 488,493	492 1,027 1,662	129 159 108
		Total	9,643	2,283,415	7,622	100%	9,737	3,143,727	10,862	103%

TABLE 5A

GROUP LONG-TERM DISABILITY INSURANCE SUPPLEMENTAL ANALYSIS OF TABLE 5 EXPERIENCE FOR EMPLOYEE CLASS CODE 2

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970-74

Nonjumbo Experience Units Only				ALL EXPERIENCE UNITS		
Number of Ex- perience Units	Life Years Exposed	Number of Claims	Ratio of A/T Claims*	Life Years Exposed	Ratio of A/T Claims*	

I. Relationship between Long-Term Disability Benefit and Salary

Ratio of gross benefit (before reduction for integra- tion) to salary: Always less than 50% Generally less than 50%	108 86	17,235 3,399	29 10	43% 85	17,235 3,399	43% 85
Subtotal (less than 50%)	194	20,634	39	49%	20,634	49%
50% (exactly or approxi- mately)	1,302	451,136	1,189	78%	646,645	87%
Always more than 50%, exact % unknown Generallymore than 50%,	104	50,952	261	1 29 %	94,696	138%
exact % unknown	294	21,888	41	59	49,432	127
More than 50%, but less than or equal to 60% More than 60%, but less		480,900	1,489	93	690,577	94
than or equal to 70%	326	87,319	256	113	125,972	109
More than 70 ¹ / ₆	7	4,480	15	110	4,480	110
Subtotal (greater than 50%) Other, including not de-	2,942	645,539	2,062	98%	965,157	103%
terminable	339	33,666	71	60%	60,783	45%
Total salaried, nonexecutive	4,777	1,150,975	3,361		1,693,219	94%

Nonju	mbo Experie	NCE UNITS	Only	ALL EXPE UNIT	
Number of Ex- perience Units	Life Years Exposed	Number of Claims	Ratio of A/T Claims*	Life Years Exposed	Ratio of A/T Claims*

TABLE 5A—Continued

II.	Analysis	by	Plan	Integration	Provision

Other income sources included in plan integration pro- vision: Nonintegrated	1,214	247,553	761	97%	539,322	10792
Social security primary		,		70	,,	
benefit only or in						
combination with in- come from other						
sources	507	225,755	748	91	288,665	91
Social security primary		,		•	200,000	
and family benefit						
only or in combina- tion with income						
from other sources.	2,922	656,875	1,792	83	844,440	86
Other integration bases.	134	20,792	60	78	20,792	78
Total salaried,						
nonexecutive	4,777	1,150,975	3,361	88%	1,693,219	94%
			1 1			t

Disability income benefit provided during the						
elimination period: Full salary Less than full salary but	102	37,993	145	117%	131,929	126%
generally more than 50%. Generally less than 50%	863	250,194	841	97	416,354	108
of salary	201	11,859	28	56	11,859	56
None.	418	67,805	161	83	67,805	83
Noncodable or unknown	3,193	783,124	2,186	84	1,065,272	86
Total salaried, nonexecutive	4,777	1,150,975	3,361	88%	1,693,219	94%

GROUP LONG-TERM DISABILITY INSURANCE Analysis of Tables 1 and 1A Experience by Industry

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined)

Calendar Years of Experience 1970-74

		TABLE 1A EXPERIENCE-NONJUMBO UNITS ONLY				TABLE 1 EXPERIENCE—ALL UNITS			
Indust Code (INDUSTRY	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
3	Agriculture, forestry, and fisheries	45	8,343	27	90%	48	31,634	323	268%
10-14	Mining	175	52,463	286	164	175	52,463	286	164
15-17	Contract Construction	275	73,797	310	119	275	73,797	310	119
19-39	Manufacturing	3,744	971,743	3,640	107	3,801	1,435,937	5,775	116
40-49	Transportation, communication, electric, gas	,							
	and sanitary services	529	154,294	567	112	531	174,801	593	104
	Wholesale and retail trade	1,478	192,468	659	103	1,484	264,769	765	89
	Finance, insurance, and real estate	1,255	360,166	842	77	1,269	531,735	1,160	89 76 77
	Services	1,826	385,209	983	77	1,836	475,381	1,313	115
91-94		128	29,329	125	115	128	29,329	125	113
	All other classifiable	99	46,546	157	127	101	64,824	186 26	102
99	Nonclassifiable	89	9,057	26	101	89	9,057	20	101
	Total	9,643	2,283,415	7,622	100%	9,737	3,143,727	10,862	103%

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES 1 AND 1A EXPERIENCE BY CONTRIBUTORY STATUS

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970-74

	TABLE 1A EXPERIENCE-NONJUMBO UNITS ONLY				TABLE 1 EXPERIENCE-ALL UNITS			
Contributory Status	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
Employee-pay all Employer-pay-all	813 4,840	291,006 842,412	1,021 2,699	104% 98	838 4,858	513,776 1,030,637	1,615 3,250	101% 96
Contributory, employer and employee share cost Unknown	2,722 1,268	713,406 436,591	2,626 1,276	108 88	2,763 1,278	1,070,144 529,170	4,333 1,664	119 89
Total	9,643	2,283,415	7,622	100%	9,737	3,143,727	10,862	103%

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES 1 AND 1A EXPERIENCE BY PREEXISTING CONDITION PROVISION (Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined)

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970–74

	TABLE	1A Experience-N	Vonjumbo Unit	s Only	TABLE 1 EXPERIENCE—ALL UNITS			
	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
Preexisting conditions are not covered Preexisting conditions are covered	5,713 3,930	729,813 1,553,602	2,275 5,347	92% 104	5,744 3,993	1,056,758 2,086,969	3,343 7,519	91% 110
Total	9,643	2,283,415	7,622	100%	9,737	3,143,727	10,862	103%

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES 1 AND 1A EXPERIENCE BY PLAN INDIRECT INTEGRATION PROVISION (Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined)

Calendar Years of Experience 1970-74

	TABLE	1A Experience-N	Sonjumbo Units	ONLY	TABLE 1 EXPERIENCE—ALL UNITS			
5	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
No indirect integration	6,058	1,386,243	4,394	94% [.]	6,103	1,789,357	5,584	93%
Indirect integration—nonduplication level: Less than 50%	21 269 1,097 2,010 149 8	10,343 122,759 306,333 392,735 45,928 1,351	22 384 1,145 1,453 85 5	61 93 113 108 67 149	21 276 1,125 2,023 149 8	$10,343 \\ 194,456 \\ 570,783 \\ 502,278 \\ 45,928 \\ 1,351$	22 602 2,166 2,121 85 5	61 102 113 121 67 149
Integrated but noncodable	31	17,723	134	332	32	29,231	277	369
Total	9,643	2,283,415	7,622	100%	9,737	3,143,727	10,862	103%

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES 1 AND 1A EXPERIENCE BY PLAN REHABILITATION PROVISION (Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970-74

	TABLE	1A Experience-N	Ionjumbo Units	ONLY	TABLE 1 EXPERIENCE—ALL UNITS				
	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	
Rehabilitation provision included Rehabilitation provision not included	7,241 2,402	1,564,056 719,359	5,178 2,444	99% 102	7,298 2,439	2,095,839 1,047,888	6,497 4,365	96% 117	
Total	9,643	2,283,415	7,622	100%	9,737	3,143,727	10,862	103%	

EXPERIENCE UNDER PLANS WHERE LTD BENEFIT IS DIRECTLY INTEGRATED WITH SOCIAL SECURITY PRIMARY AND FAMILY BENEFITS ONLY OR IN COMBINATION WITH OTHER INCOME SOURCES

TABLE 1

(Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1970-74

Indirect Integration Classification	Relationship between LTD Benefit and Salary	Relationship between Disability Income Provided during Elimination Period and Salary	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
None or a nonduplication level less than 60%	50% or less	50^{e2}_{70} or less Greater than 50^{e2}_{70}	1,037 148	307,309 50,647	795 133	77% 81
		Subtotal	1,185	357,956	928	77%
	Greater than 50%	$50^{o_{e_{e}}}_{e_{e}}$ or less Greater than $50^{o_{e}}_{e_{e}}$	3,942 407	744,563 102,630	2,449 383	98% 115
		Subtotal	4,349	847,193	2,832	100%
-	Subtotal		5,534	1,205,149	3,760	93%
Nonduplication level greater than or equal to 60%	50% or less	50% or less Greater than 50%	134 52	38,450 25,033	132 210	101% 247
		Subtotal	186	63,483	342	158%
	Greater than 50%	50% or less Greater than $50%$	468 530	40,720 126,119	155 404	110% 103
		Subtotal	998	166,839	559	105%
	Subtotal		1,184	230,322	901	120%
Total			6,718	1,435,471	4,661	98%

NONJUMBO-ALL EMPLOYEE CLASSES

* Tabular claims were calculated by applying to the actual age-group exposures the strude rates of disablement shown in Table 1A for males, females, and sex unknown combined.

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tabular ratios are consistent with those in Table 5 for Employee Code 2.

Table I is an attempt to examine the interrelationships among various parameters whose effect on disablement rates may not be mutually exclusive. The analysis was based on the experience of those nonjumbo units, all employee classes combined, that have plans that provide for the direct integration of the long-term disability benefit with either the total primary and family benefits payable under social security or with such social security benefits plus income from other sources. The parameters selected for study were (a) the disability income provided by

EXHIBIT I

	TABLE	c 1A	TABL	Е 2	TABLE 3		
Company	% of Total	Ratio	% of Total	Ratio	% of Total	Ratio	
	Exposure	A/T	Exposure	A/T	Exposure	A/T	
	10%	103%	4%	54%	12%	111%	
[37	80	6	97	6	33	
[]		125	15	109	24	128	
V	2	92	9	116		109	
• • • • • • • • • • • • •	13	110	16	97	3	137	
I	1	75	6	110	1	31	
II	5 17	120	10	110	1	81	
III		94	8	82	2	116	
Κ	30	92	0	0	36	104	
	1	85	1	77	6	22	
I	83	89	22	92	0	0	
II	3	131	3	143	8	107	
All	100%	100%	100%	100%	100%	100%	

ANALYSIS OF THE EXPERIENCE OF TABLE 1A, TABLE 2, AND TABLE 3 BY CONTRIBUTING COMPANY

employer-sponsored, short-term plans during the elimination period, (b) the proportion of salary represented by the long-term disability benefit (before integration), and (c) the point at which the long-term disability benefit is reduced, if at all, when total income from all sources exceeds a certain percentage of salary, or otherwise.

The respective Table 1A, Table 2, and Table 3 experiences, each of which is a composite of all companies, were examined by contributing company to determine the variances among companies. The findings are displayed in Exhibit I in the form of actual-to-tabular ratios. Relative exposures are also shown. In comparing the differences between companies, one should be reminded of the several caveats noted in the

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introduction to this report and the fact that the tabular adjusts only for age.

ANALYSIS OF RATES OF TERMINATION

Table D-1 shows, for plans with a six-month elimination period, crude rates of termination from death or recovery based on number of lives, by sex and age groups, for the period 1962–74. Because of the small number of terminations at the later durations, the experience has been truncated at the end of seven years of disablement. It should be noted that the termination rates for the first year of disablement relate to the six-month period following the end of the elimination period. There were 33,479 claims exposed to termination, 10,862 of which originated from the 1970– 74 and 4,861 from the 1962–69 active lives experience (all experience units combined), with the balance from experience units that were not included in the study of rates of disablement. For plans with a six-month elimination period, the Committee did a subanalysis of the termination rates of only the claims that were included in the rates of disablement study. Termination rates for these claims were found to be generally from 10 to 15 percent higher than those shown in Table D-1.

The actual number of claims that terminated by death or recovery is shown in Table D-1A. Ratios of the actual terminations to the number of terminations that would have been produced by application of termination rates from the 1964 Commissioners Disability Table to the Table D-1 exposures are presented in Table D-1B. Table D-1C compares the values of a monthly benefit of \$1 payable for a maximum period of sixty months with the values of a similar benefit payable to age 65. The illustrations are done on two alternate bases, each using a 3 percent interest discount. One basis was Table D-1 crude termination rates for the first four years, regardless of the actual number of terminations in each duration-age cell, and the 1964 Commissioners Disability Table rates thereafter. The other basis uses termination rates from the 1964 Commissioners Disability Table throughout. Table D-1D shows male and female disabled life annuity values for a benefit payable to age 65, based on the male and female claims, respectively, included in Table D-1C. There was 24,291 male and 9,188 female claims in this analysis. As was done in Table D-1C, illustrative values are shown on two alternate bases. In making any sex comparisons, one is reminded that the 1964 Commissioners Disability Table is a unisex table.

The claim termination experience is further analyzed by examining, by underlying calendar year of claim incurral, the ratio of the actual number of terminations to the expected number of terminations for all ages combined using termination rates from the 1964 Commissioners Disability

TABLE D-1

GROUP LONG-TERM DISABILITY INSURANCE CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Six-Month Elimination Period; Calendar Years of Experience 1962-74)

an a			ACE AT DI	SABLEMENT		
DURATION OF DISABLEMENT						
	Under 30	30-39	Under 40	40-49	50-59	60-64
		М	ale and Fen	nale Combi	ned	
7th month.8th month.9th month.10th month.11th month.12th month.13th month.13th month.14th month.15t year (last 6 months).13th month.14th month.15th month.17th month.18th month.20th month.21st month.22d month.23d month.24th month.24th year.3d year.4th year.5th year.7th year.7th year.	$\begin{array}{c} 62.4\\ 74.0\\ 73.5\\ 67.5\\ 57.5\\ 54.5\\ 331.6\\ 49.5\\ 54.9\\ 55.6\\ 30.4\\ 36.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.4\\ 35.8\\ 34.6\\ 30.6\\ 41.5\\ 115.4\\ 115$	$\begin{array}{r} 44.5\\ 57.3\\ 54.4\\ 45.7\\ 44.7\\ 9.6\\ 262.0\\ 47.9\\ 37.2\\ 31.4\\ 33.6\\ 33.8\\ 25.9\\ 23.1\\ 16.7\\ 14.8\\ 23.2\\ 24.0\\ 22.6\\ 288.0\\ 188.7\\ 97.8\\ 76.4\\ 55.8\\ 68.7*\\ \end{array}$	50.6 63.0 60.8 52.9 48.9 51.1 285.8 48.4 42.8 39.0 33.3 32.8 29.1 26.9 22.0 19.2 23.9 24.9 25.7 312.3 215.4 101.4 81.9 57.9 77.9	$\begin{array}{c} 36.1\\ 42.6\\ 40.2\\ 35.3\\ 31.4\\ 30.9\\ 197.9\\ 29.6\\ 26.7\\ 23.7\\ 20.0\\ 19.7\\ 20.1\\ 16.6\\ 12.1\\ 11.7\\ 12.8\\ 13.0\\ 16.4\\ 201.3\\ 139.7\\ 78.3\\ 51.3\\ 60.2\\ 53.7 \end{array}$	$\begin{array}{c} 24.1\\ 27.1\\ 24.9\\ 22.8\\ 20.9\\ 18.4\\ 130.4\\ 17.3\\ 15.6\\ 14.0\\ 12.8\\ 11.6\\ 13.6\\ 13.2\\ 10.2\\ 10.8\\ 10.1\\ 8.3\\ 9.4\\ 137.4\\ 97.5\\ 71.9\\ 64.2\\ 67.0\\ 55.3 \end{array}$	$\begin{array}{c} 18.2\\ 18.1\\ 17.9\\ 14.1\\ 12.2\\ 14.4\\ 91.4\\ 12.7\\ 10.2\\ 10.8\\ 11.6\\ 11.1\\ 10.1\\ 9.9\\ 9.6\\ 8.6\\ 6.4\\ 6.3\\ 8.1\\ 109.7\\ 86.1\\ 67.1\\ 55.4\\ 88.6\\ 31.6\dagger \end{array}$
			Male	Only		
1st year (last 6 months) 2d year. 3d year. 4th year. 5th year. 6th year. 7th year.	357.1 370.6 302.0 119.5 92.5* 41.7† 107.9†	280.0 293.9 187.8 102.3 70.8 35.5† 84.1*	306.3 318.0 220.1 106.3 76.1 37.0* 88.1*	$190.4 \\ 180.6 \\ 130.8 \\ 77.6 \\ 51.1 \\ 60.6 \\ 67.2$	$126.3 \\ 133.1 \\ 92.7 \\ 73.4 \\ 69.4 \\ 74.1 \\ 54.6$	90.6 111.9 86.3 74.4 62.4 73.5* 28.7†
			Fema	le Only		
1st year (last 6 months) 2d year 3d year 4th year 5th year 7th year	289.5 355.0 250.9 103.0* 111.9† 89.5† 116.7†	231.0 278.3 189.7 91.2 85.0 85.6* 44.1†	251.5 302.8 207.6 94.2 90.7 87.2* 61.4†	211.9 241.8 158.7 79.8 51.7 59.1 22.3†	143.3 151.7 114.5 66.4 44.8 41.7 57.5	94.3 99.6 85.0 30.7* 20.2† 194.7† 50.0†

* Involves fewer than ten terminations.

† Involves fewer than five terminations.

Table and the Table D-1 exposures associated with the claims incurred during the period 1962–64 and the years 1965–74. The results are presented in Table D-1E.

Tables D-2, D-2A, D-2B, D-2C, D-2D, and D-2E analyze the experience of terminations from plans with a three-month elimination period and are similar in form and content to the corresponding tables of the D-1 series, except that experience has been truncated at six years. The number of claims exposed to termination was 16,180, of which 4,162 and 1,295 emanated from the 1970–74 and 1962–69 portions, respectively, of the active lives experience, and the balance from experience units that were not included in the study of rates of disablement. Termination rates for the first year of disablement cover the nine months immediately following the elimination period.

For both the six- and the three-month elimination period plans, the low first-year ratios in Tables D-1B and D-2B, respectively, would appear to be due to the shorter elimination periods of the individual health insurance experience underlying the first-year termination rates of the 1964 Commissioners Disability Table.

The overall termination rates shown in this report, which includes one additional year of experience, for both six- and three-month elimination period plans, male and female combined, are slightly lower (varies by plan, age, duration, and sex) than those shown in last year's report. The financial consequences of this change are apparent from a comparison of Table D-1C and Table D-2C values between last year's and this year's report. The variation from one report to the next underscores the need to exercise caution and judgment when using the disabled life values shown in Table D-1C and D-2C for actuarial purposes, such as reserving.

TABLE D-1A

GROUP LONG-TERM DISABILITY INSURANCE NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Six-Month Elimination Period; Calendar Years of Experience 1962-74)

During			Age at Di	SABLEMENT				
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64		
		M	ale and Fem	iale Combi	ned			
1st year (last 6 months) 2d year. 3d year. 4th year. 5th year. 6th year. 7th year.	438 236 90 18 10 3 4	673 401 150 49 24 11 9	1,111 637 240 67 34 14 13	$1,311 \\ 823 \\ 349 \\ 135 \\ 58 \\ 46 \\ 26$	1,753 1,275 616 315 188 126 54	604 462 206 73 22 11 2		
	Male Only							
1st year (last 6 months) 2d year 3d year 4th year 5th year 6th year 7th year	289 151 56 12 6 1 2	452 250 91 32 13 4 7	741 401 147 44 19 5 9	817 487 225 92 41 31 23	1,283 943 454 255 161 108 41	489 385 170 67 20 8 2		
			Female	e Only				
1st year (last 6 months) 2d year	149 85 34 6 4 2 2	221 151 59 17 11 7 2	370 236 93 23 15 9 4	494 336 124 43 17 15 3	470 332 162 60 27 18 13	115 77 36 6 2 3 0		

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TABLE D-1B

GROUP LONG-TERM DISABILITY INSURANCE RATIOS OF ACTUAL CLAIMS TERMINATED BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE*

(Six-Month Elimination Period; Calendar Years of Experience 1962-74)

Duration of Disablement	ALL Ages of Dis- Able- Ment	IS OF AGE AT DISABLEMENT LE-								
	Com- bined	Under 30	30-39	Under 40	40-49	50-59	60-64			
			Male ar	nd Female	Combined	1				
1st year (last 6 months) 2d year	85 8 79 8 66.5	61.4% 117.6 122.4 64.5 74.3 60.0† 124.0†		$\begin{array}{c} 54.4\% \\ 108.9 \\ 104.5 \\ 67.6 \\ 72.3 \\ 64.1 \\ 101.0 \end{array}$	$\begin{array}{c} 42.6^{\circ}.e\\ 85.9\\ 84.9\\ 66.1\\ 56.9\\ 80.5\\ 78.0 \end{array}$	34.3% 78.6 72.8 67.3 71.1 82.6 71.0	26.8% 79.8 71.5 62.7 56.0 94.9 34.8†			
	Male Only									
1st year (last 6 months) 2d year 3d year 4th year 5th year 6th year 7th year	$\begin{array}{c} 37.1\% \\ 82.2 \\ 76.1 \\ 68.4 \\ 70.8 \\ 84.6 \\ 78.4 \end{array}$	66.1% 119.2 130.8 68.8 68.8 38.2 115.9 †	54.1% 106.4 95.4 72.0 66.4 41.7† 114.5†	$58.3\% \\ 110.9 \\ 106.9 \\ 71.1 \\ 67.2 \\ 41.27 \\ 114.37 \\ $	$\begin{array}{c} 41 & 0^{c_{1}c_{2}} \\ 77 & 1 \\ 79 & 5 \\ 65 & 5 \\ 56 & 7 \\ 81 & 0 \\ 97 & 7 \end{array}$	33.277 76.1 69.2 68.6 76.9 91.3 70.1	26.5% 81.4 71.6 69.5 63.0 78.7† 31.6†			
			F	emale Onl	ly.	- 1.8 1				
1st year (last 6 months) 2d year	41.0% 95.0 90.5 60.8 55.5 70.7 61.4	53.6% 114.2 108.7 59.3† 83.2† 82.1† 125.4†	$\begin{array}{c} 44.6\%\\ 100.8\\ 96.4\\ 64.2\\ 79.8\\ 100.5\\ 60.1\\ 1\end{array}$	47.9% 105.6 100.7 62.5 80.1 96.1† 79.3†	45.6% 103.2 96.4 67.4 57.4 79.1 32.5†	37.7% 86.8 85.5 62.1 49.6 51.5 73.8	27.6% 72.5 70.5 28.7† 20.4† 208.5† 55.0†			

* As published by the Health Insurance Association of America, Table B1, Volume III.

† Involves fewer than ten terminations.

TABLE D-1C

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES OF A MONTHLY BENEFIT OF \$1 PAYABLE FOR VARIOUS BENEFIT PERIODS, DISCOUNTED AT 3 PERCENT INTEREST

(Six-Month Elimination Period; Males and Females Combined)

		JE AS OF END		Value as of End of Twelfth Month of Disablement				
Age at Disablement	Based on Table D-1 Rates of Termi- nation*	Cable D-1Rates ofBased onRatio toTermi-1964 CDT1964 CDT			Based on 1964 CDT	Ratio to 1964 CDT		
		•		60 Months bu End of Elimi		0		
25.5. 35.5. 45.5. 55.5. 62.5.	\$22.12 27.73 33.66 39.45 20.12	\$16.59 18.44 21.71 26.85 14.91	133% 150 155 147 135	\$26.20 31.08 35.86 39.58 16.15	\$28.46 30.86 33.50 36.68 15.77	92% 101 107 108 102		
	I			with First Pa nination Period		·		
25.5. 35.5. 45.5. 55.5. 62.5.	\$43.63 60.17 69.22 57.78 20.12	\$32.62 38.72 42.87 38.40 14.91	134% 155 161 150 135	\$58.86 75.69 80.86 60.98 16.15	\$63.86 73.54 73.57 55.60 15.77	92% 103 110 110 102		

* Annuity values are based on the crude, ungraduated, combined male and female termination rates from Table D-1 for the first four years and on the 1964 Commissioners Disability Table rates thereafter.

TABLE D-1D

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES, UNDER PLANS WITH A SIX-MONTH ELIMINATION PERIOD, OF A MONTHLY BENEFIT OF \$1 DISCOUNTED AT 3 PERCENT INTEREST, PAYABLE TO AGE 65, WITH FIRST PAYMENT DUE AT END OF ELIMINATION PERIOD

		te as of End mination Peri	· · · · · · · · · · · · · · · · · · ·	Value as of End of Twelfth Month of Disablement				
AGE AT Disablement	Based on Table D-1 Rates of Termi- nation*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table D-1 Rates of Termi- nation*	Based on 1964 CDT	Ratio to 1964 CDT		
			Male	Only	·			
25.5 35.5 45.5 55.5 62.5	\$40.83 58.24 71.98 58.46 20.10	\$32.62 38.72 42.87 38.40 14.91	125% 150 168 152 135	\$56.91 74.95 83.53 61.47 16.11	\$63.86 73.54 73.57 55.60 15.77	89% 102 114 111 102		
			Female	Only				
25.5. 35.5. 45.5. 55.5. 62.5.	\$48.53 63.49 63.96 55.64 20.18	\$32.62 38.72 42.87 38.40 14.91	149% 164 149 145 135	\$62.17 76.86 75.58 59.38 16.30	\$63.86 73.54 73.57 55.60 15.77	97% 105 103 107 103		

* Annuity values are based on the crude, ungraduated, male or female termination rates from Table D-1 for the first four years and on the 1964 Commissioners Disability Table rates thereafter.

TABLE D-1E—GROUP LONG-TERM DISABILITY INSURANCE RATIOS OF ACTUAL CLAIMS TERMINATED BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE*

(Six-Month Elimination Period; Calendar Years of Experience 1962-74)

ALL AGES OF DISABLEMENT COMBINED

		YEAR OF DISABLEMENT										
DURATION OF DISABLEMENT	1962-1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	All Years
	Male and Female Combined											
1st year (last 6 months) 2d year 3d year 4th year 5th year 6th year 7th year	$50.5\% \\ 106.2 \\ 66.8 \\ 83.5 \\ 87.1 \\ 87.7 \\ 73.4$	34.8% 78.1 103.5 71.2 71.9 155.5 76.6	42.3% 98.1 90.7 83.3 80.0 39.9 70.1	47.6% 101.9 85.6 74.7 46.1 72.7 70.3	41.5% 88.1 84.7 58.6 73.1 79.6 88.8	37.9% 87.1 73.0 68.2 70.2 61.2	38.3% 76.0 75.8 58.2 47.2			77.4		38.2% 85.8 79.8 66.5 66.9 81.1 74.1
		Male Only										
1st year (last 6 months) 2d year 3d year 4th year 5th year 6th year 7th year.	44.3% 102.7 69.6 66.1 90.7 88.4 63.8	33.5% 84.8 96.7 70.2 78.3 172.7 91.3	42.3% 102.8 81.8 89.9 86.1 54.0 80.6	46.6% 96.7 74.9 79.3 48.4 75.8 83.2	41.6% 83.6 80.1 56.1 83.2 78.2 76.5	35.9% 83.8 72.9 77.4 67.3 50.1	37.4% 68.4 71.8 59.2 53.5	32.6% 79.8 73.9 50.6		34.5%	· · · · · · · · · · · ·	$\begin{array}{r} 37.1\% \\ 82.2 \\ 76.1 \\ 68.4 \\ 70.8 \\ 84.6 \\ 78.4 \end{array}$
						Femal	e Only					
1st year (last 6 months) 2d year 3d year 4th year 5th year 6th year 7th year	65.0% 115.1 58.2 136.1 73.2† 85.2† 109.4†	37.9% 62.1 119.3 73.8 54.4† 109.4† 38.1†	42.1% 85.6 114.5 63.7 62.4† 0.0† 40.2†	49.9% 114.4 114.9 61.2 39.7† 64.6† 35.1†	41.2% 100.1 97.2 65.9 43.3† 83.9 116.8†	42.8% 95.4 73.1 42.9 78.7 94.8†	41.2% 97.7 88.5 54.8 24.7	39.8% 99.3 79.4 36.8†		· · · · · · · · · · · ·		41.0% 95.0 90.5 60.8 55.5 70.7 61.4

* As published by the Health Insurance Association of America, Table B1, Volume 111,

† Involves fewer than ten terminations.

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TABLE D-2

GROUP LONG-TERM DISABILITY INSURANCE CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY

(Three-Month Elimination Period; Calendar Years of Experience 1962-74)

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			Age at Di	SABLEMENT							
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64					
	Male and Female Combined										
4th month.5th month.6th month.7th month.8th month.9th month.10th month.10th month.12th month.13th month.14th month.14th month.14th month.14th month.14th month.15th month.16th month.17th month.18th month.20th month.20th month.22d month.23d month.24th month.24th month.25 year.3d year.3d year.5th year.6th year.	$114.6 \\ 91.3 \\ 89.4 \\ 84.3 \\ 81.4 \\ 86.6 \\ 636.2 \\ 77.3 \\ 60.6 \\ 49.1 \\ 45.3^* \\ 44.1 \\ 35.4^+ \\ 17.9^+ \\ 25.2^* \\ 39.7^* \\ 46.2^* \\ 30.4^+ \\ 404.6 \\ 100000000000000000000000000000000000$	$\begin{array}{c} 108.1\\ 129.7\\ 123.8\\ 99.0\\ 74.6\\ 55.4\\ 48.5\\ 56.1\\ 53.5\\ 544.7\\ 50.5\\ 43.2\\ 37.2\\ 37.0\\ 30.4\\ 27.5\\ 21.8\\ *\\ 16.3\\ *\\ 21.9\\ 22.7\\ *\\ 30.5\\ *\\ 307.7\\ 219.8\\ 96.4\\ 52.7\\ 40.8\\ \dagger \end{array}$	$\begin{array}{c} 112.1\\ 137.7\\ 129.2\\ 104.9\\ 80.9\\ 68.0\\ 61.6\\ 65.0\\ 64.8\\ 580.5\\ 59.3\\ 48.7\\ 40.9\\ 39.5\\ 34.6\\ 29.9\\ 20.6\\ 19.0\\ 27.3\\ 29.8\\ 26.4\\ 30.5\\ 339.3\\ 228.7\\ 86.5\\ 47.0*\\ 40.8 \\ \end{array}$	$\begin{array}{c} 89.7\\ 104.5\\ 93.8\\ 78.6\\ 70.9\\ 60.0\\ 48.8\\ 44.7\\ 38.5\\ 480.6\\ 32.3\\ 29.8\\ 25.5\\ 24.2\\ 22.1\\ 19.8\\ 17.5\\ 12.6\\ 12.7\\ 16.9\\ 14.3*\\ 16.9\\ 219.3\\ 163.0\\ 88.2\\ 32.7*\\ 42.3*\\ \end{array}$	$\begin{array}{c} 64.1\\71.9\\67.0\\56.4\\44.4\\36.1\\30.4\\26.5\\24.8\\315.6\\22.4\\15.6\\17.2\\14.0\\10.6\\10.1\\10.1$	$\begin{array}{c} 42.7\\ 53.0\\ 49.2\\ 42.7\\ 35.2\\ 21.1\\ 18.9\\ 20.2\\ 14.9\\ 262.0\\ 13.4\\ 12.3\\ 12.6\\ 12.6\\ 12.6\\ 12.6\\ 12.6\\ 12.6\\ 12.6\\ 12.6\\ 12.6\\ 12.8\\ 81.4\\ 12.8\\ 8.8*\\ 114.7\\ 100.8\\ 88.8*\\ 114.7\\ 100.8\\ 88.0*\\ 30.1\dagger \end{array}$					
			Male	Only							
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	388.3 213.3	562.5 307.9 236.0 118.7* 97.4† 74.6†	603.2 334.5 231.4 98.0* 73.5† 61.3†	471.3 224.4 151.4 98.6 31.2* 37.3†	335.6 152.3 100.2 82.7 70.8 83.4	270.5 116.3 115.3 91.6 90.0* 0.0†					
			Femal	e Only							
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	593.1 425.7 296.8 75.4† 71.4† 71.4†	518.3 306.5 197.8 70.7† 0.0† 0.0†	547.5 345.1 224.6 71.6* 14.7† 14.7†	496.0 209.8 187.3 67.0* 35.3† 50.9†	392.1 156.9 94.4 83.8 47.8* 70.7*	233.3 109.3 51.1* 114.4* 81.9† 97.5†					

* Involves fewer than ten terminations.

† Involves fewer than five terminations.

TABLE D-2A

GROUP LONG-TERM DISABILITY INSURANCE NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Three-Month Elimination Period; Calendar Years of Experience 1962-74)

1

			Age at Di	SABLEMENT								
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64						
	Male and Female Combined											
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	651 91 22 2 1 0		1,517 241 72 13 5 2	1,655 277 110 32 7 7	2,046 405 154 82 39 28	666 138 61 24 9 1						
	Male Only											
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	400 52 12 1 0 0	527 87 30 7 4 2	927 139 42 8 4 2	1,020 187 70 23 5 4	1,397 302 117 62 32 22	531 107 54 17 7 0						
	Female Only											
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	251 39 10 1 1 0	339 63 20 4 0 0	590 102 30 5 1 0	635 90 40 9 2 3	649 103 37 20 7 6	135 31 7 2 1						

TABLE D-2B

GROUP LONG-TERM DISABILITY INSURANCE RATIOS OF ACTUAL CLAIMS TERMINATED BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE*

(Three-Month Elimination Period; Calendar Years of Experience 1962-74)

_

Duration of Disablement	ALL Ages of Dis- able- ment	DIS- ACE AT DISABLEMENT								
	Com- BINED	Under 30	30-39	Under 40	40-49	50-59	60-64			
	Male and Female Combined									
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	94.5	71.7% 130.1 107.7 31.6† 26.6† 32.8†	61.9% 111.4 111.7 67.8 49.4† 47.9†	65.7% 118.2 111.0 57.6 41.5† 45.7†	$57.1\% \\ 93.6 \\ 99.1 \\ 74.5 \\ 36.2 \\ 56.5 \\ 1 \\ 1 \\ 1 \\ 5 \\ 5 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1$	46.9% 87.8 73.7 77.7 72.1 98.8	39.5% 83.4 83.7 91.4 88.9† 32.2†			
	Male Only									
1st year (last 9 months) 2d year	50.5% 93.6 86.7 78.7 70.4 82.7	75.0% 124.9 92.4 27.0† 0.0† 0.0†	63.9% 111.5 119.9 83.6† 91.4† 87.6†	68.3% 116.5 111.9 64.7† 64.5† 68.5†	56.0% 95.8 92.0 83.2 34.6† 49.8†	44.7% 87.1 74.8 77.4 78.4 102.9	40.8% 84.6 95.7 85.6 90.9† 0.0†			
			F	emale Onl	у					
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	54.5% 96.6 87.1 70.5 44.3 72.6	66.8% 136.9 128.6 43.5† 53.1† 65.5†	58.9% 111.0 100.5 49.8† 0.0† 0.0†	$\begin{array}{c} 62.0\% \\ 120.4 \\ 109.4 \\ 48.3 \\ 13.1 \\ 16.5 \\ \end{array}$	58.9% 89.6 113.8 56.6† 39.1† 68.1†	52.3% 89.7 70.5 78.4 52.9† 87.1†	35.2% 79.5 42.4† 106.9† 82.7† 104.4†			

* As published by the Health Insurance Association of America, Table B1, Volume III.

† Involves fewer than ten terminations.

TABLE D-2C

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES OF A MONTHLY BENEFIT OF \$1 PAYABLE FOR VARIOUS BENEFIT PERIODS, DISCOUNTED AT 3 PERCENT INTEREST (Three-Month Elimination Period; Males and Females Combined)

		ue as of End mination Peri		Value as of End of Twelfth Month of Disablement				
Age at Disablement	Based on Table D-2 Rates of Termi- nation*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table D-2 Rates of Termi- nation*	Based on 1964 CDT	Ratio to 1964 CDT		
				60 Months bu End of Elim				
25.5 35.5. 45.5. 55.5. 62.5.	\$14.19 18.47 22.98 30.41 19.02	\$ 5.43 5.95 7.82 12.25 9.67	261% 310 294 248 197	\$24.95 28.60 33.08 37.04 16.06	\$27.50 29.72 32.18 35.19 15.77	91% 96 103 105 102		
	J			5 with First Pa nination Period	•			
25.5. 35.5. 45.5. 55.5. 62.5.	\$26.66 37.56 45.19 44.58 19.02	\$ 9.41 11.09 14.23 17.24 9.67	283% 339 318 259 197	\$60.03 71.47 76.81 59.39 16.06	\$63.86 73.54 73.57 55.60 15.77	94% 97 104 107 102		

* Annuity values are based on the crude, ungraduated, combined male and female termination rates from Table D-2 for the first four years and on the 1964 Commissioners Disability Table rates thereafter.

TABLE D-2D

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES, UNDER PLANS WITH A THREE-MONTH ELIMINATION PERIOD, OF A MONTHLY BENEFIT OF \$1, DISCOUNTED AT 3 PERCENT INTEREST, PAYABLE TO AGE 65, WITH FIRST PAYMENT DUE AT END OF ELIMINATION PERIOD

		ue as of End mination Peri		Value as of End of Twelfth Month of Disablement							
AGE AT Disablement	Based on Table D-2 Rates of Termi- nation*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table D-2 Rates of Termi- nation*	Based on 1974 CDT	Ratio to 1964 CDT					
	Male Only										
25.5. 35.5. 45.5. 55.5. 62.5.	\$26.09 35.18 45.79 45.62 18.80	\$ 9.41 11.09 14.23 17.24 9.67	277% 317 322 265 194	\$64.36 69.07 76.52 59.43 16.01	\$63.86 73.54 73.57 55.60 15.77	101% 94 104 107 102					
	Female Only										
25.5. 35.5. 45.5. 55.5. 62.5.	\$27.19 41.04 44.13 41.96 19.79	\$ 9.41 11.09 14.23 17.24 9.67	288% 370 310 243 205	\$54.16 74.66 77.15 59.30 16.23	\$63.86 73.54 73.57 55.60 15.77	85% 102 105 107 103					

* Annuity values are based on the crude, ungraduated, male or female termination rates from Table D-2 for the first four years and on the 1964 Commissioners Disability Table rates thereafter.

TABLE D-2E--Group Long-Term Disability Insurance Ratios of Actual Claims Terminated by Death or Recovery TO Number of Terminations Expected from the 1964 Commissioners Disability Table*

(Three-Month Elimination Period; Calendar Years of Experience 1962-74)

ALL AGES OF DISABLEMENT COMBINED

DURATION OF DISABLEMENT	YEAR OF DISABLEMENT											
DURATION OF DISABLEMENT	1962-1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	All Years
		Male and Female Combined										
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	97.8 53.8†	53.9% 120.3 108.4 51.5† 34.8† 111.5†	62.3% 119.4 90.0 101.8 21.2† 93.7†	56.1% 102.4 96.7 93.5 112.3 79.8†	59.3% 102.7 92.9 83.2 63.3 83.2	54.9% 84.2 103.1 78.4 49.2 49.1†	50.5% 96.5 88.4 65.9 73.4	99.5 82.9 57.3	89.3 59.5	80.5		51.8% 94.5 86.8 76.3 62.6 79.7
		Male Only										
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year.	53.3% 119.7 94.0 77.1† 55.3† 22.1†	52.5% 140.1 90.5 62.4† 50.9† 86.9†	63.3% 128.1 98.2 93.4† 23.4† 110.0†	56.3% 90.6 104.3 104.6 137.5 71.4†	59.1% 104.2 100.9 102.7 73.8† 98.3†	52.7% 90.8 97.5 85.8 59.3† 68.2†	48.2% 91.1 86.7 60.2 65.5†	52.5% 92.9 85.3 36.8		76.7		50.5% 93.6 86.7 78.7 70.4 82.7
						Femal	e Only		<u> </u>	I		<u>. </u>
1st year (last 9 months) 2d year 3d year 4th year 5th year 6th year	55.7% 77.2† 78.7† 147.2† 48.0† 31.2†	57.0% 71.6† 142.4† 25.7† 0.0† 160.8†	60.3% 102.9 74.1† 117.2† 15.7† 56.9†	55.6% 126.6 78.0† 66.7† 48.8† 98.9†	59.7% 98.5 71.9† 33.7† 39.0† 46.7†	60.2% 66.4 116.7 59.8† 24.1† 0.0†	56.1% 109.9 92.9 81.0 95.8†	55.9% 115.9 76.2 107.1†	90.3 67.6	53.1% 88.6		54.5% 96.6 87.1 70.5 44.3 72.6

* As published by the Health Insurance Association of America, Table B1, Volume 111.

+ involves fewer than ten terminations,