TRANSACTIONS OF SOCIETY OF ACTUARIES 1982 REPORTS

II. GROUP LONG-TERM DISABILITY INSURANCE

This report presents the results of the continuing study of the morbidity experience relative to Group Long-Term Disability Insurance. The reader should be careful in analyzing the results of this study due in part to the elimination of the data of one company from both the analyses of the rates of disablement and termination. An examination of the data file indicated that the incorrect data were due to a problem in reporting claims. As a result of this problem, the claims experience of calendar years 1978 and 1979 was understated in the two prior Group LTD Studies. The Committee decided to exclude the questionable data file until the extent of the data problems had been adequately determined and the appropriate modifications made. The corrections have now been made, and future studies will include the revised claim data.

As in previous reports, the available experience included in this report is predominantly that of insured employer-employee groups located in the United States and is largely for plans that appear not to have been the result of bargaining. Groups that a contributing company considers atypical have not been included. 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 the gross monthly benefit be integrated with some or all of any benefits payable under social security and frequently with other benefits payable as a result of the disability.

The Committee recommends that care be used in the interpretation of the results of this study 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 the rates of disablement or termination. In addition, the experience may not be representative of any particular group or plan.

CONTRIBUTING COMPANIES

The Committee wishes to express its gratitude to the following companies who have contributed experience for this report:

Aetna Life and Casualty Company Bankers Life Company Connecticut General Life Insurance Company Continental Assurance Company Continental Casualty Company

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Equitable Life Assurance Company John Hancock Mutual Life Insurance Company Hartford Life and Accident Insurance Company Metropolitan Life Insurance Company New England Mutual Life Insurance Company New York Life Insurance Company Provident Life and Accident Insurance Company Prudential Insurance Company of America Sun Life Assurance Company of Canada

The results of the study generally reflect the composite experience of variations in company practices, administration, and claim procedures, as well as variations in the experience among the groups involved.

ANALYSIS OF RATES OF DISABLEMENT

In this year's report, the rates of disablement for plans with three-month and six-month elimination periods have changed significantly from last year's report. As previously stated, the reader should be careful in analyzing and comparing these results due to the elimination of the data of one company. The incorrect data caused an understatement in claims for the years 1978 and 1979 in the two prior Group LTD Studies.

As in past reports, a column containing the "number of experience units" appears in most of the tables. In the context of this report, an experience unit represents the experience of a single group for one calendar year. Therefore, whenever an experience cell covers more than one calendar year of experience, a group would be included in the count for the total number of separate calendar years for which the experience of the group was submitted. Consequently, where the number of experience units in a cell is relatively small, and no distinction is made by size, the experience for that cell may be substantially influenced by the experience of just a few groups, and thus may not be representative of all units contained in that cell.

In analyzing the various tables shown in this section of the report, the reader should note that the claim experience shown may be understated somewhat as a result of the lag in the reporting of claims incurred in the latest year of the study. Historically, the reporting lag on plans with a sixmonth elimination period has been about 5-10 percent. Consequently, the tabulars, the number of claims, the rates of disablement, and the actual-to-tabular ratios shown in the various tables may be distorted somewhat for some age and sex cells.

It should be noted that under plans with an offset provision, claims were

reported and included in rates of disablement, even though, the existence of social security or other disability income may have caused no benefit to be payable under the plan.

Experience on Plans with a Six-Month Elimination Period

Table I-1 Rates of Disablement is based on the experience of all groups regardless of size for plans with a six-month elimination period for the latest five-year period, 1976-80. Crude rates of disablement based on the number of lives are shown by sex and age group. In the context of this report, the age group classification has been determined according to "age nearest birth-day" as of the date of disablement. The corresponding experience on non-

TABLE I-1

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 1976-80 ALL EXPERIENCE UNITS COMBINED

Attained Age	Life Years Exposed	Number of Claims	Rate of Disablement per 1.000 Lives
	All Experience: M	ales, Females and S	ex Unknown
Under 40 40-44 45-49 50-54	2,154,087 440,458 427,019 396,023	2,491 1,009 1,620 2,611	1.16 2.29 3.79 6.59
55–59 60–64	396,023 314,773 177,339	3,717 2,708	11.81 15.27
All ages	3,909,699	14,156	3.62
	Mal	e Experience Only	•
Under 40 40-44 45-49 50-54	1,241,264 292,924 284,396 263,103	1,267 591 1,013 1,665	1.02 2.02 3.56 6.33
55–59 60–64	212,873 119,112	2,598	12.20 16.63
All ages	2,413,672	9,115	3.78
_	Fema	le Experience Only	
Under 40 40-44 45-49 50-54 55-59 60-64	797,501 119,973 116,109 109,636 84,254 47,214	1,106 365 525 812 917 613	1.39 3.04 4.52 7.41 10.88 12.98
All ages	1,274,687	4,338	3.40

jumbo groups, defined as groups with fewer than 5,000 lives insured, is displayed in Table I-1A. Experience of the calendar year of issue is excluded from both tables and, therefore, from all subsequent tables that analyze the underlying experience. It should be noted that about 6 percent of the exposure contributed could not be separated by sex. The first part of each of these two tables summarizes the combined experience of the male, female, and sex-unknown exposures. The experience for the exposure which was sex coded is presented in the bottom two sections of each table.

The experience is based largely on a "his own occupation" definition of disability generally during the first two years following disablement. Approximately 3 percent of the experience is based on an "any occupation" definition for the full period of disability.

TABLE I-LA

GROUP LONG-TERM DISABILITY INSURANCE. CRUDE RATES OF DISABLEMENT PER 1,000 LIVES ENDOSCI (Six-Month Elimination Period: Calendar Year of Issue Excluded) Calendar Years of Experience 1976-80 NONJUMBO EXPERIENCE UNITS ONLY

Attained Age	Lite Years Exposed	Number of Claims	Rate of Disablement per 1.000 Lives
	,	ence: Males, Female	N.
	anc	I Sex Unknown	
Under 40	1,386,969	1,600	1.15
40–44	282,112	605	2.14
45-49	272,981	1.057	3.87
50-54	259,972	1.744	6.71
55 59	211,846	2.488	11.74
60-64	126,507	1,949	15.41
All Ages	2,540,387	9,443	3.72
	Male	Experience Only	
Under 40	873,414	922	1.06
40-44	199,255	385	1.93
45-49	191,776	699	3.64
50–54	179,604	1,193	6.64
55–59	145,652	1,816	12.47
6064	87,999	1,456	16.55
All ages	1,677,700	6.471	3.86
	Female	e Experience Only	
Under 40	459,665	604	131
40-44	70,316	195	2.77
45-49	68,592	307	4.48
50–54	68,309	465	6.81
55-59	56,717	553	9.75
6064	32,203	416	12.92
All ages	755,802	2,540	3.36

Table I-2 Rates of Disablement by Calendar Year analyzes the crude rates of disablement shown in Tables I-1 and I-1A, respectively, by the underlying calendar years of experience, for all ages and for combined males, females, and sex-unknown exposures. Some portion of the variation in the overall rates of disablement from year to year is the result of changes in the distributions of the exposed to risk by age groups.

Table I-2 shows that, for plans with a six-month elimination period, accidents accounted for approximately 10 percent of the claims coded for a known cause of disablement.

As mentioned previously, the lag in claim reporting tends to understate the claim experience shown in the various tables containing the most recent calendar year of the study. In particular, if past reporting lag is any indication of the extent of current claim underreporting, then the figures in Table I-2 of claims reported as incurred for the most recent calendar year, 1980, may be understated approximately 5-10 percent.

TABLE 1-2

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 1962-80

			N	MBER OF CLAI	MS	RATE OF	RATIO OF
Calendar Year of Incurral	NUMBER OF Experience Units	Life Years Exposed	Accident	Sickness	Total (Incl. Unknown)	DISABLE MENT PER 1,000 LIVES	Actual Claims to Tabular Claims*
			All Experi	ence Units Con	nbined		
1962-65 1966-70 1971-75	4,273	268,784 1,630,569 2,733,314	37 414 870	522 3,946 9,012	737 5,262 9,918	2.74 3.23 3.63	76% 86 96
1976	2,056 2,191 1,969	719,319 811,181 813,657 741,289 824,253	237 337 277 295 326	2,452 2,545 2,555 2,511 2,609	2,694 2,886 2,834 2,807 2,935	3.75 3.56 3.48 3.79 3.56	102% 97 95 105 100
1976-80	10,485	3,909,699	1,472	12,672	14,156	3.62	100%
			Nonjumbo	Experience Uni	ts Only		
1962-65 1966-70 1971-75	488 4.213 9,123	116,902 1,059,759 1,991,782	8 259 638	185 2,261 6,102	238 3,182 6,772	2.04 3.00 3.40	56% 78 89
1976	2.165	464,321 488.751 513,279 495,576 578,460	160 201 177 180 222	1,672 1,610 1,716 1,647 1,848	1,837 1,814 1,894 1,828 2,070	3.96 3.71 3.69 3.69 3.58	105% 98 99 100 98
1976-80	10,359	2,540,387	940	8,493	9,443	3.72	100%

Table I-2 shows the ratios of actual claims to tabular claims. The tabular claims for each year were obtained by applying the rates of disablement of nonjumbo size groups from Table I-1A by sex category to the actual exposures for each age-sex group (male, female, and sex unknown). The tabulars, therefore, adjust only for age and sex. No attempt is made to adjust for any other factors that might influence the disablement rates, such as size of case, industry, and so on.

Table I-3 Rates of Disablement by Size of Group subdivides the Table I-1 experience for all ages and for male, female, and sex-unknown exposures combined, by the size of the experience unit. Note that experience units containing fewer than 100 lives accounted for 57 percent of the total number of units. This explains the large number of units (about 70 percent of the total) that experienced no claims. This table indicates that the rate of disablement and the actual-to-tabular ratios tend to increase with the size of the group—a phenomenon that is consistent with the results of prior reports.

Table I-3 also includes a dispersion-type analysis of ratios of actual claims to tabular claims. As mentioned previously, the tabulars adjust only for age and sex. However, caution should be used in interpreting the results, since the experience is not adjusted for other characteristics that might have a measurable impact on the rate of disablement. These characteristics include differences among the contributing companies in underwriting and claims administration practices, the extent to which employers use the long-term disability plan as an early retirement vehicle, the proportions of salaried and hourly employees, the extent of employer financial participation, the type of industry, the relationship of the amount of benefit payable under the plan to take-home pay, and so on.

Table I-4 Rates of Disablement by Cause of Disability presents an analysis of the relative rates of disablement by cause of disability. The results are shown for each sex as well as both sexes combined. The number and percentage distribution by the cause of disability of the coded claims is shown for the various age groups. The number of claims in each cell has also been shown to indicate the relative weights of the results.

The experience underlying Tables I-1 and I-1A has also been analyzed by employee class, industry, contributory status, and indirect integration. (Indirect integration means that 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 I-5, I-5A, I-6A, I-6B, I-7, and I-8.

The portion of the Table I-5 Experience by Employee Class under units containing at least 75 percent salaried employees, the majority of whom were not executives (i.e. Code 2), was further analyzed to investigate the

TABLE I-3

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 1976-80 ALL EXPERIENCE UNITS COMBINED

	NUMBER OF			RATE OF	AVERAGE		NUMBER OF	EXPERIENCE	. UNITS BY F	ATIO OF AC	TUAL TO TAB	ULAR CLAIMS	
SIZE OF UNIT	EXPERIENCE UNITS	Lift. Years Exposed	NUMBER OF CLAIMS	DISABLE- MENT PLR 1,000 LEVES	Α/Τ Α/Τ ΚΑΠΟ*	0%	1% 50%	50%- 75%	75%- 100%	100%~ 150%	150% 200%	200%- 500%	500% or More
Under 25 lives	1,662	24,187	169	6.99	173%	1,606	0	0	0	0	0	0	56
25-49	2,024	74,277	229	3.08	73	1,820	5	0	0	0	0	62	137
50-99	2,316	163,769	508	3.10	78	1,907	0	0	0	4	20	270	115
100-249	2,131	329,630	1.204	3.65	96	1,411	1	4	37	146	163	303	66
250-499	1,058	369,707	1,347	3.64	98	423	24	92	106	161	89	144	19
500-999	613	428,458	1,596	3.72	103	148	82	72	65	99	72	69	6
1.000-2.499	405	638,163	2,343	3.67	102	40	64	71	55	96	42	37	0
2,500-4,999		512,196	2,047	4.00	106	6	25	24	26	33	20	15	1
Under 5,000	10,359	2,540,387	9,443	3.72	100%	7,361	201	263	289	539	406	900	400
5,000 or more	126	1,369,312	4,713	3.44	99%	5	20	16	24	35	20	6	0
Total	10,485	3,909,699	14,156	3.62	100%	7,366	221	279	313	574	426	906	400

TABLE 1-4

GROUP LONG-TERM DISABILITY INSURANCE

DISTRIBUTION OF THE NUMBER OF CLAIMS BY DIAGNOSIS

(Six-Month Elimination Period; Calendar Year of Issue Excluded)

ALL EXPERIENCE UNITS COMBINED

ACTIVE LIVES EXPERIENCE ONLY

				м	ALF								Femali	ŀ						To	AL.			
Diagnosis	Under 30	30- 39	40- 44	45- 49	50- 54	55- 59	60- 64	All Ages	Under 30	30- 39	40. 44	49 49	54 54	15 59	60 64	All Ages	Under 30	30– 39	4() - 44	45. 49	50- 54	55- 59	60- 64	Ali Ages
Infective and parasitic diseases:																								
Number	8	8	9	12	20	- 15	- 16	88	7	3	1	ч	ñ	5		.33	15	11	10	21	25	20	14	121
Percent	1	0	1	0	1	0	0	0	1	- 0	0	i	- 0	0	0	0	1	0	0	1	0	0	0	0
Malignant neoplasms (cancer):																								
Number	39	90	87	209	34	492	396	1,627	34	83	70	157	224	237	148	953	73	173	157	.366	538	729	544	2,580
Percent	4	5	6	8	8		8	х	-4	7	×	E E	14	1.7	12	- 11	-4	6	7	10	10	9	9	9
Benign and unspecified neoplasms:			1																					
Number	7	н	12	10	19	2.3	14	96	9	14	10	5	11	- 17	4	70	16	25	22	15	30	-4()	18	166
Percent	1	1	[I	0	0	0	0	0	1	1	1	0	1	I	0	1	1	1	1	0	1	1	0	1
Allergic, endocrine-system.																								
metabolic, and nutritional															i									
diseases:		İ																						
Number	14	.36	27	47	70	101	101	.396	18	10	14	28	28	35	28	161	.32	46	-41	75	- 98	136	129	557
Percent	1	2	2	2	2	2	2	2	2	1	2	2	-	۰,	2	2	2	2	2	2	2	2	2	2
Diseases of the blood and blood-																								
forming organs:									1															
Number	13	17	27	39	52	83	86	317	14	10	18	22	30	46	22	162	27	27	45	61	82	129	108	479
Percent	1	1 1	2	2	1	1	2	2	2	1	2	2	1	2	2	2	2	1	2	2	1	2	2	2
Mental, psychoneurotic, and															5	1]
personality disorders:																								
Number	66	121	74	124	167	202	123	877	85	139	- 76	97	117	74	44	631	151	260	150	221	284	276	166	1.508
Percent	7	7	5	5	4	4	3	4	1 11	12	ų	×		- 4	1	7	×	9	6	6	5	4	3	5
Diseases of the nervous																				1				
sytstem and sense organs:																								1
Number	59	148	114	157	247	341	313	1.379	84	101	74	901	111	126	90	676	143	249	188	247	358	467	403	2.055
Percent	6	9	8	6	6	6	6	7	10	-iji	к	7	6	7	7	8	×	9	8	7	6	6	7	7
Diseases of the circulatory system:																								
Number	38	214	380	827	1,415	2.378	2,109	7,361	34	85	118	208	375	512	384	1,716	72	299	498	1.035	1.790	2,890	2,493	9.077
Percent	4	12	26	33	37	41	44	35	4	7	13	17	21	27	36)	19	+	-10	21	28	32	38	41	30

				м	ALL								Femal	ł:						To	FAL			
Diagnosis	Under 30	30- ,39	40- 44	45- 49	50- 54	55- 59	60- 64	All Ages	Under 30	.30- .39	40- 44	45 49	50- 54	55 - 59	60- 64	All Ages	Under 30	30 - 39	40- 44	45 49	50– 54	55- 59	60- 64	All Ages
Diseases of the respiratory system:																								
Number	- 13	46	-46	135	257	443	394	1.334	24	.39	42	42	66	91	88	392		85	88	177	323	5.34	482	1,726
Percent	1	3	3	5	7	8	8	6	3	3	5	. 3	-4	5	7	4	2	3	4	5	6	7	8	6
Diseases of the digestive system																1						1		
Number	-13	(4)	47	87	- 94	165	122	588	- 31	56	42	45	- 55	55	36	320	-4-4	116	89	132	149	220	158	908
Percent	- 1	3	3	3 1	2	3	3	3	-4	5	5	4	3	3	3	4	2	4	4	4	3	3	3	4
Diseases of the genitourinary system:																								
Number	21	25	27	25	51	67	60	276	2.3		23	21	28	28	15	174	44	61	50	46	79	95	75	450
Percent	2	1	2	1	1	1	1	1	3	3	3	2	2	1	1	2	2	2	2	1	1	1	. i	1
Diseases of the skin and cellular tissue:																ł								
Number	13	19	14	20	21	34	28	149	14	22	9	13	18	23	13	112	27	41	23	33	39	57	41	261
Percent	1	1		1	1	1		1	2	2	ł	1	1	1	1	1	7		1	1		1	1	1
iseases of the bones and organs			·						-	-		, i					-		· ·	1		· ·	•	,
of movement:																		1						
Number	181	357	251	379	532	729	598	3,027	131	240	195	265	373	382	229	1,815	312	597	446	644	905	1.111	827	4,842
Percent	18	21	17	15	14	13	12	14	16	21	22	21	21	20	18	20	17	21	19	17	16	14	14	16
ongenital malformations:																		1						
Number	3	3	1	3	10	- 6	2	28	1	1	2	1	4	1	2	12	4	4	3	4	14	7	4	40
Percent	Ð	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	υ	0	0	0	0	0	0	0
enility and ill-defined conditions:										1														
Number	- 13	49	37	65	- 90	125	97	496	66	64	35	41	78	63	40	387	- 99	113	72	106	168	188	137	883
Percent	3	3	3	3	2	2	2	2	8	6	4	3	4	1	3	4	6	4	3	3	3	2	2	3
ccidents, poisoning, and																								
violence																								
Number .	423	420	203	212	252	247	143	1,900	181	168	100	124	133	120	67	893	604	588	303	336	385	367	210	2.793
Percent	43	24	14	9	7	4	3	ý.	22	15	11	10	8	6	5	10	34	21	13	9	7	5	3	4
indetermined		-																						
Number	42	99	81	141	217	307	236	1.123	53	68	57	74	91	101	60	504	95	167	138	215	308	408	296	1.627
Percent	4	6	6	6	6	5	5	5	7	6	6	6	5	5	5	6	5	6	6	6	6	5	5	5
Total:																								
Number	986	1.723	1.437	2,492	3.828	5.758	4.838	21,062	809	1.1.39	886	1.242	1.747	1,916	1,272	9.011	1,795	2,862	2,323	3,734	5,575	7,674	6.110	30.073
Percent	100	100	100	100	100	100	400	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

TABLE I-4-Continued

TABLE 1-5

GROUP LONG-TERM DISABILITY INSURANCE. ANALYSIS OF TABLES I-1 AND I-1A EXPERIENCE BY EMPLOYEE CLASS (Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1976-80

		Тавіл	-1A Experience-N	IONA MBO UN	is Osta	-	FABLE-1 EXPERIENC	TALL UNIT	\$
Employee Code	EMPLOYEL CLASS	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Cianns to Tabular Clanns?	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 unknown)	466 4,747 2,373 89	102,916 1,305,442 553,026 11,803	280 4.560 2.153 61	72% 93 104 132	473 4,838 2,390 89	171,741 2,270,409 792,682 11,803	430 7,155 3,337 61	71% 88 113 132
	Subtotal (majority salaried)	7,675	1,973,187	7,054	96%	7.790	3,246,635	10,983	95%
6 4 5	At least 50% hourly (exact percentage unknown) 50%-75% hourly At least 75% hourly	29 242 590	17,767 72,931 173,677	72 401 858	111 151 138	29 246 595	17,767 118,064 210,403	72 625 1,386	111 155 167
	Subtotal (majority hourly)	861	264,375	1.331	140%	870	346,234	2,083	161%
9	Indeterminate	1,823	302,825	1,058	97%	1,825	316,830	1,090	96%
	Total	10,359	2,540,387	9,443	100%	10,485	3,909,699	14,156	100%

effect of three variables on disablement rates: (a) the relationship between the long-term disability benefit (before integration with other income sources) and salary at a time of disablement, (b) the plans' integration provision, and (c) the extent to which a disability income is provided under employersponsored plans prior to qualification for long-term disability benefits. The several classifications are somewhat broad. The various parameters may not be mutually exclusive. The respective subanalyses are shown in portions of Table I-5A, separately for nonjumbo and for all experience units combined. It should be noted that the tabulars and the actual-to-tabular ratios are consistent with those in Table I-5 for Employee Class Code 2.

In examining Tables I-5 through I-8, it should be noted that many of the variables analyzed may be interrelated. This is especially true in the analysis by industry (Table I-6) where the results shown in the various cells may be heavily influenced by the relative level of hourly and salaried employees. The portion of the Table I-6 Experience by Industry under units with "the majority salaried" and "the majority hourly" as defined in Table I-5 were, therefore, analyzed further to investigate the effect which employee class has on the disablement rates by industry classification.

The respective subanalyses are shown in Table I-6A, separately for nonjumbo units and for all experience units combined. It should be noted that the tabulars and the actual-to-tabular ratios are consistent with those shown in Tables I-5 and I-6. The actual-to-tabular ratios shown by industry in Tables I-6 and I-6A have been compared separately for nonjumbo units and for all experience units combined. A summary of the comparison of Tables I-6 and I-6A are shown in Table I-6B Industry Experience by Employee Class.

Table I-7 Experience by Contributory Status separates the experience among plans where the employee pays the entire cost, plans where the employer pays the entire cost, and plans where the employee and employer share the cost. Table I-8 Experience by Plan Indirect Integration Provision examines the experience by nonduplication level for plans having an indirect integration provision.

Table IA examines the interrelationships among various parameters whose effect on rates of disablement may not be mutually exclusive. The analysis was based on those nonjumbo units (all employee classes combined) whose plans provide for the direct integration of the long-term disability benefit with either the total primary and family social security benefits or with such social security benefits plus income from other sources. The parameters selected for study were: (a) the disability income provided by the employersponsored, short-term plans during the benefit elimination period; (b) the proportion of salary represented by the long-term disability benefit (before

TABLE I-5A

GROUP LONG-TERM DISABILITY INSURANCE. SUPPLEMENTAL ANALYSIS OF TABLE 1-5 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 1976-80

		NONJI MBO I	JNHS ONES	_		All. Experi	INCE UNITS	
	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of A/T Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of A/T Claims*
I. Relat	ionship between	Long-Term Disat	vility Benefit and	f Salary				
Ratio of gross benefit (before reduction of integration) to salary: Always less than 50% Generally less than 50%	67 22	23,754 4,499	70	66% 43	75	89,662 4,499	233	69%
Subtotal (less than 50%).	89	28,253	75	4.3 64%	97	4,499 94,161	238	43 68%
50% (exactly or approximately).	983	404,217	1,277	81%	1.022	749,872	2,202	76%
Always more than 50%, exact % unknown Generally more than 50%, exact % unknown More than 50%, but less than or equal to 60% More than 60%, but less than or equal to 70% More than 70%	45 132 2.781 600 17	$ \begin{array}{r} 17,233\\ 26,387\\ 662,095\\ 149,132\\ 2,885 \end{array} $	88 200 2.254 531 8	112 180 94 100 71	45 134 2,803 615 17	17.233 39.862 927.150 370,573 2,885	88 296 2,927 1,237 8	112 174 91 106 71
Subtotal (greater than 50%)	3,575	857,732	3,081	101%	3,614	1,357,703	4,892	94%
Other, including not determinable	100	15,240	127	190%	105	68,673	159	54%
Total salaried, nonexecutive	4,747	1,305,442	4,560	93%	4,838	2,270,409	7,155	88%

		NONJUMBO 1	UNITS ONLY			ALL EXPLRI	NCL UNITS	
	Number of	Life	Number	Ratio of	Number of	Life	Number	Ratio of
	Experience	Years	of	A/T	Experience	Years	of	A/T
	Units	Exposed	Claims	Claims*	Units	Exposed	Claims	Claims*
	II. Analysis	by Plan Integration	on Provision					
Other income sources included in plan integration provision: Social security primary benefit only or in combination with income from other sources.	574	189,278	707	98	585	295,333	784	72
Social security primary and family benefit only or in combination with income from other sources	2,687	692,955	2,149	81	2,706	809,545	2,524	81
Other integration bases	225	68,267	290	131	232	141,404	400	77
Nonintegrated	1,261	354,942	1,414	109	1,315	1,024,127	3,447	100
Total salaried, nonexecutive	4,747	1,305,442	4,560	93	4,838	2,270,409	7.155	88
III. Extent to	Which a Disabili	ty Income is Prov	ided During Elir	nination Period				
Disability income benefit provided during elimination period: Full salary	93	36,415	131	96	107	232,638	610	92
Less than full salary but generally more than 50%	763	200,950	757	98	803	627,101	1,771	84
Generally less than 50% of salary	171	25,227	137	128	176	56,603	371	124
None	497	111,330	400	94	497	111,330	400	94
Noncodable or unknown	3,223	931,520	3,135	91	3,255	1,242,737	4,003	86
Total salaried, nonexecutive	4,747	1,305,442	4,560	93	4,838	2.270,409	7,155	88

TABLE I-6

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES I-1 AND I-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 1976-80

			NONJUMBO I	INUS ONLY			All Experi	ENCE UNITS	
Industry Code(s)	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*
01-09	Agriculture, forestry, and fisheries	52	5,710	14	65%	54	44,902	46	25%
10-14	Mining	261	101,177	601	153	261	101,177	601	153
15-17	Contract construction	260	73,428	305	104	260	73,428	305	104
19–27	Food, tobacco, textile and wood products	1,198	327,999	1,521	118	1.213	450,474	2,425	131
28–32	Chemical, petroleum, rubber, leather and stone products	772	219,902	840	103	789	380,032	1,371	97
33-37	Metal, machinery, and transportation equipment	2,050	497.080	1,744	91	2,078	732,976	2,279	82
38-39	Instruments and miscellaneous manufacturing	315	69,768	320	113	315	69,768	320	113
4049	Transportation, communication, electric, gas, and sanitary services	515	155,996	668	113	529	308,446	1,204	106
50–59	Wholesale and retail trade	1,628	318,310	1,243	108	1.628	318,310	1.243	108
6067	Finance, insurance, and real estate	1,370	407.104	1,149	84	1,388	777,915	2.075	90
70–89	Services	1,799	322,321	906	78	1,831	610.679	2,155	95
91–97	Public administration	100	39,386	130	92	100	39.386	130	92
	All other classifiable	9	827	0	0	9	827	0	Ō
99	Nonclassifiable	30	1,379	2	30	30	1,379	2	30
	Total	10,359	2,540,387	9,443	100%	10,485	3,909,699	14,156	100%

TABLE 1-6A

GROUP LONG-TERM DISABILITY INSURANCE SUPPLEMENTAL ANALYSIS OF TABLE I-6 BY INDUSTRY (Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males; Females, and Sex Unknown Combined) Calendar Years of Experience 1976-80 L GROUPS CONTAINING A MAJORITY OF HOURLY EMPLOYEES

			NONJUMBO	JNETS ONLY			ALL EXPERI	ence Units	
Industry Code(s)	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*
01-09	Agriculture, forestry, and fisheries	1	32	0	0%	1	32	0	0%
10-14	Mining	23	23,713	166	168	23	23,713	166	168
15-17	Contract construction	38	6,105	39	185	38	6,105	39	185
		155	40,661	326	185	160	77,387	854	223
28-32	Chemical, petroleum, rubber, leather and stone	62	22,150	110	171	62	22,150	110	171
33–37 38–39	products Metal, machinery, and transportation equipment Instruments and miscellaneous manufacturing Transportation, communication, electric, gas, and	180 11 49	49,422 886 19,272	209 1 101	134 34 134	180 11 53	49,422 886 64,405	209 1 325	134 34 153
50-59	sanitary services Wholesale and retail trade	182	56,096	213	106	182	56,096	213	106
		53	21.805	59	99	53	21,805	59	99
70-89		86	20,698	84	102	86	20,698	84	102
91-97	Public administration	21	3,535	23	157	21	3,535	23	157
J1 - J1	All other classifiable	0	0	0	0	0	0	0	0
99	Nonclassifiable	0	0	0	0	0	0	0	0
	Total	861	264,375	1,331	140%	870	346,234	2,083	161%

TABLE I-6A Continued

			NONJUMBO UP	sus Oran			ALE EXPERIES	CE UNITS	
INDUSTRY CODE(S)	INDUSTRY	Number of Experience Units	Late Years Exposed	Number of Claims	Ratio of Actual Chimis to Fabular Chimis ⁴	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
0109	Agriculture, forestry, and fisheries	41	5.005	12	62%	43	44,197	44	24%
10-14	Mining	234	77,359	435	149	234	77,359	435	149
15-17	Contract construction	205	65,945	171	64	205	65,945	171	64
19-27	Food, tobacco, textile and wood products	892	262,192	1,089	107	902	347,941	1,465	108
28-32	Chemical, petroleum, rubber, leather and stone products	616	183,433	677	98	633	343,563	1.208	93
33-37	Metal, machinery, and transportation equipment	1,652	389,010	1.345	86	1,680	624,906	1,880	78
38-39	Instruments and miscellaneous manufacturing	222	61,803	302	121	222	61,803	302	121
40–49		380	120,143	509	111	390	227,460	821	95
50-59	Wholesale and retail trade	1.211	231,768	931	113	1,211	231,768	931	113
60-67	Finance, insurance, and real estate	948	291,523	779	78	964	648,329	1,673	89
70-89	Services	1.186	249,769	202	78	1,218	538,127	1.951	97
9197	Public administration	69	33.794	102	85	69	33,794	102	85
	All other classifiable	5	529	0	0	5	529	0	0
99	Nonclassifiable	14	914	0	0	14	914	0	0
	Total	7,675	1,973,187	7,054	95%	7,790	3,246,635	10,983	93%

IL GROUPS CONTAINING A MAJORITY OF SALARIED EMPLOYEES.

TABLE I-6B

GROUP LONG-TERM DISABILITY INSURANCE COMPARISON OF TABLES 1-6 AND I-6A EXPERIENCE BY EMPLOYEE CLASS RATIO OF ACTUAL CLAIMS TO TABULAR CLAIMS* (Six-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1976-80

		TABLE I	A EXPERIENCE	Ioniumbo Uni	ts Only		TABLE 1 EXPERIEN	ce—All Unit	5
INDUSTRY CODE(S)	INDUSTRY	All	Majority Salaried	Majority Hourly	Indetermi- nate	All	Majority Salaried	Majority Hourly	Indetermi- nate
0109	Agriculture, forestry, and fisheries	65%	62%	0%	97%	25%	24%	0%	97%
10-14	Mining	153	149	168	0	153	149	168	0
15-17	Contract construction	104	64	185	1.388	104	64	185	1,388
19-27	Food, tobacco, textile and wood products	118	107	185	107	131	108	223	107
28-32	Chemical, petroleum, rubber, leather and stone products	103	98	171	96	97	93	171	96
33-37	Metal, machinery, and transportation equipment	91	86	134	97	82	78	134	97
38-39	Instruments and miscellaneous manufacturing	113	121	34	57	113	121	34	57
40–49	Transportation, communication, electric, gas, and sanitary services	113	111	134	102	106	95	153	102
50-59	Wholesale and retail trade	108	113	106	78	108	113	106	78
60-67	Finance, insurance, and real estate	84	78	99	- 98	90	89	99	95
70-89	Services	78	78	102	63	95	97	102	63
91-97	Public administration	92	85	157	70	92	85	157	70
	All other classifiable	0	0	0	0	0	0	0	0
99	Nonclassifiable	30	0	0	83	30	0	0	83
	Total .	100%	95%	140%	97%	100%	93%	161%	96%

TABLE 1-7

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES I-1 AND I-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 1976-80

	TABLE I-	A EXPERIENCE - NO	NA MBO UNITS	ONLY	TABLE I-1 EXPERIENCE— ALL UNITS			
	Number of Experience Units	Lite 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 Contributory, employer, and employee	573 5,949	190.317 1.143,455	852 4,104	112% 100	594 5.985	463,925 1,610,585	1,594 5,011	99% 91
share cost	3,694 143	1,125,261 81,354	4.211 276	99 85	3.763 143	1,753,835 81,354	7.275 276	108 85
Total	10,359	2,540,387	9,443	100%	10.485	3,909,699	14,156	100%

TABLE I-8

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF TABLES I-1 AND I-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 1976-80

	TABLE 1	-IA Experience-	NONJUMBO UNI	es One y		TABLE I-I EXPERIENC	e-Alt. 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*
No indirect integration Indirect integration—Nonduplication level:	7,131	1,634,408	5,637	93%	7,174	2,093,738	7,116	91%
Less than 50%	15	13,895	31	53	15	13,895	31	53
50-59%	326	154,919	683	115	345	363,311	1,238	105
60-69%	1,022	264,938	1,204	124	1,062	651,140	2,440	98
70–79%	1,703	406,659	1,669	109	1,723	693,314	2,950	124
80-89%	111	39,318	135	105	115	68,051	297	132
Greater than 89%	24	9,861	34	104	24	9,861	34	104
Integrated but noncodable	27	16,389	50	116	27	16,389	50	116
Total.	10,359	2,540,387	9,443	100%	10,485	3,909,699	14,156	100%

TABLE I-A—EXPERIENCE UNDER PLANS WHERE LTD BUSEET IS DIRECTLS INTEGRATED WITH SOCIAL SECURITY PRIMARY AND FAMILY BENEFITS ONLY OR IN COMBINATION WITH OTHER INCOME SOURCES (Six-Month Elimination Period: Calendar Year of Issue Excluded: All Ages, Males, Females, and Sex Unknown Combined) Calendar Year of Issue Excluded: All Ages, Males, Females, and Sex Unknown Combined)

Indirect Integration Classification	Relationship between UTD Benefit and Salary	Relationship between Disability Income Provided during the Elimination Period and Salary	Number of Experiment Units	Life Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
Nonduplication level less than 60%	50% or less	50% or less Greater than 50%	38 39	10,739 14,299	30 64	89% 110
		Subtotal	77	25,038	94	102%
	Greater than 50%	50% or less Greater than 50%	40 44	19,805 10,419	124 59	135% 131
		Subtotal	93	30,224	183	133%
	Subtotal		17(1	55,262	277	121%
fonduplication level greater than or equal to 60%	50% or less	50% or less Greater than 50%	56 14	14,838 1,794	148 5	246% 80
		Subtotal	70	16,632	153	231%
	Greater than 50%	50% or less Greater than 50%	239 329	55,437 81,321	264 237	120% 81
		Subtotal	568	136.758	501	97%
	Subtotal		6.38	153,390	654	113%
None	50% or less	50% or less Greater than 50%	1.013	326,847 11,370	971 35	77% 97
		Subtotal	1,049	338,217	1,006	77%
	Greater than 50%	50% or less Greater than 50%	4.861 127	914,478 48,894	3,247 184	95% 101
		Subtotal	4,988	963.372	3,431	96%
	Subtotal		6,037	1.301,589	4.437	91%
Total			6.845	1,510,241	5,368	94%

NONJUMBO - ALL EMPLOYEE CLASSES

integration); and (c) the point at which the long-term disability benefit is reduced, if at all, when total income for all sources exceeds a certain percentage of salary (i.e., the nonduplication level), or otherwise.

Experience on Plans with Three-Month and Twelve-Month Elimination Periods

Tables II-1 and III-1 Rates of Disablement for the most recent five-year period are similar to Table I-1 but are based on the experience of plans with a three-month and twelve-month elimination period, respectively. (The "II" series is for three-month elimination periods, and the "III" series of tables

TABLE II-1

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 1976-80

	AFERIENCE UNITS C								
Attained Age	Life Years Exposed	Number of Claims	Rate of Dis- ablement per 1.000 Lives						
	All Experi	ence: Males, Fem	ales.						
	and	Sex Unknown							
Under 40	552,098	1,153	2.09						
40-44	103,139	390	3.78						
45-49	92,824	584	6.29						
50–54	83,973	722	8.60						
5559	66,678	970	14.55						
60–64	40,471	805	19.89						
All ages	939,183	4,624	4.92						
	Male	Male Experience Only							
Under 40	322,763	550	1.70						
40-44	66,798	228	3.41						
45-49	59,118	340	5.75						
50–54	52,954	442	8.35						
55–59	41,923	646	15.41						
60–64	26,336	560	21.26						
All ages	569,892	2,766	4.85						
	Femal	e Experience Only							
Under 40	199,496	565	2.83						
40-44	30,154	146	4.84						
45-49	27,918	214	7.67						
50–54	25,588	243	9.50						
55-59	20,896	278	13.30						
6064	11,853	209	17.63						
All ages	315,905	1,655	5.24						

ALL EXPERIENCE UNITS COMBINED

is for twelve-month elimination.) It should be noted that the number of claims underlying the disablement rate for some of the sex-age cells shown in these tables is relatively small.

As on plans with a six-month elimination period, the experience on plans with three-month and twelve-month elimination periods are based largely on a "his own occupation" definition of disability generally during the first two years following disablement. One percent of the experience on plans with a three-month elimination period and about 4 percent of the experience on plans with a twelve-month elimination period is based on an "any occupation" definition for the full period of disability.

The reader is reminded that claims were reported and included in the rates of disablement, even though, because of the existence of social security or

TABLE III-1

	TADLE III-		
CRU P (Twelve-M Calenda	DIG-TERM DISABI DE RATES OF DIS. ER 1,000 LIVES E. Ionth Elimination Year of Issue Exc ar Years of Experi EXPERIENCE UNITS	ABLEMENT XPOSED Period: Calend luded) ence 1976-80	
Attained Age	Life Years Exposed	Number of Claims	Rate of Dis- ablement per 1,000 Lives
	All Expe	rience: Males, Fem	ales,
		nd Sex Unknown	
Under 40	227,169	235	1.03
40-44	44,584	82	1.84
45-49	47,314	142	3.00
50-54	48,847	282	5.77
55-59	39,610	369	9.32
60-64	19.773	203	10.27
All ages	427,297	1,313	3.07
-	Ma	le Experience Only	
Under 40	174,733	161	0.92
40-44	33,675	48	1.43
45-49	35,376	99	2.80
5054	36,756	188	5.11
55–59	29,205	272	9.31
60–64	15,085	172	11.40
All ages	324,830	940	2.89
	Fem	ale Experience Only	
Under 40	43,578	65	1.49
40-44	8,901	31	3.48
4549	9,657	35	3.62
50–54	9,768	83	8.50
55-59	8,408	83	9.87
6064	3,518	25	7.11
All ages	83,830	322	3.84

other disability income, no benefit may have been payable under plans with an offset provision.

Tables II-2 and III-2 Rates of Disablement by Calendar Year analyze the crude rates of disablement shown in Tables II-1 and III-1 by the underlying calendar year of experience, respectively, for all ages and for males, females, and sex-unknown exposures combined. Some portion of the variation in the overall rates of disablement from year to year is the result of changes in the distributions of the exposed to risk by age groups. These tables further show that accidents account for a small portion of the claims coded for a known cause of disablement—only about 14 percent on plans with a three-month elimination period and about 10 percent on plans with a twelve-month elimination period for calendar years 1962-80.

As on plans with a six-month elimination period, the reader is reminded that the claim experience shown in the tables presented in this portion of the report may tend to be understated somewhat due to the lag in claim reporting.

Tables II-2 and III-2 also show the ratios of actual claims to tabular claims. The tabular claims for each year were obtained by applying the rates of disablement of all size groups from Tables II-1 and III-1, respectively, by sex category to the actual exposures for each age-sex group (males, females, and sex unknown). These tabulars, therefore, adjust only for age and sex. No adjustments are made for any other factors that might influence the ratio of disablement.

Tables II-3 and III-3 analysis by Size of Experience Unit subdivide the experience shown in Tables II-1 and III-1, respectively, for all ages and for males, females, and sex-unknown exposures combined by size of the experience unit. Experience units containing fewer than 100 lives accounted for almost 75 percent of the total number of units on plans with a three-month elimination period and 41 percent on plans with a twelve-month elimination period. This explains the large number of units which experienced no claims. These tables show that the rates of disablement and the actual-to-tabular ratios tend to increase with the size of the group—a phenomenon that is consistent with the results of prior reports.

Tables II-3 and III-3 also include a dispersion-type analysis of ratios of actual claims to tabular claims. As in Tables II-2 and III-2, these tabulars adjust only for age and sex. Because the experience is not adjusted for other characteristics that might have a measurable impact on the rate of disablement, caution should be used by the reader in interpreting the results.

To illustrate the variance among the study's contributors, the respective experience shown in Table I-1A, Table II-1, and Table III-1 has been examined by contributing company. The results, along with the relative exposure, are displayed in Exhibit I in the form of actual-to-tabular ratios. In

TABLE II-2

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF RATES OF DISABLEMENT BY CALENDAR YEAR OF INCURRAL (Three-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1962-80 ALL EXPERIENCE UNITS COMBINED

CALLNDAR YEAR OP INCURRAL NUMBER OF EXPERIENCE UNITS LIFE YEARS EXPOSED Accident 1962-65 238 18.658 10 1966-70 2.285 342.194 239 1971-75 7,266 775.133 616 1976 1.337 190.714 113 1978 1.581 192.988 120 1979 1.381 174.982 109 1980 1.627 21.381 137	N	UMBER OF CL	AIMS	RATEOF	RATIO OF		
	EXPERIENCE	YEARS	Accident	Sickness	Total (Incl. Unknown)	DISABLE MENT PER 1,000 LIVES	ACTUAL CLAIMS TO TABLUAR CLAIMS
1966-70	2,285	342,194	239	62 1,416 3,460	73 1.678 4.084	3.91 4.90 5.27	80% 100 113
1977 1978	1.337 1.581	190,714 192,988	113 120	824 822 760 784 835	934 936 881 901 972	5.67 4.91 4.57 5.15 4.50	116% 101 90 105 92
1976-80	7,255	939.183	589	4,025	4,624	4.92	100%

* Tabular claims were calculated by applying to the actual age-sex-group exposures the crude rates of disablement shown in Table II-1.

TABLE III-2

GROUP LONG-TERM DISABILITY INSURANCE ANALYSIS OF RATES OF DISABLEMENT BY CALENDAR YEAR OF INCURRAL (Twelve-Month Elimination Period; Calendar Year of Issue Excluded; All Ages, Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1962–80 ALL EXPERIENCE UNITS COMBINED

			Ni	MBER OF CLA	IMS	RATEOF	RATIO OF
Calendar Year of Incurrai	NUMBER OF EXPERIENCE UNITS	Lift Years Exposed	Accident	Sickness	Total (Incl. Unknown)	DISABLE MENT PER 1,000 LIVES	ACTUAL CLAIMS TO TABULAR CLAIMS*
1962–65	33 223 408	11,236 105,503 270,735	0 19 66	28 163 676	30 221 744	2.67 2.09 2.75	91% 66 94
1976 1977 1978 1978 1979	123 128 135 136 145	66,789 72,540 99,145 98,057 90,766	19 19 34 44 20	188 228 269 232 260	207 247 303 276 280	3.10 3.41 3.06 2.81 3.08	102% 111 100 92 101
197680	667	427,297	136	1,177	1,313	3.07	100%

TABLE II-3

GROUP LONG-TERM DISABILITY INSURANCE RATES OF DISABLEMENT AND RATIOS OF ACTUAL CLAIMS TO TABULAR CLAIMS BY SIZE OF EXPERIENCE UNIT EXPOSED (Three-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1976-80 ALL EXPERIENCE UNITS COMBINED

	NUMBER OF		[RATE OF	Average	Ni	MBER OF EXP	RIENCE UNI	IS BY RATI	о об Астиа	а. то Тави	AR CLAIMS	*
Size of Unit	NUMBER OF EXPERIENCE UNITS	LIFE YEARS Exposed	NUMBER OF CLAIMS	DISABLE MENT PER 1,000 LIVES	A/T RATIO*	0%	1% 50%	50%- 75%	754 - 100%	100% 150%	150%- 200%	200%- 500%	500% or More
Under 25 lives	1,600	23,883	109	4.56	80	1,502	0	0	0	0	0	5	93
25–49	2,014	71,994	314	4.36	81	1.742	0	0	0	0	1	116	155
50–99	1,827	126,514	545	4.31	85	1,429	0	0	2	7	44	269	76
100–249	1.118	166,710	729	4.37	90	649	1	10	34	110	113	176	25
250-499	337	119,834	597	4.98	102	97	18	50	40	51	36	40	5
500-999	215	144,063	734	5.09	108	- 34	28	- 28	19	48	24	32	2
1.000-2.499	118	175,770	987	5.62	115	12	13	15	19	24	17	18	0
2,500-4,999	18	59,363	257	4.33	110	1	5	2	2	3	4	1	0
Under 5,000	7,247	888,131	4.272	4.81	99	5,466	65	105	116	243	239	657	356
5,000 or more	8	51,052	352	6.89	119	0	0	2	3	1	1	1	0
Total	7,255	939,183	4,624	4.92	100	5,466	65	107	119	244	240	658	356

TABLE III-3

GROUP LONG-TERM DISABILITY INSURANCE. RATES OF DISABLEMENT AND RATIOS OF ACTUAL CLAIMS TO TABULAR CLAIMS BY S1/1 OF EXPERIENCE UNIT EXPOSED (Twelve-Month Elimination Period; Calendar Year of Issue Excluded; All Ages; Males, Females, and Sex Unknown Combined) Calendar Years of Experience 1976-80 ALL EXPERIENCE UNITS COMBINED

	NUMBER OF			RATEOF	Average	N	смы в он Ех	perience U	NITS OF RAT	10 ВУ АСТІ	AL TO TAB	UAR CLAIMS	*
Size of Unit	EXPERIENCE UNITS	Life Years Exposed	NUMBER OF CLAIMS	DISABLE- MENT PER 1.000 LIVES	A/T Ratio*	03	114 5014	50*4- 75%	75%	100% 150%	150%~ 200%	200% 500%	500% or More
Under 25 lives	55	627	2	3.19	91	53	()	0	0	0	0	0	2
25-49	94	3,394	10	2.95	77	85	0	0	0	0	0	1	8
50-99	122	8,744	17	1.94	60	106	0	0	0	0	0	10	6
100–249	162	26,771	67	2.50	72	113	0	0	1	13	8	26	1
250-499	83	30,378	93	3.06	91	- 33	()	8	10	13	6	13	0
500-999	64	46,326	141	3.04	92	13	7	9	8	16	4	7	0
1,000-2,499	47	76,028	277	3.64	106	4	3	6	6	16	6	6	0
2,500-4,999	20	73,837	169	2.29	84	2	8	2	0	3	4		0
Under 5,000	647	266,105	776	2.92	91	409	18	25	25	61	28	64	17
5,000 or more	20	161,192	537	3.33	118	I	0	2	I	8	6	2	0
Total	667	427.297	1,313	3.07	100	410	18	27	26	69	34	66	17

GROUP LONG-TERM DISABILITY

EXHIBIT 1

0	TABLE	I-1A	TABL	E 11-1	Таві	e III-1
Contributing Company	% of Total Exposure	Ratio A/T	% of Total Exposure	Ratio A/T	% of Total Exposure	Ratio A/T
	8%	105%	2%	63%	8%	117%
I	2	74	2	45	3	14
II	13	124	33	108	24	117
V	2	121	8	107	1 1	35
V	2	63	4	94	1	15
/I	1	99	5	104	0	122
/11	9	111	12	111	4	107
/111	0	0	0	0	0	0
X	46	97	0	0	52	99
κ	0	0	0	0	0	0
KI	12	80	27	80	3	38
KII	2	118	2	263	2	133
XIII	1	96	4	104	1	119
All	100%	100%	100%	100%	100%	100%

ANALYSIS OF THE EXPERIENCE OF TABLE I-1A (SIX-MONTH, NONJUMBO), TABLE II-1 (THREE MONTH, ALL EXPERIENCE), AND TABLE III-1 (TWELVE-MONTH, ALL EXPERIENCE) BY CONTRIBUTING COMPANY

comparing the differences between the companies, one should be reminded of the various caveats noted throughout this paper.

ANALYSIS OF RATES OF TERMINATION

Experience on Plans with a Six-Month Elimination Period

As previously stated, the reader should be careful in comparing the results of this study to previous studies due to the elimination of the data of one company. Even though the disablement experience was understated, the rates of termination were not directly affected by the data problems. However, the Committee decided to exclude the entire questionable data file from further analyses until the extent of the problems could be determined and the appropriate corrections made.

Table A-1 shows, for plans with a six-month elimination period, the crude rates of termination from death or recovery based on number of lives, by sex and by age groups, for the period 1962-1980. Because of the small number of terminations at the later durations, the experience has been truncated at the end of eight 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 61,077 claims exposed to termination, of which 14,156 and 15,917 originated from the 1976-80 and the 1962-75 portions, respectively, of the active lives experience (all experience units combined), with the remaining 31,004 claims from experience units that were not included in the

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study of rates of disablement. The Committee conducted a subanalysis of the termination rates of only the 30,073 claims that were also included in the rates of disablement portion of the study. The rates of termination for these claims were found to be generally 5-15 percent higher than those shown in Table A-1 for the combined experience.

Table A-2 displays the actual number of claims that terminated by death or recovery, while Table A-3 presents the ratios of the actual number of terminations to the number of terminations that would have been produced by application of termination rates from the 1964 Commissioners Disability Table (CDT) to the Table A-1 exposures. The low first-year ratios shown in Table A-3 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 CDT.

Table A-4 further analyzes the claim termination experience by examining, by claim incurral year during the period 1962-80, the ratio (for all ages combined) of the actual number of terminations to the number of terminations that would have been produced by application of the termination rates from the 1964 CDT to the Table A-1 exposures associated with the claims incurred.

Table A-5 illustrates the value 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 is the Table A-1 crude termination rates for the first six years, regardless of the actual number of terminations in each duration-age cell, and the 1964 CDT rates thereafter. The other basis is the termination rates from the 1964 CDT throughout.

Table A-6 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 A-5. There were 42,950 male and 18,127 female claims in this analysis. As was done in Table A-5, illustrative values are shown on two alternate bases. In making any comparisons by sex, however, the reader is reminded that the 1964 CDT is a unisex table.

Tables AA-1, AA-2, AA-3, AA-4, and AA-5 also analyze the experience of terminations for plans with a six-month elimination period and are similar in form and content to Tables A-1, A-2, A-3, A-5, and A-6, respectively, except that the observation period has been restricted to the most current five years of experience, namely, 1976-80. As in Table A-1, the claim experience shown has been truncated at the end of eight years.

To allow for the analysis of trends in claim termination experience, Table AAA has been developed. This table traces the annuity values based on crude termination rates over various restricted observation periods for the

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 1962-80)

	Age at Disablement							
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	5059	60-64		
			Male and Ferr	ale Combined				
7th month	62.8	44.1	50.8	36.0	23.6	17.5		
8th month	70.7	51.0	58.0	39.2	24.0	17.0		
9th month	67.1	50.3	56.2	35.9	22.6	16.3		
10th month.	60.2	43.7	49.4	31.5	20.3	13.9		
11th month.	54.4	39.4	44.5	28.0	18.7	11.8		
12 month	55.6	41.1	46.0	28.1	17.8	13.0		
1st year (last 6 months)	318.1	241.1	268.7	183.0	120.5	86.3		
13th month.	51.3	39.4	43.4	26.0	16.6	11.3		
14th month	45.9	34.3	38.1	22.0	14.8	9.5		
15th month.	44.8	29.5	34.5	19.9	12.7	10.5		
16th month.	35.6	27.5	30.1	18.0	11.0	9.9		
17th month	30.1	27.4	28.2	17.2	9.8	8.4		
18th month	29.2	23.8	25.5	16.4	11.1	8.6		
19th month	30.8	19.7	23.2	12.8	10.8	8.8		
20th month	30.6	15.4	20.2	11.3	8.4	9.2		
21st month	26.5	15.6	19.0	11.7	8.4	8.2		
22d month	21.2	19.6	20.1	10.7	7.8	6.4		
23d month	22.7	20.7	21.3	10.9	7.6	6.8		
24th month	32.9	21.0	24.6	12.8	8.0	7.2		
2d year	335.8	257.5	283.3	174.2	119.8	99.8		
3d year	255.0	159.0	187.4	108.0	76.5	71.3		
4th year	133.6	86.9	99.3	60.3	57.1	57.9		
5th year	80.5	62.0	66.7	47.0	53.1	43.6		
6th year	74.1	53.5	58.4	41.6	55.0	50.6		
7th year	71.9	59.3	62.3	42.1	54.0	29.9		
8th year	18.6*	31.9	28.9	43.7	48.7	27.2*		
			Male	Only				
1st year (last 6 months)	313.8	241.7	266.7	177.0	118.2	83.8		
2d year	337.6	262.6	286.6	162.2	117.4	99.7		
3d year	256.2	163.4	190.1	105.3	76.2	71.4		
4th year	153.4	101.1	114.7	61.9	61.0	63.3		
5th year	66.5	63.1	63.9	49.4	57.4	42.2		
6th year	77.7	43.2	51.5	44.4	61.7	48.5		
7th year	79.9 [†]	72.1	74.1	45.1	58.5	31.6*		
8th year	14.4*	33.5*	29 .0 ⁺	51.6	51.0	23.8*		
			Female	e Only				
1st year (last 6 months)	323.6	240.1	271.5	193.9	126.9	95.7		
2d year	333.0	249.7	278.1	196.6	126.5	100.1		
3d year	253.4	152.0	183.2	113.2	77.2	70.7		
4th year	104.8	64.8	75.8	56.8	45.6	35.4		
5th year	100.8	60.3	70.8	42.0	40.4	49.0		
6th year	68.0^{+}	69.3	69.0	35.7	34.5	68.3*		
7th year	59.1*	39.4*	44.2	35.6	40.3	15.2*		
8th year	24.8*	30.0 ⁺	28.9 [†]	26.1	41.3	54.8*		

* Involves fewer than five terminations.
† Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE. NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Six-Month Elimination Period; Calendar Years of Experience 1962-80)

			AGE AT DISA	SEE MENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	5059	60-64
		~	late and Femai	2 Combined		
ist year (last 6 months)	949	1.294	2,243	2.207	3,145	1.001
2d year	511	799	- 1,310	1.382	2,254	781
3d year	202	301	503	609	1,118	355
4th year	63	113	176	261	661	149
5th year	25	60	85	161	479	49
6th year	17	38	55	110	372	16
7th year	12	31	43	85	234	7
8th year	2	13	15	72	136	5
Γ			Male O	nly		
1st year (last 6 months)	530	780	1.310	1,380	2.254	771
2d year	303	489	792	832	1,629	619
3d year	116	189	305	401	825	286
4th year	44	80	124	180	529	129
5th year	12	37	49	115	388	38
6th year	11	18	29	. 79	316	13
7th year	8	24	32	63	189	7
8th year	1	8	9	58	107	4
			Female (Duly		
1st year (last 6 months)	419	514	933	827	891	230
2d year	208	310	518	550	625	162
3d year	86	112	198	208	293	69
4th year	19	33	52	81	132	20
5th year	13	23	36	46	91	11
6th year	6	20	26	31	56	3
7th year	4	7	11	22	45	0
8th year	1	5	6	14	29	1

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 1962-80) _____

	ALL AGES			AGE AT DIS	ABLEMENT			
DURATION OF DISABLEMENT	OF DIS- ABLEMENT COMBINED	Under 30	30-39	Under 40	4049	50–59	6064	
			Male a	nd Female Co	mbined			
lst year (last 6 months)	35.9%	58.9%	46.6%	51.1%	39.4%	31.7%	25.3%	
2d year	76.0	108.0	93.3	98.6	74.3	68.6	72.6	
3d year	64.3	110.5	80.8	90.8	65.6	57.1	59.2	
4th year	54.4	76.9	61.2	66.0	50.9	53.4	54.1	
5th year	56.6	59.8	58.1	58.8	52.1	58.8	44.1	
6th year	64.1	68.0	62.8	64.3	55.6	67.8	54.2	
7th year	66.9	77.2	80.7	79.9	61.2	69.3	32.9	
8th year	60.4	22.3 [†]	47.5	40.6	65.9	63.4	29.6 [†]	
		Male Only						
1st year (last 6 months)	34.3%	58.1%	46.7%	50.8%	38.1%	31.1%	24.5%	
2d year	73.5	108.6	95.1	99.8	69.2	67.2	72.5	
3d year	63.2	111.0	83.0	92.3	64.0	56.9	59.3	
4th year	58.2	88.4	71.2	76.4	52.3	57.0	59.1	
5th year	59.7	49.4	59.2	56.4	54.8	63.5	42.7	
6th year	69.7	71.3	50.7	56.7	59.4	76.1	51.9	
7th year	72.6	85.8 ⁺	98.3	94.9	65.5	75.1	34.8 [†]	
8th year	65.1	17.3*	49.7 [†]	40.7 ⁺	77.9	66.5	25.8 [†]	
				Female Only				
1st year (last 6 months)	39.4%	59.9%	46.4%	51.6%	41.8%	33.4%	28.0%	
2d year	81.7	107.1	90.4	96.7	83.9	72.4	72.8	
3d year	67.0	109.8	77.2	88.6	68.8	57.6	58.7	
4th year	44.7	60.4	45.6	50.3	48.0	42.6	33.1	
5th year	48.6	74.9	56.5	62.3	46.6	44.8	49.5	
6th year	49.2	62.4 ⁺	81.3	75.9	47.8	42.5	73.1	
7th year	51.9	63.4 [†]	53.6 [†]	56.6	51.8	51.7	16.7	
8th year	47.7	29.8 ⁺	44.5*	40.8 [†]	39.4	53.7	59.5 ⁺	

* As published by the Health Insurance Association of America, Table B1, Volume III. † Involves fewer than ten terminations.

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 1962-80) ALL AGES OF DISABLEMENT COMBINED

						YLAR OF DI	NABLEMENT					
DURATION OF DISABLEMENT	1970 and Prior	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	All Years
		Male and Fennie Combined										
1st year (last 6 months)	41.3%	33.4%	34.0%	32.8%	31.1%	34.0%	31.5%	35.9%	35.9%	40.2%	31.0%	35.9%
2d year	88.5	82.0	78.2	69.7	66.5	65.6	67.6	73.7	75.2	68.9		76.0
3d year	81.1	70.5	64.2	55.1	58.4	50.8	52.3	60.1	54.3			64.3
4th year	68.9	50.0	54.1	48.7	42.3	50.6	44.3	53.6				54.4
5th year	67.0	61.8	45.7	50.7	50.7	49.3	50.5					56.6
6th year	78.4	65.7	48.6	59.7	47.9	42.0						64.1
7th year	74.1	59.2	53.3	72.8	58.2							66.9
8th year	66.4	54.3	48.5	54.5								60.4
		I	A			Male	Only					
1st year (last 6 months)	39.9%	31.1%	35.7%	31.0%	28.1%	32.4%	30.3%	34.7%	34.5%	36.4%	28.3%	34.3%
2d year	83.9	76.5	75.6	71.0	63.7	65.5	67.0	71.6	72.9	61.6		73.5
3d year	77.2	69.2	62.3	55.0	61.7	49.9	51.7	57.6	49.0			63.2
4th year	70.5	54.2	55.4	53.4	47.5	56.4	48.4	55.8				58.2
5th year	69.2	66.2	51.3	46.6	52.3	55.8	56.8					59.7
6th year	80.7	75.8	58.3	62.0	58.7	41.3						69.7
7th year	79.4	64.9	52.7	80.5	78.0							72.6
8th year	67.6	59.6	58.8	75.6								65.1
		L.,,	· · · · · · · · · · · · · · · · · · ·	1	1	Femal	e Ouly				L	
Ist year (last 6 months)	45.0%	39.4%	30.0%	37.0%	37.6%	37.5%	34.3%	38.5%	38.8%	47.5%	36.7%	39.4%
2d year	100.2	97.2	84.5	66.6	72.9	65.8	68.9	78.0	80.1	83.9		81.7
3d year	92.3	74.6	68.9	55.4	50.7	52.7	53.8	64.8	66.6			67.0
4th year	64.2	37.5	50.8	37.6	30.3	38.0	34.5	49.2				44.7
Sth year	60.3	48.8	31.8	59.8	47.2	34.8	34.6					48.6
6th year	71.4	35.7*	25.1*	54.3	23.4	43.3						49.2
7th year	58.7	42.9*	54.7	54.9	15.1							51.9
8th year	63.2	39.7	24.3*	12.2								47.7

* As published by the Health Insurance Association of America, Table B1, Volume III. † Involves fewer than ten terminations.

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)

		LUE AS OF END O MINATION PERIO	-	Value as of End of Twelfth Month of Disablement						
Age at Disablement	Based on Table A-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table A-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT				
	Benefit Payable for a Maximum of 60 Months but Not Beyond Age 65 with First Payment Due at End of Elimination Period									
25.5 35.5 45.5 55.5 62.5	\$23.58 30.09 36.21 41.44 20.34	\$16.59 18.44 21.71 26.85 14.91	142% 163 167 154 136	\$27.78 33.31 38.32 41.40 16.29	\$28.46 30.86 33.50 36.68 15.77	98% 108 114 113 103				
	Benefit Payable to Age 65 with First Payment Due at End of Elimination Period									
25.5 35.5 45.5 55.5 62.5	\$49.27 69.70 79.14 62.48 20.34	\$32.62 38.72 42.87 38.40 14.91	151% 180 185 163 136	\$66.02 86.29 91.65 65.67 16.29	\$63.86 73.54 73.57 55.60 15.77	103% 117 125 118 103				

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

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

		auteas of Eso I mination P erf							
Age at Disablement	Based on Table A-1 Rates of Termination*	Based on 1964 CDT	Rano to 1964 CDT	Based on Table A-1 Rates of Termination*	Based on 1964 CDT \$63.86 73.54 73.75 55 60	Ratio to 1964 CDT			
	Male Only								
25.5 35.5 45.5 55.5 62.5	\$49.02 68.58 80.57 62.38 20.40	\$32.62 38.72 42.87 38.40 14.91	150% 177 188 162 137	\$65.24 84.87 92.72 65.38 16.30	73.54	102% 115 126 118 103			
	Female Only								
25.5 35.5 45.5 55.5 62.5	\$49.67 71.47 76.61 62.85 20.15	\$32.62 38.72 42.87 38.40 14.91	152% 185 179 164 135	\$67.15 88.51 89.74 66.59 16.29	\$63.86 73.54 73.57 55.60 15.77	105% 120 122 120 103			

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

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 1976-80)

	AGE AT DISABLEMENT							
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64		
			Male and Fem	ale Combined		·		
7th month	61.0	44.6	50.7	38.6	24.5	16.9		
8th month	67.7	45.5	53.7	38.5	24.2	15.3		
9th month	64.9	45.7	52.7	34.4	23.0	13.5		
10th month	57.5	41.2	47.1	30.5	19.4	13.7		
11th month	54.2	35.1	41.9	26.5	17.6	12.4		
12th month	58.3	37.7	44.9	27.7	18.7	12.2		
Ist year (last 6 months)	312.8	225.2	258.0	180.8	102.8	81.1		
13th month	50.5	34.8	40.2	25.7	17.2	10.4		
14th month	36.6	31.3	33.1	19.0	14.8	8.9		
15th month	33.9	29.2	30.8	15.7	12.5	10.9		
16th month	34.9	24.7	28.1	15.6	10.2	9.4		
17th month	31.3	22.5	25.4	14.9	9.3	7.5		
18th month.	27.3	21.2	23.2	13.3	9.7	8.3		
19th month	27.9	17.1	20.6	10.5	9.3	7.7		
20th month	25.9	13.8	17.7	11.5	7.1	8.6		
21st month	22.3	15.3	17.5	12.4	6.8	8.2		
22d month	19.0†	16.5	17.3	10.2	6.8	6.6		
23d month	20.8	17.4	18.4	10.7	7.5	6.9		
24th month	30.5	20.1	23.3	11.0	7.5	6.1		
2d year	307.0	234.3	259.0	157.9	112.6	95.1		
3d year	231.0	138.2	166.6	87.6	67.5	59.4		
4th year	146.4	77.0	95.8	51.3	49.6	44.8		
5th year	72.8	54.4	59.1	44.1	46.1	42.3		
6th year		51.8	54.5	36.9	47.7	20.2*		
7th year	54.7†	54.2	54.5	39.1	52.3	19.4*		
8th year	11.1*	16.3†	15.2*	40.9	43.5	22.8*		
			Male	· · ·	·			
lst year (last 6 months)		210.4	241.8	175.5	119.9	78.2		
2d year	303.3	239.0	259.8	153.3	109.6	93.9		
3d year	217.6	147.6	167.8	85.8	68.8	61.0		
4th year	182.0	90.7	114.9	54.7	54.4	49.5		
5th year	63.2†	57.7	59.1	47.4	49.8	39.0		
6th year	74.5†	46.7	53.1	43.5	54.6	23.6*		
7th year		65.8	65.7	39.9	57.2	22.0*		
8th year	17.5*	27.2+	25.0†	50.1	45.9	25.6*		
			Femal	e Only				
1st year (last 6 months)	326.8	244.9	277.9	190.4	123.1	90.3		
2d year	310.7	227.5	257.7	166.4	120.4	98.9		
3d year	247.1	123.7	164.7	91.0	64. i	53.9		
4th year	95.8	56.1	67.3	44.9	36.8	27.4†		
5th year	87.8†	49.5	59.0	37.6	36.4	55.8†		
6th year	45.6*	59.0	55.8	23.3	28.3	0.0*		
7th year	38.3*	35.5†	36.3†	37.3	38.4	0.0*		
8th year	0.0*	0.0*	0.0*	20.6†	35.9	0.0*		
+1 1 6 1 6	4	·	L		k	• 		

* Involves fewer than five terminations. † Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Six-Month Elimination Period: Calendar Years of Experience 1976-80)

	Age at Disablement								
DURATION OF DISABLEMENT	LT 30	30-39	LT 40	40-49	5().59	60-64			
			Male and Fem	ale Combined					
1st year (last 6 months)	483	583	1.066	918	1.433	395			
2d year	249	375	624	552	996	332			
3d vear	107	144	251	249	515	146			
4th year	43	60	103	122	327	62			
5th year	14	34	48	93	252	27			
6th year	10	25	35	63	213	3			
7th year	7	22	29	55	164	3			
8th year	1	5	6	49	91	3			
			Male	Only					
1st year (last 6 months)	241	314	555	576	1,019	291			
2d year	134	224	358	348	703	253			
3d year	55	94	149	160	379	117			
4th year	32	42	74	86	260	53			
5th year	7	22	29	66	197	20			
6th year	7	14	21	50	182	3			
7th year	5	17	22	39	132	3			
8th year	1	5	6	41	71	3			
1			Female	e Only					
Ist year (last 6 months)	242	269	511	342	414	104			
2d year	115	151	266	204	293	79			
3d year	52	50	102	89	136	29			
4th year	11	18	29	36	67	9			
5th year	7	12	19	27	55	7			
6th year	3	11	14	13	31	0			
7th year	2	5	7	16	32	0			
8th year	0	0	0	8	20	0			
TABLE AA-3

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*

					•					
	1	1962-80 CL	AIMS ONLY							
	ALL AGES			AGE AT DI	SABLEMENT					
DURATION OF DISABLEMENT	OF DIS-									
	ABLEMENT	LT 30	30-39	LT 40	40-49	50-59	60-64			
	COMBINED									
			Male a	nd Female Co	mbined					
1st year (last 6 months)	35.5%	57.9%	43.5%	49.0%	38.9%	31.8%	23.8%			
2d year	70.8	98.8	84.9	90.0	67.4	64.4	69.1			
3d year	55.7	100.1	70.2	80.6	53.2	50.4	49.3			
4th year	47.4	84.3	54.2	63.7	43.3	46.4	41.9			
5th year	50.5	54.1	51.1	52.1	48.9	51.0	42.7			
6th year	55.6	58.1	60.7	60.0	49.3	58.8	21.6 [†]			
7th year	63.3	58.7 ⁺	73.9	69.7	56.8	67.1	21.4*			
8th year	53.2	13.3*	24.2 ⁺	21.3 [†]	61.7	56.6	24.8 [†]			
		Male Only								
lst year (last 6 months)	33.6%	55.5%	40.6%	46.0%	37.8%	31.5%	22.9%			
2d year	68.7	97.6	86.6	90.4	65.4	62.7	68.3			
3d year	55.5	94.3	75.0	81.4	52.1	51.4	50.6			
Ith year	52.1	104.9	63.9	76.5	46.2	50.9	46.3			
5th year	53.3	47.0 [†]	54.2	52.1	52.6	55.1	39.4			
6th year	63.1	68.3 ⁺	54.8	58.5	58.2	67.3	25.3*			
7th year	68.6	69.5 [†]	89.6	84.0	58.0	73.4	24.2*			
8th year	60.2	21.0 ⁺	40.4 ⁺	35.0 [†]	75.5	59.8	27.8†			
				Female Only						
1st year (last 6 months)	39.3%	60.5%	47.3%	52.8%	41.0%	32.4%	26.5%			
2d year	75.2	99.9	82.4	89.4	71.0	68.9	71.9			
3d year	56.2	107.1	62.9	79.4	55.3	47.9	44.8			
th year	36.4	55.2	39.5	44.6	37.9	34.4	25.6 [†]			
oth year	43.6	65.3 [†]	46.4	52.0	41.7	40.3	56.4 [†]			
oth year	37.0	41.9 [*]	69.2	61.3	31.2	34.9	0.0^{+}			
7th year	49.7	41.1 [†]	48.4 [†]	46.4 [†]	54.2	49.3	0.0^{\dagger}			
8th year	34.6	0.0^{*}	0.0*	0.0*	31.1*	46.7	0.0^{\dagger}			

Exactly (Six-Month Elimination Period; Calendar Years of Experience 1976-80)

* As published by the Health Insurance Association of America, Table B1, Volume III. † Involves fewer than ten terminations.

TABLE AA-4

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)

		LUE AS OF END IMINATION PERI			Value as of End of Twelfth Month of Disablement							
AGE 41 Disablement	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT						
	В	Benefit Payable for a Maximum of 60 Months but Not beyond Age 65 with First Payment Due at End of Elimination Period										
25.5 35.5 45.5 55.5 62.5	\$24.70 31.85 37.40 42.06 20.51	\$16.59 18.44 21.71 26.85 14.91	149% 173 172 157 138	\$29.18 34.87 39.70 42.13 16.37	\$28.46 30.86 33.50 36.68 15.77	103% 113 119 115 104						
	Benefit Payable to Age 65 with First Payment Due at End of Elimination Period											
25.5 35.5 45.5 55.5 62.5	\$52.72 75.48 83.08 63.96 20.51	\$32.62 38.72 42.87 38.40 14.91	162% 195 194 167 138	\$70.55 92.02 96.30 67.41 16.37	\$63.86 73.54 73.57 55.60 15.77	110% 125 127 121 104						

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

TABLE AA-5

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

		LUE AS OF END IMINATION PERI			VALUE AS OF END OF TWELFTH MONTH OF DISABLEMENT					
Agu at Disablement	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT				
	Male Only									
25.5	\$53.11	\$32.62	163%	\$69.78	\$63.86	109%				
35.5	75.09	38.72	194	89.73	73.54	122				
45.5	83.45	42.87	195	96.12	73.57	131				
55.5	63.69	38.40	166	67.02	55.60	121				
62.5	20.59	14.91	138	16.39	15.77	104				
	Female Only									
25.5	\$52.63	\$32.62	161%	\$71.90	\$63.86	113%				
35.5	76.32	38.72	197	95.63	73.54	130				
45.5	82.49	42.87	192	96.74	73.57	131				
55.5	64.72	38.40	169	68.46	55.60	123				
62.5	20.26	14,91	136	16.30	15.77	103				

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

TABLE AAA

GROUP LONG TERM DISABILITY INSURANCE RELUSTRATIVE VALUES OF A MONTHLY BENEFIT OF \$1 PAYARLE TO AGE 65, DISCOUNTED M.3 PERCENT INTEREST

BASIS OF	AGE AT DISABLEMENT								
ANNULY VALUES	25.5	35.5	45.5	55.5	62.5				
		Annuity Valu	e as of End of Elim	unation Period					
1964 CDT	\$32.62	\$38,72	\$42.87	\$38.40	\$14.91				
1976-80*	\$52.72	\$75.48	\$83.08	\$63.96	\$20.51				
Ratio to 1964 CDT	162%	195%	194%	1679e	138%				
1962-80*	\$49.27	\$69.70	\$79.14	\$62.48	\$20.34				
Ratio to 1964 CDT	151%	180%	185%	163%	136%				
		Annuity Value as of	f End of Twelfth M	onth of Disablemen	t .				
1964 CDT	\$63.86	\$73.54	\$73.57	\$55.60	\$15.77				
1976-80*	\$70.55	\$92.02	\$96.30	\$67.41	\$16.37				
Ratio to 1964 CDT	110%	125%	127%	121%	104%				
1962-80*	\$66.02	\$86.29	\$91.65	\$65.67	j \$16.29				
Ratio to 1964 CDT	103%	117%	125%	118%	103%				

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

* Annuity values are based on the crude, ungraduated, combined male and female termination rates for the respective restricted observation periods for the first six years and on the 1964 Commissioners Disability Table rates thereafter.

first six years and the 1964 CDT thereafter. for each age group on a basis consistent with Tables A-5 and AA-4 and some unpublished data.

Experience on Plan with Three-Month and Twelve-Month Elimination Periods

Tables B-1, B-2, B-3, B-4, B-5, B-6, BB-1, BB-2, BB-3, BB-4, BB-5, and BBB analyze the experience of terminations for plans with a three monthelimination period and are similar in form and content to the corresponding tables on plans with a six-month elimination period (that is, the A, AA, and AAA series) with two exceptions. The experience shown has been truncated at six years, instead of the eight years that was used for plans with a sixmonth elimination period. Also, the crude termination rates from Table B-1 are used for four years (instead of the six years as for plans with a sixmonth elimination period), with the 1964 CDT termination rates used thereafter, in calculating one of the two sets of illustrative values shown in Tables B-5 and B-6. The number of claims exposed to termination was 33,826 of which 4,624 and 5,835 emanated from the 1976-80 and 1962-75 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.

As on plans with a six-month elimination period, the low first-year ratios shown for plans with a three-month elimination period in Table B-2 would seem to be due to the shorter elimination periods of the individual health insurance experience underlying the first-year termination rates of the 1964 CDT.

For plans with a twelve-month elimination period, the experience of terminations is analyzed in the C, CC, and CCC series of tables. These tables are similar in format to the corresponding tables of the A and B series. The number of claims exposed to termination was 7,540 of which 1.313 and 995 originated from the 1976-80 and 1962-75 portions, respectively, of the active lives experience, and the balance from experience units that were not included in the study of rates of disablement.

CONCLUSION

The overall termination rates shown in this report, which include one additional year of experience, are slightly lower (depending upon the elimination period, plan, age group, duration, and sex) than those shown in last year's report. The financial consequences of this change are apparent from a comparison of the annuity values shown in Tables A-5, B-5, and C-5 between last year's report. The variation from one report to

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the next, once again, underscores the need to exercise caution and judgment when using the disabled life annuity values shown in the year's report for actuarial purposes such as reserving.

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 1962-80)

DURATION OF DINABLEMENT			AGE AT DE	S ABLEMENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40.49	50-59	60-64
			Male and Fen	nate Combined		
4th month.	129.9	107.8	117.4	91.5	56.7	40.5
5th month	145.4	122.0	132.1	97.7	61.2	44.9
6th month	128.4	111.4	118.7	85.0	55.9	40.2
7th month	110.2	94.6	101.1	69.2	47.0	33.5
8th month	92.8	76.8	83.5	61.7	37.1	28.7
9th month	85.2	58.6	69.4	53.1	31.4	21.7
10th month	79.4	48.8	61.1	43.4	27.3	18.7
11th month	69.4	51.4	58.4	37.0	22.7	15.9
12th month	65.7	47.4	54.5	32.6	20.2	12.8
1st year (last 9 months)	616.9	529.2	567.3	447.2	307.9	229.9
13th month.	57.3	45.8	50.2	30.1	17.1	12.4
14th month	54.0	37.6	43.7	25.5	14.0	11.7
15th month	51.3	32.3	39.3	23.0	13.7	11.2
16th month	41.4	33.1	36.1	22.4	14.5	9.7
17th month.	38.6	29.1	32.5	19.0	13.7	8.5
18th month.	39.9	24.0	29.7	16.4	11.2	7.6
19th month	32.1	17.0	22.3	15.5	9.0	6.0
20th month.	37.2	14.1	22.1	15.1	9.0	8.8
21st month	40.4	14.6	23.4	12.8	9.5	10.5
22d month	30.3	17.2	21.5	12.3	8.7	7.0
23d month	24.0	16.6	19.0	12.2	8.4	6.1
24th month.	23.9	20.9	21.9	11.9	8.0	5.3*
2d year	381.6	264.0	307.7	196.1	128.7	99.8
3d year.	197.6	181.5	186.6	121.5	80.2	83.9
4th year	79.3	75.3	76.6	70.3	53.1	67.3
Sth year	75.5	72.3	73.2	39.6	58.6	70.0
6th year	24.2*	53.8	45.6	31.6	60.6	28.1*
our year		55.0		L	00.0	20.1
	(3) 0		Male	·····	207.1	1 220 0
1st year (last 9 months)	631.0	534.8	575.9	431.9	297.1	229.8
2d year	370.3	286.9	316.9	201.4	130.6	99.2
3d year	181.4	182.2	182.4	120.3	85.5	92.5
4th year	68.7*	83.7	79.5	81.3	58.2	63.0
5th year	66.4+	105.9	94.3	49.8	65.8	71.4
6th year	31.6*	82.7	67.1	30.4	67.0	0.0*
			Femal	e Only		_
1st year (last 9 months)	599.9	521.8	556.4	471.4	333.5	230.0
2d year	394.3	233.1	295.6	186.8	123.8	101.4
3d year	215.0	180.I	191.8	123.7	65.9	57.2
4th year	91.8*	64.3	72.8	50.8	39.1	79.6
5th year	88.9*	31.3*	46.2*	21.6*	38.4	66.5*
6th year	12.8*	19.5*	17.9*	33.8	42.9	116.1*

* Involves fewer than five terminations. † Involves fewer than ten terminations.

GROUP LONG TERM DISABILITY INSURANCE NUMBER OF CUAINS TERMENATED BY DEATH OR RECOVERY

(Three-Month Elimination Period: Calendar Years of Experience 1962-80)

			Act as Dis	ABLEMENT					
Derveens of Disablement	1 nder 30	<u>4().</u> 34	Under 40	40.49	5()-59	n0.64			
			Male and Fem	ale Combared					
1st year (last 9 months)	1,717	1.920	3.637	2,992	3,908	1.316			
2d year.	280	331	611	583	912	311			
3d year	63	126	189	244	419	159			
4th year	14	34	45	103	212	62			
5th year .	10	23	33	42	184	25			
6th year	2	12	- 14	26	127	2			
	Male Only								
1st year (last 9 months)	954	1.086	2,040	1,775	2,648	986			
2d year	147	207	354	379	675	233			
3d vear	33 (71	104	156	324	133			
4th year	6	19	25	75	170	42			
5th year	5	[9	24	34	152	19			
6th year	2	10	12	16	104	0			
			Femal	: Only					
1st year (last 9 months)	763	834	1.597	1.217	1.260	330			
2d year	133	124	257	204	237	78			
3d year	30	55	85	88	95	26			
4th year	8	12	20	28	42	20			
5th year	5	4	- 9	8	32	6			
6th year	0	2	2	10	23	2			

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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*

	ALL AGES			AGE AT DE	SABLEMENT		
DURATION OF DISABLEMENT	of Dis- ablement Combined	Under 30	30-39	Under 40	40-49	50-59	60.64
			Male a	nd Female Co	mbined		
1st year (last 9 months)	47.7%	69.5%	60.1%	64.2%	53.1%	41.0%	34.7%
2d year	82.6	122.8	95.6	106.6	83.7	73.6	72.6
3d year	69.0	85.6	92.2	90.0	73.8	59.9	69.6
4th year	53.7	45.7	53.0	50.7	59.4	49.7	62.9
5th year	61.2	56.1	67.8	64.0	43.9	64.9	70.7
6th year	63.6	22.2^{\dagger}	63.1	49.6	42.3	74.7	-30.1 ⁺
				Male Only			•
1st year (last 9 months)	45.8%	71.1%	60.8%	65.2%	51.3%	39.6%	34.7%
2d year	82.8	119.1	103.9	109.8	86.0	74.7	72.2
3d year	70.8	78.6	92.6	88.1	73.1	63.9	76.7
4th year	57.8	39.5 ⁺	58.9	52.6	68.6	54.5	58.9
5th year	70.9	49.4 [†]	99.4	82.0	55.3	72.9	72.1
6th year	70.8	29.0*	97.0	72.6	40.7	82.6	0.0^{+}
				Female Only			-
1st year (last 9 months)	51.4%	67.6%	59.3%	63.0%	56.0%	44.5%	34.7%
2d year	82.1	126.8	84.4	102.3	79.7	70.8	73.7
3d year	64.9	93.1	91.5	92.3	75.1	49.2	47.4
4th year	44.3	52.9 ⁺	45.3	48.1	42.9	36.6	74.4
5th year	39.3	66.1 [±]	29.4 [*]	40.6^{+}	24.0°	42.6	67.1 [*]
6th year	47.2	11.8^{2}	22.9	19.6 [†]	45.2	52.8	124.3

(Three-Month Elimination Period; Calendar Years of Experience 1962-80)

* As published by the Health Insurance Association of America, Table B1, Volume III. Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE RATIOS OF ACTUAL CLAIMS 'I RMINALLD BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE* (Three-Month Elimination Period: Calendar Years of Experience 1962-80)

ALL AGES OF DISABLEMENT COMBINED.

						<u>Үн ак он D</u>	IS OF (MES)					
DURATION OF DISABLEMENT	1970 and Prior	1971	1972	1973	1974	1975	1476	1077	1978	1979	1980	All Years
		4		<u> </u>	*	Maie and Fer	nate Combined					
Ist year (last 9 months)	56.7%	54.4%	51.3% 87.0	47.5%	45.6%	42.3%	42.0%	46.5%	43.5% 82.8	46.4% 88.8	42.1%	47.7% 82.6
2d year	$106.6 \\ 101.5$	102.8 86.9	63.2	63.2	60.3	66.5	54.1	57.4 38.3	64.3			69.0 53.7
4th year	88.1 67.2	48.6 73.7	55.2 55.3	43.7 61.6	48.4 57.4	39.7 62.9	45.3 37.8					61.2
6th year	78.4	68.9	65.2	59.3	44.7	<u>49.9</u>		<u> </u>				63.6
1st year (last 9 months)	55.4%	53.1%	48.9%	45.3%	43.3%	39.5%		43.7%	42.1%	44.1%	36.4%	45.8%
2d year	108-3 100.1	97.2 87.5	86.8	70.0	68.8 64.3	76.6	72.6 60.6	68.2 50,4	86.3 66.0	87.7		82.8 70.8
4th year	89.4	51.8 84.0	60.9 62.5	50.1 71.1	52.5 63.6	45.7	46.8	42.2				57.8 70.9
5th year	72.6 81.4	74.9	73.3	72.4	55.2	41.8						70.8
						Feina	le Only					
Ist year (last 9 months)	59.6% 102.1	57.4% 117.0	56.0%	51.4% 73.4	49.6% 76.8	47.69 80.8	$\frac{44.89}{65.7}$	51.5% 70.6	46.1% 75.6	50.3% 90.9	51.0%	51.4% 82.1
2d year	104.8	85.1	65.6	49.5	52.6	57.8	41 1 42 2	73-1 29.01	60.1			64.9 44.3
4th year	84.6 53.1	39.6 46.5	41.4 38.4	30.2 41.9	40.4	26.0	5.4	-2.0				39.3 47.2
6th year	70.5	53.4	47.9	32.5	22.0°	65.5	<u> </u>		1 : : : ::::	1		47.2

* As published by the Health Insurance Association of America. Table B1, Volume III. Involves fewer than ten terminations.

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)

		M UE AS OF END IMINATION PERI		Value as of End of Twelfth Month of Disablement							
AGE AT DISABLEMENT	Based on Table B-1 Rates of Termination*	Table B-1 Based on Ratio to Rates of 1964 CDT 1964 CD		Based on Table B-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT					
	в	Benefit Payable for a Maximum of 60 Months but Not beyond Age 65 with First Payment Due at End of Elimination Period									
25.5 35.5 45.5 55.5 62.5	\$15.25 20.13 25.29 33.52 19.86	\$ 5.43 5.95 7.82 12.25 9.67	281% 338 323 274 205	\$26.46 31.05 35.06 38.92 16.25	\$27.50 29.72 32.18 35.19 15.77	96% 104 109 111 103					
	Benefit Payable to Age 65 with First Payment Due at End of Elimination Period										
25.5 35.5 45.5 55.5 62.5	\$29.45 42.65 51.33 49.93 19.86	\$ 9.41 11.09 14.23 17.24 9.67	313% 385 361 290 205	\$64.38 79.98 83.23 63.16 16.25	\$63.86 73.54 73.57 55.60 15.77	101% 109 113 114 103					

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

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

		due as of End imination Peri			Value, as of End of Twile fith Month of Disablement					
AGE AA Disablemini	Based on Table B-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDI	Based on Table B-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT				
		Male Only								
25.5 35.5 45.5 55.5 62.5	\$29.46 40.88 52.05 50.25 19.85	\$ 9.41 11.09 14.23 17.24 9.67	313% 369 366 291 205	\$67.19 77.10 82.11 62.57 16.25	\$63.86 73.54 73.57 55.60 15.77	105% 105 112 113 103				
	Female Only									
25.5 35.5 45.5 55.5 62.5	\$29.47 45.13 50.25 49.26 19.89	\$ 9.41 11.09 14.23 17.24 9.67	313% 407 353 286 206	\$61.34 83.98 85.24 64.76 16.28	\$63.86 73.54 73.57 55.60 15.77	96% 114 116 116 103				

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

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 1976-80)

			AGE AT DE	SABLEMENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64
			Male and Fen	ale Combined	_	
4th month	132.2	100.0	114.8	91.3	49.7	35.7
5th month.	142.9	113.9	127.1	89.5	54.0	38.0
6th month.	120.8	105.4	112.3	78.2	49.1	34.4
7th month.	103.7	89.3	95.6	60.8	41.7	27.8
8th month.	87.4	73.0	79.3	51.1	32.9	22.2
9th month.	77.8	56.0	65.3	46.8	28.3	19.9
10th month.	75.8	44.7	57.9	40.6	24.9	18.7
11th month	66.4	46.9	54.9	31.0	20.2	13.3
12th month.	53.6	41.8	46.6	26.7	18.3	9.4
1st year (last 9 months)	597.2	503.9	546.8	413.7	278.0	199.6
13th month.	44.8	42.3	43.3	28.4	15.6	10.1
14th month	47.0	36.1	40.4	23.8	12.7	10.4
15th month	46.8	30.4	36.8	23.4	12.5	8.7
16th month.	40.9	29.4	33.9	23.5	12.3	6.9
17th month.	38.8	27.2	31.6	15.5	11.3	6.8
18th month.	38.1	24.0	29.4	12.1	10.1	7.6
19th month	32.0	17.4	22.9	14.5	8.2	6.2 ⁺
20th month	42.2	14.3	24.5	15.5	8.7	7.4
21st month	42.6	8.2*	20.6	12.3	9.1	9.5
22d month	24.5	11.2	15.9	10.9	8.4	6.2*
23d month	22.0^{+}	14.2^{+}	16.9	11.7	8.9	4.8^{+}
24th month	20.6*	15.7	17.4	10.7	8.1	3.1*
2d year	361.7	239.9	287.4	184.8	118.9	84.2
3d year	179.5	167.0	171.4	105.8	69.4	69.4
4th year	77.2	64.9	68.9	63.8	44.2	50.8
5th year	81.0*	75.0	76.8	42.8	53.4	63.7
6th year	14.2*	58.8	46.1	27.9	53.4	0.0*
		r	1	Only		· · · · · ·
1st year (last 9 months)	597.8	506.6	547.9	394.2	270.8	192.1
2d year	345.3	266.5	295.8	190.4	123.2	84.2
3d year	179.4	161.1	167.8	104.9	76.0	77.1
4th year	65.6*	70.6	69.0	72.9	50.9	48.7
5th year	70.4*	102.7	92.8	58.2	61.6	70.5
6th year	23.1*	86.8 [±]	67.0 [†]	28.2	60.2	0.0*
			Femal	e Oniy		
1st year (last 9 months)	596.2	500.1	545.2	443.1	294.2	219.9
2d year	380.2	204.8	276.1	175.9	108.6	84.2
3d year	177.6	174.5	175.9	107.2	52.2	47.1
4th year	89.6	57.6 ⁺	68.5	49.3	26.6	56.0
5th year	93.9*	42.0*	56.7	16.8	31.8	46.7*
6th year	0.0*	25.1*	18.8*	27.3 ⁺	35.5	0.0*

* Involves fewer than five terminations. [†] Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE. NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Three-Month Elimination Period: Calendar Years of Experience 1976-80)

			AGE AT DB	AB: UVEST					
DUNCED NOP DISABILINENT	Under 30	3(5-39	Under 40	40.49	\$0.55	60-64			
			Maic and Fem	ale Combined					
Ist year (last 9 months)	899	892	1,791	1,160	1,676	555			
2d year	160	165	325	267	-460	144			
3d year	39	70	109	121	222	81			
4th year	10	19	29	63	119	31			
5th year	8	17	25	34	127	15			
6th year	1	10	H	17	90	0			
•	Male Oniy								
1st year (last 9 months)	467	482	949	664	1,128	392			
2d year	81	105	186	173	341	107			
3d vear	22	37	59	76	174	67			
4th year	4	11	15	44	- 99	21			
5th year	-1	13	17	29	106	12			
6th year	1	8	9	11	74	0			
			Female	e Onis					
1st year (last 9 months)	432	410	842	496	548	163			
2d year	79	60	139	94	119	37			
3d year	17	33	50	45	48	14			
4th year		8	14	19	20	10			
5th year		4	8	5	21	3			
6th year	0	2	2	6	16	ò			

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 1976-80)

	ALL AGES			AGE AT DE	SABLEMENT		
DURATION OF DISABLEMENT	of Dis abtement Combined	Under 30	30-39	Under 40	40-49	50-59	60.64
			Male a	nd Female Co	mbined		
1st year (last 9 months)	44.2%	67.3%	57.3%	61.9%	49.2%	37.1%	30.1%
2d year	76.1	116.4	86.9	99.3	78.9	68.0	61.2
3d year	60.0	77.8	84.8	82.3	64.3	51.8	57.6
4th year	45.5	44.5	45.7	45.4	53.9	41.4	47.5
5th year	58.2	60.3	70.3	66.9	47.5	59.2	64.4
6th year	56.5	13.1^{+}	69.0	50.0	37.4	65.9	0.0*
	Male Only						
1st year (last 9 months)	41.8%	67.3%	57.6%	62.0%	46.8%	36.1%	29.0%
2d year	76.9	111.1	96.5	102.3	81.3	70.5	61.2
3d year	62.2	77.7	81.8	80.7	63.7	56.7	63.9
4th year	50.0	37.8 [*]	49.7	45.5	61.6	47.6	45.5
5th year	69.2	52.3*	96.3	80.5	64.5	68.2	71.2
6th year	64.9	21.2*	101.9^{+}	72.1^{+}	37.8	74.2	0.0*
				Female Only			
1st year (last 9 months)	48.4%	67.2%	56.8%	61.7%	52.7%	39.2%	33.2%
2d year	74.6	122.3	74.2	95.4	75.1	62.1	61.3
3d year	55.4	77.0	88.7	84.3	65.1	39.0	39.1
4th year	35.8	51.6	40.5	45.1	41.6	24.9	52.4
5th year	34,4	69.8°	39.4°	49.6 ⁺	18.6	35.2	47.2 [†]
6th year	37.8	-0.0^{*}	29.5 ⁺	20.7*	36.5°	43.8	0.0^{\dagger}

* As published by the Health Insurance Association of America, Table B1, Volume III. Involves fewer than ten terminations.

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

		d ut as of End emination Peri			da leas of Eng Month of Disa	
AGE AE Disable ment	Based on Table BB-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table BB-1 Rates of Termination?	Based on 1964 CDT	Ratio te 1964 CDT
	В	,		60 Months but N		5
		with Firs	l Payment Due a	Find of Eliminati	on Period	
25.5	\$16.27	\$ 5.43	300%	\$27.56	\$27.50	100%
35.5	21.66	5.95	364	32.32	29.72	109
45.5	27.10	7.82	347	35.93	32.18	112
55.5	35.40	12.25	289	39.72	35.19	113
52.5	20.68	9.67	214	16.46	15.77	104
		Benefit		5 with First Payn	ient Due	
	1		at End of Ehr	nination Period		
25.5	\$32.07	\$ 9.41	341%	\$67.66	\$63.86	106%
35.5	46.90	11.09	423	84.34	73.54	115
45.5	55.81	14.23	392	86.01	73.57	117
55.5	53.09	17.24	308	64.75	55.60	116
62.5	20.68	9.67	214	16.46	15.77	104

(Three-Month Elumination Period; Males and Females Combined)

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

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

		VALUE AS OF END OF ELIMINATION PERIOD			Value as of End of Twelfth Month of Disablement			
AGE AT Disablement	Based on Table BB-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT	Based on Table BB-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT		
			Mak	: Only				
25.5	\$32.94	\$ 9.41	350%	\$70.03	\$63.86	110%		
35.5	45.38	11.09	409	81.66	73.54	111		
45.5	56.94	14.23	400	84.97	73.57	115		
55.5	52.91	17.24	307	63.85	55.60	115		
62.5	20.82	9.67	215	16.46	15.77	104		
			Fema	le Only				
25.5	\$31.19	\$ 9.41	331%	\$65.22	\$63.86	102%		
35.5	48.94	11.09	441	87.84	73.54	119		
45.5	54.10	14.23	380	87.68	73.57	119		
55.5	53.63	17.24	311	67.11	55.60	121		
62.5	20.31	9.67	210	16.49	15.77	105		

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

TABLE BBB

GROUP LONG-TERM DISABILITY INSURANCE. ILLUSTRATIVE VALUES OF A MONTHLY BENEFIT OF \$1 PAYABLE TO AGE 65, DISCOUNTED AT 3 PERCENT INTEREST. Three-Month Elimination Period, Males and Females Combined).

BASIN OF		А	GI AT DISABLENE?	~ I					
ASSERVATES	25.5	35.5	45.5	55.5	62.5				
		Annuity Valu	e as of End of Elim	unation Period					
1964 CDT	\$ 9.41	\$11.09	\$14.23	\$17.24	\$ 9.67				
1976-80*	\$32.07	\$46.90	\$55.81	\$53.09	\$20.68				
Ratio to 1964 CDT	341%	4239	392%	308%	214/2				
1962-80*	\$29.45	\$42.65	\$51.33	\$49.93	\$19.86				
Ratio to 1964 CDT	313%	385%	361%	290%	205%				
		Annuity Value as o	f End of Twelfth M	onth of Disabiemen	(
1964 CDT	\$63.86	\$73.54	\$73.57	\$55.60	\$15.77				
1976-80*	\$67.66	\$84.34	\$86.01	\$64.75	\$16.46				
Ratio to 1964 CDT	106%	115%	117%	116%	104%				
1962-80*	\$64.38	\$79.98	\$83.23	\$63.16	\$16.25				
Ratio to 1964 CDT .	101%	109%	113%	114%	103%				

* Annuity values are based on crude, ungraduated, combined male and female termination rates for the respective restricted observation periods for the first four years and on the 1964 Commissioners Disability Table rates thereafter.

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

(Twelve-Month	Elimination	Period:	Calendar	Years of	Experience	1962-80)
---------------	-------------	---------	----------	----------	------------	----------

			AGE AT DISA	BLEMENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-44	50-59	60-64
			Male and Femal	e Combined		
13th month.	10.5*	11.5	11.1	13.1	11.2	12.8
14th month.	20.3^{+}	21.3	20.9	17.3	14.3	12.8
15th month.	26.4^{+}	22.1	23.7	16.7	13.3	12.9
16th month.	24.8^{-}	18.6	21.0	13.7	10.5	11.6
17th month.	27.4°	16.6	20.7	16.0	10.9	9.6 [†]
18th month.	43.9	16.3^{*}	26.4	15.6	9.7	5.7*
19th month.	38.1*	20.6	27.0	14.2	7.3	6.4*
20th month.	25.4^{+}	20.9^*	22.5	13.8	6.2	7.4*
21st month	18.1*	14.9*	16.1	12.6 [†]	6.9	7.7
22d month	10.4*	14.3*	13.0 ⁺	16.8	8.3	11.3
23d month	35.5 [†]	20.1*	25.5	15.9	11.8	13.7
24th month.	42.9*	17.5*	26.1 [†]	10.0*	13.9	14.6*
2d year	280.3	194.9	226.6	162.3	117.3	120.3
3d year	165.6	113.1	129.6	123.5	84.4	76.2
4th year	177.0^{+}	72.7*	103.6	71.9	77.2	62.0
5th year	132.4*	41.6*	66.1 [*]	39.7	63.3	18.5*
6th year	43.0*	60.5*	57.8*	55.4	72.2	31.3*
			Male O	mly		
2d year	296.1	220.6	248.3	170.0	120.3	122.9
3d year	162.9	103.4	121.8	111.7	83.4	79.7
4th year	192.6*	76.1 [*]	111.2	80.7	86.6	58.2
5th year	166.7*	52.0*	83.1*	36.9 [†]	70.0	20.9*
6th year	54.8*	79.6*	75.1*	63.3	81.1	33.3*
	Female Only					
2d year	233.8	108.5	157.4	136.9	104.3	102.3
3d year	173.2*	150.0 ⁺	158.2*	163.4	88.4	48.6*
4th year	108.0*	56.7*	69.8*	40.0*	35.5 [†]	95.4*
5th year	0.0*	0.0*	0.0*	49.6*	32.7*	0.0*
6th year	0.0*	0.0*	0.0*	23.7*	28.4*	•0.0

* Involves fewer than five terminations. * Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Twelve-Month Elimination Period: Calendar Years of Experience 1962-80)

			AGL AT DIS	ABLEMENT				
DUBATION OF DISABLEMENT	Under 30	30-39	Under 40	4(1-14)	50-59	6064		
			Male and Fem	iale Combined				
2d year	70	84	154	159	295	98		
3d year	12	20	32	68	1.27	29		
4th year	9;	8	17	28	89	13		
5th year	4	4	8	11	51	1		
6th year	l	3	4	12	42	1		
	Male Oniy							
2d year	56	74	130	128	245	88		
3d year	10	14	24	48	103	27		
4th year	8	7	15	25	82	11		
5th year	4	4	8	8	47	1		
6th year	1	3	4	11	39	1		
			Female	: Only	•			
2d year	14	10	24	31	50	10		
3d year	2	6	8	20	24	2		
4th year	I I	1	2	3	7	2		
5th year	0	0	ō	3	4	Ō		
6th year	0	0	0	1	3	0		

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*

	D / 1 G 1 1	V (F : 10(2.00)
(I welve-Month Elimination	n Period; Calenda	r Years of Experience 1962-80)

	ALL AGES			AGE AT DE	SABLEMENT		
DURATION OF DISABLEMENT	OF DIS- ABLEMENT COMBINED	Under 30	30-39	Under 40	4049	50-59	60-64
			Male a	and Female Co	mbined		
2d year	71.8% 65.8 67.7 60.5	90.2% 71.7 101.9 ⁺ 98.5 ⁺	70.6% 57.5 51.1 ⁺ 39.0 ⁺	78.4% 62.7 68.7 58.0°	69.3% 75.0 60.7 44.0	67.1% 63.0 72.2 70.1	87.5% 63.2 58.0 18.7
5th year	82.2	98.5 39.5 [†]	59.0^{+}	58.0 63.6*	74.0	89.0	33.5
	Male Only						
2d year	75.2% 63.6 74.4 66.1 93.8	95.2% 70.6 110.9 ⁺ 124.0 ⁺ 50.3 ⁺	79.9%52.553.6† $48.8†93.4†$	86.0% 58.9 73.6 73.0 ⁺ 82.7 ⁺	72.5% 67.9 68.2 40.9 [†] 84.6	68.8% 62.3 81.0 77.5 100.0	89.4% 66.1 54.4 21.1 [†] 35.7 [†]
				Female Only			
2d year	58.1% 75.1 38.2 35.7 [†] 29.9 [†]	$75.2\%75.0^{\dagger}62.2^{\dagger}0.0^{\dagger}0.0^{\dagger}$	$\begin{array}{c} 39.3\% \\ 76.2^{\dagger} \\ 39.9^{\dagger} \\ 0.0^{\dagger} \\ 0.0^{\dagger} \end{array}$	54.4%76.4+46.4+0.0+0.0+	58.4% 99.2 33.8 ⁺ 55.0 ⁺ 31.6 ⁺	59.7% 66.0 33.2+ 36.2+ 35.0+	$\begin{array}{c} 74.4\% \\ 40.3^{\dagger} \\ 89.2^{\dagger} \\ 0.0^{\dagger} \\ 0.0^{\dagger} \end{array}$

* As published by the Health Insurance Association of America, Table B1, Volume III. † Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE RATIOS OF ACTUAL CLAIMS TERMINALED BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE* (Twelve-Month Elimination Period; Calendar Years of Experience 1962-80)

						Угля ог D	BALLANI NI NI					
DUPATION OF DISABLEMENT	1970 and Prior	1971	1972	1973	1974	1975	1476	1011	1978	1979	1980	All Years
						Male and Fen	- naic Combined					
2d year	79.6%	92.3%	80.0%	46.8%	73.1%	56.7%	74.29	72.6%	83.2%	64.0%		71.8%
3d year.	94.4	46.1	64.2	43.7	59.7	52.0	52.1	57.3	94.6			65.8
4th year	82.2	59.7	68.7	90.3	71.1	25.7	35.5	74.6				67.7
5th year	74.6	38.5	45.8	85.1	45.1	55.61	22.0					60.5
6th year	82.5	72.2	72.3	84.8	72.6] 172.41						82.2
				-		Male	Only					·
2d year	78.4%	97.7%	83.8%	53.1%	79,9%	58.5%	72.3%	79.6%	81.7%	75.8%		75.2%
3d year	91.4	52.7	57.5	44.5	55.5	45.4	50.7	50.8	108.3			63.6
4th year	87.1	7.3.4	78.3	103.0	80.5	21.67	36.7	57.1				74.4
5th year	82.2	28.4	47.6	104.1	56.2	56.11	30.6					66.1
6th year	89.0	87,41	88.81	410.7	72.2	194.0						93.8
						Lema	k Oniy					
2d year	85.1%	68.69	59.6%	15.9%	44.0%	48.4%	78.2%	50.7%	87.0%	28.2%		58.1%
3d year	108.0	15.6	94.9	39.2	77.2	77.91	56.6	77.9	33.6			75.1
4th year	58.3	0.0^{2}	23.2	24.0	28.8	39.5	30.6	114.8				38.2
5th year	38.2	81.4	37.3	0.0	$0,0^{\circ}$	51.6	0.0					35.7
6th year	51.1	-0.0°	0.0*	0.0	73.3	0.0						29.9

ALL AGES OF DISABLEMENT COMBINED.

* As published by the Health Insurance Association of America, Table B1, Volume III. Involves fewer than ten terminations.

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

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

	VALUES AS C	OF END OF ELIMINA	TION PERIOD
AGE AT Disablement	Based on Table C-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT
	but Not bey	ole for a Maximum ond Age 65 with Fi End of Elimination	rst Payment
25.5 35.5 45.5 55.5 62.5	\$33.18 39.79 41.06 44.02 16.09	\$30.28 33.03 36.02 39.53 15.77	110% 120 114 111 102
		ble to Age 65 with l End of Elimination	
25.5 35.5 45.5 55.5 62.5	\$71.08 93.57 86.43 62.78 16.09	\$63.86 73.54 73.57 55.60 15.77	111% 127 117 113 102

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

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

	VALUE AS OF END OF ELIMINATION PURIOD				
AGE AT Disabijing ne	Based on Table C-1 Rates of Termination"	Based on 1964 CDT	Ratio to 1964 CDT		
	Male Only				
25.5 35.5 45.5 55.5 62.5	\$68.85 91.31 86.01 62.26 16.05	\$63.86 73.54 73.57 55.60 15.77	108% 124 117 112 102		
		Female Only			
25.5 35.5 45.5 55.5 62.5	\$79.32 100.76 87.72 65.15 16.34	\$63.86 73.54 73.57 55.60 15.77	1249 137 119 117 104		

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

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

	AGE AT DISABLEMENT						
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	5059	60-64	
	Male and Female Combined						
13th month.	7.8*	7.0 [*]	7.3	12.8	10.2	8.1÷	
14th month.	22.0^{\dagger}	15.7 ⁺	18.1	16.2	12.4	10.8°	
15th month	31.7*	17.1 ⁺	22.7	16.1 [†]	12.7	13.5	
16th month	26.9*	19.1 ⁺	22.1	12.8†	11.9	13.0 [†]	
17th month	27.8*	15.7*	20.3	14.5 [†]	11.3	11.3*	
18th month.	51.3	12.0*	26.8	14.4 ⁺	7.5	9.3*	
19th month	43.4*	20.8^{+}	29.3	16.6 [†]	3.9*	10.1*	
20th month	26.3*	23.0*	24.2*	18.0^{+}	3.7*	9.0*	
21st month	20.3*	16.7*	18.0*	11.5*	6.2 ⁺	6.3*	
22d month	14.3*	13.0*	13.5*	11.3°	7.9*	11.7*	
23d month	51.6 [†]	18.9*	30.6	14.8*	11.0	14.1*	
24th month	64.4*	17.1*	33.7*	12.8*	13.6	11.7*	
2d year	326.8	179.4	236.6	159.1	106.6	121.6	
3d year	143.9 [†]	102.0	115.9	109.0	71.9	50.4 [*]	
4th year	163.7*	48.9*	86.1	33.4*	81.4	60.1 [*]	
5th year	118.4*	28.3*	56.4*	41.1 ⁺	52.6	35.4*	
6th year	0.0*	65.3*	46.3*	77.8	67.3	0.0*	
	Male Only						
2d year	356.0	196.9	258.0	174.1	109.1	124.1	
3d year	136.3	93.1 [*]	105.6	90.5	71.3	55.7 ⁺	
4th year	157.2	44.9*	83.4*	33.8*	92.0	65.9 ⁺	
5th year	149.6*	33.1*	67.5 [*]	37.7*	58.1	39.6*	
6th year	0.0*	80.8*	56.9*	88.5	79.0	0.0*	
	Female Only						
2d year	243.1	124.8*	174.6	115.5	96.3	101.7*	
3d year	209.2*	142.3*	158.5*	166.9	73.7	0.0*	
4th year	234.4*	65.6*	96.5*	32.0*	42.0†	0.0*	
5th year	0.0*	0.0*	0.0*	52.3*	29.1*	0.0*	
6th year	0.0*	0.0*	0.0*	34.2*	16.1*	0.0*	

(Twelve-Month Elimination Period; Calendar Years of Experience 1976-80)

* Involves fewer than five terminations. [†] Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE. NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Twelve-Month Elimination Period: Calendar Years of Experience 1976-80)

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D. SALES IN DEAR. ADA.	$\nabla_{t} (d^*(x,t) D(s,x_D)) \ (x_t) \ _{\mathcal{H}}$						
D. RATING IN TASAR, NO ST	Under 30	30-39	i nder 40	40-49	50.59	60-64	
	Male and Female Combined						
2d year.	61	54	115	84	141	-49	
3d year	6	11	17	28	52	8	
4th year	6	4	10	6	-49	5	
5th year	3	2	5	7	22	1	
6th year	0	2	2	11	23	0	
	Maie Only						
2d year	50	46	96	69	115	45	
3d year	5	8	13	18	41	8	
4th year	5 5 3	3	8	5	44	5	
5th year	3	2	5	5	20	l	
6th year	0	2	2	10	22	0	
	Female Only						
2d year	11	8	19	15	26	4	
3d year	1	3	4	10	11	0	
4th year	1	1	2	1	5	0	
5th year	0	0	0	2	2	0	
6th year	0	0	0	1	1	0	

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* (Twelve-Month Elimination Period; Calendar Years of Experience 1976-80)

	ALL AGES AGE AT DISABLEMENT				SABLEMENT		
DURATION OF DISABLEMENT	of Dis- ablement Combined	Under 30	30-39	Under 40	40-49	50-59	60-64
	Male and Female Combined						
2d year	69.9% 55.6 61.3 53.2 82.4	105.1% 62.4 ⁺ 94.3 ⁺ 88.0 ⁺ 0.0 ⁺	65.0% 51.8 34.4 ⁺ 26.6 ⁺ 76.6 ⁺	81.8% 56.0 56.7 49.0° 50.3°	67.9% 66.2 28.2 45.5 104.1	61.0% 53.7 76.2 58.3 83.0	$\begin{array}{c} 88.4\% \\ 41.8^{\dagger} \\ 56.2^{\dagger} \\ 35.8^{\dagger} \\ 0.0^{\dagger} \end{array}$
	Male Only						
2d year	74.4% 52.4 67.0 57.5 95.6	114.5%59.0+90.6+111.2+0.0+	71.3% 47.3 [†] 31.6 [†] 31.1 [†] 94.8 [†]	89.3% 51.1 54.9 58.9 ⁺ 61.8 ⁺	74.3% 55.0 28.6 41.8 118.4	62.4% 53.3 86.1 64.3 97.4	$\begin{array}{c} 90.2\% \\ 46.2^{\dagger} \\ 61.6^{\dagger} \\ 40.0^{\dagger} \\ 0.0^{\flat} \end{array}$
	Female Only						
2d year	54.0% 68.4 37.9 [†] 35.7 [†] 24.8 [†]	$78.2\% \\90.6^{\dagger} \\135.0^{\dagger} \\0.0^{\dagger} \\0.0^{\dagger}$	$\begin{array}{c} 45.2\%^{\dagger} \\ 72.3^{\dagger} \\ 46.1^{\dagger} \\ 0.0^{\dagger} \\ 0.0^{\dagger} \end{array}$	$\begin{array}{c} 60.1\% \\ 76.3^{\dagger} \\ 64.3^{\circ} \\ 0.0^{\circ} \\ 0.0^{\circ} \end{array}$	49.3% 101.4 27.1 [*] 58.0 [*] 45.7 [*]	55.1% 55.0 39.3 ⁵ 32.3 ⁵ 19.8 [*]	$\begin{array}{c c} 74.0\% \\ 0.0^{\dagger} \\ 0.0^{\dagger} \\ 0.0^{\dagger} \\ 0.0^{\dagger} \\ 0.0^{\dagger} \end{array}$

* As published by the Health Insurance Association of America, Table B1, Volume III. ⁴ Involves fewer than ten terminations.

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES OF A MONTHLY BENEFIT OF S1 PAYABLE FOR VARIOUS BENEFIT PERIODS. DISCOUNTED AT 3 PERCENT INTEREST (Twelve-Month Elimination Period: Males and Females Combined)

	VALUE COLEND OF ELIMINATION PLROUP					
Agil at Dinabel Ment	Based on Table CC-1 Rates of Termination*	Based on 1964 CDT	Ration for 1964 CDT			
	Benetic Payable for a Maximum of 60 Month- but Not beyond Age 65 with First Payment Due at End of Elimination Period					
25.5 35.5 45.5 55.5 62.5	\$32.19 41.24 42.36 44.78 16.12	\$30.28 33.03 36.02 39.53 15.77	106% 125 118 113 102			
Ĩ	Benefit Payable to Age 65 with First Payment Due at End of Elimination Period					
25.5 35.5 45.5 55.5 62.5	\$69.14 98.17 90.58 63.94 16.12	\$63.86 73.54 73.57 55.60 15.77	108% 133 123 115 102			

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

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES, UNDER PLANS WITH A TWELVE-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

	VALUE AS OF END OF Elimination Period				
AGE AT Disablement	Based on Table CC-1 Rates of Termination*	Based on 1964 CDT	Ratio to 1964 CDT		
	Male Only				
25.5 35.5 45.5 55.5 62.5	\$67.18 97.29 90.49 63.37 16.09	\$63.86 73.54 73.57 55.60 15.77	105% 132 123 114 102		
		Female Only			
25.5 35.5 45.5 55.5 62.5	\$68.20 99.12 90.10 66.19 16.34	\$63.86 73.54 73.57 55.60 15.77	107% 135 122 119 104		

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

TABLE CCC

GROUP LONG-TERM DISABILITY INSURANCE ILLUSTRATIVE VALUES OF A MONTHLY BEND-FLOF \$1 PAYABLE TO AGE 65, DISCOUNTED AT 3 PERCENT INTEREST

(Twelve-Month Elimination Period: Males and Females Combined)

BASIS OF ANNUITY VALLES	AGEAT DISABLEMENT						
	25.5	35.5	45.5	55.5	62.5		
	Annuity Value as of End of Elimination Period						
1964 CDT	\$63.86	\$73.54	\$73.57	\$55.60	\$15.77		
1976-80*	\$69.14	\$98.17	\$90.58	\$63.94	\$16.12		
Ratio to 1964 CDT	108%	133%	123%	115%	102%		
1962-80*	\$71.08	\$93.57	\$86.43	\$62.78	\$16.09		
Ratio to 1964 CDT	111%	127%	1179	113%	102%		

* Annuity values are based on the crude, ungraduated, combined male and female termination rates for the respective restricted observation periods for the first four years and on the 1964 Commissioners Disability Table rates thereafter.