TRANSACTIONS OF SOCIETY OF ACTUARIES 1984 REPORTS

REPORT OF THE COMMITTEE ON GROUP LIFE AND HEALTH INSURANCE

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, in part because of the elimination of the data of one company from the analyses of the rates of both disablement and termination. An examination of the data file indicated that the submission of experience for the company contained incorrect data on reported claims. As a result of this problem, the claims experience of calendar years 1978 and 1979 was understated in two prior Group LTD Studies (*TSA*, 1980 Reports and *TSA*, 1981 Reports). 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. Data from that company also were excluded for the study published in the 1982 Reports.

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, because 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 Connecticut General Life Insurance Company Continental Assurance Company Continental Casualty Company 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 Principal Financial Group 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

As previously stated, the reader should be careful in analyzing and comparing these results because of the elimination of the data of one company. Incorrect data caused an understatement in claims for the years 1978 and 1979 in the prior Group LTD Studies in the *TSA*, 1980 Reports and *TSA*, 1981 Reports.

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 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 six-month elimination period has been about 5–10 percent. A full claims history for the new

GROUP LONG-TERM DISABILITY 245

year of experience usually is reported in the subsequent year if the company continues to contribute data. Consequently, the tabulars, the number of claims, the rates of disablement, and the actual-to-tabular ratios shown in the various tables may be understated somewhat for some age and sex cells.

Note 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, 1977–81. 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-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. Note that about 6 percent of these two tables summarizes the combined experience of the male, female, and sex-unknown exposures. The experience for the exposure that 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.

Slight decreases in the male experience in Tables I-1 and I-1A compared to the previous study account for the overall improvement in rates of disablement. The female experience remains virtually unchanged from the previous study. These points should be considered in light of the elimination of the one company's data and the decrease in exposures.

Table I-2, Rates of Disablement by Calendar Year, analyzes the crude rates of disablement shown in Table I-1 and I-1A by the underlying calendar years of experience, for all ages and for combined males, females, and sexunknown 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

TABLE I-1

CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Six-Month Elimination Period; Calendar Year of Issue Excluded, Calendar Years of Experience 1977-81; All Experience Units Combined)

Attained Age	Life-Years Exposed	Number of Claims	Rate of Disablement per 1,000 Lives
All Exp	erience: Males, Females,	and Sex Unknown	
Under 40 40-44 45-49 50-54 55-59	1,873,102376,596359,436334,430266,864	2,312 873 1,343 2,150 3,095	$ \begin{array}{r} 1.23 \\ 2.32 \\ 3.74 \\ 6.43 \\ 11.60 \end{array} $
60–64	151,535	2,301	15.18
All ages	3,361,963	12,074	3.59
	Male Experience	Only	
Under 40 40-44 45-49 50-54 55-59 60-64	1,088,976 252,367 241,649 223,999 181,321 102,217	1,157 505 836 1,362 2,194 1,704	$1.06 \\ 2.00 \\ 3.46 \\ 6.08 \\ 12.10 \\ 16.67$
All ages	2,090,529	7,758	3.71
	Female Experience	Only	
Under 40 40-44 50-54 55-59 60-64	714,963 107,292 101,300 95,518 74,356 42,304	1,092 337 464 714 769 521	$ \begin{array}{r} 1.53 \\ 3.14 \\ 4.58 \\ 7.48 \\ 10.34 \\ 12.32 \end{array} $
All ages	1,135,733	3,897	3.43

the exposed risk by age groups. In addition, the reader should note the substantial decrease in the life years exposed starting in 1980.

Table I-2 shows that, for plans with a six-month elimination period, accidents accounted for about 11 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, 1981, may be understated approximately 5-10 percent.

TABLE I-1A

Attained Age	Life-Years Exposed	Number of Claims	Rate of Disablement per 1,000 Lives
All Expe	rience: Males, Females,	and Sex Unknown	
Under 40 40-44 50-54 50-59 60-64	1,142,549 228,957 219,556 209,893 172,226 103,376	1,346 496 820 1,339 1,926 1,577	$ \begin{array}{r} 1.18\\2.17\\3.73\\6.38\\11.18\\15.25\end{array} $
All ages	2,076,557	7,504	3.61
	Male Experience (Only	
Under 40 40-44 45-49 50-54 60-64	726,531 162,528 155,517 146,228 119,386 72,525	780 313 540 910 1,422 1,195	$ \begin{array}{r} 1.07 \\ 1.93 \\ 3.47 \\ 6.22 \\ 11.91 \\ 16.48 \\ \end{array} $
All ages	1,382,715	5,160	3.73
	Female Experience	Only	
Under 40 40-44 45-49 50-54 55-59 60-64	383,182 58,668 56,014 55,668 46,496 26,673	529 170 251 385 424 327	1.38 2.90 4.48 6.92 9.12 12.26
All ages	626,701	2,086	3.33

CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Six-Month Elimination Period; Calendar Year of Issue Excluded; Calendar Years of Experience 1977-81; Nonjumbo Experience Units Only)

Table I-2 shows the ratios of actual claims to tabular claims. The tabular claims in each study are the current five-year experience adjusted to be equal to 100 percent. 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 58 percent of the total number of units. This explains the large number of units (about 71 percent of the

TABLE I-2

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 1962-81)

			Nt	IMBER OF CLAI	MS	RATE OF	RATIO OF
Calendar Year of Incurral	NUMBER OF EXPERIENCE UNITS	Lift- Years Exposed	Accident	Sickness	Total (Incl. Unknown)	DISABLEMENT PER 1,000 LIVES	ACTUAL CLAIMS TO TABULAR CLAIMS*
		Ali	Experience Unit	s Combined			
1962-66 1967-71 1972-76	5,309	460,375 1,959,727 3,080,806	68 574 962	852 5,245 10,106	1,193 6,768 11,103	2.59 3.45 3.60	8377 97 99
1977 1978 1979 1980 1980	2,240 2,027	836,424 844,546 772,432 448,867 459,694	350 309 305 186 181	2,634 2,684 2,642 1,448 1,329	2,986 2,995 2,949 1,634 1,510	3.57 3.55 3.82 3.64 3.28	100% 99 108 106 98
1977-81		3,361.963	1,331	10,737	12,074	3.59	1026
		Nonji	umbo Experienc	e Units Only			
1962-66 1967-71 1972-76	935 5,242 9,714	225,019 1,317,275 2,149,365	22 391 670	347 3,207 6,739	484 4,241 7,441	2.15 3.22 3.46	6477 88 94
1977 1978 1979 1980 1981		503,167 528,704 511,519 264,101 269,066	208 185 181 103 106	1,649 1,755 1,694 821 798	1,858 1,941 1,877 924 904	3.69 3.67 3.67 3.50 3.36	100% 100 101 99 97
1977-81	8,463	2,076,557	783	6,717	7,504	3.61	100%

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

total) that experienced no claims. This table indicates that the rate of disablement and the actual-to-tabular ratios tend to be higher for larger groups. Compared to the previous study, some improvements in rates of disablement occurred in units of 500 to 4,999 lives, while those groups with 5,000 or more lives had a slight deterioration.

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, because 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

TABLE I-3

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 1977–81; All Experience Units Combined)

				RATE OF	RATIO OF		NUMBER	OF EXPERIENC	E UNITS BY R	ATIO OF ACTUA	L TO TABULA	r Claims	
Size of Unit	NUMBER OF Experience Units	LIFE-YEARS Exposed	NUMBER OF Claims	DISABLE- MENT PER 1,000 LIVES	ACTUAL CLAIMS TO TABULAR CLAIMS*	0%	1%50%	50%-75%	75%-100%	100%-150%	150% 200%	200% 500%	500% or More
Under 25 lives	1,372	19,947	139	6.97	176%	1,320	0	0	0	0	0	0	52
25-49	1,695	61,753	196	3.17	77	1,526	3	0	0	0	0	51	115
50–99	1,924	135,636	417	3.07	80	1,602	0	0	0	1	18	208	95
100–249		255,369	945	3.70	99	1,094	0	0	28	122	110	250	49
250-499		292,832	1,071	3.66	101	342	13	76	81	123	68	122	12
500-999		361,041	1,315	3.64	103	124	62	61	64	84	61	56	5
1,000–2,499		544,378		3.62	104	34	50	62	53	67	48	30	1
2,500-4,999	120	405,601	1,451	3.58	99	4	21	18	17	31	21	7	1
Under 5,000	8,463	2,076,557	7,504	3.61	100%	6,049	149	217	243	428	326	724	330
5,000 or more	122	1,285,406	4,570	3.56	106%	6	17	12	21	39	20	7	0
Tota!	8,585	3,361,963	12,074	3.59	102%	6,055	166	229	264	467	346	731	330

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 are shown for the various age groups. The number of claims in each cell also has been shown to indicate the relative weights of the results.

Table I-4 clearly shows that more than one-third (35%) of the claims for males of all ages is for diseases of the circulatory system and also indicates that this cause increases in percentage with age. The percentage of claims for males caused by diseases of the circulatory system also is in the same proportion as in the previous few studies. Claims for females of all ages are caused slightly more often by diseases of the bones and organs than diseases of the circulatory system. About the only noticeable change in percentages over the past few studies is a slight increase in malignant neoplasms as a cause for claims.

The experience underlying Tables I-1 and I-1A also has 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 (that is, Code 2), was further analyzed to investigate the 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 employer-sponsored 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. Note that the tabulars and the actual-to-tabular ratios are consistent with those in Table I-5 for Employee Class Code 2.

TABLE I-4

DISTRIBUTION OF THE NUMBER OF CLAIMS BY DIAGNOSIS (Six-Month Elimination Period; Calendar Year of Issue Excluded; Calendar Years of Experience 1962-81; All Experience Units Combined; Active Lives Experience Only)

				М	ALE							FEN	(ALE							To	TAI.			
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
Infective and parasitic diseases:			1								1								1	1	†			
Number	7	9	10	9	21	14	18	88	7	3	0	5	5	4	4	28	14	12	10	14	26	18	22	116
Percent	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Malignant neoplasma (cancer):			[ļ										
Number	40	94	86	221	312	508	401	1,662	36	87	78	168	240	234	147	990	76	181	164	389	552	742	548	2,652
Percent	4	5	6	9	8	9	8	8	4	7	8	13	13	12	11	11	4	6	7	10	10	9	9	9
Benign and unspecified neoplasms:	[[
Number.		12	13	12	20	25	14	103	12	15	10	5	12	16	4	74	19	27	23	17	32	41	18	177
Percent	1	1	1	0	1	0	0	0	1	1	1	0	1	1	0	1	1	1	1	0	1	1	0	
Allergic, endocrine-system,			İ.												1							-		•
metabolic, and nutritional]]								1)]]			1					
diseases:	1			[1											Į		
Number	12	37	28	44	69	102	108	400	18	14	17	28	28	37	31	173	30	51	45	72	97	139	139	573
Percent	1	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1.55	275
Diseases of the blood and blood-		-	-	-	-	-		2	-		-	-	-	-	-	-	~	2	2	-	-	-	-	-
forming organs:			ļ	{							ļ				Į –	{ i			1	Į I				
Number	13	17	27	36	48	84	84	309	14	15	18	21	31	40	20	159	27	32	45	57	79	124	104	468
Percent	1	1	2	1	1	1	2	1	2	15	2	21	2	2	2	137	1	يتيان 1	2	1	19	124	2	400
Mental, psychoneurotic, and		•	-	·		•	-	•	-	•	-	2	-	2	-	-	1	1	-		1	-	2	4
personality disorders:																								
Number.	65	124	79	132	179	197	133	909	96	149	85	96	124	81	46	677	161	273	164	228	303	278	179	1,586
Percent	6	7	5	5	5	3	3	4	п	12	9	7	7	4	4	7	8	9	7	6	5		3	1,500
Diseases of the nervous system	Ň					5	5				Í	,	,	7	- T	'	Ň	,	1	0		-	.,	
and sense organs:															1									
Number.	61	156	114	168	255	346	321	1,421	92	104	79	96	112	130	92	705	153	260	193	264	367	476	412	2,126
Percent	6	9	8	100	7	.40	6	-,-21	10	8	8	7	6	130	1 7	7	100	200	8	204	507	4/0	413	-,120
Diseases of the circulatory system:	Ň				'	v	0	, í		0	0	1	0	ĺ ĺ	1		•	, ,,	l °	1 1	0	0		
Number	37	229	400	848	1 444	2 426	2,171	7,555	40	90	120	210	375	521	394	1,750	77	319	520	1 050	1,819	2 0 4 7	7 545	0.105
	4	13	27	33	37	2,420	43	35	40	90 7	120	16	21	27	394	1,750		10			· ·	· ·	· ·	
Percent	4	15	41	- 35	57	41	43	22	*	1	15	10	21	27	_ 30	19	4	10	21	27	32	- 38	41	30

				M	ALE							Fem	ALE		_					То	TAL.			
DIAGNOSIS	Under 30	30- 39	40- 44	45- 49	50- 54	55- 59	60 - 64	Alí Ages	Under 30	30- 39	40 44	45- 49	50- 54	55 59	60. 64	All Ages	Under 30	30- 39	4()- 44	45- 49	50- 54	55- 59	60- 64	All Ages
N							()4	Ages								Aleca					<u> </u>			14203
Diseases of the respiratory system:	13	50	45	139	258	440	410	1.355	25	40	44	46	65	87	85	392	38	- 90	89	185	323	527	495	1.747
Number	1 12		3	1.57	0		410	1.000	3	- 40	5	40	4	07 1	6	1	2	3	4	5	6	7	8	6
Percent	1	1 3		2			n n					-	-	•		-	-		-			l '	, a	
Number	13	60	49	- 88	95	170	127	602	33	54	41	45	59	60	37	329	46	114	90	133	154	230	164	931
Percent	15	3	47	1 00	2	3	3	002		A	-1	3	1 2	3	1	1 2	2	4	1	3	3	3	3	3
Diseases of the genitourinary	1	-			-	.'	.,			-	-				1		~	-	1 7	-'				
system:			1											ł	1				1		1	1	}	
Number.	20	28	29	27	58	69	61	292	28	46	24	22	30	.18		197	48	74	53	49	88	97	80	489
Percent	20	20	2			1	1	1	3	4	3	2	2	1		1 .	3	2	2	1	2	1	1	2
Diseases of the skin and cellular	-	-	-	1.	1 1		•	,	.,			~	-			-			1		-			-
tissue:	1	[[1		[1			
Number	14	20	13	20	24	38	34	163	14	23	8	13	18	23	12	112	28	43	21	33	42	61	47	275
Percent			1.5	1 20	-4	1	_,14	10,0	2	2.1	1						1				1	1	1	
Diseases of the bones and organs	1	· ·		1	1	1			-	-		•					· ·		1	1 1				
of movement:																	ļ							
Number.	184	364	256	386	531	745	629	3,095	146	269	197	282	365	387	237	1,883	330	633	453	668	896	1,132	866	4,978
Percent	184	20	17	15	14	13	13	14	16	22	21	22	20	20	18	20	17	1	19		16	14	14	16
Congenital malformations:	10	-0	17	1.7	14	1.1		14	10		1		20					-'	1 1	1 1	10			1.
Number.	3	2	l ,	3	10	6	2	27	1	1	2	2	1		· ·	13	4	3	3	5	14	7	4	40
Percent		[ā		0	0	0	õ	0	0	0	- Õ	0	0		0		0	0	0		1 0	0	, o	r c
Senility and ill-defined conditions:] "		0		, v	, ,,	, v				ľ					ļ		1	Ĭ	j ï]
Number.	41	61	44	73	106	173	123	621	83	81	45	50	43	74	5.4	480	124	142	89	123	199	247	177	1.101
	41		3	1	3	3	12.7	3	9	7	5	4	5		1	400	6	5	4	3	3	3	3	1,101
Percent				-					Í	· ·		· ·					, i							
violence:	1																ł	1						
	449	443	212	224	256	249	149	1,982	202	186	105	123	143	121	72	953	651	629	318	347	399	370	221	2,935
Number	449	25	14	9	200	_49 	149	1,962	202	15	100	10	8	6	{	1	34	21	13	1	7	5	3	-, /./. g
Percent	44	25	14	9		4		"	2.3	15	11					·		21	1.5		· /			,
Undetermined: Number	46	97	90	151	216	310	221	1.131	48	69	59	82	94	102	54	508	94	166	149	233	310	412	275	1,639
	40	5	6	151	216	510	221	5	40	6	- 59	64 6	5	5	4	, 110 5	5	5	6		510	5	4	1,039
Percent				- 0	0		- 4		'	- 0		0	Ļ							<u> </u>	+			
Total:		1		1																1				
Number	1,025	1,803		2.581		5,902		21,715		1,246	933		1,798	1		9,423	1			t 1	5,700		6,317	
Percent	100	100	100	100	- 100	160	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

TABLE I-4-Continued

TABLE I-5

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 1977-81)

		TABLE	-1 Experience-	Nonjumbo U	nits Only	Та	BLE I-1A EXPERIE	NCE-ALL UN	ITS
Employee Code	Employee Class	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual to Tabular Claims*	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual to Tabular Claims*
2 3	At least 75% salaried, majority executive At least 75% salaried, majority nonexecutive 50%-75% salaried At least 50% salaried (exact percentage unknown)	430 4,142 1,506 90	81,924 1,140,731 344,030 13,457	214 3,861 1,330 63	70% 92 107 121	436 4,235 1,515 90	137,760 2,114,487 478,396 13,457	355 6,737 2,076 63	73% 91 120 121
	Subtotal (majority salaried)	6,168	1,580,142	5,468	95%	6,276	2,744,100	9,231	97%
4	At least 50% hourly 50%–75% hourly At least 75% hourly	42 214 428	25,068 59,299 141,835	89 342 764	103 170 157	42 220 434	25,068 123,027 185,550	89 628 1,253	103 165 176
	Subtotal (majority hourly)	684	226,202	1,195	157%	696	333,645	1,970	169%
9	Indeterminate	1,611	270,213	841	90%	1,613	284,218	873	89%
	Total	8,463	2,076,557	7,504	100%	8,585	3,361,963	12,074	102%

TABLE I-5A

SUPPLEMENTAL ANALYSIS OF TABLE I-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 1977-1981

		NONJUMBO I	JNITS ONLY			ALL EXPERIN	NCE UNITS	
	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual 10 Tabular Claims*	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual to Tabular Claims*
[. Relations	nip between Lon	g-Term Disability	Benefit and Sa	lary				
Ratio of gross benefit (before reduction of integration) to salary: Always less than 50% Generally less than 50%	54 16	18,808 4,439	66 3	83% 26	64 16	101,201 4,439	256 3	71% 26
Subtotal (less than 50%)		23,247	69	81%	80	105,640	259	70%
50% (exactly or approximately)		333,383	1,067	84%	896	623,594	1,849	80%
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%	46 110 2,396 567	14,298 14,903 567,355 157,463 2,787	99 35 1,928 536 4	152 60 96 96 36	46 115 2,418 582 15	14,298 46,809 844,937 381,345 2,787	99 292 2,656 1,294 4	152 151 93 107 36
Subtotal (greater than 50%)	3,134	756,806	2,602	98%	3,176	1,290,176	4,345	102%
Other, including not determinable		27,295	123	104%	83	95,077	284	75%
Total salaried, nonexecutive	4,142	1,140,731	3,861	92%	4,235	2,114,487	6,737	91%

		Nonjumbo	UNITS ONLY			ALL EXPERIE	INCE UNITS	
	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual Io Tabular Claims*	Number of Experience Units	Life Years Exposed	Number of Claims	Ratio of Actual to Tabular Claims*
	1. Analysis by I	Plan Integration F	rovision					
Other income sources included in plan integration provision: Social security primary benefit only or in combination with income from other sources Social security primary and family benefit only or in combination with income from other sources. Other integration bases Nonintegrated Total salaried, nonexecutive	567 2,403 142 1,030 4,142	183,140 599,607 51,436 306,548 1,140,731	702 1,863 225 1,071 3,861	102% 82 139 98 92%	578 2,426 147 1,084 4,235	298,435 757,484 102,978 955,590 2,114,487	761 2,383 308 3,285 6,737	72% 85 84 104 91%
III. Extent to Whic	a Disability In	come Is Provided	During Elimin	ation Period	L	1 <u>.</u> 1		
Disability income benefit provided during elimination period: Full salary Less than full salary but generally more than 50% Generally less than 50% of salary None Noncodable or unknown	91 693 143 434 2,781	36,912 196,225 25,148 108,978 773,468	133 754 125 386 2,463	99% 104 118 94 87	104 732 148 434 2,817	222,251 595,826 56,936 108,978 1,130,496	620 1,719 352 386 3,660	99% 89 120 94 89
Total salaried, nonexecutive	4,142	1,140,731	3,861	92%	4,235	2,114,487	6,737	91%

TABLE I-5A—Continued

In examining Tables I-5 through I-8, note that many of the variables analyzed may be interrelated. This is especially true in the analysis by industry (Table I-6), in which the results shown in the various cells may be heavily influenced by the relative level of hourly and salaried employees. The portion of 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 of employee class on the disablement rates by industry classification.

The respective analyses are shown in Table I-6A, separately for nonjumbo units and for all experience units combined. Note 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 comparisons of Tables I-6 and I-6A is shown in Table I-6B, Industry Experience by Employee Class.

Table I-7, Experience by Contributory Status, separates the experience among plans in which the employee pays the entire cost, plans in which the employer pays the entire cost, and plans in which 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 I-A 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 employer-sponsored, short-term plans during the benefit elimination period; (b) the proportion of salary represented by the long-term disability benefit (before integration); and (c) the point at which the long-term disability benefit is reduced, if at all, when total income for all sources exceeds a certain percentage of salary (that is, 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"

TABLE I-6

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 1977-81)

		TABLE I-	1 EXPERIENCE-	Nonjumbo Un	ITS ONLY	Ta	BLE I-1A EXPERI	ENCE-ALL UN	aits
Industry Codes	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	44	4,807	14	88%	45	13,222	27	54%
10-14		185	75,631	478	166	185	75,631	478	166
15-17		206	72,878	293	113	206	72,878	293	113
19-27	Food, tobacco, textile and wood products	1,022	263,001	1,234	121	1,036	374,324	2,051	134
28-32	Chemical, petroleum, rubber, leather and stone products	607	174,661	619	99	627	340,315	1,249	102
33-37	Metal, machinery, and transportation equipment	1,681	407,424	1,360	91	1,710	670,143	1,943	81
38-39	Instruments and miscellaneous manufacturing	270	59,743	267	114	270	59,743	267	114
40-49		423	136,445	628	124	434	257,479	1,099	120
50-59	Wholesale and retail trade	1,302	265,398	959	103	1,302	265,398	959	103
60-67	Finance, insurance, and real estate	1,111	306,212	786	76	1,128	667,143	1,775	92
70-89	Services	1,504	276,524	777	79	1,534	531,854	1,844	95
91-97		69	31,825	86	80	69	31,825	86	80
	All other classifiable	10	979	2	55	10	979	2	55
99	Nonclassifiable	29	1,029	1	24	29	1,029	1	24
	Total	8,463	2,076,557	7,504	100%	8,585	3,361,963	12,074	102%

TABLE I-6A

SUPPLEMENTAL ANALSYIS 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 1977-81)

		TABLE I-	1 EXPERIENCE-	NONJUMBO UN	ITS ONLY	TAI	BLE I-1A EXPER	ENCE-ALL UN	uts
Industry Codes	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*
	I. Gro	ups Containing	a Majority of Ho	urly Employees					
01-09 10-14 15-17 19-27 28-32 33-37 38-39 40-49	Mining Contract construction Food, tobacco, textile and wood products Chemical, petroleum, rubber, leather and stone products Metal, machinery, and transportation equipment Instruments and miscellancous manufacturing Transportation, communication, electric, gas, and	1 19 42 126 49 136 8 42	32 23,615 17,110 32,596 21,237 42,287 565 14,571	0 171 73 297 99 176 1 81	0% 180 179 218 170 146 58 143	1 19 42 131 51 136 8 47	32 23,615 17,110 69,273 34,820 42,287 565 71,754	0 171 73 782 115 176 1 355	0% 180 179 229 121 146 58 159
50-59 60-67 70-89 91-97 99	Finance, insurance, and real estate Services	141 35 72 13 0 0	46,239 7,821 18,141 1,988 0 0	168 20 91 18 0 0	107 73 127 221 0 0	141 35 72 13 0 0	46,239 7,821 18,141 1,988 0 0	168 20 91 18 0 0	107 73 127 221 0 0
	Total	684	226,202	1,195	154%	696	333,645	1,970	167%

		TABLE I-	1 EXPERIENCE	Nonjumbo Un	ITS ONLY	TA	BLE I-1A EXPERI	ENCE-ALL U	NITS
Industry Codes	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*
	II. Gro	ups Containing a	a Majority of Sal	aried Employee	s				
01-09 10-14 15-17 19-27 28-32 33-37 38-39 40-49	Mining Contract construction Food, tobacco, textile and wood products Chemical, petroleum, rubber, leather and stone products Metal, machinery, and transportation equipment Instruments and miscellaneous manufacturing	33 163 149 763 471 1,349 185 306	4,102 51,954 54,627 209,239 141,607 304,606 52,823 108,189	12 307 157 845 469 997 256 498	87% 160 74 105 90 84 125 123	34 163 149 772 489 1,378 185 312	12,517 51,954 54,627 283,885 293,678 567,325 52,823 172,040	25 307 157 1,177 1,083 1,580 256 695	52% 160 74 106 100 76 125 107
50-59 60-67 70-89 91-97 99	Wholesale and retail trade Finance, insurance, and real estate	964 759 958 48 4 16	194,338 216,203 212,808 28,406 529 711	716 554 593 64 0 0	107 76 80 68 0 0	964 774 988 48 4 16	194,338 563,129 468,138 28,406 529 711	716 1,511 1,660 64 0 0	107 95 97 68 0 0
	Total	6,168	1,580,142	5,468	94%	6,276	2,744,100	9,231	96%

TABLE I-6A—Continued

TABLE I-6B

COMPARISON OF TABLES I-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 1977–81)

		TABLE 1-	A EXPERIENCE	-Nonjumbo U:	NITS ONLY	T.	ABLE I-1 EXPERI	ence – All Un	ITS
Industry Codes	Industry	All	Majority Salaried	Majority Hourly	Indetermi- nate	All	Majority Salaried	Majority Hourly	Indetermi- nate
01-09	Agriculture, forestry, and fisheries	88%	87%	0%	98%	54%	52%	0%	98%
10-14		166	160	180	0	166	160	180	0
15-17		113	74	179	1,163	113	74	179	1,163
19-27		121	105	218	113	134	106	229	113
	Chemical, petroleum, rubber, leather and stone	99	90	170	117	102	100	121	117
· · ·	products								
33-37	Metal, machinery, and transportation equipment	91	84	146	99	81	76	146	99
38-39		114	125	58	38	114	125	58	38
40-49	Transportation, communication, electric, gas, and	124	123	143	114	120	107	159	114
	sanitary services		_						
50-59	Wholesale and retail trade	103	107	107	73	103	107	107	73
60-67		76	76	73	79	92	95	73	78
70-89		79	80	127	57	95	97	127	57
91-97		80	68	221	1 77	80	68	221	11
	All other classifiable	55	0	0	120	55	0	0	120
99	Nonclassifiable	24	0	0	58	24	0	0	58
	Total	100%	94%	154%	90%	102%	96%	167%	89%

TABLE I-7

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 1977-81)

	TABLE	I-1A EXPERIENCE-	NONJUMBO UNIT	S ONLY		TABLE I-1 EXPERIENCE—ALL UNITS			
	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual Calims 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 share cost	482 4,942 2,884	179,050 949,911 880,812	706 3,405 3,142	104% 102 97	499 4,971 2,959	407,180 1,345,898 1,535,063	1,353 4,169 6,297	100% 94 110	
Unknown	155	66,784	251	99	156	73,822	255	92	
Total	8,463	2,076,557	7,504	100%	8,585	3,361,963	12,074	102%	

TABLE I-8

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 1977-81)

	TABLE	I-1A EXPERIENCE-	-Nonjumbo Unit	s Only		TABLE I-1 EXPERI	ENCE-ALL UNITS	
	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*	Number of Experience Units	Life- Years Exposed	Number of Claims	Ratio of Actual Claims to Tabular Claims*
No indirect integration Indirect integration — nonduplication level: Less than 50% 60–69% 70–79% 80–89% Greater than 89% Integrated but noncodable	5,557 13 348 1,048 1,378 69 24 26	1,229,084 11,965 166,412 259,818 353,692 27,170 13,048 15,368	4,108 25 733 1,006 1,427 124 30 51	92% 53 118 110 110 138 69 133	5,594 13 369 1,085 1,400 74 24 26	1,619,231 11,965 392,592 584,642 662,023 63,094 13,048 15,368	5,339 25 1,364 2,161 2,791 313 30 51	92% 53 109 98 125 151 69 133
Total	8,463	2,076,557	7,504	100%	8,585	3,361,963	12,074	102%

TABLE I-A

EXPERIENCE UNDER PLANS WHERE LTD BENEFIT IS DIRECTLY 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 Years of Experience 1977-81; Nonjumbo-All Employee Classes)

maies, remaies, and sex Unknown Combin	eu, Calenuar rears or	Experience 1977-61, N	onjunioo—An Employee Classes)

Indirect Integration Classification	Relationship between LTD Benefit and Salary	Relationship between Disability Income Provided during the Elimination Period and Salary	Number of Experience 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%	55 45	13,611 17,267	42 73	94% 104
		Subtotal	100	30,878	115	100%
	Greater than 50%	50% or less Greater than 50%	46 40	21,850 8,202	126 67	125% 200
		Subtotal	86	30,052	193	144%
	Subtotal		186	60,930	308	124%
Nonduplication level greater than or equal to 60%	50% or less	50% or less Greater than 50%	49 9	16,324 1,109	105 2	161% 56
		Subtotal	58	17,433	107	155%
	Greater than 50%	50% or less Greater than 50%	293 306	66,734 75,057	278 214	110% 82
		Subtotal	599	141,791	492	96%
	Subtotal		657	159,224	599	103%
None	50% or less	50% or less Greater than 50%	762 27	215,527 10,931	615 26	75% 80
		Subtotal	789	226,458	641	75%
	Greater than 50%	50% or less Greater than 50%	3,811 89	697,522 35,985	2,397 79	95% 62
		Subtotal	3,900	733,507	2,476	94%
	Subtotal		4,689	959,965	3,117	89%
Total			5,532	1,180,119	4,024	96%

TABLE II-1

CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Three-Month Elimination Period; Calendar Year of Issue Excluded; Calendar Years of Experience 1977-81; All Experience Units Combined)

Attained Age	Life-Years Exposed	Number of Claims	Rate of Dis- ablement per 1,000 Lives
All Expe	erience: Males, Females,	and Sex Unknown	
Under 40	655,846 123,232	1,349 436	2.06 3.54
45-49	110,468 101,143	619 793	5.60 7.84
55–59	81,572 50,023	1,092 861	13.39 17.21
All ages	1,122,284	5,150	4.59
	Male Experience	Only	
Under 40	389,957	660 249	1.69
40-44	80,608 71,264	369	5.18
50-54	65,030 52,427	488 711	7.50 13.56
60–64 All ages	32,733	598 3,075	<u>18.27</u> 4.44
	Female Experience	Only	
Under 40	242,123	665	2.75
40-44	37,677 34,583	174 233	4.62 6.74
50-54	31,789 25,910	280 347	8.81 13.39
60–64	15,348	232	15.12
All ages	387,430	1,931	4.98

series is for three-month elimination periods, and the "III" series of tables is for twelve-month elimination.) Note that the number of claims underlying the disablement rate for some of the sex-age cells shown in these tables is relatively small.

As with plans having a six-month elimination period, the experience on plans with three-month and twelve-month elimination periods is 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.

TABLE III-1

Attained Age	Life-Years Exposed	Number of Claims	Rate of Dis- ablement per 1,000 Lives
All Ex	perience: Males, Females,	and Sex Unknown	
Under 40	188,113	202	1.07
40-44	37,683	45	1.19
45-49	39,455	112	2.84
50–54	40,794	220	5.39
55–59	32,648	332	10.17
60–64	16,628	169	10.16
All ages	355,321	1,080	3.04
	Male Experience	Only	
Under 40	144,959	144	0.99
40-44	28,458	27	0.95
45–49	29,626	86	2.90
5054	30,988	160	5.16
55-59	24,276	251	10.34
60–64	12,648	138	10.91
All ages	270,955	806	2.97
	Female Experience	Only	
Under 40	36,230	52	1.44
40-44	7,472	17	2.28
45-49	7,903	23	2.91
50–54	7,841	54	6.89
55-59	6,697	72	10.75
60-64	3,018	26	8.61
All ages	69,161	244	3.53

CRUDE RATES OF DISABLEMENT PER 1,000 LIVES EXPOSED (Twelve-Month Elimination Period; Calendar Year of Issue Excluded; Calendar Years of Experience 1977–81; All Experience Units Combined)

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

Compared to the previous study, the three-month elimination period data show a decrease in rates of disablement. While the 12-month data for the overall rate of disablement remains about the same as the last study, some changes have occurred with the male and female rates. Unlike the six- and twelve-month elimination period experience, the three-month data have notable increases in the life years exposed and claims.

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, respectively, by the underlying calendar year of experience for all ages and for males,

TABLE II-2

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 1962-81; All Experience Units Combined)

			N	UMBER OF CL	RATE OF	RATIO OF	
Calendar Year of Incurrat	NUMBER OF Experience Units	Life- Years Exposed	Accident	Sickness	Total (Incl. Unknown)	DISABLE- MENT PER 1,000 Lives	ACTUAL CLAIMS TO TABULAR CLAIMS*
1962–66 1967–71 1972–76		124,958 756,728 1,097,220	36 433 698	297 2,460 4,630	411 3,278 5,340	3.29 4.33 4.87	76% 95 107
1977 1978 1979 1980 1981	1,560 1,819 1,614 1,322 1,381	252,629 258,209 262,360 168,439 180,647	127 149 143 107 109	1,025 970 1,076 697 737	1,153 1,120 1,227 804 846	4.56 4.34 4.68 4.77 4.68	99% 92 102 106 105
1977–81	7,696	1,122,284	635	4,505	5,150	4.59	100%

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

TABLE III-2

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 1962-81; All Experience Units Combined)

			N	UMBER OF CL	AIMS	RATE OF	RATIO OF
Calendar Year of Incurral	NUMBER OF Experience Units	Life- Ylars Exposed	Accident	Sickness	Total (Incl. Unknown)	DISABLE- MENT PER 1,000 LIVES	ACTUAL CLAIMS TO TABULAR CLAIMS*
1962–66 1967–71 1972– 76		21,316 144,002 289,354	0 21 82	38 227 793	40 287 877	1.88 1.99 3.03	69% 73 107
1977 1978 1979 1980 1981	137 137 68	72,726 106,139 105,263 36,950 34,243	19 43 42 7 9	218 290 221 115 116	237 333 263 122 125	3.26 3.14 2.50 3.30 3.65	110% 102 81 111 127
1977-81	540	355,321	120	960	1,080	3.04	100%

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 12 percent on plans with a three-month elimination period and about 11 percent on plans with a twelve-month elimination period for calendar years 1962–81.

As with plans having 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 because of 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 about 72 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 that 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, the reader should use caution 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 comparing the differences between the companies, the reader should be reminded of the various caveats noted throughout this study.

TABLE II-3

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 1977-81; All Experience Units Combined

					RATIO OF	Ni	IMBER OF E	XPERII NCE U	JNITS BY RA	TIO OF ACT	UAL TO TAB	ULAR CLAIN	(5*
Size of Unit	NUMBER OF Experience Units	Life-Years Exposed	NUMBER OF CLAIMS	RATE OF DISABLE- MENT PER 1,000 LIVES	Actual Claims to Tabular Claims*	0%	19 50%	5073 75%	75%- 100%	100%- 150%	150% 200%	200%- 500%	500% or More
Under 25 lives	1,649	24,632	107	4.34	83%	1,556	0	0	0	0	0	3	90
25-49	2,045	72,884	297	4.07	82	1,786	1	0	0	0	1	89	168
50–99	1,816	125,435	493	3.93	84	1,415	0	()	0	5	35	270	91
100-249	1,303	195,735	846	4.32	95	773	0	4	33	103	125	224	41
250-499	439	155,092	767	4.95	107	137	- 20	38	47	63	55	71	8
500999	266	184,298	828	4.49	99	53	32	32	34	47	31	35	2
1,000-2,499	137	198,133	1,038	5.24	117	11	17	15	24	26	18	26	0
2,500-4,999	31	101,525	421	4.15	100	1	6	8	3	5	3	5	0
Under 5,000	7,686	1,057,734	4,797	4.54	99%	5,732	76	97	141	249	268	723	400
5,000 or more	10	64,550	353	5.47	104%	0	0	1	4	4	1	0	0
Total	7,696	1,122,284	5,150	4.59	100%	5,732	76	98	145	253	269	723	400

TABLE III-3

RATES OF DISABLEMENT AND RATIOS OF ACTUAL CLAIMS TO TABULAR CLAIMS BY SIZE 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 1977-81; All Experience Units Combined

				D	RATIO OF	Nt	imber of E	XPERIENCE U	UNITS BY RA	TIO OF ACT	ual to Tab	ULAR CLAIN	15*
Size of Unit	NUMBER OF EXPERIENCE UNITS	LIFE-YEARS Exposed	NUMBER OF CLAIMS	RATE OF DISABLE- MENT PER 1,000 LIVES	Actual Claims to Tabular Claims*	0%	1%- 50%	50%- 75%	75%- 100%	100%~ 150%	150%- 200%	200%- 500%	500% or More
Under 25 lives	40	452	1	2.21	74	39	0	0	0	0	0	0	1
25–49	78	2,787	8	2.87	77	71	0	0	0	0	0	1	6
50–99	104	7,371	14	1.90	60	90	0	0	0	0	0	12	2
100–249	129	21,338	62	2.91	88	89	0	0	2	10	5	21	2
250–499		22,308	72	3.23	99	25	0	6	8	8	6	8	0
500–999	49	35,357	100	2.83	85	14	4	8	2	13	4	4	0
1,000-2,499	44	69,575	250	3.59	110	4	2	6	6	15	4	7	0
2,500-4,999	18	65,539	145	2.21	81	3	6	3	1	1	4	0	0
Under 5,000	523	224,727	652	2.90	93	335	12	23	19	66	23	53	11
5,000 or more	17	130,594	428	3.28	115	0	0	5	1	5	5	1	0
Total	540	355,321	1,080	3.04	100	335	12	28	20	71	28	54	11

EXHIBIT I

1	TABL	e I-1A	Таві	f: 11-1	Тавы	E III-1
Contributing Company	% of Total Exposure	Ratio of Actual Claims to Tabular Claims	6 of Total Exposure	Ratio of Actual Claims to Tabular Claims	G of Total Exposure	Ratio of Actual Claims to Tabular Claims
1	9%	112%	2%	62%	10%	128%
1	2	88	1	41	3	27
II	18	116	33	115	31	115
V	2	124	4	102	0	- 30
7	2	47	3	72	1	0
/1	0	0	0	0	0	0
/II	12	113	10	129	5	98
/III	0	0	0	0	0	0
X	36	100	19	79	43	97
	0	0	0	0	0	0
۲	15	78	23	88	4	38
(II	2	36	1	120	3	70
(III	2	97	3	113	1	125
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

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 with those of previous studies because of the elimination of the data of one company. Even though the disablement experience of the company 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 1962–1981. Because of the small number of terminations at the later durations, the experience has been truncated at the end of eight years of disablement. Note 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 65,870 claims exposed to termination, of which 12,074 and 19,064 originated from the 1977–81 and the 1962–76 portions, respectively,

CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Six-Month Elimination Period; Calendar Years of Experience 1962-81)

			AGE AT DI	SABLEMENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64
	Male ar	nd Female Con	ibined			
7th month	62.5	44.5	51.0	36.2	23.4	16.8
8th month	68.8	50.8	57.2	39.2	24.3	16.8
9th month	65.7	48.5	54.6	35.9	22.4	16.1
10th month	60.1	41.8	48.1	31.9	19.9	13.5
11th month	53.4	36.9	42.6	28.4	18.4	11.2
12th month	52.4	38.2	43.0	28.4	17.1	12.4
1st year (last 6 months)	312.3	234.0	262.3	184.1	119.1	83.8
13th month	47.0	37.7	40.8	26.2	15.7	10.9
14th month	40.2	32.0	34.7	21.8	14.0	9.2
15th month	39.7	27.7	31.7	19.1	12.1	10.0
16th month	32.9	25.2	27.7	17.0	10.4	9.4
17th month	27.9	25.0	26.0	16.7	9.2	8.3
18th month	26.8	22.0	23.5	15.8	10.3	7.9
19th month	27.3	17.6	20.7	12.1	10.1	7.8
20th month	24.9	14.5	17.8	10.2	8.0	8.0
21st month	20.7	13.5	15.8	10.5	7.9	7.2
22nd month	17.0	15.5	16.0	9.9	7.5	5.8
23rd month	17.2	15.3	15.9	10.3	7.3	6.2
24th month	27.7	17.4	20.6	12.8	8.0	7.2
2nd year	298.9	234.1	255.5	167.9	114.1	93.8
3rd year	214.2	140.0	162.4	101.1	72.1	64.6
4th year	93.1	73.8	79.0	55.5	50.3	51.4
5th year	54.9	47.6	49.6	39.8	44.6	33.2
6th year	52.2	43.6	45.7	33.6	43.0	32.5
7th year	57.8	42.5	46.0	32.5	40.4	19.5†
8th year	19.1*	29.2	26.8	34.6	35.4	22.6†
		Male Only				
1st year (last 6 months)	311.5	238.5	263.7	177.1	117.1	80.5
2nd year	307.3	241.5	262.6	156.9	112.0	95.0
3rd year	217.1	145.7	166.5	97.1	73.0	65.5
4th year	114.8	88.4	95.4	57.6	54.1	56.1
5th year	49.7	52.6	51.9	41.1	49.4	34.9
6th year	59.2	35.6	41.5	36.9	49.8	'33.4
7th year	58.7†	51.0	52.8	36.2	44.7	22.0†
8th year	19.8*	27.5	25.6	42.2	37.6	21.5†
		Female Only				
1st year (last 6 months)	313.4	227.5	260.2	196.6	124.4	96.0
2nd year	287.7	223.3	245.7	188.4	120.0	89.1
3rd year	210.3	132.1	156.9	108.8	69.6	60.9
4th year	63.6	52.3	55.5	51.2	39.1	33.5
5th year	62.3	40.4	46.2	37.0	30.4	26.9
6th year	41.4†	55.3	52.0	27.0	23.1	29.8*
7th year	55.3†	29.6†	35.5	24.8	28.1	6.7*
8th year	17.5*	32.0†	28.8†	18.4	28.7	30.1*

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

of the active lives experience (all experience units combined), with the remaining 34,732 claims from experience units that were not included in the study of rates of disablement. In the past, the Committee had conducted an analysis of the termination rates of only the claims that also were 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. No such examination was performed this time.

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 a result of the shorter elimination periods of the individual health insurance experience underlying the first-year termination rates of the 1964 CDT. In addition, the percentage of claims terminated is somewhat lower than in the previous study.

Table A-4 further analyzes the claim termination experience by examining, by claim incurral year during the period 1962–81, 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 60 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 46,402 male and 19,468 female claims in this analysis. As 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.

Number of Claims Terminated by Death of	R RECOVERY
(Six-Month Elimination Period; Calendar Years of Ex	perience 1962-81)

DURATION OF DISABLEMENT			Age at Dis	ABLEMENT		_			
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	4049	50-59	60-64			
	Male an	id Female Con	ıbined						
1st year (last 6 months)	1,055	1,414	2,469	2,466	3,437	1,098			
2nd year	550	871	1,421	1,536	2,498	873			
3rd year	219	333	552	684	1,264	399			
4th year	57	122	179	297	724	178			
5th year	24	61	85	173	517	55			
6th year	16	43	59	117	389	18			
7th year	13	30	43	89	249	7			
8th year	3	18	21	79	145	6			
Male Only									
1st year (last 6 months)	582	857	1,439	1,528	2,479	836			
2nd year	324	530	854	928	1,811	703			
3rd year	122	203	325	437	945	322			
4th year	42	88	130	207	583	152			
5th year	12	40	52	121	428	45			
6th year	11	20	31	86	337	15			
7th year	8	23	31	68	204	7			
8th year	2	10	12	65	114	5_			
		Female Only							
1st year (last 6 months)	473	557	1,030	938	958	262			
2nd year	226	341	567	608	687	170			
3rd year	97	130	227	247	319	77			
4th year	15	34	49	90	141	26			
Sth year	12	21	33	52	89	10			
6th year	5	23	28	31	52	3			
7th year	5	7	12	21	45	0			
8th year	1	8	9	14	31	1			

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 1962-81)

	ALL AGES			AGE AT DI	SABLEMENT						
DURATION OF DISABLEMENT	OF DIS-										
DORATION OF DISABLEMENT	ABLEMENT	Under 30	30-39	Under 40	40-49	5059	60-64				
	COMBINED										
Male and Female Combined											
1st year (last 6 months)	35.4%	57.8%	45.2%	49.9%	39.6%	31.3%	24.5%				
2nd year	71.7	96.1	84.8	88.9	71.7	65.3	68.2				
3rd year.		92.8	71.2	78.6	61.4	53.9	53.6				
4th year		53.6	51.9	52.5	46.9	47.1	48.1				
5th year	46.5	40.8	44.7	43.6	44.1	49.4	33.5				
6th year		47.9	51.1	50.2	45.0	53.0	34.8				
7th year	50.3	62.0	57.9	59.0	47.3	51.9	21.5†				
8th year	46.0	22.9†	43.4	37.8	52.2	46.1	24.6†				
Male Only											
1st year (last 6 months)	33.9%	57.6%	46.1%	50.2%	38.1%	30.8%	23.6%				
2nd year		98.8	87.5	91.4	67.0	64.0	69.1				
3rd year		94.1	74.0	80.7	59.0	54.5	54.4				
4th year		66.1	62.2	63.5	48.7	50.7	52.5				
5th year		37.0	49.3	45.7	45.6	54.7	35.2				
6th year		54.4	41.8	45.6	49.3	61.4	35.8				
7th year		63.1†	69.4	67.7	52.7	57.4	24.2†				
8th year	50.3	23.8†	40.8	36.0	63.7	49.0	23.4†				
	<u></u>	Fema	ile Only	· · · · · · · · · · · · · · · · · · ·	.						
1st year (last 6 months)	38.9%	58.0%	43.9%	49.4%	42.4%	32.7%	28.1%				
2nd year		92.5	80.9	85.3	80.4	68.6	64.8				
3rd year	60.8	91.1	67.1	75.8	66.1	52.0	50.5				
4th year	38.0	36.7	36.8	36.8	43.3	36.5	31.3				
5th year	36.5	46.3	37.9	40.6	41.0	33.7	27.2				
6th year		38.0†	64.9	57.2	36.1	28.5	31.9†				
7th year	36.7	59.4†	40.3†	45.6	36.1	36.0	7.3†				
8th year		21.0†	47.6†	40.6†	27.7	37.3	32.7†				
<u></u>	·				L		<u> </u>				

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

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

(Six-Month Elimination Period; All Ages of Disablement Combined; Calendar Years of Experience 1962-81)

Year of Disablement											
1971 and Prior	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	All Years
Male and Female Combined											
39.6%	34.2%	33.3%	31.9%	34.3%	32.4%	36.1%	35.6%	26.1%	43.6%	49.4%	35.4%
87.7	78.7	70.8							71.0		71.7
								18.2			59.3
							14.0				47.9
						8.8					46.5
					16.1						50.0
				7.9†							50.3
66.6	32.3	13.1	14.7†	<u> </u>		<u></u>			<u> </u>		46.0
				Male Only							
38.0%	35.6%	31.4%	29.7%	32.7%	30.9%	34.9%	34.0%	23.1%	40.2%	41.9%	33.9%
83.7	75.7	71.1	65.0	65.0	69.9	72.7	53.9	31.1	68.5		69.8
77.3	68.1	56.9	66.4	51.8	56.5	45.5	21.1	16.0			58.7
68.5							14.7				51.8
			52.3		21.0	10.4					50.5
					12.6						56.0
				8.9†							55.6
70.3	39.7	15.9	16.6†								50.3
				Female Only	•••••						
43.8%	30.5%	38.0%	36.9%	37.8%	35.5%	38.7%	38.8%	31.4%	49.9%	61.0%	38.9%
98.5	86.1	70.0	75.0	67.6	68.6	81.3	62.0	35.2	75.6		75.9
88.6	71.0	56.7	56.6	58.7	55.6	51.1	27.0	22.3			60.8
	51.0	35.3	32.8	40.7	23.0	11.9	12.0†				38.0
55.7	31.9	59.4	45.8	15.8†	9.0†	5.1†					36.5
						'					34.6
	51.2			5.6†							36.7
56.0	14.5†	6.8†	10.7+								34.9
	Prior 39.6% 87.7 80.2 66.0 66.3 74.6 71.8 66.6 38.0% 83.7 77.3 68.5 69.9 79.7 78.0 70.3 43.8% 98.5 88.6 58.4 55.7 59.6 53.8	Prior 1972 39.6% 34.2% 87.7 78.7 80.2 68.9 66.0 55.8 66.3 47.3 71.8 49.7 66.6 32.3 38.0% 35.6% 83.7 75.7 77.3 68.1 68.5 57.6 69.9 52.8 79.7 56.8 78.0 49.0 70.3 39.7 43.8% 30.5% 98.5 86.1 88.6 71.0 55.7 31.9 59.6 23.6† 53.8 51.2	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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

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 Based on 1964 CDT Ratio to Rates of Termination* Rates of Termination 1964 CDT		Based on Table A-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	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	\$25.58 31.53 36.61 41.99 20.46	\$25.58 31.53 36.61 41.99 \$16.59 154% 154% 171 169 154% 171 169 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 154% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156% 156		\$30.47 34.89 38.87 41.96 16.37	\$28.46 30.86 33.50 36.68 15.77	$ \begin{array}{r} 107\% \\ 113 \\ 116 \\ 114 \\ 104 \\ \end{array} $				
	Ben	~	ge 65 with First Elimination Perio	·						
25.5 35.5 45.5 55.5 62.5	\$57.34 75.42 81.05 63.91 20.46	\$32.62 38.72 42.87 38.40 14.91	176% 195 189 166 137	\$77.35 93.05 94.16 67.21 16.37	\$63.86 73.54 73.57 55.60 15.77	121% 127 128 121 104				

* 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.

TABLE A-6

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 C 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 Rates of Termination	1964 CDT Ratio to Rates of 1964 CDT		Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT			
Male Only									
25.5 35.5 45.5 55.5 62.5	\$55.73 73.27 82.63 63.69 20.51	\$32.62 38.72 42.87 38.40 14.91	171% 189 193 166 138	\$74.89 90.74 95.27 66.81 16.36	\$63.86 73.54 73.75 55.60 15.77	117% 123 129 120 104			
		Fe	male Only						
25.5 35.5 45.5 55.5 62.5	\$59.58 78.62 78.27 64.60 20.26	\$32.62 38.72 42.87 38.40 14.91	183 203 183 168 136	\$80.77 96.43 92.18 68.43 16.43	\$63.86 73.54 73.57 55.60 15.77	126 131 125 123 104			

* 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.

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, 1977–81. 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 first six years and the 1964 CDT thereafter, for each age group on a basis consistent with Tables A-5 and AA-4.

Experience on Plans 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 six-month 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 36,115, of which 5,150 and 9,029 emanated from the 1977-81 and 1962-76 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 with plans having a six-month elimination period, the low first-year ratios shown for plans with a three-month elimination period in Table B-3 would seem to be a result of 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 6,678, of which 1,080 and

CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Six-Month Elimination Period; Calendar Years of Experience 1977-81)

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DURATION OF DISABLEMENT		Age at Disablement									
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	5059	6064					
	Mal	e and Female C	ombined								
7th month	64.4	45.6	52.8	40.2	23.7	15.2					
8th month	63.3	46.2	52.7	38.4	24.1	13.7					
9th month	56.8	43.5	48.4	32.3	21.6	13.8					
10th month	50.5	37.8	42.5	29.5	17.5	13.2					
11th month	48.4	30.9	37.3	26.6	16.5	11.2					
12th month	48.8	31.9	38.0	27.2	17.7	11.3					
1st year (last 6 months)	289.6	213.9	242.7	179.2	- 115.1	75,9					
13th month	40.6	32.4	35.3	24.1	15.9	8.8					
14th month.	30.3	30.2	. 30.3	16.4	13.5	7.8					
15th month	29.4	25.4	26.8	13.1	10.9	9.7					
16th month	29.6	20.2	23.5	12.9	8.5	8.5					
17th month	24.6	19.8	21.4	13.7	8.1	6.7					
18th month	23.0	18.7	20.3	11.6	8.7	6.1					
19th month	23.3	13.7	17.0	8.1	8.3	5.7					
20th month	17.2†	11.3	13.4	8.8	6.4	6.2					
21st month	12.0	12.1	12.0	9.3	5.9	5.7					
22nd month	11.5†	11.1	11.3	8.1	5.7	5.5					
23rd month	13.0	8.9	10.3	8.8	6.2	6.1					
24th month	19.9	13.3	15.5	9.1	7.1	5.7					
2nd year	242.9	197.0	213.2	135.0	100.3	79.5					
3rd year	167.6	105.3	125.2	68.5	54.5	45.3					
4th year	82.6	51.4	60.1	41.8	34.6	35.0					
5th year	37.9	31.8	33.6	29.0	32.4	22.5					
6th year	44.2†	35.9	38.0	24.4	28.6	6.8*					
7th year	37.4†	29.9	31.8	21.8	32.4	0.0*					
8th year	15.4*	12.8†	13.4†	27.9	27.4	16.8*					
		Male Only									
1st year (last 6 months)	279.6	200.4	228.2	171.4	114.5	73.1					
2nd year	240.9	205.0	216.8	129.6	98.6	80.2					
3rd year	165.7	109.2	126.2	64.2	55.2	47.9					
4th year	116.9	66.3	80.1	42.8	37.8	38.2					
5th year	38.5†	38.5	38.6	29.8	36.3	22.0					
6th year	56.5†	36.6	41.6	29.6	33.7	8.7*					
7th year	51.0†	34.6	38.6	25.2	35.9	0.0*					
8th year	24.6*	17.2†	19.0†	35.2	29.7	19.9*					
Female Only											
1st year (last 6 months)	299.6	230.6	259.1	192.5	116.8	84.7					
2nd year	244.4	186.7	208.8	144.5	104.4	77.3					
3rd year	169.4	100.2	124.0	76.1	52.7	36.5					
4th year	39.7†	31.0	33.6	39.8	26.3	24.6					
5th year	37.3†	22.7†	27.0	27.4	22.2	24.2†					
6th year	24.8*	35.1†	32.7	14.3	15.6	0.0*					
7th year	16.1*	22.5*	21.0†	14.8†	22.8	0.0*					
8th year	0.0*	6.0*	4.6*	12.1†	20.9	0.0*					
		ـــــــــــــــــــــــــــــــــــــ	·		L	·					

* Involves fewer than five terminations. † Involves fewer than ten terminations.
TABLE AA-2

Number of Claims Terminated by Death or Recovery									
(Six-Month Elimination Period; Calendar Years of Experience 1977-81)									
Age at Disablement									

			AGE AT DIS	ABLEMENT							
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50–59	60-64					
	Male	and Female Co	ombined								
1st year (last 6 months)	437	529	966	801	1,205	332					
2nd year	227	345	572	460	888	290					
3rd year	100	132	232	213	449	128					
4th year	31	48	79	114	266	64					
5th year	10	25	35	71	212	22					
6th year	9	22	31	52	163	2					
7th year	6	15	21	39	141	0					
8th year	2	6	8	44	83	3					
Male Only											
1st year (last 6 months)	205	278	483	484	856	244					
2nd year	114	200	314	282	628	224					
3rd year	52	78	130	128	325	104					
4th year	25	36	61	77	210	53					
5th year	5 7	18	23	48	171	16					
6th year		13	20	41	140	2					
7th year	5 2	11	16	31	114	0					
8th year	2	5	7	38	65	3					
		Female Only	/								
1st year (last 6 months)	232	251	483	317	349	88					
2nd year	113	145	258	178	260	66					
3rd year	48	54	102	85	124	24					
4th year	6	12	18	37	56	11					
5th year	6 5 2 1	7	12	23	41	6					
6th year	2	9	11	11	23	0					
7th year	1	4	5	8	27	0					
8th year	0	1	1	6	18	0					

TABLE AA-3

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 1977-81)

	ALL AGES			Age at Di	SABLEMENT	-					
DURATION OF DISABLEMENT	of Dis- ablement Combined	Under 30	30-39	Under 40	4049	50-59	6064				
	N	fale and Fem	ale Combined	l							
1st year (last 6 months)2nd year3rd year4th year5th year6th year7th year	34.1% 61.0 43.8 34.1 33.3 33.9 37.6	53.6% 78.1 72.6 47.6 28.2 40.5† 40.2†	41.3% 71.4 53.5 36.2 29.9 42.2 40.8	46.1% 73.9 60.4 39.9 29.5 41.8 40.7	38.6% 57.6 41.6 35.3 32.1 32.6 31.7	30.3% 57.4 40.7 32.4 35.9 35.3 41.6	22.2% 57.9 37.6 32.7 22.7 7.3† 0.0†				
8th year 35.0 18.5^{\pm} 19.1^{\pm} 18.9^{\pm} 42.2 35.6 18.3^{\pm}											
		Male	<u> </u>	10.10	26.00	1 20 10	01.107				
1st year (last 6 months) 2nd year	32.2% 59.8 43.3 37.6 36.5 39.6 42.3 40.5	51.7% 77.5 71.8 67.4 28.6† 51.9† 54.8† 29.5†	38.7% 74.2 55.5 46.7 36.1 42.9 47.1 25.6†	43.4% 75.4 61.1 53.2 33.9 45.6 49.4 26.6†	36.9% 55.3 39.0 36.2 33.0 39.6 36.6 53.1	30.1% 56.4 41.2 35.4 40.2 41.5 46.1 38.7	21.4% 58.4 39.8 35.7 22.2 9.3† 0.0† 21.7†				
		Female				1					
1st ycar (last 6 months) 2nd year 3rd year 4th year 5th year 6th year 7th year 8th year	38.1% 63.5 45.0 26.3 26.0 20.8 26.2 21.3	55.4% 78.6 73.4 22.9† 27.7† 22.8† 17.3† 0.0†	44.5% 67.6 50.9 21.8 21.3† 41.2† 30.7† 8.9†	49.2% 72.2 59.6 22.2 23.7 36.0 26.9† 6.4†	41.5% 61.7 46.2 33.6 30.3 19.1 21.5† 18.2†	30.7% 59.7 39.3 24.6 24.6 19.3 29.2 27.2	24.8% 56.2 30.3 23.0 24.4† 0.0† 0.0† 0.0†				

TABLE AA-4

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)

Age at Disablement		LUE AS OF END IMINATION PER		Value as of End of Twelfth Month of Disablement							
	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	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	34.39 38.87 43.43	\$16.59 18.44 21.71 26.85 14.91	173% 186 179 162 140	\$33.82 37.63 41.44 43.41 16.57	\$28.46 30.86 33.50 36.68 15.77	119% 122 113 118 105					
		to Age 65 with nd of Eliminatic		Due							
25.5 35.5 45.5 55.5 62.5	85.94 88.76 67.22	\$32.62 38.72 42.87 38.40 14.91	207% 222 207 175 140	\$89.49 104.20 103.12 70.70 16.57	\$63.86 73.54 73.57 55.60 15.77	140% 142 140 127 105					

* 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

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

	1	lue as of End imination Per		Value as of End of Twelfth Month of Disablement							
Age at Disablement	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT	Based on Table AA-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT					
Maie Only											
25.5 35.5 45.5 55.5 62.5	\$66.48 84.89 90.03 66.98 20.86	\$32.62 38.72 42.87 38.40 14.91	204% 219 210 174 140	\$86.63 101.04 103.68 70.35 16.57	\$63.86 73.54 73.57 55.60 15.77	136% 137 141 127 105					
		Female Only	r								
25.5 35.5 45.5 55.5 62.5	\$69.54 87.48 86.65 67.91 20.62	\$32.62 38.72 42.87 38.40 14.91	213% 226 202 177 138	\$93.53 108.56 102.21 71.64 16.58	\$63.86 73.54 73.57 55.60 15.77	146% 148 139 129 105					

* 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

ILLUSTRATIVE VALUES OF A MONTHLY BENEFIT OF \$1 PAYABLE TO AGE 65, DISCOUNTED AT 3 PERCENT INTEREST (Six-Month Elimination Period; Males and Females Combined)

BASIS OF	Age at Disablement									
ANNUITY VALUES	25.5	35.5	45.5	55.5	62.5					
	Annuity Valu	e as of End of Elim	ination Period							
1964 CDT 1977-81* Ratio to 1964 CDT 1962-81* Ratio to 1964 CDT	\$32.62 \$67.63 207% \$57.34 176%	\$38.72 \$85.94 222% \$75.42 195%	\$42.87 \$88.76 207% \$81.05 189%	\$38.40 \$67.22 175% \$63.91 166%	\$14.91 \$20.80 140% \$20.46 137%					
A	nnuity Value as o	f End of Twelfth M	onth of Disablemen	t						
1964 CDT 1977–81* Ratio to 1964 CDT 1962–81*	\$63.86 \$89.49 140% \$77.35	\$73.54 \$104.20 142% \$93.05	\$73.57 \$103.12 140% \$94.16	\$55.60 \$70.70 127% \$67.21	\$15.77 \$16.57 105% \$16.37					
Ratio to 1964 CDT	121%	127%	128%	121%	104%					

* 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.

CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Three-Month Elimination Period; Calendar Years of Experience 1962-81)

			AGE AT DIS	BLEMENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	4049	50-59	6064
	Male	e and Female C	ombined			
4th month	131.9	108.7	118.9	92.0	57.0	39.7
5th month	146.8	123.6	133.7	97.7	62.1	45.2
6th month	129.1	112.3	119.5	85.6	56.0	40.6
7th month	112.8	95.4	102.7	70.2	46.5	33.0
8th month	96.5	78.5	86.1	62.3	36.3	28.9
9th month.	85.4	60.7	70.9	53.4	30.8	22.2
10th month.	79.9	50.4	62.4 59.2	44.4	27.4	18.1
11th month	70.4 65.5	51.9 46.6	59.2 54.0	37.2 32.8	22.9 20.5	15.3
12th month.	622.1	533.9	572.7	52.8 449.8	307.7	13.0 229.2
1st year (last 9 months) 13th month	58.0	44.3	49.6	29.7	17.6	12.2
14th month.	51.9	36.9	42.7	25.4	14.6	11.3
15th month.	47.3	33.1	38.5	23.4	14.0	11.5
16th month.	38.0	35.8	36.6	21.7	14.6	9.5
17th month	36.3	33.6	34.6	19.0	13.7	8.6
18th month.	37.2	26.4	30.4	17.1	11.1	7.5
19th month	31.4	18.2	23.1	16.0	9.2	5.7
20th month.	35.8	15.7	22.9	15.0	9.4	8.0
21st month	36.1	15.8	23.0	13.0	9.5	9.2
22nd month	29.2	18.7	22.4	13.2	8.7	6.5
23rd month	23.1	17.9	19.7	12.5	8.1	5.9
24th month	21.2	21.2	21.2	12.1	7.7	5.0
2nd year	365.4	275.6	309.9	197.4	129.9	96.0
3rd year	184.6	179.8	181.6	125.3	80.6	80.1
4th year	77.3	76.9	77.1	70.5	56.5	64.9
5th year	72.5	70.0	70.8	40.6	55.3	61.4
6th year	29.4*	42.5	38.8	34.0	52.1	18.0*
+		Male Only				
1st year (last 9 months)	638.4	540.7	582.6	439.9	297.3	229.6
2nd year	369.3	290.9	319.6	204.7	130.4	95.7
3rd year	168.9	174.9	173.6	125.4	86.3	89.5
4th year	74.8†	89.7	85.3	83.5	62.4	63.9
5th year	81.5†	98.9	94.1	50.7	62.2	63.5
6th year	43.0†	66.0	59.4	37.4	58.7	0.0*
		Female Only	,			
1st year (last 9 months)	603.3	525.2	560.7	465.0	331.7	227.8
2nd year	360.7	256.2	298.3	185.2	128.5	96.6
3rd year	200.6	185.8	191.0	124.9	65.4	51.5
4th year	80.0†	59.8	66.4	48.4	40.6	67.9
Sth year	61.6†	33.3†	42.0	23.8	36.5	56.2†
6th year	8.1*	15.5*	13.9*	28.5	34.5	65.7*

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

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			AGE AT DIS	ABLEMENT							
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64					
	Male	and Female C	ombined								
1st year (last 9 months)	1,941	2,123	4,064	3,203	4,178	1,432					
2nd year	311	387	698	626	1,008	333					
3rd year	71	138	209	270	472	173					
4th year	16	36	52	111	255	68					
5th year	12	26	38	50	204	27					
6th year	3	12	15	33	137	2					
Male Only											
1st year (last 9 months)	1,057	1,197	2,254	1,909	2,822	1,076					
2nd year	164	228	392	407	736	250					
3rd year	35	74	109	172	365	146					
4th year	8	24	32	81	205	48					
5th year	7	21	28	40	168	20					
6th year	3	10	13	22	113	0					
		Female Only									
1st year (last 9 months)	884	926	1,810	1,294	1,356	356					
2nd year	147	15?	306	219	272	83					
3rd ýear	36	64	100	98	107	27					
4th year	8	12	20	30	50	20					
5th year	5		10	10	36	7					
6th year	0	5 2	2	11	24	2					

NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Three-Month Elimination Period; Calendar Years of Experience 1962–81)

RATIOS OF ACTUAL CLAIMS TERMINATED BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE* (Three-Month Elimination Period; Calendar Years of Experience 1962-81)

	ALL AGES			Age at Di	SABLEMENT					
DURATION OF DISABLEMENT	OF DIS- ABLEMENT COMBINED	Under 30	30-39	Under 40	40-49	5059	60-64			
	1	Male and Fer	nale Combine	:d						
1st year (last 9 months) 2nd year 3rd year 4th year 5th year 6th year	82.9 68.7 55.1	70.1% 117.5 80.0 44.5 53.9 27.0†	60.7% 99.8 91.4 54.1 65.7 49.8	64.8% 107.2 87.3 50.8 61.6 42.2	53.4% 84.3 76.1 59.6 45.1 45.5	41.0% 74.3 60.2 52.8 61.2 64.2	34.6% 69.8 66.5 60.6 62.0 19.3†			
Male Only										
1st year (last 9 months) 2nd year. 3rd year. 4th year 5th year 6th year	82.8 70.8 60.6 67.8	71.9% 118.8 73.2 43.1† 60.6† 39.4†	61.4% 105.4 88.9 63.1 92.8 77.5	66.0% 110.7 83.7 56.3 82.1 64.5	52.3% 87.4 76.2 70.6 56.2 50.0	39.6% 74.6 64.4 58.3 68.9 72.4	34.6% 69.6 74.3 59.7 64.1 0.0†			
		Femal	le Only							
1st ycar (last 9 months)2nd ycar3rd ycar4th ycar5th ycar6th ycar	83.1 64.3 42.6	67.9% 116.9 86.9 46.1† 45.8† 7.4†	59.7% 92.8 94.4 42.1 31.2† 18.2†	63.5% 103.0 91.5 43.7 36.5 15.2†	55.3% 79.1 75.9 40.9 26.3 38.1	44.2% 73.5 48.9 38.0 40.4 42.6	34.3% 70.3 42.7 63.4 56.8† 70.3†			

RATIOS OF ACTUAL CLAIMS TERMINATED BY DEATH OF RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE * (Three-Month Elimination Period; All Ages of Disablement Combined; Calendar Years of Experience 1962-81)

		YFAR OF DISABLEMENT										
DURATION OF DISABLEMENT	1971 and Prior	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	Atl Years
				Male an	id Female Con	bined						
Ist year (last 9 months) 2nd year 3rd year 4th year 5th year 6th year	56.3% 106.2 97.2 79.2 72.1 76.0	51.6% 88.7 63.6 56.3 54.1 67.9	47.7% 71.1 65.2 44.4 63.9 59.8	45.9% 73.5 61.2 49.1 60.3 39.9	42.8% 80.4 69.0 43.5 55.3 41.9	42.1% 71.5 58.8 47.8 44.5 22.2†	46.7% 71.1 56.3 45.1 30.9	44.2% 84.4 54.8 51.3	42.5% 78.0 55.3	48.6% 78.4 	49.2% 	48.0% 82.9 68.7 55.1 58.4 56.3
			La		Male Only							
1st year (last 9 months) 2nd year	55.1% 104.9 96.6 81.7 80.0 80.6	49.5% 88.5 62.7 62.6 60.8 77.2	45.4% 69.6 70.9 50.9 74.4 72.7	43.5% 71.1 66.4 53.7 67.9 51.1	40.2% 79.2 73.3 49.2 72.3 52.0	40.6% 72.3 64.5 49.1 54.8 26.2†	44.0% 72.5 48.6 54.6 33.21	42.7% 90.7 55.6 67.8	41.0% 73.3 66.1	45.2% 68.9	47.4%	46.2% 82.8 70.8 60.6 67.8 65.0
		······-	·		Female Only						40.00	
1st year (last 9 months)2nd year3rd year4th year5th year6th year	59.1% 109.3 98.9 72.5 51.3 64.3	55.6% 89.2 65.4 41.3 38.4† 48.0†	52.0% 74.0 52.7 30.2 41.9 33.2†	49.9% 77.7 51.1 40.3 45.3 18.3†	47.7% 82.6 60.0 31.1 19.5† 22.0†	44.8% 69.9 47.6 45.1 24.4† 14.3†	51.6% 68.0 72.1 24.1† 25.4†	46.9% 71.5 53.2 18.0†	45.0% 85.6 36.4 	53.7% 94.0	52.0% 	51.3% 83.1 64.3 42.6 37.8 37.8

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

		ue as of Ent. mination Per		Value as of End of Twelfth Month of Disablement					
AGE AT Disablement	Based on Table B-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT	Based on Table B-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	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	\$15.38 19.78 25.11 33.44 19.91	\$ 5.43 5.95 7.82 12.25 9.67	283% 332 321 273	\$27.27 30.68 34.93 38.80 16.30	\$27.50 29.72 32.18 35.19 15.77	99% 103 109 110			
Ben	efit Payable to at End e	Age 65 with F of Elimination		Due					
25.5 35.5 45.5 55.5 62.5	\$30.03 41.74 50.88 49.76 19.91	\$ 9.41 11.09 14.23 17.24 9.67	319% 376 358 289 206	\$66.89 78.87 82.81 62.91 16.30	\$63.86 73.54 73.57 55.60 15.77	105% 107 113 113 103			

*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.

TABLE B-6

Illustrative Values, under Plans with a Three-Month Elimination Period, of a Monthly Benefit of \$1 Discounted at 3 Percent Interest, Payable to Age 65, with First Payment Due at End of Elimination Period

		ue as of Ent mination Per		Value as of End of Twelfth Month of Disablement						
Age at Disablement	Based on Table B-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT	Based on Table B-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT				
Male Only										
25.5 35.5 45.5 55.5 62.5	\$29.14 40.32 50.89 50.08 19.88	\$ 9.41 11.09 14.23 17.24 9.67	310% 364 358 290 206	\$67.76 76.90 81.26 62.36 16.29	\$63.86 73.54 73.57 55.60 15.77	106% 105 110 112 103				
		Female Only								
25.5 35.5 45.5 55.5 62.5	\$31.06 43.64 50.95 49.14 19.97	\$ 9.41 11.09 14.23 17.24 9.67	330% 394 358 285 206	\$66.06 81.44 85.48 64.40 16.33	\$63.86 73.54 73.57 55.60 15.77	103 111 116 116 104				

* 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.

CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Three-Month Elimination Period; Calendar Years of Experience 1977–81)

	AGE AT DISABLEMENT						
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64	
	Male an	d Female Con	bined				
4th month	138.9	101.9	118.8	92.3	50.5	33.4	
5th month	151.3	118.2	133.0	89.1	55.5	38.4	
6th month	128.6	104.7	115.2	76.9	48.8	36.3	
7th month	112.3	87.7	98.4	63.2	41.1	27.0	
8th month	94.7	77.1	84.8	53.9	33.1	23.7	
9th month	83.6	62.7	71.6	48.1	28.0	22.7	
10th month	80.1	52.3	64.0	44.4	25.7	17.4	
11th month	67.0	50.8	57.5	34.2	21.9	12.1	
12th month	52.6	42.6	46.7	27.8	20.4	9.9	
1st year (last 9 months)	618.6	518.0	564.5	422.3	282.3	200.8	
13th month	46.4	45.0	45.6	27.7	16.9	9.6	
14th month	47.3	39.0	42.4	24.6	13.0	9.6	
15th month	39.2	28.6	32.9	22.7	13.2	9.0	
16th month	33.7	32.8	33.2	19.1	13.7	6.7†	
17th month	37.7	35.0	36.1	14.5	11.4	6.1	
18th month	36.5	26.3	30.5	13.6	9.0	6.2†	
19th month	33.5	21.6	26.3	15.7	8.4	4.8†	
20th month	39.4	18.4†	26.7	16.0	9.3	7.2	
21st month	35.5	11.8†	21.0	13.5	9.3	8.6	
22nd month	23.5†	14.7†	18.1	12.9	8.6	6.2†	
23rd month	18.0†	15.1†	16.2	12.2	8.1	5.4†	
24th month	16.9†	16.5	16.6	12.0	7.4	3.4*	
2nd year	339.9	266.1	296.3	186.6	121.0	79.5	
3rd year	162.9	170.5	168.0	114.7	69.8	62.7	
4th year	67.1†	65.0	65.7	59.4	47.8	51.6	
5th year	83.2	64.4	70.7	40.0	49.1	53.6	
6th year	25.4*	44.6†	38.8	34.7	45.1	0.0*	
		Male Only					
1st year (last 9 months)	618.4	521.8	565.0	415.8	276.0	194.5	
2nd year	363.1	272.8	308.4	197.5	124.0	79.8	
3rd year	146.9	152.7	152.1	112.6	76.8	71.9	
4th year	73.8†	79.3	77.7	73.4	53.4	55.0	
5th year	98.1†	77.4	84.2	54.9	56.9	58.6	
6th year	44.2*	64.6†	58.8†	41.1	51.5	0.0*	
		Female Only					
1st year (last 9 months)	618.5	513.5	563.7	432.2	295.6	217.9	
2nd year	315.2	258.1	282.7	168.7	113.8	78.8	
3rd year	178.7	190.4	185.2	118.1	52.3	36.9	
4th year	59.3*	46.6†	51.3	37.8	33.6	42.7†	
5th year	67.5*	48.8†	55.4†	17.6†	28.8	43.3*	
6th year	0.0*	21.3*	15.3*	25.0†	28.9	0.0*	

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

			AGE AT DIS	ABLEMENT		
DURATION OF DISABLEMENT	Under 30	3039	Under 40	40-49	50-59	6064
	Male	and Female C	ombined			
1st year (last 9 months)	946	931	1,877	1,102	1,574	526
2nd year	164	186	350	248	442	133
3rd year	39	71	110	116	218	75
4th year	9	18	27	53	128	32
5th year	10	16	26	34	125	15
6th year	2	9	11	24	90	0
		Male Only				
1st year (last 9 months)	467	492	959	643	1,048	373
2nd year	87	102	189	165	323	99
3rd year	19	34	53	72	170	63
4th year	5	12	17	39	102	24
5th year	6	11	17	28	104	11
6th year	2	7	9	17	74	0
		Female Only	<i>y</i>			
1st year (last 9 months)	479	439	918	459	526	153
2nd year	77	84	161	83	119	34
3rd year	20	37	57	44	48	12
4th year	4	6	10	14	26	8
5th year	4	5 2	9 2	6	21	4
6th year	0	2	2	7	16	0

NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Three-Month Elimination Period; Calendar Years of Experience 1977-81)

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 1977-81)

	ALL AGES			AGE AT DI	SABLEMENT	-			
DURATION OF DISABLEMENT	OF DIS- ABLEMENT COMBINED	Under 30	3039	Under 40	40-49	5059	60-64		
Male and Female Combined									
1st year (last 9 months)	45.5%	69.7%	58.9%	63.9%	50.2%	37.6%	30.3%		
2nd year	77.3	109.3	96.4	102.1	79.6	69.2	57.8		
3rd ýear	60.1	70.6	86.6	80.4	69.7	52.1	52.0		
4th year	46.1	38.6†	45.7	43.0	50.1	44.7	48.2		
5th year		61.9	60.4	61.2	44.4	54.4	54.1		
6th year	50.6	23.3†	52.3÷	42.0	46.4	55.6	0.0†		
		Mal	e Only						
1st year (last 9 months)	43.3%	69.6%	59.3%	64.0%	49.4%	36.8%	29.3%		
2nd year	77.9	116.8	98.8	106.4	84.3	70.9	58.0		
3rd year	61.7	63.6	77.6	73.1	68.4	57.3	59.7		
4th year	52.4	42.5†	55.8	50.9	62.0	50.0	51.4		
5th year	63.5	72.9†	72.6	73.1	60.9	63.0	59.2		
6th year	60.2	40.6†	75.8†	63.6†	55.0	63.6	0.0†		
		Fema	le Only						
1st year (last 9 months)	49.3%	69.7%	58.4%	63.8%	51.4%	39.4%	32.9%		
2nd year	76.1	101.4	93.5	97.2	72.0	65.1	57.3		
3rd year	56.7	77.4	96.8	88.2	71.8	39.1	30.6		
4th year	33.2	34.2†	32.8	33.5	32.0	31.4	39.9†		
5th year	32.7	50.2†	45.8†	47.7†	19.6†	31.9	43.8†		
6th year	31.1	0.0†	25.0†	16.6†	33.4†	35.6	0.0†		

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)

		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 Rates of Termination	Ratio to 1964 CDT	Based on Table BB-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	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	\$15.96 20.67 26.67 35.10 20.71	\$ 5.43 5.95 7.82 12.25 9.67	294% 347 341	\$28.72 31.30 35.75 39.55 16.53	\$27.50 29.72 32.18 35.19 15.77	104% 105 111		
	Ben	•	ge 65 with First Elimination Perio					
25.5 35.5 45.5 55.5 62.5	\$31.92 44.24 54.76 52.56 20.71	\$ 9.41 11.09 14.23 17.24 9.67	339% 399 318 305 214	\$71.51 81.31 85.46 64.42 16.53	\$63.86 73.54 73.57 55.60 15.77	112% 111 116 116 105		

* 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.

TABLE BB-5

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 Rates of Termination	Ratio to 1964 CDT	Based on Table BB-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT			
Male Only									
25.5 35.5 45.5 55.5 62.5	\$31.40 43.86 54.26 52.43 20.83	\$ 9.41 11.09 14.23 17.24 9.67	334% 396 381 304 215	\$69.97 81.10 83.63 63.64 16.53	\$63.86 73.54 73.57 55.60 15.77	110% 110 114 114 105			
		Fe	emale Only						
25.5 35.5 45.5 55.5 62.5	32.53 44.78 55.52 53.03 20.40	\$ 9.41 11.09 14.23 17.24 9.67	346% 404 390 308 211	73.19 81.68 88.37 66.42 16.56	\$63.86 73.54 73.57 55.60 15.77	115% 111 120 119 105			

* 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

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)

BASIS OF		Age at Disablement							
ANNUITY VALUES	25.5	35.5	45.5	55.5	62.5				
Annuity Value as of End of Elimination Period									
1964 CDT 1977–81* Ratio to 1964 CDT 1962–81* Ratio to 1964 CDT	\$ 9.41 \$31.92 339% \$30.03 319%	\$11.09 \$44.24 399% \$41.74 376%	\$14.23 \$54.76 318% \$50.88 358%	\$17.24 \$52.56 305% \$49.76 289%	\$ 9.67 \$20.71 214% \$19.91 206%				
	Annuity Value as	of End of Twelfth ?	Month of Disablem	ent					
1964 CDT 1977-81* Ratio to 1964 CDT 196281* Ratio to 1964 CDT		\$73.54 \$81.31 111% \$78.87 107%	\$73.57 \$85.46 116% \$82.81 113%	\$55.60 \$64.42 116% \$62.91 113%	\$15.77 \$16.53 105% \$16.30 103%				

* 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.

CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Twelve-Month Elimination Period; Calendar Years of Experience 1962-81)

D			Age at Di	SABLEMENT					
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64			
	Ма	le and Female	Combined						
13th month	10.8†	12.6	11.9	11.6	10.4	12.7			
14th month	18.6†	16.4†	17.2	13.1	12.0	12.0			
15th month	22.3†	17.0	18.9	11.0†	10.2	11.8			
16th month	14.6*	12.5*	13.3†	9.9	7.9	10.0†			
17th month	10.1*	9.9†	10.0	13.1	9.6	8.6†			
18th month	25.7	12.1†	17.1	11.8†	8.4	6.5*			
19th month	24.4*	11.3†	16.2†	10.1	5.9	4.9*			
20th month	12.8*	10.5*	11.3†	10.3†	5.0	5.7†			
21st month	11.2*	9.6†	10.2†	9.5†	5.0	7.1†			
22nd month	5.7*	8.7*	7.6*	11.8	6.0	9.3†			
23nd month	11.6†	10.0†	10.6	12.0†	9.0	10.3†			
24th month	13.7*	9.0*	10.7*	7.8†	10.2	13.0			
2nd year	167.2	130.9	144.5	124.3	95.1	106.4			
3rd year	60.7	64.7	63.7	90.3	66.5	62.6			
4th year	111.1†	54.4†	71.7	70.2	67.6	61.3			
5th year	89.3*	29.4*	45.5†	38.0	55.0	14.3*			
6th year	83.4*	43.0*	53.1†	44.5	63.5	25.0*			
		Male Only	y						
2nd year	173.9	150.8	159.5	126.6	96.0	109.0			
3rd year	52.7†	59.6	57.8	84.3	65.5	65.9			
4th year		56.8†	82.2	80.1	78.4	60.0			
5th year	111.0*	37.1*	57.3†	32.9†	62.5	16.5*			
6th year	102.3*	55.2*	67.3†	51.2	72.2	27.8*			
Female Only									
2nd year	146.2	64.6†	95.6	116.2	91.2	87.5			
3rd year	84.3*	80.0†	81.7	110.3	70.3	39.2*			
4th year	0.0*	42.5*	28.8*	35.9*	24.5†	71.9*			
5th year	0.0*	0.0*	0.0*	55.8*	24.8*	0.0*			
6th year	0.0*	0.0*	0.0*	20.3*	28.3*	0.0*			
* Involves forver then five to				k		L			

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

NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Twelve-Month Elimination Period; Calendar Years of Experience 1962-81)

	L		AGE AT DIS	ABLEMENT		
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	50-59	60-64
	Ma	le and Female	Combined			
2nd year	54	71	125	136	272	100
3rd year	12	21	33	66	127	29
4th year	7	7	14	30	88	15
5th year	3	3	6	12	52	1
6th year	2	3	5	11	43	1
		Male Onl	y	hun		
2nd year	42	63	105	106	222	90
3rd year	9	14	23	48	102	27
4th year	7	6	13	27	82	13
Sth year	3	3	6	-8	48	1
6th year	2	3	5	10	39	1
		Female Or	ıly			· · · · · · · · · · · · · · · · · · ·
2nd year	12	8	20	30	50	10
3rd year	3	7	10	18	25	2
4th year			Ĩ	3	6	$1 \overline{2}$
Sth year	ŏ	i o	Ó	4	4	l õ
6th year		ŏ	ŏ	i	4	Õ

TABLE C-3

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

	ALL AGES			Age at Di	SABLEMENT		
DURATION OF DISABLEMENT	OF DIS- ABLEMENT COMBINED	Under 30	30-39	Under 40	4049	50-59	6064
		Male and Fe	male Combin	ed		_	
2nd year	59.8 52.0	53.8% 26.3 64.0† 66.4† 76.5†	47.4% 32.9 38.3† 27.6† 50.5†	50.0% 30.5 47.4 40.1† 58.4†	53.0% 54.8 59.3 42.1 59.5	54.4% 49.7 63.2 60.9 78.3	77.4% 52.0 57.3 14.5† 26.8†
		Mal	e Only			-	
2nd year 3rd year 4th year 5th year 6th year	46.1 67.8 57.3	55.9% 22.8† 80.5† 82.5† 93.8†	54.6% 30.3 40.0† 34.8† 64.7†	55.2% 27.7 54.4 50.5† 74.0†	54.0% 51.2 67.6 36.5† 68.4	54.9% 48.9 73.4 69.2 89.0	79.3% 54.7 56.0 16.7† 29.7†
		Fema	le Only			-	
2nd year 3rd year 4th year 5th year 6th year	51.4 27.2	47.0% 36.5† 0.0† 0.0† 0.0†	23.4%† 40.7† 29.9† 0.0† 0.0†	33.0% 39.0 19.0† 0.0† 0.0†	49.6% 67.0 30.3† 61.8† 27.1†	52.2% 52.5 22.9† 27.4† 34.9†	63.7% 32.5† 67.2† 0.0† 0.0†

RATIOS OF ACTUAL CLAIMS TERMINATED BY DEATH OR RECOVERY TO NUMBER OF TERMINATIONS EXPECTED FROM THE 1964 COMMISSIONERS DISABILITY TABLE* (Twelve-Month Elimination Period; All Ages of Disablement Combined; Calendar Years of Experience 1962-81)

						Year of D	ISABLEMENT					
DURATION OF DISABLEMENT	1971 and Prior	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	All Years
				Mal	e and Female	Combined						
2nd year	82.9%	78.5%	48.4%	74.3%	58.8%	75.3%	72.0%	49.3%	7.5%	159.2%		55.4%
3rd year	84.0	62.7	43.6	61.6	56.8	51.8	43.6	13.1†	5.3†			47.1
4th year	77.1	66.8	90.2	72.1	28.1†	34.8†	25.0†	11.0†				59.7
5th year	70.4	44.2†	94.1	46.7†	39.8†	6.3†	5.2†					52.6
6th year	83.7	69.1†	86.2†	58.6†	55.9†	14.7†						70.9
					Male Oni	у						
2nd year	83.6%	83.2%	53.7%	80.8%	59.7%	72.4%	79.1%	49.0%	8.1%	169.9%		57.6%
3rd year	82.9	57.0	45.1	57.3	47.0	50.6	40.4	17.3†	5.5†			46.1
4th year	85.2	77.5	104.5	80.7	23.6†	36.3†	33.0†	14.4†				67.8
5th year	72.1	46.9†	117.5	57.4†	45.9†	8.3†	0.0†					57.3
6th year	91.3	87.2†	116.5†	54.8†	71.1†	20.5†						81.7
					Female Or	aly						
2nd year	79.4%	55.2%†	24.0%†	45.4%†	54.2%	81.6%	49.9%	49.4%	5.2%†	100.8%†		46.9%
3rd year	88.7	86.9†	36.5†	80.6†	93.6†	55.5†	52.3†	0.0†	4.7†			51.1
4th year	40.8†	20.9†	21.9†	30.7†	43.9†	29.1†	0.0†	0.0†				27.0
5th year	62.9†	32.7†	0.0†	0.0†	15.0†	0.0†	20.8†					34.4†
6th year	50.0†	0.0†	0.0†	73.6†	0.0†	0.0†						28.6†

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 of End of Elimination	PERIOD
Age at Disablement	Table C t 1064 CDT		Ratio to 1964 CDT
Benefit Payable for a	Maximum of 60 Months	But Not Beyond Age 65	
with First P	ayment Due at End of Eli	mination Period	
25.5 35.5 45.5 55.5 62.5	\$ 41.26 44.22 43.71 45.73 16.25	\$30.28 33.03 36.02 39.53 15.77	136% 134 121 116 103
	vable to Age 65 with Firs at End of Elimination Pe		
25.5 35.5 45.5 55.5 62.5	\$ 94.58 106.65 93.01 65.55 16.25	\$63.86 73.54 73.57 55.60 15.77	148% 145 126 118 103

* 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.

TABLE C-6

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 C-1 Rates of Termination*	Based on 1964 CDT Rates of Termination	Ratio to 1964 CDT			
	Male Only					
25.5	\$ 92.25 104.60 92.55 65.09 16.21	\$63.86 73.54 73.57 55.60 15.77	144% 142 126 117 103			
	Female Only					
25.5 35.5 45.5 55.5 62.5	\$103.64 113.93 94.61 67.43 16.50	\$63.86 73.54 73.57 55.60 15.77	162% 155 129 121 105			

* 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.

CRUDE TERMINATION RATES PER 1,000 CLAIMS EXPOSED TO DEATH OR RECOVERY (Twelve-Month Elimination Period; Calendar Years of Experience 1977-81)

D	Age at Disablement							
DURATION OF DISABLEMENT	Under 30	3039	Under 40	4049	5059	6064		
Male and Female Combined								
13th month	8.5*	6.3*	7.2†	7.6†	8.6	9.5†		
14th month	19.3†	6.4*	11.2†	6.6†	8.7	8.4†		
15th month	21.7†	10.5†	14.7	6.6*	6.7†	9.8*		
16th month	11.0*	11.9*	11.6*	6.6†	4.8†	7.4*		
17th month	2.2*	8.1*	5.9*	8.6*	6.8	8.8*		
18th month	20.1†	6.8*	11.9	4.8*	4.8*	9.0*		
19th month	22.5*	8.4*	13.8†	6.7†	2.0*	6.6*		
20th month	11.7*	8.5*	9.7†	11.4†	2.8*	6.7*		
21st month	11.8*	7.1*	8.9†	7.6*	3.2*	6.7*		
22nd month	4.8*	5.7*	5.4*	4.8*	4.0†	8.1*		
23nd month	12.2†	5.8*	8.2†	7.7†	6.8	8.2*		
24th month	14.7*	4.3*	8.2*	7.7*	7.2†	9.8†		
2nd year	149.4	86.2	110.5	83.5	64.2	94.7		
3rd year	25.2*	47.9	39.4	57.5	42.1	37.0†		
4th year	71.4*	32.6*	45.3†	23.9*	59.6	48.5†		
5th year	79.2*	0.0*	23.0*	41.5†	38.2	26.1*		
6th ýear	0.0*	45.8*	33.0*	44.9†	55.9	0.0*		
		Male Onl	y					
2nd year	162.0	96.8	122.0	87.3	61.6	95.4		
3rd year	13.8*	41.2†	31.3†	47.7	41.1	41.4†		
4th year	88.9*	26.8*	46.8†	29.1*	68.6	55.0†		
5th year	98.7*	0.0*	27.7*	40.0†	48.0	31.0*		
6th year	0.0*	51.7*	38.0*	60.5†	68.0	0.0*		
Female Only								
2nd year		52.9†	75.3	71.6	75.0	88.5*		
3rd year		68.6*	64.0†	85.0†	44.6†	0.0*		
4th year	0.0*	61.5*	38.1*	8.1*	29.5*	0.0*		
5th year	0.0*	0.0*	0.0*	45.7*	4.1*	0.0*		
6th year	0.0*	0.0*	0.0*	0.0*	12.6*	0.0*		

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

NUMBER OF CLAIMS TERMINATED BY DEATH OR RECOVERY (Twelve-Month Elimination Period; Calendar Years of Experience 1977-81)

	Age at Disablement							
DURATION OF DISABLEMENT	Under 30	30-39	Under 40	40-49	5059	60–64		
	Mal	le and Female (Combined					
2nd year	36	33	69	47	87	41		
Brd year	3	11	14	22	40	8		
th year	3	3	6	4	36	5		
oth year	2	0	2	7	17	1		
oth year	0	2	2	7	20	0		
		Male Only	<i>,</i>					
2nd year	29	28	57	36	67	37		
rd ýcar	2	7	9	14	31	8		
th year	3	2	5	4	32	5		
th year	2	0	2	5	17	1		
oth year	0	2	2	7	19	0		
		Female On	ly					
nd year	7	5	12	11	20	4		
ord year		4	5	8	9	0		
th year	0	1	1	0	4	0		
th year	0	0	0	2	0	0		
oth year	0	0	0	0	1	0		

TABLE CC-3

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 1977-81)

<u></u>	ALL AGES		AGE AT DISABLEMENT				
DURATION OF DISABLEMENT	of Dis- ablement Combined	Under 30	30–39	Under 40	4049	50-59	6064
		Male and Fen	nale Combine	d			
2nd year 3rd year 4th year 5th year 6th year	43.5	48.1% 10.9† 41.1† 58.9† 0.0†	31.2% 24.3 23.0† 0.0† 53.8†	38.2% 18.8 29.9† 20.1† 35.8†	35.6% 34.9 20.2† 46.0† 60.1†	36.8% 31.4 55.8 42.3 68.9	68.9% 30.7† 45.3† 26.4† 0.0†
		Male	Only				
2nd year 3rd year 4th year 5th year 6th year	49.5	52.1% 6.0† 51.2† 73.4† 0.0†	35.1% 20.9† 18.9† 0.0† 60.7†	42.2% 15.0† 30.9† 24.2† 41.4†	37.2% 29.0 24.6† 44.3† 80.9†	35.2% 30.7 64.2 53.1 83.8	69.4% 34.4† 51.4† 31.3† 0.0†
		Fcmal	le Only				
2nd year 3rd year 4th year 5th year 6th year	21.3†	35.6%† 23.4† 0.0† 0.0† 0.0†	19.1%† 34.8† 43.3† 0.0† 0.0†	26.0% 30.4† 25.1† 0.0† 0.0†	30.6% 51.6† 6.8† 50.7† 0.0†	42.9% 33.3† 27.6† 4.5† 15.6†	64.4%† 0.0† 0.0† 0.0† 0.0†

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 OF END OF ELIMINATION PERIOD					
Age at Disablement	Based on Based on Table C-1 1964 CDT Rates of Rates of Termination* Termination		Ratio to 1964 CDT			
•	Maximum of 60 Months syment Due at End of Eli	But Not Beyond Age 65				
25.5 35.5 45.5 55.5 62.5	\$ 43.85 47.26 47.56 48.07 16.44	\$30.28 33.03 36.02 39.53 15.77	145% 143 132 122			
	able to Age 65 with First at End of Elimination Per					
25.5 35.5 45.5 55.5 62.5	\$102.90 115.62 103.70 69.27 16.44	\$63.86 73.54 73.57 55.60 15.77	161% 157 141 125 104			

* 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.

TABLE CC-5

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

	VALUES AS OF END OF ELIMINATION PERIOD					
Age at Disablement	Table C I		Ratio to 1964 CDT			
	Male Only					
25.5 35.5 45.5 55.5 62.5	\$100.99 115.59 103.71 69.12 16.43	\$63.86 73.54 73.57 55.60 15.77	158% 157 141 124 104			
	Female Only					
25.5	\$110.77 114.67 103.78 69.74 16.47	\$63.86 73.54 73.57 55.60 15.77	173% 156 141 125 104			

* 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.

300 COMMITTEE ON GROUP LIFE AND HEALTH INSURANCE

TABLE CCC

ILLUSTRATIVE VALUES OF A MONTHLY BENEFIT OF \$1 PAYABLE TO AGE 65, DISCOUNTED AT 3 PERCENT INTEREST (Twelve-Month Elimination Period; Males and Females Combined)

BASIS OF ANNUTTY VALUES	Age at Disablement						
	25.5	35.5	45.5	55.5	62.5		
	Annuity Value	as of End of Elim	ination Period				
1964 CDT 1977–81* Ratio to 1964 CDT Ratio to 1964 CDT Ratio to 1964 CDT	\$ 63.86 \$102.90 161% \$ 94.58 148%	\$ 73.54 \$115.62 157% \$106.65 145%	\$ 73.57 \$103.70 141% \$ 93.01 126%	\$55.60 \$69.27 125% \$65.55 118%	\$15.77 \$16.44 104% \$16.25 103%		

* 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.

1,204 originated from the 1977–81 and 1962–76 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 the previous study. The financial consequences of this change are apparent from a comparison of annuity values shown in Tables A-5, B-5, and C-5 between the prior report and this report. The variation from one report to the next once again underscores the need to exercise caution and judgment when using the disabled life annuity values shown in a given year's report for actuarial purposes such as reserving.

This study is very late in being published. The Committee recognizes the need to make data available on a more timely basis. However, this particular report was held up by the delay in receiving data contributions. The Committee has terminated the Group Weekly Indemnity Study because of lack of data and must consider the appropriate course of action for this report.

Over the years, a substantial group long-term disability data base has been established. The Committee wants to continue to build this data base and expand its usage for special studies by the Society as well as for individual companies. To accomplish this task, steps are being taken to obtain data from companies on a more timely basis. There also is a planned increase in staff support. An additional professional has been hired by the Society for the sole purpose of working on mortality and morbidity experience studies.