

## TRANSACTIONS OF SOCIETY OF ACTUARIES 1971 REPORTS

### I. GROUP LIFE INSURANCE MORTALITY

**T**HIS report adds the experience by number of lives for calendar years 1965-69 under group life insurance policies to that previously reported in the 1965 report of the Committee. Trusteeship and association cases insuring employees of member employers of the trusteeship or association, and union cases, whether or not insurance depends on continued employment, are excluded. The experience is limited to policies with at least 25 lives at issue.

Data are included only with respect to policies containing one of the three common disability provisions described briefly below:

1. The Waiver of Premium Disability clause, in general, provides for waiver of premium upon receipt of proof of total disability of at least 9 months' duration occurring before age 60. Proof of continued total disability is required annually thereafter.
2. The Extended Death Benefit clause, in general, provides for payment of the full face amount upon death occurring within one year after termination of employment and prior to age 65 (or 60) if the employee was disabled at the time of termination of employment and continued disabled until death.
3. The Total and Permanent Disability clause provides, upon an employee's disability prior to age 60, for payment of the face amount of insurance, in some instances in one sum, in others in instalments over a short period, usually 60 months.

The experience under the Total and Permanent Disability clause should be interpreted cautiously, since companies have not generally offered these benefits in many years. The data in this report are based largely on the somewhat select group of older policies under which the clause was retained.

In viewing the separate death and disability experience, it should be kept in mind that the experience is influenced by employer and insurance company practices in permitting the continuance of insurance on disabled lives and that, accordingly, for some purposes the combined death and disability experience may be more significant. In the case of the Waiver of Premium clause, the actual disability claims shown represent three-fourths of the approved claims.

This report uses the Standard Industrial Classification (SIC) code

TABLE 1  
ALL INDUSTRIES COMBINED

YEAR	YEARS EXPOSED	TOTAL CLAIMS*	RATIO ACTUAL TO TABULAR			ACCIDENT CLAIMS	DIS-ABILITY CLAIMS*
			1960 CSG	1960 Basic Group	1965-69 Tabular		
Waiver of Premium							
1960	3,367,818	20,982	68.4%	92.4%		1,526	1,116
1961	3,412,355	21,333	67.4	90.9		1,448	1,064
1962	3,458,113	21,636	66.4	89.4		1,496	1,173
1963	3,924,026	26,110	69.4	93.3		1,839	1,411
1964	4,001,321	26,553	69.2	93.0		1,914	1,681
1965	4,046,690	27,502	70.0	93.8	100.4%	1,954	1,891
1966	2,063,718	15,357	68.2	90.4	97.6	992	951
1967	3,348,644	25,176	69.5	92.2	99.5	1,825	1,663
1968	2,306,038	16,452	71.5	95.7	102.8	1,299	1,421
1969	2,650,304	17,930	70.1	94.2	101.0	1,528	1,734
1960-64	18,163,633	116,614	68.2%	91.9%	98.4%	8,223	6,445
1965-69	14,415,394	102,417	69.8	93.2	100.0	7,598	7,660
1960-69	32,579,027	219,031	68.9	92.5	99.0	15,821	14,105
Extended Death Benefit							
1960	789,956	6,173	71.1%	94.2%		341	
1961	696,872	5,547	69.1	91.1		330	
1962	624,751	4,803	67.7	89.4		293	
1963	951,420	7,447	67.2	88.6		400	
1964	979,904	8,336	69.7	91.4		470	
1965	909,138	7,613	67.7	88.8	99.3%	418	
1966	652,655	5,009	62.3	81.7	91.5	326	
1967	802,079	7,542	72.7	95.0	106.4	407	
1968	675,363	6,300	70.9	92.6	103.5	359	
1969	472,569	4,224	66.3	86.4	96.7	244	
1960-64	4,042,903	32,306	68.9%	90.9%	101.7%	1,834	
1965-69	3,511,804	30,688	68.3	89.4	100.0	1,754	
1960-69	7,554,707	62,994	68.6	90.1	100.9	3,588	
Total and Permanent Disability							
1960	2,542,583	20,464	79.0%	105.5%		1,033	2,259
1961	2,277,543	18,356	75.8	100.8		899	1,944
1962	2,178,677	16,986	74.7	99.5		837	2,044
1963	1,944,922	16,982	79.8	105.8		825	2,010
1964	1,832,622	15,302	77.9	103.5		873	1,898
1965	1,617,344	13,885	74.2	98.0	101.8%	699	1,559
1966	516,437	3,647	69.0	92.1	94.5	204	436
1967	826,872	6,715	70.4	92.9	95.6	374	621
1968	431,406	4,482	76.5	99.7	102.9	215	524
1969	565,049	5,104	76.0	100.1	103.1	281	558
1960-64	10,776,347	88,090	77.4%	103.0%	105.8%	4,467	10,155
1965-69	3,957,108	33,833	73.4	96.8	100.0	1,773	3,698
1960-69	14,733,455	121,923	76.2	101.2	104.1	6,240	13,853

\* 75 per cent of disability claims on waiver of premium.

TABLE 2  
ALL INDUSTRIES COMBINED, CALENDAR YEARS 1965-69

CENTRAL AGE	WAIVER OF PREMIUM						EXTENDED DEATH BENEFIT					TOTAL AND PERMANENT DISABILITY					
	Years Exposed	Total Claims*	Ratio A/T†		Accid. Claims	Disab. Claims*	Years Exposed	Total Claims	Ratio A/T†		Accid. Claims	Years Exposed	Total Claims	Ratio A/T†		Accid. Claims	Disab. Claims
			1960 CSG	1960 Basic Group					1960 CSG	1960 Basic Group				1960 CSG	1960 Basic Group		
18.....	333,123	470	72%	146%	320	13	94,968	163	88%	177%	110	111,116	134	62%	124%	73	7
23.....	1,536,785	1,908	56	121	1,099	71	324,912	397	56	119	247	434,085	465	49	104	284	19
28.....	1,622,230	1,921	51	109	934	114	346,566	340	42	90	169	451,665	438	42	89	216	25
33.....	1,547,174	2,111	54	106	713	178	330,936	397	47	93	146	416,415	516	49	96	171	74
38.....	1,671,126	3,457	62	107	770	385	375,097	667	53	92	139	443,342	834	57	97	145	111
43.....	1,813,117	5,819	65	97	792	627	417,827	1,251	60	91	177	472,717	1,445	62	93	155	268
48.....	1,690,027	9,064	70	97	706	1,130	405,296	1,956	63	87	143	443,553	2,373	70	96	152	459
53.....	1,515,011	13,246	73	96	710	1,788	382,814	3,080	67	88	155	389,324	3,692	79	104	135	849
58.....	1,210,909	17,653	78	99	633	3,354	326,852	4,123	68	86	158	312,148	5,410	93	118	133	1,886
18-58.....	12,939,502	55,649	70%	100%	6,677	7,660	3,005,268	12,374	63%	89%	1,444	3,474,365	15,307	73%	105%	1,464	3,698
63.....	798,332	14,692	66%	82%	437	.....	240,160	4,672	69%	86%	111	218,809	4,129	67%	84%	93	.....
68.....	353,165	10,667	70	87	195	.....	129,805	4,138	74	91	80	121,602	3,922	75	93	68	.....
73.....	188,825	8,969	72	88	122	.....	73,079	3,487	72	89	42	75,530	3,817	76	94	56	.....
78.....	92,201	7,064	78	95	92	.....	40,495	3,053	77	94	37	41,904	3,395	82	101	44	.....
83.....	34,004	3,788	73	90	52	.....	16,962	1,956	76	93	32	18,027	2,055	75	92	27	.....
88.....	7,586	1,265	74	91	16	.....	4,872	821	75	92	8	5,238	938	80	98	14	.....
93.....	1,633	303	54	67	7	.....	1,061	182	50	62	0	1,309	243	54	67	6	.....
98.....	146	20	16	21	0	.....	102	5	06	07	0	324	27	10	13	1	.....
63-98.....	1,475,892	46,768	70%	87%	921	.....	506,536	18,314	72%	89%	310	482,743	18,526	74%	91%	309	.....
Total.....	14,415,394	102,417	70%	93%	7,598	7,660	3,511,804	30,688	68%	89%	1,754	3,957,108	33,833	73%	97%	1,773	3,698

\* 75 per cent of disability claims on waiver of premium.

† Actual/tabular in per cent.

format as published in the United States Bureau of the Budget *Standard Industrial Classification Manual* (revised 1967) in place of the previously used Society of Actuaries code format.

Reports of group life insurance experience previously published in these transactions distinguished between the categories of "Rated Industries" and "Nonrated Industries." The classification of "Rated"

TABLE 3  
ALL INDUSTRIES COMBINED  
1965-69 CRUDE QUINQUENNIAL DISABILITY, ACCIDENTAL DEATH AND  
TOTAL DEATH RATES  
(Force of Decrement)

CENTRAL AGE	WAIVER OF PREMIUM			EXTENDED DEATH BENEFIT		TOTAL AND PERMANENT DISABILITY			TOTAL ACCI- DENTAL DEATH
	Disab.*	Accid. Death	Total Death	Accid. Death	Total Death	Disab.	Accid. Death	Total Death	
18. ....	.00004	.00096	.00137	.00116	.00172	.00006	.00066	.00114	.00093
23. ....	.00005	.00072	.00120	.00076	.00122	.00004	.00065	.00103	.00071
28. ....	.00007	.00058	.00111	.00049	.00098	.00006	.00048	.00091	.00054
33. ....	.00012	.00046	.00125	.00044	.00120	.00018	.00041	.00106	.00045
38. ....	.00023	.00046	.00184	.00037	.00178	.00025	.00033	.00163	.00042
43. ....	.00035	.00044	.00286	.00042	.00299	.00057	.00033	.00249	.00042
48. ....	.00067	.00042	.00469	.00035	.00483	.00103	.00034	.00432	.00039
53. ....	.00118	.00047	.00756	.00040	.00805	.00218	.00035	.00730	.00044
58. ....	.00277	.00052	.01181	.00048	.01261	.00604	.00043	.01129	.00050
63. ....	.00000	.00055	.01840	.00046	.01945	.00000	.00043	.01887	.00051
68. ....	.00000	.00055	.03020	.00062	.03188	.00000	.00056	.03225	.00057
73. ....	.00000	.00065	.04750	.00057	.04772	.00000	.00074	.05054	.00065
78. ....	.00000	.00100	.07662	.00091	.07539	.00000	.00105	.08102	.00099
83. ....	.00000	.00153	.11140	.00189	.11532	.00000	.00150	.11400	.00161
88. ....	.00000	.00188	.16675	.00164	.16851	.00000	.00267	.17908	.00204
93. ....	.00000	.00201	.18555	.00000	.17154	.00000	.00458	.18564	.00222
98. ....	.00000	.00000	.13699	.00000	.04902	.00000	.00309	.08333	.00175

\* 75 per cent of disability claims on waiver of premium.

and "Nonrated" industries is no longer appropriate because of the lack of a generally accepted standard in the insurance industry for classifying industries as rated. Consequently no distinction is made in this report between rated and nonrated.

In Table 1 the data are shown for each disability provision by calendar year in comparison with the 1960 Commissioners Standard Group Mortality Table, the 1960 Basic Group Mortality Table, and the average 1965-69 industries experience (Table 3). It should be noted that all three types of policies produced fluctuations in experience during the ten-year

TABLE 4  
CALENDAR YEARS 1965-69

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A-T per M	A/T†		No.	A-T per M	A/T†
	<b>A. Agriculture, forestry, and fisheries</b>										
01.....	Agricultural production	41,408	40	0.97	258	0.0	100%	3,145	145	-4.1	92%
07.....	Agriculture services and hunting	30,672	20	0.65	129	0.8	84	1,259	45	-11.1	76
08.....	Forestry	1,356	0	0.00	16	3.7	145	485	34	0.0	100
09.....	Fisheries	1,330	0	0.00	12	3.8	171	73	5	27.4	167
	Total agriculture, forestry, and fisheries	74,766	60	0.80	415	0.2	97%	4,962	229	-5.0	90%
	<b>B. Mining</b>										
10.....	Metal mining	55,896	89	1.59	417	2.3	144%	3,224	194	9.3	118%
11.....	Anthracite mining	1,872	2	1.07	19	3.2	146	191	9	10.5	129
12.....	Bituminous coal and lignite mining	62,162	58	0.94	527	2.3	137	5,531	327	3.1	105
13.....	Oil and gas extraction	142,450	117	0.82	741	-0.0	100	7,873	278	-12.7	74
14.....	Nonmetallic minerals, except fuels	51,164	55	1.08	366	1.6	129	3,418	223	9.7	117
	Total mining	313,544	321	1.02	2,070	1.1	121%	20,237	1,031	-0.9	98%
	<b>C. Contract construction</b>										
15.....	General building contractors	91,686	71	0.77	469	0.3	106%	3,120	150	1.0	102%
16.....	Heavy construction contractors	131,568	126	0.96	831	1.1	121	5,507	265	0.5	101
17.....	Special trade contractors	119,323	99	0.83	628	0.2	103	6,359	321	1.1	102
	Total construction	342,577	296	0.86	1,928	0.6	111%	14,986	736	0.9	102%
	<b>D. Manufacturing</b>										
19.....	Ordnance and accessories	86,424	57	0.66	400	0.0	101%	2,272	139	10.6	121%
20.....	Food and kindred products	122,022	57	0.47	538	0.5	90%	3,760	148	-6.9	85%
202.....	Dairy products	159,443	80	0.50	1,043	1.1	121	22,365	511	-21.4	52
208.....	Beverages	480,137	243	0.50	2,511	-0.1	98	25,290	1,276	-0.3	99
	Other food and kindred products										
	Total	761,602	380	0.50	4,092	0.1	101%	51,415	1,935	-10.0	79%
21.....	Tobacco manufactures	61,852	33	0.53	404	1.7	134%	4,586	222	-0.7	99%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†		
01.....	<b>A. Agriculture, forestry, and fisheries.</b>													
07.....	Agricultural production	30,408	222	97%	17	89%	11,775	125	102%	2,370	37	93%	2	67%
08.....	Agricultural services and hunting	27,389	129	82	12	80	4,249	30	86	293	3	75	0	0
09.....	Forestry	611	4	57	0	0	0	0	0	1,230	45	125	1	100
09.....	Fisheries	1,368	17	189	0	0	35	0	0	0	0	0	0	0
	Total agriculture, forestry, and fisheries	59,776	372	92%	29	83%	16,059	155	98%	3,893	85	106%	3	75%
	<b>B. Mining</b>													
10.....	Metal mining	49,429	441	134%	56	215%	6,403	62	124%	3,288	50	116%	2	50%
11.....	Anthracite mining	1,261	14	156	0	0	802	14	117	0	0	0	0	0
12.....	Bituminous coal and lignite mining	36,472	306	110	45	196	4,320	67	99	26,901	332	113	104	335
13.....	Oil and gas extraction	77,259	420	104	57	150	24,078	227	115	48,986	274	64	41	80
14.....	Nonmetallic minerals, except fuels	32,969	290	124	36	189	15,509	175	115	6,104	79	130	9	150
	Total mining	197,390	1,471	117%	194	181%	51,112	545	114%	85,279	735	89%	156	170%
	<b>C. Contract construction</b>													
15.....	General building contractors	84,635	473	108%	41	98%	8,976	95	99%	1,195	9	69%	1	100%
16.....	Heavy construction contractors	100,566	696	119	68	124	14,885	126	98	21,624	186	120	20	87
17.....	Special trade contractors	90,557	574	106	32	68	7,035	54	110	28,090	277	106	12	46
	Total contract construction	275,758	1,743	112%	141	98%	30,896	275	100%	50,909	472	110%	33	66%
	<b>D. Manufacturing</b>													
19.....	Ordnance and accessories	58,091	218	91%	25	89%	29,355	281	121%	1,250	12	171%	3	150%
20.....	<b>Food and kindred products</b>													
202.....	Dairy products	63,929	339	92%	41	111%	53,166	229	80%	8,687	71	100%	6	60%
208.....	Beverages	130,388	892	64	146	212	23,412	184	134	28,008	308	136	24	83
	Other food and kindred products	302,542	2,041	101	206	120	73,286	559	88	129,599	826	92	155	121
	Total	496,859	3,272	86%	393	142%	149,864	972	92%	166,294	1,205	101%	185	111%
21.....	Tobacco manufactures	27,125	235	108%	28	187%	21,347	145	97%	17,966	176	134%	42	350%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4 *Continued*

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A-T per M	A/T†		No.	A-T per M	A/T†
22.....	D. <i>Manufacturing</i> —Continued										
221.....	Textile mill products										
222.....	Weaving mills, cotton	99,550	44	0.44	551	-0.0	100%	4,904	238	-0.4	99%
223.....	Knitting mills	111,586	32	0.29	405	-1.3	73	4,271	128	-17.8	63
	Other textile mill products	294,489	163	0.55	1,776	0.1	102	17,488	793	-4.9	90
	Total	505,625	239	0.47	2,732	-0.2	96%	26,663	1,159	-6.1	88%
23.....	Apparel and other textile products										
232.....	Men's and boys' furnishings	112,849	39	0.35	248	-1.7	57%	2,093	65	-14.3	68%
	Other apparel and other textile products	226,183	85	0.38	828	-1.4	72	9,307	362	-8.5	82
	Total	339,032	124	0.37	1,076	-1.5	68%	11,400	427	-9.6	80%
24.....	Lumber and wood products	173,131	161	0.93	1,074	0.7	113%	7,698	389	1.6	103%
25.....	Furniture and fixtures										
251.....	Household furniture	116,168	80	0.69	606	0.4	107%	4,572	195	-3.5	92%
	Other furniture and fixtures	66,754	33	0.49	312	-0.2	95	2,907	126	-4.1	91
	Total	182,922	113	0.62	918	0.1	103%	7,479	321	-3.9	92%
26.....	Paper and allied products										
262.....	Paper mills, except building paper	200,118	136	0.68	1,213	0.9	118%	15,514	941	8.2	116%
264.....	Miscellaneous converted paper products	114,025	41	0.36	474	-0.7	85	5,065	217	-3.0	94
	Other paper and allied products	196,683	114	0.58	976	0.4	109	5,568	265	-2.2	96
	Total	510,826	291	0.57	2,663	0.4	107%	26,147	1,423	3.8	107%
27.....	Printing and publishing										
271.....	Newspapers	260,069	85	0.33	1,631	0.3	106%	25,864	1,458	5.3	110%
273.....	Books	98,005	41	0.42	454	-0.3	94	5,355	247	-2.8	94
275.....	Commercial printing	154,646	59	0.38	758	-0.1	98	8,399	378	-4.4	91
	Other printing and publishing	126,771	53	0.42	552	-0.7	86	6,999	347	0.4	101
	Total	639,491	238	0.37	3,395	-0.1	99%	46,617	2,430	1.9	104%
28.....	Chemicals and allied products										
281.....	Industrial chemicals	201,229	105	0.52	1,318	1.1	121%	11,200	627	5.3	110%
283.....	Drugs	115,933	41	0.35	562	0.2	104	6,626	421	8.0	114
	Other chemicals and allied products	268,881	132	0.49	1,484	0.6	111	13,286	713	3.5	107
	Total	586,043	278	0.47	3,364	0.7	113%	31,112	1,761	5.1	110%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
22	D. Manufacturing—Continued													
221	Textile mill products													
225	Weaving mills, cotton	72,967	376	84%	123	280%	24,192	254	100%	7,295	36	86%	0	0%
	Knitting mills	73,876	267	68	27	69	25,487	113	65	16,494	119	88	7	41
	Other textile mill products	221,011	1,555	98	165	122	59,341	483	91	31,625	306	93	60	158
	Total	367,854	2,198	91%	315	144%	109,020	850	89%	55,414	461	91%	67	108%
23	Apparel and other textile products													
232	Men's and boys' furnishings	80,780	217	60%	21	55%	30,527	46	49%	3,635	23	68%	6	120%
	Other apparel and other textile products	171,953	650	73	41	46	39,720	217	67	23,817	245	95	37	137
	Total	252,733	867	69%	62	48%	70,247	263	63%	27,452	268	92%	43	134%
24	Lumber and wood products	148,020	992	107%	141	166%	24,340	222	100%	8,469	101	119%	7	78%
25	Furniture and fixtures													
251	Household furniture	82,645	486	104%	46	110%	29,099	176	99%	8,996	85	106%	8	80%
	Other furniture and fixtures	54,652	312	95	20	74	6,593	47	96	8,416	47	90	12	109
	Total	137,297	798	100%	66	96%	35,692	223	99%	17,412	132	100%	20	100%
26	Paper and allied products													
262	Paper mills, except building paper	90,457	690	111%	76	162%	44,013	473	121%	81,162	784	110%	131	175%
264	Miscellaneous converted paper products	57,567	356	94	22	73	13,464	104	85	48,059	167	77	42	102
	Other paper and allied products	137,066	663	98	154	226	29,448	191	102	35,737	203	100	30	88
	Total	285,090	1,709	102%	252	174%	86,925	768	110%	164,958	1,154	102%	203	136%
27	Printing and publishing													
271	Newspapers	122,423	1,037	103%	61	87%	56,791	597	106%	106,719	1,297	116%	97	84%
273	Books	56,417	282	90	43	165	12,000	116	99	34,943	224	89	36	109
275	Commercial printing	116,633	729	104	47	80	22,967	175	92	23,445	174	81	11	48
	Other printing and publishing	73,845	474	102	19	45	25,818	242	91	34,107	146	77	18	67
	Total	369,318	2,522	101%	170	87%	117,576	1,130	100%	199,214	1,841	104%	162	82%
28	Chemicals and allied products													
281	Industrial chemicals	91,417	600	121%	114	224%	62,532	504	102%	58,480	594	107%	133	196%
283	Drugs	92,733	607	102	96	218	22,852	189	102	6,974	83	114	8	114
	Other chemicals and allied products	185,363	1,128	108	96	103	46,617	504	117	50,187	403	108	66	125
	Total	369,513	2,335	109%	306	163%	132,001	1,197	108%	115,641	1,080	108%	207	162%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.



TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A—T per M	A/T†		No.	A—T per M	A/T†
29.....	<i>D. Manufacturing—Continued</i>										
291.....	Petroleum and coal products	124,984	58	0.46	858	0.6	109%	18,522	951	-3.6	94%
	Petroleum refining	27,700	37	1.34	164	0.8	116	1,248	67	1.6	103
	Other petroleum and coal products										
	Total	152,684	95	0.62	1,022	0.6	110%	19,770	1,018	-3.3	94%
30.....	Rubber and plastics products, n.e.c.‡										
306.....	Fabricated rubber products, n.e.c.‡	105,814	64	0.61	463	0.0	100%	3,099	187	11.6	124%
	Other rubber and plastics products, n.e.c.‡	156,911	90	0.57	934	1.1	122	10,345	539	2.7	105
	Total	262,725	154	0.59	1,397	0.6	114%	13,444	726	4.8	110%
31.....	Leather and leather products										
314.....	Footwear, except rubber	105,764	36	0.34	483	-1.0	82%	4,235	143	-12.0	74%
	Other leather and leather products	65,002	34	0.52	318	-0.5	91	4,909	257	-0.4	99
	Total	170,766	70	0.41	801	-0.8	85%	9,144	400	-5.9	88%
32.....	Stone, clay, and glass products	382,760	267	0.70	2,378	1.0	120%	22,859	1,341	7.8	115%
33.....	Primary metal industries										
331.....	Blast furnace and basic steel products	677,252	343	0.51	5,005	0.9	114%	90,694	5,523	9.4	118%
332.....	Iron and steel foundries	138,718	126	0.91	944	1.7	134	8,144	487	9.5	119
333.....	Primary nonferrous metals	171,198	92	0.54	1,424	1.9	130	18,343	1,006	7.4	116
	Other primary metal industries	197,024	126	0.64	1,172	1.0	120	9,849	534	4.6	109
	Total	1,184,192	687	0.58	8,545	1.2	119%	127,030	7,550	8.8	117%
34.....	Fabricated metal products										
342.....	Cutlery, hand tools, and hardware	151,060	55	0.36	806	-0.1	99%	7,365	391	5.8	112%
343.....	Plumbing and heating, except electric	114,278	70	0.61	648	0.9	118	6,488	344	4.9	110
344.....	Fabricated structural metal products	210,969	159	0.75	1,236	1.0	120	10,002	597	10.1	120
346.....	Metal stampings	125,410	84	0.67	655	0.4	107	6,532	344	1.5	103
349.....	Miscellaneous fabricated metal products	143,931	78	0.54	788	0.5	109	7,086	430	7.1	113
	Other fabricated metal products	163,275	83	0.51	881	0.4	108	8,354	414	-1.3	97
	Total	908,923	529	0.58	5,014	0.5	110%	45,827	2,520	4.9	110%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

‡ Not elsewhere classified.

TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
29.....	D. <i>Manufacturing—Continued</i>													
291.....	Petroleum and coal products	88,637	909	117%	102	182%	33,797	431	97%	21,072	339	67%	28	147%
	Petroleum refining	17,842	128	113%	11	110%	7,137	44	147%	3,969	45	92%	3	75%
	Other petroleum and coal products													
	Total	106,479	1,037	116%	113	171%	40,934	475	100%	25,041	384	69%	31	135%
30.....	Rubber and plastics products, n.e.c.‡													
306.....	Fabricated rubber products, n.e.c.‡	69,877	359	106%	49	144%	26,336	154	99%	12,700	82	109%	6	50%
	Other rubber and plastics products, n.e.c.‡	96,347	454	99%	38	84%	51,900	806	129%	19,009	164	127%	11	61%
	Total	166,224	813	102%	87	110%	78,236	960	123%	31,709	246	121%	17	55%
31.....	Leather and leather products													
314.....	Footwear, except rubber	81,078	354	79%	57	124%	14,688	76	54%	14,233	127	96%	12	67%
	Other leather and leather products	41,883	281	88%	19	83%	16,179	161	110%	11,849	108	98%	6	60%
	Total	122,961	635	83%	76	110%	30,867	237	83%	26,082	235	97%	18	64%
32.....	Stone, clay, and glass products	266,580	1,948	118%	246	172%	63,494	707	115%	75,545	701	106%	117	160%
33.....	Primary metal industries													
331.....	Blast furnace and basic steel products	712,147	9,414	116%	466	107%	38,171	514	127%	17,628	111	111%	23	153%
332.....	Iron and steel foundries	106,256	933	124%	92	164%	16,353	136	120%	24,253	222	128%	48	209%
333.....	Primary nonferrous metals	160,388	1,889	117%	215	205%	17,757	161	130%	11,396	126	118%	39	300%
	Other primary metal industries	163,789	1,110	117%	97	115%	28,234	279	120%	14,850	198	112%	22	116%
	Total	1,142,580	13,346	117%	870	129%	100,515	1,090	124%	68,127	657	118%	132	191%
34.....	Fabricated metal products													
342.....	Cutlery, hand tools, and hardware	97,887	647	108%	64	119%	13,735	128	97%	46,803	308	94%	50	100%
343.....	Plumbing and heating, except electric	105,331	766	113%	96	185%	11,750	89	96%	3,685	39	111%	2	67%
344.....	Fabricated structural metal products	180,115	1,312	121%	112	122%	20,834	199	114%	20,022	181	116%	29	138%
346.....	Metal stampings	97,222	573	106%	64	131%	12,997	136	128%	21,723	210	92%	16	89%
349.....	Miscellaneous fabricated metal products	89,771	501	99%	60	128%	4,968	30	97%	56,278	582	125%	45	83%
	Other fabricated metal products	123,793	747	102%	64	98%	23,238	194	115%	24,598	268	109%	22	81%
	Total	694,119	4,546	110%	460	128%	87,522	776	110%	173,109	1,588	109%	164	95%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

‡ Not elsewhere classified.

TABLE 4 *Continued*

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A—T per M	A/T†		No.	A—T per M	A/T†
	<b>D. Manufacturing—Continued</b>										
35	Machinery, except electrical										
351	Engines and turbines	104,893	64	0.61	538	0.9	121%	4,776	247	3.4	107%
353	Construction and related machinery	212,900	145	0.68	1,271	1.0	119	13,810	842	9.4	118
354	Metal working machinery	302,093	131	0.43	1,767	0.5	109	14,896	835	5.4	111
355	Special industry machinery	191,084	85	0.45	1,146	0.3	105	15,596	867	3.3	106
356	General industrial machinery	230,949	104	0.45	1,282	0.2	103	14,854	865	8.8	118
357	Office and computing machines	233,249	72	0.31	776	-0.4	90	8,141	411	-0.1	100
	Other machinery, except electrical	236,748	169	0.71	1,276	0.7	114	9,630	462	-2.5	95
	Total	1,511,916	770	0.51	8,056	0.4	108%	81,703	4,529	4.7	109%
	<b>Electrical equipment and supplies</b>										
36	Electric test and distributing equipment	156,398	64	0.41	594	-0.5	88%	4,122	171	-5.8	88%
361	Electrical industrial apparatus	175,839	92	0.52	930	0.5	111	6,419	358	0.9	102
362	Household appliances	108,498	62	0.57	527	0.5	111	3,335	183	0.9	102
363	Radio and television receiving equipment	127,497	49	0.38	477	0.1	102	3,297	150	-2.1	96
365	Communication equipment	110,300	43	0.39	406	-0.3	92	1,024	64	21.5	152
366	Electronic components and accessories	181,573	102	0.56	694	-0.2	96	1,430	53	-0.7	98
367	Other electrical equipment and supplies	151,633	76	0.50	690	-0.1	98	6,053	309	-0.8	102
	Total	1,011,738	488	0.48	4,318	-0.0	100%	25,680	1,288	0.1	100%
	<b>Transportation equipment</b>										
37	Motor vehicles and equipment	479,734	304	0.63	3,423	1.8	135%	33,068	2,158	12.1	123%
371	Aircraft and parts	598,352	238	0.40	2,681	-0.1	97	16,399	709	-2.8	94
372	Other transportation equipment	105,821	77	0.73	603	0.8	116	5,160	225	-7.4	86
	Total	1,183,907	619	0.52	6,707	0.8	115%	54,627	3,092	5.8	111%
	<b>Instruments and related products</b>										
38	Mechanical measuring and control devices	114,757	62	0.54	581	0.3	107%	3,670	209	7.9	116%
382	Other instruments and related products	189,960	79	0.42	801	-0.2	95	6,322	293	-0.9	98
	Total	304,717	141	0.46	1,382	0.0	100%	9,992	502	2.3	105%
	<b>Miscellaneous manufacturing industries</b>										
39	Miscellaneous manufacturing industries	263,080	80	0.30	1,191	-0.6	89%	14,457	700	-2.1	96%
	Total manufacturing	11,184,356	5,814	0.52	60,929	0.4	107%	639,922	33,872	2.7	105%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4—Continued

INDUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
	<b>D. Manufacturing—Continued</b>													
35	Machinery, except electrical	48,151	237	120%	20	111%	10,589	70	163%	50,929	394	106%	64	142%
351	Engines and turbines	172,939	1,431	119	138	160	24,112	214	98	29,659	297	122	33	110
353	Construction and related machinery	237,426	1,639	110	117	88	28,286	268	109	51,277	516	113	62	105
354	Metal working machinery	132,249	1,199	107	78	103	28,140	186	93	46,291	508	111	42	82
355	Special industry machinery	183,026	1,449	113	146	146	34,659	321	96	28,118	219	96	12	41
356	General industrial machinery	201,794	878	90	80	108	5,943	38	81	35,653	149	99	42	162
357	Office and computing machines	157,071	943	114	98	126	20,907	129	110	68,400	480	92	88	144
	<b>Total</b>	<b>1,132,656</b>	<b>7,776</b>	<b>110%</b>	<b>677</b>	<b>120%</b>	<b>152,636</b>	<b>1,226</b>	<b>102%</b>	<b>308,327</b>	<b>2,563</b>	<b>106%</b>	<b>343</b>	<b>114%</b>
36	Electrical equipment and supplies	112,756	386	78%	49	92%	18,173	125	105%	29,591	176	95%	29	121%
361	Electric test and distributing equipment	127,053	716	104	89	137	11,858	73	104	43,347	361	111	49	117
362	Electrical industrial apparatus	87,406	438	104	75	188	8,525	62	115	15,902	118	95	17	121
363	Household appliances	35,428	87	75	8	62	1,625	3	33	93,741	423	100	106	168
365	Radio and television receiving equipment	106,007	410	102	41	87	2,869	15	75	2,448	3	25	1	50
366	Communication equipment	166,065	605	96	73	99	11,633	56	112	5,305	11	65	2	50
367	Electronic components and accessories	94,756	522	100	31	66	34,070	209	96	28,860	216	109	21	81
	<b>Total</b>	<b>729,471</b>	<b>3,164</b>	<b>97%</b>	<b>366</b>	<b>108%</b>	<b>88,753</b>	<b>543</b>	<b>101%</b>	<b>219,194</b>	<b>1,308</b>	<b>102%</b>	<b>225</b>	<b>127%</b>
37	Transportation equipment	240,496	1,800	121%	220	165%	110,087	1,339	153%	162,219	1,997	122%	225	140%
371	Motor vehicles and equipment	324,379	1,336	99	191	118	3,707	18	86	286,665	1,650	95	195	76
372	Aircraft and parts	80,126	468	96	38	90	18,828	251	132	12,027	54	93	17	170
	<b>Total</b>	<b>645,001</b>	<b>3,604</b>	<b>108%</b>	<b>449</b>	<b>134%</b>	<b>132,622</b>	<b>1,608</b>	<b>148%</b>	<b>460,911</b>	<b>3,701</b>	<b>108%</b>	<b>437</b>	<b>102%</b>
38	Instruments and related products	73,736	446	115%	40	105%	9,270	39	57%	35,421	222	114%	43	139%
382	Mechanical measuring and control devices	150,294	705	92	82	117	39,181	225	93	6,807	70	130	12	171
	<b>Total</b>	<b>224,030</b>	<b>1,151</b>	<b>100%</b>	<b>122</b>	<b>114%</b>	<b>48,451</b>	<b>264</b>	<b>85%</b>	<b>42,228</b>	<b>292</b>	<b>117%</b>	<b>55</b>	<b>149%</b>
39	Miscellaneous manufacturing industries	183,706	1,156	92%	94	94%	63,889	385	89%	29,942	238	98%	18	60%
	<b>Total manufacturing</b>	<b>7,925,707</b>	<b>54,322</b>	<b>105%</b>	<b>5,318</b>	<b>127%</b>	<b>1,664,286</b>	<b>14,322</b>	<b>106%</b>	<b>2,234,285</b>	<b>18,343</b>	<b>104%</b>	<b>2,496</b>	<b>116%</b>

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4--Continued

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A-T per M	A/T†		No.	A-T per M	A/T†
	<i>E. Transportation, communication, electric, gas, and sanitary services</i>										
40.....	Railroad transportation										
401.....	Railroads	124,180	103	0.83	1,310	3.3	145%	29,229	1,811	9.3	118%
	Other railroad transportation	93,457	54	0.58	715	1.3	120	5,155	114	-12.4	64
	Total	217,637	157	0.72	2,025	2.4	135%	34,384	1,925	6.0	112%
41.....	Local and interurban passenger transit	119,867	58	0.48	1,154	2.2	130%	20,688	1,120	-0.7	99%
42.....	Trucking and warehousing										
421.....	Trucking, local and long distance	176,935	129	0.73	919	0.8	118%	3,658	192	7.4	116%
	Other trucking and warehousing	24,822	22	0.89	191	1.9	133	1,518	66	-4.0	92
	Total	201,757	151	0.75	1,110	0.9	120%	5,176	258	3.9	108%
44.....	Water transportation	45,124	41	0.91	384	2.0	132%	4,180	212	2.4	105%
45.....	Transportation by air										
451.....	Certificated air transportation	403,556	246	0.61	1,176	-0.1	96%	980	32	-2.0	94%
	Other transportation by air	19,086	10	0.52	63	-0.1	97	170	8	0.0	100
	Total	422,642	256	0.61	1,239	-0.1	96%	1,150	40	-1.7	95%
46.....	Pipeline transportation	21,899	7	0.32	109	-1.9	72%	3,793	136	-11.3	76%
47.....	Transportation services	54,843	35	0.64	470	2.1	133%	9,902	589	4.8	109%
48.....	Communication										
481.....	Telephone communication	186,020	68	0.37	642	0.9	79%	8,501	679	29.9	160%
	Other communication	45,246	19	0.42	208	0.7	119	1,277	129	49.3	195
	Total	231,266	87	0.38	850	0.6	86%	9,778	808	32.3	164%
49.....	Electric, gas, and sanitary services										
491.....	Electric companies and systems	194,958	88	0.45	1,099	0.1	102%	21,047	1,343	10.7	120%
492.....	Gas companies and systems	95,118	37	0.39	562	0.9	117	9,310	551	3.5	106
493.....	Combination companies and systems	129,985	59	0.45	749	0.2	104	15,324	906	5.7	111
	Other electric, gas, and sanitary services	28,224	15	0.53	167	1.1	102	2,556	138	2.0	104
	Total	448,285	199	0.44	2,577	0.3	106%	48,237	2,938	7.3	114%
	Total transportation, communication, electric, gas, and sanitary services	1,763,320	991	0.56	9,918	0.6	112%	137,288	8,026	6.3	112%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4--Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†		
	<i>E. Transportation, communication, electric, gas, and sanitary services</i>													
40.....	Railroad transportation													
401.....	Railroads	57,822	1,024	159%	19	58%	92,024	1,962	119%	3,563	109	96%	7	175%
	Other railroad transportation	0	0		0		98,612	829	107	0	0		0	
	Total	57,822	1,024	159%	19	58%	190,636	2,791	115%	3,563	109	96%	7	175%
41.....	Local and interurban passenger transit	67,116	840	126%	40	85%	34,211	707	124%	39,228	643	93%	44	98%
42.....	Trucking and warehousing													
421.....	Trucking, local and long distance	129,041	767	120%	71	106%	20,083	133	111%	31,469	116	113%	24	150%
	Other trucking and warehousing	20,821	187	130	7	58	3,291	32	100	2,228	30	125	1	33
	Total	149,862	954	122%	78	98%	23,374	165	109%	33,697	146	114%	25	132%
44.....	Water transportation	32,122	365	133%	28	133%	8,302	90	93%	8,880	107	118%	6	60%
45.....	Transportation by air													
451.....	Certificated air transportation	95,492	297	121%	30	103%	0	0		309,044	726	90%	155	87%
	Other transportation by air	11,243	48	104	1	20	639	5	167%	7,374	16	100	1	33
	Total	106,735	345	119%	31	91%	639	5	167%	316,418	742	90%	156	86%
46.....	Pipeline transportation	25,153	224	73%	12	80%	248	8	100%	291	1	100%	0	0%
47.....	Transportation services	35,314	448	125%	8	42%	27,982	581	118%	1,449	21	95%	1	100%
48.....	Communication													
481.....	Telephone communication	75,100	700	179%	8	23%	97,419	535	76%	22,002	73	80%	5	33%
	Other communication	39,545	139	97	8	53	2,792	111	793	4,186	75	115	4	133
	Total	114,645	839	157%	16	31%	100,211	646	90%	26,188	148	94%	9	47%
49.....	Electric, gas, and sanitary services													
491.....	Electric companies and systems	69,104	580	108%	35	97%	70,423	925	112%	76,478	804	111%	98	132%
492.....	Gas companies and systems	15,190	144	117	16	200	34,062	301	100	55,176	592	114	60	130
493.....	Combination companies and systems	58,346	536	102	30	91	67,696	817	109	19,267	259	122	13	68
	Other electric, gas, and sanitary services	26,782	233	97	22	147	3,733	47	134	265	2	50	1	
	Total	169,422	1,493	105%	103	111%	175,914	2,090	109%	151,186	1,657	114%	172	123%
	Total transportation, communication, electric, gas, and sanitary services	758,191	6,532	123%	335	85%	561,517	7,083	111%	580,900	3,574	102%	420	100%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4 *Continued*

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A-T per M	A/T†		No.	A-T per M	A/T†
50.....	F. <i>Wholesale and retail trade</i>										
501.....	Wholesale trade										
504.....	Motor vehicles and automotive equipment	103,028	73	0.77	508	0.4	102%	3,793	151	-3.2	93%
508.....	Groceries and related products	166,189	93	0.56	806	-0.4	92	7,886	323	-7.0	85
509.....	Machinery, equipment, and supplies	135,835	69	0.51	622	-0.1	99	4,739	228	1.1	102
	Miscellaneous wholesalers	289,631	161	0.56	1,530	0.1	101	15,380	775	2.0	104
	Other wholesale trade	231,924	97	0.42	1,092	-0.6	88	14,726	636	-5.8	88
	Total	926,607	493	0.53	4,558	-0.2	96%	46,524	2,113	-2.5	95%
52.....	Building materials and farm equipment	61,907	48	0.78	375	0.4	106%	3,966	175	-4.0	92%
53.....	Retail general merchandise										
531.....	Department stores	383,940	88	0.23	1,591	-2.8	59%	34,315	1,257	-14.1	72%
	Other retail general merchandise	141,183	46	0.33	578	-1.2	77	3,581	116	-12.6	72
	Total	525,123	134	0.26	2,169	-2.4	63%	37,896	1,373	-13.9	72%
54.....	Food Stores										
541.....	Grocery stores	164,431	59	0.36	632	-0.5	89%	3,020	147	2.0	104%
	Other food stores	45,310	16	0.35	188	-0.4	92	1,208	42	-9.9	78
	Total	209,741	75	0.36	820	-0.4	90%	4,228	189	-1.2	97%
55.....	Automotive dealers and service stations										
551.....	New and used car dealers	163,287	74	0.45	798	-0.0	99%	5,451	193	-5.5	87%
	Other automotive dealers and service stations	38,896	26	0.67	186	0.3	106	1,169	48	0.0	100
	Total	202,183	100	0.50	984	0.0	100%	6,620	241	-4.5	89%
56.....	Apparel and accessory stores	84,553	21	0.25	387	-2.7	63%	8,592	296	-13.7	71%
57.....	Furniture and home furnishings stores	51,347	19	0.37	293	-0.1	99%	3,789	147	-9.5	80%
58.....	Eating and drinking places	115,059	53	0.46	564	-0.4	92%	4,911	146	-13.8	68%
59.....	Miscellaneous retail stores	146,077	56	0.38	716	-0.5	91%	5,681	204	-9.5	79%
	Total wholesale and retail trade	2,322,597	999	0.43	10,866	-0.8	85%	122,207	4,884	-7.9	83%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
	<i>F. Wholesale and retail trade</i>													
	Wholesale trade													
50. ....	Motor vehicles and automotive equipment	77,433	364	99%	27	75%	23,244	204	103%	6,144	58	107%	6	100%
501. ....	Groceries and related products	129,527	750	94	52	74	19,143	139	85	25,405	173	88	15	56
504. ....	Machinery, equipment, and supplies	114,328	632	105	38	69	16,963	94	92	9,283	79	95	7	64
508. ....	Miscellaneous wholesalers	215,246	1,425	107	84	74	47,191	396	99	42,574	369	102	31	70
509. ....	Other wholesale trade	172,179	1,016	90	68	76	43,875	330	77	30,596	293	105	21	68
	Total	708,713	4,187	99%	269	73%	150,416	1,163	90%	114,002	972	100%	80	67%
52. ....	Building materials and farm equipment	52,544	404	105%	21	70%	9,259	85	100%	4,070	38	97%	2	40%
53. ....	Retail general merchandise													
531. ....	Department stores	223,835	1,366	62%	69	43%	145,796	1,040	70%	48,624	350	68%	23	34%
	Other retail general merchandise	85,055	379	83	42	86	10,987	45	92	48,722	172	57	56	95
	Total	308,890	1,745	66%	111	53%	156,783	1,085	71%	97,346	522	64%	79	63%
54. ....	Food stores													
541. ....	Grocery stores	92,717	420	97%	40	89%	22,987	111	80%	51,747	155	81%	53	129%
	Other food stores	38,239	156	92	17	106	4,449	22	67	3,830	33	100	2	50
	Total	130,956	576	96%	57	93%	27,436	133	77%	55,577	188	84%	55	122%
55. ....	Automotive dealers and service stations													
551. ....	New and used car dealers	135,230	757	102%	39	55%	28,636	160	92%	4,872	31	86%	4	80%
	Other automotive dealers and service stations	32,342	189	114	8	53	5,313	34	94	2,410	3	5	0	0
	Total	167,572	946	104%	47	55%	33,949	194	92%	7,282	34	81%	4	67%
56. ....	Apparel and accessory stores	58,969	351	66%	21	50%	19,097	194	74%	15,079	104	60%	13	65%
57. ....	Furniture and home furnishings stores	36,271	233	87%	22	105%	13,497	140	102%	5,368	44	98%	1	17%
58. ....	Eating and drinking places	92,608	507	86%	27	52%	16,243	115	103%	11,119	55	90%	6	50%
59. ....	Miscellaneous retail stores	118,324	623	91%	42	63%	28,379	215	90%	5,055	38	72%	2	33%
	Total wholesale and retail trade	1,674,847	9,572	88%	617	66%	455,059	3,324	82%	314,898	1,995	82%	242	70%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.



TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A-T per M	A/T†		No.	A-T per M	A/T†
60.....	<i>G. Finance, insurance, and real estate</i>										
602.....	Banking										
	Commercial and stock savings banks	182,315	49	0.27	686	-1.0	79%	11,146	554	-0.8	98%
	Other banking	332,038	70	0.21	1,259	-1.1	78	25,420	1,149	-5.2	90
	Total	514,353	119	0.23	1,945	-1.0	78%	36,566	1,703	-3.9	92%
61.....	Credit agencies other than banks	106,545	43	0.40	276	-0.7	79%	2,216	66	-12.2	71%
62.....	Security, commodity brokers, and services										
621.....	Security brokers and dealers	120,743	27	0.22	504	-0.4	91%	8,981	470	4.3	109%
	Other security, commodity brokers, and services	8,580	5	0.58	41	-0.5	91	710	33	-2.8	94
	Total	129,323	32	0.25	545	-0.4	91%	9,691	503	3.8	108%
63.....	Insurance carriers	282,951	118	0.42	1,191	-0.6	88%	16,088	850	4.0	.....
64.....	Insurance agents, brokers, and service	47,347	21	0.44	173	-1.0	79%	2,779	115	-7.6	85%
65.....	Real estate	43,527	14	0.32	266	-0.4	93%	4,171	163	-7.4	84%
66.....	Combined real estate, insurance, etc.	8,480	4	0.47	43	-0.2	96%	409	16	-4.9	89%
67.....	Holding and other investment companies	90,749	55	0.61	438	-0.0	100%	3,808	155	-2.9	93%
	Total finance, insurance, and real estate	1,223,275	406	0.33	4,897	-0.7	85%	75,728	3,571	-2.0	96%
	<i>H. Services</i>										
70.....	Hotels and other lodging places										
701.....	Hotels, tourist courts, and motels	116,643	73	0.63	596	-0.5	92%	8,196	253	-13.5	70%
	Other hotels and other lodging places	6,167	2	0.32	42	-0.2	98	505	17	-11.9	74
	Total	122,810	75	0.61	638	-0.4	92%	8,701	270	-13.6	70%
72.....	Personal services	94,407	42	0.45	470	-0.5	91%	4,152	135	-13.2	71%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
60.....	G. <i>Finance, insurance, and real estate</i>													
602.....	Banking													
	Commercial and stock savings banks	96,541	602	90%	29	64%	13,099	65	83%	83,821	514	91%	30	45%
	Other banking	190,072	1,187	84	84	91	65,974	299	61	101,412	780	95	58	67
	Total	286,613	1,789	86%	113	82%	79,073	364	64%	185,233	1,294	93%	88	58%
61.....	Credit agencies other than banks	86,507	250	76%	21	72%	15,055	45	83%	7,199	25	81%	1	25%
62.....	Security, commodity brokers, and services													
621.....	Security brokers and dealers	77,041	608	108%	7	21%	9,087	68	79%	43,596	280	104%	11	37%
	Other security, commodity brokers, and services	4,345	31	82	2	67	4,870	37	97	75	4	400	0	0
	Total	81,386	639	106%	9	26%	13,957	105	84%	43,671	284	105%	11	35%
63.....	Insurance carriers	194,873	1,053	87%	73	79%	69,120	589	113%	35,046	308	106%	18	55%
64.....	Insurance agents, brokers, and service	35,191	188	80%	16	100%	7,796	34	74%	7,139	44	88%	6	86%
65.....	Real estate	39,144	327	95%	12	50%	5,336	63	91%	3,218	26	74%	1	20%
66.....	Combined real estate, insurance, etc.	7,944	44	94%	4	100%	554	8	100%	391	3	75%	0	0%
67.....	Holding and other investment companies	78,787	489	104%	20	49%	11,795	72	90%	3,975	31	97%	1	25%
	Total finance, insurance, and real estate	810,445	4,779	90%	268	71%	202,686	1,280	87%	285,872	2,015	96%	126	53%
	H. <i>Services</i>													
70.....	Hotels and other lodging places													
701.....	Hotels, tourist courts, and motels	82,044	625	88%	18	35%	34,216	148	85%	2,579	56	84%	2	20%
	Other hotels and other lodging places	5,193	40	87	0	0	799	12	120	680	7	100	0	0
	Total	87,237	665	88%	18	33%	35,015	160	86%	9,259	63	85%	2	18%
72.....	Personal services	75,113	411	87%	23	53%	18,402	115	85%	5,044	54	106%	2	29%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4 (Continued)

IN- DUSTRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims*			Years Exposed	All Claims		
			No.	Per M	No.	A-T per M	A/T†		No.	A-T per M	A/T†
	H. Services—Continued										
73.....	Miscellaneous business services	171,670	75	0.44	641	-0.2	95%	3,408	140	-2.9	93%
739.....	Miscellaneous business services	144,722	36	0.25	571	-0.5	86	5,701	190	-8.8	79
	Other miscellaneous business services										
	Total	316,392	111	0.35	1,212	-0.4	91%	9,109	330	-6.7	84%
75.....	Auto repair services; garages	23,835	15	0.63	113	0.3	107%	806	44	8.7	119%
76.....	Miscellaneous repair services	9,340	5	0.54	40	0.6	87%	417	10	-21.6	53%
78.....	Motion pictures	29,629	7	0.24	190	0.0	101%	3,310	129	-7.3	84%
79.....	Amusement and recreation services, n.e.c.‡	37,316	22	0.59	253	0.4	107%	3,488	145	-5.2	89%
80.....	Medical and other health services										
806.....	Hospitals	444,207	139	0.31	1,556	-2.0	63%	16,246	449	-15.0	65%
	Other medical and other health services	37,693	13	0.34	157	-1.0	81	1,384	34	-17.3	59
	Total	481,900	152	0.32	1,713	-1.9	65%	17,630	483	-15.1	64%
81.....	Legal services	38,442	8	0.21	109	-1.9	60%	2,557	94	-11.3	76%
82.....	Educational services										
821.....	Elementary and secondary schools	292,520	61	0.21	940	-2.5	57%	11,246	338	-13.8	69%
822.....	Colleges and universities	353,310	101	0.29	1,366	-1.7	70	24,014	915	-11.5	77
	Other educational services	48,175	15	0.31	212	-0.9	83	1,897	61	-12.7	72
	Total	694,005	177	0.26	2,518	-2.0	65%	37,157	1,314	-12.2	74%
84.....	Museums; botanical and zoological gardens	8,481	1	0.12	48	-1.1	84%	1,019	36	-14.7	71%
86.....	Nonprofit membership organizations										
866.....	Religious organizations	105,007	41	0.39	154	-1.7	72%	10,241	488	-4.9	91%
	Other nonprofit membership organizations	236,667	105	0.44	1,272	-0.4	93	17,084	703	-6.0	87
	Total	341,674	146	0.43	1,726	-0.8	86%	27,325	1,191	-5.6	89%
88.....	Private households	1,644	1	0.61	3	-3.7	33%	44	1	-22.7	50%
89.....	Miscellaneous services										
891.....	Engineering and architectural services	133,726	62	0.46	519	-0.4	91%	3,621	132	-5.8	86%
	Other miscellaneous services	95,012	39	0.41	307	-0.5	87	2,681	128	-2.2	96
	Total	228,738	101	0.44	826	-0.4	90%	6,302	260	-4.1	91%
	Total services	2,428,613	863	0.36	9,859	-1.2	77%	122,017	4,442	-10.0	78%

184

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

‡ Not elsewhere classified.

TABLE 4—Continued

IN- DUSTRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
73. . . .	H. Services—Continued													
739. . . .	Miscellaneous business services	161,554	656	100%	49	74%	5,053	33	75%	8,471	39	81%	4	50%
	Miscellaneous business services	122,720	634	89	26	43	6,958	34	79	20,745	61	82	6	46
	Other miscellaneous business services													
	Total	284,274	1,290	94%	75	60%	12,011	67	77%	29,216	100	82%	10	45%
75. . . .	Auto repair services; garages	16,801	110	121%	4	50%	7,756	41	95%	84	2	200%	0	0%
76. . . .	Miscellaneous repair services	8,705	40	78%	4	80%	974	6	75%	78	0	0%	0	0%
78. . . .	Motion pictures	17,274	184	108%	7	64%	6,824	88	88%	8,841	37	67%	3	38%
79. . . .	Amusement and recreation services, n.e.c.‡	35,567	303	98%	3	14%	3,965	68	131%	1,272	24	150%	0	0%
80. . . .	Medical and other health services													
806. . . .	Hospitals	388,100	1,499	64%	86	38%	49,625	294	71%	22,728	113	76%	13	57%
	Other medical and other health services	31,229	136	75	9	53	3,696	25	78	4,152	17	94	4	133
	Total	419,329	1,635	65%	95	39%	53,321	319	72%	26,880	130	78%	17	63%
81. . . .	Legal services	33,669	161	72%	4	25%	5,131	29	60%	2,199	9	56%	0	0%
82. . . .	Educational services													
821. . . .	Elementary and secondary schools	231,616	835	59%	49	36%	27,296	142	64%	44,854	224	69%	28	60%
822. . . .	Colleges and universities	165,834	902	73	46	49	101,457	557	69	110,033	727	80	49	45
	Other educational services	44,905	223	90	6	25	3,506	30	73	1,661	14	54	0	0
	Total	442,355	1,960	67%	101	40%	132,259	729	68%	156,548	965	77%	77	48%
84. . . .	Museums; botanical and zoological gardens	6,250	31	67%	0	0%	2,817	43	90%	433	10	100%	0	0%
86. . . .	Nonprofit membership organizations													
866. . . .	Religious organizations	77,591	510	79%	10	22%	26,703	303	91%	10,954	115	88%	4	33%
	Other nonprofit membership organizations	187,492	1,291	93	60	55	44,066	360	93	22,193	246	95	18	67
	Total	265,083	1,801	88%	70	45%	70,769	663	92%	33,147	361	93%	22	56%
88. . . .	Private households	1,688	4	40%	0	0%	0	0		0	0		0	
89. . . .	Miscellaneous services													
891. . . .	Engineering and architectural services	122,480	520	93%	34	63%	4,679	22	85%	10,188	70	101%	5	50%
	Other miscellaneous services	52,807	213	89	17	74	21,740	126	98	23,146	72	88	7	54
	Total	175,287	733	92%	51	67%	26,419	148	96%	33,334	142	93%	12	50%
	Total services	1,868,632	9,328	79%	455	45%	375,663	2,476	80%	306,335	1,897	82%	145	48%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3, actual/tabular in per cent.

‡ Not elsewhere classified

TABLE 4 *Continued*

IN- DUS- TRY CODE	INDUSTRY	ALL DISABILITY CLAUSES COMBINED									
		Through Age 65						Above Age 65			
		Years Exposed	Accidental Death Claims		All Claims <sup>†</sup>			Years Exposed	All Claims		
			No.	Per M	No.	A--T per M	A/T <sup>†</sup>		No.	A--T per M	A/T <sup>†</sup>
91.....	I. <i>Government</i> Federal government	27,021	11	0.41	157	-0.5	92%	1,704	77	-3.5	93%
92.....	State government	74,178	38	0.51	481	0.1	102%	5,743	244	-1.4	97%
93.....	Local government										
939.....	Regular government functions—executive, legislative, and judicial	634,688	308	0.49	4,947	0.5	110%	48,082	2,347	2.5	105%
	Other local government	123,706	43	0.35	575	-0.9	84	6,421	333	-5.0	111
	Total	758,394	351	0.46	4,522	0.3	105%	54,503	2,680	2.8	106%
94.....	International government	14,851	6	0.40	72	-1.1	82%	302	12	6.6	120%
	Total government	874,444	406	0.46	5,232	0.2	104%	62,252	3,013	2.3	105%
90	J. <i>Nonclassifiable establishments—Total</i>	148,944	70	0.47	709	-0.3	94%	8,271	311	-11.0	77%
	Grand total	20,676,436	10,226	0.49	106,823	-0.0	100%	1,207,870	60,115	0.0	100%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

TABLE 4--Continued

IN- DUS- TRY CODE	INDUSTRY	ALL AGES COMBINED												
		Waiver of Premium				Extended Death Benefit				Total and Permanent Disability				
		Years Exposed	Death		Disability*		Years Exposed	Death		Years Exposed	Death		Disability	
			No.	A/T†	No.	A/T†		No.	A/T†		No.	A/T†	No.	A/T†
91.....	I. <i>Government</i> Federal government	11,121	74	114%	9	129%	12,326	94	78%	5,278	47	85%	10	167%
92.....	State government	74,023	650	101%	48	100%	4,926	19	83%	972	8	100%	0	0%
93.....	Local government													
939.....	Regular government functions—executive, legislative, and judicial	526,627	4,623	110%	198	65%	87,744	701	115%	68,399	716	115%	56	79%
	Other local government	102,133	556	89	23	40	14,477	108	96	13,517	210	117	11	73
	Total	628,760	5,179	107%	221	61%	102,221	809	112%	81,916	926	116%	67	79%
94.....	International government	15,153	80	91%	4	40%	0	0	.....	0	0	.....	0	.....
	Total government	729,057	5,983	106%	282	66%	119,473	922	106%	88,166	981	114%	77	84%
99.....	J. <i>Nonclassifiable establishments—Total</i>	115,591	655	100%	21	37%	35,053	306	78%	6,571	38	84%	0	0%
	Grand total	14,415,394	94,757	100%	7,660	100%	3,511,804	30,688	100%	3,957,108	30,135	100%	3,698	100%

\* 75 per cent of disability claims on waiver of premium.

† Tabular claims by Table 3; actual/tabular in per cent.

period. Higher ratios of actual to tabular were observed in 1968-69 under the policies with the Waiver of Premium clause. This was due, at least in part, to an increase in disability claim levels. Experience under policies with Extended Death Benefit and Total and Permanent Disability clauses fluctuated somewhat during the 1965-69 period; however, ratios of actual to tabular generally showed a decrease from the 1960-64 levels. The fluctuation in trends shown in Table 1 should be interpreted with caution, because such fluctuations may be partly due to policy changes from one disability clause to another, the aging of data as in the case of policies with total and permanent clauses, and the fact that not all contributors were able to contribute data every year.

In Table 2 the aggregate data for the five most recent calendar years (1965-69) appear for each disability clause, tabulated by five-year age groups. The high actual-to-tabular ratios for central ages 18 and 23 result from the high accidental death rates which produce mortality rates from all causes which are higher than that at central age 28.

The data for all industries for the period 1965-69 were used to compute disability rates, accidental death rates, and total death rates by five-year age groups as shown in Table 3. The determination of accident as a cause of death under group life policies may be less than exact, and caution should be used in applying the accident death rates to forms of group insurance other than group life.

Table 4 contains experience observed for the calendar years 1965-69. It presents (a) all industries on a two-digit SIC basis and (b) those SIC industries at the three-digit level which have more than 100,000 life years exposed. Tabular claims were obtained by applying the rates of Table 3 (experience of 1965-69) to the exposed to risk by industry code for each five-year age group. Actual-to-tabular ratios are, therefore, measured against an industries standard of 100 per cent. (Because of a processing problem, there is a slight understatement in tabular deaths in Table 4 at ages 88 and 93 for the Waiver of Premium experience. For the Table 4 Waiver of Premium experience for all industries combined, tabular claims are understated by 0.3 per cent. Similarly, Table 4 tabular claims for ages over 65, all disability clauses and industries combined, are understated by 0.4 per cent.)

The following companies contributed experience for the total period or a portion of the period of this study:

Aetna Life Insurance Company  
Bankers Life Company

Connecticut General Life Insurance Company  
Continental Assurance Company  
Equitable Life Assurance Society of the United States  
General American Life Insurance Company  
John Hancock Mutual Life Insurance Company  
Lincoln National Life Insurance Company  
Occidental Life Insurance Company of California  
Prudential Insurance Company of America  
Sun Life Assurance Company of Canada  
The Travelers Insurance Company