TRANSACTIONS OF SOCIETY OF ACTUARIES

TRANSACTIONS

1959 REPORTS OF MORTALITY AND MORBIDITY EXPERIENCE

REPORT OF THE COMMITTEE ON MORTALITY UNDER ORDINARY INSURANCES AND ANNUITIES

I. MORTALITY UNDER STANDARD ORDINARY INSURANCE ISSUES BETWEEN 1957 AND 1958 ANNIVERSARIES

HIS report covers the intercompany experience under standard Ordinary insurance issues between 1957 and 1958 anniversaries. It takes up in turn the mortality experience under:

- 1. Standard Ordinary insurance issued subject to a medical examination, during each of the first fifteen policy years,
- 2. Standard Ordinary insurance issued without a medical examination, during each of the first fifteen policy years, and
- 3. Standard Ordinary insurance—medical and nonmedical issues combined—during the sixteenth and subsequent policy years.

Also included is a report on the intercompany mortality experience by sex under standard Ordinary insurance for the three-year period between 1955 and 1958 anniversaries. The experience is analyzed separately for issues (a) subject to a medical examination and (b) without a medical examination, during each of the first fifteen policy years.

The names of the contributing companies and their proportionate contributions to the total exposures are given in Table A of the Appendix.

EXPERIENCE UNDER STANDARD MEDICALLY EXAMINED ISSUES DURING THE FIRST FIFTEEN YEARS OF INSURANCE

The current experience during the first fifteen years of insurance is based on an exposure of \$69,592,532,000 and actual claims of \$209,803,000.

Expected deaths were calculated on the 1946-49 Select Basic Table (TSA II, 506). The mortality ratios on this table are presented in Table 1 by age groups at issue for all years of issue combined. The experience by year of issue (or by policy year) is presented in Table 2. The detailed experience by age groups at issue for each year of issue (or each policy year) is set forth in Table B of the Appendix.

TABLE 1

STANDARD MEDICALLY EXAMINED ISSUES OF 1943 TO 1957 EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY AGE AT ISSUE

POLICY YEARS 1 TO 15 COMBINED

Expected Deaths on 1946-1949 Select Basic Table

(Amounts Shown in \$1,000 Units)

Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths on 1946-1949 Select Basic Table	Mortality Ratio
10–14	\$ 927,258	\$ 656	\$ 801	81.9%
15–19	2,003,061	1,758	2,065	85.1
20–24	5,851,974	4,456	5,621	79.3
25–29	11,204,540	10,261	13,409	76.5
30–34	14,470,944	21,542	24,703	87.2
35–39	13,674,466	33,996	39,167	86.8
10-44	10,456,387	42,569	47,426	89.8
45-49	6,157,912	39,203	44,952	87.2
50-54	3,095,417	29,514	32,669	90.3
55-59	1,277,103	17,061	18,828	90.6
6U-64.	386,352	7,183	7,960	90.2
65 and over	87,118	1,604	2,396	66.9
All Ages	\$69,592,532	\$209,803	\$239,997	87.4%

TABLE 2

STANDARD MEDICALLY EXAMINED ISSUES OF 1943 TO 1957 EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE

ALL AGES COMBINED

Expected Deaths on 1946-1949 Select Basic Table

(Amounts Shown in \$1,000 Units)

Year of Issue	Policy Year	Exposed to Risk	Actual Deaths	Expected Deaths on 1946-1949 Select Basic Table	Mortality Ratio
1943	15	\$ 1,745,897	\$ 13,670	\$ 16,597	82.4%
1944	14	2,018,619	16,092	17,444	92.2
1945	13	2,243,568	15,249	17,023	89.6
1946	12	3,378,655	17,349	19,842	87.4
1947	11	3,280,891	15,115	18,529	81.6
1948	10	2,995,295	14,255	14,981	95.2
1949	9	3,163,398	12,739	14,056	90.6
1950	8 7	3,775,262	13,494	14,956	90.2
1951	7]	3,492,343	12,627	13,704	92.1
1952	6 5	3,944,542	11,732	14,446	81.2
1953	5	4,818,307	11,412	15,698	72.7
1954	4 3	5,922,637	13,594	16,175	84.0
1955		7,864,549	16,068	18,102	88.8
1956	2	9,051,035	13,960	15,347	91.0
1957	1	11,897,534	12,447	13,097	95.0
All Years of Issue		\$69,592,532	\$209,803	\$239,997	87.4%

The aggregate mortality ratio for the period from 1957 to 1958 anniversaries (87.4%) was .9 percentage points higher than that (86.5%) for the period from 1956 to 1957 anniversaries.

As shown in Table 1, the lowest mortality ratios were experienced at ages 20 through 29 (less than 80%) and also at ages 65 and over where, however, the low ratio of 67% may be the result of a chance fluctuation. At ages 30 through 64 the mortality ratios ranged from 87% to 91% of the 1946-49 Select Basic Table.

Table 2 shows that the mortality ratio for the first policy year was somewhat higher than the ratios for other policy year durations, but this difference was not as great as in the previous report. The mortality ratios decreased from the second to the fifth policy years but were not significantly different from the ratios for other policy year durations. In previous reports it had been noted that the mortality ratio for the first policy year was materially higher than the ratios for the later policy year durations.

Table 3 presents an analysis of the 1957-58 experience on medical issues according to major subdivisions by cause of death based on the

TABLE 3
STANDARD MEDICALLY EXAMINED ISSUES OF 1943 TO 1957
EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES
PERCENTAGE DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT PAID IN CLAIMS

Cause of Death:	Tuber- culosis (All Forms)	Malig- nant Neo- plasms	Dia- betes Mel- litus	Vascu- lar Le- sions Affect- ing Central Nervous System	Dis- eases of the Heart and Circu- latory System	Pneu- monia and Influ- enza	Accidents and Homicide	Sui- cide	All Other Causes and Un- known
Committee's 1950 Code:	01, 02	18-33	37	42	49-55	56-59	88-96, 98	97	Resid- ual
Ages 10-29 at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.6% .4 .5	12.7% 21.3 17.7	.2%	2.7% 2.3 2.5	6.6% 21.9 15.4	1.7% 1.8 1.8	57.9%. 29.3 41.3	3.9% 7.7 6.1	13.7% 14.8 14.3
Ages 30-39 at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.1 .2 .1	16.3 21.8 20.1	.0 .3 .2	3.5 3.3 3.4	34.0 43.9 41.0	1.5 1.3 1.3	29.4 10.9 16.5	4.4 5.0 4.8	10.8 13.3 12.6
Ages 40-49 at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.1 .1 .1	20.3 21.6 21.2	. 2 . 5 . 4	2.7 5.7 4.8	45.1 49.1 47.8	1.1 1.5 1.4	13.3 5.5 7.9	5.1 3.8 4.2	12.1 12.2 12.2
Ages 50 and over at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.2 .4 .3	23.5 24.7 24.3	. 0 . 4 . 3	3.7 7.6 6.2	52.5 45.6 48.0	1.0 2.0 1.7	5.2 2.5 3.4	2.7 1.8 2.1	11.2 15.0 13.7
All Ages at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.2 .2 .2	19.4 22.4 21.4	.1 .4 .3	3.2 5.3 4.6	40.3 44.9 43.6	1.2 1.6 1.5	19.8 7.9 11.7	4.1 3.9 3.9	11.7 13.4 12.8

Committee's 1950 Code for Cause of Death (TSA I, 617). This table shows the percentage distribution by cause of death of the amount paid in claims.

The distribution by cause of death for the 1957–58 experience on medical issues is not markedly different from that for the 1956–57 period, except for pneumonia and influenza. The proportion of deaths from these causes was from one and a half to two times that in the 1956–57 experience, reflecting the influenza epidemic which began in October 1957 and continued through the spring of 1958. Deaths from suicide were also higher in the 1957–58 experience at ages 40 and over in the first five policy years.

Death rates based on the percentage distribution of mortality by cause of death for the two-year period between 1956 and 1958 anniversaries, together with the corresponding death rates for the two-year period between 1950 and 1952 anniversaries, are shown in Table 3a. In interpreting

TABLE 3a
STANDARD MEDICALLY EXAMINED ISSUES
COMPARISON OF DEATH RATES BY CAUSE OF DEATH
BETWEEN 1950-1952 AND 1956-1958
POLICY YEARS 1 TO 15 COMBINED
DEATH RATES PER 100,000

Cause of Death:	Tuber- culosis (All Forms)	Malig- nant Neo- plasms	Dia- betes Mel- litus	Vascu- lar Le- sions Affect- ing Central Nerv- ous System	Dis- eases of the Heart and Circu- latory System	Pneu- monia and Influ- enza	Accidents and Homicide	Sui- cide	War Deaths	All Other Causes and Un- known
Committee's 1950 Code:	01, 02	18-33	37	42	49-55	56-59	88–96, 98	97	99	Resid- ual
			Expe	rience betw	een 1950	and 1952	Anniver	saries		
Ages at Issue 10-29 30-39 40-49 50 and over. All Ages	2.0 2.1 2.8 3.6	17.5 43.0 121.8 261.7	.3 .7 3.7 10.4	2.8 11.1 29.3 104.9	16.5 92.3 263.7 603.2 140.1	1.0 2.5 3.1 18.0	40.2 34.6 39.3 61.5 39.4	7.1 13.7 19.1 26.0	10.3 1.3 .2 .0 4.0	20.8 39.7 79.6 162.3 50.6
		<u></u>	Expe	rience betw	een 1956	and 1958	Anniver	saries	. '	·
Ages at Issue 10-29	.3 .3 .6 2.5	15.4 37.7 105.8 288.5	.3 .5 1.8 3.6	2.3 7.1 19.6 65.2 12.9	13.3 81.2 239.6 545.5	1.3 2.1 5.3 15.2	37.3 32.8 43.1 46.5 37.5	5.6 9.1 18.6 20.6	.0 .0 .0 .0 .0	12.5 25.0 58.2 136.5

these figures it should be kept in mind that they refer to durations 1-15 combined and that the proportion of the exposure in the earlier durations has increased from the 1950-52 period to the 1956-58 period. A comparison of these death rates indicates that over this interval on medical issues in the first fifteen policy years (a) the death rate from tuberculosis has decreased by about one third at issue ages 50 and over and by about four fifths at ages under 50, (b) death rates from diabetes decreased markedly at issue ages 40 and over, but did not change appreciably at the younger ages, and (c) death rates from vascular lesions of the central nervous system decreased substantially. The death rates from pneumonia and influenza during the 1956-58 period were unfavorably affected by the epidemic of influenza and allied upper respiratory infections mentioned above.

EXPERIENCE UNDER STANDARD NONMEDICAL ISSUES DURING THE FIRST FIFTEEN YEARS OF INSURANCE

The current experience during the first fifteen years of insurance is based on an exposure of \$23,996,849,000 and actual claims of \$28,719,000. Expected deaths were calculated on the 1946–49 Select Basic Table, which was based on the experience under medical issues.

Nonmedical business continues to grow in importance and now accounts for about one quarter of the total experience on recent Ordinary issues. The exposure on nonmedical issues in the current study showed an increase of 25.0% over that in the study covering the period from 1956 to 1957 anniversaries, whereas the corresponding exposure on medical issues increased only 12.0%. The large increase in the first policy year exposure on nonmedical issues is believed to reflect both the introduction of the Family Policy and increases in nonmedical amount limits by some companies. For the sixteen companies contributing to this study, the proportion of nonmedical insurance increased considerably on new issues, accounting for approximately 35.8% of the standard issues of 1957 (by amounts) as compared with 30.3% of the standard issues of 1956 and 23.8% of the standard issues of 1955.

The mortality ratios for nonmedical issues are presented in Table 4 by age groups at issue for all years of issue combined. The aggregate mortality ratio on nonmedical business for the period from 1957 to 1958 anniversaries (93.4%) was 6.4 percentage points higher than that (87.0%) for the period from 1956 to 1957 anniversaries, but only 1.2 percentage points higher than the mortality ratio (92.2%) for the period from 1955 to 1956 anniversaries. Except at issue ages 10-14, the mortality ratios during the period from 1957 to 1958 anniversaries were higher for every

issue age group than those during the period from 1956 to 1957 anniversaries. Sharp increases in mortality ratios were recorded at issue ages 15-24 and 30-34.

The mortality ratios appearing in Table 4 understate somewhat the death rates on nonmedical business because in calculating the expected deaths no adjustment was made for the fact that the average ages of the exposures under nonmedical issues for issue age groups 35-39, 40-44,

TABLE 4

STANDARD NONMEDICAL ISSUES OF 1943 TO 1957 EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY AGE AT ISSUE

POLICY YEARS 1 TO 15 COMBINED Expected Deaths on 1946-1949 Select Basic Table (Amounts Shown in \$1,000 Units)

Ages at	Exposed	Actua!	Expected Deaths* on 1946-1949 Select Basic Table	Mortality
Issue	to Risk	Deaths		Ratio*
10–14	\$ 1,100,770	\$ 653	\$ 828	78.9%
15–19	3,635,406	3,414	3,493	97.7
20–24	6,212,917	5,134	5,547	92.6
25–29	6,065,411	5,163	6,407	80.6
0-34	4,251,982	5,753	5,981	96.2
5-39	2,123,740	5,040	5,233	96.3
0-44	510,286	2,607	2,420	107.7
5-49	77,121	696	602	115.6
All Ages	\$23,996,849	\$28,719	\$30,754	$\frac{106.6}{93.4\%}$

^{*} Not adjusted for distribution of exposures by age within each five year age group at issue.

45-49, and 50 and over were younger than the average ages of the mortality rates for those age groups in the experience entering into the 1946-49 Select Basic Table; this situation arose from the limiting ages for non-medical issues of the contributing companies being variously set at 35, 40, 45, or 50, so that the nonmedical exposures beyond these ages tended to fall off sharply. It is likely that a further understatement arises from the general practice of reducing nonmedical amount limits in steps of \$5,000 or \$10,000 beyond ages ending in 0 or 5, such as 30 and 35.

The extent to which Table 4 understates the true mortality on non-medical business is indicated by the figures shown below.

MORTALITY RATIOS ON NONMEDICAL ISSUES OF 1943 TO 1957—EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY AGE AT ISSUE POLICY YEARS 1 TO 15 COMBINED

Ages at Issue	Mortali	Y RATIOS
AGES AT ISSUE	Unadjusted	Adjusted*
35-39	96.3%	96.7%
40-44	107.7	116.2
45–49	115.6	120.0
50 and over	106.6	109.3
Ages 35 and over	101.2%	104.0%

^{*} For distribution of exposures by age within each five year age group at issue.

TABLE 5

STANDARD NONMEDICAL ISSUES OF 1943 TO 1957 EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE

ALL AGES COMBINED

Year of Issue	Policy Year	Exposed to Risk	Actual Deaths	Expected Deaths* on 1946-1949 Select Basic Table	Mortality Ratio
1943 1944	15 14	\$ 398,438 440,466	\$ 1,158 1,197	\$ 1,430 1,406	81.0% 85.1
1945	13	473,189	1,199	1,351	88.7
1946	12	872,672	1,714	2,028	84.5
1947	11	727,782	1,448	1,582	91.5
1948	10	632,111	1,223	1,237	98.9
1949	9	689,546	1,162	1,241	93.6
1950		864,672	1,305	1,427	91.5
1951	8 7	1,304,492	1,923	2,057	93.5
1952		1,497,642	1,971	2,220	88.8
1953	6 5	1,801,086	2,256	2,421	93.2
1954	4 3	1,890,536	2,018	2,220	90.9
1955	3	2,229,299	2,059	2,339	88.0
1956	2	3,543,353	2,936	3,181	92.3
1957	1	6,631,565	5,150	4,614	111.6
All Years			600.540	A10 #54	07.40
of Issue		\$23,996,849	\$28,719	\$30,754	93.4%

^{*} Not adjusted for distribution of exposures by age within each five year age group at issue.

The unadjusted mortality ratios understate the true mortality on non-medical business to a significant degree in the age range from 40 through 49 at issue. The nonmedical business issued at ages 50 and over represents largely business issued under special circumstances (as for instance under salary allotment plans) which do not appreciably affect the distribution of exposures by age within each five year age group at issue.

The mortality ratios by year of issue (or by policy year) for the experience on nonmedical business during the period from 1957 to 1958 anniversaries are presented in Table 5 on an unadjusted basis. The mortality ratio for the first policy year was markedly higher than those for the later durations. In the experience since 1950 anniversaries, the mortality ratios for the first and second policy year durations have generally been relatively high.

The details of the unadjusted experience by age groups at issue for each year of issue (or each policy year) are set forth in Table C of the Appendix.

Table 6 presents an analysis of the 1957-58 experience on nonmedical

TABLE 6
STANDARD NONMEDICAL ISSUES OF 1943 TO 1957
EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES
PERCENTAGE DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT PAID IN CLAIMS

Cause of Death:	Tuber- culosis (All Forms)	Malig- nant Neo- plasms	Dia- betcs Mel- litus	Vascu- lar Le- sions Affect- ing Central Nervous System	Dis- eases of the Heart and Circu- latory System	Pneu- monia and Influ- enza	Acci- dents and Homi- cide	Sui- cide	All Other Causes and Un- known
Committee's 1950 Code:	01, 02	18 33	37	42	49-55	56-59	88-96, 98	97	Resid- ual
Ages 10-29 at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.1%	10.1% 16.6 12.8	.2% .9 .5	2.4% 3.3 2.8	5.8% 17.1 10.5	2.7% 2.2 2.5	62.2% 33.0 50.1	2 9% 4.7 3.6	13.6 21.9 17.0
Ages 30-39 at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.4 .6 .5	16.3 19.5 18.0	. 5 . 5 . 5	2.7 4.2 3.5	26.9 42.0 35.0	1.8 1.4 1.6	31.0 11.3 20.4	3.8 3.4 3.6	16.6 17.1 16.9
Ages 40-49 at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.8 .3 .4	22.1 23.0 22.7	.1 .6 .5	2.0 5.3 4.4	41.5 47.4 45.7	1.2 1.7 1.6	12.2 5.1 7.1	1.5 2.3 2.1	18.6 14.3 15.5
Ages 50 and over at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15		27.6 18.3 21.0	.0 2.7 1.9	2.6 5.0 4.3	40.3 51.1 47.9	1.3 3.3 2.7	1.3 3.7 3.0	2.6 .5 1.2	24.3 15.4 18.0
All Ages at Issue Policy Years 1-5 Policy Years 6-15 Policy Years 1-15	.2 .4 .3	13.1 18.9 16.0	.3 .7 .5	2.5 4.0 3.2	15.6 32.7 24.1	2 3 1.8 2.1	47 9 19 2 33 6	3.1 3.7 3.4	15 0 18 6 16 8

issues according to the major subdivisions by cause of death based on the Committee's 1950 Code for Cause of Death. This table shows the percentage distribution by cause of death of the amount paid in claims.

The distribution by cause of death for the 1957–58 experience on non-medical issues is not markedly different from that for the 1956–57 period, except for the proportion of deaths from pneumonia and influenza at issue ages 10–29 which was nearly double that in the 1956–57 experience.

The death rates based on the percentage distribution of the mortality by cause of death for the two-year period between 1956 and 1958 anniversaries, together with the corresponding death rates for the two-year period between 1950 and 1952 anniversaries, are shown in Table 6a. In interpreting these figures, it should be kept in mind that they refer to durations 1-15 combined and that the proportion of the exposure in the earlier durations has increased from the 1950-52 period to the 1956-58 period. A comparison of these death rates indicates that over this interval on

TABLE 6a
STANDARD NONMEDICAL ISSUES
COMPARISON OF DEATH RATES BY CAUSE OF DEATH
BETWEEN 1950-1952 AND 1956-1958
POLICY YEARS 1 TO 15 COMBINED
DEATH RATES PER 100,000

Cause of Death:	Tuber- culosis (All Forms)	Malig- nant Neo- plasms	Dia- betes Mel- litus	Vascu- lar Le- sions Affect- ing Central Nerv- ous System	Dis- eases of the Heart and Circu- latory System	Pneu- monia and Influ- enza	Acci- dents and Homi- cide	Sui- cide	War Deaths	All Other Causes and Un- known
Committee's 1950 Code:	01, 02	18-33	37	42	49-55	5659	88-96, 98	97	99	Resid- ual
			Ехре	rience betw	een 1950	and 1952	Anniver	saries		
Ages at Issue 10-29 30-39 40-49 50 and over All Ages	1.9 3.4 5.6 4.1	12.2 37.4 101.1 158.7	.5 1.3 4.0	2.2 9.7 35.8 90.1	11.2 76.3 246.6 613.8	1.3 3.4 6.0 8.5	40.2 33.1 37.5 27.2 38.5	4.4 8.1 13.5 8.2	13.5 1.5 .1 .1	21.8 40.4 92.4 158.8 28.7
		<u>. </u>	Expe	rience betw	een 1956	nd 1958	Anniver	saries	·	
Ages at Issue 10-29 30-39 40-49 50 and over All Ages	.4	11.0 30.2 124.8 232.6	.5 .8 2.1 15.7	2.2 6.7 24.3 57.9	9.2 59.0 249.8 593.9	1.7 2.6 7.7 66.9	41.2 32.0 38.4 32.3 38.7	3.0 6.6 13.4 13.1	.0	13.7 28.8 82.2 276.9

nonmedical issues in the first fifteen policy years (a) the death rate from tuberculosis has decreased by almost five sixths and (b) death rates from cancer have increased by about 20 percent at issue ages 40–49. The death rates from pneumonia and influenza during the 1956–58 period were unfavorably affected by the epidemic of influenza and allied upper respiratory infections that began late in 1957 and continued into early 1958.

COMPARISONS OF MEDICAL AND NONMEDICAL EXPERIENCE DURING THE FIRST FIFTEEN POLICY YEARS

While it would be desirable to compare the nonmedical experience with an experience on strictly comparable policies issued with a medical examination, data for such a comparison are not available. Table 7 presents

TABLE 7

COMPARISON OF MEDICAL AND NONMEDICAL EXPERIENCE
BETWEEN 1955 AND 1958 ANNIVERSARIES
BY AGE GROUP AT ISSUE AND DURATION (FIRST FIFTEEN POLICY YEARS)

Age Group					Polici	YEARS					
AT ISSUE	1	1 -2		3-5		6-10		-15	1-15		
		Mortality Ratios on 1946-49 Select Basic Table									
	Medi- cal	Non- medi- cal	Medi- cal	Non- medi- cal	Medi- cal %	Non- medi- cal	Medi- cal %	Non- medi- cal	Medi- cal	Non- medi- cal	
10-19 20-29 30-39 40-49 50 and over	77 83 87 95 93	103 95 101* 154* 110*	86 83 81 85 85	94 77 93* 108* 109*	89 74 86 90 90	89 83 96* 109* 88*	82 83 89 87 86	76 78 91* 106* 122*	84 80 86 88 88	91 84 95* 111* 101*	
All Ages	90	100*	84	88*	88	92*	87	88*	87	92*	
		1	Ratios o	f Nonme	edical to	Medical	Mortali	ty Ratio	S	<u></u>	
10–19 20–29 30–39 40–49 50 and over	134% 114 116 162 118		9 11 12	109% 93 115 127 128		00% 2 2 2 !1		2	10 11 12	08% 05 10 26	
All Ages	11	1%	10	15%	10	5%	10	1%	10	16%	

^{*} Adjusted for distribution of exposures by age within each five year age group at issue.

side by side the experience on medical and nonmedical issues as reported to the Committee for the three-year period from 1955 to 1958 anniversaries. The nonmedical mortality ratios shown in this table have been adjusted approximately so as to reflect the distribution of nonmedical exposures by age within each five year age group at issue. It should be kept in mind that the nonmedical experience at issue ages 50 and over reflects primarily business issued under special circumstances, such as salary allotment plans.

In so far as the figures in Table 7 serve to compare medical with non-medical experience, they indicate that (a) nonmedical mortality is appreciably higher than mortality on medical business and (b) the excess non-medical mortality over medical mortality increases from about 5 percent at issue ages 20–29 to 10 percent at issue ages 30–39 and to about 25 percent at issue ages 40–49. At ages 10–29 the excess nonmedical mortality appears to be confined largely to the early policy years, whereas at the higher issue ages the extra mortality continues into the later durations. However, the relationship between medical and nonmedical mortality at issue ages 10–19 has shown sizable fluctuations due to the relatively small volume of data.

Additional data furnished the Committee indicate that females continue to constitute a higher proportion of nonmedical issues (7.3% for 1957 issues) than of medical issues (4.4% for 1957 issues) by amounts of insurance. However, the proportion of females was much lower on the 1957 issues than on 1956 issues, for which they constituted 12.3% of the nonmedical issues and 5.8% of the medical issues. A probable explanation of this decrease may lie in the introduction of the Family Policy, since the experience on wives insured under this form of coverage has been excluded from the experience covered in this study. To the extent that females constitute a higher proportion of the nonmedical experience than of the medical experience, Table 7 understates the excess of nonmedical mortality over medical mortality.

To afford a better comparison of nonmedical experience with medical experience, Table 7a presents side by side the experience of 13 companies for the three-year period from 1955 to 1958 anniversaries on medical issues and the corresponding experience of 12 companies on nonmedical issues, separately for each sex. The nonmedical mortality ratios shown in this table have been adjusted to reflect the distribution of nonmedical exposures by age within each five year age group at issue. The figures in Table 7a indicate: (a) for males in the age range 20-39 at issue, which accounts for about three fourths of the total male nonmedical experience, the difference between medical and nonmedical mortality was less than 10 percent,

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TABLE 7a

COMPARISON BY SEX OF MEDICAL AND NONMEDICAL EXPERIENCE* BETWEEN 1955 AND 1958 ANNIVERSARIES

BY AGE GROUP AT ISSUE AND DURATION (FIRST FIFTEEN POLICY YEARS)

					Роцсу	YEARS					
Age Group	1	-2	3-	3-5		10	11	-15	1-	-15	
AT ISSUE	Medi- cal	Non- medi- cal %	Medi- cal %	Non- medi- cal %	Medi- cal	Non- medi- cal %	Medi- cal %	Non- medi- cal	Medi- cal	Non- medi- cal	
		M	ortality I	Ratios on	1946-4	Select 1	Basic Ta	ble—Ma	les	1	
10-19	76 86 86 97 92	124 106 94† 154† 104†	87 87 83 86 89	114 82 91† 107† 126†	104 76 89 91 93	109 82 98† 108† 94†	100 88 92 88 88	95 78 96† 108† 111†	94 84 88 89 90	112 89 95† 110† 108†	
All Ages	91	106†	86	92†	90	96†	89	94†	89	96†	
		Mo	Mortality Ratios on 1946-49 Select Basic Table-Females								
10-19 20-29 30-39 40-49 50 and over	0 49 61 47 47	51 51 76† 90† 0†	34 64 46 54 42	37 53 68† 71† 0†	51 49 52 46 47 48	44 62 73† 46† 0†	34 50 44 40 48	41 50 56† 53† 0†	37 52 48 45 46 46	42 54 66† 59† 38†	
		Rati	os of No	nmedica	l to Med	lical Mo	rtality R	atios—M	fales		
10–19	12 10 15 11	9 9	9 11 12 14	4	10 11 11 10	0 9	10 12 12	3	10 10 12 12)8	
		Ratio	s of Nor	nmedical	to Medi	cal Mort	ality Ra	tiosFe	males		
10-19. 20-29. 30-39. 40-49. 50 and over	10 12 19		10 8 14 13		8 12 14 10	0	12 10 12 13	7	10 13 13		
All Ages	12	5%	11	7%	12	5%	11	6%	12	22%	

^{*} Based on data from 13 companies.

[†] Adjusted for distribution of exposures by age within each five year age group at issue.

but at ages 40 and over nonmedical mortality was about 20 percent higher than medical; the nonmedical experience at ages 10–19 was also about 20 percent higher but may have been affected by chance fluctuations; and (b) among females there was relatively little difference between medical and nonmedical mortality in the age range 20–29 at issue, but nonmedical mortality was higher than medical by about 40 percent at issue ages 30–39 and by about 30 percent at ages 40–49; it should be noted that the excess mortality on nonmedical issues at issue ages 30–39 was relatively much higher among female lives than among male lives.

EXPERIENCE UNDER STANDARD ISSUES DURING THE 16TH AND SUBSEQUENT POLICY YEARS

The current experience during the 16th and subsequent policy years is based on an exposure of \$31,675,019,000 and actual claims of \$584,095,000. Mortality ratios based on (i) the 1946–49 Ultimate Basic Table, (ii) the Commissioners 1941 Standard Ordinary Mortality Table and (iii) the Commissioners 1958 Standard Ordinary Mortality Table, are presented in Table 8 by attained age groups.

TABLE 8

STANDARD ISSUES DURING 16TH AND SUBSEQUENT POLICY YEARS
EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES
BY ATTAINED AGE
ALL POLICY YEARS COMBINED

ALL POLICY YEARS COMBINED (Amounts Shown in \$1,000 Units)

Attained Ages	Exposed to Risk	Actual Deaths	Expected Deaths on 1946-1949 Ultimate Basic Table	Mortality Ratio on 1946–1949 Ultimate Basic Table	Mortality Ratio on 1941 CSO Table	Mortality Ratio on 1958 CSO Table
25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-89 90-95	812,666 1,865,037 3,174,273 4,282,244 5,092,763 4,988,950 4,437,336 3,184,737 2,008,949 1,004,010 411,943 109,842	\$ 318 940 3,053 8,815 22,138 41,155 66,026 97,946 103,590 98,689 71,769 46,434 18,217 5,005	\$ 338 1,214 3,785 10,466 24,352 48,034 78,693 111,539 118,398 109,941 81,548 50,141 19,713 5,053	94.1% 77.4 80.7 84.2 90.9 85.7 83.9 87.8 87.5 89.8 88.0 92.6 92.4	35.5% 28.8 31.2 38.9 51.5 56.0 62.7 70.7 70.3 71.3 69.9 75.3 76.5 77.0	56.1% 50.6 56.6 65.3 79.8 80.3 84.6 90.6 85.9 85.0 84.6 90.0 92.9 93.4
All Ages.	\$31,675,019	\$584,095	\$663,215	88.1%	66.6%	85.3%

The aggregate mortality ratio on the 1946-49 Ultimate Basic Table for the period from 1957 to 1958 anniversaries (88.1%) remained at about the same level as in the three preceding reports.

Table 9 presents an analysis of the current experience on business in the 16th and subsequent policy years according to the major subdivisions by cause of death based on the Committee's 1950 Code for Cause of Death (TSA I, 617). This table shows the percentage distribution by cause of death of the amount paid in claims. The distribution by cause of death for the 1957-58 experience is not markedly different from that

TABLE 9

STANDARD ISSUES DURING 16TH AND SUBSEQUENT POLICY YEARS
EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES

PERCENTAGE DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT PAID IN CLAIMS

Cause of Death:	Tuber- culosis ^All Forms)	Malig- nant Neo- plasms	Dia- betes Mel- litus	Vascu- lar Le- sions Affect- ing Central Nervous System	Dis- eases of the Heart and Circu- latory System	Pneu- monia and Influ- enza	Accidents and Homicide	Sui- cide	All Other Causes and Un- known
Committee's 1950 Code:	01, 02	18-33	37	42	4955	56-59	88-96, 98	97	Resid- ual
Attained Age Under 40* 40-49 50-59 60-69 70-79 80 and over All Ages*	.9% .5 .3 .3 .2 .2 .2	18 777 19 9 19 4 19 7 16 4 11 6	1.4% 6.99 1.1 1.1 1.6	2.6% 4.3 6.2 8.6 13.1 17.6	23.0% 43.9 51.6 52.4 50.6 48.6	2.4% 1.3 1.1 1.8 2.8 5.3	24.7% 8.4 3.7 1.9 1.6 1.5	6.9% 4.4 3.0 1.1 .6 .3	19.4% 16.7 13.8 13.1 13.6 13.3

^{*} Excludes ages 24 and under.

for the 1956-57 period, except that at attained ages 50 and over the proportion of deaths from pneumonia and influenza was about 50 percent higher during the 1957-58 period than during the 1956-57 period.

The death rates based on the percentage distribution of the mortality by cause of death for the two-year period between 1956 and 1958 anniversaries, together with the corresponding death rates for the two-year period between 1950 and 1952 anniversaries, are shown in Table 9a. A comparison of these death rates indicates that on business in the 16th and subsequent policy years (a) the death rate from tuberculosis has decreased by about half from its level in the earlier period at attained ages 40 and over and by about three quarters at ages under 40, and (b) death rates from diseases of the heart and circulatory system and from vascular

lesions affecting the central nervous system have decreased at attained ages under 80. At attained ages 80 and over there was an increase in the death rate from every cause except tuberculosis.

Twelve companies were able to submit their experience on premium-paying policies and ten companies did so on fully paid-up policies; the former constituted 81.2% of the total ultimate experience, while the latter accounted for only 16.6% of the total experience (both percentages based on exposures). This separation permitted a comparison to be made of the mortality on premium-paying and paid-up business, with mortality ratios calculated on the 1946-49 Ultimate Basic Table, as shown in Table 10. At attained ages 50 and over, the mortality ratios were higher on premium-paying than on fully paid-up policies, the differential in favor of fully paid-up policies ranging from 2 to 10 percentage points.

TABLE 9a
STANDARD ISSUES DURING 16TH AND SUBSEQUENT POLICY YEARS
COMPARISON OF DEATH RATES BY CAUSE OF DEATH
BETWEEN 1950–1952 AND 1956–1958
DEATH RATES PER 100,000

Cause of Death:	Tuber- culosis (All Forms)	Malig- nant Neo- plasms	Dia- betes Mel- litus	Vascu- lar Le- sions Affect- ing Central Nervous System	Dis- eases of the Heart and Circu- latory System	Pneu- monia and Influ- enza	Accidents and Homicide	Sui- cide	War Deaths	All Other Causes and Un- known
Committee's 1950 Code:	01, 02	18–33	37	42	49-55	56-59	88-96, 98	97	99	Resid- ual
			Experi	ence betw	een 1950	and 1952	Anniver	saries		
Attained Age Under 40 40-49 50-59 60-69 70-79 80 and over All Ages	5.6 6.9 10.1 14.2 15.1 31.4	27.3 73.6 213.1 463.5 913.4 1559.1 302.7	1.8 3.2 11.4 35.4 93.0 169.6	5.1 25.8 98.3 293.7 878.5 1938.1 211.6	35.3 193.2 591.0 1414.1 3145.8 6345.6	1.7 4.4 8.5 27.4 87.8 411.8	35.5 47.4 45.8 62.9 85.6 227.7	12.1 23.8 30.8 32.6 36.2 25.5	3.2	37.0 82.6 172.7 398.9 809.4 1879.7
			Experi	ence betw	een 1956	and 1958	Anniver	saries		·
Attained Age Under 40	1.5 2.4 3.4 7.0 10.4 14.5	25.6 81.7 212.5 506.5 933.8 1580.6	2.0 2.6 9.8 30.0 70.4 200.2	4.2 18.6 66.3 232.4 746.8 2236.9	34.0 176.6 546.4 1363.3 2962.4 6476.1	3.4 5.0 9.9 38.9 136.7 576.0	32.9 33.7 36.2 53.6 97.6 250.8	10.0 16.8 31.0 34.3 35.6 34.3	.0	29.0 63.5 145.3 336.1 748.3 1619.7
Aut Aiges.	3.7	320.0	21.3	191.4	741.7	30.9	49.0	27.1	1 .0	244.2

EXPERIENCE BY SEX DURING THE FIRST FIFTEEN YEARS OF INSURANCE

Of the sixteen companies contributing their experience for the period from 1957 to 1958 anniversaries, thirteen were able to submit their experience separately for males and females (a) on standard medically examined issues, and (b) on nonmedical issues, during the first 15 years of insurance. However, one company's contribution to this portion of the study was limited to the experience for the first six policy years only. Expected deaths were calculated on the 1946-49 Select Basic Table (TSA II, 506). The thirteen companies contributed data by sex representing 66.7% of the medical exposures and 54.5% of the nonmedical exposures. The level of standard mortality in the thirteen companies was about the same as that of all contributing companies on both medically examined and nonmedical issues. The detailed experience for the period

TABLE 10

COMPARISON OF MORTALITY EXPERIENCE UNDER PREMIUM-PAYING AND FULLY PAID-UP POLICIES

STANDARD ISSUES DURING THE 16TH AND SUBSEQUENT POLICY YEARS

OBSERVED BETWEEN 1957 AND 1958 ANNIVERSARIES
Expected Deaths on 1946-1949 Ultimate Basic Table
(Amounts Shown in \$1,000 Units)

ATTAINED	Prem	ium-Payin	C POLICIES*	FULLY PAID-UP POLICIES†				
ATTAINED Ages	Actual Deaths		Mortality Ratio	Actual Deaths		Mortality Ratio		
25-29	S	304	97.1%	\$	4	30.8%		
0-34	-	767	75.3	-	147	103.5		
5-39		2,402	76.7		424	90.4		
0-44		7,043	85.0		1,242	80.9		
5-49	1	7,153	90.5		3,258	91.7		
0–54	3	2,017	86.7		5,358	79.6		
5–59	5	0,732	85.6		8,924	78.8		
0–64	7	2,653	88.7	1	4,545	84.1		
5-69	7	3,233	88.3	1	8,894	85.6		
0-74	6	6,011	89.3	1	9,765	86.3		
5–79		6,636	88.9	1	6,314	86.2		
0–84		9,267	94.9		1,011	85.3		
5–89 [0,712	96.5		5,833	94.2		
0–95		2,373	105.2		2,134	102.8		
All Ages	\$4 1	1,303	88.8%	\$10	7,853	85.5%		

^{*} Based on data from 12 companies.

[†] Based on data from 10 companies.

from 1957 to 1958 anniversaries by age groups at issue for each year of issue (or policy year) is set forth in Table D of the Appendix for medical issues and Table E for nonmedical issues.

Medically Examined Issues

The mortality ratios by sex on standard medically examined issues during the first fifteen years of insurance covering the experience for the three-year period from 1955 to 1958 anniversaries are presented in Table 11 by age groups at issue for all years of issue combined. The corresponding experience by policy year for the three-year period is presented in Table 12.

Table 11 indicates that, in relation to the 1946–49 Select Basic Table, the highest male mortality was found at ages 10–14 and 20–24 at issue, while the 25–29 age group, with an 80.4% ratio, was the lowest. Female mortality, in relation to the 1946–49 Select Basic Table, was highest at ages 25–34 at issue. In the aggregate, female mortality under standard medical issues during the first fifteen years of insurance was about half

TABLE 11

COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE*
STANDARD MEDICALLY EXAMINED ISSUES
OBSERVED BETWEEN 1955 AND 1958 ANNIVERSARIES
BY AGE AT ISSUE—POLICY YEARS 1 TO 15 COMBINED
Expected Deaths on 1946–1949 Select Basic Table
(Amounts Shown in \$1,000 Units)

Ages at Issue	Exposed to Risk		ACTUAL	DEATHS	MORTALI	RATIO OF FEMALE TO MALE	
ISSUE	Male	Female	Male	Female	Male	Female	Mor-
10–14	\$ 1,429,790	\$ 374,810	\$ 1,237	\$ 92	103.5%	28.1%	27.1%
15-19	2,751,012	500,179	2,478	224	90.2	42.0	46.6
20-24	7,558,527	871,834	6,498	467	92.8	48.5	52.3
25-29	16,167,207	977,714	14,768	742	80.4	54.1	67.3
30-34	21,396,879	1,145,781	29,463	1,277	85.7	57.2	66.7
35-39	20,979,960	1,280,568	50,871	1,750	89.3	43.6	48.8
40-44	16,717,995	1,381,620	64,180	3,094	88.5	48.4	54.7
45-49	10,381,043	1,023,934	65,599	3,138	90.5	42.9	47.4
50-54	5,398,259	604,692	50,340	2,702	91.9	44.3	48.2
55-59	2,262,448	282,045	28,823	1,920	90.3	48.3	53.5
60-64	685,347	100,644	11,637	920	87.5	47.4	54.2
65 and	300,011	100,011	1 22,000	/	1		
over	153,641	23,243	3,083	229	76.1	42.9	56.4
All Ages	\$105,882,108	\$8,567,064	\$328,977	\$16,555	89.0%	46.4%	52.1%

^{*} Based on data from 13 companies.

(52.1%) that of males. Compared with male mortality, female mortality was relatively highest at issue ages 25–34, where it was about 67% of male mortality, and was relatively lowest at issue ages 10–14, where it was less than 30% of male mortality.

The mortality ratios for males during the three-year period from 1955 to 1958 anniversaries were about the same as those for the two-year period from 1955 to 1957 anniversaries. However, the mortality ratios for females for the three-year period 1955–58 showed significant increases at issue ages 20 through 44, with a sharp increase at ages 30–34, as compared with the corresponding ratios for the two-year period 1955–57.

Table 12 reveals wide fluctuations in the mortality ratios for females by policy year and there does not appear to be any significant pattern in the ratio of female to male mortality by duration.

TABLE 12

Comparison of Male and Female Mortality Experience*
Standard Medically Examined Issues
Observed between 1955 and 1958 Anniversaries

BY POLICY YEAR—ALL AGES COMBINED

Expected Deaths on 1946-1949 Select Basic Table
(Amounts Shown in \$1,000 Units)

Policy Year	Exposed	Exposed to Risk		DEATHS	MORTALITY RATIO		RATIO OF FEMALE TO MALE
IEAR	Male	Female	Male	Female	Male	Female	Mor- TALITY
5	\$ 2,332,979	\$ 351,134	\$ 20,171	\$ 1,259	87.4%	42.5%	48.6%
4	2,380,336	369,925	20,213	1,165	90.1	42.2	46.8
3	2,782,907	391,366	21,348	1,334	89.8	50.1	55.8
.2	3,669,022	435,688	23,990	1,071	90.6	39.8	43.9
1	4,377,695	449,129	24,012	1,127	87.3	44.3	50.7
.0	4,649,645	445,195	23,675	1,078	93.5	46.4	49.6
9	4,616,000	435,259	20,459	1,053	90.1	49.3	54.7
8	4,796,931	420,132	18,785	898	89.8	45.4	50.6
7	5,226,652	444,871	18,160	1,101	89.2	56.7	63.6
6	6,496,532	512,701	20,920	910	87.2	42.0	48.2
5	8,036,326	611,487	21,904	829	80.9	34.2	42.3
4	9,615,403	716,662	23,945	1,284	87.7	52.0	59.3
3	12,277,044	874,643	26,374	1,526	90.3	57.5	63.7
2	15,634,623	1,011,750	23,502	999	86.0	43.8	50.9
1	18,990,013	1,097,122	21,519	921	96.8	54.2	56.0
All							_
Years	\$105,882,108	\$8,567,064	\$ 328,977	\$16,555	89.0%	46.4%	52.19

^{*} Based on data from 13 companies.

Nonmedical Issues

The mortality ratios by sex on nonmedical issues during the first fifteen years of insurance are presented in Table 13 for the three-year period from 1955 to 1958 anniversaries by age groups at issue. The corresponding experience by policy year for the three-year period is presented in Table 14. The mortality ratios in Tables 13 and 14 understate somewhat the death rates on nonmedical business because in calculating the expected deaths no adjustment was made for the fact that the average ages of the exposures under nonmedical issues for issue age groups 35-39, 40-44, 45-49, and 50 and over were younger than the average ages of the exposures on these age groups in the medical experience entering into the 1946-49 Select Basic Table.

In relation to the 1946-49 Select Basic Table, male nonmedical mortality during the three-year period was highest at issue ages under 25 and at ages 40 and over; it was lowest (79.7%) in the age group 25-29 at issue. Female nonmedical mortality, in relation to the 1946-49 Select

TABLE 13

COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE*
STANDARD NONMEDICAL ISSUES
OBSERVED BETWEEN 1955 AND 1958 ANNIVERSARIES
BY AGE AT ISSUE—POLICY YEARS 1 TO 15 COMBINED
Expected Deaths on 1946–1949 Select Basic Table

Ages at	Exposed	Exposed to Risk		ACTUAL :	De/	ATHS	Mortalit	Y RATIO†	RATIO OF FEMALE TO MALE
Issue	Male	Female		Male	F	emale	Male	Female	Mor-
10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49	2,920,184 5,782,058 6,302,467 4,771,219 2,471,630 688,931	\$ 394,082 1,077,015 1,625,858 939,078 712,030 535,397 147,743 20,495	\$	751 3,167 5,075 5,287 6,497 6,439 3,504 876	\$	111 465 839 648 751 999 367 66	104.2% 114.4 100.0 79.7 93.4 95.7 103.3 102.3	38.0% 43.5 52.2 56.3 62.6 68.4 55.9 47.5	36.5% 38.0 52.2 70.6 67.0 71.5 54.1 46.4
50 and over	24,869	4,208		299		15	104.2	35.7	34.3
All Ages	\$24,058,901	\$5,455,906	\$	31,895	\$4	,261	95.4%	56.0%	58.7%

^{*} Based on data from 12 companies.

[†] Not adjusted for distribution of exposures by age within each five year age group at issue.

Basic Table, was highest at issue ages 30–39. In the aggregate, female mortality on nonmedical issues in the first fifteen years of insurance was about 59% of male mortality. Compared with male mortality, female mortality was relatively highest at issue ages 25–39 and relatively lowest at issue ages 10–19.

Compared with the two-year experience from 1955 to 1957 anniversaries, the male mortality ratios for the three-year period from 1955 to 1958 were significantly higher at issue ages 15-24. The female non-medical experience during the 1955-58 period showed little change from that for 1955-57.

Table 14 shows considerable fluctuation in the mortality ratios for both males and females by policy year.

TABLE 14

Comparison of Male and Female Mortality Experience*
Standard Nonmedical Issues
Observed between 1955 and 1958 Anniversaries

BY POLICY YEAR-ALL AGES COMBINED

Policy Year	Exposed to Risk		ACTUAL	DEATHS	Mortalit	RATIO OF FEMALE TO MALE	
ILAR	Male	Female	Male	Female	Male	Female	Mor- TALITY†
15	\$ 292,534	\$ 122,892	\$ 1,154	\$ 180	89.1%	47.1%	52.9%
[4	322,652	164,744	1,174	214	90.8	48.7	53.6
13,,		201,981	1,350	271	93.4	55.6	59.5
12	592,132	221,853	1,711	246	95.5	49.7	52.0
1.,,	741,025	226,626	1,819	240	93.5	51.8	55.4
0	838,681	223, 281	1,842	234	98.1	56.5	57.6
9		211,452	1,481	225	93.4	61.6	66.0
8	821,084	214,492	1,380	206	90.6	58.9	65.0
7.,,		237,468	1,499	239	95.9	67.1	70.0
6		377,714	2,369	313	94.6	57.1	60.4
5		537,095	3,228	400	95.3	54.6	57.3
4	2,585,317	582,153	2,799	377	86.7	53.3	61.5
3	2,842,299	644,124	2,851	409	90.9	58.8	64.7
2	3,327,689	690,042	2,835	352	95.2	56.8	59.7
1	5,592,137	799,989	4,403	355	114.0	63.4	55.6
All							
Years	\$24,058,901	\$5,455,906	\$31,895	\$4,261	95.4%	56.0%	58.7%

^{*} Based on data from 12 companies.

[†] Not adjusted for distribution of exposures by age within each five year age group at issue.

Medical and Nonmedical Issues Combined

Of interest also is the experience on medical and nonmedical business combined, considered separately for the two sexes. This is shown in Table 15 for the three-year period from 1955 to 1958 anniversaries by age groups at issue. In relation to the 1946–49 Select Basic Table, male mortality was highest at ages 10–24 and lowest at ages 25–29. Female mortality, on the other hand, was highest in the age range 25–34 and lowest at ages 10–14. In the aggregate, female mortality was slightly more than half (53.7%) that of males.

TABLE 15

COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE*
STANDARD COMBINED MEDICAL AND NONMEDICAL ISSUES
OBSERVED BETWEEN 1955 AND 1958 ANNIVERSARIES
BY AGE AT ISSUE—POLICY YEARS 1 TO 15 COMBINED
Expected Deaths on 1946–1949 Select Basic Table
(Amounts Shown in \$1,000 Units)

AGES AT	Exposed to Risk		ACTUAL	DEATHS	Mortali	RATIO OF FEMALE TO MALE	
Issue	Male	Female	Male	Female	Male	Female	Mor- tality
10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 2,420,809 5,671,196 13,340,585 22,469,674 26,168,098 23,451,590 17,406,926 10,487,567 8,524,564	\$ 768,892 1,577,194 2,497,692 1,916,792 1,857,811 1,815,965 1,529,363 1,044,429 1,014,832	\$ 1,988 5,645 11,573 20,055 35,960 57,310 67,684 66,475 94,182	\$ 203 689 1,306 1,390 2,028 2,749 3,461 3,204 5,786	103.8% 102.3 95.9 80.2 87.0 90.0 89.2 90.6 90.3	32.8% 43.0 50.8 55.1 59.1 50.3 49.1 43.0 46.0	31.6% 42.0 53.0 68.7 67.9 55.9 55.0 47.5
All Ages	\$129,941,009	\$14,022,970	\$360,872	\$20,816	89.5%	48.1%	53.7%

^{*} Based on data from 13 companies.

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APPENDIX

TABLE A

CONTRIBUTING COMPANIES
PROPORTION OF TOTAL EXPOSURES CONTRIBUTED BY EACH

		YEARS	16th And	FIRST 15 POLICY YEARS BY SEX					
Company	Medical	Non-	SUBSE- QUENT POLICY	Medica	l Issues	Nonmedia	al Issues		
	Issues	medical Issues	YEARS	Male	Female	Male	Female		
Metropolitan	21.1%	27.7%	24.5%	16.6%	.8%	35.1%	5.1%		
Prudential	18.9	38.3	12.9						
New York Life		8.7	12.7	16.0	1.4	12.2	3.8		
Equitable, N.Y	$\frac{9.2}{7.7}$	6.6	8.8	12.9	.9	10.1	1.9		
Northwestern Mutual	7.7		7.5	10.6	1.0				
John Hancock	4.5	5.9	4.4	6.2	.5	8.0	2.8		
Massachusetts Mutual	3.8	1.9	3.7	5.3	.4	3.0	.4		
Mutual Life, N.Y	3.5	2.3	6.1	4.9	.3	3.3	.9		
Mutual Benefit	3.4	.9	3.0						
Penn Mutual	3.2	1.2	3.5	4.4	.4 .3 .3 .3	1.8	.3		
Travelers	3.2	.8	3.7	4.4	.3	1.3	. 1		
Connecticut Mutual	2.8	2.0	1.9	3.9	.3	3.2	. 5		
Aetna	2.5	.7	2.5	3.5	.3	.9	.5 .3		
Connecticut General	1.8	. 2	1.0	2.5	. 2	.3	. 1		
Provident Mutual	1.4	.3	1.7	[
Sun Life, Canada	1.4	2.5	2.1	1.9	. 1	4.1	. 5		
Total	100.0%	100.0%	100.0%	93.1%	6.9%	83.3%	16.7%		

TABLE B

STANDARD MEDICALLY EXAMINED ISSUES OF 1943 TO 1957

EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE

AND AGE AT ISSUE

Policy P						
(15) 15-19 100,952 113 141 80 20-24 150,701 192 282 68 25-29 255,300 715 753 95 30-34 317,703 1,529 1,604 95 35-39 322,762 2,420 2,650 91 40-44 261,808 2,489 3,472 72 45-49 167,670 3,092 3,550 87 50-54 77,334 1,672 2,336 72 72 45-49 167,670 30,92 3,550 87 55-59 27,725 988 1,209 82 60-64 6,829 357 435 82 65 and over 1,014 49 100 49 49 100 49 49 40 40	(Policy	_				Mortality Ratio
1944 10-14	1943	15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64	100,952 150,701 255,300 317,703 322,762 261,808 167,670 77,334 27,725 6,829	113 192 715 1,529 2,420 2,489 3,092 1,672 988 357	141 282 753 1,604 2,650 3,472 3,550 2,336 1,209 435	68 95 95 91 72 87 72 82 82
(14)		All Ages	\$1,745,897	\$13,670	\$16,597	82%
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	107,812 138,441 241,805 365,853 403,282 347,803 207,711 97,369 32,304 7,228 1,273	107 133 684 1,461 2,549 3,750 3,044 2,475 1,354 367 100	138 224 619 1,570 2,807 3,913 3,782 2,568 1,244 395 107	59 111 93 91 96 80 96 109 93
All Ages \$2,243,568 \$15,249 \$17,023 90%		10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	107,828 150,536 265,533 427,844 471,721 376,216 221,765 108,433 34,426 8,697 1,573	\$ 120 127 152 457 1,847 2,396 3,298 3,218 2,110 1,002 467 55	\$ 78 130 212 589 1,609 2,906 3,706 3,566 2,520 1,175 419 113	154% 98 72 78 115 82 89 90 84 85 111

TABLE B-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1946 (12)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over All Ages 10-14 15 19 20-24 25-29 30-34 35-39 40-44 45-49 50-54	\$ 73,280 125,665 375,064 581,326 679,832 642,207 467,657 257,275 125,669 38,813 10,135 1,732 \$3,378,655 \$ 66,813 140,754 304,511 492,182 655,502 643,519 494,602 278,000 145,014	\$ 52 103 385 1,054 1,989 2,991 3,779 3,089 2,229 1,364 311 93 \$17,349 \$ 89 101 321 546 1,613 2,863 3,714 2,611 1,845	\$ 82 146 488 1,139 2,264 3,596 4,083 3,749 2,566 1,176 442 111 \$19,842 \$ 73 158 362 876 1,934 3,230 3,853 3,606 2,622	63% 71 79 93 88 81 93 82 87 116 70 84 87% 64 89 62 83 89 96 72 70
	55–59 60–64 65 and over	\$3,280,891	991 258 163 \$15,115	1,248 449 118 \$18,529	79 57 138 82%
1948(10)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 50,181 112,877 279,053 475,903 604,402 567,003 451,458 257,676 132,713 48,196 13,467 2,366	\$ 73 139 292 576 1,638 2,505 2,689 2,929 2,025 966 315 108	\$ 54 123 310 752 1,529 2,478 3,056 2,873 2,080 1,111 490 125	135% 1135 94 77 107 101 88 102 97 87 64
1949(9)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$2,995,295 \$47,751 111,403 306,195 527,206 628,045 606,141 466,538 264,489 135,402 53,584 13,993 2,651	\$14,255 \$ 47 87 228 578 1,422 2,125 2,315 2,324 1,779 1,089 627 118	\$14,981 \$ 49 120 325 764 1,419 2,370 2,813 2,592 1,915 1,105 459 125	95% 96% 70 76 100 90 82 90 93 99 137 94
	All Ages	\$3,163,398	\$12,739	\$14,056	91%

TABLE B-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1950(8)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 49,836 134,932 360,622 654,637 780,701 714,161 526,877 311,313 159,413 64,412 15,711 2,647	\$ 44 125 234 596 1,379 2,659 2,733 2,108 1,959 1,082 510 65	\$ 48 144 371 884 1,608 2,514 2,850 2,715 2,052 1,203 455 112	92% 87 63 67 86 106 96 78 95 90 112 58
40#4			<u> </u>		
1951	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 43,519 95,939 228,737 526,239 698,992 700,360 563,624 350,699 179,078 79,039 20,985 5,132	\$ 100 113 340 1,086 1,632 2,590 2,680 2,020 1,104 802 152	\$ 38 103 224 647 1,265 2,101 2,688 2,606 2,036 1,298 514 184	21% 97 50 53 86 78 96 103 99 85 156 83
	All Ages	\$3,492,343	\$12,627	\$13,704	92%
1952 (6)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 44,482 90,639 230,408 601,151 809,832 808,730 640,175 402,427 191,999 91,557 27,784 5,358	\$ 4 89 206 482 964 1,863 2,155 2,261 1,888 1,261 452 107	\$ 36 96 226 703 1,344 2,224 2,862 2,716 2,041 1,412 618 168	11% 93 91 69 72 84 75 83 93 89 73 64
	All Ages	\$3,944,542	\$11,732	\$14,446	81%
1953(5)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 46,933 108,041 274,684 754,532 1,004,158 990,125 765,912 485,387 242,016 106,210 33,771 6,538	\$ 30 83 231 647 1,140 1,969 1,964 2,374 1,758 835 342 39	\$ 35 115 269 845 1,496 2,406 3,033 2,888 2,280 1,478 673 180	86% 72 86 77 76 82 65 82 77 56
	All Ages	\$4,818,307	\$11,412	\$15,698	73%

TABLE B-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratío
1954(4)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 65,809 134,186 380,957 942,622 1,273,479 1,174,520 913,863 562,630 291,202 130,007 41,978 11,384 \$5,922,637	\$ 26 164 257 763 1,218 1,832 2,545 2,602 1,890 1,460 673 164 \$13,594	\$ 43 136 358 980 1,643 2,431 3,007 2,836 2,254 1,511 710 266 \$16,175	60% 121 72 78 74 75 85 92 84 97 95 62
(3)	10-14 15-19 20-24 25-29 30-34 35-30 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 81,201 172,452 588,139 1,278,131 1,684,369 1,537,388 1,180,284 720,425 375,741 171,024 61,272 14,120	\$ 22 146 408 862 1,583 2,323 3,105 2,738 2,247 1,844 640 150	\$ 48 166 523 1,240 1,920 2,737 3,234 3,076 2,363 1,628 878 289	46% 88 78 70 82 85 96 89 95 113 73 52
	All Ages	\$7,864,549	\$16,068	\$18,102	89%
1956(2)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 87,981 196,955 777,031 1,480,876 1,901,550 1,780,697 1,362,202 806,221 408,931 176,789 58,224 13,578	\$ 5 132 512 895 1,478 1,950 3,000 2,338 1,826 977 729 118	\$ 44 165 598 1,214 1,730 2,475 2,711 2,548 1,820 1,209 614 219	11% 80 86 74 85 79 111 92 100 81 119 54
	All Ages	\$9,051,035	\$13,960	\$15,347	91%
1957(1)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 76,639 262,626 1,306,895 2,127,094 2,638,682 2,311,850 1,637,368 864,224 425,103 176,193 55,129 15,731	\$ 14 142 792 1,066 1,195 2,009 2,443 1,795 1,791 744 333 123	\$ 31 184 849 1,404 1,768 2,242 2,145 1,849 1,216 821 409 179	45% 77 93 76 68 90 114 97 147 91 81 69
	All Ages	\$11,897,534	\$12,447	\$13,097	95%

TABLE C
STANDARD NONMEDICAL ISSUES OF 1943 TO 1957
EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE
AND AGE AT ISSUE

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1943	10-14	\$ 31,344	\$ 34	\$ 36	94%
(15)	15-19	90,361	93	127	73
` '	20-24	84,787	113	159	71
	25-29	71,834	162	212	76
	30-34	61,871	287	312	92
	35-39	41,273	264	339	78
	40-44	14,770	172	196	88
	45-49	2,039	32	43	74
	50 and over	159	ĩ	6	17
:	All Ages	\$ 398,438	\$1,158	\$1,430	81%
1944	10-14	\$ 42,781	\$ 30	\$ 49	61%
(14)	15-19	105,304	92	135	68
` '	20-24	84,171	99	136	73
	25-29	68,833	150	176	85
	30-34	65,333	256	280	91
	35-39	52,092	337	363	93
	40-44	19,511	196	220	89
	45-49	2,184	26	40	65
(50 and over	257	11	7	157
	All Ages	\$ 440,466	\$1,197	\$1,406	85%
1945	10–14	\$ 46,898	\$ 42	\$ 53	79%
(13)	15~19	104,248	85	126	67
	20–24	89,195	78	126	62
	25-29	82,245	163	183	89
	30–34	70,981	232	267	87
	35–39	56,329	312	347	90
	40-44	20,774	211	205	103
	45-49	2,246	69	36	192
	50 and over	273	7	8	88
,	All Ages	\$ 473,189	\$1,199	\$1,351	89%

TABLE C-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1946(12)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 40,373 103,804 275,162 236,996 121,381 69,651 21,967 2,756 582	\$ 35 107 267 354 325 372 198 44 12	\$ 45 120 358 465 404 390 192 40 14	78% 89 75 76 80 95 103 110 86
	All Ages	\$ 872,672	\$1,714	\$2,028	85%
1947 (11)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 42,643 132,815 204,335 156,914 97,681 65,022 24,029 3,408 935	\$ 32 90 204 273 242 280 237 55 35	\$ 47 149 243 279 288 326 187 44 19	68% 60 84 98 84 86 127 125 184
	All Ages	\$ 727,782	\$1,448	\$1,582	92%
1948(10)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 39,104 117,274 181,357 133,947 80,180 52,849 22,068 3,929 1,403	\$ 49 111 199 220 208 202 152 52 30	\$ 42 128 201 212 203 231 149 44 27	117% 87 99 104 102 87 102 118
	All Ages	\$ 632,111	\$1,223	\$1,237	99%
1949 10 (9) 15 20 25 30 35 40 45	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 42,983 122,224 194,346 149,349 92,675 59,247 23,806 3,722 1,194	\$ 47 92 213 209 164 233 161 23 20	\$ 44 132 206 217 209 232 144 36 21	107% 70 103 96 78 100 112 64 95
	All Ages	\$ 689,546	\$1,162	\$1,241	94%

TABLE C-Continued

)	1		
Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1950(8)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 50,550 156,557 236,718 193,805 124,170 69,738 28,101 3,857 1,176	\$ 44 151 207 202 257 220 170 46 8	\$ 49 168 244 262 256 245 152 34 17	90% 90 85 77 100 90 112 135 47
	All Ages	\$ 864,672	\$1,305	\$1,427	91%
1951 (7)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50 and over	\$ 63,437 203,641 304,116 326,929 232,869 119,257 41,656 10,519 2,068	\$ 72 201 232 301 367 436 179 103 32	\$ 56 218 298 402 421 358 199 78 27	129% 92 78 75 87 122 90 132 119
	All Ages	\$1,304,492	\$1,923	\$2,057	93%
1952(6)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 72,253 227,273 331,914 397,013 277,217 134,708 44,045 10,415 2,804	\$ 50 214 287 339 447 343 190 75 26	\$ 59 241 325 465 460 370 197 70 33	85% 89 88 73 97 93 96 107
	All Ages	\$1,497,642	\$1,971	\$2,220	89%
1953(5)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 90,268 299,856 389,237 479,337 339,052 149,755 40,751 10,358 2,472	\$ 42 305 291 471 500 319 195 91 42	\$ 68 318 381 537 505 364 161 62 25	62% 96 76 88 99 88 121 147 168
	All Ages	\$1,801,086	\$2,256	\$2,421	93%

TABLE C-Continued

		,			
Issue Year	Ages at	Exposed to	Actual	Expected	Mortality
(Policy Year)	Issue	Risk	Deaths	Deaths	Ratio
1954	10-14	\$ 99,603	\$ 41	\$ 65	63%
(4)	15-19	298,033	378	301	126
(-)	20-24	449,096	326	422	77
	25-29	499,259	409	519	79
	30-34	356,126	397	459	86
	35-39	150,338	311	311	100
	40-44	32,005	114	105	109
	45-49	4,564	22	23	96
	50 and over	1,512	20	15	133
	All Ages	\$1,890,536	\$2,018	\$2,220	91%
1955	10-14	\$ 131,484	\$ 38	\$ 78	49%
(3)	15-19	374,884	362	360	101
	20-24	583,287	489	519	94
i	25-29	551,159	301	535	56
	30-34	387,134	485	441	110
	35-39	165,747	279	295	95
	40-44	29,625	91	81	112
	45–49 50 and over	4,483 1,496	12	19	63 18
	All Ages	\$2,229,299	\$2,059	\$2,339	88%
1956	10-14	\$ 140,669	\$ 47	\$ 70	67%
(2)	15-19	438,583	357	368	97
(-)	20-24	883,361	661	680	97
	25-29	934,256	560	766	73
ĺ	30-34	720,741	549	656	84
	35-39	361,954	558	503	111
	40-44	56,601	171	113	151
	45-49	5,830	31	18	172
	50 and over	1,358	2	7	29
	All Ages	\$3,543,353	\$2,936	\$3,181	92%
1957	10-14	\$ 166,380	\$ 50	\$ 67	75%
(1)	15-19	860,549	776	602	129
}	20-24	1,921,835	1,468	1,249	118
	25-29	1,783,535	1,049	1,177	89
	30-34	1,224,571	1,037	820	126
	35-39	575,780	574	559	103
ļ	40-44	90,577	170	119	143
	45-49	6,811	15	15	100
	50 and over	1,527	11	6	183
j	All Ages	\$6,631,565	\$5,150	\$4,614	112%

TABLE D STANDARD MEDICALLY EXAMINED ISSUES OF 1943 TO 1957 MALE LIVES

EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE AND AGE AT ISSUE

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1943(15)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50–54 55–59 60–64 65 and over	\$ 24,364 30,493 45,197 95,671 137,547 161,884 144,557 97,927 45,935 16,341 4,088 586	\$ 28 68 41 267 873 1,244 1,188 2,034 1,097 581 225 38	\$ 28 43 85 282 695 1,329 1,917 2,073 1,388 712 261 58	100% 158 48 95 126 94 62 98 79 82 86 66
	All Ages	\$ 804,590	\$ 7,684	\$ 8,871	87%
1944(14)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 31,197 37,231 43,612 98,257 165,833 202,747 189,381 119,500 56,601 18,356 4,159 780	\$ 30 20 76 313 748 1,346 2,120 1,660 1,628 832 228 62	\$ 36 48 71 252 711 1,411 2,131 2,176 1,493 707 227 65	83% 42 107 124 105 95 99 76 109 118 100 95
1945	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 967,654 \$ 33,078 39,249 50,798 111,320 192,103 235,211 202,800 126,639 64,338 20,406 5,038 973	\$ 9,063 \$ 90 76 53 217 893 1,041 1,432 1,966 1,201 571 235 41	\$ 9,328 \$ 37 47 72 247 722 1,449 1,998 2,036 1,495 696 243 70	97% 243% 162 74 88 124 72 72 97 80 82 97 59
	All Ages	\$1,081,953	\$ 7,816	\$ 9,112	86%

TABLE D-MALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1946	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 39,974 50,762 119,995 238,995 336,048 357,017 281,335 160,852 78,885 24,911 5,769 1,050	\$ 38 31 82 428 1,059 1,678 2,378 1,974 1,439 939 167 56	\$ 45 59 156 468 1,119 1,999 2,456 2,344 1,611 755 252 67	84% 53 53 91 95 84 97 84 89 124 66 84
	All Ages	\$1,695,593	\$10,269	\$11,331	91%
1947 (11)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50–54 55–59 60–64 65 and over	\$ 34,991 56,508 102,978 222,494 333,316 350,195 286,200 166,021 91,114 28,977 6,388 1,236	\$ 68 65 140 228 770 1,457 2,139 1,638 980 624 138 58	\$ 38 63 123 396 983 1,758 2,230 2,153 1,647 772 257 72	179% 103 114 58 78 83 96 76 60 81 54 81
	All Ages	\$1,680,418	\$ 8,305	\$10,492	79%
1948(10)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 30,577 45,317 102,390 210,648 292,688 290,510 251,192 148,764 80,651 28,526 7,613 1,432	\$ 60 82 126 219 959 1,195 1,386 1,924 1,166 611 148 56	\$ 33 49 114 333 741 1,270 1,701 1,659 1,264 658 277 76	182% 167 111 66 129 94 81 116 92 93 53 74
	All Ages	\$1,490,308	\$ 7,932	\$ 8,175	97%
1949(9)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 28,353 44,470 116,636 241,738 304,084 307,373 252,910 150,626 79,519 32,418 7,600 1,349	\$ 33 30 54 233 827 1,130 1,262 1,346 1,022 840 428 51	\$ 29 48 124 351 687 1,202 1,525 1,476 1,124 669 249 64	114% 63 44 66 120 94 83 91 91 126 172 80
	All Ages	\$1,567,076	\$ 7,256	\$ 7,548	96%

TABLE D-MALE LIVES-Continued

Issue Year			1	ł	1
(Policy	Ages at	Exposed to	Actual	Expected	Mortality
Year)	Issue	Risk	Deaths	Deaths	Ratio
			-	<u> </u>	
1950	10-14	\$ 30,880	\$ 40	\$ 30	133%
(8)	15-19	61,624	67	66	102
	20-24	154,605	132	159	83
1	25-29	319,059	259	431	60
	30-34	395,011	649	814	80
1	35–39	366,264	1,210	1,289	94
	40-44	283,764	1,461	1,535	95
j	45-49	179,014 93,718	1,340	1,561	86
	50-54	93,/18	1,120	1,206	93
	55-59	38,902	643	727	88
	60-64	8,694	248	252	98
	65 and over	1,258	26	53	49
}	All Ages	\$1,932,793	\$ 7,195	\$ 8,123	89%
1951	10-14	\$ 27,715	\$ 2	\$ 24	8%
(7)	15-19	50,487	41	54	76
	20-24	110,498	48	108	44
	25-29	271,891	200	334	60
ł	30-34	369,729	593	669	89
Į	35-39	367,941	795	1,104	72
ĺ	40-44	312,491	1,392	1,491	93
ļ	45-49	202,228	1,460	1,503	97
İ	50-54	107,408	1,174	1,221	96
i	55-59 60-64	47,779 11,788	604 590	785 289	204
	65 and over	3,184	71	114	62
	OS and over	0,104		114	
ļ	All Ages	\$1,883,139	\$ 6,970	\$ 7,696	91%
1952	10-14	\$ 28,190	\$ 4	\$ 23	17%
(6)	15-19	65,907	75	70	107
` '	20-24	156,951	158	154	103
	25-29	432,264	405	506	80
1	30-34	577,942	743	959	77
	35-39	583,171	1,376	1,604	86
	40-44	472,543	1,724	2,112	82
	45–49	295,095	1,733	1,992	87
	50-54	142,015	1,543	1,510	102
ı	55-59	68,393	861	1,055	82
}	60-64	21,694	405	483	84
	65 and over	4,411	102	139	73
	All Ages	\$2,848,576	\$ 9,129	\$10,607	86%
1953	10-14	\$ 28,798	\$ 28	\$ 22	127%
(5)	15-19	75,468	59	80	74
ļ	20-24	174,532	173	171	101
	25-29	507,104	463	568	82
,	30-34	678,504	809	1,011	80
1	35-39	682,754	1,466	1,659	88
1	40-44	540,537	1,333	2,141	62
	45-49	340,993	1,804	2,029	89
1	50-54	173,661	1,407	1,636	86
	55-59	76,252	613	1,061	58
	60-64	25,988	302	518	58
	65 and over	4,401	14	121	12
	All Ages	\$3,308,992	\$ 8,471	\$11,017	77%

TABLE D-MALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1954	10-14	\$ 46,690	\$ 26	\$ 30	87%
(4)	15-19	99,421	118	100	118
ļ	20-24	261,342	153	246	62
Ī	25-29	652,399	488	678	72
Į.	30–34	883,001	916	1,139	80
	35–39	824,646	1,374	1,707	80
	40-44	650,578	1,882	2,140	88
Í	45-49	408,625	1,894	2,059	92
	50-54	209,682	1,407	1,623	87
1	55-59	95,764	1,204	1,113	108
l	60-64	29,940	548	506	108
	65 and over	8,761	141	204	69
	All Ages	\$4,170,849	\$10,151	\$11,545	88%
1955	10-14	\$ 54,979	\$ 15	\$ 32	47%
(3)	15-19	125,001	92	120	77
1	20-24	412,134	326	367	89
	25-29 30-34	924,343	1.036	897	61
	35-39	1,200,050 $1,110,468$	1,780	1,368 1,977	76
	40-44	861,145	2,444	2,360	104
ļ	45-49	523,052	2,042	2,333	91
l	50-54	276,687	1,856	1,740	107
Ì	55-59	125,291	1,447	1,193	121
j	60-64	47,133	433	675	64
	65 and over	10,433	78	214	36
	All Ages	\$5,670,716	\$12,097	\$13,176	92%
1956	10-14	\$ 64,406	\$ 4	\$ 32	13%
(2)	15-19	148,885	114	125	91
	20-24	573,422	442	442	100
	25-29	1,095,931	716	899	80
ļ	30–34	1,379,776	1,064	1,256	85
	35–39	1,293,718	1,352	1,798	75
;	40-44	955,632	2,173	1,902	114
	45-49	577,448	1,809	1,825	99
	50-54	297,276	1,419	1,323	107
	55-59	129,492 43,177	672	886	76 115
	60–64 65 and over	9,836	524 94	455 159	59
	All Ages	\$6,568,999	\$10,383	\$11,102	94%
1957	10-14	\$ 54,384	\$ 14	\$ 22	64%
(1)	15-19	196,486	95	138	69
	20-24	860,376	471	559	84
	25-29	1,334,396	667	881	76
	30-34	1,582,883	722	1,061	68
	35-39	1,444,942	1,349	1,402	96
	40-44	1,037,473	1,371	1,359	101
	45-49	593,823	1,251	1,271	98
	50-54	295,965	1,349	846	159
	55-59	126,759	532	591	90
	60-64	38,046	260	282	92
	65 and over	11,426	94	130	_ 72
	All Ages	\$7,576,959	\$ 8,175	\$ 8,542	969

TABLE D-Continued

STANDARD MEDICALLY EXAMINED ISSUES OF 1943 TO 1957

FEMALE LIVES

EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE AND AGE AT ISSUE

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1943 (15)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 8,054 11,354 17,666 15,737 15,603 16,342 15,098 10,012 5,093 2,332 689 29	\$ 4 3 16 31 26 58 76 123 22 74 32 0	\$ 9 16 33 46 79 134 200 212 154 102 44 3	44% 19 48 67 33 43 38 58 14 73 73
ļ	All Ages	\$ 118,009	\$ 465	\$1,032	45%
1944 (14)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 8,986 11,310 18,988 17,125 17,285 18,525 18,746 12,397 6,143 2,578 352 31	\$ 2 16 4 24 43 35 43 94 21 82 7	\$ 10 14 31 44 74 129 211 226 162 99 19	20% 114 13 55 58 27 20 42 13 83 37 33
İ	All Ages	\$ 132,466	\$ 372	\$1,022	36%
1945 (13)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 9,542 11,752 17,815 17,239 18,751 21,385 18,653 11,997 6,363 2,174 660 37	\$ 0 6 18 17 137 56 48 47 94 117 8 0	\$ 11 14 25 38 71 132 184 193 148 74 32 3	0% 43 72 45 193 42 26 24 64 158 25 0
	All Ages	\$ 136,368	\$ 548	\$ 925	59%

TABLE D-FEMALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1946(12)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50–54 55–59 60–64 65 and over	\$ 10,108 15,118 20,937 22,777 23,199 26,242 22,930 15,233 7,938 2,593 884 59	\$ 4 7 24 21 80 50 50 64 77 12 2	\$ 11 18 27 45 77 147 200 222 162 79 39 4	36% 39 47 104 34 25 29 48 15 5
	All Ages	\$ 168,018	\$ 393	\$1,031	38%
1947 (11)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50–54 55–59 60–64 65 and over	\$ 9,955 12,080 19,403 19,594 20,973 24,235 21,188 15,661 8,381 2,905 859 48	\$ 2 4 1 19 19 83 135 71 48 24 10 0	\$ 11 14 23 35 62 122 165 203 152 77 35 3	18% 29 4 54 31 68 82 35 32 31 29
	All Ages	\$ 155,282	\$ 416	\$ 902	46%
1948 (10)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 8,490 9,807 16,042 16,387 17,719 18,622 19,654 13,778 7,970 3,347 1,070 82	\$ 0 6 6 12 5 61 62 51 35 46 4	\$ 9 11 18 26 45 81 133 154 125 77 39 4	0% 55 33 46 11 75 47 33 28 60 10
	All Ages	\$ 132,968	\$ 292	\$ 722	40%
1949 (9)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 8,302 9,187 16,334 16,587 19,319 20,508 23,704 15,366 9,628 3,690 1,266 274	\$ 11 7 13 14 58 60 86 43 41 16 9	\$ 8 10 17 24 44 80 143 151 136 76 42	138% 70 76 58 132 75 60 28 30 21 21 8
	All Ages	\$ 144,165	\$ 359	\$ 744	48%

TABLE D-FEMALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1950(8)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 7,585 9,208 14,766 18,012 18,523 20,516 23,578 16,551 11,307 5,010 1,391 318	\$ 0 0 2 4 8 37 154 55 38 25 20 0	\$ 7 10 15 24 38 72 128 144 146 94 40 13	0% 0 13 17 21 51 120 38 26 27 50 0
	All Ages	\$ 146,765	\$ 343	\$ 731	47%
1951 (7)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 7,138 8,248 14,902 15,980 19,272 21,583 25,481 19,658 11,714 5,980 2,199 152	\$ 0 0 8 3 222 59 107 74 159 8 37	\$ 6 9 15 20 35 65 122 146 133 98 54	0% 0 53 15 63 91 88 51 120 8 69 240
	All Ages	\$ 152,307	\$ 489	\$ 708	69%
1952	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 8,729 9,865 17,614 21,794 27,487 32,374 37,446 28,905 16,206 7,461 2,121 341	\$ 1 2 13 4 40 29 94 153 141 38 23 3	\$ 7 10 17 25 46 89 167 195 172 115 47 11	14% 20 76 16 87 33 56 78 82 33 49 27
	All Ages	\$ 210,343	\$ 541	\$ 901	60%
1953	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 8,441 10,630 18,161 22,863 30,139 36,806 43,301 35,233 21,349 9,801 3,043 910	\$ 1 3 10 56 17 28 40 82 24 24 19 3	\$ 6 11 18 26 45 89 171 210 201 136 61 25	17% 27 56 215 38 31 23 39 12 18 31
	All Ages	\$ 240,677	\$ 307	\$ 999	31%
	I		ı		

TABLE D-FEMALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1954(4)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 9,802 11,752 20,924 29,400 40,241 43,264 55,716 40,138 27,064 12,272 5,052 1,353	\$ 0 1 5 15 18 33 70 81 64 98 76 4	\$ 6 12 20 31 52 90 183 202 209 143 85 32	0% 8 25 48 35 37 38 40 31 69 89
	All Ages	\$ 296,978	\$ 4 65	\$1,065	44%
1955(3)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 11,750 14,521 25,540 34,607 47,085 58,865 66,559 54,621 31,180 18,907 7,351 1,908	\$ 0 16 10 15 17 30 176 168 89 140 145 6	\$ 7 14 23 34 54 105 182 233 196 180 105 39	0% 114 83 44 31 29 97 72 45 78 138
	All Ages	\$ 372,894	\$ 821	\$1,172	70%
1956	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50–54 55–59 60–64 65 and over	\$ 10,973 17,038 29,612 34,366 46,658 55,421 67,712 54,742 32,364 14,809 6,230 1,929	\$ 1 2 18 7 21 52 93 59 113 124 54 12	\$ 5 14 23 28 42 77 135 173 144 101 66 31	20% 14 78 25 50 68 69 34 78 123 82 39
	All Ages	\$ 371,854	\$ 556	\$ 839	66%
1957	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over	\$ 10,572 15,304 29,318 34,592 51,837 63,195 75,430 52,171 34,593 15,685 7,174 2,216	\$ 0 0 17 44 40 46 133 88 19 8 5	\$ 4 11 19 23 35 61 99 112 99 73 53 25	0% 0 89 191 114 75 134 79 19 11 9
	All Ages	\$ 392,087	\$ 415	\$ 614	68%

TABLE E STANDARD NONMEDICAL ISSUES OF 1943 TO 1957 MALE LIVES

Experience between 1957 and 1958 Anniversaries by Year of Issue and Age at Issue

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1943(15)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50 and over	\$ 8,929 18,351 16,623 23,451 24,942 20,286 6,579 1,056 118	\$ 10 34 34 56 121 124 81 14 0	\$ 10 26 31 69 126 167 87 22 4	100% 131 110 81 96 74 93 64 0
	All Ages	\$ 120,335	\$ 474	\$ 542	87%
1944 (14)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 11,312 20,040 12,314 19,310 25,653 24,318 8,851 1,245 194	\$ 8 17 15 43 106 176 87 10	\$ 13 26 20 49 110 169 100 23 5	62% 65 75 88 96 104 87 43 180
	All Ages	\$ 123,237	\$ 471	\$ 515	91%
1945 (13)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 13,410 21,940 16,179 25,263 31,408 28,605 10,828 1,087 224	\$ 20 22 12 32 110 162 104 18 6	\$ 15 27 23 56 118 176 107 17 6	133% 81 52 57 93 92 97 106 100
	All Ages	\$ 148,944	\$ 486	\$ 545	89%
		<u> </u>	[1

TABLE E-MALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1946 (12)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 13,119 27,904 76,367 80,559 57,478 39,005 12,536 1,647 330	\$ 18 45 93 116 157 202 133 21 4	\$ 15 32 99 158 191 218 109 24 8	120% 141 94 73 82 93 122 88 50
	All Ages	\$ 308,945	\$ 789	\$ 854	92%
1947	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50 and over	\$ 12,219 35,448 58,836 57,238 47,683 35,820 13,310 2,064 476	\$ 18 24 65 89 131 149 151 20 11	\$ 13 40 70 102 141 180 104 27 9	138% 60 93 87 93 83 145 74 122
	All Ages	\$ 263,094	\$ 658	\$ 686	96%
1948(10)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 9,679 33,766 58,972 52,706 39,876 28,587 11,046 1,840 397	\$ 22 50 66 107 111 115 75 29 3	\$ 10 37 65 83 101 125 75 21 7	220% 135 102 129 110 92 100 138 43
	All Ages	\$ 236,869	\$ 578	\$ 524	110%
1949(9)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 11,875 32,917 63,827 55,649 39,868 29,620 11,870 1,924 480	\$ 18 28 71 63 83 106 87 10 3	\$ 12 36 68 81 90 116 72 19 8	150% 78 104 78 92 91 121 53 38
Ï	All Ages	\$ 248,030	\$ 469	\$ 502	93%

TABLE E-MALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1950 (8)	10-14 15-19	\$ 14,520 41,340	\$ 19 44	\$ 14 44	136% 100
1	20-24 25-29	79,782 70,060	70 82	82 95	85 86
	30–34	49,888	72	103	70
	35-39	35,567	131	125	105
	40-44	15,239	110	82	134
	45-49	2,020	27	18	150
	50 and over	434	1	6	17
ĺ	All Ages	\$ 308,850	\$ 556	\$ 569	98%
1951	10-14	\$ 17,527	\$ 24	\$ 15	160%
(7)	15-19	47,700	47	51	92
	20-24	79,409	101	78	129
	25-29	85,032 63,737	60	105	57
	30-34	63,737 40,558	97	115	84 122
	35–39 40–44	40,558 15,600	149 68	122 74	92
	45-49	2,065	18	15	120
	50 and over	525	10	8	125
	All Ages	\$ 352,153	\$ 574	\$ 583	98%
1952	10–14	\$ 35,006	\$ 26	\$ 29	90%
(6)	15-19	97,269	123	103	119
	20-24	187,053	142	183	78
	25-29	257,993 192,393	222	302	74
	30–34	192,393	345	319	108
	35–39	95,970	279	264	106
	40–44 45–49	32,939	156	147	106 114
	50 and over	7,186 1,072	56 10	49 12	83
ĺ	All Ages	\$ 906,881	\$1,359	\$1,408	97%
	All Ages			Φ1,408	_
1953	10-14	\$ 39,551	\$ 23	\$ 30	77%
(5)	15-19	111,938	149	119	125
	20-24	209,248	175	205	85
	25-29	301,773	291	338	86
	30-34 35-39	234,836	342	350	98 86
	35~39 40~44	106,675	223 169	259 117	144
	45-49	29,522 7,452	68	44	155
	50 and over	1,353	25	14	179
	All Ages	\$1,042,348	\$1,465	\$1,476	99%

TABLE E-MALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1954 (4)	10-14 15-19 20-24 25-29 30-34 35-39 40-44	\$ 41,222 107,295 220,102 293,211 236,197 102,726 20,783	\$ 20 150 155 229 290 239 2	\$ 27 108 207 305 305 213 68	74% 139 75 75 95 112 3
	45-49 50 and over	2,813 1,070	18 17	14 10	129 170
	All Ages	\$1,025,419	\$1,120	\$1,257	89%
1955(3)	10–14 15–19 20–24 25–29 30–34 35–39 40–44 45–49 50 and over	\$ 51,538 135,466 289,480 320,624 257,045 112,749 19,543 2,327 1,078	\$ 22 162 311 222 318 197 59 4	\$ 30 130 258 311 293 201 54 10 8	73% 125 121 71 109 98 109 40 0
	All Ages	\$1,189,850	\$1,295	\$1,295	100%
1956(2)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 55,960 173,833 385,822 397,285 287,627 119,423 20,040 2,642 726	\$ 35 169 323 248 242 164 60 12 2	\$ 28 146 297 326 262 166 40 8	125% 116 109 76 92 99 150 150 50
	All Ages	\$1,443,358	\$1,255	\$1,277	98%
1957(1)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 75,127 414,058 980,475 858,732 591,652 222,573 31,139 2,676 885	\$ 30 431 878 509 458 170 71 5	\$ 30 290 637 567 396 216 41 6 3	100% 149 138 90 116 79 173 83 333
	All Ages	\$3,177,317	\$2,562	\$2,186	117%

TABLE E-Continued

STANDARD NONMEDICAL ISSUES OF 1943 TO 1957

FEMALE LIVES

EXPERIENCE BETWEEN 1957 AND 1958 ANNIVERSARIES BY YEAR OF ISSUE AND AGE AT ISSUE

Issue Year (Policy Year)	Ages at Issue	E	xposed to Risk		tual aths	pected eaths	Mortality Ratio
1943 (15)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$	4,385 12,909 19,633 10,022 7,141 4,859 1,006 76 2	\$	3 8 18 18 20 24 4 0	\$ 5 18 37 30 36 40 13 2	60% 44 49 60 56 60 31 0
	All Ages	\$	60,033	\$	95	\$ 181	52%
1944 (14)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$	5,608 14,256 21,166 11,535 8,388 6,271 1,391 85 12	\$	4 7 20 16 15 21 5 0	\$ 6 18 34 30 36 44 16 2	67% 39 59 53 42 48 31 0
	All Ages	\$	68,712	\$	88	\$ 186	47%
1945 (13)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$	5,799 13,730 20,661 11,785 8,494 6,935 1,687 166 11	\$	0 6 14 22 10 34 9 0	\$ 7 17 29 26 32 43 17 3	0% 35 48 85 31 79 53 0
	All Ages	\$	69,268	\$	95	\$ 174	55%

TABLE E-FEMALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Ex	posed to Risk		tual aths	ected aths	Mortality Ratio
1946 (12)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$	5,708 14,701 24,813 15,099 10,296 7,294 1,947 186 42	\$	2 5 12 8 14 34 1 1 0	\$ 6 17 32 30 34 41 17 3	33% 29 38 27 41 83 6 33 0
	All Ages	\$	80,086	\$	77	\$ 181	43%
1947 (11)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	S	5,166 14,591 23,919 13,541 9,115 6,943 1,932 156 39	S	1 4 18 19 14 15 11 0	\$ 6 16 28 24 27 35 15 2	17% 25 64 79 52 43 73 0
	All Ages	\$	75,402	\$	82	\$ 154	53%
1948 (10)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$	4,223 12,967 20,961 10,631 7,821 5,938 1,911 282 37	\$	4 5 16 16 26 15 3 0	\$ 5 14 23 17 20 26 13 3	80% 36 70 94 130 58 23 0
	All Ages	\$	64,771	\$	85	\$ 122	70%
1949	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$	4,815 13,158 21,411 11,607 8,086 6,631 2,131 216 52	S	0 3 15 12 6 20 8 0	\$ 5 14 23 17 18 26 13 2	0% 21 65 71 33 77 62 0
	All Ages	\$	68,107	\$	64	\$ 119	54%

TABLE E-FEMALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1950 (8)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 6,003 14,046 23,383 13,929 9,772 7,203 2,644 253 67	\$ 1 11 7 6 24 18 11 1 0	\$ 6 15 24 19 20 25 14 2	17% 73 29 32 120 72 79 50 0
i	All Ages	\$ 77,300	\$ 79	\$ 126	63%
1951 (7)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 6,999 16,285 25,831 15,043 11,097 9,251 3,297 537 89	\$ 1 8 22 14 30 19 2 1	\$ 6 17 25 19 20 28 16 4	17% 47 88 74 150 68 13 25
	All Ages	\$ 88,429	\$ 97	\$ 136	71%
1952 (6)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 15,014 41,723 60,863 34,315 26,122 21,661 7,322 1,612 191	\$ 7 15 32 36 23 36 16 8	\$ 12 44 60 40 43 60 33 11 2	58% 34 53 90 53 60 48 73 0
	All Ages	\$ 208,823	\$ 173	\$ 305	57%
1953 (5)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 16,429 46,109 64,960 37,990 30,176 23,161 7,340 1,671 268	\$ 1 13 38 15 14 35 20 4 2	\$ 12 49 64 43 45 56 29 10 3	8% 27 59 35 31 63 69 40 67
	All Ages	\$ 228,104	\$ 142	\$ 311	46%

TABLE E-FEMALE LIVES-Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1954 (4)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 17,897 45,453 67,093 40,807 33,001 24,970 6,286 731 271	\$ 2 16 36 33 28 31 15 2 3	\$ 12 46 63 42 43 52 21 4 3	17% 35 57 79 65 60 71 50 100
ļ	All Ages	\$ 236,509	\$ 166	\$ 286	58%
1955. (3)	10-14 15-19 20-24 25-29 30-31 35-39 40-44 45-49 50 and over	\$ 20,989 54,527 74,220 45,379 38,296 29,321 5,954 726 177	\$ 4 20 31 14 43 46 13 0	\$ 12 52 66 44 44 52 16 3	33% 38 47 32 98 88 81 0
	All Ages	\$ 269,589	\$ 172	\$ 290	59%
1956 (2)	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 19,641 52,214 72,714 44,361 36,694 28,693 6,361 698 198	\$ 0 12 16 24 28 45 15 0	\$ 10 44 56 36 33 40 13 2	0% 27 29 67 85 113 115 0
	All Ages	\$ 261,574	\$ 140	\$ 235	60%
1957	10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over	\$ 21,638 64,516 95,624 60,614 49,251 34,072 8,153 568 189	\$ 3 25 55 21 13 38 6 2	\$ 9 45 62 40 33 33 11 1	33% 56 89 53 39 115 55 200 100
	All Ages	\$ 334,625	\$ 164	\$ 235	70%