

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1970 REPORTS**

**II. MORTALITY UNDER STANDARD ORDINARY
INSURANCE ISSUES BETWEEN 1968
AND 1969 ANNIVERSARIES**

ABSTRACT

This is one in a series of annual reports on intercompany mortality experience under Standard Ordinary life insurance policies. The included tables, based on data contributed by nineteen large life insurance companies, show amounts exposed to risk, actual death claim amounts, and expected death claim amounts (based on the most recent intercompany mortality tables—the 1955–60 Basic Tables). Ratios of actual to expected deaths are also shown.

This report covers the one year of mortality experience between 1968 and 1969 policy anniversaries and the five years of experience between 1964 and 1969 policy anniversaries. The mortality experience between 1968 and 1969 anniversaries, excluding war deaths, shows a slight increase over the previous study for two of the three principal divisions of the study: medically examined issues of the fifteen most recent policy years and nonmedical issues of the fifteen most recent policy years. This year's mortality experience in these two divisions, together with the corresponding 1967–68 experience, has reversed the trend toward improving mortality which began with the 1964–65 experience.

The third principal division of the study, all issues of sixteen or more policy years, shows a slight decrease in the mortality experience for 1968–69 as compared with the previous study.

Recent nonmedical issues observed between 1964 and 1969 anniversaries continue to show higher over-all mortality than comparable medical issues, with the greater differences at issue ages 20 and over. Female mortality on all issues continues to average about 60 per cent of male mortality.

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INTRODUCTION

THIS report covers the intercompany mortality experience under Standard Ordinary insurance issues between 1968 and 1969 anniversaries. It reviews in turn the mortality experience under:

1. Standard Ordinary insurance issued subject to a medical examination, observed during each of the first fifteen policy years;
2. Standard Ordinary insurance issued without a medical examination, observed during each of the first fifteen policy years; and
3. Standard Ordinary insurance observed during the sixteenth and subsequent policy years. As in previous reports, this ultimate experience is shown for medical and nonmedical issues combined, with a portion of it shown for medical and nonmedical issues separately. A table comparing the ultimate experience under premium-paying and fully paid-up (excluding reduced paid-up) policies has also been included.

In comparison with the 1967-68 study, aggregate mortality ratios, excluding war deaths, for the select experience (observed during each of the first fifteen policy years), both medical and nonmedical, have increased slightly, while the ratio for the ultimate experience (observed during the sixteenth and subsequent policy years) has decreased slightly. The select medical mortality ratio has increased from 94.2 per cent last year to 94.8 per cent for the 1968-69 study, and the select nonmedical

mortality ratio has increased from 109.9 to 112.8 per cent. The mortality ratio for the ultimate experience decreased from 95.5 to 93.4 per cent. The aggregate mortality ratio, including war deaths, for select medical business increased from 95.2 to 95.4 per cent in the 1968-69 study, and for nonmedical business there was an increase from 128.3 to 128.6 per cent.

Because of the significance of war deaths (see definition in Appendix II), all tables have been adjusted to exclude or to show separately the war deaths incurred during the exposure period. The following tabulation shows the war deaths and the ratio of war deaths to total deaths experienced between 1964 and 1969 anniversaries:

**WAR DEATHS AND THE RATIO OF WAR DEATHS
TO TOTAL DEATHS EXPERIENCED BETWEEN 1964 AND
1969 ANNIVERSARIES
MALE LIVES EXCEPT AS INDICATED FOR 1965-69
(Amounts Shown in \$1,000 Units)**

EXPOSURE YEAR	FIRST FIFTEEN POLICY YEARS				SIXTEENTH AND SUBSEQUENT POLICY YEARS:	
	Medical*		Nonmedical†			
	Amount	Ratio	Amount	Ratio	Amount	Ratio
1968-69.....	\$ 2,702	0.7%	\$12,653	12.2%	\$ 570	0.1%
1967-68.....	3,526	1.0	12,831	14.3	750	0.1
1966-67.....	2,774	0.7	9,268	10.8	439	0.1
1965-66.....	1,508	0.4	5,543	7.2	200	§
1964-65.....	523	0.2	690	1.1	38	§
Total.....	\$11,033	0.6%	\$40,985	9.7%	\$1,997	§

* Female war deaths of \$5,000 for 1968-69 are included.

† Female war deaths of \$13,000 for 1968-69, \$2,000 for 1967-68, \$18,500 for 1966-67, and \$25,000 for 1965-66 are included.

‡ Female war deaths of \$2,000 for 1968-69 and \$1,000 for 1966-67 are included.

§ Negligible.

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

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

Medically Examined Issues

The current experience during the first fifteen policy years is based on an exposure of \$123,112,017,000 and actual claims of \$412,181,000. This represents an increase in the exposure from the preceding year of 13.3

per cent, part of which was due to the inclusion of the data from one contributor which did not participate in the 1967-68 study but did in the 1966-67 study. (The increase in the exposure over that of two years ago is 4.9 per cent.) Not included in the above claim total were 249 policies, representing \$2,702,000 in claims resulting from operations of war and reported as deaths between 1968 and 1969 anniversaries.

The 1955-60 Male, Female, and Male and Female Combined Select Basic Tables (*TSA, 1962 Reports*, p. 44, and *1963 Reports*, p. 40) were used to calculate expected deaths separately for the male experience, female experience, and experience reported without subdivision by sex. The expected deaths for these three classes of experience were combined and mortality ratios were calculated excluding and including war deaths.

The results by age group at issue are shown in Table 1 for the first

TABLE 1

**STANDARD MEDICALLY EXAMINED ISSUES OF 1954-68
MALE AND FEMALE LIVES COMBINED
(INCLUDING DATA NOT SUBDIVIDED BY SEX)
EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
BY AGE AT ISSUE
POLICY YEARS 1-15 COMBINED**

Expected Deaths on 1955-60 Select Basic Tables
(Amounts Shown in \$1,000 Units)

AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
		Exclud- ing War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
0.....	\$ 214,808	\$ 155	\$ 0	\$ 111	139.6%	139.6%
1.....	232,168	213	0	88	242.0	242.0
2-4.....	286,251	231	1	110	210.0	210.9
5-9.....	584,563	253	21	295	85.8	92.9
10-14.....	876,767	1,010	284	726	139.1	178.2
15-19.....	2,210,709	2,584	652	2,143	120.6	151.0
20-24.....	8,276,015	7,488	790	7,583	98.7	109.2
25-29.....	16,385,773	17,342	463	18,262	95.0	97.5
30-34.....	23,465,667	41,282	297	40,831	101.1	101.8
35-39.....	25,468,961	65,804	128	69,170	95.1	95.3
40-44.....	20,885,593	82,544	53	87,105	94.8	94.8
45-49.....	13,075,754	73,716	12	80,737	91.3	91.3
50-54.....	6,858,551	59,440	1	62,117	95.7	95.7
55-59.....	2,986,004	34,779	0	38,494	90.3	90.3
60-64.....	1,002,275	18,488	0	18,716	98.8	98.8
65-69.....	255,347	5,731	0	6,600	86.8	86.8
70 and over....	46,811	1,121	0	1,676	66.9	66.9
All ages.....	\$123,112,017	\$412,181	\$2,702	\$434,764	94.8%	95.4%

fifteen policy years combined. The experience by year of issue is presented in Table 2. The detailed experience by age group at issue for each year of issue is set forth in Table B of Appendix I.

The aggregate mortality ratio, excluding war deaths, for the period from 1968 to 1969 anniversaries was 94.8 per cent. The following tabulation shows how this result compares with previous studies based on the 1955–60 Basic Tables:

Exposure Year	Aggregate Mortality Ratio
1961–62.....	98.5%
1962–63.....	97.7
1963–64.....	101.0
1964–65.....	96.0
1965–66.....	95.1
1966–67.....	93.2
1967–68.....	94.2
1968–69.....	94.8

TABLE 2
STANDARD MEDICALLY EXAMINED ISSUES OF 1954–68
MALE AND FEMALE LIVES COMBINED
(INCLUDING DATA NOT SUBDIVIDED BY SEX)
EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
BY YEAR OF ISSUE
ALL AGES COMBINED

Expected Deaths on 1955–60 Select Basic Tables
(Amounts Shown in \$1,000 Units)

YEAR OF ISSUE	POLICY YEAR	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1954.....	15	\$ 3,879,565	\$ 27,161	\$ 55	\$ 30,837	88.1%	88.3%
1955.....	14	4,953,247	33,806	78	35,326	95.7	95.9
1956.....	13	5,482,366	30,716	58	34,443	89.2	89.3
1957.....	12	6,381,813	32,870	147	33,695	97.6	98.0
1958.....	11	6,716,216	30,398	122	33,141	91.7	92.1
1959.....	10	7,138,768	33,204	113	32,747	101.4	101.7
1960.....	9	6,339,160	24,829	126	27,662	89.8	90.2
1961.....	8	6,588,636	25,040	118	26,752	93.6	94.0
1962.....	7	6,858,677	22,267	202	25,695	86.7	87.4
1963.....	6	8,320,018	26,621	143	28,218	94.3	94.8
1964.....	5	9,537,204	26,493	251	28,061	94.4	95.3
1965.....	4	10,916,013	30,493	499	28,535	106.9	108.6
1966.....	3	12,040,468	24,905	266	27,013	92.2	93.2
1967.....	2	13,188,283	24,076	289	23,225	103.7	104.9
1968.....	1	14,771,583	19,302	235	19,414	99.4	100.6
All years of issue.....		\$123,112,017	\$412,181	\$2,702	\$434,764	94.8%	95.4%

In the current study, issue age group 0 again has a high mortality ratio (139.6 per cent). Although the exposure here was small, it should be noted that issue age 0 has had high mortality ratios in past studies. Table 9, which appears later, shows a mortality ratio of 166.7 per cent for males and 106.9 per cent for females, issue age 0, exposed between 1964 and 1969 anniversaries. The mortality ratios between 1968 and 1969 anniversaries (excluding war deaths) for issue age groups 1, 2-4, 10-14, and 15-19 were also quite high, being 242.0, 210.0, 139.1, and 120.6 per cent, respectively.

War deaths increased the mortality ratio for the issue age group 10-14 by 39.1 percentage points and for issue age groups 5-9, 15-19, and 20-24 by 7.1, 30.4, and 10.5 percentage points, respectively. War deaths caused an increase of 0.6 percentage points in the all-ages mortality ratio, compared with an increase of 1.0 percentage points in last year's study and 0.7 percentage points two years ago.

Mortality ratios by year of issue (excluding war deaths) ranged from 86.7 per cent for 1962 (policy year 7) to 106.9 per cent for 1965 (policy year 4).

The following tabulation gives an indication of the variation in the

	Number of Companies	Proportion of Actual Deaths
Percentage points below average:		
10-20.....	4	14.5%
5-10.....	3	7.0
0-5.....	5	30.4
Percentage points above average:		
0-5.....	2	8.8
5-10.....	3	33.7
10-20.....	1	4.1
More than 20.....	1	1.5

aggregate mortality ratios of the contributing companies from the all-company average of 94.8 per cent. War deaths were excluded in determining these ratios.

Nonmedical Issues

The current experience during the first fifteen policy years is based on an exposure of \$75,767,780,000 and actual claims of \$90,734,000. This represents an increase in the exposure from the preceding year of 15.0 per cent, part of which was due to the inclusion of the data from one contributor which did not participate in the 1967-68 study but did in the 1966-67 study. (The increase in the exposure from that of two years ago

is 13.1 per cent.) Not included in the above claim total were 1,605 policies, representing \$12,653,000 in claims resulting from operations of war and reported as deaths between 1968 and 1969 anniversaries.

Expected deaths were calculated on the 1955–60 Select Basic Tables in the same manner as for medically examined issues. These tables were based on experience under medical issues, except that nonmedical issues were included for issue ages under 25.

For all age groups combined, nonmedical business now comprises 38.1 per cent of the total experience on recent Ordinary issues, measured by the exposures during the first fifteen policy years, as compared with 37.7 per cent last year. For all age groups combined, the proportion of non-medical issues in the first policy year for 1968–69 was 46.4 per cent, compared with 43.1 per cent in last year's report. The following tabulation shows nonmedical exposures as a percentage of total exposures, by age group at issue, for experience between 1968 and 1969 anniversaries:

NONMEDICAL EXPOSURES AS PERCENTAGE
OF TOTAL EXPOSURES

Ages at Issue	Policy Year 1	Policy Years 1–15
0–9	90.3%	83.6%
10–19.	90.4	82.9
20–29.	72.5	61.6
30–39.	26.7	21.7
40–49.	4.1	2.4
50 and over.	0.2	0.1
All ages.	46.4%	38.1%

The mortality ratios for nonmedical issues are presented in Table 3 by age group at issue for the first fifteen policy years combined. The aggregate mortality ratio, excluding war deaths, for the period from 1968 to 1969 anniversaries was 112.8 per cent. The following tabulation shows how this result compares with previous studies based on the 1955–60 Basic Tables:

Exposure Year	Aggregate Mortality Ratio
1961–62.	105.8%
1962–63.	106.3
1963–64.	109.5
1964–65.	108.5
1965–66.	107.8
1966–67.	107.0
1967–68.	109.9
1968–69.	112.8

In the current study, the mortality ratio for issue age group 15-19 continues to be high (122.3 per cent), even when war deaths are excluded. Exclusion of war deaths has a greater effect on nonmedical issues than on medical issues, with issue age group 15-19 and the all-ages nonmedical mortality ratio being increased by 50.9 and 15.8 percentage points,

TABLE 3
 STANDARD NONMEDICAL ISSUES OF 1954-68
 MALE AND FEMALE LIVES COMBINED
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)
 EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
 BY AGE AT ISSUE
 POLICY YEARS 1-15 COMBINED
 Expected Deaths on 1955-60 Select Basic Tables
 (Amounts Shown in \$1,000 Units)

AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS*	MORTALITY RATIO	
		Excluding War Deaths	War Deaths		Exclud-ing War Deaths*	Includ-ing War Deaths*
0.....	\$ 2,573,065	\$ 1,254	\$ 0	\$ 1,413	88.7%	88.7%
1.....	955,139	390	0	409	95.4	95.4
2-4.....	1,253,422	535	0	505	105.9	105.9
5-9.....	1,921,930	853	122	807	105.7	120.8
10-14.....	2,844,245	2,273	567	2,066	110.0	137.5
15-19.....	12,156,055	13,325	5,547	10,896	122.3	173.2
20-24.....	21,998,709	21,017	4,355	17,928	117.2	141.5
25-29.....	17,640,245	18,336	1,532	16,935	108.3	117.3
30-34.....	9,436,402	16,673	456	15,093	110.5	113.5
35-39.....	4,120,903	12,469	70	10,884	114.6	115.2
40-44.....	791,097	2,913	4	2,959	98.4	98.6
45-49.....	59,827	403	0	326	123.6	123.6
50 and over.....	16,741	293	0	189	155.0	155.0
All ages.....	\$75,767,780	\$90,734	\$12,653	\$80,410	112.8%	128.6%

* Exposures not adjusted for distribution by age within each five-year age group at issue.

respectively, if war deaths are included. War deaths increased the all-ages nonmedical mortality ratio in last year's reports by 18.4 percentage points.

The mortality ratios in Table 3 underestimate somewhat the death rates for 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 are younger than the average ages of the exposures for these age groups in the medical experience entering into the Basic Tables. This

situation arises because the maximum age at which nonmedical business is issued by the various contributing companies falls at 35, 40, 45, or 50. Thus the nonmedical exposures beyond these ages tend 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 such as 35 and 40.

An indication of the extent to which Table 3 understates the true mortality on nonmedical business is given in the following tabulation, which shows mortality ratios adjusted for the distribution of exposures by age within each five-year age group at issue. Only the nonmedical age limits of the contributing companies were considered in making this adjustment; the reductions in amount limits mentioned above were not considered.

**MORTALITY RATIOS ON NONMEDICAL ISSUES OF 1954-68
EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
BY AGE AT ISSUE
POLICY YEARS 1-15 COMBINED**

(Expected Deaths on 1955-60 Select Basic Tables)

AGES AT ISSUE	MORTALITY RATIOS	
	Unadjusted	Adjusted
35-39.....	114.6%	114.8%
40-44.....	98.4	110.9
45-49.....	123.6	130.4
50 and over.....	155.0	155.9
Ages 35 and over.....	112.0%	115.0%

The unadjusted mortality ratios understate the true mortality on nonmedical business to a significant degree at issue ages 40-44. Except for one company, whose limit for nonmedical issues was age 50 until 1959, nonmedical issues at ages 45-49, and especially at ages 50 and over, are largely business issued under special circumstances (such as pension trust and salary allotment plans), which do not appreciably affect the distribution of exposures by age within each five-year age group at issue. So-called "policyholder's nonmedical," issued on the basis of a previous medical examination within six or twelve months, is also included for some companies; others include it in their medical issues. Policies issued under any "special" approach for obtaining medical evidence of insurability (e.g., Paramedical) have been either excluded from the study or

have been included in the recent medical issues by the contributing companies.

The nonmedical mortality ratios by year of issue for all ages at issue combined during the period from 1968 to 1969 anniversaries are presented in Table 4 on an unadjusted basis. The highest mortality ratio by year of

TABLE 4
STANDARD NONMEDICAL ISSUES OF 1954-68
MALE AND FEMALE LIVES COMBINED
(INCLUDING DATA NOT SUBDIVIDED BY SEX)
EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
BY YEAR OF ISSUE
ALL AGES COMBINED

Expected Deaths on 1955-60 Select Basic Tables
(Amounts Shown in \$1,000 Units)

YEAR OF ISSUE	POLICY YEAR	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS*	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Excluding War Deaths*	Including War Deaths*
1954.....	15	\$ 1,531,727	\$ 3,735	\$ 94	\$ 3,567	104.7%	107.3%
1955.....	14	1,736,063	3,401	62	3,414	99.6	101.4
1956.....	13	2,321,224	5,277	93	4,830	109.3	111.2
1957.....	12	3,621,541	7,356	175	6,948	105.9	108.4
1958.....	11	3,638,204	6,161	246	5,771	106.8	111.0
1959.....	10	3,758,370	5,509	319	5,224	105.5	111.6
1960.....	9	3,871,224	4,662	329	4,900	95.1	101.9
1961.....	8	4,259,969	5,120	459	4,877	105.0	114.4
1962.....	7	4,295,740	4,758	545	4,480	106.2	118.4
1963.....	6	5,124,428	5,852	794	4,943	118.4	134.5
1964.....	5	5,932,724	5,900	1,025	5,391	109.4	128.5
1965.....	4	6,787,317	7,123	1,638	5,894	120.9	148.6
1966.....	3	7,094,907	7,052	1,777	5,734	123.0	154.0
1967.....	2	9,008,160	7,330	2,975	6,381	114.9	161.5
1968.....	1	12,786,182	11,498	2,122	8,056	142.7	169.1
All years of issue.....		\$75,767,780	\$90,734	\$12,653	\$80,410	112.8%	128.6%

* Exposures not adjusted for distribution by age within each five-year age group at issue.

issue (excluding war deaths) was 142.7 per cent for issue year 1968 (policy year 1). Mortality ratios for policy year 1 have tended to be high for the last six experience years.

War deaths have had their greatest impact on nonmedical experience during the very recent years of issue. This continues to be true when the data by year of issue are analyzed to compare only the ages at which most of the exposure to war occurs, approximately attained ages 18-35.

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

The following tabulation gives an indication of the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 112.8 per cent. War deaths were excluded in determining these ratios.

	Number of Companies	Proportion of Actual Deaths
Percentage points below average:		
More than 20.....	5	5.7%
10-20.....	2	2.7
5-10.....	4	11.4
0-5.....	2	3.5
Percentage points above average:		
0-5.....	3	59.1
5-10.....	2	16.5
10-20.....	1	1.1

Comparison of Medical and Nonmedical Experience

It would be desirable to compare the nonmedical experience with an experience on strictly comparable policies issued with a medical examination, but data for such a comparison are not available.¹ Table 5 presents side by side the experience on medical and nonmedical issues as reported to the Committee for the five-year period from 1964 to 1969 anniversaries. The 1955-60 Male, Female, and Male and Female Combined Select Basic Tables, respectively, were used to calculate expected deaths for the male experience, female experience, and experience reported without subdivision by sex. War deaths have been excluded from the 1964-69 experience.

The nonmedical mortality ratios shown in Table 5 have been adjusted to reflect the approximate distribution of nonmedical exposures by age for issue age groups 35-39 and higher. The lower half of Table 5 shows that, for policy years 1-15 combined, nonmedical mortality exceeds medical mortality appreciably at all issue ages 20 and over; the excess ranges

¹ Four factors, among others, that should be considered in the comparisons presented in this study are the following: (a) the relative proportions of medical and nonmedical business differ among companies (see Appendix I, Table A); (b) the underwriting standards of the contributing companies differ; (c) the age distributions of each type of business differ; and (d) the proportions of business applied for nonmedically but issued subject to medical examination and then classified as medical business differ among companies.

from about 7 per cent at issue ages 20-24 to about 27 per cent at issue ages 45-49. Over the past few years, the trend of the ratio of nonmedical to medical mortality has been to increase slightly for the important non-medical issue age group 15-39, policy years 1-15 combined.

TABLE 5
COMPARISON OF MEDICAL AND NONMEDICAL EXPERIENCE*
MALE AND FEMALE LIVES COMBINED
(INCLUDING DATA NOT SUBDIVIDED BY SEX)
BETWEEN 1964 AND 1969 ANNIVERSARIES
BY AGE GROUP AT ISSUE AND DURATION (FIRST FIFTEEN POLICY YEARS)

AGE GROUP AT ISSUE	POLICY YEARS									
	1-2		3-5		6-10		11-15		1-15	
	Mortality Ratios on 1955-60 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 %
0.....	154	89	117	73	173	94	161	102	151	89
1-9.....	65	78	140	94	123	111	139	127	125	105
10-19....	131	127	121	127	112	110	105	94	114	117
20-24....	110	127	109	111	99	97	93	96	102	109
25-29....	96	118	88	104	102	105	95	102	96	106
30-34....	133	122	112	117	97	108	89	99	99	108
35-39....	96	118†	98	123†	95	109†	91	108†	94	112†
40-44....	89	128†	93	107†	97	114†	95	125†	95	119†
45-49....	90	61†	94	106†	93	111†	95	128†	93	118†
50 and over	95	38†	86	67†	92	140†	97	121†	92	112†
All ages.	97	121†	93	114†	95	106†	94	104†	95	110†
Ratio of Nonmedical to Medical Mortality Ratios										
0.....	58%		62%		54%		63%		59%	
1-9.....	120		67		90		91		84	
10-19....	97		105		98		90		103	
20-24....	115		102		98		103		107	
25-29....	123		118		103		107		110	
30-34....	92		104		111		111		109	
35-39....	123†		126†		115†		119†		119†	
40-44....	144†		115†		118†		132†		125†	
45-49....	68†		113†		119†		135†		127†	
50 and over	40†		78†		152†		125†		122†	

* Excluding war deaths between 1964 and 1969 anniversaries.

† Exposures adjusted for distribution by age within each five-year age group at issue.

**EXPERIENCE UNDER STANDARD ISSUES DURING THE
SIXTEENTH AND SUBSEQUENT POLICY YEARS**

The current experience during the sixteenth and subsequent policy years is based on an exposure of \$51,314,728,000 and actual claims of \$900,817,000, excluding war deaths. This represents an increase in the exposures from the preceding year of 14.2 per cent, part of which was due to the inclusion of the data from one contributor which did not participate in the 1967-68 study but did in the 1966-67 study. (The increase in the exposure from that of two years ago is 6.7 per cent.) Deaths resulting from operations of war between 1968 and 1969 anniversaries amounted to 378 policies, representing \$570,000 in claims. While war deaths had a small effect on the all-ages mortality ratio, a few age cells showed a rather large proportion of war deaths: the 20-24 attained age group mortality ratio was 103.8 per cent excluding war deaths and 135.8 per cent including war deaths; the 15-19 group showed 109.1 per cent and 118.4 per cent; and the 25-29 group showed 99.4 per cent and 109.9 per cent. Mortality ratios based on (1) the 1955-60 Ultimate Basic Tables (Male, Female, and Male and Female Combined, respectively, for the male experience, female experience, and experience reported without subdivision by sex), (2) the Commissioners 1941 Standard Ordinary Mortality Table, and (3) the Commissioners 1958 Standard Ordinary Mortality Table are presented in Table 6 by attained age groups. The aggregate mortality ratio (excluding war deaths) on the 1955-60 Ultimate Basic Tables for the period from 1968 to 1969 anniversaries was 93.4 per cent.

The following tabulation shows how this result compares with previous studies based on the 1955-60 Basic Tables.

Exposure Year	Aggregate Mortality Ratio
1961-62.....	96.8%
1962-63.....	98.6
1963-64.....	98.1
1964-65.....	95.4
1965-66.....	94.9
1966-67.....	94.3
1967-68.....	95.5
1968-69.....	93.4

The tabulation below gives an indication of the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 93.4 per cent. War deaths were excluded in determining the ratios.

	Number of Companies	Proportion of Actual Deaths
Percentage points below average:		
5-10.....	3	14.3%
0-5.....	8	33.7
Percentage points above average:		
0-5.....	7	50.3
5-10.....	1	1.7

TABLE 6

STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS
 MALE AND FEMALE LIVES COMBINED
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)
 EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
 BY ATTAINED AGE
 ALL POLICY YEARS COMBINED
 (Amounts Shown in \$1,000 Units)

ATTAINED AGES	EXPOSED TO RISK	ACTUAL DEATHS		1955-60 ULTIMATE BASIC TABLE		MORTALITY RATIO*	
				Expected Deaths	Mortality Ratio		
		Exclud- ing War Deaths	War Deaths	Exclud- ing War Deaths	Includ- ing War Deaths	1941 CSO Table	1958 CSO Table
15-19.....	\$ 997,767	\$ 814	\$ 69	\$ 746	109.1%	118.4%	36.2%
20-24.....	901,446	948	292	913	103.8	135.8	40.7
25-29.....	749,978	769	82	774	99.4	109.9	32.9
30-34.....	1,083,689	1,230	39	1,286	95.6	98.7	28.4
35-39.....	2,363,581	3,847	39	3,796	101.3	102.4	30.8
40-44.....	4,708,738	13,005	29	12,556	103.6	103.8	38.6
45-49.....	6,643,039	29,291	5	32,223	90.9	90.9	44.0
50-54.....	7,905,913	58,977	14	63,703	92.6	92.6	51.7
55-59.....	7,950,743	96,733	1	101,804	95.0	95.0	57.7
60-64.....	6,969,749	130,377	0	143,530	90.8	90.8	60.0
65-69.....	4,631,281	134,976	0	147,607	91.4	91.4	63.1
70-74.....	3,264,723	146,425	0	158,154	92.6	92.6	64.8
75-79.....	1,931,034	136,472	0	139,774	97.6	97.6	69.0
80-84.....	885,407	93,956	0	96,694	97.2	97.2	70.4
85-89.....	264,752	39,774	0	44,948	88.5	88.5	69.0
90-95.....	62,888	13,223	0	15,894	83.2	83.2	66.9
All ages.	\$51,314,728	\$900,817	\$570	\$964,402	93.4%	93.5%	61.2%
							78.1%

* Excluding war deaths between 1968 and 1969 anniversaries.

Comparison of Medical and Nonmedical Experience

Companies were asked to subdivide their ultimate data into medical and nonmedical if they could conveniently do so. Twelve companies were able to subdivide their data in this manner. The results of this experience between 1964 and 1969 anniversaries are shown in Table 7. These data involve exposures which comprise 44.2 per cent of the entire ultimate experience reported for the period (about the same as in last year's study).

For practically all attained age groups the nonmedical mortality is higher than the medical. War deaths were excluded in determining the mortality ratios.

Comparison of Premium-paying and Fully Paid-up Experience

A comparison of the mortality on premium-paying and fully paid-up (excluding reduced paid-up) policies for the period from 1964 to 1969 anniversaries is shown in Table 8 for standard medical and nonmedical

TABLE 7

COMPARISON OF MEDICAL AND NONMEDICAL MORTALITY EXPERIENCE*
MALE AND FEMALE LIVES COMBINED
(INCLUDING DATA NOT SUBDIVIDED BY SEX)
STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS
EXPERIENCE BETWEEN 1964 AND 1969 ANNIVERSARIES
BY ATTAINED AGE
ALL POLICY YEARS COMBINED

Expected Deaths on 1955-60 Ultimate Basic Tables
(Amounts Shown in \$1,000 Units)

ATTAINED AGES	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO†	RATIO OF NON-MEDICAL TO MEDICAL MORTALITY RATIOS‡
			Excluding War Deaths		War Deaths			
	Medical	Nonmedical	Medical	Non-medical	Medical	Non-medical		
15-19	\$ 386,339	\$ 1,535,047	\$ 345	\$ 1,236	\$ 11	\$ 67	115.8%	108.6%
20-24	422,169	695,177	376	746	104	216	83.0	101.9
25-29	634,842	535,670	538	639	64	55	79.0	114.1
30-34	1,169,437	1,074,824	1,404	1,294	65	37	99.5	98.4
35-39	2,647,008	2,497,449	4,251	3,875	58	39	99.1	98.6
40-44	6,030,552	3,383,959	15,323	8,883	47	17	93.0	102.7
45-49	10,692,003	3,088,679	46,921	13,384	48	5	87.4	92.9
50-54	14,572,608	2,180,552	102,397	16,282	5	5	85.8	98.4
55-59	15,535,288	1,489,514	185,304	18,481	10	0	92.2	101.8
60-64	13,463,679	841,054	255,497	16,669	2	0	91.7	97.4
65-69	8,682,508	429,464	263,533	13,868	3	0	94.9	101.0
70-74	6,124,003	276,858	280,515	13,922	0	0	94.5	103.2
75-79	3,497,483	149,940	248,359	11,286	0	0	98.0	103.0
80-84	1,548,678	54,325	167,216	6,076	0	0	99.1	103.0
85-89	448,842	10,767	72,778	1,811	0	0	95.2	99.7
90-95	92,870	1,398	22,205	291	0	0	95.6	83.9
All ages	\$85,948,309	\$18,244,677	\$1,666,962	\$128,743	\$417	\$441	94.0%	100.0%
								106.4%

* Based on data from twelve companies.

† Excluding war deaths between 1964 and 1969 anniversaries.

issues combined. Thirteen companies submitted their experience separately on premium-paying policies, and ten companies did so on fully paid-up policies. Based on the experience between 1964 and 1969 anniversaries, the premium-paying data submitted constituted 71.7 per cent and the fully paid-up data 17.5 per cent of the total ultimate experience of all companies.

Mortality ratios are higher on premium-paying than on fully paid-up policies except at attained ages 35-39 and 45-54. War deaths were excluded in determining the mortality ratios.

EXPERIENCE BY SEX

All the nineteen contributing companies submitted all or the major portion of both their medical and nonmedical select data separately for

TABLE 8
COMPARISON OF MORTALITY EXPERIENCE
UNDER PREMIUM-PAYING AND FULLY PAID-UP POLICIES
MALE AND FEMALE LIVES COMBINED
(INCLUDING DATA NOT SUBDIVIDED BY SEX)
STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS
EXPERIENCE BETWEEN 1964 AND 1969 ANNIVERSARIES
BY ATTAINED AGE
ALL POLICY YEARS COMBINED
Expected Deaths on 1955-60 Ultimate Basic Tables
(Amounts Shown in \$1,000 Units)

AT- TAINED AGES	PREMIUM-PAYING POLICIES*				FULLY PAID-UP POLICIES†			
	Exposed to Risk	Actual Deaths		Mort- al- ti- ty Ratio‡	Exposed to Risk	Actual Deaths		Mort- al- ti- ty Ratio‡
		Excluding War Deaths	War Deaths			Excluding War Deaths	War Deaths	
15-19...	\$ 4,038,061	\$ 3,207	\$ 194	106.9%	\$ 178,854	\$ 109	\$ 31	76.8%
20-24...	1,813,497	2,178	498	119.1	1,557,287	1,696	360	110.8
25-29...	1,808,401	1,992	146	105.3	873,217	825	53	94.3
30-34...	3,717,120	4,410	116	99.9	772,728	856	14	96.8
35-39...	9,251,976	14,665	122	99.3	1,655,736	2,821	20	109.2
40-44...	16,480,066	44,094	100	99.9	3,154,837	7,792	5	98.0
45-49...	22,926,262	103,481	54	92.2	4,384,031	19,127	0	95.1
50-54...	27,291,964	199,929	9	90.4	5,262,734	38,157	2	94.1
55-59...	27,234,009	335,176	10	95.3	5,655,505	64,834	2	92.3
60-64...	22,316,082	438,067	2	94.8	5,574,784	99,953	0	89.1
65-69...	13,917,626	432,339	3	96.6	4,888,337	133,229	1	86.6
70-74...	9,647,513	449,193	0	95.8	3,520,895	148,025	0	87.4
75-79...	5,362,054	391,151	0	100.5	2,175,653	143,819	0	91.4
80-84...	2,325,164	256,605	0	101.1	1,077,866	108,797	0	92.5
85-89...	599,784	98,474	0	96.3	402,634	62,667	0	91.4
90-95...	118,560	25,571	0	86.2	107,899	23,088	0	84.6
All ages	\$168,848,139	\$2,800,532	\$1,254	96.3%	\$41,242,997	\$855,795	\$488	90.0%

* Based on data from thirteen companies.

† Based on data from ten companies.

‡ Excluding war deaths between 1964 and 1969 anniversaries.

males and females. For the period from 1968 to 1969 anniversaries, the select sex-distinct data comprise 99.8 per cent of the medical exposures and 99.9 per cent of the nonmedical exposures.

The detailed select experience by sex for the period from 1968 to 1969 anniversaries by age group at issue for each year of issue is presented in Table D of Appendix I for medical issues and in Table E of Appendix I

TABLE 9

COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE

STANDARD MEDICALLY EXAMINED ISSUES

OBSERVED BETWEEN 1964 AND 1969 ANNIVERSARIES

BY AGE AT ISSUE—POLICY YEARS 1–15 COMBINED

Expected Deaths on 1955–60 Male Select Basic Table

and 1955–60 Female Select Basic Table

(Amounts Shown in \$1,000 Units)

AGES AT ISSUE	EXPOSED TO RISK		ACTUAL DEATHS			MORTALITY RATIO*		RATIO* OF FE- MALE TO MALE MOR- TALITY†
			Excluding War Deaths		War Deaths Male			
	Male	Female	Male	Female	Male	Male	Female	
0	\$ 700,781	\$ 340,188	\$ 697	\$ 154	\$ 0	166.7%	106.9%	48.4%
1	764,014	378,492	430	63	0	128.7	53.8	29.7
2–4	975,872	399,234	515	162	3	124.7	138.5	76.9
5–9	2,045,452	790,333	1,620	184	216	140.9	81.8	30.9
10–14	3,463,249	785,696	4,098	547	598	127.1	228.9	61.3
15–19	9,572,978	1,160,166	10,595	535	1,988	107.1	123.0	42.3
20–24	36,528,251	2,040,651	33,303	1,455	3,365	100.6	128.9	77.8
25–29	72,525,792	2,767,216	74,951	2,512	2,516	94.7	139.3	90.7
30–34	104,055,442	4,641,128	171,275	6,360	1,535	98.8	123.2	90.1
35–39	108,626,089	6,798,736	270,328	10,760	527	93.9	104.6	70.4
40–44	84,320,562	8,136,232	333,993	18,566	248	94.6	97.9	61.2
45–49	50,612,637	6,201,120	299,854	19,445	32	93.3	93.7	55.4
50–54	25,779,277	3,693,572	227,797	17,306	1	93.3	104.3	54.4
55–59	10,953,140	1,816,350	134,989	10,120	0	90.6	82.5	46.2
60–64	3,527,973	745,820	64,577	6,932	0	92.6	90.1	53.0
65–69	861,176	233,355	21,902	3,146	0	94.5	86.3	56.4
70 and over	135,027	46,657	4,676	981	0	88.3	111.9	71.9
All ages	\$515,447,712	\$40,974,946	\$1,655,600	\$99,228	\$11,029	94.4%	98.8%	58.3%

* Excluding war deaths between 1964 and 1969 anniversaries.

† Female mortality ratios calculated on 1955–60 Male Select Basic Table.

for nonmedical issues. Expected deaths were calculated on the 1955–60 Male Select and the 1955–60 Female Select Basic Tables.

Tables 9–12 examine the experience by sex between 1964 and 1969 anniversaries for the select and ultimate data. War deaths were excluded in determining the mortality ratios in these tables.

The mortality ratios by age group at issue and sex for the first fifteen policy years combined, covering the experience from 1964 to 1969 anniversaries, are presented in Table 9 for standard medically examined issues and in Table 10 for standard nonmedical issues. For the purpose of comparing male and female mortality, the right-hand column of these tables

is based on mortality ratios for females with expected deaths calculated on the male table. The highest ratios of female to male mortality are found at issue ages 2-4, 20-39, and 70 and over for medical issues and at issue ages 0 and 25-34 for nonmedical issues. The high female mortality ratio at issue ages 2-4 for medical issues can be attributed to two

TABLE 10
COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE
STANDARD NONMEDICAL ISSUES
OBSERVED BETWEEN 1964 AND 1969 ANNIVERSARIES
BY AGE AT ISSUE—POLICY YEARS 1-15 COMBINED
Expected Deaths on 1955-60 Male Select Basic Table
and 1955-60 Female Select Basic Table
(Amounts Shown in \$1,000 Units)

AGES AT ISSUE	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO*†		RATIO* OF FEMALE TO MALE MORTALITY‡
			Excluding War Deaths		War Deaths				
	Male	Female	Male	Female	Male	Female	Male	Female	
0	\$ 7,711,846	\$ 4,795,323	\$ 4,060	\$ 1,934	\$ 0	\$ 0	88.1%	90.7%	77.0%
1	2,846,563	1,714,160	1,316	480	0	0	97.3	85.6	60.6
2-4	3,693,042	2,005,948	1,650	583	5	0	100.6	94.2	63.6
5-9	5,882,691	2,463,847	3,248	679	314	1	117.9	99.6	48.6
10-14	9,790,361	2,569,046	8,367	859	1,603	2	105.0	126.0	39.8
15-19	45,444,765	7,886,432	53,361	3,408	17,039	30	118.5	126.1	37.2
20-24	79,879,426	10,247,722	74,125	5,508	14,346	5	109.3	107.3	57.5
25-29	67,848,063	6,889,010	69,682	5,103	5,507	2	104.9	128.2	76.3
30-34	36,198,330	5,603,912	63,698	6,018	1,799	4	108.5	104.4	70.6
35-39	14,669,509	4,019,606	45,912	7,207	280	5	111.2	116.7	66.1
40-44	2,481,561	903,906	12,298	2,054	25	0	105.7	99.9	55.3
45-49	211,197	63,417	2,090	235	0	0	119.3	97.9	43.8
50 and over	61,784	9,716	769	67	0	0	107.4	115.5	55.7
All ages	\$276,719,138	\$49,172,045	\$340,776	\$34,135	\$40,918	\$49	109.3%	110.9%	59.6%

* Excluding war deaths between 1964 and 1969 anniversaries.

† Exposures not adjusted for distribution by age within each five-year age group at issue.

‡ Female mortality ratios calculated on 1955-60 Male Select Basic Table.

large claims totaling \$90,000 in the 1968-69 experience (see Table D, Female Lives, Issue Year 1965). The ratios of female to male mortality are generally lower on nonmedical than on medical business at issue ages 10 and over. At the younger ages the opposite is true, except for the 2-4 issue age group.

Table 11 presents side by side the experience for the five-year period from 1964 to 1969 anniversaries on medical and nonmedical issues, separately for each sex, for policy years 1-2, 3-5, 6-10, 11-15, and 1-15. The nonmedical mortality ratios shown in this table have been adjusted approximately to reflect the distribution of nonmedical exposures by age for issue age groups 35-39 and over. For males, the ratios of nonmedical

TABLE 11

COMPARISON BY SEX OF MEDICAL AND NONMEDICAL EXPERIENCE*
BETWEEN 1964 AND 1969 ANNIVERSARIES
BY AGE GROUP AT ISSUE AND DURATION (FIRST FIFTEEN POLICY YEARS)

AGE GROUP AT ISSUE	POLICY YEARS									
	1-2		3-5		6-10		11-15		1-15	
	Medical %	Non- medical %	Medical %	Non- medical %	Medical %	Non- medical %	Medical %	Non- medical %	Medical %	Non- medical %
Male Experience—Mortality Ratios on 1955-60 Male Select Basic Table										
0.....	180	89	92	68	227	95	164	107	166	88
1-9.....	81	77	136	97	137	119	148	130	135	108
10-19.....	114	126	118	128	113	109	105	91	112	116
20-24.....	108	127	109	112	97	97	92	95	101	109
25-29.....	94	117	87	103	100	104	94	100	95	105
30-34.....	131	125	113	119	97	109	88	100	99	109
35-39.....	96	118†	98	125†	96	110†	90	106†	94	112†
40-44.....	88	135†	94	106†	97	114†	94	124†	95	119†
45-49.....	90	61†	92	103†	93	118†	95	137†	93	124†
50 and over.....	92	39†	85	64†	92	130†	98	141†	92	109†
All ages.....	96	121†	93	115†	95	106†	94	103†	94	110†
Female Experience—Mortality Ratios on 1955-60 Female Select Basic Table										
0.....	74	91	205	89	45	91	136	92	107	91
1-9.....	9	81	153	87	76	87	100	118	89	93
10-19.....	465	142	171	123	81	116	119	127	159	126
20-24.....	172	131	100	94	151	104	105	100	129	107
25-29.....	168	124	130	128	158	123	117	137	139	128
30-34.....	174	104	93	105	97	102	150	107	123	104
35-39.....	108	120†	96	117†	92	104†	130	131†	105	117†
40-44.....	106	106†	84	113†	99	118†	105	112†	98	113†
45-49.....	97	59†	109	126†	88	84†	87	106†	94	103†
50 and over.....	127	28†	92	125†	89	60†	88	153†	94	117†
All ages.....	121	115†	96	110†	93	106†	100	117†	99	112†
Male Experience—Ratio of Nonmedical to Medical Mortality Ratios										
0.....	49%	74%		42%		65%		53%		
1-9.....	95	71		87		88		80		
10-19.....	111	108		96		87		104		
20-24.....	118	103		100		103		108		
25-29.....	124	118		104		106		111		
30-34.....	95	105		112		114		110		
35-39.....	123†	128†		115†		118†		119†		
40-44.....	153†	113†		118†		132†		125†		
45-49.....	68†	112†		127†		144†		133†		
50 and over.....	42†	75†		141†		144†		118†		
Female Experience—Ratio of Nonmedical to Medical Mortality Ratios										
0.....	123%	43%		202%		68%		85%		
1-9.....	900	57		114		118		104		
10-19.....	31	72		143		107		79		
20-24.....	76	94		69		95		83		
25-29.....	74	98		78		117		92		
30-34.....	60	113		105		71		85		
35-39.....	111†	122†		113†		101†		111†		
40-44.....	100†	135†		119†		107†		115†		
45-49.....	61†	116†		95†		122†		110†		
50 and over.....	22†	136†		67†		174†		124†		

* Excluding war deaths between 1964 and 1969 anniversaries.

† Exposures adjusted for distribution by age within each five-year age group at issue.

to medical mortality tend to increase with issue age and are in excess of 100 per cent at issue ages 10 and over in policy years 1-15 combined. For females, the ratios exceed 100 per cent at issue ages 1-9 and 35 and over in policy years 1-15 combined.

The mortality ratios by attained age groups and sex for policy years sixteen and over combined, covering the experience from 1964 to 1969

TABLE 12

COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE*
STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS
EXPERIENCE BETWEEN 1964 AND 1969 ANNIVERSARIES
BY ATTAINED AGE—ALL POLICY YEARS COMBINED
Expected Deaths on 1955-60 Male Ultimate Basic Table
and 1955-60 Female Ultimate Basic Table
(Amounts Shown in \$1,000 Units)

ATTAINED AGES	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO†		RATIO‡ OF FE- MALE TO MALE MOR- TALITY‡
			Excluding War Deaths		War Deaths				
	Male	Female	Male	Female	Male	Female	Male	Female	
15-19	\$ 1,444,623	\$ 1,100,999	\$ 1,412	\$ 496	\$ 229	\$ 0	94.7%	120.1%	45.9%
20-24	1,307,849	874,480	1,465	464	954	0	78.4	110.0	47.3
25-29	1,246,057	547,483	1,394	327	221	0	94.0	86.3	53.1
30-34	2,276,488	598,312	2,873	510	153	0	98.8	88.1	67.6
35-39	5,036,808	1,409,327	8,552	1,729	156	1	101.8	95.7	72.3
40-44	9,522,511	2,158,088	26,107	4,068	125	0	98.1	106.2	69.8
45-49	14,191,108	2,358,802	65,302	7,300	76	0	88.7	106.7	68.1
50-54	17,355,407	2,330,699	131,997	10,071	24	2	90.0	95.9	57.1
55-59	17,738,084	2,185,941	226,425	13,751	31	0	95.4	93.7	49.4
60-64	15,097,320	1,638,875	304,125	16,748	4	0	93.8	102.5	50.9
65-69	10,069,725	1,094,196	318,672	17,037	4	0	96.1	91.7	49.1
70-74	6,943,935	784,295	328,992	20,562	0	0	95.6	80.4	55.3
75-79	3,952,223	432,168	289,653	21,068	0	0	99.0	98.8	66.5
80-84	1,760,414	195,891	194,796	15,289	0	0	99.5	100.7	70.3
85-89	520,770	59,930	83,846	7,898	0	0	92.9	100.2	81.4
90-95	113,783	16,861	25,645	3,205	0	0	88.4	87.5	84.4
All ages	\$108,577,105	\$17,786,347	\$2,011,256	\$140,523	\$1,977	\$3	95.4%	95.0%	58.5%

* Based on data from twelve companies.

† Excluding war deaths between 1964 and 1969 anniversaries.

‡ Female mortality ratios calculated on 1955-60 Male Ultimate Basic Table.

anniversaries, are presented in Table 12 for standard medical and non-medical issues combined. Again, for the purpose of comparing male and female mortality, the right-hand column of this table is based on mortality ratios for females with expected deaths calculated on the male table. Twelve of the contributing companies submitted data separately for males and females for policy years sixteen and over. The lowest ratios of female to male mortality are found at attained ages 15-24, while the highest ratios are found at attained ages 85 and over.

APPENDIX I

TABLE A

CONTRIBUTING COMPANIES

PROPORTION OF TOTAL EXPOSURES BETWEEN 1968 AND 1969 ANNIVERSARIES
CONTRIBUTED BY EACH COMPANY

COMPANY	FIRST FIFTEEN POLICY YEARS		SIXTEENTH AND SUBSEQUENT POLICY YEARS	FIRST FIFTEEN POLICY YEARS BY SEX				SIXTEENTH AND SUBSEQUENT POLICY YEARS BY SEX	
	Medical Issues	Nonmedical Issues		Medical Issues		Nonmedical Issues			
	Male and Female Lives Combined (Including Data Not Subdivided by Sex)			Male	Female	Male	Female	Male	Female
Prudential	19.2%	35.0%	17.0%	18.0%	1.5%	29.3%	5.7%	26.2%	4.7%
New York Life	11.3	11.7	10.9	10.2	1.1	9.5	2.2	14.1	2.7
Metropolitan	11.2	19.1	23.4	10.5	0.7	16.9	2.3		
Equitable, N.Y.	8.8	5.7	8.4	8.2	0.6	4.8	0.8		
Northwestern Mutual	7.2	1.5	7.1	6.6	0.6	1.1	0.4	11.8	1.0
Massachusetts Mutual	6.1	2.6	3.1	5.7	0.4	2.2	0.4		
John Hancock	5.1	6.3	5.2	4.7	0.4	5.1	1.2	7.5	1.9
New England Life	4.0	1.6	2.0	3.7	0.2	1.3	0.2	3.4	0.3
Mutual Benefit	3.5	1.3	3.1	3.2	0.3	1.1	0.2	3.2	0.3
Connecticut Mutual	3.3	2.2	2.2	3.1	0.2	1.9	0.3		
Mutual Life, N.Y.	2.9	3.6	4.2	2.7	0.2	3.0	0.6	6.6	1.0
Travelers	2.9	1.8	2.8	2.8	0.2	1.6	0.2	4.7	0.4
Occidental	2.9	1.0	0.7	2.5	0.2	0.7	0.2		
Aetna	2.7	1.4	1.9	2.5	0.2	1.2	0.3	3.0	0.4
Connecticut General	2.4	0.4	0.8	2.1	0.2	0.3	0.1	1.4	0.2
Penn Mutual	2.3	2.1	2.8	2.1	0.2	1.8	0.3		
Lincoln National	2.2	1.3	1.9	2.0	0.2	1.1	0.2	2.9	0.5
Provident Mutual	1.3	0.8	1.5	1.2	0.1	0.7	0.2		
Sun Life, Canada	0.7	0.6	1.0	0.6	0.1	0.5	0.1	1.6	0.2
Total	100.0%	100.0%	100.0%	92.4%	7.6%	84.1%	15.9%	86.4%	13.6%

NOTE.—A Comparative Mortality Study of the select experience between 1964 and 1969 anniversaries for the above companies is available upon request to the Office of the Society of Actuaries. The companies are not identified by name but are differentiated simply by a system of code letters. Experience is shown by issue age groups and by issue year groups separately for medical and nonmedical business.

TABLE B
 STANDARD MEDICALLY EXAMINED ISSUES OF 1954-68
 MALE AND FEMALE LIVES COMBINED
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)
 EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
 BY YEAR OF ISSUE AND AGE AT ISSUE
 Expected Deaths on 1955-60 Select Basic Tables
 (Amounts Shown in \$1,000 Units)

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1954	0	\$ 16,826	\$ 15	\$ 0	\$ 7	214%	214%
	1	10,912	2	0	5	40	40
	2-4	14,899	2	1	8	25	38
	5-9	41,569	41	4	35	117	129
	10-14	55,895	41	10	62	66	82
	15-19	96,822	131	10	113	116	125
	20-24	243,890	224	10	362	62	65
	25-29	611,059	1,413	20	1,470	96	97
	30-34	831,613	3,029	0	3,724	81	81
	35-39	768,470	4,303	0	5,426	79	79
	40-44	584,741	5,745	0	5,994	96	96
	45-49	346,842	4,682	0	5,865	80	80
	50-54	157,929	3,515	0	3,731	94	94
	55-59	68,847	1,956	0	2,485	79	79
	60-64	23,432	1,811	0	1,120	162	162
	65-69	5,366	228	0	365	62	62
	70 and over	453	23	0	65	35	35
	All ages	\$ 3,879,565	\$27,161	\$ 55	\$30,837	88%	88%
1955	0	\$ 16,990	\$ 8	\$ 0	\$ 5	160%	160%
	1	11,169	23	0	5	460	460
	2-4	16,110	28	0	8	350	350
	5-9	49,577	70	16	43	163	200
	10-14	66,200	46	20	71	65	93
	15-19	118,847	107	0	130	82	82
	20-24	348,541	562	12	482	117	119
	25-29	784,267	1,637	10	1,690	97	97
	30-34	1,051,829	2,924	0	4,090	71	71
	35-39	975,200	5,561	0	5,907	94	94
	40-44	739,141	6,412	20	6,965	92	92
	45-49	436,012	5,578	0	6,499	86	86
	50-54	209,217	5,299	0	4,525	117	117
	55-59	90,199	3,714	0	2,933	127	127
	60-64	32,711	1,429	0	1,475	97	97
	65-69	6,479	289	0	399	72	72
	70 and over	758	119	0	99	120	120
	All ages	\$ 4,953,247	\$33,806	\$ 78	\$35,326	96%	96%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1956 . . . (13)	0	\$ 15,165	\$ 3	\$ 0	\$ 4	75%	75%
	1	15,044	11	0	5	220	220
	2-4	21,491	7	0	10	70	70
	5-9	41,216	24	1	34	71	74
	10-14	68,652	215	27	73	295	332
	15-19	129,118	116	10	138	84	91
	20-24	426,019	356	20	537	66	70
	25-29	860,179	1,682	0	1,673	101	101
	30-34	1,133,763	3,552	0	3,788	94	94
	35-39	1,082,585	4,681	0	5,797	81	81
	40-44	838,278	6,463	0	7,096	91	91
	45-49	487,942	5,881	0	6,381	92	92
	50-54	232,139	3,625	0	4,432	82	82
	55-59	90,834	2,592	0	2,629	99	99
	60-64	33,227	1,286	0	1,422	90	90
	65-69	6,183	200	0	358	56	56
	70 and over	531	22	0	66	33	33
	All ages	\$ 5,482,366	\$30,716	\$ 58	\$34,443	89%	89%
1957 . . . (12)	0	\$ 14,296	\$ 0	\$ 0	\$ 4	0%	0%
	1	18,688	1	0	6	17	17
	2-4	21,481	18	0	9	200	200
	5-9	38,228	9	0	27	33	33
	10-14	63,346	44	26	64	69	109
	15-19	134,140	95	0	143	66	66
	20-24	554,982	505	84	637	79	92
	25-29	1,019,312	1,528	28	1,756	87	89
	30-34	1,414,747	4,172	0	4,148	101	101
	35-39	1,303,205	6,060	9	6,323	96	96
	40-44	937,075	6,942	0	7,007	99	99
	45-49	496,888	5,320	0	5,624	95	95
	50-54	233,964	4,077	0	3,889	105	105
	55-59	89,057	1,721	0	2,270	76	76
	60-64	32,850	1,657	0	1,246	133	133
	65-69	8,996	644	0	479	134	134
	70 and over	558	77	0	63	122	122
	All ages	\$ 6,381,813	\$32,870	\$147	\$33,695	98%	98%
1958 . . . (11)	0	\$ 12,813	\$ 0	\$ 0	\$ 3	0%	0%
	1	21,296	7	0	6	117	117
	2-4	20,662	0	0	8	0	0
	5-9	37,183	25	0	23	109	109
	10-14	62,273	80	52	61	131	216
	15-19	133,506	324	5	141	230	233
	20-24	530,719	540	25	560	96	101
	25-29	989,262	1,501	10	1,469	102	103
	30-34	1,461,319	4,136	16	3,805	109	109
	35-39	1,418,716	5,486	14	6,095	90	90
	40-44	1,016,937	5,772	0	6,808	85	85
	45-49	563,503	6,017	0	5,613	107	107
	50-54	284,907	3,679	0	4,257	86	86
	55-59	115,335	1,811	0	2,575	70	70
	60-64	37,988	563	0	1,212	46	46
	65-69	8,944	402	0	426	94	94
	70 and over	853	55	0	79	70	70
	All ages	\$ 6,716,216	\$30,398	\$122	\$33,141	92%	92%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1959..... (10)	0	\$ 12,824	\$ 5	\$ 0	\$ 3	167%	167%
	1	22,891	57	0	6	950	950
	2-4	22,051	16	0	7	229	229
	5-9	44,733	13	0	24	54	54
	10-14	75,882	109	20	71	154	182
	15-19	162,352	205	0	173	118	118
	20-24	535,879	446	11	533	84	86
	25-29	976,740	1,263	33	1,285	98	101
	30-34	1,449,503	3,574	0	3,326	107	107
	35-39	1,522,910	6,285	36	5,729	110	110
	40-44	1,102,299	5,607	13	6,507	86	86
	45-49	673,096	5,792	0	5,942	97	97
	50-54	335,437	4,769	0	4,526	105	105
	55-59	143,957	2,828	0	2,822	100	100
	60-64	44,104	1,503	0	1,195	126	126
	65-69	13,088	664	0	512	130	130
	70 and over	1,022	68	0	86	79	79
	All ages	\$ 7,138,768	\$33,204	\$113	\$32,747	101%	102%
1960..... (9)	0	\$ 10,428	\$ 0	\$ 0	\$ 3	0%	0%
	1	21,492	0	0	6	0	0
	2-4	19,632	0	0	5	0	0
	5-9	34,555	13	0	17	76	76
	10-14	57,153	81	36	52	156	225
	15-19	132,872	139	32	137	101	125
	20-24	399,889	305	3	374	82	82
	25-29	771,882	854	25	906	94	97
	30-34	1,262,009	2,771	20	2,514	110	111
	35-39	1,377,292	3,553	10	4,549	78	78
	40-44	1,054,864	5,436	0	5,525	98	98
	45-49	651,759	4,150	0	5,202	80	80
	50-54	332,584	3,434	0	4,076	84	84
	55-59	147,333	2,508	0	2,531	99	99
	60-64	50,542	1,312	0	1,200	109	109
	65-69	13,340	228	0	454	50	50
	70 and over	1,534	45	0	111	41	41
	All ages	\$ 6,339,160	\$24,829	\$126	\$27,662	90%	90%
1961..... (8)	0	\$ 9,012	\$ 1	\$ 0	\$ 3	33%	33%
	1	21,866	2	0	6	33	33
	2-4	19,185	2	0	4	50	50
	5-9	34,816	28	0	14	200	200
	10-14	53,047	119	25	46	259	313
	15-19	140,940	99	40	142	70	98
	20-24	414,331	254	21	367	69	75
	25-29	760,677	699	0	794	88	88
	30-34	1,255,989	2,352	22	2,154	109	110
	35-39	1,423,043	4,194	0	4,138	101	101
	40-44	1,142,975	5,700	10	5,392	106	106
	45-49	697,942	4,116	0	5,110	81	81
	50-54	380,030	4,235	0	4,298	99	99
	55-59	167,591	1,813	0	2,627	69	69
	60-64	50,436	954	0	1,068	89	89
	65-69	13,797	331	0	410	81	81
	70 and over	2,939	141	0	179	79	79
	All ages	\$ 6,588,636	\$25,040	\$118	\$26,752	94%	94%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1962	0	\$ 9,188	\$ 0	\$ 0	\$ 4	0%	0%
	1	23,089	0	0	8	0	0
	2-4	21,469	0	0	6	0	0
	5-9	36,233	0	0	13	0	0
	10-14	50,756	57	10	41	139	163
	15-19	140,951	107	95	136	79	149
	20-24	409,538	287	40	345	83	95
	25-29	783,249	851	57	745	114	122
	30-34	1,257,629	1,725	0	1,833	94	94
	35-39	1,463,783	3,293	0	3,776	87	87
	40-44	1,227,588	5,306	0	5,191	102	102
	45-49	773,668	4,092	0	5,107	80	80
	50-54	402,089	3,259	0	4,146	79	79
	55-59	174,278	1,856	0	2,503	74	74
	60-64	65,816	919	0	1,251	73	73
	65-69	16,629	408	0	459	89	89
	70 and over	2,724	107	0	131	82	82
	All ages	\$ 6,858,677	\$22,267	\$202	\$25,695	87%	87%
1963	0	\$ 13,177	\$ 1	\$ 0	\$ 6	17%	17%
	1	15,905	15	0	6	250	250
	2-4	17,923	18	0	5	360	360
	5-9	35,206	30	0	11	273	273
	10-14	49,860	23	58	37	62	219
	15-19	139,603	147	50	131	112	150
	20-24	490,017	456	13	406	112	116
	25-29	959,965	679	0	866	78	78
	30-34	1,505,280	1,885	12	1,982	95	96
	35-39	1,789,706	4,256	10	4,061	105	105
	40-44	1,515,662	5,207	0	5,795	90	90
	45-49	947,657	5,422	0	5,452	99	99
	50-54	499,518	4,407	0	4,439	99	99
	55-59	230,675	2,534	0	2,851	89	89
	60-64	82,892	1,106	0	1,433	77	77
	65-69	22,608	344	0	556	62	62
	70 and over	4,364	91	0	181	50	50
	All ages	\$ 8,320,018	\$26,621	\$143	\$28,218	94%	95%
1964	0	\$ 16,941	\$ 2	\$ 0	\$ 8	25%	25%
	1	9,243	2	0	4	50	50
	2-4	16,560	0	0	5	0	0
	5-9	32,907	0	0	9	0	0
	10-14	52,107	25	0	38	66	66
	15-19	155,170	209	69	145	144	192
	20-24	604,754	567	78	498	114	130
	25-29	1,182,146	845	44	1,025	82	87
	30-34	1,702,274	2,358	30	1,950	121	122
	35-39	2,000,057	4,265	30	3,967	108	108
	40-44	1,719,238	4,873	0	5,597	87	87
	45-49	1,063,230	4,617	0	5,344	86	86
	50-54	599,814	3,623	0	4,483	81	81
	55-59	264,664	3,488	0	2,856	122	122
	60-64	88,807	1,039	0	1,435	72	72
	65-69	24,604	514	0	549	94	94
	70 and over	4,688	66	0	148	45	45
	All ages	\$ 9,537,204	\$26,493	\$251	\$28,061	94%	95%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1965 (4)	0	\$ 16,452	\$ 10	\$ 0	\$ 9	111%	111%
	1	9,421	0	0	5	0	0
	2-4	19,162	90	0	7	1,286	1,286
	5-9	38,723	0	0	10	0	0
	10-14	50,163	2	0	31	6	6
	15-19	192,966	176	167	177	99	194
	20-24	753,039	833	134	619	135	156
	25-29	1,376,653	847	116	1,160	73	83
	30-34	1,958,978	2,783	76	2,059	135	139
	35-39	2,245,540	4,090	0	3,900	105	105
	40-44	1,929,994	5,628	5	5,598	101	101
	45-49	1,230,397	5,637	0	5,410	104	104
	50-54	680,522	4,601	1	4,632	99	99
	55-59	285,685	2,894	0	2,826	102	102
	60-64	99,265	2,170	0	1,503	144	144
	65-69	24,516	646	0	475	136	136
	70 and over	4,537	86	0	114	75	75
	All ages	\$10,916,013	\$30,493	\$499	\$28,535	107%	109%
1966 (3)	0	\$ 17,468	\$ 5	\$ 0	\$ 11	45%	45%
	1	11,019	3	0	6	50	50
	2-4	18,820	50	0	8	625	625
	5-9	38,203	0	0	10	0	0
	10-14	57,316	150	0	32	469	469
	15-19	201,145	283	97	182	155	209
	20-24	832,520	529	116	658	80	98
	25-29	1,530,538	1,279	10	1,223	105	105
	30-34	2,131,045	1,857	20	1,998	93	94
	35-39	2,456,813	3,680	11	3,663	100	101
	40-44	2,138,345	5,038	0	5,204	97	97
	45-49	1,394,066	4,804	12	5,146	93	94
	50-54	749,619	3,323	0	4,340	77	77
	55-59	324,079	2,608	0	2,651	98	98
	60-64	102,892	808	0	1,253	64	64
	65-69	30,372	341	0	499	68	68
	70 and over	6,208	147	0	129	114	114
	All ages	\$12,040,468	\$24,905	\$266	\$27,013	92%	93%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1967..... (2)	0	\$ 17,214	\$ 4	\$ 0	\$ 13	31%	31%
	1	10,827	0	0	7	0	0
	2-4	20,235	0	0	10	0	0
	5-9	42,450	0	0	12	0	0
	10-14	53,872	6	0	24	25	25
	15-19	174,943	144	67	144	100	147
	20-24	835,117	898	130	604	149	170
	25-29	1,734,025	1,299	60	1,128	115	120
	30-34	2,349,319	1,999	24	1,788	112	113
	35-39	2,695,411	3,029	8	3,161	96	96
	40-44	2,342,294	4,015	0	4,629	87	87
	45-49	1,558,069	4,054	0	4,421	92	92
	50-54	825,764	5,888	0	3,530	167	167
	55-59	372,450	1,451	0	2,221	65	65
	60-64	121,484	990	0	1,072	92	92
	65-69	28,723	235	0	364	65	65
	70 and over	6,086	64	0	97	66	66
	All ages	\$13,188,283	\$24,076	\$289	\$23,225	104%	105%
1968..... (1)	0	\$ 16,014	\$ 101	\$ 0	\$ 28	361%	361%
	1	9,306	90	0	7	1,286	1,286
	2-4	16,571	0	0	10	0	0
	5-9	38,964	0	0	13	0	0
	10-14	60,245	12	0	23	52	52
	15-19	157,334	302	10	111	272	281
	20-24	896,780	726	93	601	121	136
	25-29	2,045,819	965	50	1,072	90	95
	30-34	2,700,370	2,165	77	1,672	129	134
	35-39	2,946,230	3,068	0	2,678	115	115
	40-44	2,596,162	4,400	5	3,797	116	116
	45-49	1,754,683	3,554	0	3,621	98	98
	50-54	935,018	1,706	0	2,813	61	61
	55-59	421,020	1,005	0	1,714	59	59
	60-64	135,809	941	0	831	113	113
	65-69	31,702	257	0	295	87	87
	70 and over	9,556	10	0	128	8	8
	All ages	\$14,771,583	\$19,302	\$235	\$19,414	99%	101%

TABLE C
 STANDARD NONMEDICAL ISSUES OF 1954-68
 MALE AND FEMALE LIVES COMBINED
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)
 EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
 BY YEAR OF ISSUE AND AGE AT ISSUE
 Expected Deaths on 1955-60 Select Basic Tables
 (Amounts Shown in \$1,000 Units)

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1954 (15)	0	\$ 155,372	\$ 80	\$ 0	\$ 61	131%	131%
	1	53,622	23	0	25	92	92
	2-4	54,871	41	0	32	128	128
	5-9	73,480	97	40	59	164	232
	10-14	75,335	77	13	79	97	114
	15-19	166,454	169	1	181	93	94
	20-24	260,613	397	30	369	108	116
	25-29	314,120	693	10	732	95	96
	30-34	241,695	1,043	0	1,045	100	100
	35-39	110,583	681	0	708	96	96
	40-44	21,932	212	0	207	102	102
	45-49	2,611	116	0	41	283	283
	50 and over	1,039	106	0	28	379	379
	All ages	\$ 1,531,727	\$ 3,735	\$ 94	\$3,567	105%	107%
1955 (14)	0	\$ 184,619	\$ 60	\$ 0	\$ 62	97%	97%
	1	64,967	23	0	26	88	88
	2-4	67,796	67	0	35	191	191
	5-9	86,273	98	37	70	140	193
	10-14	96,044	58	15	99	59	74
	15-19	201,957	194	0	209	93	93
	20-24	316,895	445	10	419	106	109
	25-29	325,498	566	0	677	84	84
	30-34	251,447	895	0	942	95	95
	35-39	117,187	682	0	643	106	106
	40-44	19,954	213	0	172	124	124
	45-49	2,378	46	0	34	135	135
	50 and over	1,048	54	0	26	208	208
	All ages	\$ 1,736,063	\$ 3,401	\$ 62	\$3,414	100%	101%
1956 (13)	0	\$ 171,504	\$ 46	\$ 0	\$ 50	92%	92%
	1	64,888	32	0	22	145	145
	2-4	66,498	52	0	32	163	163
	5-9	87,435	74	28	69	107	148
	10-14	102,547	112	24	104	108	131
	15-19	223,818	232	12	229	101	107
	20-24	428,335	317	19	524	60	64
	25-29	498,466	1,052	10	951	111	112
	30-34	416,119	1,607	0	1,365	118	118
	35-39	223,029	1,424	0	1,145	124	124
	40-44	35,193	265	0	284	93	93
	45-49	2,298	43	0	29	148	148
	50 and over	1,094	21	0	26	81	81
	All ages	\$ 2,321,224	\$ 5,277	\$ 93	\$4,830	109%	111%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1957 . . . (12)	0	\$ 159,147	\$ 40	\$ 0	\$ 41	98%	98%
	1	59,210	26	0	17	153	153
	2-4	60,219	28	0	24	117	117
	5-9	80,935	59	7	55	107	120
	10-14	119,680	167	50	119	140	182
	15-19	376,470	310	36	397	78	87
	20-24	836,688	942	47	949	99	104
	25-29	901,323	1,576	31	1,536	103	105
	30-34	649,804	2,085	4	1,883	111	111
	35-39	325,130	1,724	0	1,533	112	112
	40-44	50,586	344	0	364	95	95
	45-49	1,917	50	0	21	238	238
	50 and over	432	5	0	9	56	56
	All ages	\$ 3,621,541	\$ 7,356	\$ 175	\$ 6,948	106%	108%
1958 . . . (11)	0	\$ 152,842	\$ 45	\$ 0	\$ 38	118%	118%
	1	61,478	12	0	16	75	75
	2-4	62,027	7	0	21	33	33
	5-9	85,672	98	8	51	192	208
	10-14	143,518	165	128	140	118	209
	15-19	467,424	487	22	494	99	103
	20-24	925,570	1,073	51	965	111	116
	25-29	885,765	1,362	20	1,299	105	106
	30-34	554,873	1,468	17	1,415	104	105
	35-39	255,387	1,196	0	1,046	114	114
	40-44	40,968	230	0	259	89	89
	45-49	2,221	16	0	21	76	76
	50 and over	459	2	0	6	33	33
	All ages	\$ 3,638,204	\$ 6,161	\$ 246	\$ 5,771	107%	111%
1959 . . . (10)	0	\$ 147,192	\$ 25	\$ 0	\$ 38	66%	66%
	1	58,911	30	0	15	200	200
	2-4	64,273	35	0	19	184	184
	5-9	93,553	73	2	50	146	150
	10-14	161,525	159	93	152	105	166
	15-19	612,738	577	96	650	89	104
	20-24	979,348	851	52	964	88	94
	25-29	847,930	1,246	35	1,101	113	116
	30-34	517,821	1,233	41	1,164	106	109
	35-39	236,079	1,019	0	844	121	121
	40-44	35,790	242	0	198	122	122
	45-49	2,640	11	0	21	52	52
	50 and over	570	8	0	8	100	100
	All ages	\$ 3,758,370	\$ 5,509	\$ 319	\$ 5,224	105%	112%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1960 (9)	0	\$ 123,311	\$ 32	\$ 0	\$ 36	89%	89%
	1	48,460	23	0	13	177	177
	2-4	61,380	7	0	17	41	41
	5-9	102,837	53	0	51	104	104
	10-14	171,158	174	87	159	109	164
	15-19	703,778	701	97	718	98	111
	20-24	998,084	841	89	925	91	101
	25-29	881,757	880	48	1,029	86	90
	30-34	502,851	940	8	983	96	96
	35-39	233,341	806	0	735	110	110
	40-44	40,853	187	0	202	93	93
	45-49	2,584	7	0	20	35	35
	50 and over	830	11	0	12	92	92
	All ages	\$ 3,871,224	\$ 4,662	\$ 329	\$4,900	95%	102%
1961 (8)	0	\$ 127,294	\$ 34	\$ 0	\$ 42	81%	81%
	1	49,964	22	0	14	157	157
	2-4	65,410	5	0	17	29	29
	5-9	108,498	30	0	46	65	65
	10-14	182,651	155	37	161	96	119
	15-19	819,525	864	187	818	106	128
	20-24	1,130,978	1,054	102	993	106	116
	25-29	945,483	1,149	98	981	117	127
	30-34	539,218	887	35	913	97	101
	35-39	245,860	681	0	685	99	99
	40-44	42,608	202	0	189	107	107
	45-49	2,089	26	0	14	186	186
	50 and over	391	11	0	4	275	275
	All ages	\$ 4,259,969	\$ 5,120	\$ 459	\$4,877	105%	114%
1962 (7)	0	\$ 126,563	\$ 47	\$ 0	\$ 50	94%	94%
	1	51,959	26	0	17	153	153
	2-4	67,647	34	0	17	200	200
	5-9	106,587	21	0	38	55	55
	10-14	169,605	202	58	141	143	184
	15-19	808,590	935	297	773	121	159
	20-24	1,183,738	923	65	986	94	100
	25-29	968,918	907	115	916	99	112
	30-34	527,152	783	10	762	103	104
	35-39	242,354	654	0	599	109	109
	40-44	39,606	186	0	156	119	119
	45-49	2,201	8	0	14	57	57
	50 and over	820	32	0	11	291	291
	All ages	\$ 4,295,740	\$ 4,758	\$ 545	\$4,480	106%	118%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1963 (6)	0	\$ 163,362	\$ 69	\$ 0	\$ 71	97%	97%
	1	58,058	21	0	22	95	95
	2-4	86,512	30	0	24	125	125
	5-9	143,335	32	0	44	73	73
	10-14	228,247	247	42	175	141	165
	15-19	912,114	1,046	439	839	125	177
	20-24	1,459,835	1,492	210	1,189	125	143
	25-29	1,155,597	1,225	54	1,033	119	124
	30-34	601,698	924	49	784	118	124
	35-39	267,160	600	0	577	104	104
	40-44	44,663	145	0	159	91	91
	45-49	2,725	2	0	15	13	13
	50 and over	1,122	19	0	11	173	173
	All ages	\$ 5,124,428	\$ 5,852	\$ 794	\$ 4,943	118%	134%
1964 (5)	0	\$ 178,351	\$ 81	\$ 0	\$ 85	95%	95%
	1	62,499	22	0	27	81	81
	2-4	96,991	49	0	32	153	153
	5-9	159,992	50	0	45	111	111
	10-14	246,832	232	20	174	133	145
	15-19	1,065,610	1,216	655	970	125	193
	20-24	1,766,947	1,562	208	1,422	110	124
	25-29	1,330,721	1,055	77	1,136	93	100
	30-34	671,845	933	65	761	123	131
	35-39	297,802	587	0	562	104	104
	40-44	50,651	106	0	153	69	69
	45-49	3,467	7	0	16	44	44
	50 and over	1,016	0	0	8	0	0
	All ages	\$ 5,932,724	\$ 5,900	\$ 1,025	\$ 5,391	109%	128%
1965 (4)	0	\$ 188,608	\$ 78	\$ 0	\$ 102	76%	76%
	1	67,948	19	0	33	58	58
	2-4	105,434	41	0	41	100	100
	5-9	173,811	18	0	45	40	40
	10-14	264,775	161	0	166	97	97
	15-19	1,385,360	1,748	964	1,249	140	217
	20-24	2,056,411	2,029	453	1,647	123	151
	25-29	1,481,948	1,329	167	1,221	109	123
	30-34	710,272	821	54	737	111	119
	35-39	295,117	665	0	487	137	137
	40-44	52,228	163	0	139	117	117
	45-49	4,177	44	0	17	259	259
	50 and over	1,228	7	0	10	70	70
	All ages	\$ 6,787,317	\$ 7,123	\$ 1,638	\$ 5,894	121%	149%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO		
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths	
1966 (3)	0	\$ 203,290	\$ 102	\$ 0	\$ 126	81%	81%	
	1	73,404	28	0	40	70	70	
	2-4	115,211	34	0	50	68	68	
	5-9	183,716	52	0	48	108	108	
	10-14	272,528	208	0	151	138	138	
	15-19	1,290,090	1,502	1,027	1,122	134	225	
	20-24	2,177,313	2,042	558	1,661	123	157	
	25-29	1,671,335	1,582	166	1,294	122	135	
	30-34	755,425	844	26	693	122	126	
	35-39	295,126	533	0	410	130	130	
	40-44	51,520	111	0	114	97	97	
	45-49	4,500	6	0	16	38	38	
	50 and over	1,449	8	0	9	89	89	
	All ages	\$ 7,094,907	\$ 7,052	\$1,777	\$5,734	123%	154%	
1967 (2)	0	\$ 227,118	\$ 176	\$ 0	\$ 161	109%	109%	
	1	81,765	49	0	52	94	94	
	2-4	127,045	46	0	61	75	75	
	5-9	200,595	54	0	58	93	93	
	10-14	285,200	78	0	127	61	61	
	15-19	1,400,388	1,480	1,325	1,101	134	255	
	20-24	2,963,281	2,529	1,173	2,052	123	180	
	25-29	2,204,131	1,274	389	1,392	92	119	
	30-34	1,019,993	923	63	759	122	130	
	35-39	391,751	560	25	426	131	137	
	40-44	96,564	147	0	162	91	91	
	45-49	8,169	10	0	20	50	50	
	50 and over	2,160	4	0	10	40	40	
	All ages	\$ 9,008,160	\$ 7,330	\$2,975	\$6,381	115%	161%	
1968 (1)	0	\$ 264,492	\$ 339	\$ 0	\$ 450	75%	75%	
	1	98,006	34	0	70	49	49	
	2-4	152,108	59	0	83	71	71	
	5-9	235,211	44	0	78	56	56	
	10-14	324,600	78	0	119	66	66	
	15-19	1,721,739	1,864	389	1,146	163	197	
	20-24	4,514,673	4,520	1,288	2,863	158	203	
	25-29	3,227,253	2,440	312	1,637	149	168	
	30-34	1,476,189	1,287	84	887	145	155	
	35-39	584,997	657	45	484	136	145	
	40-44	167,981	160	4	201	80	82	
	45-49	15,850	11	0	27	41	41	
	50 and over	3,083	5	0	11	45	45	
	All ages	\$12,786,182	\$11,498	\$2,122	\$8,056	143%	169%	

TABLE D
STANDARD MEDICALLY EXAMINED ISSUES OF 1954-68
MALE LIVES
EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
BY YEAR OF ISSUE AND AGE AT ISSUE
Expected Deaths on 1955-60 Male Select Basic Table
(Amounts Shown in \$1,000 Units)

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1954... (15)	0	\$ 10,306	\$ 14	\$ 0	\$ 5	280%	280%
	1	7,268	2	0	4	50	50
	2-4	10,414	2	1	7	29	43
	5-9	30,565	40	4	31	129	142
	10-14	47,159	36	10	57	63	81
	15-19	87,466	130	10	107	121	131
	20-24	226,627	213	10	344	62	65
	25-29	582,518	1,376	20	1,427	96	98
	30-34	788,797	2,911	0	3,597	81	81
	35-39	721,695	4,096	0	5,240	78	78
	40-44	528,480	5,123	0	5,628	91	91
	45-49	306,341	4,376	0	5,459	80	80
	50-54	135,767	3,304	0	3,405	97	97
	55-59	57,874	1,783	0	2,235	80	80
	60-64	18,618	1,510	0	970	156	156
	65-69	3,950	214	0	293	73	73
	70 and over	367	22	0	54	41	41
	All ages	\$ 3,564,212	\$ 25,152	\$ 55	\$ 28,863	87%	87%
1955... (14)	0	\$ 11,537	\$ 8	\$ 0	\$ 4	200%	200%
	1	8,031	15	0	4	375	375
	2-4	11,426	27	0	7	386	386
	5-9	38,518	70	16	39	179	221
	10-14	55,898	46	20	66	70	100
	15-19	107,233	95	0	123	77	77
	20-24	326,628	556	12	461	121	123
	25-29	750,313	1,579	10	1,643	96	97
	30-34	1,001,037	2,820	0	3,954	71	71
	35-39	914,183	5,239	0	5,686	92	92
	40-44	672,043	6,125	20	6,566	93	94
	45-49	387,554	5,258	0	6,085	86	86
	50-54	181,459	5,081	0	4,152	122	122
	55-59	74,627	3,325	0	2,601	128	128
	60-64	26,160	1,247	0	1,290	97	97
	65-69	4,965	177	0	338	52	52
	70 and over	575	115	0	79	146	146
	All ages	\$ 4,572,187	\$ 31,783	\$ 78	\$ 33,098	96%	96%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1956... (13)	0	\$ 9,539	\$ 3	\$ 0	\$ 3	100%	100%
	1	9,762	10	0	4	250	250
	2-4	14,801	5	0	8	63	63
	5-9	29,915	20	1	30	67	70
	10-14	58,570	205	27	68	301	341
	15-19	117,035	95	10	132	72	80
	20-24	404,584	350	20	518	68	71
	25-29	827,398	1,571	0	1,630	96	96
	30-34	1,083,650	2,764	0	3,663	75	75
	35-39	1,023,601	4,545	0	5,589	81	81
	40-44	768,003	6,045	0	6,712	90	90
	45-49	435,375	5,577	0	5,965	93	93
	50-54	199,447	3,262	0	4,037	81	81
	55-59	76,998	2,312	0	2,361	98	98
	60-64	27,771	1,129	0	1,279	88	88
	65-69	4,596	135	0	290	47	47
	70 and over	356	12	0	46	26	26
All ages		\$ 5,091,401	\$ 28,040	\$ 58	\$ 32,335	87%	87%
1957... (12)	0	\$ 8,901	\$ 0	\$ 0	\$ 3	0%	0%
	1	12,352	0	0	4	0	0
	2-4	14,770	8	0	7	114	114
	5-9	26,521	5	0	23	22	22
	10-14	52,807	42	26	59	71	115
	15-19	123,440	79	0	138	57	57
	20-24	534,634	476	84	620	77	90
	25-29	989,319	1,476	28	1,721	86	87
	30-34	1,360,409	3,962	0	4,027	98	98
	35-39	1,235,775	5,898	9	6,105	97	97
	40-44	862,899	6,451	0	6,662	97	97
	45-49	444,920	4,969	0	5,268	94	94
	50-54	201,488	3,850	0	3,566	108	108
	55-59	75,864	1,576	0	2,064	76	76
	60-64	26,757	1,610	0	1,110	145	145
	65-69	7,173	600	0	416	144	144
	70 and over	493	76	0	57	133	133
All ages		\$ 5,978,522	\$ 31,078	\$ 147	\$ 31,850	98%	98%
1958... (11)	0	\$ 8,272	\$ 0	\$ 0	\$ 2	0%	0%
	1	14,068	5	0	4	125	125
	2-4	14,686	0	0	6	0	0
	5-9	27,347	25	0	20	125	125
	10-14	51,960	80	52	57	140	232
	15-19	121,733	315	5	136	232	235
	20-24	511,646	538	25	547	98	103
	25-29	964,006	1,489	10	1,446	103	104
	30-34	1,416,697	4,075	16	3,726	109	110
	35-39	1,359,372	5,199	14	5,940	88	88
	40-44	944,401	5,543	0	6,535	85	85
	45-49	507,574	5,558	0	5,299	105	105
	50-54	252,690	3,360	0	4,003	84	84
	55-59	99,557	1,656	0	2,378	70	70
	60-64	31,621	510	0	1,101	46	46
	65-69	7,538	341	0	385	89	89
	70 and over	615	39	0	63	62	62
All ages		\$ 6,333,783	\$ 28,733	\$ 122	\$ 31,648	91%	91%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1959... (10)	0	\$ 8,669	\$ 4	\$ 0	\$ 2	200%	200%
	1	15,107	50	0	4	1,250	1,250
	2-4	15,746	11	0	5	220	220
	5-9	32,041	13	0	20	65	65
	10-14	62,589	99	20	66	150	180
	15-19	149,464	197	0	167	118	118
	20-24	515,170	423	11	520	81	83
	25-29	947,552	1,147	33	1,260	91	94
	30-34	1,397,138	3,515	0	3,241	108	108
	35-39	1,448,019	6,193	36	5,546	112	112
	40-44	1,017,865	5,275	13	6,209	85	85
	45-49	603,499	5,301	0	5,582	95	95
	50-54	294,110	4,248	0	4,250	100	100
	55-59	123,444	2,609	0	2,612	100	100
	60-64	36,311	1,454	0	1,072	136	136
	65-69	9,895	587	0	424	138	138
	70 and over	835	61	0	75	81	81
	All ages	\$ 6,677,454	\$ 31,187	\$ 113	\$ 31,055	100%	101%
1960... (9)	0	\$ 7,069	\$ 0	\$ 0	\$ 2	0%	0%
	1	13,872	0	0	4	0	0
	2-4	13,948	0	0	4	0	0
	5-9	25,674	13	0	14	93	93
	10-14	46,479	76	31	48	158	223
	15-19	121,187	114	32	132	86	111
	20-24	380,090	303	3	362	84	85
	25-29	746,222	810	25	886	91	94
	30-34	1,211,713	2,721	20	2,440	112	112
	35-39	1,300,710	3,430	10	4,373	78	79
	40-44	959,399	5,167	0	5,210	99	99
	45-49	577,708	3,696	0	4,850	76	76
	50-54	289,956	3,131	0	3,805	82	82
	55-59	124,211	2,317	0	2,327	100	100
	60-64	41,194	1,220	0	1,062	115	115
	65-69	10,600	213	0	385	55	55
	70 and over	1,267	37	0	98	38	38
	All ages	\$ 5,871,299	\$ 23,248	\$ 121	\$ 26,002	89%	90%
1961... (8)	0	\$ 6,451	\$ 0	\$ 0	\$ 2	0%	0%
	1	13,787	0	0	4	0	0
	2-4	12,876	0	0	3	0	0
	5-9	24,370	6	0	11	55	55
	10-14	42,527	119	25	42	283	343
	15-19	127,445	97	40	136	71	101
	20-24	392,009	254	21	354	72	78
	25-29	733,814	679	0	775	88	88
	30-34	1,200,951	2,295	22	2,081	110	111
	35-39	1,333,803	4,032	0	3,950	102	102
	40-44	1,034,735	5,495	10	5,060	109	109
	45-49	618,371	3,902	0	4,764	82	82
	50-54	330,378	4,035	0	4,011	101	101
	55-59	141,096	1,694	0	2,418	70	70
	60-64	41,373	845	0	942	90	90
	65-69	10,736	266	0	340	78	78
	70 and over	2,351	137	0	156	88	88
	All ages	\$ 6,067,073	\$ 23,856	\$ 118	\$ 25,049	95%	96%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1962... (7)	0	\$ 6,444	\$ 0	\$ 0	\$ 3	0%	0%
	1	14,934	0	0	6	0	0
	2-4	14,615	0	0	4	0	0
	5-9	25,493	0	0	10	0	0
	10-14	39,180	57	10	37	154	181
	15-19	123,845	107	95	129	83	157
	20-24	381,557	277	40	329	84	96
	25-29	747,935	761	57	721	106	113
	30-34	1,196,338	1,617	0	1,760	92	92
	35-39	1,363,080	3,087	0	3,583	86	86
	40-44	1,103,672	5,046	0	4,841	104	104
	45-49	685,020	3,860	0	4,755	81	81
	50-54	345,882	3,070	0	3,845	80	80
	55-59	148,358	1,638	0	2,313	71	71
	60-64	53,632	854	0	1,094	78	78
	65-69	13,577	344	0	396	87	87
	70 and over	1,843	97	0	102	95	95
	All ages	\$ 6,265,405	\$ 20,815	\$ 202	\$ 23,928	87%	88%
1963... (6)	0	\$ 9,344	\$ 1	\$ 0	\$ 5	20%	20%
	1	10,250	13	0	4	325	325
	2-4	12,846	18	0	4	450	450
	5-9	24,602	30	0	8	375	375
	10-14	38,858	20	58	34	59	229
	15-19	122,703	144	50	124	116	156
	20-24	459,926	456	13	389	117	121
	25-29	921,308	658	0	841	78	78
	30-34	1,428,930	1,834	12	1,901	96	97
	35-39	1,667,501	4,081	10	3,862	106	106
	40-44	1,362,654	4,862	0	5,406	90	90
	45-49	832,939	5,030	0	5,049	100	100
	50-54	430,744	4,172	0	4,121	101	101
	55-59	195,404	2,242	0	2,618	86	86
	60-64	65,600	894	0	1,234	72	72
	65-69	16,907	297	0	452	66	66
	70 and over	3,377	80	0	155	52	52
	All ages	\$ 7,603,893	\$ 24,832	\$ 143	\$ 26,207	95%	95%
1964... (5)	0	\$ 11,936	\$ 2	\$ 0	\$ 6	33%	33%
	1	6,894	2	0	3	67	67
	2-4	11,968	0	0	4	0	0
	5-9	23,129	0	0	7	0	0
	10-14	41,948	25	0	35	71	71
	15-19	135,475	204	69	137	149	199
	20-24	571,839	551	78	480	115	131
	25-29	1,130,738	778	44	995	78	83
	30-34	1,612,396	2,324	30	1,865	125	126
	35-39	1,856,566	3,935	30	3,762	105	105
	40-44	1,546,542	4,470	0	5,212	86	86
	45-49	937,347	4,417	0	4,957	89	89
	50-54	520,194	3,432	0	4,156	83	83
	55-59	223,308	3,290	0	2,603	126	126
	60-64	69,668	910	0	1,239	73	73
	65-69	17,946	492	0	442	111	111
	70 and over	3,080	58	0	115	50	50
	All ages	\$ 8,720,974	\$ 24,890	\$ 251	\$ 26,018	96%	97%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1965... (4)	0	\$ 11,536	\$ 10	\$ 0	\$ 7	143%	143%
	1	6,582	0	0	4	0	0
	2-4	14,664	0	0	6	0	0
	5-9	27,122	0	0	7	0	0
	10-14	40,079	2	0	29	7	7
	15-19	168,165	176	167	168	105	204
	20-24	712,418	818	134	598	137	159
	25-29	1,316,876	832	116	1,128	74	84
	30-34	1,856,174	2,725	76	1,969	138	142
	35-39	2,078,034	3,938	0	3,687	107	107
	40-44	1,737,982	5,376	5	5,219	103	103
	45-49	1,083,780	5,054	0	5,014	101	101
	50-54	592,991	4,109	1	4,319	95	95
	55-59	245,001	2,514	0	2,600	97	97
	60-64	82,444	1,888	0	1,353	140	140
	65-69	18,413	612	0	393	156	156
	70 and over	3,100	83	0	91	91	91
	All ages	\$ 9,995,361	\$ 28,137	\$ 499	\$ 26,592	106%	108%
1966... (3)	0	\$ 12,475	\$ 5	\$ 0	\$ 9	56%	56%
	1	7,851	3	0	5	60	60
	2-4	14,504	50	0	7	714	714
	5-9	25,658	0	0	7	0	0
	10-14	44,022	11	0	29	38	38
	15-19	172,274	278	97	172	162	218
	20-24	782,525	519	116	634	82	100
	25-29	1,464,410	1,223	10	1,191	103	104
	30-34	2,021,294	1,822	20	1,914	95	96
	35-39	2,284,553	3,488	11	3,485	100	100
	40-44	1,937,221	4,857	0	4,884	99	99
	45-49	1,232,600	4,496	12	4,775	94	94
	50-54	660,067	3,085	0	4,081	76	76
	55-59	275,840	2,525	0	2,427	104	104
	60-64	85,217	626	0	1,125	56	56
	65-69	23,935	309	0	434	71	71
	70 and over	4,317	101	0	105	96	96
	All ages	\$11,048,763	\$ 23,398	\$ 266	\$ 25,284	93%	94%
1967... (2)	0	\$ 12,330	\$ 4	\$ 0	\$ 10	40%	40%
	1	8,147	0	0	6	0	0
	2-4	13,576	0	0	7	0	0
	5-9	28,894	0	0	9	0	0
	10-14	40,902	1	0	22	5	5
	15-19	147,481	136	67	137	99	148
	20-24	782,487	883	130	583	151	174
	25-29	1,652,167	1,248	60	1,095	114	119
	30-34	2,229,566	1,955	24	1,717	114	115
	35-39	2,514,998	2,897	8	3,022	96	96
	40-44	2,126,791	3,821	0	4,382	87	87
	45-49	1,372,635	3,579	0	4,126	87	87
	50-54	716,501	3,342	0	3,308	101	101
	55-59	320,064	1,392	0	2,046	68	68
	60-64	100,402	885	0	966	92	92
	65-69	21,559	162	0	307	53	53
	70 and over	3,821	9	0	74	12	12
	All ages	\$12,092,321	\$ 20,314	\$ 289	\$ 21,817	93%	94%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1968 . . . (1)	0	\$ 11,649	\$ 100	\$ 0	\$ 21	476%	476%
	1	6,285	90	0	5	1,800	1,800
	2-4	12,445	0	0	8	0	0
	5-9	26,689	0	0	10	0	0
	10-14	45,913	10	0	21	48	48
	15-19	132,737	264	10	106	249	258
	20-24	842,437	686	93	584	117	133
	25-29	1,959,977	910	50	1,044	87	92
	30-34	2,564,385	2,107	77	1,610	131	136
	35-39	2,752,649	2,808	0	2,578	109	109
	40-44	2,358,259	4,155	5	3,621	115	115
	45-49	1,555,996	3,287	0	3,387	97	97
	50-54	808,437	1,644	0	2,632	62	62
	55-59	358,901	954	0	1,575	61	61
	60-64	110,805	906	0	750	121	121
	65-69	25,834	255	0	265	96	96
	70 and over	7,658	10	0	114	9	9
	All ages	\$13,581,056	\$ 18,186	\$ 235	\$ 18,331	99%	100%
All years (1-15)	0	\$ 146,458	\$ 151	\$ 0	\$ 84	180%	180%
	1	155,190	190	0	65	292	292
	2-4	203,285	121	1	87	139	140
	5-9	416,538	222	21	246	90	99
	10-14	708,891	829	279	670	124	165
	15-19	1,957,683	2,431	652	2,044	119	151
	20-24	7,824,577	7,303	790	7,323	100	111
	25-29	15,734,553	16,537	463	17,803	93	95
	30-34	22,369,475	39,447	297	39,465	100	101
	35-39	23,854,539	62,866	128	66,408	95	95
	40-44	18,960,946	77,811	53	82,147	95	95
	45-49	11,581,659	68,360	12	75,335	91	91
	50-54	5,960,111	53,125	1	57,691	92	92
	55-59	2,540,547	31,827	0	35,178	90	90
	60-64	817,573	16,488	0	16,587	99	99
	65-69	197,624	5,004	0	5,560	90	90
	70 and over	34,055	937	0	1,384	68	68
	All ages	\$113,463,704	\$383,649	\$2,697	\$408,077	94%	95%

TABLE D—Continued
STANDARD MEDICALLY EXAMINED ISSUES OF 1954-68
FEMALE LIVES
EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
BY YEAR OF ISSUE AND AGE AT ISSUE
Expected Deaths on 1955-60 Female Select Basic Table
(Amounts Shown in \$1,000 Units)

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1954..... (15)	0	\$ 6,055	\$ 1	\$ 2	50%
	1	3,167	0	1	0
	2-4	3,892	0	1	0
	5-9	9,966	1	3	33
	10-14	8,210	2	4	50
	15-19	8,805	1	5	20
	20-24	15,577	11	16	69
	25-29	23,701	31	32	97
	30-34	33,751	88	89	99
	35-39	37,455	147	120	123
	40-44	47,786	474	277	171
	45-49	35,019	222	311	71
	50-54	19,547	206	261	79
	55-59	9,406	119	190	63
	60-64	3,960	193	106	182
	65-69	910	5	35	14
	70 and over	39	0	4	0
	All ages	\$ 267,246	\$ 1,501	\$ 1,457	103%
1955..... (14)	0	\$ 5,130	\$ 0	\$ 1	0%
	1	2,682	0	1	0
	2-4	4,286	1	1	100
	5-9	10,318	0	3	0
	10-14	9,477	0	4	0
	15-19	10,821	11	6	183
	20-24	19,495	6	18	33
	25-29	27,762	39	34	115
	30-34	38,990	60	92	65
	35-39	47,870	268	140	191
	40-44	56,712	234	298	79
	45-49	42,382	264	321	82
	50-54	23,228	196	271	72
	55-59	12,716	167	233	72
	60-64	5,457	173	133	130
	65-69	1,354	33	50	66
	70 and over	111	1	10	10
	All ages	\$ 318,791	\$ 1,453	\$ 1,616	90%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1956..... (13)	0	\$ 5,196	\$ 0	\$ 1	0%
	1	4,808	1	1	100
	2-4	6,108	0	2	0
	5-9	10,640	2	3	67
	10-14	9,316	5	4	125
	15-19	11,010	15	5	300
	20-24	18,172	6	15	40
	25-29	24,068	75	26	288
	30-34	34,959	771	75	1,028
	35-39	43,126	98	122	80
	40-44	56,002	272	260	105
	45-49	44,468	242	308	79
	50-54	26,410	192	271	71
	55-59	11,168	224	187	120
	60-64	4,468	79	99	80
	65-69	1,133	58	39	149
	70 and over	49	6	4	150
	All ages	\$ 311,101	\$ 2,046	\$ 1,422	144%
1957..... (12)	0	\$ 4,888	\$ 0	\$ 1	0%
	1	5,999	1	2	50
	2-4	6,193	10	2	500
	5-9	11,038	3	4	75
	10-14	9,655	2	4	50
	15-19	9,397	16	4	400
	20-24	16,890	29	13	223
	25-29	22,498	42	22	191
	30-34	38,561	67	75	89
	35-39	51,220	130	139	94
	40-44	60,754	266	242	110
	45-49	44,702	218	272	80
	50-54	28,226	191	250	76
	55-59	11,739	109	167	65
	60-64	5,330	31	105	30
	65-69	1,605	38	50	76
	70 and over	47	1	4	25
	All ages	\$ 328,742	\$ 1,154	\$ 1,356	85%
1958..... (11)	0	\$ 4,541	\$ 0	\$ 1	0%
	1	7,228	2	2	100
	2-4	5,976	0	2	0
	5-9	9,836	0	3	0
	10-14	10,313	0	4	0
	15-19	11,773	9	5	180
	20-24	19,073	2	13	15
	25-29	25,256	12	23	52
	30-34	44,622	61	79	77
	35-39	59,344	287	155	185
	40-44	72,536	229	273	84
	45-49	55,929	459	314	146
	50-54	32,217	319	254	126
	55-59	15,778	155	197	79
	60-64	6,367	53	111	48
	65-69	1,406	61	41	149
	70 and over	238	16	16	100
	All ages	\$ 382,433	\$ 1,665	\$ 1,493	112%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1959..... (10)	0	\$ 4,155	\$ 1	\$ 1	100%
	1	7,784	7	2	350
	2-4	6,305	5	2	250
	5-9	12,692	0	4	0
	10-14	13,293	10	5	200
	15-19	12,888	8	6	133
	20-24	20,709	23	13	177
	25-29	29,188	116	25	464
	30-34	52,365	59	85	69
	35-39	74,891	92	183	50
	40-44	84,434	332	298	111
	45-49	69,597	491	360	136
	50-54	41,327	521	276	189
	55-59	20,513	219	210	104
	60-64	7,793	49	123	40
	65-69	3,193	77	88	88
	70 and over	187	7	11	64
	All ages	\$ 461,314	\$ 2,017	\$ 1,692	119%
1960..... (9)	0	\$ 3,359	\$ 0	\$ 1	0%
	1	7,620	0	2	0
	2-4	5,684	0	1	0
	5-9	8,881	0	3	0
	10-14	10,674	5*	4	125
	15-19	11,685	25	5	500
	20-24	19,799	2	12	17
	25-29	25,660	44	20	220
	30-34	50,296	50	74	68
	35-39	76,582	123	176	70
	40-44	95,465	269	315	85
	45-49	74,051	454	352	129
	50-54	42,628	303	271	112
	55-59	23,122	191	204	94
	60-64	9,348	92	138	67
	65-69	2,740	15	69	22
	70 and over	267	8	13	62
	All ages	\$ 467,861	\$ 1,581	\$ 1,660	95%
1961..... (8)	0	\$ 2,561	\$ 1	\$ 1	100%
	1	8,079	2	2	100
	2-4	6,309	2	1	200
	5-9	10,446	22	3	733
	10-14	10,520	0	4	0
	15-19	13,495	2	6	33
	20-24	22,322	0	13	0
	25-29	26,863	20	19	105
	30-34	55,038	57	73	78
	35-39	89,240	162	188	86
	40-44	108,240	205	332	62
	45-49	79,571	214	346	62
	50-54	49,652	200	287	70
	55-59	26,495	119	209	57
	60-64	9,083	109	126	87
	65-69	3,061	65	70	93
	70 and over	588	4	23	17
	All ages	\$ 521,563	\$ 1,184	\$ 1,703	70%

* One female war death for \$5,000 is included.

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1962 (7)	0	\$ 2,744	\$ 0	\$ 1	0%
	1	8,155	0	2	0
	2-4	6,854	0	2	0
	5-9	10,740	0	3	0
	10-14	11,576	0	4	0
	15-19	17,106	0	7	0
	20-24	27,981	10	16	63
	25-29	35,314	90	24	375
	30-34	61,291	108	73	148
	35-39	100,703	206	193	107
	40-44	123,916	260	350	74
	45-49	88,648	232	352	66
	50-54	56,207	189	301	63
	55-59	25,920	218	190	115
	60-64	12,184	65	157	41
	65-69	3,052	64	63	102
	70 and over	881	10	29	34
	All ages	\$ 593,272	\$ 1,452	\$ 1,767	82%
1963 (6)	0	\$ 3,833	\$ 0	\$ 1	0%
	1	5,655	2	2	100
	2-4	5,077	0	1	0
	5-9	10,604	0	3	0
	10-14	11,002	3	3	100
	15-19	16,900	3	7	43
	20-24	30,091	0	17	0
	25-29	38,657	21	25	84
	30-34	76,350	51	81	63
	35-39	122,205	175	199	88
	40-44	153,008	345	389	89
	45-49	114,718	392	403	97
	50-54	68,774	235	318	74
	55-59	35,271	292	233	125
	60-64	17,292	212	199	107
	65-69	5,701	47	104	45
	70 and over	987	11	26	42
	All ages	\$ 716,125	\$ 1,789	\$ 2,011	89%
1964 (5)	0	\$ 5,005	\$ 0	\$ 2	0%
	1	2,349	0	1	0
	2-4	4,592	0	1	0
	5-9	9,778	0	2	0
	10-14	10,159	0	3	0
	15-19	19,695	5	8	63
	20-24	32,915	16	18	89
	25-29	51,408	67	30	223
	30-34	89,878	34	85	40
	35-39	143,491	330	205	161
	40-44	172,696	403	385	105
	45-49	125,883	200	387	52
	50-54	79,620	191	327	58
	55-59	41,356	198	253	78
	60-64	19,139	129	196	66
	65-69	6,658	22	107	21
	70 and over	1,608	8	33	24
	All ages	\$ 816,230	\$ 1,603	\$ 2,043	78%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1965..... (4)	0	\$ 4,916	\$ 0	\$ 2	0%
	1	2,839	0	1	0
	2-4	4,498	90	1	9,000
	5-9	11,601	0	3	0
	10-14	10,084	0	2	0
	15-19	24,801	0	9	0
	20-24	40,621	15	21	71
	25-29	59,777	15	32	47
	30-34	102,804	58	90	64
	35-39	167,506	152	213	71
	40-44	192,012	252	379	66
	45-49	146,617	583	396	147
	50-54	87,531	492	313	157
	55-59	40,684	380	226	168
	60-64	16,821	282	150	188
	65-69	6,103	34	82	41
	70 and over	1,437	3	23	13
	All ages	\$ 920,652	\$ 2,356	\$ 1,943	121%
1966..... (3)	0	\$ 4,993	\$ 0	\$ 2	0%
	1	3,168	0	1	0
	2-4	4,316	0	1	0
	5-9	12,545	0	3	0
	10-14	13,294	139	3	4,633
	15-19	28,871	5	10	50
	20-24	49,995	10	24	42
	25-29	66,128	56	32	175
	30-34	109,751	35	84	42
	35-39	172,260	192	178	108
	40-44	201,124	181	320	57
	45-49	161,466	308	371	83
	50-54	89,552	238	259	92
	55-59	48,239	83	224	37
	60-64	17,675	182	128	142
	65-69	6,437	32	65	49
	70 and over	1,891	46	24	192
	All ages	\$ 991,705	\$ 1,507	\$ 1,729	87%
1967..... (2)	0	\$ 4,884	\$ 0	\$ 3	0%
	1	2,680	0	1	0
	2-4	6,659	0	3	0
	5-9	13,556	0	3	0
	10-14	12,970	5	2	250
	15-19	27,462	8	7	114
	20-24	52,630	15	21	71
	25-29	81,858	51	33	155
	30-34	119,753	44	71	62
	35-39	180,413	132	139	95
	40-44	215,503	194	247	79
	45-49	185,434	475	295	161
	50-54	109,263	2,546	222	1,147
	55-59	52,386	59	175	34
	60-64	21,082	105	106	99
	65-69	7,164	73	57	128
	70 and over	2,265	55	23	239
	All ages	\$ 1,095,962	\$ 3,762	\$ 1,408	267%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1968	0	\$ 4,365	\$ 1	\$ 7	14%
(1)	1	3,021	0	2	0
	2-4	4,126	0	2	0
	5-9	12,275	0	3	0
	10-14	14,332	2	2	100
	15-19	24,597	38	5	760
	20-24	54,343	40	17	235
	25-29	85,842	55	28	196
	30-34	135,985	58	62	94
	35-39	193,581	260	100	260
	40-44	237,903	245	176	139
	45-49	198,687	267	234	114
	50-54	126,581	62	181	34
	55-59	62,119	51	139	37
	60-64	25,004	35	81	43
	65-69	5,868	2	30	7
	70 and over	1,898	0	14	0
	All ages	\$1,190,527	\$ 1,116	\$ 1,083	103%
All years	0	\$ 66,625	\$ 4	\$ 27	15%
(1-15)	1	75,234	15	23	65
	2-4	80,875	108	23	470
	5-9	164,916	28	46	61
	10-14	164,875	173*	52	333
	15-19	249,306	146	95	154
	20-24	440,613	185	247	75
	25-29	623,980	734	405	181
	30-34	1,044,394	1,601	1,188	135
	35-39	1,559,887	2,754	2,450	112
	40-44	1,878,091	4,161	4,541	92
	45-49	1,467,172	5,021	5,022	100
	50-54	880,763	6,081	4,062	150
	55-59	436,912	2,584	3,037	85
	60-64	181,003	1,789	1,958	91
	65-69	56,385	626	950	66
	70 and over	12,493	176	257	68
	All ages	\$9,383,524	\$26,186	\$24,383	107%

* One female war death for \$5,000 is included.

TABLE E
 STANDARD NONMEDICAL ISSUES OF 1954-68
 MALE LIVES
 EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
 BY YEAR OF ISSUE AND AGE AT ISSUE
 Expected Deaths on 1955-60 Male Select Basic Table
 (Amounts Shown in \$1,000 Units)

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1954 . . . (15)	0	\$ 89,150	\$ 46	\$ 0	\$ 41	112%	112%
	1	30,939	21	0	17	124	124
	2-4	33,408	33	0	24	138	138
	5-9	49,871	80	40	50	160	240
	10-14	58,038	75	13	70	107	126
	15-19	131,712	137	1	161	85	86
	20-24	206,688	333	30	314	106	116
	25-29	276,807	620	10	678	91	93
	30-34	208,984	965	0	953	101	101
	35-39	85,261	556	0	619	90	90
	40-44	16,122	183	0	172	106	106
	45-49	1,976	105	0	35	300	300
	50 and over	887	86	0	25	344	344
	All ages	\$ 1,189,843	\$ 3,240	\$ 94	\$ 3,159	103%	106%
1955 . . . (14)	0	\$ 107,715	\$ 44	\$ 0	\$ 41	107%	107%
	1	37,933	20	0	17	118	118
	2-4	41,476	41	0	26	158	158
	5-9	58,686	82	37	60	137	198
	10-14	75,166	50	15	89	56	73
	15-19	162,235	163	0	187	87	87
	20-24	260,085	382	10	367	104	107
	25-29	285,494	525	0	625	84	84
	30-34	215,095	818	0	850	96	96
	35-39	88,916	576	0	553	104	104
	40-44	14,581	188	0	142	132	132
	45-49	1,900	31	0	30	103	103
	50 and over	934	53	0	25	212	212
	All ages	\$ 1,350,216	\$ 2,973	\$ 62	\$ 3,012	99%	101%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1956 . . . (13)	0	\$ 102,548	\$ 25	\$ 0	\$ 33	76%	76%
	1	38,678	27	0	15	180	180
	2-4	41,387	41	0	23	178	178
	5-9	60,730	63	28	60	105	152
	10-14	81,268	98	24	94	104	130
	15-19	186,156	213	12	210	101	107
	20-24	374,036	278	19	479	58	62
	25-29	459,176	959	10	905	106	107
	30-34	379,590	1,530	0	1,283	119	119
	35-39	193,463	1,299	0	1,056	123	123
	40-44	29,214	232	0	255	91	91
	45-49	1,906	40	0	26	154	154
	50 and over	1,051	21	0	26	81	81
	All ages	\$ 1,949,203	\$ 4,826	\$ 93	\$ 4,465	108%	110%
1957 . . . (12)	0	\$ 94,403	\$ 18	\$ 0	\$ 27	67%	67%
	1	35,736	16	0	11	145	145
	2-4	37,373	21	0	17	124	124
	5-9	54,185	47	7	46	102	117
	10-14	96,996	157	50	109	144	190
	15-19	335,808	280	36	376	74	84
	20-24	777,275	893	47	902	99	104
	25-29	854,115	1,491	31	1,486	100	102
	30-34	604,607	2,008	4	1,790	112	112
	35-39	290,297	1,617	0	1,434	113	113
	40-44	43,250	298	0	334	89	89
	45-49	1,584	49	0	19	258	258
	50 and over	372	5	0	8	63	63
	All ages	\$ 3,226,001	\$ 6,900	\$ 175	\$ 6,559	105%	108%
1958 . . . (11)	0	\$ 92,125	\$ 28	\$ 0	\$ 25	112%	112%
	1	37,703	6	0	11	55	55
	2-4	39,319	0	0	15	0	0
	5-9	59,356	91	8	43	212	230
	10-14	117,987	152	128	130	117	215
	15-19	422,201	467	22	473	99	103
	20-24	859,334	1,031	51	919	112	118
	25-29	834,334	1,302	20	1,252	104	106
	30-34	504,330	1,356	17	1,326	102	104
	35-39	215,768	1,093	0	943	116	116
	40-44	33,255	207	0	230	90	90
	45-49	1,741	13	0	18	72	72
	50 and over	401	2	0	6	33	33
	All ages	\$ 3,217,854	\$ 5,748	\$ 246	\$ 5,391	107%	111%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1959 . . . (10)	0	\$ 90,747	\$ 22	\$ 0	\$ 25	88%	88%
	1	36,730	18	0	10	180	180
	2-4	42,461	29	0	14	207	207
	5-9	67,350	68	2	42	162	167
	10-14	133,151	139	93	141	99	165
	15-19	557,893	566	96	625	91	106
	20-24	908,831	782	52	918	85	91
	25-29	793,281	1,187	35	1,055	113	116
	30-34	464,145	1,152	41	1,077	107	111
	35-39	192,117	932	0	736	127	127
	40-44	27,652	203	0	169	120	120
	45-49	1,814	10	0	17	59	59
	50 and over	455	3	0	7	43	43
	All ages	\$ 3,316,627	\$ 5,111	\$ 319	\$ 4,836	106%	112%
1960 . . . (9)	0	\$ 80,245	\$ 17	\$ 0	\$ 25	68%	68%
	1	31,827	22	0	9	244	244
	2-4	41,698	7	0	12	58	58
	5-9	76,935	43	0	43	100	100
	10-14	142,468	149	87	148	101	159
	15-19	630,838	667	97	686	97	111
	20-24	917,037	786	89	875	90	100
	25-29	819,801	830	46	980	85	89
	30-34	441,958	850	8	894	95	96
	35-39	184,271	650	0	622	105	105
	40-44	30,959	154	0	169	91	91
	45-49	1,997	7	0	17	41	41
	50 and over	736	11	0	11	100	100
	All ages	\$ 3,400,770	\$ 4,193	\$ 327	\$ 4,491	93%	101%
1961 . . . (8)	0	\$ 83,175	\$ 25	\$ 0	\$ 30	83%	83%
	1	32,499	19	0	10	190	190
	2-4	44,160	2	0	12	17	17
	5-9	81,438	15	0	38	39	39
	10-14	150,180	155	37	149	104	129
	15-19	733,289	826	187	782	106	130
	20-24	1,032,693	955	102	934	102	113
	25-29	871,698	1,101	98	928	119	129
	30-34	468,317	796	34	819	97	101
	35-39	190,709	579	0	569	102	102
	40-44	31,430	164	0	155	106	106
	45-49	1,584	26	0	12	217	217
	50 and over	323	11	0	4	275	275
	All ages	\$ 3,721,495	\$ 4,674	\$ 458	\$ 4,442	105%	116%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1962 . . . (7)	0	\$ 81,617	\$ 32	\$ 0	\$ 36	89%	89%
	1	33,877	21	0	12	175	175
	2-4	45,959	29	0	12	242	242
	5-9	78,217	19	0	30	63	63
	10-14	139,005	181	58	131	138	182
	15-19	706,030	881	297	731	121	161
	20-24	1,061,848	839	65	915	92	99
	25-29	885,125	847	115	859	99	112
	30-34	446,569	688	10	666	103	105
	35-39	181,926	512	0	483	106	106
	40-44	27,948	143	0	123	116	116
	45-49	1,731	4	0	12	33	33
	50 and over	756	32	0	11	291	291
	All ages	\$ 3,690,608	\$ 4,228	\$ 545	\$ 4,021	105%	119%
1963 . . . (6)	0	\$ 105,707	\$ 49	\$ 0	\$ 51	96%	96%
	1	37,606	12	0	16	75	75
	2-4	57,635	25	0	17	147	147
	5-9	102,930	32	0	34	94	94
	10-14	181,556	234	42	161	145	171
	15-19	781,075	1,014	439	786	129	185
	20-24	1,300,064	1,450	210	1,099	132	151
	25-29	1,045,618	1,115	54	963	116	121
	30-34	504,428	790	49	680	116	123
	35-39	194,874	504	0	458	110	110
	40-44	30,706	122	0	123	99	99
	45-49	2,189	0	0	13	0	0
	50 and over	1,026	17	0	11	155	155
	All ages	\$ 4,345,414	\$ 5,364	\$ 794	\$ 4,412	122%	140%
1964 . . . (5)	0	\$ 113,424	\$ 54	\$ 0	\$ 60	90%	90%
	1	40,181	17	0	19	89	89
	2-4	63,960	40	0	23	174	174
	5-9	113,915	31	0	34	91	91
	10-14	192,529	218	20	160	136	149
	15-19	898,831	1,124	655	905	124	197
	20-24	1,558,024	1,474	208	1,309	113	128
	25-29	1,187,761	986	77	1,052	94	101
	30-34	555,846	822	65	651	126	136
	35-39	217,722	451	0	447	101	101
	40-44	34,220	82	0	116	71	71
	45-49	2,690	5	0	14	36	36
	50 and over	901	0	0	8	0	0
	All ages	\$ 4,980,004	\$ 5,304	\$ 1,025	\$ 4,798	111%	132%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1965 . . . (4)	0	\$ 120,105	\$ 54	\$ 0	\$ 73	74%	74%
	1	43,196	15	0	23	65	65
	2-4	69,768	30	0	30	100	100
	5-9	121,457	12	0	33	36	36
	10-14	204,096	144	0	152	95	95
	15-19	1,174,094	1,677	954	1,170	143	225
	20-24	1,805,528	1,926	453	1,517	127	157
	25-29	1,312,570	1,199	167	1,129	106	121
	30-34	582,468	735	54	625	118	126
	35-39	212,161	544	0	381	143	143
	40-44	34,598	129	0	104	124	124
	45-49	3,133	44	0	14	314	314
	50 and over	1,042	7	0	10	70	70
	All ages	\$ 5,684,216	\$ 6,516	\$ 1,628	\$ 5,261	124%	155%
1966 . . . (3)	0	\$ 127,867	\$ 81	\$ 0	\$ 91	89%	89%
	1	47,261	12	0	29	41	41
	2-4	73,940	27	0	36	75	75
	5-9	127,906	45	0	35	129	129
	10-14	206,881	191	0	138	138	138
	15-19	1,036,154	1,350	1,027	1,034	131	230
	20-24	1,867,212	1,902	558	1,512	126	163
	25-29	1,464,067	1,406	166	1,192	118	132
	30-34	612,350	701	26	584	120	124
	35-39	206,674	443	0	318	139	139
	40-44	33,375	93	0	85	109	109
	45-49	3,326	3	0	13	23	23
	50 and over	1,230	6	0	9	67	67
	All ages	\$ 5,808,243	\$ 6,260	\$ 1,777	\$ 5,076	123%	158%
1967 . . . (2)	0	\$ 140,987	\$ 120	\$ 0	\$ 117	103%	103%
	1	52,288	42	0	38	111	111
	2-4	82,516	40	0	44	91	91
	5-9	136,912	49	0	42	117	117
	10-14	211,826	73	0	116	63	63
	15-19	1,104,864	1,380	1,325	1,025	135	264
	20-24	2,525,201	2,392	1,173	1,881	127	190
	25-29	1,923,731	1,161	389	1,278	91	121
	30-34	832,934	844	63	647	130	140
	35-39	275,280	443	25	335	132	140
	40-44	54,939	101	0	114	89	89
	45-49	4,627	10	0	14	71	71
	50 and over	1,814	4	0	10	40	40
	All ages	\$ 7,347,919	\$ 6,659	\$ 2,975	\$ 5,661	118%	170%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1968 . . . (1)	0	\$ 164,643	\$ 230	\$ 0	\$ 291	79%	79%
	1	61,991	17	0	52	33	33
	2-4	96,865	18	0	60	30	30
	5-9	156,407	25	0	56	45	45
	10-14	234,603	66	0	109	61	61
	15-19	1,339,616	1,735	389	1,063	163	200
	20-24	3,858,561	4,159	1,288	2,660	156	205
	25-29	2,803,573	2,201	312	1,500	147	168
	30-34	1,205,124	1,151	84	764	151	162
	35-39	418,350	542	45	397	137	148
	40-44	92,573	137	4	144	95	98
	45-49	8,873	3	0	19	16	16
	50 and over	2,486	2	0	10	20	20
	All ages	\$10,443,665	\$10,286	\$ 2,122	\$ 7,125	144%	174%
All years. (1-15)	0	\$ 1,594,458	\$ 845	\$ 0	\$ 966	87%	87%
	1	598,445	285	0	289	99	99
	2-4	811,925	383	0	365	105	105
	5-9	1,346,295	702	122	646	109	128
	10-14	2,225,750	2,082	567	1,897	110	140
	15-19	10,200,796	12,480	5,537	10,214	122	176
	20-24	19,312,417	19,582	4,355	16,601	118	144
	25-29	15,817,151	16,930	1,530	15,882	107	116
	30-34	8,026,745	15,206	455	13,609	112	115
	35-39	3,147,789	10,741	70	9,351	115	116
	40-44	534,822	2,436	4	2,435	100	100
	45-49	41,071	350	0	273	128	128
	50 and over	14,414	260	0	181	144	144
	All ages	\$63,672,078	\$82,282	\$12,640	\$72,709	113%	131%

TABLE E—Continued
 STANDARD NONMEDICAL ISSUES OF 1954–68
 FEMALE LIVES
 EXPERIENCE BETWEEN 1968 AND 1969 ANNIVERSARIES
 BY YEAR OF ISSUE AND AGE AT ISSUE
 Expected Deaths on 1955–60 Female Select Basic Table
 (Amounts Shown in \$1,000 Units)

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1954..... (15)	0	\$ 64,635	\$ 32	\$ 19	168%
	1	21,357	2	7	29
	2–4	20,327	5	7	71
	5–9	22,154	17	8	213
	10–14	16,331	2	8	25
	15–19	33,270	32	19	168
	20–24	51,388	51	52	98
	25–29	33,793	67	46	146
	30–34	29,220	75	77	97
	35–39	23,375	114	75	152
	40–44	5,553	25	32	78
	45–49	635	11	6	183
	50 and over	152	20	3	667
All ages		\$ 322,190	\$ 453	\$ 359	126%
1955..... (14)	0	\$ 75,403	\$ 16	\$ 20	80%
	1	25,769	2	8	25
	2–4	25,195	21	8	263
	5–9	26,188	15	9	167
	10–14	19,587	8	9	89
	15–19	38,116	28	20	140
	20–24	53,736	58	48	121
	25–29	36,194	41	44	93
	30–34	31,796	57	75	76
	35–39	26,224	95	77	123
	40–44	5,081	24	27	89
	45–49	478	15	4	375
	50 and over	114	1	1	100
All ages		\$ 363,881	\$ 381	\$ 350	109%
1956..... (13)	0	\$ 67,345	\$ 20	\$ 17	118%
	1	24,922	5	7	71
	2–4	24,032	9	8	113
	5–9	25,500	11	8	138
	10–14	20,072	9	9	100
	15–19	35,548	19	17	112
	20–24	50,958	29	41	71
	25–29	34,984	77	38	203
	30–34	32,466	65	69	94
	35–39	27,496	105	78	135
	40–44	5,804	32	27	119
	45–49	392	3	3	100
	50 and over	43	0	0	.....
All ages		\$ 349,562	\$ 384	\$ 322	119%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1957..... (12)	0	\$ 62,754	\$ 20	\$ 14	143%
	1	22,452	9	6	150
	2-4	21,788	7	7	100
	5-9	25,647	7	8	88
	10-14	21,142	8	9	89
	15-19	37,898	27	18	150
	20-24	54,212	44	41	107
	25-29	42,429	68	42	162
	30-34	40,819	71	80	89
	35-39	32,695	102	89	115
	40-44	7,088	46	28	164
	45-49	333	1	2	50
	50 and over	60	0	1	0
	All ages	\$ 369,317	\$ 410	\$ 345	119%
1958..... (11)	0	\$ 60,717	\$ 17	\$ 13	131%
	1	23,775	6	5	120
	2-4	22,708	7	6	117
	5-9	26,316	7	8	88
	10-14	25,531	13	10	130
	15-19	45,223	20	21	95
	20-24	66,236	42	46	91
	25-29	51,431	60	47	128
	30-34	50,543	112	89	126
	35-39	39,619	103	103	100
	40-44	7,713	23	29	79
	45-49	480	3	3	100
	50 and over	58	0	0	.....
	All ages	\$ 420,350	\$ 413	\$ 380	109%
1959..... (10)	0	\$ 56,445	\$ 3	\$ 13	23%
	1	22,181	12	5	240
	2-4	21,812	6	5	120
	5-9	26,203	5	8	63
	10-14	28,374	20	11	182
	15-19	54,845	11	25	44
	20-24	70,517	69	46	150
	25-29	54,649	59	46	128
	30-34	53,676	81	87	93
	35-39	43,962	87	108	81
	40-44	8,138	39	29	134
	45-49	826	1	4	25
	50 and over	115	5	1	500
	All ages	\$ 441,743	\$ 398	\$ 388	103%
1960..... (9)	0	\$ 43,066	\$ 15	\$ 11	136%
	1	16,633	1	4	25
	2-4	19,682	0	5	0
	5-9	25,902	10	8	125
	10-14	28,690	25	11	227
	15-19	72,940	34	32	106
	20-24	81,047	55	50	110
	25-29	61,956	52*	49	106
	30-34	60,893	90	89	101
	35-39	49,070	156	113	138
	40-44	9,894	33	33	100
	45-49	587	0	3	0
	50 and over	94	0	1	0
	All ages	\$ 470,454	\$ 471	\$ 409	115%

* One female war death for \$2,000 is included.

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1961..... (8)	0	\$ 44,119	\$ 9	\$ 12	75%
	1	17,465	3	4	75
	2-4	21,250	3	5	60
	5-9	27,060	15	8	188
	10-14	32,471	0	12	0
	15-19	86,236	38	36	106
	20-24	98,285	99	59	168
	25-29	73,785	48	53	91
	30-34	70,901	92†	94	98
	35-39	55,151	102	116	88
	40-44	11,178	38	34	112
	45-49	505	0	2	0
	50 and over	68	0	0	.....
	All ages	\$ 538,474	\$ 447	\$ 435	103%
1962..... (7)	0	\$ 44,946	\$ 15	\$ 14	107%
	1	18,082	5	5	100
	2-4	21,688	5	5	100
	5-9	28,370	2	8	25
	10-14	30,600	21	10	210
	15-19	102,560	54	42	129
	20-24	121,890	84	71	118
	25-29	83,793	60	57	105
	30-34	80,583	95	96	99
	35-39	60,428	142	116	122
	40-44	11,658	43	33	130
	45-49	470	4	2	200
	50 and over	64	0	0	.....
	All ages	\$ 605,132	\$ 530	\$ 459	115%
1963..... (6)	0	\$ 57,655	\$ 20	\$ 20	100%
	1	20,452	9	6	150
	2-4	28,877	5	7	71
	5-9	40,405	0	10	0
	10-14	46,691	13	14	93
	15-19	131,039	32	53	60
	20-24	159,771	42	90	47
	25-29	109,979	110	70	157
	30-34	97,270	134	104	129
	35-39	72,286	96	119	81
	40-44	13,957	23	36	64
	45-49	536	2	2	100
	50 and over	96	2	0	.....
	All ages	\$ 779,014	\$ 488	\$ 531	92%
1964..... (5)	0	\$ 64,927	\$ 27	\$ 25	108%
	1	22,318	5	8	63
	2-4	33,031	9	9	100
	5-9	46,077	19	11	173
	10-14	54,303	14	14	100
	15-19	166,779	92	65	142
	20-24	208,923	88	113	78
	25-29	142,960	69	84	82
	30-34	115,999	111	110	101
	35-39	80,080	136	115	118
	40-44	16,431	24	37	65
	45-49	777	2	2	100
	50 and over	115	0	0	.....
	All ages	\$ 952,720	\$ 596	\$ 593	101%

† One female war death for \$1,000 is included.

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1965..... (4)	0	\$ 68,503	\$ 24	\$ 29	83%
	1	24,752	4	10	40
	2-4	35,666	11	11	100
	5-9	52,354	6	12	50
	10-14	60,679	17	14	121
	15-19	211,266	81‡	79	103
	20-24	250,883	103	130	79
	25-29	169,378	130	92	141
	30-34	127,804	86	112	77
	35-39	82,956	121	106	114
	40-44	17,630	34	35	97
	45-49	1,044	0	3	0
	50 and over	186	0	0	.....
	All ages	\$ 1,103,101	\$ 617	\$ 633	97%
1966..... (3)	0	\$ 75,423	\$ 21	\$ 35	60%
	1	26,143	16	11	145
	2-4	41,271	7	14	50
	5-9	55,810	7	13	54
	10-14	65,647	17	13	131
	15-19	253,936	152	88	173
	20-24	310,101	140	149	94
	25-29	207,268	176	102	173
	30-34	143,075	143	109	131
	35-39	88,452	90	92	98
	40-44	18,145	18	29	62
	45-49	1,174	3	3	100
	50 and over	219	2	0	.....
	All ages	\$ 1,286,664	\$ 792	\$ 658	120%
1967..... (2)	0	\$ 86,131	\$ 56	\$ 44	127%
	1	29,477	7	14	50
	2-4	44,529	6	17	35
	5-9	63,683	5	16	31
	10-14	73,374	5	11	45
	15-19	295,524	100	76	132
	20-24	438,080	137	171	80
	25-29	280,400	113	114	99
	30-34	187,059	79	112	71
	35-39	116,471	117	91	129
	40-44	41,625	46	48	96
	45-49	3,542	0	6	0
	50 and over	346	0	0	.....
	All ages	\$ 1,660,241	\$ 671	\$ 720	93%
1968..... (1)	0	\$ 99,849	\$ 109	\$ 159	69%
	1	36,015	17	18	94
	2-4	55,243	41	23	178
	5-9	78,804	19	22	86
	10-14	89,997	12	10	120
	15-19	382,123	129	83	155
	20-24	656,112	361	203	178
	25-29	423,680	239	137	174
	30-34	271,065	136	123	111
	35-39	166,647	115	87	132
	40-44	75,408	23	57	40
	45-49	6,977	8	8	100
	50 and over	597	3	1	300
	All ages	\$ 2,342,517	\$ 1,212	\$ 931	130%

‡ One female war death for \$10,000 is included.

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
All years... (1-15)	0	\$ 971,918	\$ 404	\$ 445	91%
	1	351,793	103	118	87
	2-4	437,099	142	137	104
	5-9	570,473	145	157	92
	10-14	613,489	184	165	112
	15-19	1,947,303	849‡	674	126
	20-24	2,672,139	1,402	1,310	107
	25-29	1,806,679	1,369*	1,021	134
	30-34	1,393,169	1,427†	1,426	100
	35-39	964,912	1,681	1,485	113
	40-44	255,303	471	514	92
	45-49	18,756	53	53	100
	50 and over	2,327	33	8	413
	All ages	\$12,005,360	\$8,263	\$7,513	110%

* One female war death for \$2,000 is included.

† One female war death for \$1,000 is included.

‡ One female war death for \$10,000 is included.

APPENDIX II

DEFINITION OF "WAR DEATHS"

War deaths are identified by the 1961 Committee Code 99. In coding for war deaths, some companies may refer to the Report of Casualty form furnished by the various armed forces. Item 2 of this form has two boxes to indicate whether death arose in "battle" or in "non-battle." In addition to all "battle" deaths, it should be noted that many (but not all) "non-battle" deaths should be coded 99. For example, a death arising after battle, but due to burns received in battle, may be coded by the government as a "non-battle" death. In cases like this, a review of the comments given in Item 2 is necessary to determine the full facts and whether death was due to the operations of war and hence a code 99.

Questions may arise with regard to the coding of military service deaths outside the combat area which may nevertheless be attributable to the Vietnam operation. For example, a plane on the way to Vietnam may crash far outside the Vietnam area, or a death in Japan may be the result of activity for the benefit of the Vietnam engagement. Such deaths should be treated as due to the operations of war and coded 99.

Military service deaths which cannot be tied in with the Vietnam engagement should not be treated as due to operations of war. For example, the Committee Code 89 would apply to a death resulting from a plane crash in Germany. Deaths occurring in the United States and Canada, not tied in with the Vietnam engagement, should also be assumed not due to war.

Due to the relatively low death rate from disease among troops in Vietnam, no deaths from disease should be considered as war deaths.