

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1970 REPORTS**

**TRANSACTIONS**

**1970 REPORTS OF MORTALITY AND MORBIDITY EXPERIENCE**

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**REPORTS OF THE COMMITTEE ON MORTALITY UNDER  
ORDINARY INSURANCES AND ANNUITIES**

**I. MORTALITY UNDER STANDARD ORDINARY  
INSURANCE ISSUES BETWEEN 1967  
AND 1968 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 eighteen 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 1967 and 1968 policy anniversaries and the five years of experience between 1963 and 1968 policy anniversaries. The mortality experience between 1967 and 1968 anniversaries, excluding war deaths, shows a slight increase over the previous study. This increase is evident in each of the three principal divisions of the study: medically examined issues of the fifteen most recent policy years, non-medical issues of the fifteen most recent policy years, and all issues of sixteen or more policy years.

Recent nonmedical issues observed between 1963 and 1968 anniversaries continue to show higher over-all mortality than comparable medical issues, with the greatest difference at issue ages 25 and over. Female mortality on all issues continues to average about 60 per cent of male mortality.

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#### INTRODUCTION

**T**HIS report covers the intercompany experience under Standard Ordinary insurance issues between 1967 and 1968 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 experience is shown for medical and nonmedical issues combined, with a portion of it shown for medical and nonmedical issues separately. An additional table comparing experience under premium-paying and fully paid-up (excluding reduced paid-up) policies has been included.

Aggregate mortality ratios, excluding war deaths, for each of the above three areas have increased slightly. In previous studies the trend had been toward slight decreases in mortality ratios for all three areas. Select medical mortality has increased from 93.2 per cent of expected last year to 94.2 per cent for the 1967-68 study. The select nonmedical mortality ratio has increased from 107.0 to 109.9 per cent and the mortality ratio for ultimate experience increased from 94.3 to 95.5 per cent. The aggregate mortality ratio, including war deaths, for select medical business increased from 93.9 to 95.2 per cent in the 1967-68 study, and for nonmedical business there was an increase from 119.9 to 128.3 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 between anniversaries in 1967 and 1968. In Tables 5, 7, 9, 10, 11, and 12, the war deaths are excluded between 1964 and 1968 anniversaries only, since war deaths reported between 1963 and 1964 comprised less than 1 per cent of all the war deaths reported between 1963 and 1968 anniversaries and were not available in suitable form. The following tabulation shows the war deaths and the ratio of war deaths to total deaths experienced between 1963 and 1968 anniversaries:

**WAR DEATHS AND THE RATIO OF WAR DEATHS  
TO TOTAL DEATHS EXPERIENCED BETWEEN 1963 AND  
1968 ANNIVERSARIES**  
**MALE LIVES EXCEPT AS INDICATED FOR 1965-68**

(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
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	§
1963-64.....	77	§	164	0.3	5	§
Total.....	\$8,408	0.5%	\$28,496	7.6%	\$1,432	§

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

† Female war deaths of \$1,000 for 1966-67 are included.

§ Negligible.

The names of the eighteen contributing companies and their proportionate contributions to the total exposure are given in Table A of Appendix I. The exclusion of the data of one company which was unable to contribute their 1967-68 experience to this report does not appreciably affect the over-all results.

**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 \$108,684,296,000 and actual claims of \$347,404,000. This represents a decrease in the exposure from the preceding year of 7.4 per cent, all of which was due to the exclusion of the data from one contributor in the current study. Not included in the above claim total were 319 policies, representing \$3,526,000 in claims, reported as deaths resulting from operations of war between 1967 and 1968 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 fifteen policy years combined. The experience by year of issue is presented in Table 2. The detailed experience by age groups 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 1967 to 1968 anniversaries was 94.2 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

In the current study, issue age group 0 again has a high mortality ratio (165.0 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 154.6 per cent for males and 117.0 per cent for females, issue age 0, exposed between 1963

TABLE 1  
**STANDARD MEDICALLY EXAMINED ISSUES OF 1953 TO 1967**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1967 AND 1968 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		Excluding War Deaths	Including War Deaths
0.....	\$ 219,650	\$ 193	\$ 0	\$ 117	165.0%	165.0%
1.....	236,769	107	0	88	121.6	121.6
2-4.....	291,913	182	2	115	158.3	160.0
5-9.....	566,503	469	142	286	164.0	213.6
10-14.....	835,093	1,429	182	689	207.4	233.8
15-19.....	2,129,782	2,153	713	2,046	105.2	140.1
20-24.....	7,821,972	6,924	1,141	7,001	98.9	115.2
25-29.....	14,859,797	15,855	671	16,294	97.3	101.4
30-34.....	21,031,046	35,839	463	35,655	100.5	101.8
35-39.....	22,342,166	55,389	141	59,167	93.6	93.9
40-44.....	17,958,445	68,524	56	73,665	93.0	93.1
45-49.....	11,071,127	63,573	15	67,582	94.1	94.1
50-54.....	5,747,237	46,123	0	51,628	89.3	89.3
55-59.....	2,487,270	29,116	0	31,954	91.1	91.1
60-64.....	834,095	14,478	0	15,668	92.4	92.4
65-69.....	214,766	5,646	0	5,472	103.2	103.2
70 and over....	36,665	1,404	0	1,343	104.5	104.5
All ages.....	\$108,684,296	\$347,404	\$3,526	\$368,770	94.2%	95.2%

and 1968 anniversaries. Mortality ratios between 1967 and 1968 anniversaries (excluding war deaths) for issue age groups 1, 2-4, 5-9, and 10-14 were 121.6, 158.3, 164.0, and 207.4 per cent, respectively.

War deaths increased the mortality ratio for the issue age group 5-9 by 49.6 percentage points and for issue age groups 10-14, 15-19, and

## COMMITTEE ON MORTALITY--ORDINARY

20-24 by 26.4, 34.9, and 16.3 percentage points, respectively. War deaths caused an increase of 1.0 percentage points in the all-ages mortality ratio, compared with an increase of 0.7 percentage points in last year's study and 0.4 percentage points two years ago.

Mortality ratios by year of issue (excluding war deaths) ranged from

TABLE 2

STANDARD MEDICALLY EXAMINED ISSUES OF 1953 TO 1967  
 MALE AND FEMALE LIVES COMBINED  
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)  
 EXPERIENCE BETWEEN 1967 AND 1968 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
1953.....	15	\$ 3,044,368	\$ 22,026	\$ 68	\$ 24,054	91.6%	91.9%
1954.....	14	3,653,689	23,866	65	25,776	92.6	92.8
1955.....	13	4,553,675	26,294	123	28,744	91.5	91.9
1956.....	12	5,045,716	26,209	129	27,892	94.0	94.4
1957.....	11	6,067,416	27,336	121	28,098	97.3	97.7
1958.....	10	6,592,746	28,652	130	28,728	99.7	100.2
1959.....	09	6,842,461	26,967	357	27,731	97.2	98.5
1960.....	08	6,106,966	23,630	51	23,927	98.8	99.0
1961.....	07	6,346,707	20,454	99	23,015	88.9	89.3
1962.....	06	6,609,260	19,901	189	21,562	92.3	93.2
1963.....	05	8,186,677	22,693	283	23,955	94.7	95.9
1964.....	04	9,252,321	21,263	295	23,978	88.7	89.9
1965.....	03	10,736,485	22,207	703	23,426	94.8	97.8
1966.....	02	12,068,195	18,662	565	20,663	90.3	93.1
1967.....	01	13,577,614	17,244	348	17,221	100.1	102.2
All years of issue.....		\$108,684,296	\$347,404	\$3,526	\$368,770	94.2%	95.2%

88.7 per cent for 1964 (policy year 4) to 100.1 percent for 1967 (policy year 1).

The following tabulation gives an indication of the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 94.2 per cent. War deaths were excluded in determining these ratios.

	Number of Companies	Proportion of Actual Deaths
Percentage points below average:		
More than 20.....	1	0.9%
10-20.....	3	8.5
5-10.....	3	8.3
0-5.....	6	32.0
Percentage points above average:		
0-5.....	.....	.....
5-10.....	4	45.9
10-20.....	1	4.4

### *Nonmedical Issues*

The current experience during the first fifteen policy years is based on an exposure of \$65,879,794,000 and actual claims of \$76,778,000. This represents a decrease in the exposure from the preceding year of 1.7 per cent, all of which was due to the exclusion of the data from one contributor in the current study. Not included in the above claim total were 1,716 policies, representing \$12,831,000 in claims resulting from operations of war and reported as deaths between 1967 and 1968 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 37.7 per cent of the total experience on recent Ordinary issues, measured by the exposures during the first fifteen policy years, as compared with 36.3 per cent last year. For all age groups combined, the proportion of non-medical issues in the first policy year for 1967-68 was 43.1 per cent, compared with 39.7 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 1967 and 1968 anniversaries:

**NONMEDICAL EXPOSURES AS PERCENTAGE  
OF TOTAL EXPOSURES**

Ages at Issue	Policy Year 1	Policy Years 1-15
0-9.....	88.6%	82.8%
10-19.....	88.4	82.0
20-29.....	67.5	59.7
30-39.....	22.8	21.4
40-49.....	2.8	2.2
50 and over.....	0.2	0.1
All ages.....	43.1%	37.7%

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 ratio, excluding war deaths, for the period from 1967 to 1968 anniversaries was 109.9 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

TABLE 3  
STANDARD NONMEDICAL ISSUES OF 1953 TO 1967  
MALE AND FEMALE LIVES COMBINED  
(INCLUDING DATA NOT SUBDIVIDED BY SEX)  
EXPERIENCE BETWEEN 1967 AND 1968 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 . . . . .	\$ 2,537,468	\$ 1,228	\$ 0	\$ 1,367	89.8%	89.8%
1 . . . . .	936,626	364	0	395	92.2	92.2
2–4 . . . . .	1,196,302	410	0	483	84.9	84.9
5–9 . . . . .	1,661,574	895	117	698	128.2	145.0
10–14 . . . . .	2,493,171	2,133	561	1,809	117.9	148.9
15–19 . . . . .	10,979,713	12,122	5,575	9,846	123.1	179.7
20–24 . . . . .	18,511,827	16,383	4,564	15,077	108.7	138.9
25–29 . . . . .	15,068,197	15,508	1,419	14,474	107.1	116.9
30–34 . . . . .	8,189,979	14,059	503	13,138	107.0	110.8
35–39 . . . . .	3,624,560	10,556	86	9,608	109.9	110.8
40–44 . . . . .	625,047	2,647	6	2,518	105.1	105.4
45–49 . . . . .	42,216	393	0	296	132.8	132.8
50 and over . . . . .	13,114	80	0	136	58.8	58.8
All ages . . . . .	\$65,879,794	\$76,778	\$12,831	\$69,845	109.9%	128.3%

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

In the current study, the mortality ratio for issue age group 15-19 continues to be high (123.1 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 over-all nonmedical mortality ratio being increased by 56.6 and 18.4 percentage points, respectively, if war deaths are included. War deaths increased the over-all nonmedical mortality ratio in last year's report by 12.9 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 1953-67**  
**EXPERIENCE BETWEEN 1967 AND 1968 ANNIVERSARIES**  
**BY AGE AT ISSUE**  
**POLICY YEARS 1-15 COMBINED**  
(Expected Deaths on 1955-60 Select Basic Tables)

<b>AGES AT ISSUE</b>	<b>MORTALITY RATIOS</b>	
	<b>Unadjusted</b>	<b>Adjusted</b>
35-39.....	109.9%	110.2%
40-44.....	105.1	119.4
45-49.....	132.8	135.1
50 and over.....	58.8	59.3
Ages 35 and over.....	108.9%	111.9%

The unadjusted mortality ratios understate the true mortality on non-medical business to a significant degree at issue ages 40–44. Except for one company, whose limit for nonmedical issues was age 50 until 1959, non-medical 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.

The nonmedical mortality ratios by year of issue for all ages at issue combined during the period from 1967 to 1968 anniversaries are presented in Table 4 on an unadjusted basis. The highest mortality ratio by year of

TABLE 4  
STANDARD NONMEDICAL ISSUES OF 1953 TO 1967  
MALE AND FEMALE LIVES COMBINED  
(INCLUDING DATA NOT SUBDIVIDED BY SEX)  
EXPERIENCE BETWEEN 1967 AND 1968 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*	Includ-ing War Deaths*
1953.....	15	\$ 1,416,796	\$ 3,361	\$ 79	\$ 3,426	98.1%	100.4%
1954.....	14	1,455,704	2,730	67	2,906	93.9	96.2
1955.....	13	1,696,847	2,901	74	2,916	99.5	102.0
1956.....	12	2,284,002	4,304	116	4,238	101.6	104.3
1957.....	11	3,553,786	6,227	199	6,127	101.6	104.9
1958.....	10	3,576,163	5,257	317	5,139	102.3	108.5
1959.....	09	3,701,063	5,046	419	4,634	108.9	117.9
1960.....	08	3,807,722	4,075	470	4,378	93.1	103.8
1961.....	07	4,228,183	4,954	472	4,440	111.6	122.2
1962.....	06	4,307,335	4,517	821	4,186	107.9	127.5
1963.....	05	5,192,749	5,443	1,110	4,747	114.7	138.0
1964.....	04	6,007,774	6,268	1,213	5,243	119.5	142.7
1965.....	03	6,929,909	7,203	2,351	5,702	126.3	167.6
1966.....	02	7,455,113	6,047	2,675	5,271	114.7	165.5
1967.....	01	10,266,648	8,445	2,448	6,492	130.1	167.8
All years of issue.....		\$65,879,794	\$76,778	\$12,831	\$69,845	109.9%	128.3%

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

issue (excluding war deaths) was 130.1 per cent for issue year 1967 (policy year 1). Mortality ratios for policy year 1 have tended to be high for the last five experience years. The mortality ratios for issue years 1963–66 (policy years 2–5) are also high, ranging from 114.7 to 126.3 per cent.

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 109.9 per cent. War deaths were excluded in determining these ratios.

	Number of Companies	Proportion of Actual Deaths
<b>Percentage points below average:</b>		
More than 20.....	2	2.4%
10–20.....		
5–10.....	6	10.4
0–5.....	4	34.2
<b>Percentage points above average:</b>		
0–5.....		
5–10.....	5	51.8
10–20.....	1	1.2

#### *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.<sup>1</sup> Table 5 presents side by side the experience on medical and nonmedical issues as reported to the Committee for the five-year period from 1963 to 1968 anniversaries. The 1955–60 Male, Female, and Male and Female Combined Select Basic Tables, respectively, were used to calculate expected deaths for the male

<sup>1</sup> 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.

experience, female experience, and experience reported without subdivision by sex. War deaths have been excluded from the 1964–68 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,

TABLE 5

## COMPARISON OF MEDICAL AND NONMEDICAL EXPERIENCE\*

MALE AND FEMALE LIVES COMBINED

(INCLUDING DATA NOT SUBDIVIDED BY SEX)

BETWEEN 1963 AND 1968 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.....	129	91	123	71	171	100	162	102	144	91
1-9.....	56	76	121	99	102	113	150	124	118	104
10-19....	123	122	115	123	114	110	100	96	111	115
20-24....	104	122	105	108	103	97	97	95	102	106
25-29....	92	115	95	103	103	106	94	102	97	106
30-34....	132	118	109	118	97	110	89	97	99	108
35-39....	96	119†	94	121†	96	110†	93	107†	95	112†
40-44....	87	132†	96	120†	99	113†	98	124†	97	120†
45-49....	92	76†	95	127†	95	112†	97	124†	95	120†
50 and over	96	52†	88	69†	92	138†	97	107†	93	103†
All ages	97	117†	94	112†	96	107†	96	103†	96	109†
Ratio of Nonmedical to Medical Mortality Ratios										
0.....	71%		58%		58%		63%		63%	
1-9.....	136		82		111		83		88	
10-19....	99		107		96		96		104	
20-24....	117		103		94		98		104	
25-29....	125		108		103		109		109	
30-34....	89		108		113		109		109	
35-39....	124†		129†		115†		115†		118†	
40-44....	152†		125†		114†		127†		124†	
45-49....	83†		134†		118†		128†		126†	
50 and over	54†		78†		150†		110†		111†	

\* Excluding war deaths between 1964 and 1968 anniversaries.

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

for policy years 1-15 combined, nonmedical mortality exceeds medical mortality appreciably at all issue ages 25 and over; the excess ranges from about 9 per cent at issue ages 25-34 to about 26 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.

**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 \$44,914,494,000 and actual claims of \$791,789,000, excluding war deaths. This represents a decrease in the exposures from the preceding year of 6.6 per cent, all of which is due to the exclusion of the data from one contributor in the current study. Deaths resulting from operations of war between 1967 and 1968 anniversaries amounted to 449 policies, representing \$750,000 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 107.8 per cent excluding war deaths and 151.8 per cent including war deaths; the 15-19 group showed 100.8 per cent and 115.5 per cent; and the 25-29 group showed 85.0 per cent and 96.0 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 1967 to 1968 anniversaries was 95.5 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

The tabulation below gives an indication of the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 95.5 per cent. War deaths were excluded in determining the ratios.

	Number of Companies	Proportion of Actual Deaths
<b>Percentage points below average:</b>		
10-20.....	1	0.3%
5-10.....	3	5.7
0-5.....	4	30.1
<b>Percentage points above average:</b>		
0-5.....	10	63.9

TABLE 6  
STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS  
MALE AND FEMALE LIVES COMBINED  
(INCLUDING DATA NOT SUBDIVIDED BY SEX)  
EXPERIENCE BETWEEN 1967 AND 1968 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			MOR-TALITY* RATIO ON 1941 CSO TABLE	MOR-TALITY* RATIO ON 1958 CSO TABLE
				Expected Deaths	Mortality Ratio			
		Exclud-ing War Deaths	War Deaths	Exclud-ing War Deaths	Includ-ing War Deaths			
15-19.....	\$ 863,173	\$ 649	\$ .95	\$ 644	100.8%	115.5%	33.3%	46.6%
20-24.....	780,138	848	347	787	107.8	151.8	42.1	58.7
25-29.....	607,198	534	69	628	85.0	96.0	28.2	44.1
30-34.....	931,061	1,022	50	1,103	92.7	97.2	27.5	48.2
35-39.....	2,234,045	3,589	59	3,576	100.4	102.0	30.4	55.2
40-44.....	4,143,530	10,841	26	11,006	98.5	98.7	36.5	61.4
45-49.....	5,858,637	25,933	60	28,404	91.3	91.5	44.2	68.5
50-54.....	6,961,734	50,142	10	56,038	89.5	89.5	49.9	71.5
55-59.....	7,026,615	84,712	29	90,014	94.1	94.1	57.1	77.0
60-64.....	6,050,197	114,316	2	124,503	91.8	91.8	60.7	77.7
65-69.....	3,984,000	123,171	3	126,990	97.0	97.0	66.7	81.5
70-74.....	2,830,357	128,258	0	136,991	93.6	93.6	65.5	78.1
75-79.....	1,634,922	120,944	0	118,282	102.3	102.3	72.2	87.4
80-84.....	744,668	79,688	0	81,225	98.1	98.1	71.1	85.0
85-89.....	213,143	35,384	0	36,266	97.6	97.6	76.0	92.5
90-95.....	51,076	11,758	0	12,900	91.1	91.1	73.2	88.7
All ages	\$44,914,494	\$791,789	\$750	\$829,357	95.5%	95.6%	62.3%	79.6%

\* Excluding war deaths between 1967 and 1968 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 contributed medical data, and eleven companies contributed nonmedical data. The results of this experience between 1963 and 1968 anniversaries

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 1963 AND 1968 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	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO†		RATIO‡ OF NON- MEDICAL TO MEDICAL MOR- TALITY RATIOS
			Excluding War Deaths		War Deaths				
	Medical	Nonmedical	Medical	Non- medi- cal	Medi- cal	Non- medi- cal	Medical	Non- medi- cal	
15-19	\$ 359,063	\$ 1,529,853	\$ 305	\$ 1,233	\$ 8	\$ 53	110.9%	109.3%	98.6%
20-24	379,925	626,226	365	689	83	138	91.0	105.0	115.4
25-29	628,045	472,241	595	530	39	37	88.5	107.7	121.7
30-34	1,180,250	995,437	1,449	1,240	52	23	101.9	102.3	100.4
35-39	2,630,188	2,449,121	4,144	3,744	46	29	97.7	97.9	100.2
40-44	5,820,683	3,148,836	14,564	8,360	47	7	91.9	104.7	113.9
45-49	10,424,915	2,819,398	46,892	12,242	48	0	89.7	93.5	104.2
50-54	14,131,366	2,049,114	100,596	15,549	0	0	87.0	99.6	114.5
55-59	15,214,841	1,463,915	180,934	18,437	10	0	91.9	102.7	111.8
60-64	12,993,267	817,797	251,204	16,371	2	0	93.4	97.8	104.7
65-69	8,548,699	432,250	261,958	14,089	3	0	95.7	101.7	106.3
70-74	5,974,886	276,699	275,775	13,940	0	0	95.2	103.3	108.5
75-79	3,355,077	146,825	238,709	10,905	0	0	98.2	101.7	103.6
80-84	1,463,570	50,023	160,006	5,709	0	0	100.5	105.1	104.6
85-89	423,989	9,751	69,732	1,433	0	0	96.4	87.1	90.4
90-95	84,002	1,117	20,666	250	0	0	98.3	91.6	93.2
All ages	\$83,612,766	\$17,288,603	\$1,627,894	\$124,721	\$338	\$287	94.9%	100.5%	105.9%

\* Based on medical data from twelve companies and nonmedical data from eleven companies.

† Excluding war deaths between 1964 and 1968 anniversaries.

are shown in Table 7. The experience between 1963 and 1968 anniversaries comprises 44.3 per cent of the total ultimate experience during this period (as compared with 42.0 per cent for the previous study).

For practically all attained age groups the nonmedical mortality is higher than the medical. War deaths have been excluded between 1964 and 1968 anniversaries.

*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 1968 anniversaries is shown in Table 8 for standard medical and nonmedical

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 1968 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		Mor- tality Ratio‡	Exposed to Risk	Actual Deaths		Mor- tality Ratio‡
		Excluding War Deaths	War Deaths			Excluding War Deaths	War Deaths	
15-19	\$ 3,139,821	\$ 2,463	\$139	105.6%	\$ 145,757	\$ 82	\$ 20	70.7%
20-24	1,365,735	1,682	355	122.7	1,178,951	1,273	239	109.7
25-29	1,390,056	1,512	89	104.1	610,241	570	38	93.0
30-34	2,902,945	3,432	92	99.7	593,922	657	9	96.5
35-39	7,402,229	11,670	88	99.0	1,321,328	2,284	17	111.0
40-44	12,801,416	33,721	72	98.4	2,497,884	6,175	4	98.1
45-49	17,797,527	80,584	49	92.5	3,467,873	15,059	0	94.5
50-54	21,303,140	155,676	0	90.2	4,126,372	29,820	2	93.8
55-59	21,339,699	263,411	10	95.6	4,414,857	50,142	1	91.4
60-64	17,359,090	343,397	2	95.5	4,295,575	77,567	0	89.7
65-69	10,924,693	341,971	3	97.2	3,734,548	102,520	1	87.2
70-74	7,547,873	351,676	0	95.9	2,711,074	114,625	0	87.9
75-79	4,154,841	302,776	0	100.4	1,663,621	110,784	0	92.1
80-84	1,790,040	197,319	0	101.1	819,361	83,822	0	93.8
85-89	460,744	76,864	0	97.7	303,458	48,434	0	93.8
90-95	89,159	19,741	0	88.7	80,040	16,915	0	83.6
All ages	\$131,769,008	\$2,187,895	\$899	96.6%	\$31,964,862	\$660,729	\$331	90.6%

\* Based on data from thirteen companies.

† Based on data from ten companies.

‡ Excluding war deaths between 1964 and 1968 anniversaries.

issues combined. Thirteen companies submitted their experience separately on premium-paying policies, and ten companies did so on fully paid-up policies; the premium-paying data submitted constituted 71.5 per cent and the fully paid-up data 17.4 per cent of the total ultimate experience of all companies (both percentages based on exposures for the four-year period).

Mortality ratios are higher on premium-paying than on fully paid-up policies except at ages 35-39 and 45-54. War deaths have been excluded during the entire experience period, between 1964 and 1968 anniversaries.

#### EXPERIENCE BY SEX

All the eighteen contributing companies submitted all or the major portion of both their medical and nonmedical select data separately for males and females. For the period from 1967 to 1968 anniversaries, the select sex-distinct data comprise 99.0 per cent of the medical exposures and 99.7 per cent of the nonmedical exposures.

The detailed select experience by sex for the period from 1967 to 1968 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 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 1963 and 1968 anniversaries for the select and ultimate data. War deaths between 1964 and 1968 anniversaries have been excluded from these tables.

The mortality ratios by age group at issue and sex for the first fifteen policy years combined, covering the experience from 1963 to 1968 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 columns of these tables show 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 20-34 and 70 and over for medical issues and at issue ages 0 and 25-34 for nonmedical issues. The ratios of female to male mortality are generally lower on nonmedical than on medical business at ages 10 and over. At the younger ages the opposite is true.

Table 11 presents side by side the experience for the five-year period from 1963 to 1968 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 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.

TABLE 9  
 COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE  
 STANDARD MEDICALLY EXAMINED ISSUES  
 OBSERVED BETWEEN 1963 AND 1968 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	Female	Male	Female	Male	Male	Female	
0	\$ 676,117	\$ 338,931	\$ 617	\$ 158	0	154.6%	117.0%	56.1%
1	755,780	379,915	341	67	0	99.7	51.5	38.8
2-4	947,214	394,459	473	58	2	116.8	51.3	30.1
5-9	2,012,287	771,308	1,605	168	195	145.9	77.1	28.6
10-14	3,427,652	770,176	4,008	457	318	126.9	195.3	52.7
15-19	9,376,569	1,107,638	10,104	496	1,336	104.7	119.8	42.1
20-24	34,805,663	1,949,590	31,411	1,563	2,576	100.7	145.1	87.7
25-29	69,269,266	2,597,983	71,000	2,462	2,053	95.6	145.1	93.0
30-34	99,919,185	4,344,160	160,340	5,929	1,239	99.0	123.6	89.8
35-39	103,292,919	6,267,928	252,605	9,712	399	94.5	103.7	69.0
40-44	79,303,552	7,492,002	313,235	17,486	194	95.8	101.7	62.4
45-49	47,330,354	5,667,103	283,952	17,169	20	95.6	91.5	52.6
50-54	23,965,517	3,365,617	212,267	13,381	0	94.4	89.7	46.2
55-59	10,173,924	1,651,463	126,492	8,928	0	92.2	81.4	44.7
60-64	3,281,089	672,013	60,491	5,997	0	94.8	88.6	50.9
65-69	803,538	208,823	20,439	3,339	0	96.9	105.5	67.1
70 and over	120,095	38,663	4,024	850	0	88.5	122.0	77.6
All ages	\$489,460,721	\$38,017,772	\$1,553,404	\$88,220	\$8,332	95.6%	97.3%	56.5%

\* Excluding war deaths between 1964 and 1968 anniversaries.

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

TABLE 10  
 COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE  
 STANDARD NONMEDICAL ISSUES  
 OBSERVED BETWEEN 1963 AND 1968 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	Female	Male	Fe- male	Male	Fe- male	Male	Female	
0	\$ 7,484,373	\$ 4,709,996	\$ 4,027	\$ 1,895	\$ 0	\$ 0	90.2%	91.4%	77.7%
1	2,746,809	1,674,728	1,253	505	0	0	96.3	92.3	67.2
2–4	3,475,513	1,901,499	1,512	553	5	0	98.8	94.0	66.4
5–9	5,463,119	2,282,308	2,957	654	192	1	117.6	103.2	50.9
10–14	9,091,876	2,338,994	7,463	849	1,037	2	99.7	136.3	45.2
15–19	42,182,229	7,011,252	48,736	3,053	11,503	20	117.1	127.5	38.2
20–24	72,092,849	8,946,635	64,777	4,862	9,993	15	106.6	107.2	59.3
25–29	62,610,728	5,995,074	62,979	4,451	3,977	0	104.6	127.2	75.5
30–34	34,367,692	5,015,709	58,243	5,499	1,345	3	108.2	107.0	72.0
35–39	14,156,607	3,668,181	42,474	6,651	210	5	110.7	118.9	67.2
40–44	2,417,801	780,456	12,281	1,929	21	0	108.5	103.8	55.9
45–49	216,001	55,358	2,206	245	0	0	117.5	103.8	46.7
50 and over	56,927	8,869	626	47	0	0	99.1	100.0	47.4
All ages	\$256,362,524	\$44,389,059	\$309,534	\$31,193	\$28,283	\$46	108.3%	112.3%	61.0%

\* Excluding war deaths between 1964 and 1968 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.

TABLE 11

**COMPARISON BY SEX OF MEDICAL AND NONMEDICAL EXPERIENCE\***  
**BETWEEN 1963 AND 1968 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			
	Medi- cal %	Non- medi- cal %	Medi- cal %	Non- medi- cal %	Medi- cal %	Non- medi- cal %	Medi- cal %	Non- medi- cal %		
Male Experience: Mortality Ratios on 1955-60 Male Select Basic Table										
0.....	149	89	91	64	235	106	157	112	155	90
1-9.....	68	74	137	99	117	121	162	128	131	107
10-19.....	108	123	117	124	115	109	100	92	110	115
20-24.....	101	122	105	109	102	96	95	94	101	107
25-29.....	91	115	94	102	102	105	92	100	96	105
30-34.....	130	120	108	119	97	111	89	96	99	108
35-39.....	97	118†	94	123†	96	111†	92	104†	94	111†
40-44.....	86	135†	96	120†	98	113†	96	125†	96	121†
45-49.....	92	81†	94	126†	96	116†	98	128†	96	123†
50 and over.....	97	58†	88	66†	93	129†	98	119†	94	102†
All ages.....	96	118†	94	113†	96	107†	95	101†	96	109†
Female Experience: Mortality Ratios on 1955-60 Female Select Basic Table										
0.....	76	95	239	92	61	90	150	83	117	91
1-9.....	17	81	65	99	59	94	98	116	64	97
10-19.....	448	140	86	123	101	125	120	133	147	129
20-24.....	164	127	138	95	173	105	112	103	145	107
25-29.....	159	118	139	129	171	126	119	135	145	127
30-34.....	188	105	112	110	112	102	118	111	124	107
35-39.....	93	122†	97	116†	96	110†	127	133†	104	119†
40-44.....	109	122†	89	124†	107	116†	103	106†	102	115†
45-49.....	83	56†	109	144†	89	104†	84	110†	91	109†
50 and over.....	78	0†	89	122†	90	110†	92	132†	89	104†
All ages.....	98	114†	96	112†	97	110†	98	118†	97	113†
Male Experience: Ratio of Nonmedical to Medical Mortality Ratios										
0.....	60%	70%	45%	71%	71%	71%	71%	71%	58%	
1-9.....	109	72	103	79	79	79	79	79	82	
10-19.....	114	106	95	92	92	92	92	92	105	
20-24.....	121	104	94	99	99	99	99	99	106	
25-29.....	126	109	103	109	109	109	109	109	109	
30-34.....	92	110	114	108	108	108	108	108	109	
35-39.....	122†	131†	116†	113†	113†	113†	113†	113†	118†	
40-44.....	157†	125†	115†	130†	130†	130†	130†	130†	126†	
45-49.....	88†	134†	121†	131†	131†	131†	131†	131†	128†	
50 and over.....	60†	75†	139†	121†	121†	121†	121†	121†	109†	
Female Experience: Ratio of Nonmedical to Medical Mortality Ratios										
0.....	125%	38%	148%	55%	55%	55%	55%	55%	78%	
1-9.....	476	152	159	118	118	118	118	118	152	
10-19.....	31	143	124	111	111	111	111	111	88	
20-24.....	77	69	61	92	92	92	92	92	74	
25-29.....	74	93	74	113	113	113	113	113	88	
30-34.....	56	98	91	94	94	94	94	94	86	
35-39.....	131†	120†	115†	105†	105†	105†	105†	105†	114†	
40-44.....	112†	139†	108†	103†	103†	103†	103†	103†	113†	
45-49.....	67†	132†	117†	131†	131†	131†	131†	131†	120†	
50 and over.....	0†	137†	122†	143†	143†	143†	143†	143†	117†	

\* Excluding war deaths between 1964 and 1968 anniversaries.

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

The mortality ratios by attained age groups and sex for policy years sixteen and over combined, covering the experience from 1963 to 1968 anniversaries, are presented in Table 12 for standard medical and non-medical issues combined. Again, for the purpose of comparing male and

TABLE 12  
COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE\*  
STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS  
EXPERIENCE BETWEEN 1963 AND 1968 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)

At- tain- ed 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...	\$ 1,409,229	\$ 1,104,691	\$ 1,357	\$ 521	\$ 163	\$ 0	92.5%	127.4%	49.3%
20–24...	1,177,613	800,297	1,400	420	672	0	83.2	112.9	44.0
25–29...	1,116,453	480,212	1,343	279	142	0	101.1	82.5	47.2
30–34...	2,144,784	599,962	2,838	536	116	0	103.5	91.2	67.4
35–39...	4,854,599	1,484,929	8,246	1,848	118	1	102.1	97.0	73.0
40–44...	8,918,275	2,171,101	24,507	4,085	96	0	98.4	106.3	69.8
45–49...	13,425,304	2,299,066	63,800	7,074	71	0	91.5	106.1	65.7
50–54...	16,450,785	2,248,998	126,668	10,017	12	0	91.1	98.8	58.1
55–59...	17,020,392	2,085,013	218,130	13,450	30	0	95.8	96.2	50.5
60–64...	14,262,538	1,519,638	293,781	16,018	4	0	96.0	105.7	51.3
65–69...	9,698,425	1,040,144	313,007	17,312	4	0	97.9	98.0	51.5
70–74...	6,683,384	724,847	319,271	19,367	0	0	96.4	82.1	56.0
75–79...	3,769,890	397,489	277,472	20,072	0	0	99.4	102.4	68.7
80–84...	1,658,335	179,420	184,338	14,231	0	0	100.0	102.6	71.2
85–89...	488,218	55,515	79,990	7,532	0	0	94.5	103.0	82.2
90–95...	102,667	14,603	23,827	2,704	0	0	91.1	85.9	80.1
All ages	\$103,180,891	\$17,205,925	\$1,939,975	\$135,466	\$1,428	\$1	96.6%	97.8%	59.4%

\* Based on data from eleven companies.

† Excluding war deaths between 1964 and 1968 anniversaries.

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

female mortality in the right-hand columns of these tables, mortality ratios for females were calculated on the male table. Eleven 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 15–29, while the highest ratios are found at attained ages 85 and over.

## APPENDIX I

TABLE A

### CONTRIBUTING COMPANIES

**PROPORTION OF TOTAL EXPOSURES BETWEEN 1967 AND 1968 ANNIVERSARIES  
CONTRIBUTED BY EACH COMPANY**

COMPANY	FIRST FIFTEEN POLICY YEARS		SIX- TEENTH AND SUBSE- QUENT POLICY YEARS	FIRST FIFTEEN POLICY YEARS BY SEX				SIXTEENTH AND SUBSEQUENT POLICY YEARS BY SEX	
	Medi- cal Issues	Non- medi- cal Issues		Medical Issues		Nonmedical Issues			
	Male and Female Lives Combined (Including Data Not Subdivided by Sex)				Male	Female	Male	Female	Male
Prudential.....	22.4%	36.6%	18.2%	20.9%	1.8%	31.0%	5.7%	26.4%	4.9%
Metropolitan.....	12.8	21.9	25.9	12.1	0.8	19.4	2.6		
New York Life.....	12.2	11.9	12.2	11.1	1.2	9.7	2.2	14.6	2.9
Northwestern Mutual.....	7.6	1.4	7.8	7.0	0.7	1.0	0.4	12.4	1.1
Massachusetts Mutual.....	6.4	2.7	3.5	6.0	0.4	2.3	0.4		
John Hancock.....	5.4	6.5	5.7	5.0	0.4	5.2	1.3	7.7	2.0
New England Life.....	4.1	1.8	2.1	3.9	0.3	1.5	0.3	3.3	0.3
Mutual Benefit.....	3.8	1.3	2.7	2.9	0.2	1.0	0.2		
Connecticut Mutual.....	3.5	2.2	2.4	3.3	0.2	1.9	0.3		
Travelers.....	3.3	1.8	3.1	3.1	0.2	1.7	0.2	5.0	0.4
Mutual Life, N.Y.....	3.1	3.8	4.8	2.9	0.3	3.2	0.6	7.2	1.0
Occidental.....	3.1	1.1	0.7	2.6	0.2	0.7	0.2		
Aetna.....	2.8	1.5	2.1	2.6	0.2	1.2	0.3	3.2	0.5
Penn Mutual.....	2.6	2.2	3.1	2.4	0.2	1.9	0.3		
Connecticut General.....	2.5	0.4	0.9	2.2	0.3	0.3	0.1	1.4	0.2
Lincoln National.....	2.4	1.4	2.1	2.2	0.2	1.1	0.2	3.1	0.5
Provident Mutual.....	1.4	0.8	1.6	1.4	0.1	0.8	0.1		
Sun Life, Canada.....	0.6	0.7	1.1	0.6	0.1	0.5	0.2	1.7	0.2
Total.....	100.0%	100.0%	100.0%	92.2%	7.8%	84.4%	15.6%	86.0%	14.0%

NOTE.—A Comparative Mortality Study of the select experience between 1963 and 1968 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 1953-67**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1967 AND 1968 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	
			Exclud- ing War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1953 . . . (15)	0	\$ 16,074	\$ 23	\$ 0	\$ 6	383%	383%
	1	9,034	2	0	4	50	50
	2-4	11,827	30	2	7	429	457
	5-9	33,613	29	39	28	104	243
	10-14	38,482	21	3	41	51	59
	15-19	76,747	108	0	88	123	123
	20-24	177,350	340	15	261	130	136
	25-29	484,179	1,022	0	1,165	88	88
	30-34	641,442	2,359	0	2,868	82	82
	35-39	618,775	4,192	9	4,371	96	96
	40-44	469,131	4,561	0	4,816	95	95
	45-49	276,718	4,341	0	4,676	93	93
	50-54	118,877	2,507	0	2,808	89	89
	55-59	52,316	1,587	0	1,882	84	84
	60-64	17,376	740	0	851	87	87
	65-69	2,247	134	0	157	85	85
	70 and over	180	30	0	25	120	120
	All ages	\$ 3,044,368	\$22,026	\$ 68	\$24,054	92%	92%
1954 . . . (14)	0	\$ 17,130	\$ 4	\$ 0	\$ 6	67%	67%
	1	11,068	0	0	5	0	0
	2-4	15,588	9	0	9	100	100
	5-9	40,335	71	32	34	209	303
	10-14	55,023	9	28	59	15	63
	15-19	94,244	122	0	102	120	120
	20-24	235,387	242	0	323	75	75
	25-29	583,887	1,281	0	1,256	102	102
	30-34	781,364	2,585	5	3,032	85	85
	35-39	714,908	4,039	0	4,335	93	93
	40-44	540,306	5,050	0	5,079	99	99
	45-49	323,157	4,945	0	4,812	103	103
	50-54	149,829	2,735	0	3,218	85	85
	55-59	62,181	1,381	0	2,028	68	68
	60-64	22,959	1,015	0	1,046	97	97
	65-69	5,869	374	0	372	101	101
	70 and over	454	4	0	60	7	7
	All ages	\$ 3,653,689	\$23,866	\$ 65	\$25,776	93%	93%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	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
1955 . . . (13)	0	\$ 17,450	\$ 19	\$ 0	\$ 5	380%	380%
	1	11,680	10	0	4	250	250
	2-4	18,045	1	0	9	11	11
	5-9	48,812	52	43	41	127	232
	10-14	65,349	98	10	68	144	159
	15-19	110,479	73	11	118	62	71
	20-24	330,002	265	30	413	64	71
	25-29	726,537	1,261	6	1,409	89	90
	30-34	960,501	3,043	23	3,201	95	96
	35-39	877,962	3,932	0	4,684	84	84
	40-44	668,388	5,059	0	5,629	90	90
	45-49	397,878	4,584	0	5,182	88	88
	50-54	198,236	3,792	0	3,781	100	100
	55-59	83,030	2,622	0	2,383	110	110
	60-64	31,746	897	0	1,331	67	67
	65-69	6,760	476	0	388	123	123
	70 and over	820	110	0	98	112	112
	All ages	\$ 4,553,675	\$26,294	\$123	\$28,744	91%	92%
1956 . . . (12)	0	\$ 15,593	\$ 5	\$ 0	\$ 4	125%	125%
	1	16,037	1	0	5	20	20
	2-4	23,564	7	0	10	70	70
	5-9	41,453	64	28	30	213	307
	10-14	67,977	55	25	69	80	116
	15-19	122,877	165	30	130	127	150
	20-24	408,080	419	16	466	90	93
	25-29	801,940	1,377	30	1,377	100	102
	30-34	1,032,889	3,175	0	3,022	105	105
	35-39	972,730	3,922	0	4,712	83	83
	40-44	761,719	5,298	0	5,683	93	93
	45-49	440,792	4,762	0	4,987	95	95
	50-54	217,825	3,801	0	3,633	105	105
	55-59	83,553	1,691	0	2,135	79	79
	60-64	31,914	1,112	0	1,230	90	90
	65-69	6,133	277	0	327	85	85
	70 and over	640	78	0	72	108	108
	All ages	\$ 5,045,716	\$26,209	\$129	\$27,892	94%	94%
1957 . . . (11)	0	\$ 14,157	\$ 1	\$ 0	\$ 4	25%	25%
	1	19,189	17	0	5	340	340
	2-4	22,369	14	0	8	175	175
	5-9	38,022	18	0	23	78	78
	10-14	63,028	253	39	62	408	471
	15-19	132,015	73	5	141	52	55
	20-24	556,399	565	31	589	96	101
	25-29	998,179	1,452	20	1,485	98	99
	30-34	1,339,398	3,257	26	3,493	93	94
	35-39	1,210,136	4,995	0	5,207	96	96
	40-44	872,078	5,261	0	5,854	90	90
	45-49	455,005	3,853	0	4,539	85	85
	50-54	222,099	4,348	0	3,306	132	132
	55-59	84,740	1,849	0	1,899	97	97
	60-64	31,256	997	0	1,008	99	99
	65-69	8,741	358	0	415	86	86
	70 and over	605	25	0	60	42	42
	All ages	\$ 6,067,416	\$27,336	\$121	\$28,098	97%	98%

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
1958... (10)	0	\$ 13,173	\$ 24	\$ 0	\$ 3	800%	800%
	1	21,588	2	0	5	40	40
	2-4	21,008	3	0	6	50	50
	5-9	36,991	72	0	20	360	360
	10-14	61,985	121	9	59	205	220
	15-19	133,997	95	15	142	67	77
	20-24	539,705	416	41	538	77	85
	25-29	989,521	1,255	50	1,304	96	100
	30-34	1,434,394	2,636	0	3,297	80	80
	35-39	1,369,451	4,910	15	5,164	95	95
	40-44	983,461	6,071	0	5,810	104	104
	45-49	541,425	5,022	0	4,785	105	105
	50-54	278,896	3,729	0	3,781	99	99
	55-59	119,510	2,924	0	2,349	124	124
	60-64	38,094	940	0	1,044	90	90
	65-69	8,650	403	0	349	115	115
	70 and over	897	29	0	72	40	40
	All ages	\$ 6,592,746	\$28,652	\$130	\$28,728	100%	100%
1959... (9)	0	\$ 13,088	\$ 15	\$ 0	\$ 4	375%	375%
	1	23,154	2	0	6	33	33
	2-4	22,362	0	0	6	0	0
	5-9	41,886	18	0	21	86	86
	10-14	72,166	234	45	67	349	416
	15-19	158,729	145	55	165	88	121
	20-24	536,908	360	110	503	72	93
	25-29	962,209	1,226	100	1,124	109	118
	30-34	1,391,398	2,406	32	2,756	87	88
	35-39	1,428,274	4,423	0	4,697	94	94
	40-44	1,036,378	5,526	15	5,423	102	102
	45-49	638,822	5,152	0	5,099	101	101
	50-54	320,621	3,579	0	3,926	91	91
	55-59	140,427	2,413	0	2,431	99	99
	60-64	42,359	979	0	1,008	97	97
	65-69	12,631	456	0	419	109	109
	70 and over	1,049	33	0	76	43	43
	All ages	\$ 6,842,461	\$26,967	\$357	\$27,731	97%	99%
1960... (8)	0	\$ 10,541	\$ 0	0	\$ 4	0%	0%
	1	21,772	8	0	6	133	133
	2-4	19,991	2	0	5	40	40
	5-9	33,564	20	0	14	143	143
	10-14	55,128	53	10	48	110	131
	15-19	128,931	214	31	130	165	188
	20-24	395,319	292	0	351	83	83
	25-29	756,382	924	10	790	117	118
	30-34	1,220,801	2,103	0	2,096	100	100
	35-39	1,319,001	4,514	0	3,844	117	117
	40-44	1,002,393	3,863	0	4,732	82	82
	45-49	621,245	4,082	0	4,546	90	90
	50-54	313,841	3,503	0	3,559	98	98
	55-59	144,897	2,360	0	2,232	103	103
	60-64	48,249	1,142	0	1,018	112	112
	65-69	13,117	381	0	391	97	97
	70 and over	1,794	169	0	111	152	152
	All ages	\$ 6,106,966	\$23,630	\$ 51	\$23,927	99%	99%

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
1961... (7)	0	\$ 9,224	\$ 0	\$ 0	\$ 4	0%	0%
	1	22,196	5	0	7	71	71
	2-4	19,622	4	0	5	80	80
	5-9	33,828	62	0	12	517	517
	10-14	51,270	74	10	42	176	200
	15-19	139,084	54	54	136	40	79
	20-24	410,750	510	0	347	147	147
	25-29	745,486	624	0	712	88	88
	30-34	1,217,754	2,038	25	1,779	115	116
	35-39	1,358,739	3,350	0	3,514	95	95
	40-44	1,090,789	4,126	0	4,623	89	89
	45-49	662,373	3,665	10	4,371	84	84
	50-54	361,669	2,468	0	3,749	66	66
	55-59	159,704	1,940	0	2,283	85	85
	60-64	47,912	1,078	0	914	118	118
	65-69	13,270	300	0	362	83	83
	70 and over	3,037	156	0	155	101	101
	All ages	\$ 6,346,707	\$ 20,454	\$ 99	\$ 23,015	89%	89%
1962... (6)	0	\$ 9,687	\$ 7	\$ 0	\$ 4	175%	175%
	1	23,475	4	0	9	44	44
	2-4	22,016	4	0	6	67	67
	5-9	35,842	3	0	11	27	27
	10-14	50,243	134	3	37	362	370
	15-19	139,464	193	106	131	147	228
	20-24	407,886	290	43	335	87	99
	25-29	765,209	672	10	682	99	100
	30-34	1,220,744	1,244	22	1,583	79	80
	35-39	1,403,373	2,780	5	3,144	88	89
	40-44	1,168,618	4,108	0	4,429	93	93
	45-49	735,335	4,353	0	4,202	104	104
	50-54	380,180	2,969	0	3,353	89	89
	55-59	166,438	1,683	0	2,048	82	82
	60-64	62,192	1,072	0	1,082	99	99
	65-69	15,880	322	0	400	81	81
	70 and over	2,678	63	0	106	59	59
	All ages	\$ 6,609,260	\$ 19,901	\$ 189	\$ 21,562	92%	93%
1963... (5)	0	\$ 13,708	\$ 7	\$ 0	\$ 7	100%	100%
	1	16,159	12	0	7	171	171
	2-4	18,352	3	0	6	50	50
	5-9	34,267	0	0	9	0	0
	10-14	48,288	37	0	34	109	109
	15-19	138,244	245	84	129	190	255
	20-24	499,843	595	50	411	145	157
	25-29	959,564	549	85	833	66	76
	30-34	1,505,992	1,962	60	1,730	113	117
	35-39	1,749,438	3,256	4	3,480	94	94
	40-44	1,477,790	4,003	0	4,816	83	83
	45-49	922,785	3,953	0	4,637	85	85
	50-54	478,724	3,737	0	3,570	105	105
	55-59	219,425	2,005	0	2,379	84	84
	60-64	77,395	801	0	1,257	64	64
	65-69	21,996	1,315	0	495	266	266
	70 and over	4,707	213	0	155	137	137
	All ages	\$ 8,186,677	\$ 22,693	\$ 283	\$ 23,955	95%	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
1964 . . . (4)	0	\$ 17,530	\$ 2	\$ 0	\$ 10	20%	20%
	1	9,412	0	0	5	0	0
	2-4	17,287	100	0	7	1,429	1,429
	5-9	32,352	55	0	8	688	688
	10-14	50,440	21	0	32	66	66
	15-19	154,264	209	80	142	147	204
	20-24	620,890	655	98	511	128	147
	25-29	1,175,069	845	67	991	85	92
	30-34	1,682,354	1,574	40	1,771	89	91
	35-39	1,934,550	3,496	10	3,367	104	104
	40-44	1,640,439	4,435	0	4,759	93	93
	45-49	1,004,814	4,143	0	4,422	94	94
	50-54	559,044	2,827	0	3,791	75	75
	55-59	244,143	1,681	0	2,397	70	70
	60-64	82,363	971	0	1,216	80	80
	65-69	22,847	199	0	438	45	45
	70 and over	4,523	50	0	111	45	45
	All ages	\$ 9,252,321	\$21,263	\$295	\$23,978	89%	90%
1965 . . . (3)	0	\$ 16,884	\$ 11	\$ 0	\$ 11	100%	100%
	1	9,764	0	0	5	0	0
	2-4	19,981	5	0	9	56	56
	5-9	37,167	0	0	10	0	0
	10-14	48,463	3	0	27	11	11
	15-19	196,470	181	166	180	101	193
	20-24	791,499	519	203	627	83	115
	25-29	1,402,038	1,175	144	1,121	105	118
	30-34	1,950,245	2,449	133	1,832	134	141
	35-39	2,199,746	2,839	50	3,287	86	88
	40-44	1,861,306	4,509	7	4,533	99	100
	45-49	1,179,614	4,768	0	4,357	109	109
	50-54	641,630	2,504	0	3,695	68	68
	55-59	263,233	2,239	0	2,163	104	104
	60-64	91,764	707	0	1,119	63	63
	65-69	22,470	235	0	364	65	65
	70 and over	4,211	63	0	86	73	73
	All ages	\$10,736,485	\$22,207	\$703	\$23,426	95%	98%
1966 . . . (2)	0	\$ 18,144	\$ 2	\$ 0	\$ 14	14%	14%
	1	11,277	40	0	7	571	571
	2-4	19,403	0	0	10	0	0
	5-9	37,615	0	0	11	0	0
	10-14	55,940	6	0	25	24	24
	15-19	209,779	126	61	175	72	107
	20-24	908,821	755	298	657	115	160
	25-29	1,607,971	973	108	1,049	93	103
	30-34	2,179,370	3,175	56	1,663	191	194
	35-39	2,440,029	2,537	28	2,867	88	89
	40-44	2,077,081	3,735	9	4,106	91	91
	45-49	1,343,150	2,882	5	3,823	75	76
	50-54	716,872	1,923	0	3,088	62	62
	55-59	311,570	1,625	0	1,856	88	88
	60-64	97,676	707	0	862	82	82
	65-69	28,370	129	0	366	35	35
	70 and over	5,127	47	0	84	56	56
	All ages	\$12,068,195	\$18,662	\$565	\$20,663	90%	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 (1)	0	\$ 17,267	\$ 73	\$ 0	\$ 31	235%	235%
	1	10,964	4	0	8	50	50
	2-4	20,498	0	0	12	0	0
	5-9	40,756	5	0	14	36	36
	10-14	51,311	310	0	19	1,632	1,632
	15-19	194,458	150	15	137	109	120
	20-24	1,003,133	701	206	669	105	136
	25-29	1,901,626	1,219	41	996	122	127
	30-34	2,472,400	1,833	41	1,532	120	122
	35-39	2,745,054	2,204	20	2,494	88	89
	40-44	2,308,568	2,919	25	3,373	87	87
	45-49	1,528,014	3,068	0	3,144	98	98
	50-54	788,894	1,701	0	2,370	72	72
	55-59	352,103	1,116	0	1,439	78	78
	60-64	110,840	1,320	0	682	194	194
	65-69	25,785	287	0	229	125	125
	70 and over	5,943	334	0	72	464	464
All ages		\$13,577,614	\$17,244	\$348	\$17,221	100%	102%

TABLE C  
 STANDARD NONMEDICAL ISSUES OF 1953-67  
 MALE AND FEMALE LIVES COMBINED  
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)  
 EXPERIENCE BETWEEN 1967 AND 1968 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	
			Exclud- ing War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1953 . . . (15)	0	\$ 144,093	\$ 60	\$ 0	\$ 57	105%	105%
	1	48,203	14	0	22	64	64
	2-4	48,372	37	0	28	132	132
	5-9	55,717	61	40	45	136	224
	10-14	62,011	59	10	65	91	106
	15-19	165,835	178	16	180	99	108
	20-24	231,816	273	10	327	83	87
	25-29	303,095	630	3	709	89	89
	30-34	220,751	904	0	956	95	95
	35-39	104,011	670	0	669	100	100
	40-44	25,937	292	0	248	118	118
	45-49	6,127	167	0	100	167	167
	50 and over	828	16	0	20	80	80
	All ages	\$ 1,416,796	\$3,361	\$ 79	\$3,426	98%	100%
1954 . . . (14)	0	\$ 157,591	\$ 29	\$ 0	\$ 53	55%	55%
	1	54,297	10	0	21	48	48
	2-4	56,439	13	0	29	45	45
	5-9	67,014	84	27	54	156	206
	10-14	72,922	74	21	75	99	127
	15-19	161,346	133	13	165	81	88
	20-24	249,143	319	1	326	98	98
	25-29	296,098	568	5	618	92	93
	30-34	220,694	708	0	828	86	86
	35-39	99,934	527	0	549	96	96
	40-44	18,145	222	0	156	142	142
	45-49	1,767	31	0	25	124	124
	50 and over	314	12	0	7	171	171
	All ages	\$ 1,455,704	\$2,730	\$ 67	\$2,906	94%	96%
1955 . . . (13)	0	\$ 187,293	\$ 48	\$ 0	\$ 55	87%	87%
	1	65,404	16	0	22	73	73
	2-4	67,505	30	0	32	94	94
	5-9	80,171	79	21	63	125	159
	10-14	94,519	111	18	96	116	134
	15-19	200,734	187	17	203	92	100
	20-24	311,297	360	11	373	97	99
	25-29	318,386	646	7	597	108	109
	30-34	241,753	700	0	779	90	90
	35-39	110,803	551	0	540	102	102
	40-44	17,231	137	0	132	104	104
	45-49	1,410	28	0	17	165	165
	50 and over	341	8	0	7	114	114
	All ages	\$ 1,696,847	\$2,901	\$ 74	\$2,916	99%	102%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	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
1956 . . . (12)	0	\$ 174,048	\$ 62	\$ 0	\$ 46	135%	135%
	1	65,278	15	0	19	79	79
	2-4	66,086	41	0	27	152	152
	5-9	80,384	98	28	56	175	225
	10-14	99,668	101	33	98	103	137
	15-19	220,660	224	19	225	100	108
	20-24	420,779	441	21	468	94	99
	25-29	490,662	725	15	829	87	89
	30-34	412,844	1,183	0	1,191	99	99
	35-39	219,961	1,138	0	1,029	111	111
	40-44	31,893	227	0	229	99	99
	45-49	1,400	46	0	15	307	307
	50 and over	339	3	0	6	50	50
	All ages	\$ 2,284,002	\$4,304	\$ 116	\$4,238	102%	104%
1957 (11)	0	\$ 161,978	\$ 54	\$ 0	\$ 40	135%	135%
	1	60,104	12	0	16	75	75
	2-4	60,846	12	0	21	57	57
	5-9	75,424	45	0	45	100	100
	10-14	113,617	169	34	111	152	183
	15-19	370,929	295	36	390	76	85
	20-24	815,967	768	109	852	90	103
	25-29	877,254	1,374	10	1,293	106	107
	30-34	642,722	1,682	10	1,657	102	102
	35-39	323,944	1,350	0	1,360	99	99
	40-44	48,955	452	0	319	142	142
	45-49	1,615	14	0	16	88	88
	50 and over	431	0	0	7	0	0
	All ages	\$ 3,553,786	\$6,227	\$ 199	\$6,127	102%	105%
1958 . . . (10)	0	\$ 155,896	\$ 20	\$ 0	\$ 40	50%	50%
	1	62,643	21	0	16	131	131
	2-4	63,348	19	0	19	100	100
	5-9	81,029	86	1	44	195	198
	10-14	139,390	186	90	131	142	211
	15-19	466,457	405	62	493	82	95
	20-24	910,089	779	88	896	87	97
	25-29	863,709	1,127	53	1,125	100	105
	30-34	539,175	1,477	22	1,217	121	123
	35-39	252,849	874	0	914	96	96
	40-44	39,202	229	1	221	104	104
	45-49	1,898	22	0	16	138	138
	50 and over	478	12	0	7	171	171
	All ages	\$ 3,576,163	\$5,257	\$ 317	\$5,139	102%	108%

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
1959 . . . . (9)	0	\$ 150,257	\$ 41	\$ 0	\$ 43	95%	95%
	1	60,195	11	0	15	73	73
	2-4	65,673	27	0	18	150	150
	5-9	88,315	28	0	44	64	64
	10-14	156,914	204	99	145	141	209
	15-19	618,973	633	132	640	99	120
	20-24	971,640	945	111	901	105	117
	25-29	827,611	1,005	72	956	105	113
	30-34	496,248	1,064	5	965	110	111
	35-39	229,881	936	0	723	129	129
	40-44	33,029	132	0	163	81	81
	45-49	1,751	17	0	13	131	131
	50 and over	576	3	0	8	38	38
	All ages	\$ 3,701,063	\$ 5,046	\$ 419	\$ 4,634	109%	118%
1960 . . . . (8)	0	\$ 126,190	\$ 31	\$ 0	\$ 42	74%	74%
	1	49,338	9	0	14	64	64
	2-4	62,660	19	0	16	119	119
	5-9	96,290	46	0	41	112	112
	10-14	163,305	188	173	145	130	249
	15-19	710,406	698	181	710	98	124
	20-24	984,557	623	61	866	72	79
	25-29	864,986	774	30	900	86	89
	30-34	483,462	777	25	818	95	98
	35-39	225,557	730	0	630	116	116
	40-44	38,173	167	0	171	98	98
	45-49	1,953	12	0	14	86	86
	50 and over	845	1	0	11	9	9
	All ages	\$ 3,807,722	\$ 4,075	\$ 470	\$ 4,378	93%	104%
1961 . . . . (7)	0	\$ 130,797	\$ 95	\$ 0	\$ 51	186%	186%
	1	51,295	11	0	17	65	65
	2-4	67,153	3	0	17	18	18
	5-9	100,898	71	0	36	197	197
	10-14	173,939	166	41	145	114	143
	15-19	836,665	1,062	239	812	131	160
	20-24	1,127,550	965	77	945	102	110
	25-29	935,347	902	69	887	102	109
	30-34	523,680	996	31	760	131	135
	35-39	239,315	535	15	596	90	92
	40-44	39,567	139	0	159	87	87
	45-49	1,567	4	0	10	40	40
	50 and over	410	5	0	5	100	100
	All ages	\$ 4,228,183	\$ 4,954	\$ 472	\$ 4,440	112%	122%

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
1962 . . . (6)	0	\$ 130,369	\$ 78	\$ 0	\$ 57	137%	137%
	1	53,551	12	0	21	57	57
	2-4	69,751	22	0	20	110	110
	5-9	100,476	10	0	31	32	32
	10-14	162,980	169	20	126	134	150
	15-19	831,265	864	405	778	111	163
	20-24	1,194,962	962	202	972	99	120
	25-29	970,173	949	136	858	111	126
	30-34	516,930	690	58	664	104	113
	35-39	237,305	650	0	508	128	128
	40-44	37,070	106	0	132	80	80
	45-49	1,724	4	0	10	40	40
	50 and over	779	1	0	9	11	11
	All ages	\$ 4,307,335	\$4,517	\$ 821	\$4,186	108%	128%
1963 . . . (5)	0	\$ 168,739	\$ 48	\$ 0	\$ 80	60%	60%
	1	60,008	28	0	26	108	108
	2-4	89,342	18	0	30	60	60
	5-9	136,276	67	0	38	176	176
	10-14	219,379	232	22	156	149	163
	15-19	941,860	1,195	594	864	138	207
	20-24	1,489,443	1,361	326	1,202	113	140
	25-29	1,171,874	1,082	152	1,006	108	123
	30-34	599,167	716	16	683	105	107
	35-39	270,694	530	0	512	104	104
	40-44	42,568	154	0	130	118	118
	45-49	2,332	12	0	11	109	109
	50 and over	1,067	0	0	9	0	0
	All ages	\$ 5,192,749	\$5,443	\$1,110	\$4,747	115%	138%
1964 . . . (4)	0	\$ 184,981	\$ 65	\$ 0	\$ 100	65%	65%
	1	64,938	25	0	31	81	81
	2-4	100,663	43	0	39	110	110
	5-9	152,023	97	0	39	249	249
	10-14	234,960	168	0	148	114	114
	15-19	1,090,071	1,333	563	978	136	194
	20-24	1,808,802	1,503	391	1,451	104	131
	25-29	1,353,832	1,490	181	1,120	133	149
	30-34	672,202	836	78	700	119	131
	35-39	294,121	639	0	489	131	131
	40-44	47,421	54	0	128	42	42
	45-49	2,794	8	0	12	67	67
	50 and over	966	7	0	8	88	88
	All ages	\$ 6,007,774	\$6,268	\$1,213	\$5,243	120%	143%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	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
1965 . . . (3)	0	\$ 197,818	\$ 78	\$ 0	\$ 123	63%	63%
	1	71,298	58	0	39	149	149
	2-4	110,234	45	0	48	94	94
	5-9	165,511	39	0	43	91	91
	10-14	252,045	145	0	142	102	102
	15-19	1,418,588	1,872	1,376	1,270	147	256
	20-24	2,128,754	2,074	706	1,639	127	170
	25-29	1,518,008	1,397	189	1,182	118	134
	30-34	719,086	837	72	665	126	137
	35-39	292,707	565	3	412	137	138
	40-44	50,547	73	5	113	65	69
	45-49	3,709	18	0	13	138	138
	50 and over	1,604	2	0	13	15	15
	All ages	\$ 6,929,909	\$ 7,203	\$ 2,351	\$ 5,702	126%	168%
1966 . . . (2)	0	\$ 216,014	\$ 151	\$ 0	\$ 153	99%	99%
	1	78,574	36	0	50	72	72
	2-4	122,411	39	0	59	66	66
	5-9	178,135	18	0	51	35	35
	10-14	262,131	64	0	119	54	54
	15-19	1,349,450	1,467	1,333	1,069	137	262
	20-24	2,344,991	1,891	1,020	1,629	116	179
	25-29	1,757,166	1,177	208	1,113	106	124
	30-34	780,205	748	94	581	129	145
	35-39	305,794	361	20	334	108	114
	40-44	54,745	93	0	96	97	97
	45-49	4,039	2	0	10	20	20
	50 and over	1,458	0	0	7	0	0
	All ages	\$ 7,455,113	\$ 6,047	\$ 2,675	\$ 5,271	115%	165%
1967 . . . (1)	0	\$ 251,404	\$ 368	\$ 0	\$ 427	86%	86%
	1	91,500	86	0	66	130	130
	2-4	145,819	42	0	80	53	53
	5-9	203,911	66	0	68	97	97
	10-14	285,391	97	0	107	91	91
	15-19	1,596,474	1,576	589	1,069	147	203
	20-24	3,522,037	3,119	1,430	2,230	140	204
	25-29	2,519,996	1,662	289	1,281	130	152
	30-34	1,121,060	741	92	674	110	124
	35-39	417,684	500	48	343	146	160
	40-44	100,564	170	0	121	140	140
	45-49	8,130	8	0	14	57	57
	50 and over	2,678	10	0	12	83	83
	All ages	\$10,266,648	\$8,445	\$2,448	\$6,492	130%	168%

TABLE D  
 STANDARD MEDICALLY EXAMINED ISSUES OF 1953-67  
 MALE LIVES  
 EXPERIENCE BETWEEN 1967 AND 1968 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
1953 . . . . . (15)	0	\$ 8,469	\$ 1	\$ 0	\$ 4	25%	25%
	1	4,896	0	0	3	0	0
	2-4	6,862	26	2	5	520	560
	5-9	22,453	26	39	22	118	295
	10-14	28,245	21	3	34	62	71
	15-19	65,810	104	0	80	130	130
	20-24	156,462	294	15	238	124	130
	25-29	444,435	944	0	1,089	87	87
	30-34	586,195	2,234	0	2,673	84	84
	35-39	557,361	3,861	9	4,046	95	96
	40-44	407,236	4,175	0	4,337	96	96
	45-49	232,878	4,011	0	4,150	97	97
	50-54	96,802	2,226	0	2,428	92	92
	55-59	42,060	1,391	0	1,624	86	86
	60-64	14,341	605	0	747	81	81
	65-69	1,797	104	0	133	78	78
	70 and over	123	11	0	18	61	61
	All ages	\$ 2,676,425	\$ 20,034	\$ 68	\$ 21,631	93%	93%
1954 . . . . . (14)	0	\$ 9,272	\$ 2	\$ 0	\$ 4	50%	50%
	1	6,542	0	0	3	0	0
	2-4	9,690	9	0	6	150	150
	5-9	27,861	69	32	28	246	361
	10-14	43,829	7	28	52	13	67
	15-19	82,208	120	0	95	126	126
	20-24	213,927	226	0	302	75	75
	25-29	539,804	1,217	0	1,182	103	103
	30-34	718,541	2,268	5	2,838	80	80
	35-39	647,644	3,730	0	4,028	93	93
	40-44	469,199	4,593	0	4,584	100	100
	45-49	275,260	4,532	0	4,322	105	105
	50-54	123,738	2,470	0	2,831	87	87
	55-59	50,868	1,183	0	1,773	67	67
	60-64	18,128	854	0	894	96	96
	65-69	4,368	350	0	297	118	118
	70 and over	367	3	0	50	6	6
	All ages	\$ 3,241,246	\$ 21,633	\$ 65	\$ 23,289	93%	93%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	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
1955 . . . . (13)	0	\$ 10,414	\$ 16	\$ 0	\$ 3	533%	533%
	1	7,136	10	0	3	333	333
	2-4	10,872	1	0	6	17	17
	5-9	34,068	34	43	34	100	226
	10-14	51,087	98	10	59	166	183
	15-19	97,114	70	11	110	64	74
	20-24	305,435	256	30	391	65	73
	25-29	679,295	1,173	6	1,338	88	88
	30-34	883,489	2,925	23	2,986	98	99
	35-39	795,730	3,768	0	4,345	87	87
	40-44	584,324	4,578	0	5,107	90	90
	45-49	338,091	4,065	0	4,632	88	88
	50-54	163,783	3,513	0	3,315	106	106
	55-59	66,331	2,373	0	2,034	117	117
	60-64	24,476	734	0	1,127	65	65
	65-69	5,223	431	0	329	131	131
	70 and over	558	37	0	71	52	52
	All ages	\$ 4,057,426	\$ 24,082	\$ 123	\$ 25,890	93%	93%
1956 . . . . (12)	0	\$ 8,023	\$ 5	\$ 0	\$ 2	250%	250%
	1	9,327	0	0	3	0	0
	2-4	14,418	1	0	7	14	14
	5-9	27,936	63	28	24	263	379
	10-14	54,889	53	25	61	87	128
	15-19	108,799	142	30	122	116	141
	20-24	381,881	385	16	443	87	91
	25-29	751,837	1,327	30	1,308	101	104
	30-34	954,223	2,919	0	2,825	103	103
	35-39	884,143	3,353	0	4,368	77	77
	40-44	668,678	4,747	0	5,162	92	92
	45-49	377,428	4,120	0	4,469	92	92
	50-54	177,413	3,273	0	3,140	104	104
	55-59	67,928	1,604	0	1,848	87	87
	60-64	25,493	1,031	0	1,057	98	98
	65-69	4,421	208	0	257	81	81
	70 and over	383	21	0	44	48	48
	All ages	\$ 4,517,221	\$ 23,252	\$ 129	\$ 25,140	92%	93%
1957 . . . . (11)	0	\$ 7,243	\$ 0	\$ 0	\$ 2	0%	0%
	1	11,693	15	0	3	500	500
	2-4	13,988	12	0	5	240	240
	5-9	25,126	7	0	18	39	39
	10-14	50,358	241	39	55	438	509
	15-19	119,869	71	5	134	53	57
	20-24	532,005	546	31	569	96	101
	25-29	956,592	1,421	20	1,435	99	100
	30-34	1,269,757	3,177	26	3,339	95	96
	35-39	1,129,676	4,738	0	4,937	96	96
	40-44	786,642	4,680	0	5,444	86	86
	45-49	395,326	3,653	0	4,127	89	89
	50-54	186,235	4,017	0	2,950	136	136
	55-59	69,890	1,660	0	1,670	99	99
	60-64	25,167	893	0	876	102	102
	65-69	6,935	324	0	355	91	91
	70 and over	520	9	0	53	17	17
	All ages	\$ 5,587,022	\$ 25,464	\$ 121	\$ 25,972	98%	99%

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
1958 . . . . . (10)	0	\$ 8,451	\$ 21	\$ 0	\$ 2	1,050%	1,050%
	1	14,276	2	0	4	50	50
	2-4	14,850	2	0	5	40	40
	5-9	26,776	72	0	17	424	424
	10-14	51,940	106	9	55	193	209
	15-19	122,193	93	15	137	68	79
	20-24	520,049	406	41	525	77	85
	25-29	963,226	1,251	50	1,281	98	102
	30-34	1,388,434	2,539	0	3,221	79	79
	35-39	1,309,807	4,821	15	5,017	96	96
	40-44	909,392	5,471	0	5,547	99	99
	45-49	486,284	4,703	0	4,498	105	105
	50-54	246,733	3,548	0	3,565	100	100
	55-59	103,006	2,754	0	2,180	126	126
	60-64	32,238	779	0	951	82	82
	65-69	7,200	362	0	309	117	117
	70 and over	651	21	0	59	36	36
	All ages	\$ 6,205,506	\$ 26,951	\$ 130	\$ 27,373	98%	99%
1959 . . . . . (9)	0	\$ 8,869	\$ 15	\$ 0	\$ 3	500%	500%
	1	15,231	0	0	4	0	0
	2-4	15,975	0	0	5	0	0
	5-9	29,888	8	8	17	47	47
	10-14	59,621	234	45	62	377	450
	15-19	145,873	145	55	159	91	126
	20-24	516,307	346	110	490	71	93
	25-29	932,332	1,218	100	1,100	111	120
	30-34	1,339,580	2,347	32	2,679	88	89
	35-39	1,356,245	4,341	0	4,530	96	96
	40-44	953,686	5,242	15	5,150	102	102
	45-49	573,410	4,926	0	4,788	103	103
	50-54	280,862	3,425	0	3,674	93	93
	55-59	120,870	2,230	0	2,259	99	99
	60-64	34,935	796	0	899	89	89
	65-69	9,264	445	0	335	133	133
	70 and over	878	31	0	68	46	46
	All ages	\$ 6,393,826	\$ 25,749	\$ 357	\$ 26,222	98%	100%
1960 . . . . . (8)	0	\$ 7,151	\$ 0	\$ 0	\$ 3	0%	0%
	1	14,078	6	0	4	150	150
	2-4	14,161	2	0	4	50	50
	5-9	24,861	20	0	11	182	182
	10-14	44,626	52	10	44	118	141
	15-19	117,185	214	31	125	171	196
	20-24	374,617	282	0	338	83	83
	25-29	729,218	914	10	771	119	120
	30-34	1,169,135	2,082	0	2,027	103	103
	35-39	1,243,981	4,293	0	3,685	116	116
	40-44	907,877	3,626	0	4,441	82	82
	45-49	549,109	3,907	0	4,232	92	92
	50-54	274,153	3,348	0	3,329	101	101
	55-59	123,114	2,200	0	2,110	104	104
	60-64	39,256	995	0	893	111	111
	65-69	10,425	321	0	330	97	97
	70 and over	1,525	169	0	101	167	167
	All ages	\$ 5,644,472	\$ 22,431	\$ 51	\$ 22,448	100%	100%

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
1961 . . . . . (7)	0	\$ 6,667	\$ 0	\$ 0	\$ 3	0%	0%
	1	14,044	5	0	5	100	100
	2-4	13,106	0	0	4	0	0
	5-9	23,670	62	0	9	689	689
	10-14	40,744	62	10	38	163	189
	15-19	125,412	54	54	130	42	83
	20-24	387,700	287	0	334	86	86
	25-29	717,711	624	0	693	90	90
	30-34	1,161,958	1,994	25	1,712	116	118
	35-39	1,269,584	3,254	0	3,342	97	97
	40-44	984,312	3,781	0	4,321	88	88
	45-49	584,738	3,408	10	4,062	84	84
	50-54	314,395	2,302	0	3,496	66	66
	55-59	134,582	1,816	0	2,099	87	87
	60-64	39,507	1,054	0	806	131	131
	65-69	10,206	257	0	299	86	86
	70 and over	2,444	139	0	136	102	102
	All ages	\$ 5,830,780	\$ 19,099	\$ 99	\$ 21,489	89%	89%
1962 . . . . . (6)	0	\$ 6,710	\$ 5	\$ 0	\$ 3	167%	167%
	1	15,200	4	0	7	57	57
	2-4	14,927	0	0	5	0	0
	5-9	25,326	3	0	8	38	38
	10-14	38,655	124	3	34	365	374
	15-19	122,272	186	106	124	150	235
	20-24	379,352	280	43	319	88	101
	25-29	728,763	567	10	659	86	88
	30-34	1,157,460	1,241	22	1,516	82	83
	35-39	1,302,755	2,648	5	2,981	89	89
	40-44	1,048,679	3,600	0	4,126	87	87
	45-49	649,066	4,171	0	3,900	107	107
	50-54	326,422	2,641	0	3,106	85	85
	55-59	141,101	1,428	0	1,882	76	76
	60-64	50,597	1,014	0	950	107	107
	65-69	13,103	311	0	349	89	89
	70 and over	1,803	39	0	83	47	47
	All ages	\$ 6,022,191	\$ 18,262	\$ 189	\$ 20,052	91%	92%
1963 . . . . . (5)	0	\$ 9,757	\$ 7	\$ 0	\$ 5	140%	140%
	1	10,397	10	0	5	200	200
	2-4	13,176	3	0	5	60	60
	5-9	24,056	0	0	7	0	0
	10-14	37,432	37	0	31	119	119
	15-19	120,778	230	84	122	189	257
	20-24	468,579	586	50	394	149	161
	25-29	918,346	518	85	808	64	75
	30-34	1,425,700	1,903	60	1,653	115	119
	35-39	1,620,945	3,149	4	3,304	95	95
	40-44	1,324,872	3,774	0	4,474	84	84
	45-49	809,205	3,619	0	4,287	84	84
	50-54	411,542	3,429	0	3,294	104	104
	55-59	186,211	1,745	0	2,175	80	80
	60-64	61,356	732	0	1,092	67	67
	65-69	16,559	1,288	0	407	316	316
	70 and over	3,520	205	0	131	156	156
	All ages	\$ 7,468,431	\$ 21,235	\$ 283	\$ 22,194	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
1964 . . . (4)	0	\$ 12,340	\$ 0	\$ 0	\$ 8	0%	0%
	1	6,986	0	0	4	0	0
	2-4	12,436	100	0	5	2,000	2,000
	5-9	22,577	55	0	6	917	917
	10-14	40,353	21	0	30	70	70
	15-19	134,171	204	80	134	152	212
	20-24	586,827	650	98	493	132	152
	25-29	1,120,767	810	67	960	84	91
	30-34	1,589,671	1,536	40	1,689	91	93
	35-39	1,790,542	3,358	10	3,182	106	106
	40-44	1,468,877	4,130	0	4,418	93	93
	45-49	881,002	3,892	0	4,086	95	95
	50-54	481,927	2,411	0	3,515	69	69
	55-59	205,518	1,581	0	2,183	72	72
	60-64	64,134	952	0	1,053	90	90
	65-69	16,505	183	0	353	52	52
	70 and over	2,933	46	0	86	53	53
	All ages	\$ 8,437,566	\$ 19,929	\$ 295	\$ 22,205	90%	91%
1965 . . . (3)	0	\$ 11,740	\$ 10	\$ 0	\$ 9	111%	111%
	1	6,752	0	0	4	0	0
	2-4	15,298	5	0	7	71	71
	5-9	26,318	0	0	7	0	0
	10-14	38,916	3	0	26	12	12
	15-19	170,950	169	166	171	99	196
	20-24	748,093	508	203	606	84	117
	25-29	1,338,661	1,155	144	1,089	106	119
	30-34	1,842,562	2,365	133	1,750	135	143
	35-39	2,030,490	2,638	50	3,110	85	86
	40-44	1,671,886	4,056	7	4,228	96	96
	45-49	1,036,955	4,482	0	4,027	111	111
	50-54	555,995	2,195	0	3,445	64	64
	55-59	225,195	2,117	0	1,986	107	107
	60-64	76,170	638	0	1,005	63	63
	65-69	16,993	212	0	309	69	69
	70 and over	2,774	21	0	67	31	31
	All ages	\$ 9,815,748	\$ 20,574	\$ 703	\$ 21,846	94%	97%
1966 . . . (2)	0	\$ 12,938	\$ 2	\$ 0	\$ 11	18%	18%
	1	8,006	40	0	6	667	667
	2-4	14,948	0	0	8	0	0
	5-9	25,269	0	0	8	0	0
	10-14	43,024	6	0	23	26	26
	15-19	179,278	85	61	167	51	87
	20-24	852,152	733	298	635	115	162
	25-29	1,534,132	868	108	1,018	85	96
	30-34	2,061,452	3,091	56	1,592	194	198
	35-39	2,259,203	2,440	28	2,725	90	91
	40-44	1,874,257	3,431	9	3,870	89	89
	45-49	1,184,197	2,686	5	3,568	75	75
	50-54	629,316	1,839	0	2,909	63	63
	55-59	265,831	1,539	0	1,702	90	90
	60-64	80,428	547	0	776	59	59
	65-69	22,256	115	0	317	36	36
	70 and over	3,460	36	0	67	54	54
	All ages	\$11,050,147	\$ 17,368	\$ 565	\$ 19,402	90%	92%

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
1967 . . . .	0	\$ 12,213	\$ 43	\$ 0	\$ 22	195%	195%
(1)	1	8,339	4	0	7	57	57
	2-4	14,097	0	0	9	0	0
	5-9	27,602	5	0	10	50	50
	10-14	39,544	100	0	18	556	556
	15-19	163,733	145	15	130	112	123
	20-24	939,413	673	206	648	104	136
	25-29	1,807,306	1,197	41	964	124	128
	30-34	2,338,870	1,794	41	1,471	122	125
	35-39	2,556,203	2,166	20	2,394	90	91
	40-44	2,088,363	2,656	25	3,208	83	84
	45-49	1,342,178	2,874	0	2,924	98	98
	50-54	679,739	1,573	0	2,213	71	71
	55-59	302,487	1,043	0	1,327	79	79
	60-64	91,527	1,260	0	619	204	204
	65-69	18,855	274	0	193	142	142
	70 and over	3,789	334	0	56	596	596
	All ages	\$12,434,258	\$ 16,141	\$ 348	\$ 16,213	100%	102%
All years . . .	(1-15)	0	\$ 140,257	\$ 127	\$ 0	\$ 84	151%
		1	152,903	96	0	65	148
		2-4	198,804	161	2	86	187
		5-9	393,787	424	142	226	188
		10-14	663,263	1,165	182	622	187
		15-19	1,875,645	2,032	713	1,940	105
		20-24	7,362,799	6,458	1,141	6,725	96
		25-29	14,162,425	15,204	671	15,695	97
		30-34	19,887,027	34,415	463	33,971	101
		35-39	20,760,309	52,558	141	55,994	94
		40-44	16,148,280	62,540	56	68,417	91
		45-49	9,715,127	59,049	15	62,072	95
		50-54	4,949,055	42,210	0	47,210	89
		55-59	2,104,992	26,664	0	28,852	92
		60-64	677,754	12,794	0	13,745	93
		65-69	164,110	5,185	0	4,572	113
		70 and over	25,728	1,122	0	1,090	103
	All ages	\$99,382,265	\$322,204	\$3,526	\$341,366	94%	95%

TABLE D—Continued  
 STANDARD MEDICALLY EXAMINED ISSUES OF 1953–67  
 FEMALE LIVES  
 EXPERIENCE BETWEEN 1967 AND 1968 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
1953..... (15)	0	\$ 5,309	\$ 2	\$ 2	100%
	1	2,497	2	1	200
	2-4	2,853	1	1	100
	5-9	7,374	2	3	67
	10-14	6,711	0	3	0
	15-19	7,453	4	4	100
	20-24	14,108	13	14	93
	25-29	17,763	27	24	113
	30-34	23,677	66	63	105
	35-39	28,602	110	92	120
	40-44	36,678	113	212	53
	45-49	27,652	225	246	91
	50-54	14,694	107	196	55
	55-59	7,457	120	150	80
	60-64	2,124	72	57	126
	65-69	258	6	10	60
	70 and over	40	2	4	50
	All ages	\$ 205,340	\$ 872	\$ 1,082	81%
1954..... (14)	0	\$ 5,402	\$ 1	\$ 1	100%
	1	2,774	0	1	0
	2-4	3,633	0	1	0
	5-9	9,218	0	3	0
	10-14	7,773	1	3	33
	15-19	8,620	2	4	50
	20-24	15,007	11	14	79
	25-29	21,995	10	27	37
	30-34	30,295	294	72	408
	35-39	33,504	102	98	104
	40-44	44,051	276	231	119
	45-49	31,385	168	238	71
	50-54	18,392	131	215	61
	55-59	8,382	133	154	86
	60-64	3,392	103	83	124
	65-69	843	14	31	45
	70 and over	39	0	4	0
	All ages	\$ 244,705	\$ 1,246	\$ 1,180	106%
1955..... (13)	0	\$ 4,432	\$ 4	\$ 1	400%
	1	2,403	0	1	0
	2-4	4,068	0	1	0
	5-9	10,003	2	3	67
	10-14	8,962	0	4	0
	15-19	10,280	3	5	60
	20-24	16,686	6	13	46
	25-29	24,137	28	26	108
	30-34	34,859	64	75	85
	35-39	41,437	62	117	53
	40-44	51,706	194	240	81
	45-49	38,754	254	268	95
	50-54	22,546	156	232	67
	55-59	11,565	153	194	79
	60-64	5,349	142	119	119
	65-69	1,300	45	44	102
	70 and over	163	53	14	379
	All ages	\$ 288,650	\$ 1,166	\$ 1,357	86%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1956..... (12)	0	\$ 4,233	\$ 0	\$ 1	0%
	1	4,312	1	1	100
	2-4	5,899	4	2	200
	5-9	9,225	0	3	0
	10-14	8,856	2	4	50
	15-19	10,353	23	5	460
	20-24	16,624	14	12	117
	25-29	23,079	22	23	96
	30-34	33,832	132	66	200
	35-39	40,785	260	111	234
	40-44	52,526	322	210	153
	45-49	38,864	149	236	63
	50-54	24,120	232	214	108
	55-59	10,528	50	150	33
	60-64	4,136	63	81	78
	65-69	1,085	49	34	144
	70 and over	53	1	4	25
	All ages	\$ 288,510	\$ 1,324	\$ 1,157	114%
1957..... (11)	0	\$ 4,223	\$ 1	\$ 1	100%
	1	5,811	2	1	200
	2-4	5,960	2	2	100
	5-9	10,124	8	3	267
	10-14	8,873	10	4	250
	15-19	8,851	2	4	50
	20-24	15,515	17	11	155
	25-29	20,683	1	19	5
	30-34	34,111	30	60	50
	35-39	45,741	130	119	109
	40-44	56,394	265	212	125
	45-49	42,649	151	240	63
	50-54	25,812	196	203	97
	55-59	10,774	74	134	55
	60-64	4,569	50	80	63
	65-69	1,429	21	42	50
	70 and over	51	5	3	167
	All ages	\$ 301,570	\$ 965	\$ 1,138	85%
1958..... (10)	0	\$ 4,722	\$ 3	\$ 1	300%
	1	7,312	0	2	0
	2-4	6,158	1	2	50
	5-9	10,216	0	3	0
	10-14	10,035	15	4	375
	15-19	11,799	2	5	40
	20-24	19,463	10	13	77
	25-29	25,337	4	21	19
	30-34	43,878	92	71	130
	35-39	58,468	89	143	62
	40-44	73,435	600	259	232
	45-49	54,766	319	283	113
	50-54	32,046	177	214	83
	55-59	16,497	171	169	101
	60-64	5,856	161	93	173
	65-69	1,450	42	40	105
	70 and over	246	8	14	57
	All ages	\$ 381,684	\$ 1,694	\$ 1,337	127%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1959 . . . . . (9)	0	\$ 4,219	\$ 0	\$ 1	0%
	1	7,922	2	2	100
	2-4	6,387	0	1	0
	5-9	11,998	10	4	250
	10-14	12,545	0	5	0
	15-19	12,856	0	6	0
	20-24	20,242	14	13	108
	25-29	28,396	9	22	41
	30-34	49,928	59	73	81
	35-39	70,206	82	161	51
	40-44	82,014	284	270	105
	45-49	65,176	225	309	73
	50-54	39,623	155	251	62
	55-59	19,557	183	172	106
	60-64	7,424	183	109	168
	65-69	3,368	10	84	12
	70 and over	171	2	8	25
	All ages	\$ 442,032	\$ 1,218	\$ 1,491	82%
1960 . . . . . (8)	0	\$ 3,390	\$ 0	\$ 1	0%
	1	7,694	2	2	100
	2-4	5,829	0	1	0
	5-9	8,704	0	3	0
	10-14	10,502	2	4	50
	15-19	11,746	0	5	0
	20-24	20,231	10	12	83
	25-29	25,571	10	18	56
	30-34	49,815	21	66	32
	35-39	73,490	220	155	142
	40-44	93,836	237	287	83
	45-49	71,822	173	312	55
	50-54	39,625	153	229	67
	55-59	21,782	161	172	94
	60-64	8,993	148	124	119
	65-69	2,693	60	62	97
	70 and over	270	0	11	0
	All ages	\$ 455,993	\$ 1,197	\$ 1,464	82%
1961 . . . . . (7)	0	\$ 2,557	\$ 0	\$ 1	0%
	1	8,152	0	2	0
	2-4	6,516	4	1	400
	5-9	10,157	0	3	0
	10-14	10,526	12	3	400
	15-19	13,672	0	6	0
	20-24	22,751	223	13	1,715
	25-29	26,702	0	18	0
	30-34	53,885	44	64	69
	35-39	87,379	96	168	57
	40-44	105,479	345	298	116
	45-49	77,335	253	307	82
	50-54	47,205	161	252	64
	55-59	25,120	124	184	67
	60-64	8,405	25	108	23
	65-69	3,064	43	63	68
	70 and over	593	18	19	95
	All ages	\$ 509,498	\$ 1,348	\$ 1,510	89%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1962..... (6)	0	\$ 2,977	\$ 2	\$ 1	200%
	1	8,275	0	3	0
	2-4	7,089	4	2	200
	5-9	10,516	0	3	0
	10-14	11,587	10	3	333
	15-19	17,193	7	7	100
	20-24	28,318	10	16	63
	25-29	35,165	105	22	477
	30-34	61,527	3	64	5
	35-39	98,924	132	159	83
	40-44	119,364	508	301	169
	45-49	85,891	182	300	61
	50-54	53,638	328	246	133
	55-59	25,337	255	166	154
	60-64	11,595	58	133	44
	65-69	2,777	11	51	22
	70 and over	875	24	23	104
	All ages	\$ 581,138	\$ 1,639	\$ 1,500	109%
1963..... (5)	0	\$ 3,952	\$ 0	\$ 2	0%
	1	5,762	2	2	100
	2-4	5,176	0	1	0
	5-9	10,211	0	2	0
	10-14	10,856	0	3	0
	15-19	17,466	15	7	214
	20-24	30,932	10	17	59
	25-29	39,799	32	23	139
	30-34	78,414	59	74	80
	35-39	120,762	107	173	62
	40-44	152,056	230	339	68
	45-49	113,088	334	348	96
	50-54	67,112	308	276	112
	55-59	33,199	260	204	127
	60-64	16,039	69	165	42
	65-69	5,437	28	87	32
	70 and over	1,187	8	25	32
	All ages	\$ 711,448	\$ 1,462	\$ 1,748	84%
1964..... (4)	0	\$ 5,191	\$ 2	\$ 2	100%
	1	2,426	0	1	0
	2-4	4,852	0	1	0
	5-9	9,776	0	2	0
	10-14	10,087	0	2	0
	15-19	20,093	5	7	71
	20-24	33,441	5	17	29
	25-29	51,724	35	28	125
	30-34	88,919	38	78	49
	35-39	140,868	138	180	77
	40-44	169,612	305	335	91
	45-49	122,783	244	332	73
	50-54	76,997	416	276	151
	55-59	38,590	100	214	47
	60-64	18,228	19	162	12
	65-69	6,342	16	86	19
	70 and over	1,590	4	25	16
	All ages	\$ 801,519	\$ 1,327	\$ 1,748	76%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1965..... (3)	0	\$ 5,144	\$ 1	\$ 2	50%
	1	3,012	0	1	0
	2-4	4,683	0	2	0
	5-9	10,849	0	2	0
	10-14	9,547	0	2	0
	15-19	25,520	12	9	133
	20-24	42,424	11	20	55
	25-29	60,356	20	30	67
	30-34	102,458	84	78	108
	35-39	164,584	195	170	115
	40-44	186,977	443	299	148
	45-49	141,757	271	326	83
	50-54	85,300	309	248	125
	55-59	38,033	121	177	68
	60-64	15,593	69	113	61
	65-69	5,477	23	56	41
	70 and over	1,436	42	18	233
	All ages	\$ 903,150	\$ 1,601	\$ 1,553	103%
1966..... (2)	0	\$ 5,207	\$ 0	\$ 3	0%
	1	3,271	0	2	0
	2-4	4,455	0	2	0
	5-9	12,346	0	3	0
	10-14	12,916	0	2	0
	15-19	30,502	41	8	513
	20-24	55,450	22	22	100
	25-29	69,500	106	28	379
	30-34	112,282	85	67	127
	35-39	176,395	97	137	71
	40-44	199,392	303	229	132
	45-49	157,932	187	252	74
	50-54	87,316	84	178	47
	55-59	45,704	85	153	56
	60-64	17,248	249	86	290
	65-69	6,114	14	49	29
	70 and over	1,667	11	17	65
	All ages	\$ 997,697	\$ 1,284	\$ 1,238	104%
1967..... (1)	0	\$ 5,055	\$ 30	\$ 8	375%
	1	2,626	0	1	0
	2-4	6,400	0	3	0
	5-9	13,154	0	4	0
	10-14	11,767	210	1	21,000
	15-19	30,724	5	7	71
	20-24	62,186	28	19	147
	25-29	88,291	23	29	79
	30-34	126,577	39	57	68
	35-39	183,934	38	95	40
	40-44	217,614	263	162	162
	45-49	184,202	194	217	89
	50-54	108,776	78	156	50
	55-59	49,607	73	111	66
	60-64	19,312	60	63	95
	65-69	6,930	13	36	36
	70 and over	2,154	0	16	0
	All ages	\$1,119,310	\$ 1,054	\$ 985	107%

TABLE D—FEMALE LIVES—*Continued*

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
All years... . . (1-15)	0	\$ 66,013	\$ 46	\$ 28	164%
	1	74,249	11	23	48
	2-4	79,958	16	23	70
	5-9	153,871	22	44	50
	10-14	151,543	262	47	557
	15-19	237,218	121	89	136
	20-24	413,378	404	226	179
	25-29	558,498	432	358	121
	30-34	924,457	1,110	1,028	108
	35-39	1,365,079	1,858	2,078	89
	40-44	1,641,134	4,688	3,884	121
	45-49	1,254,146	3,329	4,214	79
	50-54	743,202	2,991	3,386	88
	55-59	362,132	2,063	2,504	82
	60-64	148,264	1,471	1,576	93
	65-69	48,567	395	775	51
	70 and over	10,535	178	205	87
	All ages	\$8,232,244	\$19,397	\$20,488	95%

TABLE E  
 STANDARD NONMEDICAL ISSUES OF 1953-67  
 MALE LIVES  
 EXPERIENCE BETWEEN 1967 AND 1968 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	
			Exclud- ing War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1953 (15)	0	\$ 82,296	\$ 46	\$ 0	\$ 38	121%	121%
	1	27,471	9	0	15	60	60
	2-4	29,471	29	0	21	138	138
	5-9	37,437	52	40	37	141	249
	10-14	47,641	53	10	58	91	109
	15-19	129,970	155	16	159	97	108
	20-24	178,146	237	10	271	87	91
	25-29	266,433	566	3	653	87	87
	30-34	189,387	829	0	864	96	96
	35-39	79,468	551	0	577	95	95
	40-44	19,503	252	0	208	121	121
	45-49	4,877	153	0	87	176	176
	50 and over	652	14	0	17	82	82
	All ages	\$ 1,092,752	\$ 2,946	\$ 79	\$ 3,005	98%	101%
1954 (14)	0	\$ 90,453	\$ 19	\$ 0	\$ 34	56%	56%
	1	31,343	8	0	14	57	57
	2-4	34,224	9	0	22	41	41
	5-9	45,780	69	27	47	147	204
	10-14	56,372	60	21	67	90	121
	15-19	126,919	104	13	146	71	80
	20-24	195,061	251	1	275	91	92
	25-29	256,839	481	5	562	86	86
	30-34	185,999	631	0	735	86	86
	35-39	74,011	432	0	460	94	94
	40-44	12,777	194	0	125	155	155
	45-49	1,345	29	0	21	138	138
	50 and over	220	5	0	5	100	100
	All ages	\$ 1,111,343	\$ 2,292	\$ 67	\$ 2,513	91%	94%
1955 (13)	0	\$ 109,246	\$ 34	\$ 0	\$ 35	97%	97%
	1	38,169	10	0	15	67	67
	2-4	41,151	25	0	23	109	109
	5-9	54,652	61	21	54	113	152
	10-14	74,423	88	18	86	102	123
	15-19	160,206	169	17	181	93	103
	20-24	252,656	287	11	323	89	92
	25-29	274,766	594	7	541	110	111
	30-34	201,731	649	0	682	95	95
	35-39	81,666	436	0	446	98	98
	40-44	11,897	85	0	104	82	82
	45-49	900	28	0	12	233	233
	50 and over	213	6	0	5	120	120
	All ages	\$ 1,301,676	\$ 2,472	\$ 74	\$ 2,507	99%	102%

TABLE E--MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	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
1956..... (12)	0	\$ 104,007	\$ 47	\$ 0	\$ 30	157%	157%
	1	38,821	11	0	12	92	92
	2-4	40,945	33	0	19	174	174
	5-9	55,705	63	28	47	134	194
	10-14	79,205	96	33	89	108	145
	15-19	183,008	196	19	205	96	105
	20-24	365,265	408	21	424	96	101
	25-29	447,628	668	15	779	86	88
	30-34	372,486	1,118	0	1,103	101	101
	35-39	189,667	1,053	0	937	112	112
	40-44	26,662	203	0	206	99	99
	45-49	877	22	0	10	220	220
	50 and over	157	3	0	3	100	100
	All ages	\$ 1,904,433	\$ 3,921	\$ 116	\$ 3,864	101%	104%
1957..... (11)	0	\$ 96,182	\$ 48	\$ 0	\$ 26	185%	185%
	1	36,182	4	0	10	40	40
	2-4	37,712	8	0	14	57	57
	5-9	51,613	37	0	37	100	100
	10-14	92,102	166	34	101	164	198
	15-19	329,215	274	36	369	74	84
	20-24	753,708	736	109	806	91	105
	25-29	827,380	1,283	10	1,241	103	104
	30-34	595,200	1,586	10	1,565	101	102
	35-39	288,068	1,234	0	1,259	98	98
	40-44	42,071	416	0	291	143	143
	45-49	1,190	13	0	12	108	108
	50 and over	280	0	0	5	0	0
	All ages	\$ 3,150,903	\$ 5,805	\$ 199	\$ 5,736	101%	105%
1958..... (10)	0	\$ 93,884	\$ 13	\$ 0	\$ 25	52%	52%
	1	38,439	16	0	10	160	160
	2-4	40,165	17	0	13	131	131
	5-9	56,685	71	1	36	197	200
	10-14	114,378	170	90	121	140	215
	15-19	422,265	401	62	473	85	98
	20-24	845,601	735	88	854	86	96
	25-29	814,223	1,077	53	1,083	99	104
	30-34	490,125	1,390	22	1,137	122	124
	35-39	213,595	789	0	818	96	96
	40-44	32,158	208	1	196	106	107
	45-49	1,590	21	0	15	140	140
	50 and over	416	12	0	6	200	200
	All ages	\$ 3,163,524	\$ 4,920	\$ 317	\$ 4,787	103%	109%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	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
1959 . . . . . (9)	0	\$ 92,715	\$ 31	\$ 0	\$ 29	107%	107%
	1	37,502	6	0	10	60	60
	2-4	43,217	17	0	13	131	131
	5-9	63,973	26	0	36	72	72
	10-14	129,479	182	97	135	135	207
	15-19	564,894	602	132	616	98	119
	20-24	903,838	865	111	859	101	114
	25-29	776,106	944	72	916	103	111
	30-34	444,436	995	5	889	112	112
	35-39	187,377	821	0	626	131	131
	40-44	25,949	115	0	140	82	82
	45-49	1,328	16	0	11	145	145
	50 and over	456	2	0	7	29	29
All ages		\$ 3,271,270	\$ 4,622	\$ 417	\$ 4,287	108%	118%
1960 . . . . . (8)	0	\$ 82,024	\$ 25	\$ 0	\$ 30	83%	83%
	1	32,371	5	0	10	50	50
	2-4	42,543	19	0	12	158	158
	5-9	72,190	36	0	34	106	106
	10-14	135,642	180	173	135	133	261
	15-19	637,475	675	181	680	99	126
	20-24	905,253	592	61	818	72	80
	25-29	804,323	712	30	856	83	87
	30-34	424,238	696	25	740	94	97
	35-39	178,145	647	0	530	122	122
	40-44	29,507	130	0	145	90	90
	45-49	1,628	12	0	12	100	100
	50 and over	740	1	0	10	10	10
All ages		\$ 3,346,079	\$ 3,730	\$ 470	\$ 4,012	93%	105%
1961 . . . . . (7)	0	\$ 85,420	\$ 73	\$ 0	\$ 37	197%	197%
	1	33,354	7	0	12	58	58
	2-4	45,384	0	0	12	0	0
	5-9	75,653	67	0	29	231	231
	10-14	143,252	152	41	135	113	143
	15-19	748,510	1,020	239	775	132	162
	20-24	1,029,860	922	77	888	104	113
	25-29	862,283	876	69	837	105	113
	30-34	454,135	899	31	677	133	137
	35-39	185,501	431	15	493	87	90
	40-44	29,662	118	0	131	90	90
	45-49	1,267	4	0	9	44	44
	50 and over	334	5	0	4	125	125
All ages		\$ 3,694,615	\$ 4,574	\$ 472	\$ 4,039	113%	125%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	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
1962 . . . . . (6)	0	\$ 84,071	\$ 68	\$ 0	\$ 41	166%	166%
	1	34,878	10	0	15	67	67
	2-4	47,349	0	0	15	0	0
	5-9	73,449	8	0	24	33	33
	10-14	133,410	152	20	118	129	146
	15-19	724,981	801	405	736	109	164
	20-24	1,071,895	907	202	903	100	123
	25-29	886,885	862	136	806	107	124
	30-34	437,681	629	58	581	108	118
	35-39	177,977	568	0	412	138	138
	40-44	26,584	94	0	105	90	90
	45-49	1,419	0	0	8	0	0
	50 and over	699	1	0	9	11	11
	All ages	\$ 3,701,278	\$ 4,100	\$ 821	\$ 3,773	109%	130%
1963 . . . . . (5)	0	\$ 109,047	\$ 32	\$ 0	\$ 58	55%	55%
	1	38,853	15	0	19	79	79
	2-4	59,444	17	0	21	81	81
	5-9	97,884	53	0	29	183	183
	10-14	174,443	207	22	145	143	158
	15-19	805,877	1,146	594	811	141	215
	20-24	1,325,942	1,282	326	1,114	115	144
	25-29	1,060,269	985	152	940	105	121
	30-34	502,229	632	16	591	107	110
	35-39	199,432	437	0	410	107	107
	40-44	29,666	138	0	101	137	137
	45-49	1,993	9	0	10	90	90
	50 and over	964	0	0	9	0	0
	All ages	\$ 4,406,043	\$ 4,953	\$ 1,110	\$ 4,258	116%	142%
1964 . . . . . (4)	0	\$ 117,571	\$ 43	\$ 0	\$ 71	61%	61%
	1	41,835	23	0	22	105	105
	2-4	66,261	36	0	28	129	129
	5-9	107,995	85	0	30	283	283
	10-14	183,000	146	0	136	107	107
	15-19	917,702	1,258	563	914	138	199
	20-24	1,596,111	1,380	391	1,341	103	132
	25-29	1,209,191	1,396	181	1,041	134	151
	30-34	556,673	738	78	598	123	136
	35-39	215,577	523	0	388	135	135
	40-44	32,519	42	0	98	43	43
	45-49	2,255	0	0	10	0	0
	50 and over	837	0	0	8	0	0
	All ages	\$ 5,047,527	\$ 5,670	\$ 1,213	\$ 4,685	121%	147%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	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
1965 (3)	0	\$ 125,846	\$ 48	\$ 0	\$ 90	53%	53%
	1	43,343	56	0	28	200	200
	2-4	72,865	6	0	35	17	17
	5-9	115,705	35	0	31	113	113
	10-14	194,446	120	0	130	92	92
	15-19	1,198,904	1,770	1,376	1,194	148	263
	20-24	1,869,252	1,958	706	1,514	129	176
	25-29	1,345,260	1,280	189	1,097	117	134
	30-34	591,742	701	72	568	123	136
	35-39	210,787	469	3	327	143	144
	40-44	33,724	45	5	86	52	58
	45-49	2,919	15	0	11	136	136
	50 and over	1,404	0	0	12	0	0
All ages		\$ 5,808,197	\$ 6,503	\$ 2,351	\$ 5,123	127%	173%
1966 (2)	0	\$ 135,670	\$ 84	\$ 0	\$ 112	75%	75%
	1	50,586	32	0	37	86	86
	2-4	79,017	34	0	42	81	81
	5-9	123,486	18	0	37	49	49
	10-14	198,291	55	0	109	50	50
	15-19	1,077,512	1,417	1,333	999	142	275
	20-24	2,013,739	1,794	1,020	1,500	120	188
	25-29	1,539,303	1,081	208	1,023	106	126
	30-34	634,389	646	94	493	131	150
	35-39	217,214	286	20	265	108	115
	40-44	36,036	58	0	75	77	77
	45-49	2,932	2	0	9	22	22
	50 and over	1,274	0	0	7	0	0
All ages		\$ 6,109,449	\$ 5,507	\$ 2,675	\$ 4,708	117%	174%
1967 (1)	0	\$ 156,254	\$ 225	\$ 0	\$ 276	82%	82%
	1	58,360	59	0	49	120	120
	2-4	94,059	33	0	58	57	57
	5-9	138,596	47	0	50	94	94
	10-14	211,498	95	0	99	96	96
	15-19	1,253,239	1,451	589	995	146	205
	20-24	2,999,434	2,862	1,430	2,067	138	208
	25-29	2,201,569	1,551	289	1,177	132	156
	30-34	918,304	672	92	582	115	131
	35-39	294,472	431	48	279	154	172
	40-44	56,552	127	0	87	146	146
	45-49	4,285	8	0	9	89	89
	50 and over	1,924	10	0	8	125	125
All ages		\$ 8,388,546	\$ 7,571	\$ 2,448	\$ 5,736	132%	175%

TABLE E—MALE LIVES—*Continued*

ISSUE YEAR (POLICY YEAR)	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
All years... (1-15)	0	\$ 1,564,686	\$ 836	\$ 0	\$ 932	90%	90%
	1	583,507	271	0	278	97	97
	2-4	773,807	283	0	348	81	81
	5-9	1,170,803	728	117	558	130	151
	10-14	1,967,582	1,922	559	1,664	116	149
	15-19	9,280,677	11,439	5,575	9,253	124	184
	20-24	16,305,761	15,216	4,564	13,957	109	142
	25-29	13,572,458	14,356	1,419	13,552	106	116
	30-34	6,998,755	12,811	503	11,805	109	113
	35-39	2,792,957	9,108	86	8,227	111	112
	40-44	445,267	2,225	6	2,098	106	106
	45-49	30,805	332	0	246	135	135
	50 and over	10,570	59	0	115	51	51
All ages		\$55,497,635	\$69,586	\$12,829	\$63,033	110%	131%

TABLE E—Continued  
 STANDARD NONMEDICAL ISSUES OF 1953-67  
 FEMALE LIVES  
 EXPERIENCE BETWEEN 1967 AND 1968 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
1953..... (15)	0	\$ 60,251	\$ 14	\$ 18	78%
	1	19,413	5	6	83
	2-4	17,731	7	6	117
	5-9	16,822	2	6	33
	10-14	13,289	3	6	50
	15-19	33,099	22	19	116
	20-24	49,651	35	51	69
	25-29	30,477	52	42	124
	30-34	25,147	51	66	77
	35-39	20,957	105	67	157
	40-44	5,711	22	33	67
	45-49	1,070	14	10	140
	50 and over	114	2	2	100
	All ages	\$ 293,732	\$ 334	\$ 332	101%
1954..... (14)	0	\$ 65,500	\$ 10	\$ 18	56%
	1	21,609	2	6	33
	2-4	21,051	3	7	43
	5-9	19,905	15	7	214
	10-14	15,471	12	7	171
	15-19	31,307	21	16	131
	20-24	48,523	60	44	136
	25-29	30,633	72	37	195
	30-34	26,694	66	63	105
	35-39	21,995	74	64	116
	40-44	4,735	18	25	72
	45-49	362	2	3	67
	50 and over	47	7	1	700
	All ages	\$ 307,832	\$ 362	\$ 298	121%
1955..... (13)	0	\$ 76,510	\$ 14	\$ 19	74%
	1	25,931	6	7	86
	2-4	25,188	5	8	63
	5-9	24,264	12	8	150
	10-14	18,742	23	8	288
	15-19	37,016	18	18	100
	20-24	52,003	61	42	145
	25-29	34,083	52	37	141
	30-34	29,888	40	64	63
	35-39	24,680	107	70	153
	40-44	4,663	47	22	214
	45-49	298	0	2	0
	50 and over	55	2	1	200
	All ages	\$ 353,321	\$ 387	\$ 306	126%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1956..... (12)	0	\$ 68,398	\$ 15	\$ 16	94%
	1	25,150	4	6	67
	2-4	24,026	7	7	100
	5-9	23,596	35	8	438
	10-14	19,223	5	8	63
	15-19	33,334	27	16	169
	20-24	47,804	33	36	92
	25-29	33,045	28	33	85
	30-34	30,683	51	60	85
	35-39	25,890	67	70	96
	40-44	4,651	20	19	105
	45-49	225	3	1	300
	50 and over	38	0	0	.....
	All ages	\$ 336,063	\$ 295	\$ 280	105%
1957..... (11)	0	\$ 63,754	\$ 5	\$ 14	36%
	1	22,871	8	5	160
	2-4	22,043	4	6	67
	5-9	22,680	9	7	129
	10-14	20,051	3	8	38
	15-19	36,560	19	17	112
	20-24	52,114	19	36	53
	25-29	39,348	71	36	197
	30-34	38,476	73	68	107
	35-39	31,651	102	83	123
	40-44	6,102	32	23	139
	45-49	189	1	1	100
	50 and over	32	0	0	.....
	All ages	\$ 355,871	\$ 346	\$ 304	114%
1958..... (10)	0	\$ 62,013	\$ 7	\$ 14	50%
	1	24,205	5	5	100
	2-4	23,183	2	6	33
	5-9	24,344	16	8	200
	10-14	25,011	16	10	160
	15-19	44,191	4	20	20
	20-24	64,421	44	42	105
	25-29	49,307	51	41	124
	30-34	48,891	87	79	110
	35-39	39,219	84	96	88
	40-44	7,044	21	25	84
	45-49	305	2	2	100
	50 and over	63	0	0	.....
	All ages	\$ 412,197	\$ 339	\$ 348	97%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1959..... (9)	0	\$ 57,542	\$ 10	\$ 14	71%
	1	22,694	6	5	120
	2-4	22,456	11	5	220
	5-9	24,342	2	8	25
	10-14	27,435	25*	10	250
	15-19	54,079	31	24	129
	20-24	67,719	80	42	190
	25-29	51,330	61	40	153
	30-34	51,615	69	75	92
	35-39	42,491	116	97	120
	40-44	7,077	17	23	74
	45-49	420	1	2	50
	50 and over	120	1	1	100
	All ages	\$ 429,320	\$ 430	\$ 346	124%
1960..... (8)	0	\$ 44,166	\$ 7	\$ 12	58%
	1	16,967	4	4	100
	2-4	20,117	0	4	0
	5-9	24,100	11	7	157
	10-14	27,663	8	10	80
	15-19	72,931	23	31	74
	20-24	79,186	32	48	67
	25-29	60,354	62	43	144
	30-34	59,042	81	78	104
	35-39	47,392	83	100	83
	40-44	8,666	38	27	141
	45-49	325	0	1	0
	50 and over	104	0	1	0
	All ages	\$ 461,013	\$ 349	\$ 366	95%
1961..... (7)	0	\$ 45,377	\$ 22	\$ 14	157%
	1	17,940	4	5	80
	2-4	21,770	3	5	60
	5-9	25,245	4	7	57
	10-14	30,687	14	10	140
	15-19	88,155	43	36	119
	20-24	97,483	43	57	75
	25-29	72,449	26	49	53
	30-34	69,199	97	82	118
	35-39	53,732	104	103	101
	40-44	9,899	21	28	75
	45-49	300	0	1	0
	50 and over	76	0	0	.....
	All ages	\$ 532,312	\$ 381	\$ 397	96%

\* 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
1962..... (6)	0	\$ 46,298	\$ 10	\$ 16	63%
	1	18,673	2	6	33
	2-4	22,403	22	6	367
	5-9	27,027	2	7	29
	10-14	29,570	17	9	189
	15-19	106,284	63	42	150
	20-24	122,851	55	69	80
	25-29	82,771	87	52	167
	30-34	78,926	61	83	73
	35-39	59,261	83	96	86
	40-44	10,481	12	26	46
	45-49	304	4	1	400
	50 and over	80	0	0	.....
	All ages	\$ 604,929	\$ 418	\$ 413	101%
1963..... (5)	0	\$ 59,692	\$ 16	\$ 23	70%
	1	21,155	13	7	186
	2-4	29,899	1	8	13
	5-9	38,392	14	9	156
	10-14	44,936	25	11	227
	15-19	135,983	50	53	94
	20-24	163,269	79	88	90
	25-29	110,884	97	65	149
	30-34	96,627	84	92	91
	35-39	71,219	94	103	91
	40-44	12,899	15	29	52
	45-49	339	4	1	400
	50 and over	104	0	0	.....
	All ages	\$ 785,398	\$ 492	\$ 489	101%
1964..... (4)	0	\$ 67,411	\$ 22	\$ 28	79%
	1	23,103	2	9	22
	2-4	34,402	8	11	73
	5-9	44,028	12	10	120
	10-14	51,960	23	12	192
	15-19	172,370	75	64	117
	20-24	212,400	122	110	111
	25-29	143,449	94	78	121
	30-34	115,123	98	101	97
	35-39	78,474	116	101	115
	40-44	14,900	12	30	40
	45-49	539	8	1	800
	50 and over	123	7	1	700
	All ages	\$ 958,282	\$ 599	\$ 556	108%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1965..... (3)	0	\$ 71,972	\$ 30	\$ 34	88%
	1	25,955	2	11	18
	2-4	37,369	39	13	300
	5-9	49,806	5	11	45
	10-14	57,600	25	11	227
	15-19	219,685	103	76	136
	20-24	258,978	108	124	87
	25-29	171,483	117	85	138
	30-34	126,997	136	97	140
	35-39	81,852	96	85	113
	40-44	16,802	29	27	107
	45-49	790	3	2	150
	50 and over	197	2	1	200
	All ages	\$ 1,119,486	\$ 695	\$ 577	120%
1966..... (2)	0	\$ 80,344	\$ 67	\$ 41	163%
	1	27,989	4	13	31
	2-4	43,393	5	17	29
	5-9	54,649	0	13	0
	10-14	63,840	9	10	90
	15-19	271,939	50	70	71
	20-24	330,751	94	129	73
	25-29	216,732	96	89	108
	30-34	145,427	102	87	117
	35-39	88,557	75	69	109
	40-44	18,709	35	22	159
	45-49	1,107	0	2	0
	50 and over	184	0	0	.....
	All ages	\$ 1,343,621	\$ 537	\$ 562	96%
1967..... (1)	0	\$ 95,149	\$ 143	\$ 151	95%
	1	33,139	27	17	159
	2-4	51,760	10	22	54
	5-9	65,315	19	18	106
	10-14	73,894	2	8	25
	15-19	343,236	126	74	170
	20-24	521,824	257	162	159
	25-29	317,141	111	103	108
	30-34	202,292	69	92	75
	35-39	123,159	69	64	108
	40-44	44,010	44	33	133
	45-49	3,844	1	5	20
	50 and over	754	0	4	0
	All ages	\$ 1,875,517	\$ 878	\$ 753	117%
All years..... (1-15)	0	\$ 964,377	\$ 392	\$ 432	91%
	1	346,794	94	112	84
	2-4	416,791	127	131	97
	5-9	484,515	158	134	118
	10-14	519,372	210*	138	152
	15-19	1,680,169	675	576	117
	20-24	2,168,977	1,122	1,080	104
	25-29	1,443,486	1,077	830	130
	30-34	1,145,027	1,165	1,187	98
	35-39	810,529	1,375	1,268	108
	40-44	176,349	383	392	98
	45-49	10,417	43	35	123
	50 and over	2,091	21	12	175
	All ages	\$10,168,894	\$6,842	\$6,327	108%

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