

**TRANSACTIONS OF SOCIETY OF ACTUARIES**  
**1973 REPORTS**

# **TRANSACTIONS**

1973 REPORTS OF MORTALITY AND MORBIDITY EXPERIENCE

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## **REPORTS OF THE COMMITTEE ON ORDINARY INSURANCE AND ANNUITIES**

### **I. MORTALITY UNDER STANDARD ORDINARY INSURANCE ISSUES BETWEEN 1971 AND 1972 ANNIVERSARIES**

#### **ABSTRACT**

This is the latest in a series of annual reports on intercompany mortality experience under Standard Ordinary life insurance policies. Each of the tables included in this report shows amount exposed to risk, actual death claim amounts, expected death claim amounts, and mortality ratios of actual to expected deaths. The expected death claims were based on the 1955-60 Basic Tables, all other data being based on the contributions of eighteen large life insurance companies. The tables are based on either select (first fifteen policy years) or ultimate experience.

The following results, which exclude the effect of war deaths, summarize the important conclusions reached in this study.

#### *General Mortality*

The over-all medical mortality ratio in the select period declined by 2.0 percentage points from last year's study. This is the lowest mortality ratio since the inception of the use of the 1955-60 Basic Tables for expected deaths in 1962.

The over-all nonmedical mortality ratio in the select period increased by 1.1 percentage points from last year's study. This mortality ratio has remained relatively stable over the last eleven years.

The over-all mortality ratio in the ultimate period increased by 0.1 percentage points from last year's study. With the exception of last year's study, this is the lowest mortality ratio since the inception of the use of the 1955-60 Basic Tables for expected deaths in 1962.

The experience on paramedical issues could not be studied, because of the volume of the exposure submitted and the youth of the data.

#### *Medical versus Nonmedical Mortality*

In the select period for all durations combined, nonmedical mortality continued to be higher than medical mortality at issue ages 10 and over, and lower under age 10.

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Table	Exposure Period	Policy Years	Medical or Nonmedical	Male and Female	Mortality Ratios by
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3.....	1971-72	1-15	Nonmedical	Combined	Ages at issue
4.....	1971-72	1-15	Nonmedical	Combined	Year of issue
5.....	1967-72	1-15	Medical and nonmedical	Combined	Age group at issue and duration
6.....	1971-72	16 and later	Combined	Combined	Attained ages
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8.....	1967-72	16 and later	Combined	Combined	Attained ages; premium-paying and paid-up
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10.....	1967-72	1-15	Nonmedical	Separate	Ages at issue
11.....	1967-72	1-15	Medical and nonmedical	Separate	Age group at issue and duration
12.....	1967-72	16 and later	Combined	Separate	Attained ages
<b>Appendix I:</b>					
A.....	Contributing companies, proportion of total exposures contributed by each company				
B.....	1971-72	1-15	Medical	Combined	Year of issue and ages at issue
C.....	1971-72	1-15	Nonmedical	Combined	Year of issue and ages at issue
D.....	1971-72	1-15	Medical	Separate	Year of issue and ages at issue
E.....	1971-72	1-15	Nonmedical	Separate	Year of issue and ages at issue

In the ultimate period, for almost all attained ages, nonmedical mortality exceeds medical mortality.

For males, nonmedical mortality in the select period exceeds medical mortality for issue ages 10 and over.

For females, nonmedical mortality in the select period exceeds medical mortality for issue ages 1-9 and 35 and over.

*Premium-paying versus Paid-up Mortality—Ultimate Period*

Overall, premium-paying mortality continues to exceed paid-up by about 6 percentage points. However, for attained ages 25-29 and 35-59, the mortality ratios are higher for paid-up.

*Male versus Female Mortality*

There is little change from last year's study, with female mortality averaging about 60 per cent of male mortality.

## INTRODUCTION

**T**HIS report covers the intercompany mortality experience under Standard Ordinary insurance issues between 1971 and 1972 anniversaries, and also for the period between 1967 and 1972 anniversaries where one year's exposure provided an insufficient volume of data. It reviews in turn the mortality experience under the following:

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

A summary of aggregate mortality ratios for each major category of experience is as follows:

	EXPERIENCE BETWEEN ANNIVERSARIES			
	Excluding War Deaths		Including War Deaths	
	1970-71	1971-72	1970-71	1971-72
Medical select.....	90.7%	88.7%	90.9%	88.8%
Nonmedical select.....	105.9	107.0	109.8	108.0
Ultimate.....	88.6	88.7	88.7	88.8

Because of the significance of war deaths (see definition in Appendix II), all tables have been adjusted to exclude or to show separately the

war deaths incurred during the exposure period. The following tabulation shows the war deaths by amount and the ratio of war deaths to total deaths experienced between 1967 and 1972 anniversaries.

**WAR DEATHS AND THE RATIO OF WAR DEATHS  
TO TOTAL DEATHS EXPERIENCED BETWEEN 1967 AND  
1972 ANNIVERSARIES  
MALE AND FEMALE LIVES COMBINED  
(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%
1968-69 . . . . .	2,702	0.7	12,653	12.2	570	0.1
1969-70 . . . . .	2,081	0.5	7,401	7.2	395	§
1970-71 . . . . .	930	0.2	3,690	3.6	262	§
1971-72 . . . . .	458	0.1	1,034	1.0	127	§
Total . . . . .	\$9,697	0.5%	\$37,609	7.4%	\$2,104	§

\* Female war deaths of \$5,000 for 1968-69, \$10,000 for 1969-70, and \$50,000 for 1971-72 are included.

† Female war deaths of \$2,000 for 1967-68, \$13,000 for 1968-69, and \$5,000 for 1970-71 are included.

‡ Female war deaths of \$2,000 for 1968-69 and \$5,100 for 1970-71 are included.

§ Less than 0.05 per cent.

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 to this year's 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 \$133 billion and actual claims of \$428 million. This represents an increase in the exposure from the preceding year of 2.1 per cent, despite the fact that one less company contributed to this year's study. Not included in the claim total were twenty-nine policies representing \$458,000 in claims resulting from operations of war and reported as deaths between 1971 and 1972 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,

TABLE 1  
**STANDARD MEDICALLY EXAMINED ISSUES OF 1957-71**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1971 AND 1972 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.....	\$ 210,047	\$ 212	\$ 0	\$ 121	175.2%	175.2%
1.....	226,826	82	0	92	89.1	89.1
2-4.....	290,579	119	0	120	99.2	99.2
5-9.....	555,821	282	0	266	106.0	106.0
10-14.....	803,791	1,062	10	640	165.9	167.5
15-19.....	2,038,854	2,121	2	1,971	107.6	107.7
20-24.....	8,645,880	7,270	181	7,980	91.1	93.4
25-29.....	17,808,293	18,813	50	19,234	97.8	98.1
30-34.....	24,923,323	41,467	147	42,971	96.5	96.8
35-39.....	26,676,194	66,827	25	74,399	89.8	89.9
40-44.....	22,657,579	84,986	42	96,123	88.4	88.5
45-49.....	14,967,065	78,298	0	92,185	84.9	84.9
50-54.....	7,916,573	60,951	0	71,135	85.7	85.7
55-59.....	3,503,519	37,571	0	44,152	85.1	85.1
60-64.....	1,189,494	18,451	0	21,341	86.5	86.5
65-69.....	304,142	7,500	1	7,738	96.9	96.9
70 and over.....	64,117	2,173	0	2,435	89.2	89.2
All ages.....	\$132,782,099	\$428,185	\$458	\$482,903	88.7%	88.8%

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 group at issue for each year of issue is set forth in Table B of Appendix I.

The aggregate mortality ratio, excluding war deaths, for the period from 1971 to 1972 anniversaries was 88.7 per cent. The following tabula-

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

Exposure Year	Aggregate Mortality Ratio
1961-62.....	98.5%
1962-63.....	97.7
1963-64.....	101.0
1964-65.....	96.0
1965-66.....	95.1
1966-67.....	93.2
1967-68.....	94.2
1968-69.....	94.8
1969-70.....	92.7
1970-71.....	90.7
1971-72.....	88.7

As seen in Table 1, there were four issue age groups which showed mortality ratios of greater than 100.0 per cent: ages 0, 5-9, 10-14, and 15-19. Of these age groupings, only age group 10-14 was influenced by large claims of at least \$100,000. The mortality ratio for the 10-14 age group was influenced to the point that without two claims totaling \$251,000 the mortality ratio excluding war deaths would have been 126.7 per cent instead of the reported 165.9 per cent.

War deaths played a small role in medical mortality, increasing the mortality ratio more than 0.3 percentage points only for age groups 10-14 and 20-24, which increased 1.6 and 2.3 percentage points, respectively. War deaths caused an increase of 0.1 percentage points in the all-ages mortality ratio, compared with an increase of 0.2 percentage points in last year's study and 0.4 percentage points two years ago.

As seen in Table 2, mortality ratios by year of issue, excluding war deaths, ranged from 78.6 per cent for 1965 (policy year 7) to 94.4 per cent for 1970 (policy year 2).

The tabulation at the top of page 7 indicates the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 88.7 per cent. War deaths were excluded in determining these ratios.

#### *Nonmedical Issues*

The current experience during the first fifteen policy years is based on an exposure of \$93 billion and actual claims of \$107 million. This represents an increase in the exposure from the preceding year of 6.6 per cent, despite the fact that one less company contributed to this year's study.

	Number of Companies	Proportion of Actual Deaths
Percentage points below average:		
More than 20.....	3	7.3%
10-20.....	2	8.5
5-10.....	2	3.3
0-5.....	2	5.2
Percentage points above average:		
0-5.....	5	29.3
5-10.....	3	34.8
10-20.....	1	11.6

**TABLE 2**  
**STANDARD MEDICALLY EXAMINED ISSUES OF 1957-71**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES**  
**BY YEAR OF ISSUE**  
**ALL AGES COMBINED**  
**Expected Deaths on 1955-60 Select Basic Tables**  
**(Amounts Shown in \$1,000 Units)**

YEAR OF ISSUE	POLICY YEAR	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Excluding War Deaths	Including War Deaths
1957.....	15	\$ 5,637,013	\$ 37,287	\$ 96	\$ 41,673	89.5%	89.7%
1958.....	14	5,907,596	36,526	6	41,058	89.0	89.0
1959.....	13	6,111,262	35,686	0	38,993	91.5	91.5
1960.....	12	5,365,812	30,139	20	32,513	92.7	92.8
1961.....	11	5,560,856	27,934	25	30,899	90.4	90.5
1962.....	10	5,871,325	26,745	0	30,075	88.9	88.9
1963.....	9	7,027,224	28,961	24	33,263	87.1	87.1
1964.....	8	7,767,838	30,720	15	32,882	93.4	93.5
1965.....	7	8,698,351	25,887	15	32,946	78.6	78.6
1966.....	6	9,316,413	28,590	64	31,331	91.3	91.5
1967.....	5	9,895,715	25,437	34	29,668	85.7	85.9
1968.....	4	10,207,652	23,497	75	28,216	83.3	83.5
1969.....	3	12,764,040	24,569	20	29,619	83.0	83.0
1970.....	2	14,915,151	25,067	64	26,545	94.4	94.7
1971.....	1	17,735,850	21,140	0	23,222	91.0	91.0
All years of issue.....		\$132,782,099	\$428,185	\$458	\$482,903	88.7%	88.8%

Not included in the claim total were eighty-six policies, representing \$1,034,000 in claims resulting from operations of war and reported as deaths between 1971 and 1972 anniversaries.

Expected deaths were calculated on the 1955–60 Select Basic Tables in the same manner as for medically examined issues. These basic 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 41.3 per cent of the total experience on recent Ordinary issues, measured by the exposures during the first fifteen policy years, as compared with 40.3 per cent last year. For all age groups combined, the proportion of nonmedical issues in the first policy year for 1971–72 was 47.0 per cent, compared with 46.5 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 1971 and 1972 anniversaries.

NONMEDICAL EXPOSURES AS PERCENTAGE  
OF TOTAL EXPOSURES

Ages at Issue	Policy Year 1	Policy Years 1-15
0-9 . . . . .	91.5%	86.0%
10-19 . . . . .	91.4	85.8
20-29 . . . . .	71.7	66.0
30-39 . . . . .	25.9	23.5
40-49 . . . . .	4.2	3.0
50 and over . . . . .	0.3	0.2
All ages . . . . .	47.0%	41.3%

The mortality ratios for nonmedical issues are presented in Table 3 by age group at issue for the first fifteen policy years combined. The aggregate mortality ratio, excluding war deaths, for the period from 1971 to 1972 anniversaries was 107.0 per cent. The tabulation at the top of page 9 shows how this result compares with previous studies based on the 1955–60 Basic Tables.

Issue age group 15–19 continues to be high (116.7 per cent), even when war deaths are excluded. Exclusion of war deaths has a greater effect on nonmedical issues than on medical issues. Issue age group 15–19 and the all-ages nonmedical mortality ratio are increased by 2.6 and 1.0 percentage points, respectively, if war deaths are included. War deaths increased the all-ages nonmedical mortality ratio in last year's report by 3.9 percentage points.

Exposure Year	Aggregate Mortality Ratio
1961-62.....	105.8%
1962-63.....	106.3
1963-64.....	109.5
1964-65.....	108.5
1965-66.....	107.8
1966-67.....	107.0
1967-68.....	109.9
1968-69.....	112.8
1969-70.....	110.0
1970-71.....	105.9
1971-72.....	107.0

**TABLE 3**  
**STANDARD NONMEDICAL ISSUES OF 1957-71**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES**  
**BY AGE AT ISSUE**  
**POLICY YEARS 1-15 COMBINED**  
**Expected Deaths on 1955-60 Select Basic Tables**  
**(Amounts Shown in \$1,000 Units)**

AGE AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS*	MORTALITY RATIO	
		Exclud- ing War Deaths	War Deaths		Exclud- ing War Deaths*	Includ- ing War Deaths*
0.....	\$ 2,927,882	\$ 1,428	\$ 0	\$ 1,770	80.7%	80.7%
1.....	1,127,459	441	0	512	86.1	86.1
2-4.....	1,580,931	622	0	638	97.5	97.5
5-9.....	2,240,413	1,063	0	935	113.7	113.7
10-14.....	3,286,668	2,604	35	2,383	109.3	110.8
15-19.....	13,938,581	14,494	329	12,422	116.7	119.3
20-24.....	29,273,723	25,739	387	24,221	106.3	107.9
25-29.....	22,091,440	22,590	149	21,967	102.8	103.5
30-34.....	11,073,817	19,400	89	18,261	106.2	106.7
35-39.....	4,758,910	14,331	44	12,819	111.8	112.1
40-44.....	1,084,566	4,021	0	3,724	108.0	108.0
45-49.....	90,584	361	0	389	92.9	92.9
50 and over....	23,910	209	0	229	91.2	91.2
All ages....	\$93,498,883	\$107,303	\$1,034	\$100,268	107.0%	108.0%

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

The mortality ratios in Table 3 understate 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 accompanying tabulation,

**MORTALITY RATIOS ON NONMEDICAL ISSUES  
OF 1957-71**  
**EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES**  
**BY AGE AT ISSUE**  
**POLICY YEARS 1-15 COMBINED**  
(Expected Deaths on 1955-60 Select Basic Tables)

AGES AT ISSUE	MORTALITY RATIOS	
	Unadjusted	Adjusted
35-39.....	111.8%	111.8%
40-44.....	108.0	122.7
45-49.....	92.9	99.6
50 and over.....	91.2	91.2
Ages 35 and over.....	107.0%	107.5%

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.

The unadjusted mortality ratios understate the true mortality on nonmedical business to a significant degree at ages 40-44. Except for one company, whose limit for nonmedical issues was age 50 until 1959, nonmedical issues at ages 45-49 and especially at ages 50 and over are largely business issued under special circumstances (such as pension trust and salary allotment plans), which do not appreciably affect the distribu-

tion of exposures by age within each five-year age group at issue. So-called "policyholder's nonmedical," issued on the basis of a previous medical examination within six or twelve months, is also included for some companies; others include it in their medical issues. Policies issued

TABLE 4  
 STANDARD NONMEDICAL ISSUES OF 1957-71  
 MALE AND FEMALE LIVES COMBINED  
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)  
 EXPERIENCE BETWEEN 1971 AND 1972 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*
1957 . . . . .	15	\$ 3,377,167	\$ 9,428	\$ 9	\$ 9,188	102.6%	102.7%
1958 . . . . .	14	3,364,251	7,347	25	7,408	99.2	99.5
1959 . . . . .	13	3,404,597	6,245	15	6,367	98.1	98.3
1960 . . . . .	12	3,454,743	5,248	30	5,823	90.1	90.6
1961 . . . . .	11	3,737,048	5,524	16	5,617	98.3	98.6
1962 . . . . .	10	3,754,922	4,896	54	5,095	96.1	97.1
1963 . . . . .	9	4,451,756	5,589	34	5,446	102.6	103.2
1964 . . . . .	8	5,046,961	6,179	33	5,580	110.7	111.3
1965 . . . . .	7	5,640,723	6,080	60	5,654	107.5	108.6
1966 . . . . .	6	5,742,855	5,043	75	5,337	94.5	95.9
1967 . . . . .	5	6,822,816	6,981	55	6,118	114.1	115.0
1968 . . . . .	4	8,111,837	7,903	159	7,096	111.4	113.6
1969 . . . . .	3	9,263,205	8,532	130	7,587	112.4	114.2
1970 . . . . .	2	11,584,725	9,154	296	8,159	112.2	115.8
1971 . . . . .	1	15,741,275	13,156	45	9,795	134.3	134.8
All years of issue . . . . .		\$93,498,883	\$107,303	\$1,034	\$100,268	107.0%	108.0%

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

under any "special" approach for obtaining medical evidence of insurability have been either excluded from the study or included in the recent medical issues by the contributing companies.

The nonmedical mortality ratios by year of issue for all ages at issue combined during the period from 1971 to 1972 anniversaries are presented in Table 4 on an unadjusted basis. The highest mortality ratio by year of issue, excluding war deaths, was 134.3 per cent for issue year 1971

(policy year 1). Mortality ratios for policy year 1 have tended to be high for the last nine experience years.

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 indicates the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 107.0 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 . . . . .	3	3.0%
10-20 . . . . .	4	12.0
5-10 . . . . .	1	1.2
0-5 . . . . .	1	1.3
<b>Percentage points above average:</b>		
0-5 . . . . .	4	37.5
5-10 . . . . .	2	22.4
10-20 . . . . .	3	22.6

#### *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 1967 to 1972 anniversaries. The 1955-60 Male, Female, and Male and Female Combined Select Basic Tables, respectively, were used to calculate expected deaths for the male experience, female experience, and experience reported without subdivision by sex. War deaths have been excluded from the 1967-72 experience.

The nonmedical mortality ratios shown in Table 5 have been adjusted to reflect the approximate distribution of nonmedical exposures by age for

<sup>1</sup> Four factors, among others, which 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.

issue age groups 35-39 and higher. The lower half of Table 5 shows that, for policy years 1-15 combined, nonmedical mortality exceeds medical mortality appreciably at issue ages 10 and over; the excess ranges from about 2 per cent at issue ages 10-19 to about 28 per cent at issue ages

TABLE 5  
COMPARISON OF MEDICAL AND NONMEDICAL EXPERIENCE\*  
MALE AND FEMALE LIVES COMBINED  
(INCLUDING DATA NOT SUBDIVIDED BY SEX)  
BETWEEN 1967 AND 1972 ANNIVERSARIES  
BY AGE GROUP AT ISSUE AND DURATION (FIRST FIFTEEN POLICY YEARS)

AGE GROUP AT ISSUE	POLICY YEARS									
	1-2		3-5		6-10		11-15		1-15	
	Medical %	Non- Medical %								
Mortality Ratios on 1955-60 Select Basic Table										
0.....	135	76	133	77	115	83	246	109	151	83
1-9.....	157	79	110	92	111	115	141	131	131	106
10-19....	137	131	145	128	105	111	100	95	115	117
20-24....	97	135	97	110	91	101	92	87	94	110
25-29....	107	124	102	100	97	102	89	98	96	104
30-34....	112	133	107	116	97	103	90	101	96	107
35-39....	99	132†	97	124†	94	107†	89	107†	93	112†
40-44....	93	124†	91	111†	93	122†	93	119†	93	119†
45-49....	89	87†	89	92†	88	69†	92	139†	90	106†
50 and over	87	41†	81	91†	90	167†	96	98†	90	104†
All ages.	94	127†	90	113†	92	105†	92	101†	92	109†
Ratio of Nonmedical to Medical Mortality Ratios										
0.....	56%	58%		73%		44%		55%		
1-9.....	51	83		104		93		81		
10-19....	96	89		105		96		102		
20-24....	140	113		110		95		117		
25-29....	116	99		105		110		109		
30-34....	119	109		106		112		111		
35-39....	133†	128†		114†		121†		120†		
40-44....	132†	121†		132†		128†		128†		
45-49....	97†	104†		78†		151†		118†		
50 and over	48†	112†		186†		102†		116†		

\* Excluding war deaths between 1967 and 1972 anniversaries.

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

40-44. 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.

#### *Paramedically Examined Issues*

Companies were asked to submit their data on paramedically examined business separately. In prior years these data had always been excluded if possible; otherwise, they were included in the medically examined experience. Twelve companies were able to submit this business separately. The total exposure submitted was only \$418 million, which is less than 1 per cent of the medically examined experience. Of the \$418 million exposed, \$383 million, or about 92 per cent of the total exposure, is concentrated in the first policy year. Therefore, due to the size of the exposure and the youth of the data, no meaningful conclusions can be reached.

#### 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 \$61 billion and actual claims of \$988 million excluding war deaths. This represents an increase in the exposures from the preceding year of 6.6 per cent, despite the fact that one less company contributed to this year's study. Deaths resulting from operations of war between 1971 and 1972 anniversaries amounted to forty-one policies, representing \$127,000 in claims. War deaths had minimal effect on the all-ages mortality ratio. The mortality ratios for age groups 20-24 and 25-29 were affected the most by war deaths, but even in these cases the net effect was an increase of less than 3.5 percentage points. Mortality ratios are presented in Table 6 by attained age groups 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. The aggregate mortality ratio, excluding war deaths, on the 1955-60 Ultimate Basic Tables for the period from 1971 to 1972 anniversaries was 88.7 per cent.

The tabulation at the top of page 15 shows how this result compares with previous studies based on the 1955-60 Basic Tables.

Exposure Year	Aggregate Mortality Ratio
1961-62.....	96.8%
1962-63.....	98.6
1963-64.....	98.1
1964-65.....	95.4
1965-66.....	94.9
1966-67.....	94.3
1967-68.....	95.5
1968-69.....	93.4
1969-70.....	90.3
1970-71.....	88.6
1971-72.....	88.7

**TABLE 6**  
**STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES**  
**BY ATTAINED AGE**  
**ALL POLICY YEARS COMBINED**  
**(Amounts Shown in \$1,000 Units)**

ATTAINED AGES	EXPOSED TO RISK	ACTUAL DEATHS		1955-60 ULTIMATE BASIC TABLE				MORTALITY RATIO*	
				Expected Deaths	Mortality Ratio				
		Exclud- ing War Deaths	War Deaths	Exclud- ing War Deaths	Includ- ing War Deaths	1941 CSO Table	1958 CSO Table		
15-19.....	\$ 1,302,038	\$ 1,252	\$ 2	\$ 999	125.3%	125.5%	42.6%	59.4%	
20-24.....	1,143,933	1,322	38	1,182	111.8	115.1	44.5	62.2	
25-29.....	1,061,666	938	17	1,099	85.4	86.9	28.2	44.2	
30-34.....	1,382,981	1,578	14	1,640	96.2	97.1	28.6	50.1	
35-39.....	2,937,218	4,450	0	4,700	94.7	94.7	28.8	52.4	
40-44.....	5,766,104	13,470	17	15,575	86.5	86.6	32.5	54.6	
45-49.....	8,394,024	35,672	19	41,038	86.9	87.0	42.4	65.7	
50-54.....	9,414,436	64,481	0	75,675	85.2	85.2	47.6	68.3	
55-59.....	9,219,067	100,597	19	118,115	85.2	85.2	51.8	69.8	
60-64.....	7,728,054	138,570	0	159,084	87.1	87.1	57.5	73.6	
65-69.....	5,323,907	149,062	1	169,330	88.0	88.0	60.6	74.0	
70-74.....	3,537,779	153,315	0	171,257	89.5	89.5	62.6	74.6	
75-79.....	2,220,167	145,575	0	160,699	90.6	90.6	63.9	77.3	
80-84.....	1,042,585	108,188	0	113,674	95.2	95.2	68.8	82.3	
85-89.....	338,272	51,151	0	57,448	89.0	89.0	69.3	84.3	
90-95.....	82,781	17,909	0	21,244	84.3	84.3	67.9	81.9	
All ages.	\$60,895,011	\$987,530	\$127	\$1,112,759	88.7%	88.8%	58.0%	74.1%	

\* Excluding war deaths between 1971 and 1972 anniversaries.

The following tabulation indicates the variation in the aggregate mortality ratios of the contributing companies from the all-company average of 88.7 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 .....	4	10.0%
5-10 .....	3	15.3
0-5 .....	4	32.5
<b>Percentage points above average:</b>		
0-5 .....	2	3.0%
5-10 .....	3	28.2
10-20 .....	2	11.0

#### *Comparison of Medical and Nonmedical Experience*

Companies were asked to subdivide their ultimate data into medical and nonmedical if they could conveniently do so. Eleven companies were able to subdivide their data in this manner. The results of this experience between 1967 and 1972 anniversaries are shown in Table 7. These data involve exposures which comprise 44.5 per cent of the entire ultimate experience reported for the period, as compared with 46.3 per cent for the previous study.

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

#### *Comparison of Premium-paying and Fully Paid-up Experience*

A comparison of the mortality on premium-paying and fully paid-up (excluding reduced paid-up) policies for the period from 1967 to 1972 anniversaries is shown in Table 8 for standard medical and nonmedical issues combined. Fifteen companies submitted their experience separately on premium-paying policies, and thirteen companies did so on fully paid-up policies. On the basis of the experience between 1967 and 1972 anniversaries, the premium-paying data submitted constituted 74.6 per cent and the fully paid-up data 17.3 per cent of the total ultimate experience of all companies.

Mortality ratios are consistently higher on premium-paying than on fully paid-up policies at the higher attained ages. War deaths were excluded in determining the mortality ratios.

## EXPERIENCE BY SEX

All of the eighteen contributing companies submitted all or the major portion of both their medical and their nonmedical select data separately for males and females.

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 1967 AND 1972 ANNIVERSARIES  
 BY ATTAINED AGE  
 ALL POLICY YEARS COMBINED

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

ATTAINED AGES	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO†		RATIO OF NON-MEDICAL TO MEDICAL MORTALITY RATIOS‡
			Excluding War Deaths		War Deaths				
	Medical	Nonmedical	Medical	Non-medical	Medical	Non-medical	Medical	Non-medical	
15-19.....	\$ 470,632	\$ 1,984,964	\$ 448	\$ 1,621	\$ 6	\$ 42	118.8%	107.9%	90.8%
20-24.....	597,409	1,021,667	599	1,139	71	192	89.7	102.4	114.2
25-29.....	760,047	845,363	582	932	87	73	71.0	104.3	146.9
30-34.....	1,279,526	1,504,576	1,555	1,705	21	39	99.7	92.0	92.3
35-39.....	2,912,196	2,891,465	4,478	4,304	35	21	94.0	93.8	99.8
40-44.....	7,206,140	4,196,138	18,072	10,557	30	12	91.2	96.5	105.8
45-49.....	12,613,771	4,157,743	52,826	17,995	38	15	83.0	91.4	110.1
50-54.....	16,265,065	2,859,776	111,497	20,933	18	5	83.5	96.2	115.2
55-59.....	17,167,874	1,642,173	193,006	19,369	0	0	86.9	98.7	113.6
60-64.....	14,764,318	897,774	268,140	17,640	2	0	87.7	98.4	112.2
65-69.....	9,400,209	442,019	274,167	13,804	1	0	91.6	99.0	108.1
70-74.....	6,508,693	272,046	290,341	12,983	0	0	92.2	98.3	106.6
75-79.....	3,904,653	156,293	266,380	11,715	1	0	94.4	103.0	109.1
80-84.....	1,779,661	66,244	185,661	7,087	0	0	95.7	97.8	102.2
85-89.....	539,456	14,483	86,187	2,373	0	0	94.2	98.0	104.0
90-95.....	117,964	2,127	25,933	496	0	0	87.3	92.2	105.6
All ages.....	\$96,287,612	\$22,954,841	\$1,779,874	\$144,653	\$310	\$399	90.6%	97.3%	107.4%

\* Based on data from eleven companies.

† Excluding war deaths between 1967 and 1972 anniversaries.

The detailed select experience by sex for the period from 1971 to 1972 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 1967 and 1972 anniversaries for the select and ultimate data. War deaths were excluded in determining the mortality ratios in these tables.

The mortality ratios by age group at issue and sex for the first fifteen policy years combined, covering the experience from 1967 to 1972 anniversaries, are presented in Table 9 for standard medically examined issues and in Table 10 for standard nonmedical issues. For the purpose of

**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 1967 AND 1972 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†				RATIO OF PREMIUM- PAYING TO PAID-UP MOR-TALITY RATIOS‡	
	Exposed to Risk	Actual Deaths		Mor-tal-i-ty Ratio‡	Exposed to Risk	Actual Deaths		Mor-tal-i-ty Ratio‡		
		Excluding War Deaths	War Deaths			Excluding War Deaths	War Deaths			
15-19	\$ 5,070,591	\$ 4,232	\$ 119	110.9%	\$ 170,259	\$ 135	\$ 22	98.5%	113%	
20-24	2,599,037	2,938	500	109.1	1,897,070	1,972	329	106.0	103	
25-29	2,481,234	2,474	191	94.6	1,392,916	1,407	51	101.3	93	
30-34	4,470,831	5,399	66	101.0	982,689	1,084	9	97.7	103	
35-39	10,338,381	15,770	96	95.0	1,577,927	2,538	15	102.9	92	
40-44	20,040,716	51,817	90	95.7	3,165,274	7,949	8	99.4	96	
45-49	28,515,693	122,999	67	87.9	4,463,369	18,629	1	91.7	96	
50-54	32,125,320	226,697	21	87.0	5,517,008	38,723	1	91.6	95	
55-59	31,519,647	364,790	44	89.8	6,182,072	69,036	3	90.4	99	
60-64	25,855,200	483,221	2	90.2	6,332,383	108,957	2	85.8	105	
65-69	15,887,293	467,118	1	91.7	5,912,130	157,093	1	84.7	108	
70-74	10,844,723	489,782	0	92.9	4,131,318	169,116	0	85.2	109	
75-79	6,360,028	442,801	0	96.0	2,627,465	165,202	1	87.2	110	
80-84	2,840,013	300,004	0	96.7	1,341,143	132,433	0	90.6	107	
85-89	762,997	117,657	0	90.8	526,706	79,143	0	88.4	103	
90-95	160,929	33,729	0	82.8	155,459	29,840	0	75.6	110	
All ages	\$199,872,633	\$3,131,428	\$1,197	91.9%	\$46,375,189	\$983,257	\$443	87.0%	106.6%	

\* Based on data from fifteen companies.

† Based on data from thirteen companies.

‡ Excluding war deaths between 1967 and 1972 anniversaries.

comparing male and female mortality, the right-hand column of these tables is based on mortality ratios for females with expected deaths calculated on the male table. The highest ratios of female to male mortality are found at issue ages 20-39 and 70 and over for medical issues and at issue ages 0 and 25-39 for nonmedical issues. The ratios of

female to male mortality are generally lower on nonmedical than on medical business at issue ages 15 and over, while at the younger ages the opposite is true.

Table 11 presents side by side the experience for the five-year period from 1967 to 1972 anniversaries on medical and nonmedical issues,

TABLE 9

COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE  
STANDARD MEDICALLY EXAMINED ISSUES  
OBSERVED BETWEEN 1967 AND 1972 ANNIVERSARIES  
BY AGE AT ISSUE—POLICY YEARS 1–15 COMBINED  
Expected Deaths on 1955–60 Male Select Basic Table  
and 1955–60 Female Select Basic Table  
(Amounts Shown in \$1,000 Units)

AGES AT ISSUE	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO*		RATIO* OF FEMALE TO MALE MOR- TALITY†
			Excluding War Deaths		War Deaths				
	Male	Female	Male	Female	Male	Female	Male	Female	
0	\$ 729,098	\$ 330,762	\$ 765	\$ 131	\$ 0	172.7%	89.1%	39.0%	
1	773,693	376,926	384	50	0	115.0	44.6	27.5	
2–4	1,022,398	409,387	757	174	4	168.6	143.8	57.1	
5–9	2,037,280	821,853	1,654	138	106	142.0	59.2	21.9	
10–14	3,407,923	828,694	4,133	398	535	129.5	157.9	41.8	
15–19	9,500,682	1,251,773	10,673	655	1,563	107.7	136.7	47.4	
20–24	39,673,345	2,273,878	34,483	1,384	2,875	93.0	109.7	72.0	
25–29	80,752,639	3,271,263	85,127	2,847	1,778	94.6	136.0	89.3	
30–34	113,945,182	5,467,899	189,947	7,708	1,009	95.4	125.4	95.0	
35–39	120,630,432	8,100,356	310,865	14,010	661	92.1	109.3	74.8	
40–44	96,922,420	9,716,008	387,493	23,824	331	91.9	100.4	64.7	
45–49	60,181,992	7,753,095	349,970	24,020	12	89.6	90.2	55.6	
50–54	30,961,080	4,640,260	267,556	21,752	1	89.6	101.5	55.4	
55–59	13,249,255	2,320,189	160,506	12,933	0	88.3	80.3	46.4	
60–64	4,297,214	960,667	77,007	9,584	0	90.1	92.2	55.9	
65–69	1,030,969	300,605	28,393	4,623	1	98.8	91.1	56.8	
70 and over	187,408	72,737	5,973	1,718	0	77.2	109.9	82.2	
All ages	\$579,303,009	\$48,896,352	\$1,915,686	\$125,949	\$8,876	91.5%	98.0%	59.6%	

\* Excluding war deaths between 1967 and 1972 anniversaries.

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

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 for issue ages 1–9 and 35 and over in policy years 1–15 combined.

The mortality ratios by attained age groups and sex for policy years sixteen and over combined, covering the experience from 1967 to 1972 anniversaries, are presented in Table 12 for standard medical and non-medical issues combined. Again, for the purpose of comparing male and female mortality, the right-hand column of this table is based on mortality ratios for females with expected deaths calculated on the male table. Eleven of the contributing companies submitted data separately for males and females for policy years 16 and over. The highest ratios of female to male mortality are found at attained ages 35–44 and 80–95.

TABLE 10  
COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE  
STANDARD NONMEDICAL ISSUES  
OBSERVED BETWEEN 1967 AND 1972 ANNIVERSARIES  
BY AGE AT ISSUE—POLICY YEARS 1–15 COMBINED  
Expected Deaths on 1955–60 Male Select Basic Table  
and 1955–60 Female Select Basic Table  
(Amounts Shown in \$1,000 Units)

AGES AT ISSUE	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO*†		RATIO* OF FEMALE TO MALE MOR- TALITY‡	
			Excluding War Deaths		War Deaths					
	Male	Female	Male	Fe- male	Male	Fe- male	Male	Female		
0 . . . .	\$ 8,401,920	\$ 5,128,977	\$ 4,363	\$ 2,016	\$ 0	\$ 0	83.2%	81.6%	73.1%	
1 . . . .	3,191,390	1,881,887	1,594	433	0	0	101.0	67.4	45.3	
2–4 . . . .	4,396,967	2,378,359	2,015	631	0	0	102.1	84.8	56.2	
5–9 . . . .	7,006,679	3,013,977	4,126	857	279	1	122.9	103.9	49.5	
10–14 . . . .	11,521,995	3,287,427	10,283	1,190	1,447	0	104.2	136.6	43.6	
15–19 . . . .	52,657,448	10,610,391	62,274	4,690	14,291	15	117.8	127.0	38.1	
20–24 . . . .	105,239,901	15,305,013	101,079	7,484	12,377	5	110.6	99.0	52.6	
25–29 . . . .	84,146,383	10,510,004	88,993	7,070	4,169	2	103.0	119.8	73.2	
30–34 . . . .	41,832,222	7,778,694	77,830	8,258	1,207	3	107.4	103.8	71.2	
35–39 . . . .	16,414,742	5,243,410	51,368	9,830	197	0	109.6	121.5	69.7	
40–44 . . . .	2,867,837	1,570,943	13,584	3,261	24	0	103.0	104.5	59.8	
45–49 . . . .	230,033	122,233	1,565	236	0	0	103.0	74.0	39.7	
50 and over . . . .	79,672	15,050	1,013	69	0	0	111.0	81.2	38.4	
All ages . . . .	\$337,987,187	\$66,846,364	\$423,087	\$46,025	\$33,991	\$26	108.4%	109.1%	59.1%	

\* Excluding war deaths between 1967 and 1972 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 1967 AND 1972 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	
	Medi- cal %	Non- medi- cal %								
Male Experience—Mortality Ratios on 1955-60 Male Select Basic Table										
0 . . . . .	146	77	123	75	148	85	335	111	173	83
1-9 . . . . .	183	81	105	98	126	127	154	132	144	112
10-19 . . . . .	135	128	142	129	105	110	97	94	113	116
20-24 . . . . .	95	136	97	113	91	101	91	87	93	111
25-29 . . . . .	106	124	100	99	96	101	88	97	95	103
30-34 . . . . .	111	139	107	119	97	103	88	100†	95	107
35-39 . . . . .	98	134†	96	123†	94	107†	88	105†	92	110†
40-44 . . . . .	91	126†	91	110†	93	125†	92	116†	92	119†
45-49 . . . . .	89	50†	89	114†	87	62†	92	149†	90	109†
50 and over . . . . .	84	42†	81	97†	90	114†	97	99†	90	94†
All ages . . . . .	92	128†	90	114†	91	105†	92	99†	92	109†
Female Experience—Mortality Ratios on 1955-60 Female Select Basic Table										
0 . . . . .	101	74	170	82	15	80	57	106	91	82
1-9 . . . . .	73	74	127	75	64	79	68	123	78	87
10-19 . . . . .	181	167	181	120	107	119	147	114	144	129
20-24 . . . . .	143	124	114	87	85	93	114	94	110	100
25-29 . . . . .	139	123	163	114	142	114	111	131	136	120
30-34 . . . . .	132	103	95	102	92	101	175	109	125	104
35-39 . . . . .	124	135†	113	128†	90	106†	128	133†	109	122†
40-44 . . . . .	137	125†	86	97†	92	108†	111	122†	100	113†
45-49 . . . . .	94	64†	88	104†	92	77†	89	137†	90	95†
50 and over . . . . .	122	18†	85	71†	95	168†	86	139†	93	108†
All ages . . . . .	120	116†	91	105†	94	104†	101	118†	98	110†
Male Experience—Ratio of Nonmedical to Medical Mortality Ratios										
0 . . . . .	53%	61%		57%		33%		48%		
1-9 . . . . .	44	93		101		86		78		
10-19 . . . . .	95	91		104		97		102		
20-24 . . . . .	143	117		111		96		119		
25-29 . . . . .	117	99		106		109		109		
30-34 . . . . .	123	110		106		114		113		
35-39 . . . . .	137†	128†		114†		120†		120†		
40-44 . . . . .	139†	121†		134†		126†		129†		
45-49 . . . . .	56†	128†		72†		161†		122†		
50 and over . . . . .	51†	119†		127†		102†		105†		
Female Experience—Ratio of Nonmedical to Medical Mortality Ratios										
0 . . . . .	73%	48%		537%		186%		90%		
1-9 . . . . .	101	59		124		179		111		
10-19 . . . . .	93	67		112		77		89		
20-24 . . . . .	87	76		110		82		91		
25-29 . . . . .	89	70		81		118		88		
30-34 . . . . .	78	107		110		62		83		
35-39 . . . . .	108†	114†		118†		104†		111†		
40-44 . . . . .	91†	113†		118†		110†		112†		
45-49 . . . . .	68†	118†		83†		154†		106†		
50 and over . . . . .	13†	84†		177†		161†		116†		

\* Excluding war deaths between 1967 and 1972 anniversaries.

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

TABLE 12

**COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE\***  
**STANDARD ISSUES DURING SIXTEENTH AND SUBSEQUENT POLICY YEARS**  
**EXPERIENCE BETWEEN 1967 AND 1972 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- TAINED AGES	EXPOSED TO RISK		ACTUAL DEATHS				MORTALITY RATIO†		RATIO‡ OF FEMALE TO MALE MOR- TALITY‡
			Excluding War Deaths		War Deaths				
	Male	Female	Male	Female	Male	Fe- male	Male	Female	
15–19	\$ 1,870,381	\$ 1,253,235	\$ 2,049	\$ 551	\$ 126	\$ 0	106.8%	117.5%	40.4%
20–24	1,792,539	1,069,057	2,159	598	782	1	84.3	114.3	45.6
25–29	1,792,080	781,219	1,889	455	245	0	88.6	84.1	53.6
30–34	2,962,444	688,257	3,739	494	77	1	98.9	75.3	56.9
35–39	5,885,400	1,307,780	9,511	1,469	89	1	96.9	87.8	70.6
40–44	11,921,633	2,056,200	31,531	4,057	83	0	94.6	110.7	75.6
45–49	17,767,722	2,561,967	78,101	7,532	69	0	84.9	101.0	66.9
50–54	20,595,835	2,628,265	150,534	12,348	25	2	86.5	104.3	64.0
55–59	20,570,532	2,479,499	244,811	16,889	11	0	89.1	101.4	56.8
60–64	17,448,209	2,025,998	331,967	20,976	4	0	88.4	103.6	53.7
65–69	11,597,346	1,318,196	350,710	18,693	2	0	92.0	83.8	46.3
70–74	7,722,979	952,973	357,662	23,627	0	0	93.4	75.7	52.9
75–79	4,538,122	563,246	321,023	24,845	1	1	95.5	89.4	61.5
80–84	2,042,946	255,142	219,238	19,389	0	0	96.3	98.1	70.0
85–89	637,202	81,054	99,870	9,879	0	0	90.7	93.2	76.4
90–95	146,328	22,299	31,497	3,685	0	0	83.8	75.1	75.4
All ages	\$129,306,694	\$20,044,386	\$2,236,291	\$165,487	\$1,514	\$6	91.5%	91.8%	58.6%

\* Based on data from eleven companies.

† Excluding war deaths between 1967 and 1972 anniversaries.

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

## APPENDIX I

**TABLE A**  
**CONTRIBUTING COMPANIES**  
**PROPORTION OF TOTAL EXPOSURES BETWEEN 1971 AND 1972 ANNIVERSARIES**  
**CONTRIBUTED BY EACH COMPANY**

COMPANY	FIRST FIFTEEN POLICY YEARS		SIXTEENTH AND SUBSEQUENT POLICY YEARS	FIRST FIFTEEN POLICY YEARS BY SEX				SIXTEENTH AND SUBSEQUENT POLICY YEARS BY SEX	
	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	18.2%	34.1%	18.4%	16.6%	1.6%	27.7%	6.4%	28.4%	4.5%
New York Life	11.9	13.9	11.3	10.6	1.3	11.0	2.9	15.9	2.7
Metropolitan	10.4	17.1	22.4	9.7	0.7	14.8	2.3		
Equitable, N.Y.	8.3	6.4	8.8	7.7	0.6	5.2	1.2		
Northwestern Mutual	8.2	2.0	6.6	7.5	0.7	1.4	0.6	10.9	1.0
Massachusetts Mutual	6.9	2.7	3.9	6.5	0.4	2.2	0.5		
John Hancock	5.4	6.2	5.1	4.9	0.5	5.0	1.2	7.4	1.8
New England	4.0	1.6	2.8	3.7	0.3	1.4	0.2	3.6	0.3
Connecticut Mutual	3.6	2.3	2.3	3.3	0.3	2.0	0.3		
Mutual Benefit	3.5	1.3	2.8	3.2	0.3	1.1	0.2	3.7	0.4
Connecticut General	3.1	0.5	0.9	2.8	0.3	0.4	0.1	1.5	0.2
Occidental	2.9	1.0	0.8	2.7	0.2	0.8	0.2		
Travelers	2.8	1.7	2.6	2.6	0.2	1.5	0.2	4.4	0.3
Aetna	2.8	1.4	1.8	2.6	0.2	1.1	0.3	2.8	0.4
Mutual Life, N.Y.	2.4	3.6	3.8	2.1	0.3	3.0	0.6	5.8	0.9
Penn Mutual	2.2	2.1	2.6	2.0	0.2	1.8	0.3		
Lincoln National	2.0	1.2	1.7	1.8	0.2	1.0	0.2	2.7	0.4
Provident Mutual	1.4	0.9	1.4	1.3	0.1	0.8	0.1		
Total	100.0%	100.0%	100.0%	91.6%	8.4%	82.2%	17.8%	87.1%	12.9%

NOTE.—A Comparative Mortality Study of the select experience between 1967 and 1972 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 separately for medical and nonmedical business.

**TABLE B**  
**STANDARD MEDICALLY EXAMINED ISSUES OF 1957-71**  
**MALE AND FEMALE LIVES COMBINED**  
**(INCLUDING DATA NOT SUBDIVIDED BY SEX)**  
**EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES**  
**BY YEAR OF ISSUE AND AGE AT ISSUE**  
**Expected Deaths on 1955-60 Select Basic Tables**  
**(Amounts Shown in \$1,000 Units)**

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1957 (15)	0	\$ 12,924	\$ 23	\$ 0	\$ 5	460%	460%
	1	17,705	0	0	9	0	0
	2-4	20,303	22	0	12	183	183
	5-9	35,622	17	0	24	58	58
	10-14	55,837	47	10	61	77	93
	15-19	120,113	119	2	141	84	85
	20-24	495,977	841	14	746	112	114
	25-29	912,964	1,728	0	2,215	78	78
	30-34	1,255,919	5,175	70	5,657	91	92
	35-39	1,159,931	6,657	0	8,235	80	80
	40-44	830,809	7,702	0	8,585	89	89
	45-49	430,271	5,887	0	7,313	80	80
	50-54	182,980	4,227	0	4,318	97	97
	55-59	72,783	2,754	0	2,621	105	105
	60-64	25,951	1,273	0	1,232	103	103
	65-69	6,476	803	0	431	186	186
	70 and over	439	12	0	63	19	19
	All ages	\$ 5,637,013	\$37,287	\$96	\$41,673	89%	89%
1958 (14)	0	\$ 10,357	\$ 1	\$ 0	\$ 4	25%	25%
	1	19,706	17	0	8	212	212
	2-4	18,970	11	0	10	110	110
	5-9	32,866	52	0	28	185	185
	10-14	54,910	24	0	58	41	41
	15-19	119,199	113	0	130	86	86
	20-24	474,116	550	6	660	83	84
	25-29	880,775	1,711	0	1,906	89	89
	30-34	1,292,338	4,255	0	5,042	84	84
	35-39	1,258,281	7,197	0	7,653	94	94
	40-44	900,793	7,671	0	8,507	90	90
	45-49	489,554	6,123	0	7,286	84	84
	50-54	223,794	4,035	0	4,834	83	83
	55-59	93,815	2,716	0	3,051	89	89
	60-64	30,521	1,528	0	1,367	111	111
	65-69	6,946	498	0	435	114	114
	70 and over	647	24	0	79	30	30
	All ages	\$ 5,907,595	\$36,526	\$ 6	\$41,058	88%	88%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1959 . . . . . (13)	0	\$ 11,058	\$ 8	\$ 0	\$ 3	266%	266%
	1	21,905	0	0	8	0	0
	2-4	21,191	0	0	11	0	0
	5-9	40,207	21	0	33	63	63
	10-14	66,643	36	0	70	51	51
	15-19	143,087	149	0	155	96	96
	20-24	473,034	573	0	595	96	96
	25-29	849,760	1,452	0	1,652	87	87
	30-34	1,255,555	4,083	0	4,188	97	97
	35-39	1,310,753	5,711	0	6,985	81	81
	40-44	941,758	6,902	0	7,933	87	87
	45-49	562,500	6,859	0	7,303	93	93
	50-54	261,869	5,370	0	4,968	108	108
	55-59	107,437	2,733	0	3,061	89	89
	60-64	33,957	799	0	1,410	56	56
	65-69	9,867	959	0	539	177	177
	70 and over	671	31	0	79	39	39
	All ages	\$ 6,111,261	\$35,686	\$ 0	\$38,993	91%	91%
1960 . . . . . (12)	0	\$ 9,940	\$ 15	\$ 0	\$ 3	500%	500%
	1	20,853	0	0	6	0	0
	2-4	18,791	30	0	8	375	375
	5-9	31,881	49	0	23	213	213
	10-14	50,371	54	0	51	105	105
	15-19	116,083	187	0	123	152	152
	20-24	346,968	255	0	397	64	64
	25-29	663,792	949	0	1,145	82	82
	30-34	1,079,540	2,999	0	3,173	94	94
	35-39	1,169,726	5,047	0	5,664	89	89
	40-44	892,376	6,145	20	6,616	92	93
	45-49	540,576	5,784	0	6,064	95	95
	50-54	264,314	3,887	0	4,384	88	88
	55-59	110,114	2,190	0	2,757	79	79
	60-64	38,852	1,707	0	1,436	118	118
	65-69	10,597	758	0	554	136	136
	70 and over	1,028	83	0	109	76	76
	All ages	\$ 5,365,811	\$30,139	\$20	\$32,513	92%	92%
1961 . . . . . (11)	0	\$ 8,752	\$ 1	\$ 0	\$ 3	33%	33%
	1	21,244	2	0	6	33	33
	2-4	18,650	24	0	7	342	342
	5-9	32,245	24	0	19	126	126
	10-14	48,863	104	0	47	221	221
	15-19	122,088	112	0	129	86	86
	20-24	355,040	336	25	374	89	96
	25-29	650,733	900	0	970	92	92
	30-34	1,072,204	2,546	0	2,797	91	91
	35-39	1,199,951	4,377	0	5,143	85	85
	40-44	964,980	6,576	0	6,417	102	102
	45-49	582,288	4,915	0	5,777	85	85
	50-54	307,544	4,266	0	4,550	93	93
	55-59	124,261	2,260	0	2,728	82	82
	60-64	39,017	1,114	0	1,227	90	90
	65-69	10,781	275	0	497	55	55
	70 and over	2,207	102	0	208	49	49
	All ages	\$ 5,560,856	\$27,934	\$25	\$30,899	90%	90%

TABLE B—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1962 . . . . (10)	0	\$ 9,286	\$ 39	\$ 0	\$ 3	1,300%	1,300%
	1	22,403	10	0	6	166	166
	2-4	20,358	5	0	6	83	83
	5-9	33,820	20	0	18	111	111
	10-14	47,032	68	0	43	158	158
	15-19	121,996	205	0	127	161	161
	20-24	350,461	383	0	346	110	110
	25-29	670,435	944	0	883	106	106
	30-34	1,075,664	2,311	0	2,474	93	93
	35-39	1,254,716	4,674	0	4,715	99	99
	40-44	1,059,721	5,437	0	6,222	87	87
	45-49	659,438	5,069	0	5,819	87	87
	50-54	335,591	3,496	0	4,490	77	77
	55-59	140,171	2,689	0	2,739	98	98
	60-64	54,277	984	0	1,459	67	67
	65-69	13,786	378	0	552	68	68
	70 and over	2,160	33	0	173	19	19
	All ages	\$ 5,871,324	\$26,745	\$ 0	\$30,075	88%	88%
1963 . . . (9)	0	\$ 12,769	\$ 0	\$ 0	\$ 4	0%	0%
	1	15,348	0	0	4	0	0
	2-4	17,999	0	0	5	0	0
	5-9	32,907	35	0	16	218	218
	10-14	47,273	60	0	43	139	139
	15-19	121,439	124	0	123	100	100
	20-24	406,575	362	12	382	94	97
	25-29	800,852	679	5	952	71	71
	30-34	1,264,783	1,991	0	2,542	78	78
	35-39	1,508,280	4,550	0	5,016	90	90
	40-44	1,283,804	5,255	6	6,752	77	77
	45-49	811,332	5,435	0	6,502	83	83
	50-54	422,898	4,235	0	5,176	81	81
	55-59	191,706	3,449	0	3,306	104	104
	60-64	68,119	2,126	0	1,593	133	133
	65-69	17,490	427	1	584	73	73
	70 and over	3,640	233	0	263	88	88
	All ages	\$ 7,027,223	\$28,961	\$24	\$33,263	87%	87%
1964 . . . (8)	0	\$ 15,965	\$ 0	\$ 0	\$ 5	0%	0%
	1	9,052	0	0	3	0	0
	2-4	16,244	0	0	4	0	0
	5-9	30,896	27	0	13	207	207
	10-14	48,542	49	0	42	116	116
	15-19	130,516	91	0	128	71	71
	20-24	492,148	427	0	439	97	97
	25-29	957,132	908	0	1,012	89	89
	30-34	1,372,578	2,610	15	2,380	109	110
	35-39	1,631,580	5,272	0	4,782	110	110
	40-44	1,407,326	6,685	0	6,673	100	100
	45-49	866,838	5,010	0	6,373	78	78
	50-54	488,486	4,610	0	5,531	83	83
	55-59	205,329	2,850	0	3,213	88	88
	60-64	72,474	1,247	0	1,499	83	83
	65-69	18,471	712	0	545	130	130
	70 and over	4,254	222	0	240	92	92
	All ages	\$ 7,767,838	\$30,720	\$15	\$32,882	93%	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	
1965 . . . . .	0	\$ 15,455	\$ 3	\$ 0	\$ 6	50%	50%	
	1	9,144	2	0	3	66	66	
	2-4	18,344	0	0	5	0	0	
	5-9	35,279	7	0	13	53	53	
	10-14	46,819	75	0	38	197	197	
	15-19	162,240	144	0	155	92	92	
	20-24	599,658	354	15	509	69	72	
	25-29	1,100,236	1,194	0	1,060	112	112	
	30-34	1,533,629	1,638	0	2,270	72	72	
	35-39	1,784,818	3,414	0	4,654	73	73	
	40-44	1,538,754	5,699	0	6,559	86	86	
	45-49	983,736	5,358	0	6,523	82	82	
	50-54	540,521	3,723	0	5,628	66	66	
	55-59	225,154	2,377	0	3,246	73	73	
	60-64	80,142	1,067	0	1,530	69	69	
	65-69	20,226	619	0	546	113	113	
	70 and over	4,188	213	0	201	105	105	
	All ages	\$ 8,698,350	\$25,887	\$15	\$32,946	78%	78%	
1966 . . . . .	0	\$ 16,706	\$ 5	\$ 0	\$ 8	62%	62%	
	1	10,249	0	0	4	0	0	
	2-4	17,729	0	0	5	0	0	
	5-9	35,746	0	0	11	0	0	
	10-14	52,406	133	0	39	341	341	
	15-19	166,755	126	0	154	81	81	
	20-24	640,879	430	0	531	80	80	
	25-29	1,177,519	948	40	1,061	89	93	
	30-34	1,622,938	2,507	9	2,132	117	118	
	35-39	1,873,816	3,754	0	4,241	88	88	
	40-44	1,664,300	5,207	15	6,360	81	82	
	45-49	1,092,535	5,383	0	6,271	85	85	
	50-54	584,933	5,861	0	5,232	112	112	
	55-59	249,716	2,610	0	3,074	84	84	
	60-64	82,000	780	0	1,433	54	54	
	65-69	23,194	626	0	571	109	109	
	70 and over	4,984	220	0	204	107	107	
	All ages	\$ 9,316,412	\$28,590	\$64	\$31,331	91%	91%	
1967 . . . . .	0	\$ 15,057	\$ 0	\$ 0	\$ 8	0%	0%	
	1	10,759	0	0	5	0	0	
	2-4	19,330	0	0	7	0	0	
	5-9	38,857	20	0	11	181	181	
	10-14	49,838	279	0	34	820	820	
	15-19	145,743	124	0	134	92	92	
	20-24	604,905	444	0	497	89	89	
	25-29	1,253,584	1,347	0	1,082	124	124	
	30-34	1,725,332	1,702	33	1,969	86	88	
	35-39	2,001,932	3,438	0	3,964	86	86	
	40-44	1,775,949	4,734	1	5,774	81	82	
	45-49	1,201,148	5,535	0	6,010	92	92	
	50-54	640,023	3,338	0	4,773	69	69	
	55-59	286,553	2,697	0	3,093	87	87	
	60-64	97,035	1,073	0	1,594	67	67	
	65-69	24,208	219	0	539	40	40	
	70 and over	5,455	487	0	174	279	279	
	All ages	\$ 9,895,715	\$25,437	\$34	\$29,668	85%	85%	

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
1968 . . . . (4)	0	\$ 14,879	\$ 10	\$ 0	\$ 9	111%	111%
	1	9,439	0	0	5	0	0
	2-4	16,436	25	0	6	416	416
	5-9	35,861	0	0	9	0	0
	10-14	57,360	40	0	35	114	114
	15-19	125,896	262	0	114	229	229
	20-24	574,110	426	30	471	90	96
	25-29	1,301,625	1,786	0	1,094	163	163
	30-34	1,869,550	2,199	20	1,954	112	113
	35-39	1,963,003	3,687	25	3,401	108	109
	40-44	1,753,930	4,510	0	5,069	88	88
	45-49	1,305,448	4,338	0	5,726	75	75
	50-54	710,498	2,850	0	4,809	59	59
	55-59	334,000	1,440	0	3,280	43	43
	60-64	102,650	1,376	0	1,531	89	89
	65-69	25,212	460	0	500	92	92
	70 and over	7,746	88	0	203	43	43
All ages		\$10,207,652	\$23,497	\$75	\$28,216	83%	83%
1969 . . . . (3)	0	\$ 17,243	\$ 50	\$ 0	\$ 11	454%	454%
	1	12,645	0	0	7	0	0
	2-4	19,804	0	0	9	0	0
	5-9	44,202	10	0	12	83	83
	10-14	60,332	93	0	33	281	281
	15-19	139,390	125	0	126	99	99
	20-24	697,784	402	15	551	72	75
	25-29	1,718,269	1,816	5	1,372	132	132
	30-34	2,328,120	1,998	0	2,176	91	91
	35-39	2,490,798	3,181	0	3,710	85	85
	40-44	2,234,487	4,097	0	5,447	75	75
	45-49	1,598,327	4,763	0	5,901	80	80
	50-54	851,292	4,083	0	4,902	83	83
	55-59	387,017	2,295	0	3,161	72	72
	60-64	125,508	1,212	0	1,525	79	79
	65-69	30,643	271	0	507	53	53
	70 and over	8,171	173	0	169	102	102
All ages		\$12,764,040	\$24,569	\$20	\$29,619	82%	83%

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
1970 . . . . (2)	0	\$ 21,123	\$ 5	\$ 0	\$ 16	31%	31%
	1	12,682	26	0	8	325	325
	2-4	23,396	2	0	12	16	16
	5-9	45,954	0	0	14	0	0
	10-14	55,427	0	0	24	0	0
	15-19	145,739	167	0	121	138	138
	20-24	962,997	605	64	699	86	95
	25-29	2,200,381	1,117	0	1,434	77	77
	30-34	2,778,434	2,968	0	2,116	140	140
	35-39	2,766,684	2,759	0	3,244	85	85
	40-44	2,504,581	4,670	0	4,961	94	94
	45-49	1,782,486	4,060	0	5,067	80	80
	50-54	964,222	4,748	0	4,127	115	115
	55-59	445,833	2,133	0	2,658	80	80
	60-64	155,363	1,183	0	1,370	86	86
	65-69	40,310	427	0	517	82	82
	70 and over	9,530	197	0	157	125	125
	All ages	\$14,915,151	\$25,067	\$64	\$26,545	94%	94%
1971 . . . . (1)	0	\$ 18,526	\$ 52	\$ 0	\$ 33	157%	157%
	1	13,685	25	0	10	250	250
	2-4	23,027	0	0	13	0	0
	5-9	49,469	0	0	17	0	0
	10-14	62,131	0	0	22	0	0
	15-19	158,562	73	0	111	65	65
	20-24	1,171,220	882	0	783	112	112
	25-29	2,670,229	1,334	0	1,396	95	95
	30-34	3,396,732	2,485	0	2,101	118	118
	35-39	3,301,916	3,109	0	2,992	103	103
	40-44	2,904,003	3,696	0	4,248	87	87
	45-49	2,060,581	3,779	0	4,250	88	88
	50-54	1,137,601	2,222	0	3,413	65	65
	55-59	529,622	2,378	0	2,164	109	109
	60-64	183,623	982	0	1,135	86	86
	65-69	45,927	68	0	421	16	16
	70 and over	8,987	55	0	113	48	48
	All ages	\$17,735,849	\$21,140	\$ 0	\$23,222	91%	91%

TABLE C  
 STANDARD NONMEDICAL ISSUES OF 1957-71  
 MALE AND FEMALE LIVES COMBINED  
 (INCLUDING DATA NOT SUBDIVIDED BY SEX)  
 EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES  
 BY YEAR OF ISSUE AND AGE AT ISSUE  
 Expected Deaths on 1955-60 Select Basic Tables  
 (Amounts Shown in \$1,000 Units)

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1957 (15)	0	\$ 162,456	\$ 75	\$ 0	\$ 64	117%	117%
	1	61,669	36	0	30	120	120
	2-4	62,299	44	0	36	122	122
	5-9	74,944	91	0	61	149	149
	10-14	102,663	102	2	110	92	94
	15-19	336,489	373	0	387	96	96
	20-24	770,266	1,075	0	1,145	93	93
	25-29	840,787	2,031	0	2,018	100	100
	30-34	608,504	2,852	0	2,701	105	105
	35-39	306,561	2,199	6	2,103	104	104
	40-44	47,760	525	0	477	110	110
	45-49	1,887	15	0	31	48	48
	50 and over	877	10	0	24	41	41
	All ages	\$ 3,377,167	\$ 9,428	\$ 8	\$ 9,187	102%	102%
1958 (14)	0	\$ 156,710	\$ 78	\$ 0	\$ 53	147%	147%
	1	63,726	27	0	25	108	108
	2-4	65,025	34	0	34	100	100
	5-9	78,935	117	0	65	180	180
	10-14	123,211	121	5	130	93	96
	15-19	410,691	363	0	447	81	81
	20-24	845,420	986	10	1,162	84	85
	25-29	820,432	1,736	10	1,752	99	99
	30-34	517,758	1,836	0	1,973	93	93
	35-39	241,231	1,593	0	1,382	115	115
	40-44	38,526	401	0	344	116	116
	45-49	2,042	28	0	28	100	100
	50 and over	539	26	0	14	185	185
	All ages	\$ 3,364,251	\$ 7,346	\$ 25	\$ 7,409	99%	99%
1959 (13)	0	\$ 149,904	\$ 61	\$ 0	\$ 43	141%	141%
	1	60,713	21	0	21	100	100
	2-4	67,003	25	0	32	78	78
	5-9	86,357	74	0	70	105	105
	10-14	141,081	173	5	146	118	121
	15-19	527,461	583	0	565	103	103
	20-24	877,232	889	0	1,093	81	81
	25-29	768,691	1,411	10	1,472	95	96
	30-34	471,793	1,498	0	1,535	97	97
	35-39	218,457	1,202	0	1,088	110	110
	40-44	32,827	247	0	256	96	96
	45-49	2,393	51	0	28	182	182
	50 and over	678	8	0	16	50	50
	All ages	\$ 3,404,597	\$ 6,243	\$ 15	\$ 6,365	98%	98%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1960 . . . . . (12)	0	\$ 125,689	\$ 38	\$ 0	\$ 34	111%	111%
	1	50,332	18	0	15	120	120
	2-4	63,956	65	0	26	250	250
	5-9	94,055	118	0	68	173	173
	10-14	151,759	156	0	153	101	101
	15-19	596,616	571	20	628	90	94
	20-24	883,242	765	10	1,005	76	77
	25-29	784,072	1,122	0	1,340	83	83
	30-34	452,373	1,337	0	1,299	102	102
	35-39	213,472	847	0	964	87	87
	40-44	36,206	204	0	249	81	81
	45-49	2,075	5	0	22	22	22
	50 and over	890	0	0	20	0	0
	All ages	\$ 3,454,743	\$ 5,246	\$ 30	\$ 5,823	90%	90%
1961 . . . . . (11)	0	\$ 127,924	\$ 32	\$ 0	\$ 33	96%	96%
	1	50,448	23	0	14	164	164
	2-4	66,659	24	0	23	104	104
	5-9	99,469	75	0	63	119	119
	10-14	161,975	243	0	159	152	152
	15-19	685,152	637	10	720	88	89
	20-24	979,108	763	6	1,022	74	75
	25-29	827,044	1,196	0	1,222	97	97
	30-34	478,245	1,164	0	1,221	95	95
	35-39	221,774	1,081	0	892	121	121
	40-44	37,501	274	0	230	119	119
	45-49	1,383	9	0	12	75	75
	50 and over	360	1	0	6	16	16
	All ages	\$ 3,737,047	\$ 5,522	\$ 16	\$ 5,617	98%	98%
1962 . . . . . (10)	0	\$ 125,425	\$ 57	\$ 0	\$ 32	178%	178%
	1	52,261	8	0	13	61	61
	2-4	67,531	5	0	20	25	25
	5-9	98,097	70	0	54	129	129
	10-14	153,405	199	5	145	137	140
	15-19	673,581	724	11	697	103	105
	20-24	1,014,198	861	0	993	86	86
	25-29	845,358	1,070	10	1,105	96	97
	30-34	468,985	834	27	1,053	79	81
	35-39	219,251	844	0	774	109	109
	40-44	34,779	203	0	188	107	107
	45-49	1,588	21	0	14	150	150
	50 and over	457	0	0	8	0	0
	All ages	\$ 3,754,922	\$ 4,896	\$ 53	\$ 5,096	96%	97%

TABLE C—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO		
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths	
1963 . . . . (9)	0	\$ 157,875	\$ 24	\$ 0	\$ 44	54%	54%	
	1	57,353	38	0	15	253	253	
	2-4	85,984	24	0	24	100	100	
	5-9	132,671	104	0	67	155	155	
	10-14	209,600	218	2	191	114	115	
	15-19	757,539	705	2	752	93	94	
	20-24	1,233,484	1,103	30	1,140	96	99	
	25-29	999,113	1,260	0	1,180	106	106	
	30-34	529,472	940	0	1,042	91	91	
	35-39	246,926	936	0	777	120	120	
	40-44	39,169	220	0	190	115	115	
	45-49	1,918	4	0	14	28	28	
	50 and over	645	1	0	9	11	11	
All ages		\$ 4,451,755	\$ 5,586	\$ 34	\$5,445	102%	103%	
1964 . . . (8)	0	\$ 170,258	\$ 64	\$ 0	\$ 55	116%	116%	
	1	61,329	18	0	17	105	105	
	2-4	95,377	38	0	24	158	158	
	5-9	147,814	48	0	64	75	75	
	10-14	227,720	309	2	196	157	158	
	15-19	870,243	1,113	5	835	133	133	
	20-24	1,458,433	1,261	25	1,275	98	100	
	25-29	1,126,088	1,186	0	1,179	100	100	
	30-34	580,569	1,114	0	987	112	112	
	35-39	262,690	736	0	733	100	100	
	40-44	43,097	209	0	187	111	111	
	45-49	2,667	2	0	19	10	10	
	50 and over	671	77	0	8	962	962	
All ages		\$ 5,046,961	\$ 6,175	\$ 32	\$5,579	110%	111%	
1965 . . . (7)	0	\$ 177,448	\$ 55	\$ 0	\$ 68	80%	80%	
	1	66,555	33	0	22	150	150	
	2-4	101,871	18	0	26	69	69	
	5-9	158,895	57	0	57	100	100	
	10-14	244,231	231	5	198	116	119	
	15-19	1,114,004	1,080	45	1,042	103	107	
	20-24	1,653,200	1,415	5	1,373	103	103	
	25-29	1,216,726	1,272	0	1,156	110	110	
	30-34	605,127	1,021	5	883	115	116	
	35-39	256,077	720	0	635	113	113	
	40-44	42,934	158	0	168	94	94	
	45-49	3,003	16	0	18	88	88	
	50 and over	646	3	0	6	50	50	
All ages		\$ 5,640,723	\$ 6,079	\$ 60	\$5,652	107%	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
1966 . . . . . (6)	0	\$ 187,206	\$ 52	\$ 0	\$ 80	65%	65%
	1	69,033	5	0	26	19	19
	2-4	108,846	42	0	31	135	135
	5-9	165,630	64	0	51	125	125
	10-14	250,373	161	3	187	86	87
	15-19	1,037,987	1,037	31	928	111	115
	20-24	1,682,103	1,136	10	1,354	83	84
	25-29	1,318,713	933	24	1,162	80	82
	30-34	620,989	841	0	799	105	105
	35-39	254,366	579	6	541	107	108
	40-44	43,436	145	0	151	96	96
	45-49	3,091	24	0	17	141	141
	50 and over	1,073	25	0	11	227	227
	All ages	\$ 5,742,854	\$ 5,044	\$ 74	\$5,338	94%	95%
1967 . . . . . (5)	0	\$ 199,446	\$ 60	\$ 0	\$ 94	63%	63%
	1	74,852	11	0	32	34	34
	2-4	115,749	17	0	38	44	44
	5-9	173,974	42	0	49	85	85
	10-14	255,192	245	5	175	140	142
	15-19	1,089,794	1,370	25	964	142	144
	20-24	2,112,799	1,883	10	1,681	112	112
	25-29	1,622,397	1,695	10	1,370	123	124
	30-34	781,590	914	0	880	103	103
	35-39	315,076	552	5	585	94	95
	40-44	74,982	184	0	216	85	85
	45-49	5,665	0	0	24	0	0
	50 and over	1,294	7	0	10	70	70
	All ages	\$ 6,822,816	\$ 6,980	\$ 55	\$6,118	114%	114%
1968 . . . . . (4)	0	\$ 223,840	\$ 103	\$ 0	\$ 120	85%	85%
	1	81,751	14	0	39	35	35
	2-4	124,263	21	0	48	43	43
	5-9	183,337	60	0	47	127	127
	10-14	269,432	181	0	163	111	111
	15-19	1,163,584	1,395	35	1,007	138	142
	20-24	2,657,091	2,261	103	2,110	107	112
	25-29	1,925,441	1,513	10	1,568	96	97
	30-34	965,301	1,078	10	997	108	109
	35-39	386,389	864	0	632	136	136
	40-44	117,350	385	0	299	128	128
	45-49	11,417	21	0	43	48	48
	50 and over	2,635	6	0	22	27	27
	All ages	\$ 8,111,837	\$ 7,902	\$158	\$7,095	111%	113%

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	
1969 (3)	0	\$ 252,638	\$ 118	\$ 0	\$ 157	75%	75%	
	1	93,642	23	0	51	45	45	
	2-4	136,266	34	0	59	57	57	
	5-9	195,260	33	0	50	66	66	
	10-14	281,304	113	0	151	74	74	
	15-19	1,249,355	1,298	75	1,057	122	129	
	20-24	3,129,299	2,688	45	2,375	113	115	
	25-29	2,286,390	1,715	0	1,754	97	97	
	30-34	1,045,171	1,277	10	960	133	134	
	35-39	442,101	843	0	616	136	136	
	40-44	132,880	336	0	279	120	120	
	45-49	15,124	30	0	48	62	62	
	50 and over	3,769	21	0	28	75	75	
	All ages	\$ 9,263,204	\$ 8,529	\$130	\$7,585	112%	114%	
1970 (2)	0	\$ 316,294	\$ 192	\$ 0	\$ 223	86%	86%	
	1	120,539	62	0	76	81	81	
	2-4	171,323	91	0	81	112	112	
	5-9	231,176	56	0	66	84	84	
	10-14	308,538	101	0	134	75	75	
	15-19	1,502,597	1,488	60	1,148	129	134	
	20-24	4,173,383	3,211	112	2,869	111	115	
	25-29	2,793,369	1,929	60	1,740	110	114	
	30-34	1,262,154	1,153	36	931	123	127	
	35-39	521,435	536	27	566	94	99	
	40-44	162,581	215	0	264	81	81	
	45-49	16,804	101	0	39	258	258	
	50 and over	4,524	19	0	23	82	82	
	All ages	\$11,584,724	\$ 9,154	\$295	\$8,160	112%	115%	
1971 (1)	0	\$ 394,762	\$ 417	\$ 0	\$ 669	62%	62%	
	1	163,247	101	0	116	87	87	
	2-4	248,773	135	0	135	100	100	
	5-9	319,792	48	0	105	45	45	
	10-14	406,178	50	0	144	34	34	
	15-19	1,923,480	1,753	10	1,243	141	141	
	20-24	5,804,455	5,444	20	3,625	150	150	
	25-29	3,916,811	2,522	15	1,949	129	130	
	30-34	1,685,779	1,532	0	999	153	153	
	35-39	653,097	800	0	530	150	150	
	40-44	200,531	313	0	228	137	137	
	45-49	19,521	35	0	32	109	109	
	50 and over	4,844	3	0	19	15	15	
	All ages	\$15,741,275	\$13,153	\$ 45	\$9,794	134%	134%	

TABLE D  
 STANDARD MEDICALLY EXAMINED ISSUES OF 1957-71  
 MALE LIVES  
 EXPERIENCE BETWEEN 1971 AND 1972 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
1957 . . . (15)	0	\$ 7,614	\$ 23	\$ 0	\$ 4	575%	575%
	1	11,681	0	0	7	0	0
	2-4	14,136	21	0	10	210	210
	5-9	25,363	17	0	25	68	68
	10-14	46,534	45	10	56	80	98
	15-19	110,424	115	2	135	85	86
	20-24	478,265	838	14	727	115	117
	25-29	886,359	1,693	0	2,172	77	77
	30-34	1,209,772	4,875	20	5,517	88	88
	35-39	1,101,337	6,404	0	7,996	80	80
	40-44	766,701	7,485	0	8,165	91	91
	45-49	385,290	5,484	0	6,866	79	79
	50-54	156,740	3,893	0	3,931	99	99
	55-59	61,637	2,591	0	2,380	108	108
	60-64	20,606	1,131	0	1,074	105	105
	65-69	4,908	706	0	364	193	193
	70 and over	393	10	0	58	17	17
	All ages	\$ 5,287,769	\$ 35,331	\$ 46	\$ 39,487	89%	89%
1958 . . . (14)	0	\$ 6,938	\$ 1	\$ 0	\$ 3	33%	33%
	1	13,198	12	0	6	200	200
	2-4	13,165	11	0	8	137	137
	5-9	24,268	52	0	25	208	208
	10-14	45,904	24	0	54	44	44
	15-19	108,675	113	0	125	90	90
	20-24	456,499	538	6	644	83	84
	25-29	857,070	1,688	0	1,877	89	89
	30-34	1,252,298	3,876	0	4,947	78	78
	35-39	1,205,672	6,888	0	7,499	91	91
	40-44	835,846	7,265	0	8,166	88	88
	45-49	440,324	5,805	0	6,913	83	83
	50-54	198,196	3,793	0	4,535	83	83
	55-59	80,573	2,562	0	2,808	91	91
	60-64	24,953	1,320	0	1,231	107	107
	65-69	5,746	464	0	391	118	118
	70 and over	433	13	0	59	22	22
	All ages	\$ 5,569,765	\$ 34,425	\$ 6	\$ 39,291	87%	87%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1959... (13)	0	\$ 7,735	\$ 6	\$ 0	\$ 2	300%	300%
	1	14,645	0	0	6	0	0
	2-4	15,714	0	0	9	0	0
	5-9	29,002	21	0	29	72	72
	10-14	55,670	34	0	65	52	52
	15-19	131,815	139	0	149	93	93
	20-24	452,569	566	0	579	97	97
	25-29	824,641	1,422	0	1,625	87	87
	30-34	1,210,397	3,817	0	4,091	93	93
	35-39	1,245,166	5,550	0	6,799	81	81
	40-44	868,923	6,655	0	7,594	87	87
	45-49	503,076	6,534	0	6,892	94	94
	50-54	228,541	5,135	0	4,626	111	111
	55-59	90,671	2,625	0	2,780	94	94
	60-64	27,545	716	0	1,268	56	56
	65-69	7,035	908	0	443	204	204
	70 and over	516	27	0	66	40	40
	All ages	\$ 5,713,667	\$ 34,155	\$ 0	\$ 37,023	92%	92%
1960... (12)	0	\$ 6,838	\$ 15	\$ 0	\$ 2	750%	750%
	1	13,604	0	0	4	0	0
	2-4	13,370	30	0	6	500	500
	5-9	23,965	49	0	20	245	245
	10-14	41,631	29	0	47	61	61
	15-19	105,646	157	0	118	133	133
	20-24	329,450	220	0	384	57	57
	25-29	641,885	924	0	1,123	82	82
	30-34	1,036,577	2,924	0	3,089	94	94
	35-39	1,103,880	4,786	0	5,484	87	87
	40-44	809,905	5,767	20	6,285	91	92
	45-49	477,334	5,455	0	5,678	96	96
	50-54	229,015	3,684	0	4,070	90	90
	55-59	91,086	2,074	0	2,485	83	83
	60-64	30,675	1,144	0	1,275	89	89
	65-69	8,268	739	0	481	153	153
	70 and over	784	80	0	91	87	87
	All ages	\$ 4,963,921	\$ 28,077	\$ 20	\$ 30,642	91%	91%
1961... (11)	0	\$ 6,190	\$ 1	\$ 0	\$ 2	50%	50%
	1	13,437	2	0	4	50	50
	2-4	12,523	22	0	5	440	440
	5-9	22,743	24	0	16	150	150
	10-14	39,498	104	0	43	241	241
	15-19	109,906	108	0	123	87	87
	20-24	335,847	326	25	361	90	97
	25-29	627,492	891	0	948	93	93
	30-34	1,024,165	2,441	0	2,712	90	90
	35-39	1,123,978	4,183	0	4,944	84	84
	40-44	871,438	6,130	0	6,063	101	101
	45-49	513,727	4,571	0	5,390	84	84
	50-54	265,010	4,091	0	4,214	97	97
	55-59	102,546	2,067	0	2,457	84	84
	60-64	31,188	981	0	1,090	90	90
	65-69	8,237	260	0	423	61	61
	70 and over	1,715	88	0	176	50	50
	All ages	\$ 5,109,648	\$ 26,290	\$ 25	\$ 28,971	90%	90%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1962 . . . (10)	0	\$ 6,549	\$ 39	\$ 0	\$ 2	1,950%	1,950%
	1	14,541	5	0	4	125	125
	2-4	13,948	5	0	4	125	125
	5-9	23,835	20	0	15	133	133
	10-14	36,740	68	0	39	174	174
	15-19	107,499	185	0	120	154	154
	20-24	326,702	375	0	331	113	113
	25-29	639,949	878	0	857	102	102
	30-34	1,023,535	2,204	0	2,389	92	92
	35-39	1,168,015	4,548	0	4,502	101	101
	40-44	952,189	4,907	0	5,841	84	84
	45-49	582,758	4,752	0	5,421	87	87
	50-54	287,223	3,301	0	4,166	79	79
	55-59	118,615	2,498	0	2,517	99	99
	60-64	43,515	876	0	1,288	67	67
	65-69	11,126	348	0	478	72	72
	70 and over	1,510	13	0	136	9	9
	All ages	\$ 5,358,257	\$ 25,021	\$ 0	\$ 28,110	89%	89%
1963 . . . (9)	0	\$ 8,991	\$ 0	\$ 0	\$ 3	0%	0%
	1	9,888	0	0	3	0	0
	2-4	13,202	0	0	4	0	0
	5-9	23,064	34	0	13	261	261
	10-14	37,422	60	0	39	153	153
	15-19	106,757	124	0	116	106	106
	20-24	381,340	342	12	366	93	96
	25-29	768,303	674	5	926	72	73
	30-34	1,199,231	1,876	0	2,445	76	76
	35-39	1,404,023	4,358	0	4,774	91	91
	40-44	1,150,842	4,684	6	6,308	74	74
	45-49	710,510	5,091	0	6,019	84	84
	50-54	362,771	3,944	0	4,791	82	82
	55-59	161,165	3,062	0	3,032	100	100
	60-64	52,776	1,415	0	1,364	103	103
	65-69	12,657	398	1	463	85	86
	70 and over	2,996	208	0	232	89	89
	All ages	\$ 6,405,946	\$ 26,270	\$ 24	\$ 30,898	85%	85%
1964 . . . (8)	0	\$ 11,172	\$ 0	\$ 0	\$ 4	0%	0%
	1	6,896	0	0	2	0	0
	2-4	11,785	0	0	3	0	0
	5-9	21,739	27	0	10	270	270
	10-14	38,919	47	0	39	120	120
	15-19	113,834	76	0	121	62	62
	20-24	465,639	405	0	423	95	95
	25-29	915,281	894	0	981	91	91
	30-34	1,298,762	2,531	15	2,280	111	111
	35-39	1,511,402	5,072	0	4,525	112	112
	40-44	1,258,991	6,296	0	6,214	101	101
	45-49	759,053	4,491	0	5,901	76	76
	50-54	420,534	4,037	0	5,135	78	78
	55-59	170,843	2,569	0	2,938	87	87
	60-64	55,140	1,109	0	1,258	88	88
	65-69	13,559	450	0	432	104	104
	70 and over	2,671	212	0	177	119	119
	All ages	\$ 7,076,227	\$ 28,216	\$ 15	\$ 30,443	92%	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
1965 . . . (7)	0	\$ 10,993	\$ 3	\$ 0	\$ 5	60%	60%
	1	6,296	2	0	2	100	100
	2-4	14,151	0	0	4	0	0
	5-9	24,982	7	0	10	70	70
	10-14	37,423	60	0	35	171	171
	15-19	141,858	135	0	146	92	92
	20-24	566,326	351	15	490	71	74
	25-29	1,052,398	1,133	0	1,027	110	110
	30-34	1,451,599	1,598	0	2,171	73	73
	35-39	1,648,899	3,207	0	4,390	73	73
	40-44	1,377,097	5,413	0	6,099	88	88
	45-49	861,130	4,833	0	6,033	80	80
	50-54	468,527	3,426	0	5,240	65	65
	55-59	191,485	2,164	0	2,997	72	72
	60-64	65,592	1,029	0	1,342	76	76
	65-69	14,766	510	0	433	117	117
	70 and over	2,819	181	0	157	115	115
	All ages	\$ 7,936,349	\$ 24,052	\$ 15	\$ 30,581	78%	78%
1966 . . . (6)	0	\$ 11,731	\$ 5	\$ 0	\$ 6	83%	83%
	1	7,263	0	0	3	0	0
	2-4	13,621	0	0	4	0	0
	5-9	24,330	0	0	8	0	0
	10-14	40,770	125	0	36	347	347
	15-19	143,743	126	0	145	86	86
	20-24	602,650	394	0	509	77	77
	25-29	1,125,849	927	40	1,028	90	94
	30-34	1,535,005	2,432	9	2,039	119	119
	35-39	1,739,134	3,510	0	4,021	87	87
	40-44	1,499,699	4,877	15	5,942	82	82
	45-49	957,322	5,061	0	5,796	87	87
	50-54	512,024	5,624	0	4,895	114	114
	55-59	209,968	2,383	0	2,812	84	84
	60-64	66,738	575	0	1,257	45	45
	65-69	17,267	395	0	462	85	85
	70 and over	3,665	218	0	169	128	128
	All ages	\$ 8,510,787	\$ 26,652	\$ 64	\$ 29,132	91%	91%
1967 . . . (5)	0	\$ 10,460	\$ 0	\$ 0	\$ 6	0%	0%
	1	8,177	0	0	4	0	0
	2-4	13,209	0	0	5	0	0
	5-9	26,565	20	0	8	250	250
	10-14	37,789	277	0	31	893	893
	15-19	123,157	114	0	125	91	91
	20-24	566,433	424	0	476	89	89
	25-29	1,189,585	1,335	0	1,045	127	127
	30-34	1,634,984	1,599	33	1,884	84	86
	35-39	1,862,920	3,218	0	3,766	85	85
	40-44	1,602,477	4,046	1	5,389	75	75
	45-49	1,050,841	5,229	0	5,549	94	94
	50-54	553,043	2,960	0	4,416	67	67
	55-59	242,240	2,529	0	2,822	89	89
	60-64	79,543	1,009	0	1,414	71	71
	65-69	17,555	197	0	432	45	45
	70 and over	3,721	472	0	138	342	342
	All ages	\$ 9,022,706	\$ 23,429	\$ 34	\$ 27,510	85%	85%

TABLE D—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1968 . . . (4)	0	\$ 10,728	\$ 0	\$ 0	\$ 7	0%	0%
	1	6,494	0	0	4	0	0
	2-4	12,490	25	0	5	500	500
	5-9	24,521	0	0	7	0	0
	10-14	44,168	35	0	32	109	109
	15-19	106,410	257	0	107	240	240
	20-24	538,897	416	30	453	91	98
	25-29	1,243,593	1,735	0	1,063	163	163
	30-34	1,774,964	2,129	20	1,872	113	114
	35-39	1,819,723	2,987	25	3,219	92	93
	40-44	1,572,190	4,301	0	4,712	91	91
	45-49	1,149,592	3,914	0	5,306	73	73
	50-54	613,536	2,572	0	4,463	57	57
	55-59	283,299	1,310	0	3,000	43	43
	60-64	82,197	1,243	0	1,349	92	92
	65-69	20,218	336	0	433	77	77
	70 and over	5,969	62	0	175	35	35
	All ages	\$ 9,308,998	\$ 21,322	\$ 75	\$ 26,207	81%	81%
1969 . . . (3)	0	\$ 12,192	\$ 50	\$ 0	\$ 9	555%	555%
	1	9,175	0	0	6	0	0
	2-4	13,392	0	0	7	0	0
	5-9	31,646	10	0	9	111	111
	10-14	45,235	55	0	30	183	183
	15-19	118,300	105	0	119	88	88
	20-24	654,415	402	15	530	75	78
	25-29	1,645,506	1,755	5	1,337	131	131
	30-34	2,212,196	1,981	0	2,088	94	94
	35-39	2,319,961	3,050	0	3,535	86	86
	40-44	2,035,846	3,832	0	5,132	74	74
	45-49	1,414,497	4,378	0	5,478	79	79
	50-54	740,440	3,927	0	4,581	85	85
	55-59	327,752	2,084	0	2,885	72	72
	60-64	103,323	1,117	0	1,364	81	81
	65-69	24,448	231	0	444	52	52
	70 and over	5,536	8	0	135	5	5
	All ages	\$ 11,713,867	\$ 22,985	\$ 20	\$ 27,689	83%	83%
1970 . . . (2)	0	\$ 13,811	\$ 5	\$ 0	\$ 12	41%	41%
	1	8,757	25	0	6	416	416
	2-4	16,411	2	0	9	22	22
	5-9	31,226	0	0	10	0	0
	10-14	41,241	0	0	22	0	0
	15-19	122,863	147	0	115	127	127
	20-24	907,733	599	64	677	88	97
	25-29	2,104,779	981	0	1,395	70	70
	30-34	2,634,192	2,948	0	2,030	145	145
	35-39	2,564,293	2,681	0	3,088	86	86
	40-44	2,276,860	4,148	0	4,700	88	88
	45-49	1,569,063	3,840	0	4,727	81	81
	50-54	835,604	4,455	0	3,864	115	115
	55-59	380,225	1,930	0	2,438	79	79
	60-64	127,293	1,019	0	1,229	82	82
	65-69	30,896	386	0	442	87	87
	70 and over	6,509	91	0	127	71	71
	All ages	\$ 13,671,765	\$ 23,257	\$ 64	\$ 24,891	93%	93%

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
1971 . . . (1)	0	\$ 13,503	\$ 2	\$ 0	\$ 25	8%	8%
	1	9,349	25	0	8	312	312
	2-4	15,451	0	0	10	0	0
	5-9	32,825	0	0	12	0	0
	10-14	44,590	0	0	20	0	0
	15-19	131,810	68	0	105	64	64
	20-24	1,098,133	871	0	760	114	114
	25-29	2,539,150	1,312	0	1,354	96	96
	30-34	3,197,910	2,390	0	2,011	118	118
	35-39	3,054,469	2,760	0	2,864	96	96
	40-44	2,631,993	3,261	0	4,046	80	80
	45-49	1,814,564	3,635	0	3,960	91	91
	50-54	975,750	2,113	0	3,180	66	66
	55-59	452,442	2,303	0	1,990	115	115
	60-64	152,346	891	0	1,033	86	86
	65-69	36,157	68	0	371	18	18
	70 and over	6,277	48	0	93	51	51
	All ages	\$ 16,206,725	\$ 19,747	\$ 0	\$ 21,842	90%	90%
All years (1-15)	0	\$ 145,453	\$ 150	\$ 0	\$ 92	163%	163%
	1	153,408	71	0	69	102	102
	2-4	206,576	116	0	93	124	124
	5-9	390,082	281	0	217	129	129
	10-14	633,540	963	10	588	163	165
	15-19	1,782,703	1,969	2	1,869	105	105
	20-24	8,160,904	7,067	181	7,710	91	94
	25-29	17,061,847	18,242	50	18,758	97	97
	30-34	23,695,593	39,621	97	41,565	95	95
	35-39	24,872,877	63,202	25	71,406	88	88
	40-44	20,511,005	79,067	42	90,656	87	87
	45-49	13,189,088	73,073	0	85,929	85	85
	50-54	6,846,960	56,955	0	66,107	86	86
	55-59	2,964,552	34,751	0	40,341	86	86
	60-64	963,434	15,574	0	18,836	82	82
	65-69	232,851	6,396	1	6,492	98	98
	70 and over	45,523	1,731	0	1,989	87	87
	All ages	\$121,856,405	\$399,229	\$408	\$452,717	88%	88%

TABLE D—Continued  
 STANDARD MEDICALLY EXAMINED ISSUES OF 1957-71  
 FEMALE LIVES  
 EXPERIENCE BETWEEN 1971 AND 1972 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
1957..... (15)	0	\$ 4,817	\$ 0	\$ 1	0%
	1	5,715	0	2	0
	2-4	5,708	1	2	50
	5-9	9,398	0	3	0
	10-14	8,461	2	4	50
	15-19	8,570	4	5	80
	20-24	14,722	3	15	20
	25-29	20,235	35	28	125
	30-34	34,338	176*	91	193
	35-39	45,529	182	146	124
	40-44	53,998	180	313	57
	45-49	39,442	282	351	80
	50-54	23,161	261	310	84
	55-59	10,247	131	207	63
	60-64	4,763	140	128	109
	65-69	1,395	69	54	127
	70 and over	28	1	3	33
	All ages	\$ 290,534	\$ 1,467	\$ 1,663	88%
1958..... (14)	0	\$ 3,418	\$ 0	\$ 1	0%
	1	6,507	5	2	250
	2-4	5,805	0	2	0
	5-9	8,598	0	3	0
	10-14	9,006	0	4	0
	15-19	10,523	0	5	0
	20-24	17,617	12	16	75
	25-29	23,704	23	29	79
	30-34	40,040	379	95	398
	35-39	52,608	309	154	200
	40-44	64,946	406	341	119
	45-49	49,230	318	373	85
	50-54	25,598	242	299	80
	55-59	13,241	154	243	63
	60-64	5,568	208	136	152
	65-69	1,199	34	44	77
	70 and over	214	11	20	55
	All ages	\$ 337,830	\$ 2,101	\$ 1,767	118%

\* One female war death for \$50,000 is included.

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1959 . . . . . (13)	0	\$ 3,322	\$ 2	\$ 1	200%
	1	7,260	0	2	0
	2-4	5,477	0	2	0
	5-9	11,205	0	4	0
	10-14	10,973	2	5	40
	15-19	11,271	10	6	166
	20-24	20,465	7	16	43
	25-29	25,119	30	27	111
	30-34	45,157	266	97	274
	35-39	65,587	161	186	86
	40-44	72,835	247	339	72
	45-49	59,424	325	411	79
	50-54	33,328	235	342	68
	55-59	16,766	108	281	38
	60-64	6,411	83	142	58
	65-59	2,832	51	96	53
	70 and over	155	4	13	30
	All ages	\$ 397,594	\$ 1,531	\$ 1,970	77%
1960 . . . . . (12)	0	\$ 3,101	\$ 0	\$ 1	0%
	1	7,249	0	2	0
	2-4	5,420	0	2	0
	5-9	7,916	0	3	0
	10-14	8,739	25	4	625
	15-19	10,437	30	5	600
	20-24	17,518	35	13	269
	25-29	21,907	25	22	113
	30-34	42,962	75	84	89
	35-39	65,846	261	180	145
	40-44	82,471	378	331	114
	45-49	63,241	329	386	85
	50-54	35,298	203	314	64
	55-59	19,028	116	272	42
	60-64	8,177	563	161	349
	65-69	2,329	19	73	26
	70 and over	243	3	18	16
	All ages	\$ 401,890	\$ 2,062	\$ 1,871	110%
1961 . . . . . (11)	0	\$ 2,561	\$ 0	\$ 1	0%
	1	7,807	0	2	0
	2-4	6,127	2	2	100
	5-9	9,502	0	3	0
	10-14	9,364	0	4	0
	15-19	12,182	4	6	66
	20-24	19,192	10	13	76
	25-29	23,241	9	22	40
	30-34	48,038	105	85	123
	35-39	75,973	194	199	97
	40-44	93,542	446	354	125
	45-49	68,560	344	387	88
	50-54	42,533	175	336	52
	55-59	21,715	193	271	71
	60-64	7,828	133	137	97
	65-69	2,543	15	74	20
	70 and over	491	14	32	43
	All ages	\$ 451,208	\$ 1,644	\$ 1,928	85%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1962 . . . . . (10)	0	\$ 2,737	\$ 0	\$ 1	0%
	1	7,861	5	2	250
	2-4	6,409	0	2	0
	5-9	9,984	0	3	0
	10-14	10,292	0	4	0
	15-19	14,496	20	7	285
	20-24	23,759	8	15	53
	25-29	30,485	66	26	253
	30-34	52,129	107	85	125
	35-39	86,701	126	213	59
	40-44	107,531	530	381	139
	45-49	76,680	317	398	79
	50-54	48,367	195	324	60
	55-59	21,556	191	222	86
	60-64	10,762	109	171	63
	65-69	2,660	30	74	40
	70 and over	650	20	37	54
	All ages	\$ 513,066	\$ 1,724	\$ 1,965	87%
1963 . . . . . (9)	0	\$ 3,777	\$ 0	\$ 1	0%
	1	5,460	0	1	0
	2-4	4,796	0	1	0
	5-9	9,842	1	3	33
	10-14	9,851	0	4	0
	15-19	14,681	0	7	0
	20-24	25,235	20	16	125
	25-29	32,549	5	26	19
	30-34	65,552	115	97	118
	35-39	104,257	192	242	79
	40-44	132,961	571	444	128
	45-49	100,822	344	483	71
	50-54	60,126	291	385	75
	55-59	30,540	387	274	141
	60-64	15,342	711	229	310
	65-69	4,833	29	121	23
	70 and over	644	25	31	80
	All ages	\$ 621,276	\$ 2,691	\$ 2,365	113%
1964 . . . . . (8)	0	\$ 4,792	\$ 0	\$ 1	0%
	1	2,156	0	1	0
	2-4	4,458	0	1	0
	5-9	9,157	0	3	0
	10-14	9,622	2	3	66
	15-19	16,682	15	7	214
	20-24	26,508	22	16	137
	25-29	41,850	14	31	45
	30-34	73,816	79	100	79
	35-39	120,178	200	257	77
	40-44	148,335	389	459	84
	45-49	107,784	519	472	109
	50-54	67,951	573	396	144
	55-59	34,485	281	275	102
	60-64	17,334	138	241	57
	65-69	4,911	262	113	231
	70 and over	1,583	10	63	15
	All ages	\$ 691,610	\$ 2,504	\$ 2,439	102%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1965 . . . . . (7)	0	\$ 4,462	\$ 0	\$ 1	0%
	1	2,847	0	1	0
	2-4	4,193	0	1	0
	5-9	10,296	0	3	0
	10-14	9,396	15	3	500
	15-19	20,381	9	9	100
	20-24	33,332	3	19	15
	25-29	47,838	61	33	184
	30-34	82,029	40	99	40
	35-39	135,918	207	264	78
	40-44	161,656	286	460	62
	45-49	122,606	525	490	107
	50-54	71,994	297	388	76
	55-59	33,668	213	249	85
	60-64	14,549	38	188	20
	65-69	5,459	109	113	96
	70 and over	1,368	32	44	72
	All ages	\$ 762,001	\$ 1,835	\$ 2,365	77%
1966 . . . . . (6)	0	\$ 4,975	\$ 0	\$ 2	0%
	1	2,985	0	1	0
	2-4	4,108	0	1	0
	5-9	11,415	0	3	0
	10-14	11,636	8	3	266
	15-19	23,012	0	9	0
	20-24	38,229	36	22	163
	25-29	51,670	21	33	63
	30-34	87,933	75	93	80
	35-39	134,681	244	220	110
	40-44	164,600	330	418	78
	45-49	135,212	322	475	67
	50-54	72,908	237	337	70
	55-59	39,748	227	262	86
	60-64	15,261	205	176	116
	65-69	5,926	231	109	211
	70 and over	1,318	2	35	5
	All ages	\$ 805,625	\$ 1,938	\$ 2,199	88%
1967 . . . . . (5)	0	\$ 4,596	\$ 0	\$ 2	0%
	1	2,581	0	1	0
	2-4	6,121	0	2	0
	5-9	12,292	0	3	0
	10-14	12,048	2	3	66
	15-19	22,586	10	9	111
	20-24	38,471	20	21	95
	25-29	63,999	12	37	32
	30-34	90,347	103	85	121
	35-39	139,012	220	198	111
	40-44	173,471	688	385	178
	45-49	150,307	306	461	66
	50-54	86,979	378	357	105
	55-59	44,312	168	271	61
	60-64	17,491	64	180	35
	65-69	6,652	22	107	20
	70 and over	1,734	15	36	41
	All ages	\$ 873,008	\$ 2,008	\$ 2,158	93%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1968 . . . . (4) . . . .	0	\$ 4,150	\$ 10	\$ 2	500%
	1	2,944	0	1	0
	2-4	3,945	0	1	0
	5-9	11,339	0	2	0
	10-14	13,192	5	3	166
	15-19	19,486	5	7	71
	20-24	35,213	10	18	55
	25-29	58,031	51	31	164
	30-34	94,585	70	82	85
	35-39	143,280	700	182	384
	40-44	181,740	209	357	58
	45-49	155,855	424	420	100
	50-54	96,962	278	346	80
	55-59	50,701	130	280	46
	60-64	20,452	133	182	73
	65-69	4,993	124	67	185
	70 and over	1,776	26	28	92
	All ages	\$ 898,653	\$ 2,175	\$ 2,009	108%
1969 . . . . (3) . . . .	0	\$ 5,050	\$ 0	\$ 2	0%
	1	3,470	0	1	0
	2-4	6,411	0	2	0
	5-9	12,555	0	3	0
	10-14	15,097	38	3	1,266
	15-19	21,089	20	7	285
	20-24	43,369	0	21	0
	25-29	72,762	61	35	174
	30-34	115,924	17	88	19
	35-39	170,837	131	175	74
	40-44	198,640	265	315	84
	45-49	183,830	385	423	91
	50-54	110,851	156	321	48
	55-59	59,265	211	276	76
	60-64	22,184	95	161	59
	65-69	6,195	40	63	63
	70 and over	2,635	165	34	485
	All ages	\$ 1,050,172	\$ 1,584	\$ 1,930	82%
1970 . . . . (2) . . . .	0	\$ 7,312	\$ 0	\$ 4	0%
	1	3,924	1	2	50
	2-4	6,984	0	3	0
	5-9	14,728	0	4	0
	10-14	14,186	0	2	0
	15-19	22,876	20	6	333
	20-24	55,263	6	22	27
	25-29	95,601	136	39	348
	30-34	144,242	20	86	23
	35-39	202,391	78	156	50
	40-44	227,721	522	261	200
	45-49	213,423	220	340	64
	50-54	128,618	293	263	111
	55-59	65,608	203	220	92
	60-64	28,070	164	141	116
	65-69	9,414	41	75	54
	70 and over	3,020	106	30	353
	All ages	\$ 1,243,385	\$ 1,810	\$ 1,654	109%

TABLE D—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1971..... (1)	0	\$ 5,023	\$ 50	\$ 8	625%
	1	4,336	0	2	0
	2-4	7,575	0	3	0
	5-9	16,643	0	5	0
	10-14	17,540	0	2	0
	15-19	26,752	5	6	83
	20-24	73,086	11	23	37
	25-29	131,078	22	42	52
	30-34	198,822	95	90	105
	35-39	247,447	349	128	272
	40-44	272,010	435	202	215
	45-49	246,016	144	290	49
	50-54	161,850	109	233	46
	55-59	77,180	75	174	43
	60-64	31,277	91	102	89
	65-69	9,770	0	50	0
	70 and over	2,710	7	20	35
	All ages	\$ 1,529,124	\$ 1,393	\$ 1,380	100%
All Years. (1-15)	0	\$ 64,101	\$ 62	\$ 29	213%
	1	73,109	11	23	47
	2-4	83,543	3	27	11
	5-9	164,878	1	48	2
	10-14	169,409	99	51	194
	15-19	255,033	152	101	150
	20-24	481,986	203	266	76
	25-29	740,075	571	461	123
	30-34	1,215,920	1,722*	1,357	126
	35-39	1,790,250	3,554	2,900	122
	40-44	2,136,463	5,882	5,360	109
	45-49	1,772,438	5,104	6,160	82
	50-54	1,066,533	3,923	4,951	79
	55-59	538,067	2,788	3,777	73
	60-64	225,477	2,875	2,475	116
	65-69	71,118	1,076	1,233	87
	70 and over	18,576	441	444	99
	All ages	\$10,866,984	\$28,467	\$29,663	95%

\* One female war death for \$50,000 is included.

TABLE E  
 STANDARD NONMEDICAL ISSUES OF 1957-71  
 MALE LIVES  
 EXPERIENCE BETWEEN 1971 AND 1972 ANNIVERSARIES  
 BY YEAR OF ISSUE AND AGE AT ISSUE  
 Expected Deaths on 1955-60 Male Selected 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
1957 . . . . . (15)	0	\$ 96,400	\$ 59	\$ 0	\$ 44	134%	134%
	1	36,907	27	0	21	128	128
	2-4	38,465	33	0	28	117	117
	5-9	51,705	76	0	52	146	146
	10-14	83,496	98	2	101	97	99
	15-19	300,064	351	0	366	95	95
	20-24	715,800	1,021	0	1,088	93	93
	25-29	797,816	1,917	0	1,955	98	98
	30-34	567,069	2,782	0	2,586	107	107
	35-39	274,677	2,058	6	1,994	103	103
	40-44	40,907	485	0	436	111	111
	45-49	1,564	14	0	28	49	49
	50 and over	592	3	0	19	15	15
All ages			\$ 3,005,468	\$ 8,924	\$ 8,718	102%	102%
1958 . . . . . (14)	0	\$ 94,331	\$ 51	\$ 0	\$ 36	141%	141%
	1	38,886	22	0	18	122	122
	2-4	40,801	28	0	26	107	107
	5-9	56,101	104	0	57	182	182
	10-14	101,438	113	5	120	94	98
	15-19	370,680	349	0	426	81	81
	20-24	785,862	927	10	1,108	83	84
	25-29	773,955	1,659	10	1,695	97	98
	30-34	472,195	1,784	0	1,865	95	95
	35-39	205,120	1,431	0	1,276	112	112
	40-44	31,452	337	0	307	109	109
	45-49	1,617	26	0	25	103	103
	50 and over	488	26	0	13	199	199
All ages			\$ 2,972,933	\$ 6,857	\$ 25	\$ 6,972	98%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1959 (13)	0	\$ 92,173	\$ 52	\$ 0	\$ 29	179%	179%
	1	38,149	21	0	15	139	139
	2-4	43,939	22	0	25	87	87
	5-9	63,242	62	0	63	98	98
	10-14	116,840	159	5	136	116	120
	15-19	479,762	537	0	542	99	99
	20-24	814,514	845	0	1,043	81	81
	25-29	720,089	1,360	10	1,419	95	96
	30-34	423,793	1,355	0	1,432	94	94
	35-39	178,635	1,091	0	975	111	111
	40-44	25,441	218	0	222	98	98
	45-49	1,697	47	0	23	204	204
	50 and over	584	8	0	15	53	53
All ages		\$ 2,998,865	\$ 5,777	\$ 15	\$ 5,939	97%	97%
1960 (12)	0	\$ 81,485	\$ 31	\$ 0	\$ 24	129%	129%
	1	32,929	16	0	11	145	145
	2-4	43,284	61	0	20	304	304
	5-9	71,126	107	0	61	175	175
	10-14	127,556	143	0	143	99	99
	15-19	534,165	531	20	598	88	92
	20-24	811,505	703	10	951	73	74
	25-29	729,621	1,054	0	1,286	81	81
	30-34	397,911	1,172	0	1,192	98	98
	35-39	169,012	673	0	843	79	79
	40-44	27,490	162	0	214	75	75
	45-49	1,630	3	0	19	15	15
	50 and over	793	0	0	19	0	0
All ages		\$ 3,028,513	\$ 4,656	\$ 30	\$ 5,381	86%	87%
1961 (11)	0	\$ 83,086	\$ 21	\$ 0	\$ 23	91%	91%
	1	33,116	22	0	10	219	219
	2-4	45,150	24	0	17	141	141
	5-9	75,394	60	0	55	109	109
	10-14	134,787	224	0	148	151	151
	15-19	612,432	602	10	686	87	89
	20-24	893,513	734	6	963	76	76
	25-29	761,834	1,139	0	1,161	98	98
	30-34	415,500	1,073	0	1,109	96	96
	35-39	171,778	878	0	761	115	115
	40-44	27,475	241	0	192	125	125
	45-49	1,004	9	0	10	89	89
	50 and over	310	1	0	6	16	16
All ages		\$ 3,255,384	\$ 5,028	\$ 16	\$ 5,141	97%	98%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1962 (10)	0	\$ 81,059	\$ 54	\$ 0	\$ 22	245%	245%
	1	33,966	2	0	9	22	22
	2-4	45,884	1	0	15	6	6
	5-9	72,469	62	0	46	134	134
	10-14	127,137	188	5	135	139	142
	15-19	588,180	679	11	658	103	104
	20-24	909,012	826	0	924	89	89
	25-29	771,910	975	10	1,043	93	94
	30-34	397,037	745	27	936	79	82
	35-39	164,123	750	0	638	117	117
	40-44	24,403	154	0	151	101	101
	45-49	1,262	21	0	12	174	174
	50 and over	414	0	0	8	0	0
	All ages	\$ 3,216,863	\$ 4,457	\$ 53	\$ 4,597	96%	98%
1963 (9)	0	\$ 101,844	\$ 9	\$ 0	\$ 30	29%	29%
	1	37,340	27	0	10	269	269
	2-4	57,641	24	0	17	141	141
	5-9	95,672	88	0	55	159	159
	10-14	168,345	198	2	176	112	113
	15-19	649,073	663	2	703	94	94
	20-24	1,096,785	1,060	30	1,054	100	103
	25-29	902,626	1,114	0	1,102	101	101
	30-34	442,574	812	0	912	89	89
	35-39	181,145	755	0	623	121	121
	40-44	26,734	171	0	148	115	115
	45-49	1,462	0	0	12	0	0
	50 and over	573	1	0	9	11	11
	All ages	\$ 3,761,819	\$ 4,922	\$ 34	\$ 4,851	101%	102%
1964 (8)	0	\$ 108,434	\$ 53	\$ 0	\$ 38	139%	139%
	1	39,597	18	0	12	149	149
	2-4	63,205	30	0	17	176	176
	5-9	105,903	38	0	51	74	74
	10-14	179,050	262	2	178	147	148
	15-19	734,948	1,044	5	777	134	135
	20-24	1,283,873	1,155	25	1,169	98	100
	21-29	1,003,817	1,116	0	1,089	102	102
	30-34	479,119	1,001	0	850	117	117
	35-39	190,976	534	0	579	92	92
	40-44	28,475	159	0	142	111	111
	45-49	2,047	1	0	16	6	6
	50 and over	534	77	0	7	1,099	1,099
	All ages	\$ 4,219,984	\$ 5,488	\$ 32	\$ 4,925	111%	112%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1965 (7)	0	\$ 112,701	\$ 32	\$ 0	\$ 48	66%	66%
	1	42,298	5	0	15	33	33
	2-4	67,606	18	0	18	99	99
	5-9	111,596	55	0	44	124	124
	10-14	190,239	198	5	180	109	112
	15-19	945,881	1,023	45	971	105	109
	20-24	1,449,029	1,318	5	1,254	105	105
	25-29	1,075,890	1,143	0	1,059	107	107
	30-34	495,194	927	5	750	123	124
	35-39	182,734	575	0	492	116	116
	40-44	27,704	120	0	124	96	96
	45-49	2,228	14	0	15	93	93
	50 and over	507	0	0	6	0	0
All ages		\$ 4,703,613	\$ 5,428	\$ 60	\$ 4,976	109%	110%
1966 (6)	0	\$ 118,146	\$ 46	\$ 0	\$ 57	80%	80%
	1	44,667	0	0	19	0	0
	2-4	70,315	39	0	21	185	185
	5-9	116,240	59	0	38	155	155
	10-14	191,835	138	3	170	81	82
	15-19	841,725	958	31	849	112	116
	20-24	1,440,351	1,031	10	1,217	84	85
	25-29	1,151,350	874	24	1,056	82	85
	30-34	501,749	712	0	672	105	105
	35-39	178,161	462	6	416	111	112
	40-44	28,116	92	0	112	82	82
	45-49	2,274	16	0	14	114	114
	50 and over	906	22	0	10	219	219
All ages		\$ 4,685,841	\$ 4,449	\$ 74	\$ 4,651	95%	97%
1967 (5)	0	\$ 122,913	\$ 49	\$ 0	\$ 65	75%	75%
	1	48,003	9	0	23	39	39
	2-4	75,658	13	0	27	48	48
	5-9	119,906	42	0	36	116	116
	10-14	191,620	228	5	159	143	146
	15-19	870,983	1,277	25	878	145	148
	20-24	1,788,297	1,788	10	1,511	118	118
	25-29	1,410,817	1,550	10	1,246	124	125
	30-34	633,413	826	0	739	111	111
	35-39	219,635	439	5	448	97	99
	40-44	40,964	131	0	139	94	94
	45-49	3,006	0	0	16	0	0
	50 and over	991	7	0	9	77	77
All ages		\$ 5,536,215	\$ 6,359	\$ 55	\$ 5,296	120%	121%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1968 (4)	0	\$ 137,841	\$ 81	\$ 0	\$ 84	96%	96%
	1	51,959	2	0	28	7	7
	2-4	79,916	17	0	34	49	49
	5-9	123,874	48	0	34	141	141
	10-14	197,832	158	0	147	107	107
	15-19	916,482	1,281	35	915	139	143
	20-24	2,277,769	2,072	103	1,913	108	113
	25-29	1,653,791	1,384	10	1,421	97	98
	30-34	779,827*	891	10	834	106	108
	35-39	267,030	755	0	479	157	157
	40-44	62,027	224	0	189	118	118
	45-49	6,379	12	0	29	41	41
	50 and over	2,192	6	0	20	29	29
	All ages	\$ 6,556,924	\$ 6,931	\$ 158	\$ 6,127	113%	115%
1969 (3)	0	\$ 155,773	\$ 77	\$ 0	\$ 111	69%	69%
	1	58,795	12	0	36	33	33
	2-4	87,560	34	0	42	80	80
	5-9	130,432	24	0	35	68	68
	10-14	204,203	106	0	136	77	77
	15-19	959,651	1,162	75	957	121	129
	20-24	2,643,879	2,539	45	2,142	118	120
	25-29	1,950,774	1,513	0	1,589	95	95
	30-34	839,210	1,022	10	803	127	128
	35-39	310,971	631	0	480	131	131
	40-44	67,847	217	0	174	124	124
	45-49	8,444	28	0	33	84	84
	50 and over	3,129	21	0	25	83	83
	All ages	\$ 7,420,674	\$ 7,386	\$ 130	\$ 6,563	112%	114%
1970 (2)	0	\$ 192,590	\$ 111	\$ 0	\$ 160	69%	69%
	1	75,708	52	0	55	94	94
	2-4	107,729	39	0	57	68	68
	5-9	151,142	54	0	46	117	117
	10-14	221,480	74	0	121	61	61
	15-19	1,136,374	1,288	60	1,054	122	127
	20-24	3,499,153	2,977	112	2,606	114	118
	25-29	2,337,057	1,744	60	1,553	112	116
	30-34	976,794	968	36	760	127	132
	35-39	359,110	410	27	439	93	99
	40-44	80,288	119	0	168	70	70
	45-49	8,707	90	0	26	346	346
	50 and over	3,730	15	0	21	71	71
	All ages	\$ 9,149,869	\$ 7,941	\$ 295	\$ 7,066	112%	116%

TABLE E—MALE LIVES—Continued

ISSUE YEAR (POLICY YEAR)	AGES AT ISSUE	EXPOSED TO RISK	ACTUAL DEATHS		EXPECTED DEATHS	MORTALITY RATIO	
			Excluding War Deaths	War Deaths		Exclud- ing War Deaths	Includ- ing War Deaths
1971 (1)	0	\$ 236,805	\$ 271	\$ 0	\$ 418	64%	64%
	1	99,414	89	0	83	107	107
	2-4	152,669	98	0	94	104	104
	5-9	204,176	31	0	73	42	42
	10-14	276,236	41	0	129	31	31
	15-19	1,432,542	1,539	10	1,137	135	136
	20-24	4,819,999	5,049	20	3,320	152	152
	25-29	3,218,840	2,135	15	1,722	123	124
	30-34	1,286,192	1,292	0	817	158	158
	35-39	443,078	628	0	421	149	149
	40-44	95,374	218	0	148	147	147
	45-49	9,012	32	0	20	159	159
	50 and over	3,623	3	0	14	21	21
	All ages	\$12,277,967	\$11,426	\$ 45	\$ 8,396	136%	136%
All years (1-15)	0	\$ 1,815,587	\$ 997	\$ 0	\$ 1,189	83%	83%
	1	711,743	324	0	365	88	88
	2-4	1,019,829	481	0	458	105	105
	5-9	1,548,986	910	0	746	121	121
	10-14	2,512,102	2,328	34	2,179	106	108
	15-19	11,372,949	13,284	329	11,517	115	118
	20-24	25,239,349	24,045	386	22,263	108	109
	25-29	19,260,194	20,677	149	20,396	101	102
	30-34	9,107,586	17,362	88	16,257	106	107
	35-39	3,496,191	12,070	44	10,864	111	111
	40-44	634,705	3,048	0	2,866	106	106
	45-49	52,339	313	0	298	105	105
	50 and over	19,373	190	0	201	94	94
	All ages	\$76,790,939	\$96,029	\$1,030	\$89,599	107%	108%

**TABLE E—Continued**  
**STANDARD NONMEDICAL ISSUES OF 1957-71**  
**FEMALE LIVES**  
**EXPERIENCE BETWEEN 1971 AND 1972 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
1957 . . . . . (15)	0	\$ 64,172	\$ 15	\$ 19	78%
	1	23,791	8	8	99
	2-4	22,872	11	7	157
	5-9	21,719	14	8	174
	10-14	17,865	4	8	49
	15-19	34,007	22	19	115
	20-24	49,787	51	51	99
	25-29	38,708	106	53	199
	30-34	37,608	64	99	64
	35-39	30,072	137	96	142
	40-44	6,602	40	38	105
	45-49	298	0	3	0
	50 and over	285	7	5	139
	All ages	\$ 347,793	\$ 479	\$ 414	115%
1958 . . . . . (14)	0	\$ 62,378	\$ 27	\$ 17	158%
	1	24,839	5	7	71
	2-4	24,223	6	8	74
	5-9	22,834	13	8	162
	10-14	21,773	8	10	79
	15-19	40,010	14	21	66
	20-24	59,557	59	54	109
	25-29	46,477	77	57	135
	30-34	45,562	52	108	48
	35-39	36,110	162	106	152
	40-44	7,074	64	37	172
	45-49	424	2	3	66
	50 and over	51	0	1	0
	All ages	\$ 391,317	\$ 489	\$ 437	111%
1959 . . . . . (13)	0	\$ 57,730	\$ 9	\$ 14	64%
	1	22,563	0	6	0
	2-4	23,064	3	7	42
	5-9	23,114	12	7	171
	10-14	24,240	14	10	139
	15-19	47,699	46	23	199
	20-24	62,718	44	50	87
	25-29	48,601	51	53	96
	30-34	47,999	143	103	138
	35-39	39,822	111	113	98
	40-44	7,385	29	34	85
	45-49	696	4	5	79
	50 and over	94	0	1	0
	All ages	\$ 405,732	\$ 466	\$ 426	109%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1960 (12)	0	\$ 44,204	\$ 7	\$ 10	69%
	1	17,403	2	4	49
	2-4	20,672	4	6	66
	5-9	22,929	11	7	157
	10-14	24,202	13	10	129
	15-19	62,450	40	30	133
	20-24	71,736	62	54	114
	25-29	54,450	68	54	125
	30-34	54,461	165	107	154
	35-39	44,459	174	121	143
	40-44	8,716	42	35	119
	45-49	445	2	3	66
	50 and over	96	0	1	0
	All ages	\$ 426,229	\$ 590	\$ 442	133%
1961 (11)	0	\$ 44,837	\$ 11	\$ 10	109%
	1	17,331	1	4	24
	2-4	21,509	0	6	0
	5-9	24,075	15	8	187
	10-14	27,187	19	11	172
	15-19	72,720	35	34	102
	20-24	85,594	29	59	49
	25-29	65,209	57	61	93
	30-34	62,745	91	112	81
	35-39	49,995	203	131	154
	40-44	10,025	33	38	86
	45-49	379	0	2	0
	50 and over	49	0	0	0
	All ages	\$ 481,662	\$ 494	\$ 476	103%
1962 (10)	0	\$ 44,366	\$ 3	\$ 10	29%
	1	18,295	6	4	149
	2-4	21,647	4	5	79
	5-9	25,627	8	8	99
	10-14	26,268	11	10	109
	15-19	85,400	45	39	115
	20-24	105,186	35	69	50
	25-29	73,447	95	62	153
	30-34	71,947	89	117	76
	35-39	55,127	94	136	69
	40-44	10,376	49	37	132
	45-49	325	0	2	0
	50 and over	43	0	0	0
	All ages	\$ 538,059	\$ 439	\$ 499	87%
1963 (9)	0	\$ 56,030	\$ 15	\$ 14	107%
	1	20,013	11	5	219
	2-4	28,343	0	7	0
	5-9	36,999	16	12	133
	10-14	41,254	20	15	133
	15-19	108,466	42	49	85
	20-24	136,699	43	86	49
	25-29	96,486	146	78	187
	30-34	86,898	137	130	105
	35-39	65,780	181	154	117
	40-44	12,434	49	42	116
	45-49	456	4	2	199
	50 and over	72	0	0	0
	All ages	\$ 689,935	\$ 664	\$ 594	111%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1964..... (8)	0	\$ 61,824	\$ 11	\$ 17	64%
	1	21,732	0	5	0
	2-4	32,171	8	7	114
	5-9	41,910	10	13	76
	10-14	48,669	47	18	261
	15-19	135,294	69	58	118
	20-24	174,560	106	106	99
	25-29	122,271	70	90	77
	30-34	101,450	113	137	82
	35-39	71,714	202	154	131
	40-44	14,621	50	45	111
	45-49	619	1	3	33
	50 and over	136	0	1	0
	All ages	\$ 826,976	\$ 687	\$ 654	105%
1965..... (7)	0	\$ 64,746	\$ 23	\$ 20	114%
	1	24,256	28	7	399
	2-4	34,264	0	8	0
	5-9	47,299	2	13	15
	10-14	53,992	33	18	183
	15-19	168,123	57	71	80
	20-24	204,171	97	119	81
	25-29	140,836	129	97	132
	30-34	109,932	94	133	70
	35-39	73,343	145	143	101
	40-44	15,229	38	44	86
	45-49	775	2	3	66
	50 and over	139	3	0	0
	All ages	\$ 937,110	\$ 651	\$ 676	96%
1966..... (6)	0	\$ 69,060	\$ 6	\$ 23	26%
	1	24,365	5	7	71
	2-4	38,530	3	10	29
	5-9	49,390	5	13	38
	10-14	58,537	23	17	135
	15-19	196,262	79	79	99
	20-24	241,752	105	137	76
	25-29	167,363	59	106	55
	30-34	119,240	129	127	101
	35-39	76,205	117	125	93
	40-44	15,320	53	39	135
	45-49	816	8	3	266
	50 and over	167	3	1	299
	All ages	\$ 1,057,013	\$ 595	\$ 687	86%
1967..... (5)	0	\$ 76,533	\$ 11	\$ 29	37%
	1	26,848	2	9	22
	2-4	40,090	4	11	36
	5-9	54,067	0	13	0
	10-14	63,571	17	16	106
	15-19	218,810	93	86	108
	20-24	314,501	95	170	55
	25-29	211,579	145	124	116
	30-34	148,176	88	141	62
	35-39	95,440	113	137	82
	40-44	34,017	53	77	68
	45-49	2,658	0	8	0
	50 and over	302	0	1	0
	All ages	\$ 1,286,600	\$ 621	\$ 822	75%

TABLE E—FEMALE LIVES—Continued

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
1968..... (4)	0	\$ 85,998	\$ 22	\$ 36	61%
	1	29,792	12	11	109
	2-4	44,346	4	14	28
	5-9	59,462	12	13	92
	10-14	71,599	23	16	143
	15-19	247,101	114	92	123
	20-24	379,322	189	197	95
	25-29	271,650	129	147	87
	30-34	185,473	187	163	114
	35-39	119,359	109	153	71
	40-44	55,323	161	110	146
	45-49	5,038	9	14	64
	50 and over	443	0	2	0
	All ages	\$ 1,554,912	\$ 971	\$ 968	100%
1969..... (3)	0	\$ 96,865	\$ 41	\$ 46	89%
	1	34,847	11	15	73
	2-4	48,705	0	17	0
	5-9	64,827	9	15	59
	10-14	77,101	7	15	46
	15-19	289,703	136	100	135
	20-24	485,420	149	233	63
	25-29	335,616	202	165	122
	30-34	205,960	255	157	162
	35-39	131,129	212	136	155
	40-44	65,033	119	105	113
	45-49	6,680	2	15	13
	50 and over	639	0	3	0
	All ages	\$ 1,842,530	\$ 1,143	\$ 1,022	111%
1970..... (2)	0	\$ 123,703	\$ 81	\$ 63	128%
	1	44,831	10	21	47
	2-4	63,593	52	24	216
	5-9	80,033	2	20	9
	10-14	87,057	27	13	207
	15-19	366,223	200	94	212
	20-24	674,230	234	263	88
	25-29	456,312	185	187	98
	30-34	285,359	185	171	108
	35-39	162,325	126	127	99
	40-44	82,293	96	96	99
	45-49	8,097	11	13	84
	50 and over	793	4	2	199
	All ages	\$ 2,434,855	\$ 1,213	1,094	110%
1971..... (1)	0	\$ 157,957	\$ 146	\$ 251	58%
	1	63,832	12	33	36
	2-4	96,104	37	41	90
	5-9	115,615	17	32	53
	10-14	129,941	9	15	59
	15-19	490,938	214	106	201
	20-24	984,455	395	305	129
	25-29	697,970	387	227	170
	30-34	399,587	240	182	131
	35-39	210,019	172	109	157
	40-44	105,156	95	80	118
	45-49	10,508	3	12	24
	50 and over	1,220	0	5	0
	All ages	\$ 3,463,308	\$ 1,727	\$ 1,398	123%

TABLE E—FEMALE LIVES—*Continued*

Issue Year (Policy Year)	Ages at Issue	Exposed to Risk	Actual Deaths	Expected Deaths	Mortality Ratio
All years... (1-15)	0	\$ 1,110,410	\$ 428	\$ 579	73%
	1	414,745	113	146	77
	2-4	560,140	136	178	76
	5-9	689,907	146	190	76
	10-14	773,264	275	202	136
	15-19	2,563,214	1,206	901	133
	20-24	4,029,694	1,693	1,953	86
	25-29	2,826,983	1,906	1,561	122
	30-34	1,962,403	2,032	1,987	102
	35-39	1,260,906	2,258	1,941	116
	40-44	449,610	971	857	113
	45-49	38,219	48	91	52
	50 and over	4,536	17	23	73
All ages		\$16,684,038	\$11,229	\$10,609	105%

## APPENDIX II

## DEFINITION OF "WAR DEATHS"

War deaths are identified by the 1970 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 "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 should be coded 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's 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 war deaths.

