

TRANSACTIONS

1956 REPORTS OF MORTALITY AND MORBIDITY EXPERIENCE

REPORT OF THE COMMITTEE ON MORTALITY UNDER ORDINARY INSURANCES AND ANNUITIES

I. MORTALITY UNDER STANDARD ORDINARY INSURANCE ISSUES BETWEEN 1954 AND 1955 ANNIVERSARIES

THIS report covers the intercompany experience under standard Ordinary insurance issues between 1954 and 1955 anniversaries. It takes up in turn the mortality experienced under

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

The report also includes data on the trend of mortality during the past sixteen years on (a) standard Ordinary medically examined insurance in the first fifteen policy years, and (b) standard Ordinary insurance—non-medical and medical issues combined—in the sixteenth and subsequent policy years.

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

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

The current experience during the first fifteen years of insurance is based on an exposure of \$52,519,219,000 and actual claims of \$167,243,000. There were belated claims for a few deaths (13) incurred in the Korean War where the insured was adjudged to be legally dead and the claim paid during the period covered by this experience; these deaths have not been excluded.

Expected deaths were calculated on the 1946-49 Select Basic Table (TSA II, 506). The mortality ratios on this table are presented in Table 1 by age groups at issue for all years of issue combined. The experience by

TABLE 1
STANDARD MEDICALLY EXAMINED ISSUES OF 1940 TO 1954
EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
BY AGE AT ISSUE
POLICY YEARS 1 TO 15 COMBINED
(Amounts Shown in \$1,000 Units)

| Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths on 1946-1949 Select Basic Table | Mortality Ratio |
|------------------|-----------------|---------------|---|-----------------|
| 10-14..... | \$ 936,926 | \$ 940 | \$ 859 | 109.4% |
| 15-19..... | 1,937,449 | 1,822 | 2,084 | 87.4 |
| 20-24..... | 4,493,535 | 3,694 | 4,857 | 76.1 |
| 25-29..... | 8,304,380 | 9,241 | 10,831 | 85.3 |
| 30-34..... | 10,463,635 | 16,871 | 19,230 | 87.7 |
| 35-39..... | 10,033,334 | 26,077 | 30,182 | 86.4 |
| 40-44..... | 7,802,566 | 33,146 | 36,450 | 90.9 |
| 45-49..... | 4,778,683 | 31,639 | 35,931 | 88.1 |
| 50-54..... | 2,445,245 | 23,585 | 26,843 | 87.9 |
| 55-59..... | 989,338 | 13,465 | 15,272 | 88.2 |
| 60-64..... | 277,661 | 5,486 | 6,186 | 88.7 |
| 65 and over..... | 56,467 | 1,277 | 1,704 | 74.9 |
| All Ages..... | \$52,519,219 | \$167,243 | \$190,429 | 87.8% |

TABLE 2
STANDARD MEDICALLY EXAMINED ISSUES OF 1940 TO 1954
EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
BY YEAR OF ISSUE
ALL AGES COMBINED
(Amounts Shown in \$1,000 Units)

| Year of Issue | Policy Year | Exposed to Risk | Actual Deaths | Expected Deaths on 1946-1949 Select Basic Table | Mortality Ratio |
|-------------------------|-------------|-----------------|---------------|---|-----------------|
| 1940..... | 15 | \$ 1,911,532 | \$ 11,398 | \$ 14,922 | 76.4% |
| 1941..... | 14 | 2,364,829 | 14,709 | 15,942 | 92.3 |
| 1942..... | 13 | 1,688,026 | 10,235 | 11,186 | 91.5 |
| 1943..... | 12 | 1,919,023 | 10,967 | 12,952 | 84.7 |
| 1944..... | 11 | 2,218,110 | 12,965 | 14,086 | 92.0 |
| 1945..... | 10 | 2,503,850 | 12,999 | 13,886 | 93.6 |
| 1946..... | 9 | 3,745,926 | 14,717 | 15,932 | 92.4 |
| 1947..... | 8 | 3,630,948 | 12,609 | 14,964 | 84.3 |
| 1948..... | 7 | 3,281,004 | 10,711 | 11,795 | 90.8 |
| 1949..... | 6 | 3,476,768 | 9,319 | 11,475 | 81.2 |
| 1950..... | 5 | 4,291,606 | 10,527 | 12,523 | 84.1 |
| 1951..... | 4 | 4,021,038 | 9,565 | 11,223 | 85.2 |
| 1952..... | 3 | 4,620,370 | 9,270 | 10,940 | 84.7 |
| 1953..... | 2 | 5,670,047 | 9,261 | 10,000 | 92.6 |
| 1954..... | 1 | 7,176,142 | 7,991 | 8,603 | 92.9 |
| All Years of Issue..... | | \$52,519,219 | \$167,243 | \$190,429 | 87.8% |

year of issue (or by policy year) for all ages at issue combined is presented in Table 2. The detailed experience by age groups at issue for each year of issue (or each policy year) is set forth in Table B of the Appendix.

The aggregate mortality ratio for the period from 1954 to 1955 anniversaries (87.8%) was .9 percentage points lower than that (88.7%) for the period from 1953 to 1954 anniversaries. Table 1 brings out that for all five year age groups between 25 and 64 the mortality ratios fell within the very narrow range from 85% to 91% of the 1946-49 Select Basic Table.

TABLE 3
STANDARD MEDICALLY EXAMINED ISSUES OF 1940 TO 1954
EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
PERCENTAGE DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT PAID IN CLAIMS

| Cause of Death: | Tuber- culosis (All Forms) | Malign- nant Neo- plasms | Dia- betes Mel- litus | Vascu- lar Le- sions Affect- ing Central Nervous System | Dis- eases of the Heart and Circu- latory System | Pneu- monia and Influ- enza | Acci- dents and Homic- ide | Sui- cide | War Deaths | All Other Causes and Un- known |
|---------------------------|-------------------------------------|-----------------------------------|--------------------------------|--|---|---|--|--------------|---------------|---|
| Committee's 1950 Code: | 01, 02 | 18-33 | 37 | 42 | 49-55 | 56-59 | 88-96, 98 | 97 | 99 | Residual |
| Ages 10-29 at issue | | | | | | | | | | |
| Policy Years 1-5... | .2% | 14.9% | .2% | 1.3% | 7.2% | .2% | 56.2% | 3.2% | .1% | 16.5% |
| Policy Years 6-15... | .6 | 18.9 | .2 | 2.9 | 20.8 | 1.1 | 29.6 | 6.6 | .2 | 19.1 |
| Policy Years 1-15... | .5 | 17.7 | .2 | 2.4 | 16.6 | .8 | 37.9 | 5.5 | .1 | 18.3 |
| Ages 30-39 at issue | | | | | | | | | | |
| Policy Years 1-5... | .4 | 18.2 | .1 | 3.6 | 30.1 | 1.8 | 26.2 | 6.2 | .3 | 13.1 |
| Policy Years 6-15... | .5 | 18.7 | .4 | 3.8 | 43.3 | .8 | 9.9 | 5.2 | .0 | 17.4 |
| Policy Years 1-15... | .5 | 18.6 | .3 | 3.7 | 39.8 | 1.1 | 14.2 | 5.4 | .1 | 16.3 |
| Ages 40-49 at issue | | | | | | | | | | |
| Policy Years 1-5... | .1 | 20.7 | .1 | 3.4 | 46.8 | 1.2 | 11.8 | 4.1 | .0 | 11.8 |
| Policy Years 6-15... | .2 | 20.8 | .3 | 4.7 | 51.7 | .7 | 5.2 | 3.8 | .0 | 12.6 |
| Policy Years 1-15... | .2 | 20.8 | .3 | 4.3 | 50.3 | .8 | 7.0 | 3.9 | .0 | 12.4 |
| Ages 50 and over at issue | | | | | | | | | | |
| Policy Years 1-5... | .1 | 28.0 | .0 | 4.2 | 47.7 | .5 | 6.7 | 2.6 | .0 | 10.2 |
| Policy Years 6-15... | .3 | 23.0 | .7 | 6.7 | 50.7 | .7 | 3.4 | 2.1 | .0 | 12.4 |
| Policy Years 1-15... | .2 | 24.5 | .5 | 5.9 | 49.9 | .7 | 4.4 | 2.2 | .0 | 11.7 |
| All Ages at issue | | | | | | | | | | |
| Policy Years 1-5... | .2 | 21.5 | .1 | 3.4 | 38.9 | 1.0 | 18.5 | 4.1 | .1 | 12.2 |
| Policy Years 6-15... | .3 | 20.7 | .4 | 4.8 | 46.5 | .8 | 8.1 | 4.0 | .0 | 14.4 |
| Policy Years 1-15... | .3 | 20.9 | .3 | 4.4 | 44.4 | .8 | 11.1 | 4.0 | .0 | 13.8 |

Table 2 presents the mortality ratios by year of issue (or by policy year), and shows that the mortality ratios for the first and second policy year durations were at least 7 percentage points higher than for the third, fourth, fifth and sixth policy year durations. A similar relation has held in the experience since 1950 anniversaries.

Table 3 presents an analysis of current experience on medical issues according to the major subdivisions by cause of death based on the Committee's 1950 Code for Cause of Death (*TSA I, 617*). This table shows the

percentage distribution by cause of death of the amount paid in claims. A comparison of the death rates based on the percentage distribution of the mortality by cause of death between 1954 and 1955 anniversaries with the corresponding death rates for the period between 1950 and 1951 anniversaries (based on the data in Table 3, page 4, 1952 Reports, after adjustment for war deaths) indicates that for medical issues in the first fifteen policy years (a) the death rate from tuberculosis has decreased to a fraction of its earlier level, (b) death rates from cancer have increased slightly at issue ages under 40 and to a greater extent at issue ages 50 and over, and (c) death rates from diabetes have decreased appreciably.

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

The current experience during the first fifteen years of insurance is based on an exposure of \$14,442,513,000 and actual claims of \$18,262,000. There were belated claims for a few deaths (14) incurred in the Korean War where the insured was adjudged to be legally dead and the claim paid during the period covered by this experience; these deaths have not been excluded.

It should be noted that nonmedical business continued to grow in importance as part of the total experience on recent Ordinary issues. The exposure on nonmedical issues in the current study increased 11.6% over that in the study covering the period from 1953 to 1954 anniversaries, whereas the corresponding exposures on medical issues increased only 7.0%. Nevertheless, for the 16 companies contributing to this study, the proportion of nonmedical insurance has decreased slightly on new issues, accounting for approximately 26.0% of the standard issues of 1954 (by amounts) as compared with 28.9% of the standard issues of 1953 and 1952.

Expected deaths were calculated on the 1946-49 Select Basis Table (TSA II, 506) which was based on the experience under medical issues.

The mortality ratios for nonmedical issues on this table are presented in Table 4 by age groups at issue for all years of issue combined. These mortality ratios understate somewhat the death rates on nonmedical business because in calculating the expected deaths no adjustment was made for the fact that the central ages of the exposures under nonmedical issues for issue age groups 35-39, 40-44, 45-49, and 50 and over were younger than the central ages of the mortality rates for those age groups in the 1946-49 Select Basic Table; this situation arose from the limiting ages for nonmedical issues of the contributing companies being variously set at 35, 40, 45, or 50, so that the exposures beyond these ages tended to fall off sharply.

TABLE 4
STANDARD NONMEDICAL ISSUES OF 1940 TO 1954
EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
BY AGE AT ISSUE
POLICY YEARS 1 TO 15 COMBINED
(Amounts Shown in \$1,000 Units)

| Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths* on 1946-1949 Select Basic Table | Mortality Ratio* |
|------------------|-----------------|---------------|--|------------------|
| 10-14..... | \$ 770,247 | \$ 488 | \$ 593 | 82.3% |
| 15-19..... | 2,482,451 | 2,000 | 2,432 | 82.2 |
| 20-24..... | 3,656,436 | 3,015 | 3,456 | 87.2 |
| 25-29..... | 3,501,716 | 3,440 | 3,883 | 88.6 |
| 30-34..... | 2,336,063 | 3,281 | 3,564 | 92.1 |
| 35-39..... | 1,195,251 | 3,190 | 3,209 | 99.4 |
| 40-44..... | 394,556 | 1,907 | 1,799 | 106.0 |
| 45-49..... | 86,530 | 762 | 598 | 127.4 |
| 50 and over..... | 19,263 | 179 | 197 | 90.9 |
| All Ages..... | \$14,442,513 | \$18,262 | \$19,731 | 92.6% |

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

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

MORTALITY RATIOS ON NONMEDICAL ISSUES OF
1940 TO 1954—EXPERIENCE BETWEEN 1954 AND
1955 ANNIVERSARIES BY AGE AT ISSUE
POLICY YEARS 1 TO 15 COMBINED

| AGES AT ISSUE | MORTALITY RATIOS | |
|-----------------------|------------------|-----------|
| | Unadjusted | Adjusted* |
| 35-39..... | 99.4% | 99.5% |
| 40-44..... | 106.0 | 112.2 |
| 45-49..... | 127.4 | 135.6 |
| 50 and over..... | 90.9 | 93.2 |
| Ages 35 and over..... | 104.0% | 106.7% |

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

The unadjusted mortality ratios understate the true mortality on non-medical business to a significant degree only in the age groups 40-44 and 45-49 at issue. The nonmedical business issued at ages 50 and over represents primarily business issued under special circumstances (as for in-

stance under salary allotment plans) which do not affect the distribution of exposures by age within each five year age group at issue.

Allowing for the understatement of the mortality ratios on nonmedical business issued at ages 40-44 and 45-49 as shown in Table 4, it appears that the mortality ratios on nonmedical business did not exceed those on medical business by more than about 5 or 10 points at issue ages 20-34 but were approximately 15 percentage points higher at issue ages 35-39,

TABLE 5
STANDARD NONMEDICAL ISSUES OF 1940 TO 1954
EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
BY YEAR OF ISSUE
ALL AGES COMBINED
(Amounts Shown in \$1,000 Units)

| Year of Issue | Policy Year | Exposed to Risk | Actual Deaths | Expected Deaths* on 1946-1949 Select Basic Table | Mortality Ratio* |
|-------------------------|-------------|-----------------|---------------|--|------------------|
| 1940..... | 15 | \$ 242,488 | \$ 792 | \$ 841 | 94.2% |
| 1941..... | 14 | 294,129 | 773 | 845 | 91.5 |
| 1942..... | 13 | 246,793 | 593 | 669 | 88.6 |
| 1943..... | 12 | 430,359 | 946 | 1,067 | 88.7 |
| 1944..... | 11 | 479,511 | 915 | 1,114 | 82.1 |
| 1945..... | 10 | 521,025 | 989 | 1,087 | 91.0 |
| 1946..... | 9 | 965,350 | 1,528 | 1,662 | 91.9 |
| 1947..... | 8 | 812,546 | 1,204 | 1,352 | 89.1 |
| 1948..... | 7 | 707,369 | 977 | 1,076 | 90.8 |
| 1949..... | 6 | 785,363 | 1,016 | 1,130 | 89.9 |
| 1950..... | 5 | 1,017,098 | 1,113 | 1,351 | 82.4 |
| 1951..... | 4 | 1,510,198 | 1,779 | 1,880 | 94.6 |
| 1952..... | 3 | 1,750,745 | 1,904 | 1,960 | 97.1 |
| 1953..... | 2 | 2,161,892 | 1,888 | 1,953 | 96.7 |
| 1954..... | 1 | 2,517,647 | 1,845 | 1,744 | 105.8 |
| All Years of Issue..... | | \$14,442,513 | \$18,262 | \$19,731 | 92.6% |

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

20 percentage points higher at issue ages 40-44 and 50 percentage points higher at issue ages 45-49.

The aggregate mortality ratio on nonmedical business for the period from 1954 to 1955 anniversaries (92.6%) was 1.6 percentage points lower than that (94.2%) for the period from 1953 to 1954 anniversaries, both on an unadjusted basis.

The mortality ratios on nonmedical issues by year of issue (or by policy year) are presented in Table 5, also on an unadjusted basis. The mortality

ratios for the first, second, and third policy year durations were higher than those for any later durations. In the experience since 1950 anniversaries, the mortality ratios for the first and second policy year durations have been generally relatively high.

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

Table 6 presents an analysis of the current experience on nonmedical

TABLE 6
STANDARD NONMEDICAL ISSUES OF 1940 TO 1954
EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
PERCENTAGE DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT PAID IN CLAIMS

| Cause of Death: | Tuber- culosis (All Forms) | Malign- ant Neo- plasms | Dia- betes Mel- litus | Vascu- lar Le- sions Affect- ing Central Nerv- ous System | Dis- eases of the Heart and Circu- latory System | Pneu- monia and Influenza | Acci- dents and Homi- cide | Sui- cide | War Deaths | All Other Causes and Un- known |
|---------------------------|-------------------------------------|----------------------------------|--------------------------------|---|---|------------------------------------|--|--------------|---------------|---|
| Committee's 1950 Code: | 01, 02 | 18-33 | 37 | 42 | 49-55 | 56-59 | 88-96, 98 | 97 | 99 | Resid- ual |
| Ages 10-29 at issue | | | | | | | | | | |
| Policy Years 1-5 | .2% | 10.9% | .5% | 2.2% | 6.5% | 9% | 54.3% | 5.2% | .2% | 19.1% |
| Policy Years 6-15 | .8 | 17.5 | .6 | 2.7 | 16.6 | 1.0 | 33.6 | 4.9 | .3 | 22.0 |
| Policy Years 1-15 | .5 | 13.9 | .6 | 2.4 | 11.1 | 1.0 | 44.8 | 5.0 | .3 | 20.4 |
| Ages 30-39 at issue | | | | | | | | | | |
| Policy Years 1-5 | .7 | 16.2 | .7 | 2.1 | 26.8 | 1.2 | 30.4 | 3.5 | .1 | 18.3 |
| Policy Years 6-15 | .8 | 19.1 | .5 | 4.6 | 39.1 | 1.3 | 10.3 | 5.2 | .0 | 19.1 |
| Policy Years 1-15 | .7 | 17.9 | .6 | 3.6 | 34.1 | 1.3 | 18.5 | 4.5 | .0 | 18.8 |
| Ages 40-49 at issue | | | | | | | | | | |
| Policy Years 1-5 | .0 | 21.1 | .0 | 6.2 | 44.8 | .4 | 9.9 | 1.8 | .0 | 15.8 |
| Policy Years 6-15 | .7 | 19.4 | 1.0 | 5.1 | 49.6 | .3 | 5.4 | 2.6 | .0 | 15.9 |
| Policy Years 1-15 | .5 | 20.0 | .6 | 5.5 | 47.9 | .4 | 6.9 | 2.3 | .0 | 15.9 |
| Ages 50 and over at issue | | | | | | | | | | |
| Policy Years 1-5 | .0 | 15.0 | 1.1 | 2.9 | 50.6 | .0 | .6 | 1.9 | .0 | 27.9 |
| Policy Years 6-15 | .0 | 17.3 | .0 | 6.3 | 56.5 | .0 | .0 | .0 | .0 | 19.9 |
| Policy Years 1-15 | .0 | 16.2 | .6 | 4.6 | 53.6 | .0 | .3 | .9 | .0 | 23.8 |
| All Ages at issue | | | | | | | | | | |
| Policy Years 1-5 | .3 | 13.7 | .5 | 2.6 | 17.4 | 1.0 | 41.5 | 4.2 | .2 | 18.6 |
| Policy Years 6-15 | .8 | 18.4 | .6 | 3.9 | 31.7 | 1.0 | 19.1 | 4.6 | .1 | 19.8 |
| Policy Years 1-15 | .6 | 16.2 | .6 | 3.3 | 25.0 | 1.0 | 29.5 | 4.4 | .2 | 19.2 |

issues according to the major subdivisions by cause of death based on the Committee's 1950 Code for Cause of Death (*TSA I*, 617). This table shows the percentage distribution by cause of death of the amount paid in claims. A comparison of the death rates based on the percentage distribution of the mortality by cause of death between 1954 and 1955 anniversaries with the corresponding death rates for the period between 1950 and 1951 anniversaries (based on the data in Table 6, page 8, 1952 Reports, after adjustment for war deaths) indicates that for nonmedical issues in the

first fifteen policy years (*a*) the death rate from tuberculosis has decreased to a fraction of its earlier level, (*b*) death rates from pneumonia and influenza have decreased somewhat at all ages, and (*c*) deaths from accidents and homicides have increased appreciably at ages under 40.

Ideally, it would have been desirable to compare the nonmedical ex-

TABLE 7
COMPARISON OF MEDICAL AND NONMEDICAL EXPERIENCE*
BETWEEN 1950 AND 1955 ANNIVERSARIES
BY AGE GROUP AT ISSUE AND DURATION (FIRST FIFTEEN POLICY YEARS)

| AGE GROUP AT ISSUE | POLICY YEARS | | | | | | | | | |
|--|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|
| | 1-2 | 3-5 | 6-10 | 11-15 | 1-15 | | | | | |
| Mortality Ratios on 1946-49 Select Basic Table | | | | | | | | | | |
| | Medi- cal % | Non- medi- cal % | Medi- cal % | Non- medi- cal % | Medi- cal % | Non- medi- cal % | Medi- cal % | Non- medi- cal % | Medi- cal % | Non- medi- cal % |
| 10-19..... | 100.7 | 99.5† | 96.4 | 94.8† | 97.7 | 89.6† | 85.0 | 79.9† | 92.6 | 91.4† |
| 20-29..... | 87.9 | 101.0† | 83.2 | 89.9† | 89.4 | 85.5† | 85.1 | 89.9† | 86.2 | 91.2† |
| 30-39..... | 89.2 | 98.1† | 84.6 | 96.0† | 93.4 | 99.3† | 96.0 | 100.5† | 92.4 | 98.7† |
| 40-49..... | 101.4 | 133.1† | 88.5 | 110.0† | 94.3 | 111.3† | 88.8 | 106.9† | 91.7 | 111.8† |
| 50 and over | 100.9 | 104.5† | 88.8 | 92.0† | 88.7 | 91.6† | 87.7 | 108.6† | 89.4 | 97.0† |
| All Ages. | 96.3 | 102.1† | 87.2 | 94.7† | 92.2 | 94.7† | 90.0 | 96.0† | 90.8 | 96.4† |
| Ratios of Nonmedical to Medical Mortality Ratios | | | | | | | | | | |
| 10-19..... | 98.8% | | 98.3% | | 91.7% | | 94.0% | | 98.7% | |
| 20-29..... | 114.9 | | 108.1 | | 95.6 | | 105.6 | | 105.8 | |
| 30-39..... | 110.0 | | 113.5 | | 106.3 | | 104.7 | | 106.8 | |
| 40-49..... | 131.3 | | 124.3 | | 118.0 | | 120.4 | | 121.9 | |
| 50 and over | 103.6 | | 103.6 | | 103.3 | | 123.8 | | 108.5 | |
| All Ages. | 106.0% | | 108.6% | | 102.7% | | 106.7% | | 106.2% | |

* Excludes war claims up to 1954 anniversaries.

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

perience with an experience on strictly comparable policies issued with a medical examination. Data for such a comparison, however, are not available. Table 7 presents side by side the experience on medical and nonmedical issues as reported to the Committee for the period from 1950 to 1955 anniversaries. The nonmedical mortality ratios shown in this

table have been adjusted approximately so as to reflect the distribution of nonmedical exposures by age within each five year age group at issue. In so far as these figures go, they continue to indicate (a) that with the exception of the age group 10-19 at issue, nonmedical mortality is appreciably higher than on medical business, and (b) that the excess nonmedical mortality over medical mortality increases from 6 or 7 percentage points at issue ages 20-39 to about 20 percentage points for issue ages 40-49. It should be kept in mind that the nonmedical experience at issue ages 50 and over is not representative because it reflects primarily business issued under special circumstances as, for instance, under salary allotment plans.

Additional data furnished the Committee indicate that females continue to constitute a higher proportion of nonmedical issues (15.7%) than of medical issues (6.4%) by amounts of insurance. This was noted in previous reports. To the extent that females constitute a higher proportion of the nonmedical experience than of the medical experience, Table 7 understates the excess of nonmedical mortality over medical mortality.

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

The current experience during the 16th and subsequent policy years is based on an exposure of \$23,587,775,000 and actual claims of \$431,605,000. There were belated claims for a few deaths (3) incurred in the Korean War where the insured was adjudged to be legally dead and the claim paid during the period covered by this experience; these deaths have not been excluded.

Expected deaths were calculated on the 1946-49 Ultimate Basic Table (TSA II, 507) and also on the Commissioners 1941 Standard Ordinary Mortality Table. The mortality ratios based on these tables are presented in Table 8 by attained age groups.

The aggregate mortality ratio on the 1946-49 Ultimate Basic Table for the period from 1954 to 1955 anniversaries (88.2%) was 1.4 percentage points lower than that (89.6%) for the period from 1953 to 1954 anniversaries.

Table 9 presents an analysis of the current experience on business in the 16th and subsequent policy years according to the major subdivisions by cause of death based on the Committee's 1950 Code for Cause of Death (TSA I, 617). This table shows the percentage distribution by cause of death of the amount paid in claims. A comparison of the death rates based on the percentage distribution of the mortality by cause of death between 1954 and 1955 anniversaries with the corresponding death rates

TABLE 8
 STANDARD ISSUES DURING 16TH AND SUBSEQUENT POLICY YEARS
 EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
 BY ATTAINED AGE
 ALL POLICY YEARS COMBINED
 (Amounts Shown in \$1,000 Units)

| Attained Ages | Exposed to Risk | Actual Deaths | Expected Deaths on 1946-1949 Ultimate Basic Table | Expected Deaths on CSO Table | Mortality Ratio on 1946-1949 Ultimate Basic Table | Mortality Ratio on CSO Table |
|---------------|-----------------|---------------|---|------------------------------|---|------------------------------|
| 25-29 | \$ 206,527 | \$ 330 | \$ 249 | \$ 658 | 132.5% | 50.2% |
| 30-34 | 552,881 | 705 | 823 | 2,213 | 85.7 | 31.9 |
| 35-39 | 1,279,922 | 2,274 | 2,608 | 6,746 | 87.2 | 33.7 |
| 40-44 | 2,244,017 | 6,307 | 7,403 | 16,033 | 85.2 | 39.3 |
| 45-49 | 3,246,567 | 15,757 | 18,456 | 32,609 | 85.4 | 48.3 |
| 50-54 | 3,818,978 | 30,434 | 36,006 | 55,091 | 84.5 | 55.2 |
| 55-59 | 3,899,458 | 51,732 | 61,606 | 82,421 | 84.0 | 62.8 |
| 60-64 | 3,436,289 | 74,542 | 86,109 | 107,014 | 86.6 | 69.7 |
| 65-69 | 2,388,142 | 78,884 | 88,743 | 110,518 | 88.9 | 71.4 |
| 70-74 | 1,417,928 | 67,729 | 77,403 | 97,408 | 87.5 | 69.5 |
| 75-79 | 728,495 | 55,566 | 59,058 | 74,339 | 94.1 | 74.7 |
| 80-84 | 281,235 | 31,739 | 34,282 | 42,171 | 92.6 | 75.3 |
| 85-89 | 72,634 | 12,847 | 12,992 | 15,701 | 98.9 | 81.8 |
| 90-95 | 14,702 | 2,759 | 3,536 | 4,534 | 78.0 | 60.9 |
| All Ages | \$23,587,775 | \$431,605 | \$489,274 | \$647,456 | 88.2% | 66.7% |

TABLE 9
 STANDARD ISSUES DURING 16TH AND SUBSEQUENT POLICY YEARS
 EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES
 PERCENTAGE DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT PAID IN CLAIMS

| Cause of Death: | Tuberculosis (All Forms) | Malignant Neoplasms | Diabetes Mellitus | Vascular Lesions Affecting Central Nervous System | Diseases of the Heart and Circulatory System | Pneumonia and Influenza | Accidents and Homicide | Suicide | War Deaths | All Other Causes and Unknown |
|------------------------|--------------------------|---------------------|-------------------|---|--|-------------------------|------------------------|---------|------------|------------------------------|
| Committee's 1950 Code: | 01, 02 | 18-33 | 37 | 42 | 49-55 | 56-59 | 88-96, 98 | 97 | 99 | Residual |
| Attained Ages | | | | | | | | | | |
| Under 40 | 1.3% | 15.9% | .9% | 3.3% | 22.0% | 1.3% | 24.7% | 7.2% | .1% | 23.3% |
| 40-49 | .4 | 19.4 | .6 | 3.7 | 42.5 | .9 | 9.5 | 4.9 | .0 | 18.1 |
| 50-59 | .4 | 18.1 | 1.0 | 5.6 | 51.2 | .7 | 4.1 | 3.2 | .0 | 15.7 |
| 60-69 | .3 | 19.0 | 1.2 | 8.6 | 51.1 | 1.1 | 2.1 | 1.4 | .0 | 15.2 |
| 70-79 | .3 | 17.3 | 1.4 | 12.7 | 50.8 | 2.1 | 1.9 | .4 | .0 | 13.1 |
| 80 and over | .2 | 12.0 | 1.3 | 13.9 | 56.2 | 2.9 | 1.2 | .1 | .0 | 12.2 |
| All Ages | .3% | 17.6% | 1.2% | 9.5% | 50.9% | 1.5% | 2.9% | 1.5% | .0% | 14.6% |

for the period between 1950 and 1951 anniversaries (based on the data in Table 9, page 11, 1952 Reports, after adjustment for war deaths) indicates that on business in the 16th and subsequent policy years (a) the death rate from tuberculosis has decreased to a fraction of its earlier level, (b) death rates from cancer have increased somewhat at attained ages 40-79, and (c) death rates from vascular lesions affecting the central nervous system have decreased.

It had been noted in some companies that at the older ages the ultimate experience on premium-paying policies was somewhat higher than

TABLE 10
COMPARISON BETWEEN MORTALITY EXPERIENCE
UNDER PREMIUM-PAYING AND FULLY PAID-UP POLICIES
STANDARD ISSUES DURING THE
16TH AND SUBSEQUENT POLICY YEARS
OBSERVED BETWEEN 1954 AND 1955 ANNIVERSARIES
(Amounts Shown in \$1,000 Units)

| ATTAINED AGES | PREMIUM-PAYING POLICIES | | FULLY PAID-UP POLICIES | |
|--------------------|-------------------------|--------------------|------------------------|--------------------|
| | Actual Deaths | Mortality Ratio | Actual Deaths | Mortality Ratio |
| 25-29 | \$ 219 | 112.9% | \$ 10 | 200.0% |
| 30-34 | 517 | 88.2 | 96 | 99.0 |
| 35-39 | 1,542 | 81.1 | 263 | 94.6 |
| 40-44 | 4,521 | 87.7 | 790 | 86.4 |
| 45-49 | 10,711 | 86.8 | 1,867 | 85.4 |
| 50-54 | 20,136 | 86.4 | 3,150 | 78.9 |
| 55-59 | 32,480 | 84.9 | 5,908 | 88.6 |
| 60-64 | 43,836 | 87.0 | 7,671 | 76.4 |
| 65-69 | 43,493 | 90.6 | 10,038 | 84.4 |
| 70-74 | 34,756 | 90.1 | 9,469 | 83.9 |
| 75-79 | 25,359 | 94.7 | 8,454 | 90.5 |
| 80-84 | 14,231 | 98.8 | 5,118 | 85.9 |
| 85-89 | 4,708 | 102.3 | 2,894 | 101.6 |
| 90-95 | 745 | 65.5 | 847 | 96.9 |
| All Ages | \$237,254 | 89.3% | \$56,575 | 85.2% |

on fully paid-up policies. Nine companies were able to submit their experience on premium-paying policies and six companies did so on fully paid-up policies; the former constituted 62% of the total ultimate experience while the latter accounted for 12% of the total ultimate experience (both percentages based on exposures). This permitted a comparison to be made of the mortality on premium-paying and paid-up business with mortality ratios calculated on the 1946-49 Ultimate Basic Table, as shown in Table 10. At attained ages 60 and over the mortality ratios

were generally higher on premium-paying than on fully paid-up policies, the differential in favor of fully paid-up policies averaging about 6 percentage points.

MORTALITY TRENDS

The data presented in past reports of the Mortality Committee of the Actuarial Society and in the reports of this Committee shed light on the mortality trends during the past 16 years. Three series of mortality rates for each year of experience from policy anniversaries in 1939 to policy anniversaries in 1955 are included in this report to illustrate these trends. The series are as follows:

1. Mortality rates on standard Ordinary medical issues for policy years 1-5, inclusive, by five year age groups at issue. These mortality rates are given in detail in Table D of the Appendix. The trend by year of these death rates by approximate attained age groups in the range from 20 to 64 is presented in Charts I to IX. (The translation of age groups at issue to approximate attained age groups was made from the central age for each age group at issue.)
2. Mortality rates on standard Ordinary medical issues for policy years 6-15, inclusive, by approximate five year attained age groups. (The translation to approximate attained age groups was likewise made from the central age for each age group at issue.) These mortality rates are given in detail in Table E of the Appendix. The trend by year of these death rates in the age range from 20 to 64 is presented in Charts I to IX.
3. Mortality rates on standard Ordinary business (medical and nonmedical combined) in the 16th and subsequent policy years by five year attained age groups. These mortality rates are given in detail in Table F of the Appendix. The trend by year of these death rates in the age range from 25 to 64 is presented in Charts II to IX.

The mortality trends during the period from 1939 to 1955 anniversaries on standard Ordinary medical issues in the first five policy years are summarized in Table 11. This table indicates that from the 1939-43 period to the 1951-55 period, mortality in the first five policy years improved in general between 20 and 30 percent at all ages 20 and older at issue. The improvement was only 10 or 15 per cent at issue ages 10-19.

The mortality trends during the period from 1939 to 1955 anniversaries on standard Ordinary medical issues in the 6th to 15th policy years are summarized in Table 12. This table shows that from the 1939-43 period to the 1951-55 period, mortality at these durations has improved from 25 to 35 percent at attained ages 25 and over. At attained ages under 25, the improvement was only 10 or 15 percent.

The mortality trends during the period from 1939 to 1955 anniversaries on standard Ordinary business—medical and nonmedical issues

TABLE 11
TREND OF EXPERIENCE ON MEDICAL ISSUES*
FIRST FIVE POLICY YEARS

| AGES AT ISSUE | EXPERIENCED FOR PERIOD BETWEEN ANNIVERSARIES IN INDICATED YEARS | | | |
|--|--|-----------|-----------|-----------|
| | 1939-1943 | 1943-1947 | 1947-1951 | 1951-1955 |
| Mortality Rate per 1,000 (Based on Amounts of Insurance) | | | | |
| 10-14..... | 0.646 | 0.643 | 0.517 | 0.553 |
| 15-19..... | 1.039 | 0.942 | 0.870 | 0.941 |
| 20-24..... | 0.980 | 0.853 | 0.797 | 0.760 |
| 25-29..... | 0.998 | 0.961 | 0.810 | 0.723 |
| 30-34..... | 1.290 | 1.162 | 0.975 | 0.931 |
| 35-39..... | 1.910 | 1.672 | 1.566 | 1.376 |
| 40-44..... | 2.987 | 2.615 | 2.437 | 2.203 |
| 45-49..... | 4.621 | 4.044 | 4.096 | 3.660 |
| 50-54..... | 7.787 | 6.053 | 5.607 | 5.519 |
| 55-59..... | 10.819 | 9.211 | 8.776 | 7.914 |
| 60-64..... | 14.651 | 12.121 | 12.804 | 10.451 |
| 65 and over... | 20.834 | 18.679 | 24.290 | 16.386 |
| Mortality Index with 1939-1943 Experience = 100% | | | | |
| 10-14..... | 100.0% | 99.5% | 80.0% | 85.6% |
| 15-19..... | 100.0 | 90.7 | 83.7 | 90.6 |
| 20-24..... | 100.0 | 87.0 | 81.3 | 77.6 |
| 25-29..... | 100.0 | 96.3 | 81.2 | 72.4 |
| 30-34..... | 100.0 | 90.1 | 75.6 | 72.2 |
| 35-39..... | 100.0 | 87.5 | 82.0 | 72.0 |
| 40-44..... | 100.0 | 87.5 | 81.6 | 73.8 |
| 45-49..... | 100.0 | 87.5 | 88.6 | 79.2 |
| 50-54..... | 100.0 | 77.7 | 72.0 | 70.9 |
| 55-59..... | 100.0 | 85.1 | 81.1 | 73.1 |
| 60-64..... | 100.0 | 82.7 | 87.4 | 71.3 |
| 65 and over... | 100.0 | 89.7 | 116.6 | 78.7 |

* Excludes war claims between 1941 and 1946 anniversaries and between 1949 and 1954 anniversaries

combined—in the 16th and subsequent policy years are summarized in Table 13. This table shows that from the 1939-43 period to the 1951-55 period, ultimate mortality rates at attained ages under 35 decreased about 40 percent, at attained ages 35-39 about 30 percent and at attained ages 40-69 about 20 percent; at attained ages 70 and over the improvement in mortality averaged only about 15 percent.

TABLE 12
TREND OF EXPERIENCE ON MEDICAL ISSUES*
POLICY YEARS 6-15

| APPROXIMATE ATTAINED AGES | EXPERIENCE FOR PERIOD BETWEEN ANNIVERSARIES IN INDICATED YEARS | | | |
|------------------------------|--|-----------|-----------|-----------|
| | 1939-1943 | 1943-1947 | 1947-1951 | 1951-1955 |
| | Mortality Rate per 1,000 (Based on Amounts of Insurance) | | | |
| 17-19..... | 1.006 | 0.777 | 0.881 | 0.918 |
| 20-24..... | 1.279 | 1.162 | 0.986 | 1.086 |
| 25-29..... | 1.339 | 1.257 | 0.987 | 0.947 |
| 30-34..... | 1.609 | 1.355 | 1.129 | 1.064 |
| 35-39..... | 2.193 | 1.884 | 1.735 | 1.575 |
| 40-44..... | 3.686 | 3.111 | 2.981 | 2.716 |
| 45-49..... | 5.792 | 5.194 | 4.883 | 4.476 |
| 50-54..... | 9.636 | 8.107 | 7.788 | 7.266 |
| 55-59..... | 14.929 | 12.799 | 11.592 | 10.985 |
| 60-64..... | 22.218 | 19.638 | 16.796 | 15.188 |
| 65-69..... | 37.049 | 28.470 | 25.651 | 23.874 |
| 70-74..... | 50.493 | 46.787 | 37.865 | 35.529 |
| 75 and over... | 72.883 | 83.668 | 58.066 | 49.000 |
| | Mortality Index with 1939-1943 Experience = 100% | | | |
| 17-19..... | 100.0% | 77.2% | 87.6% | 91.3% |
| 20-24..... | 100.0 | 90.9 | 77.1 | 84.9 |
| 25-29..... | 100.0 | 93.9 | 73.7 | 70.7 |
| 30-34..... | 100.0 | 84.2 | 70.2 | 66.1 |
| 35-39..... | 100.0 | 85.9 | 79.1 | 71.8 |
| 40-44..... | 100.0 | 84.4 | 80.9 | 73.7 |
| 45-49..... | 100.0 | 89.7 | 84.3 | 77.3 |
| 50-54..... | 100.0 | 84.1 | 80.8 | 75.4 |
| 55-59..... | 100.0 | 85.7 | 77.6 | 73.6 |
| 60-64..... | 100.0 | 88.4 | 75.6 | 68.4 |
| 65-69..... | 100.0 | 76.8 | 69.2 | 64.4 |
| 70-74..... | 100.0 | 92.7 | 75.0 | 70.4 |
| 75 and over... | 100.0 | 114.8 | 79.7 | 67.2 |

* Excludes war claims between 1941 and 1946 anniversaries and between 1949 and 1954 anniversaries.

When comparisons are made of the changes in mortality between the successive four year periods, (a) the greatest improvement in mortality at the central or middle ages occurred from 1939-43 to 1943-47, (b) the greatest improvement in mortality at the younger ages appeared from 1943-47 to 1947-51, and (c) at the oldest ages the trends were different for the three series of mortality rates reviewed.

TABLE 13
TREND OF EXPERIENCE ON BUSINESS*
IN 16TH AND SUBSEQUENT POLICY YEARS

| ATTAINED AGES | EXPERIENCE FOR PERIOD BETWEEN ANNIVERSARIES IN INDICATED YEARS | | | |
|------------------|--|-----------|-----------|-----------|
| | 1939-1943 | 1943-1947 | 1947-1951 | 1951-1955 |
| | Mortality Rate per 1,000 (Based on Amounts of Insurance) | | | |
| 25-29 | 2.142 | 1.785 | 1.171 | 1.244 |
| 30-34 | 2.127 | 1.903 | 1.364 | 1.302 |
| 35-39 | 2.524 | 2.336 | 1.922 | 1.786 |
| 40-44 | 3.813 | 3.396 | 3.381 | 3.085 |
| 45-49 | 6.573 | 6.108 | 5.569 | 5.107 |
| 50-54 | 10.725 | 9.828 | 9.427 | 8.497 |
| 55-59 | 16.905 | 15.725 | 15.197 | 13.883 |
| 60-64 | 27.757 | 24.991 | 24.203 | 22.344 |
| 65-69 | 40.801 | 36.797 | 36.381 | 33.821 |
| 70-74 | 58.594 | 56.181 | 53.862 | 50.850 |
| 75-79 | 85.727 | 84.016 | 79.971 | 75.156 |
| 80-84 | 136.807 | 124.293 | 113.844 | 111.755 |
| 85 and over... | 199.785 | 180.111 | 177.068 | 170.061 |
| | Mortality Index with 1939-1943 Experience = 100% | | | |
| 25-29 | 100.0% | 83.3% | 54.7% | 58.1% |
| 30-34 | 100.0 | 89.5 | 64.1 | 61.2 |
| 35-39 | 100.0 | 92.6 | 76.1 | 70.8 |
| 40-44 | 100.0 | 89.1 | 88.7 | 80.9 |
| 45-49 | 100.0 | 92.9 | 84.7 | 77.7 |
| 50-54 | 100.0 | 91.6 | 87.9 | 79.2 |
| 55-59 | 100.0 | 93.0 | 89.9 | 82.1 |
| 60-64 | 100.0 | 90.0 | 87.2 | 80.5 |
| 65-69 | 100.0 | 90.2 | 89.2 | 82.9 |
| 70-74 | 100.0 | 95.9 | 91.9 | 86.8 |
| 75-79 | 100.0 | 98.0 | 93.3 | 87.7 |
| 80-84 | 100.0 | 90.9 | 83.2 | 81.7 |
| 85 and over... | 100.0 | 90.2 | 88.6 | 85.1 |

* Excludes war claims between 1941 and 1946 anniversaries and between 1949 and 1954 anniversaries.

CHART I

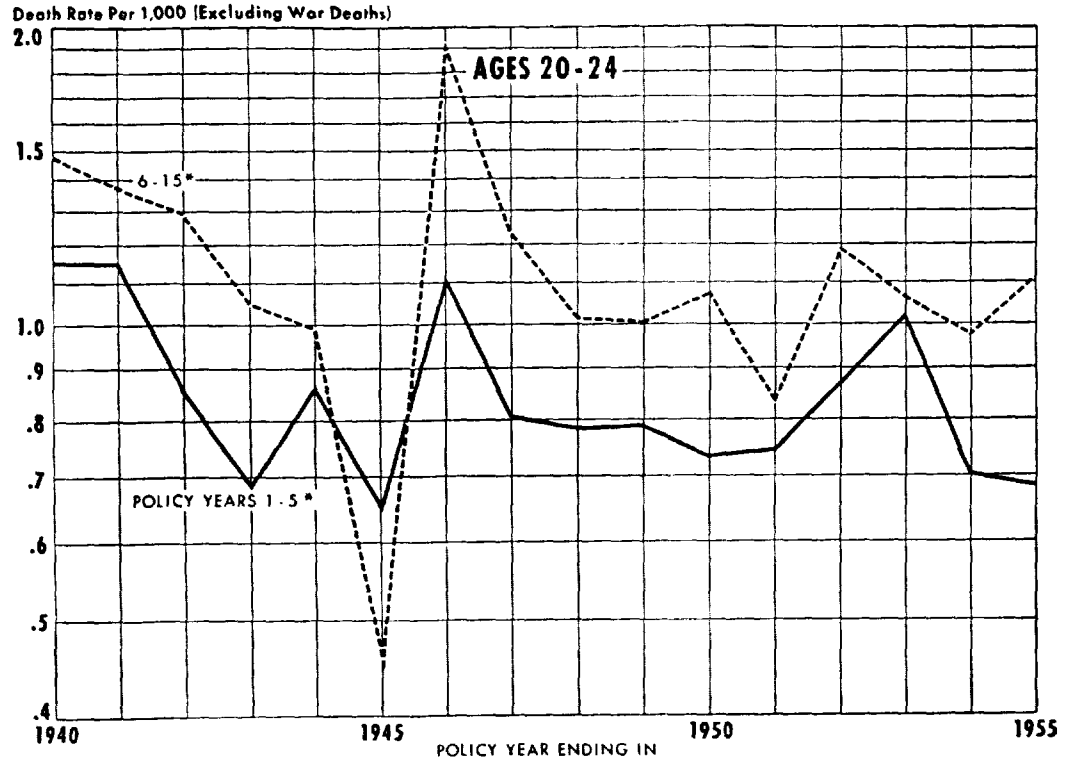
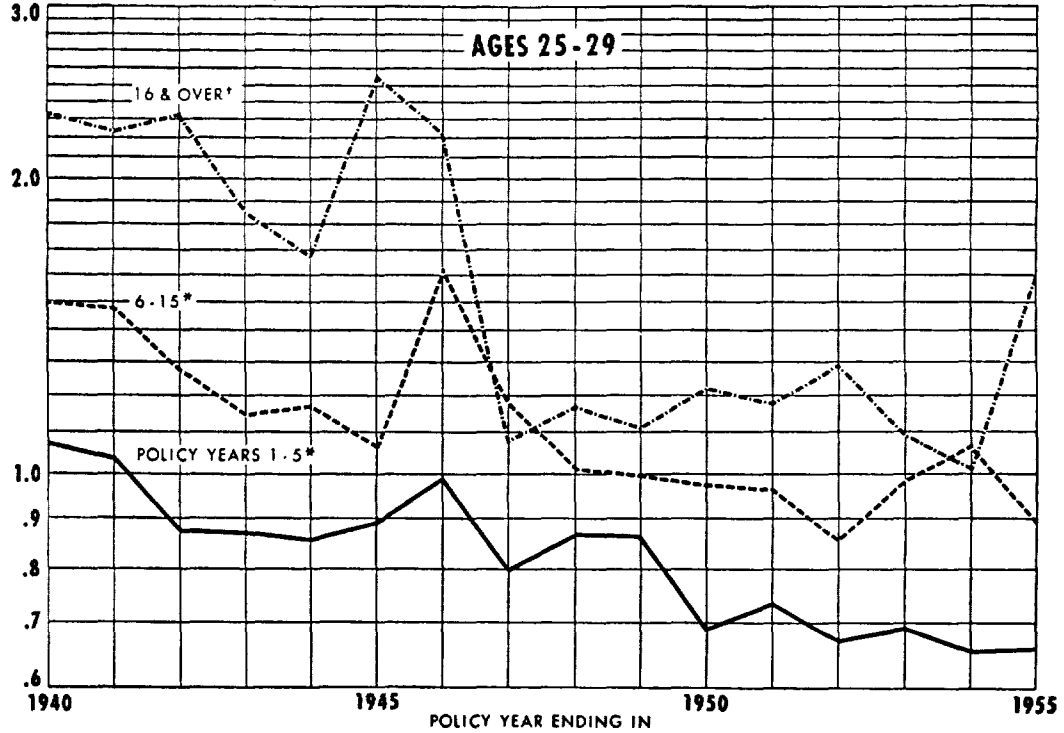


CHART II

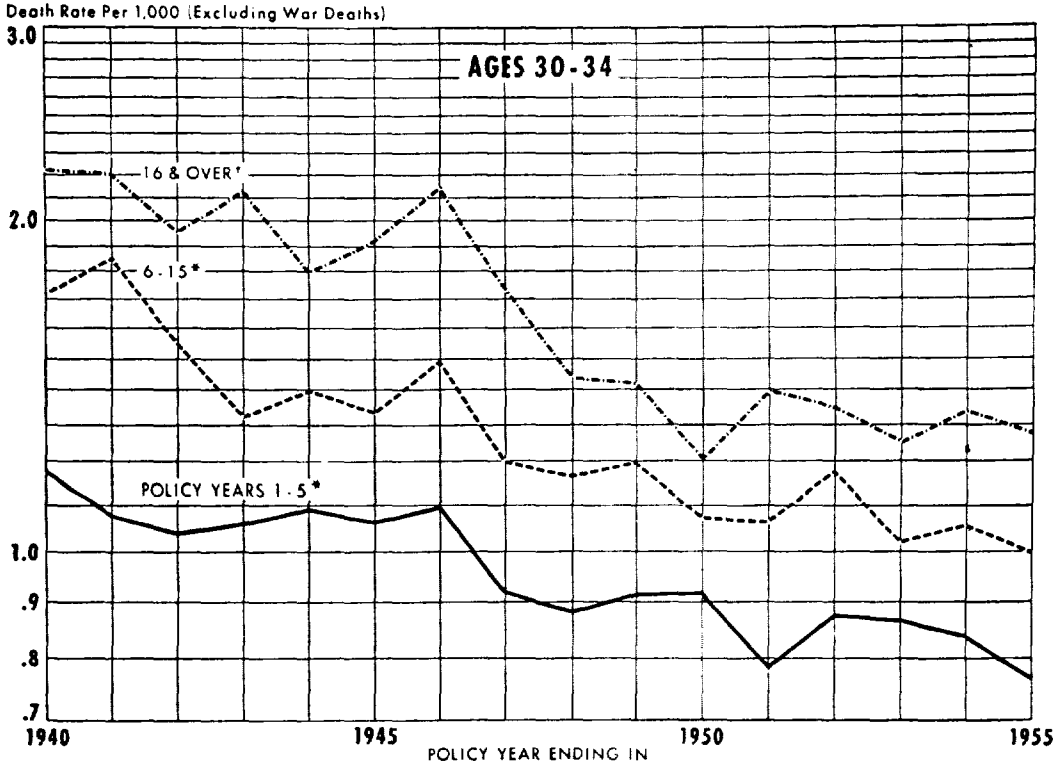
Death Rate Per 1,000 (Excluding War Deaths)



* Medical issues.

† Total issues, medical and nonmedical combined.

CHART III



* Medical issues.

† Total issues, medical and nonmedical combined.

CHART IV

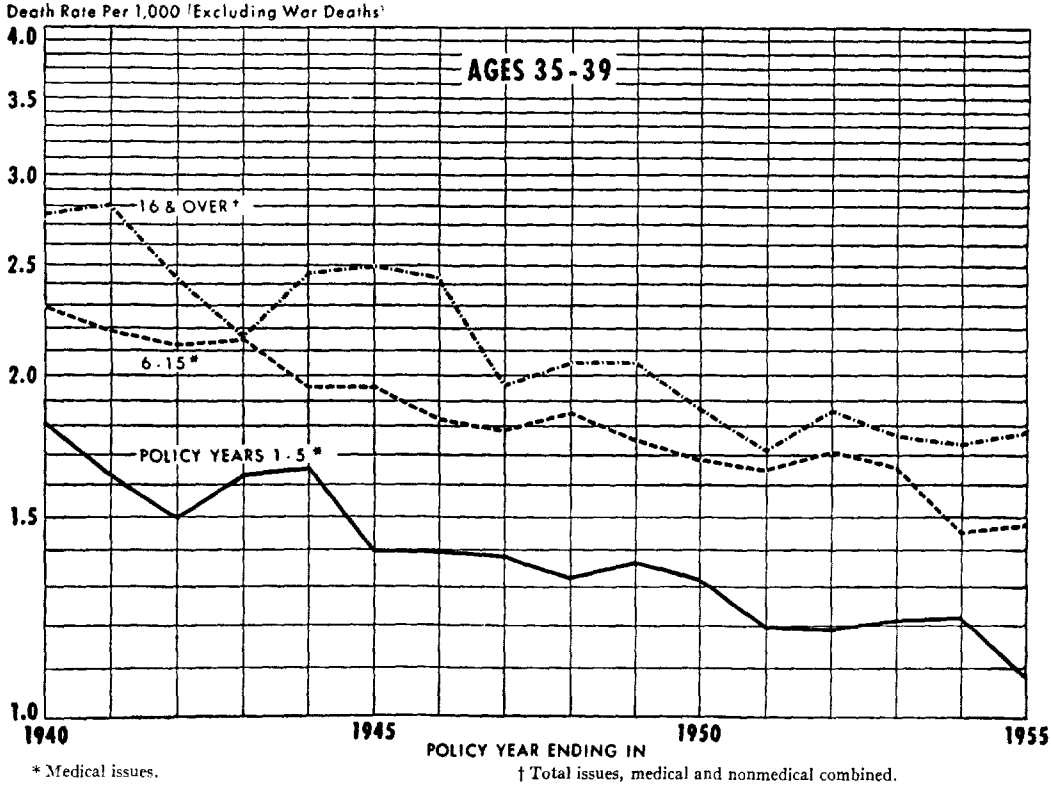
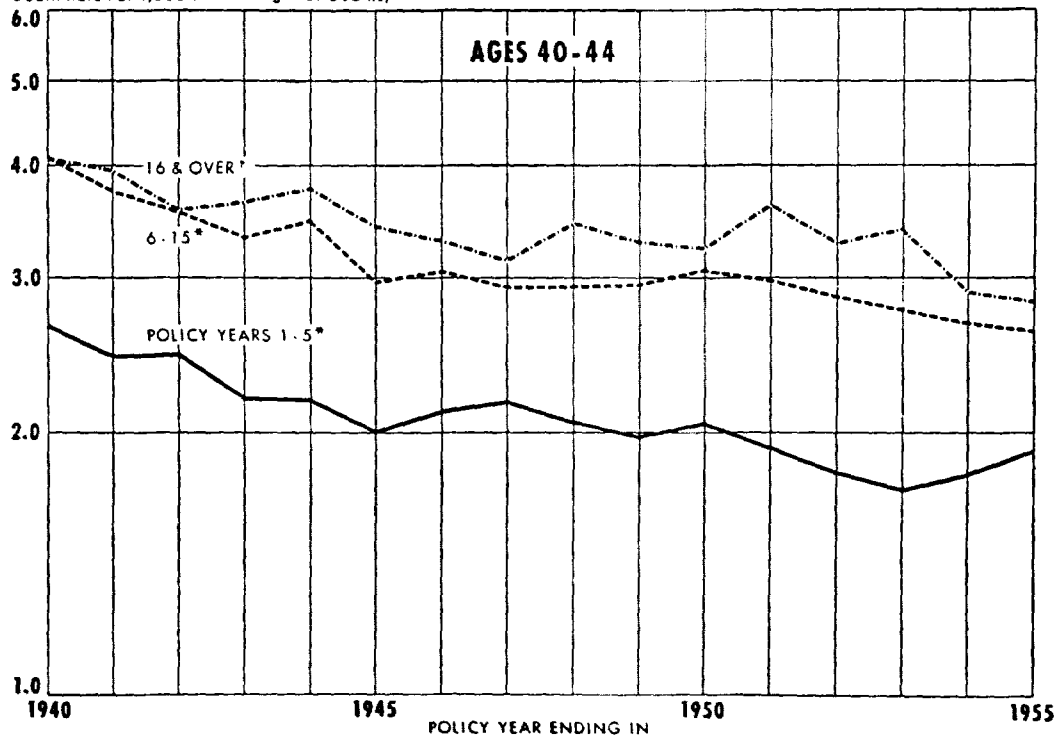


CHART V

Death Rate Per 1,000 (Excluding War Deaths)



* Medical issues.

† Total issues, medical and nonmedical combined.

CHART VI

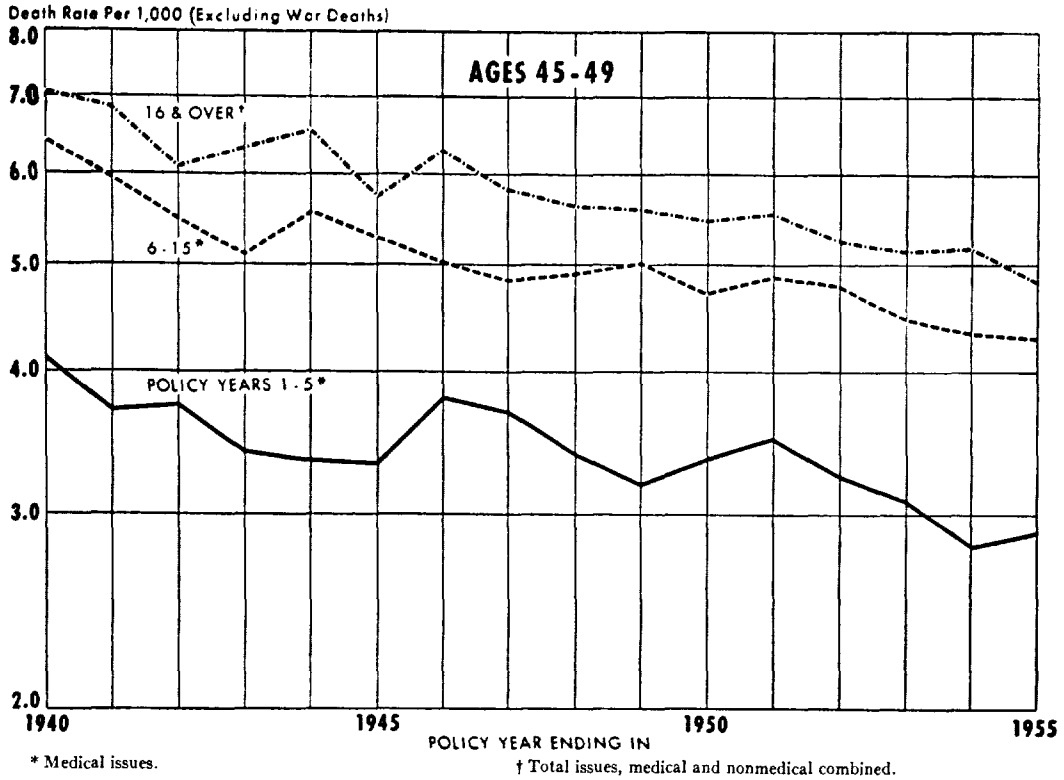
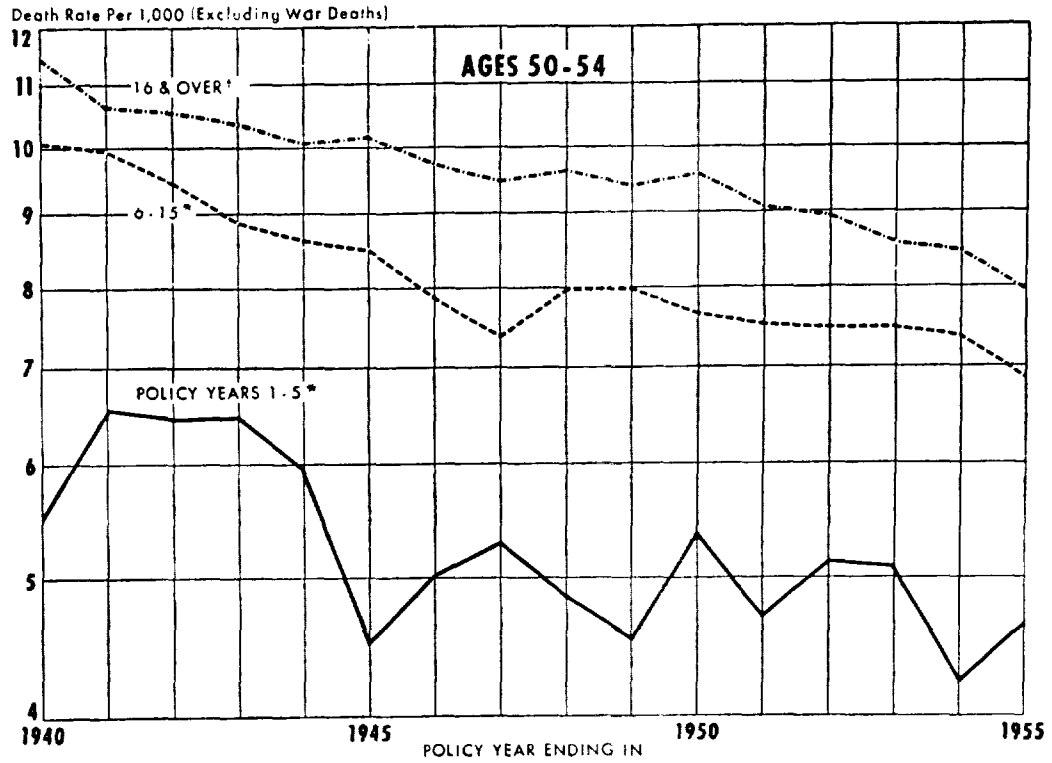


CHART VII



* Medical issues.

† Total issues, medical and nonmedical combined.

CHART VIII

Death Rate Per 1,000 (Excluding War Deaths)

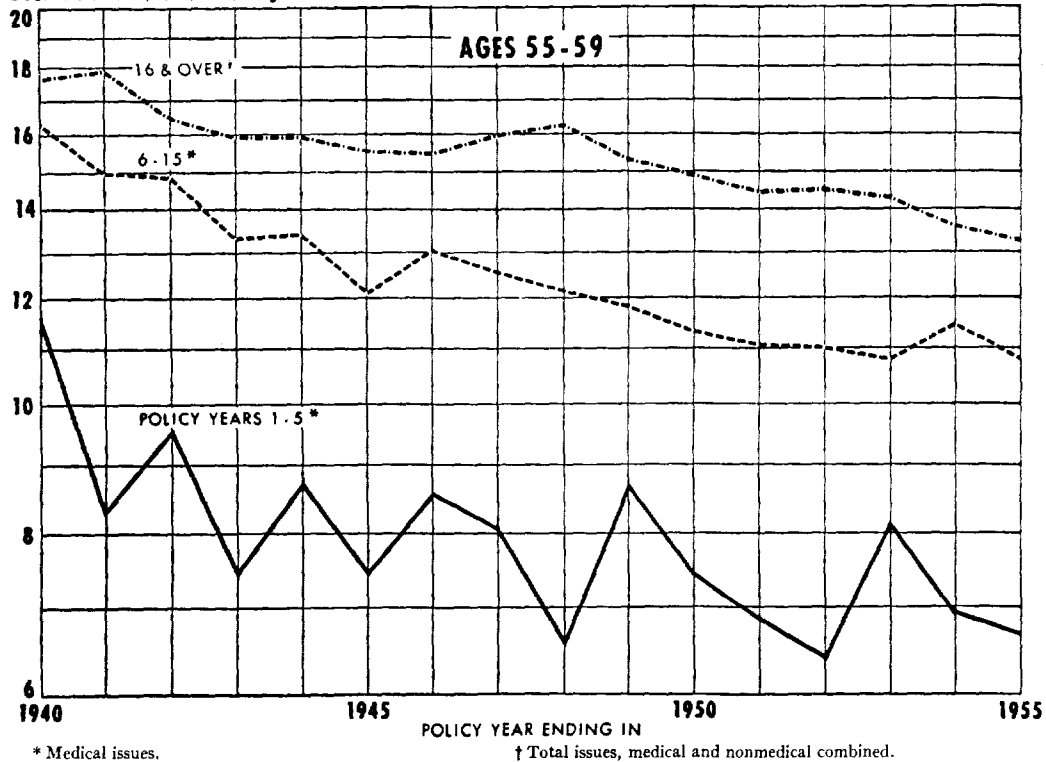
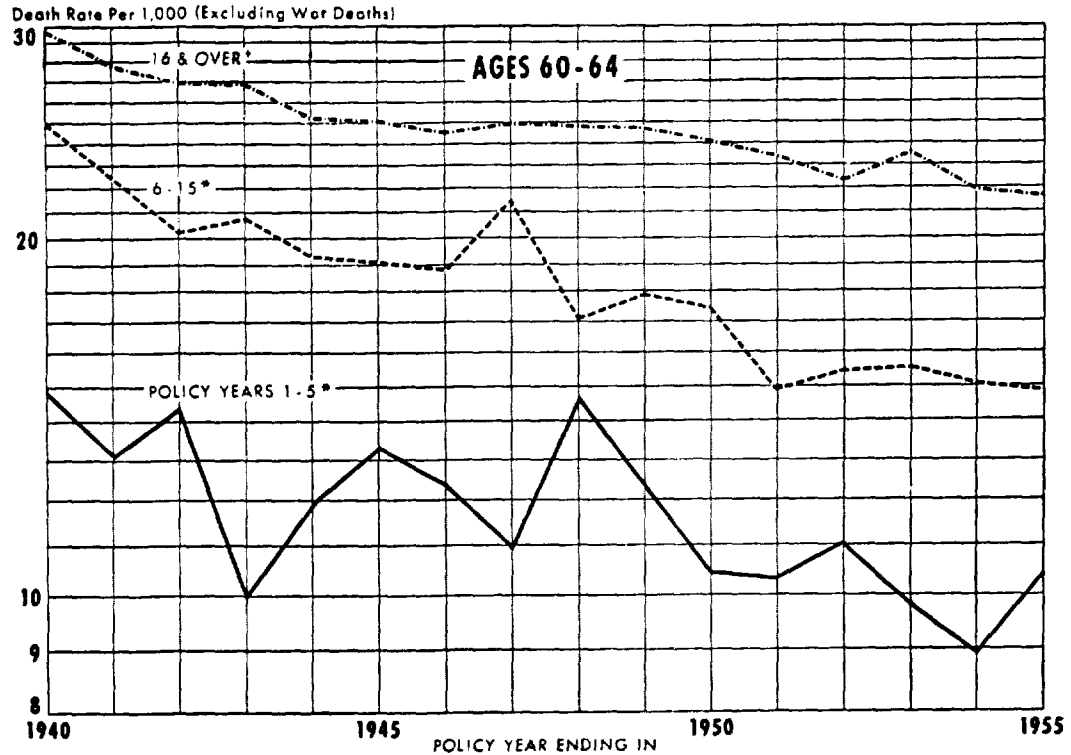


CHART IX



* Medical issues.

† Total issues, medical and nonmedical combined.

APPENDIX

TABLE A
CONTRIBUTING COMPANIES
PROPORTION OF TOTAL EXPOSURES
CONTRIBUTED BY EACH

| COMPANY | FIRST 15 POLICY YEARS | | 16TH AND SUBSEQUENT POLICY YEARS |
|--------------------------------|-----------------------|----------------------|---|
| | Medical Issues | Nonmedical Issues | |
| Metropolitan | 22.8% | 26.4% | 28.6% |
| Prudential | 16.1 | 33.6 | 13.4 |
| New York Life | 10.2 | 11.2 | |
| Equitable, N. Y. | 8.8 | 7.8 | 11.3 |
| Northwestern Mutual | 8.7 | | 9.9 |
| John Hancock | 4.8 | 7.4 | 3.3 |
| Mutual Life, N. Y. | 3.9 | 2.2 | 6.3 |
| Mutual Benefit | 3.9 | .8 | 3.9 |
| Massachusetts Mutual | 3.7 | 1.9 | 4.8 |
| Travelers | 3.4 | .6 | 4.3 |
| Penn Mutual | 3.4 | 1.0 | 4.3 |
| Connecticut Mutual | 2.9 | 2.5 | 2.2 |
| Aetna | 2.6 | .8 | 2.9 |
| Connecticut General | 1.8 | .3 | 1.0 |
| Provident Mutual | 1.6 | .3 | 2.2 |
| Sun Life, Canada | 1.4 | 3.2 | 1.6 |
| Total | 100.0% | 100.0% | 100.0% |

TABLE B
 STANDARD MEDICALLY EXAMINED ISSUES OF 1940 TO 1954
 EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES BY YEAR OF ISSUE
 AND AGE AT ISSUE
 EXPECTED DEATHS ON 1946-1949 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 |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1940..... (15) | 10-14 | \$ 71,768 | \$ 184 | \$ 83 | 222% |
| | 15-19 | 129,646 | 125 | 182 | 69 |
| | 20-24 | 290,460 | 420 | 543 | 77 |
| | 25-29 | 354,196 | 836 | 1,045 | 80 |
| | 30-34 | 345,844 | 1,492 | 1,746 | 85 |
| | 35-39 | 289,610 | 1,923 | 2,378 | 81 |
| | 40-44 | 207,795 | 2,372 | 2,755 | 86 |
| | 45-49 | 128,017 | 1,791 | 2,710 | 66 |
| | 50-54 | 61,470 | 1,325 | 1,857 | 71 |
| | 55-59 | 25,015 | 671 | 1,091 | 62 |
| | 60-64 | 6,569 | 206 | 419 | 49 |
| | 65 and over | 1,142 | 53 | 113 | 47 |
| | | All Ages | \$1,911,532 | \$11,398 | \$14,922 |
| 1941..... (14) | 10-14 | \$ 79,816 | \$ 64 | \$ 91 | 70% |
| | 15-19 | 173,514 | 166 | 222 | 75 |
| | 20-24 | 357,536 | 424 | 579 | 73 |
| | 25-29 | 425,810 | 1,061 | 1,090 | 97 |
| | 30-34 | 433,508 | 1,903 | 1,860 | 102 |
| | 35-39 | 365,297 | 2,381 | 2,542 | 94 |
| | 40-44 | 249,140 | 2,637 | 2,803 | 94 |
| | 45-49 | 163,761 | 2,338 | 2,982 | 78 |
| | 50-54 | 76,858 | 2,207 | 2,027 | 109 |
| | 55-59 | 28,627 | 1,092 | 1,102 | 99 |
| | 60-64 | 9,408 | 322 | 514 | 63 |
| | 65 and over | 1,554 | 114 | 130 | 88 |
| | | All Ages | \$2,364,829 | \$14,709 | \$15,942 |
| 1942..... (13) | 10-14 | \$ 58,305 | \$ 49 | \$ 66 | 74% |
| | 15-19 | 120,705 | 85 | 146 | 58 |
| | 20-24 | 202,127 | 217 | 285 | 76 |
| | 25-29 | 284,957 | 577 | 633 | 91 |
| | 30-34 | 305,672 | 1,024 | 1,149 | 89 |
| | 35-39 | 270,982 | 1,656 | 1,669 | 99 |
| | 40-44 | 198,690 | 1,611 | 1,957 | 82 |
| | 45-49 | 138,080 | 1,999 | 2,220 | 90 |
| | 50-54 | 72,487 | 1,315 | 1,684 | 78 |
| | 55-59 | 27,572 | 1,058 | 941 | 112 |
| | 60-64 | 7,227 | 505 | 348 | 145 |
| | 65 and over | 1,222 | 139 | 88 | 158 |
| | | All Ages | \$1,688,026 | \$10,235 | \$11,186 |

TABLE B—Continued

| Issue Year (Policy Year) | Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths | Mortality Ratio |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1943..... (12) | 10-14 | \$ 61,047 | \$ 65 | \$ 68 | 96% |
| | 15-19 | 109,506 | 97 | 127 | 76 |
| | 20-24 | 159,844 | 227 | 208 | 109 |
| | 25-29 | 270,870 | 519 | 531 | 98 |
| | 30-34 | 339,949 | 1,047 | 1,132 | 92 |
| | 35-39 | 349,446 | 1,612 | 1,957 | 82 |
| | 40-44 | 288,526 | 2,047 | 2,519 | 81 |
| | 45-49 | 193,197 | 2,569 | 2,815 | 91 |
| | 50-54 | 102,508 | 1,625 | 2,093 | 78 |
| | 55-59 | 33,903 | 706 | 1,027 | 69 |
| | 60-64 | 8,772 | 336 | 382 | 88 |
| | 65 and over | 1,455 | 117 | 93 | 126 |
| | | All Ages | \$1,919,023 | \$10,967 | \$12,952 |
| 1944..... (11) | 10-14 | \$ 73,683 | \$ 50 | \$ 81 | 62% |
| | 15-19 | 116,810 | 87 | 131 | 66 |
| | 20-24 | 147,892 | 101 | 176 | 57 |
| | 25-29 | 256,296 | 448 | 456 | 98 |
| | 30-34 | 389,788 | 1,093 | 1,150 | 95 |
| | 35-39 | 435,408 | 2,118 | 2,186 | 97 |
| | 40-44 | 382,931 | 3,128 | 2,983 | 105 |
| | 45-49 | 237,888 | 2,447 | 3,085 | 79 |
| | 50-54 | 126,017 | 2,136 | 2,278 | 94 |
| | 55-59 | 39,848 | 825 | 1,062 | 78 |
| | 60-64 | 9,714 | 454 | 391 | 116 |
| | 65 and over | 1,835 | 78 | 107 | 73 |
| | | All Ages | \$2,218,110 | \$12,965 | \$14,086 |
| 1945..... (10) | 10-14 | \$ 75,495 | \$ 94 | \$ 82 | 115% |
| | 15-19 | 118,422 | 114 | 129 | 88 |
| | 20-24 | 163,196 | 128 | 181 | 71 |
| | 25-29 | 285,337 | 332 | 451 | 74 |
| | 30-34 | 460,450 | 1,117 | 1,165 | 96 |
| | 35-39 | 518,952 | 1,834 | 2,268 | 81 |
| | 40-44 | 421,652 | 2,869 | 2,854 | 101 |
| | 45-49 | 257,855 | 2,593 | 2,875 | 90 |
| | 50-54 | 138,008 | 1,992 | 2,162 | 92 |
| | 55-59 | 49,763 | 1,293 | 1,147 | 113 |
| | 60-64 | 12,547 | 537 | 457 | 118 |
| | 65 and over | 2,173 | 96 | 115 | 83 |
| | | All Ages | \$2,503,850 | \$12,999 | \$13,886 |
| 1946..... (9) | 10-14 | \$ 79,159 | \$ 70 | \$ 81 | 86% |
| | 15-19 | 138,678 | 150 | 150 | 100 |
| | 20-24 | 408,548 | 297 | 433 | 69 |
| | 25-29 | 627,162 | 701 | 909 | 77 |
| | 30-34 | 740,826 | 1,548 | 1,674 | 92 |
| | 35-39 | 705,444 | 2,523 | 2,758 | 91 |
| | 40-44 | 526,697 | 3,153 | 3,176 | 99 |
| | 45-49 | 295,977 | 2,717 | 2,900 | 94 |
| | 50-54 | 153,019 | 2,220 | 2,164 | 103 |
| | 55-59 | 54,104 | 941 | 1,116 | 84 |
| | 60-64 | 13,839 | 351 | 454 | 77 |
| | 65 and over | 2,473 | 46 | 117 | 39 |
| | | All Ages | \$3,745,926 | \$14,717 | \$15,932 |

TABLE B—Continued

| Issue Year (Policy Year) | Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths | Mortality Ratio |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1947..... (8) | 10-14 | \$ 72,098 | \$ 61 | \$ 70 | 87% |
| | 15-19 | 155,522 | 204 | 166 | 123 |
| | 20-24 | 331,804 | 237 | 342 | 69 |
| | 25-29 | 531,363 | 699 | 717 | 97 |
| | 30-34 | 709,410 | 1,273 | 1,461 | 87 |
| | 35-39 | 703,680 | 1,793 | 2,477 | 72 |
| | 40-44 | 554,541 | 2,437 | 3,000 | 81 |
| | 45-49 | 319,875 | 2,506 | 2,789 | 90 |
| | 50-54 | 171,381 | 1,932 | 2,206 | 88 |
| | 55-59 | 63,699 | 976 | 1,190 | 82 |
| | 60-64 | 14,793 | 378 | 429 | 88 |
| 65 and over | 2,782 | 113 | 117 | 97 | |
| | All Ages | \$3,630,948 | \$12,609 | \$14,964 | 84% |
| 1948..... (7) | 10-14 | \$ 53,390 | \$ 33 | \$ 47 | 70% |
| | 15-19 | 124,228 | 173 | 132 | 131 |
| | 20-24 | 306,604 | 234 | 300 | 78 |
| | 25-29 | 517,068 | 550 | 635 | 87 |
| | 30-34 | 652,671 | 939 | 1,181 | 80 |
| | 35-39 | 616,508 | 1,928 | 1,850 | 104 |
| | 40-44 | 494,306 | 2,280 | 2,356 | 97 |
| | 45-49 | 288,806 | 1,895 | 2,145 | 88 |
| | 50-54 | 152,325 | 1,576 | 1,732 | 91 |
| | 55-59 | 56,296 | 710 | 924 | 77 |
| | 60-64 | 15,992 | 364 | 392 | 93 |
| 65 and over | 2,810 | 29 | 101 | 29 | |
| | All Ages | \$3,281,004 | \$10,711 | \$11,795 | 91% |
| 1949..... (6) | 10-14 | \$ 50,436 | \$ 27 | \$ 41 | 66% |
| | 15-19 | 123,663 | 135 | 131 | 103 |
| | 20-24 | 337,315 | 281 | 330 | 85 |
| | 25-29 | 576,058 | 506 | 674 | 75 |
| | 30-34 | 682,527 | 910 | 1,133 | 80 |
| | 35-39 | 662,721 | 1,556 | 1,822 | 85 |
| | 40-44 | 513,077 | 2,074 | 2,293 | 90 |
| | 45-49 | 296,577 | 1,633 | 2,002 | 82 |
| | 50-54 | 152,785 | 1,252 | 1,624 | 77 |
| | 55-59 | 61,650 | 654 | 951 | 69 |
| | 60-64 | 16,757 | 239 | 373 | 64 |
| 65 and over | 3,202 | 52 | 101 | 51 | |
| | All Ages | \$3,476,768 | \$ 9,319 | \$11,475 | 81% |
| 1950..... (5) | 10-14 | \$ 52,007 | \$ 24 | \$ 39 | 62% |
| | 15-19 | 150,489 | 196 | 160 | 123 |
| | 20-24 | 409,224 | 322 | 401 | 80 |
| | 25-29 | 740,496 | 673 | 829 | 81 |
| | 30-34 | 884,991 | 1,322 | 1,319 | 100 |
| | 35-39 | 806,864 | 1,794 | 1,961 | 91 |
| | 40-44 | 600,869 | 1,438 | 2,379 | 60 |
| | 45-49 | 362,352 | 2,005 | 2,156 | 93 |
| | 50-54 | 185,730 | 1,273 | 1,750 | 73 |
| | 55-59 | 76,449 | 1,110 | 1,064 | 104 |
| | 60-64 | 19,013 | 310 | 379 | 82 |
| 65 and over | 3,122 | 60 | 86 | 70 | |
| | All Ages | \$4,291,606 | \$10,527 | \$12,523 | 84% |

TABLE B—Continued

| Issue Year (Policy Year) | Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths | Mortality Ratio |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1951..... (4) | 10-14 | \$ 45,899 | \$ 94 | \$ 30 | 313% |
| | 15-19 | 104,575 | 62 | 106 | 58 |
| | 20-24 | 261,259 | 126 | 246 | 51 |
| | 25-29 | 603,153 | 650 | 627 | 104 |
| | 30-34 | 802,676 | 645 | 1,035 | 62 |
| | 35-39 | 803,376 | 1,341 | 1,663 | 81 |
| | 40-44 | 653,491 | 1,983 | 2,150 | 92 |
| | 45-49 | 410,080 | 2,072 | 2,067 | 100 |
| | 50-54 | 210,183 | 1,259 | 1,627 | 77 |
| | 55-59 | 95,077 | 822 | 1,105 | 74 |
| | 60-64 | 25,279 | 413 | 427 | 97 |
| 65 and over | 5,990 | 98 | 140 | 70 | |
| | All Ages | \$4,021,038 | \$ 9,565 | \$11,223 | 85% |
| 1952..... (3) | 10-14 | \$ 46,882 | \$ 45 | \$ 28 | 161% |
| | 15-19 | 99,102 | 56 | 95 | 59 |
| | 20-24 | 274,082 | 205 | 244 | 84 |
| | 25-29 | 709,854 | 589 | 688 | 86 |
| | 30-34 | 953,988 | 863 | 1,088 | 79 |
| | 35-39 | 944,173 | 1,230 | 1,681 | 73 |
| | 40-44 | 745,872 | 1,747 | 2,044 | 85 |
| | 45-49 | 471,518 | 1,651 | 2,013 | 82 |
| | 50-54 | 227,432 | 1,149 | 1,430 | 80 |
| | 55-59 | 108,289 | 1,091 | 1,031 | 106 |
| | 60-64 | 33,220 | 555 | 476 | 117 |
| 65 and over | 5,958 | 89 | 122 | 73 | |
| | All Ages | \$4,620,370 | \$ 9,270 | \$10,940 | 85% |
| 1953..... (2) | 10-14 | \$ 49,388 | \$ 51 | \$ 25 | 204% |
| | 15-19 | 119,165 | 88 | 100 | 88 |
| | 20-24 | 334,484 | 180 | 258 | 70 |
| | 25-29 | 911,223 | 486 | 747 | 65 |
| | 30-34 | 1,194,835 | 897 | 1,087 | 83 |
| | 35-39 | 1,155,955 | 1,381 | 1,607 | 86 |
| | 40-44 | 892,247 | 1,891 | 1,776 | 106 |
| | 45-49 | 561,077 | 1,847 | 1,773 | 104 |
| | 50-54 | 282,935 | 1,282 | 1,259 | 102 |
| | 55-59 | 122,890 | 839 | 840 | 100 |
| | 60-64 | 37,869 | 260 | 399 | 65 |
| 65 and over | 7,979 | 59 | 129 | 46 | |
| | All Ages | \$5,670,047 | \$ 9,261 | \$10,000 | 93% |
| 1954..... (1) | 10-14 | \$ 67,553 | \$ 29 | \$ 27 | 107% |
| | 15-19 | 153,424 | 84 | 107 | 79 |
| | 20-24 | 509,160 | 295 | 331 | 89 |
| | 25-29 | 1,210,537 | 614 | 799 | 77 |
| | 30-34 | 1,566,500 | 798 | 1,050 | 76 |
| | 35-39 | 1,404,918 | 1,007 | 1,363 | 74 |
| | 40-44 | 1,072,732 | 1,479 | 1,405 | 105 |
| | 45-49 | 653,623 | 1,576 | 1,399 | 113 |
| | 50-54 | 332,107 | 1,042 | 950 | 110 |
| | 55-59 | 146,156 | 677 | 681 | 99 |
| | 60-64 | 46,662 | 256 | 346 | 74 |
| 65 and over | 12,770 | 134 | 145 | 92 | |
| | All Ages | \$7,176,142 | \$ 7,991 | \$ 8,603 | 93% |

TABLE C
 STANDARD NONMEDICAL ISSUES OF 1940 TO 1954
 EXPERIENCE BETWEEN 1954 AND 1955 ANNIVERSARIES BY YEAR OF ISSUE
 AND AGE AT ISSUE
 EXPECTED DEATHS BY 1946-1949 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 |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1940..... (15) | 10-14 | \$ 14,832 | \$ 10 | \$ 17 | 59% |
| | 15-19 | 39,940 | 38 | 56 | 68 |
| | 20-24 | 68,780 | 102 | 129 | 79 |
| | 25-29 | 54,811 | 155 | 162 | 96 |
| | 30-34 | 37,797 | 169 | 191 | 88 |
| | 35-39 | 16,532 | 169 | 136 | 124 |
| | 40-44 | 7,430 | 89 | 98 | 91 |
| | 45-49 | 2,176 | 57 | 46 | 124 |
| | 50 and over | 190 | 3 | 6 | 50 |
| | All Ages | \$ 242,488 | \$ 792 | \$ 841 | 94% |
| 1941..... (14) | 10-14 | \$ 14,784 | \$ 16 | \$ 17 | 94% |
| | 15-19 | 56,854 | 49 | 73 | 67 |
| | 20-24 | 85,630 | 101 | 139 | 73 |
| | 25-29 | 63,596 | 131 | 163 | 80 |
| | 30-34 | 43,807 | 184 | 188 | 98 |
| | 35-39 | 19,091 | 142 | 133 | 107 |
| | 40-44 | 8,279 | 96 | 93 | 103 |
| | 45-49 | 1,924 | 50 | 35 | 143 |
| | 50 and over | 164 | 4 | 4 | 100 |
| | All Ages | \$ 294,129 | \$ 773 | \$ 845 | 91% |
| 1942..... (13) | 10-14 | \$ 14,878 | \$ 12 | \$ 17 | 71% |
| | 15-19 | 53,441 | 53 | 65 | 82 |
| | 20-24 | 60,689 | 56 | 86 | 65 |
| | 25-29 | 48,562 | 85 | 108 | 79 |
| | 30-34 | 38,440 | 135 | 144 | 94 |
| | 35-39 | 19,625 | 119 | 121 | 98 |
| | 40-44 | 8,828 | 98 | 87 | 113 |
| | 45-49 | 2,098 | 29 | 34 | 85 |
| | 50 and over | 232 | 6 | 7 | 86 |
| | All Ages | \$ 246,793 | \$ 593 | \$ 669 | 89% |
| 1943..... (12) | 10-14 | \$ 35,479 | \$ 42 | \$ 40 | 105% |
| | 15-19 | 99,256 | 80 | 115 | 70 |
| | 20-24 | 90,772 | 113 | 118 | 96 |
| | 25-29 | 76,690 | 123 | 150 | 82 |
| | 30-34 | 65,623 | 195 | 219 | 89 |
| | 35-39 | 43,959 | 235 | 246 | 96 |
| | 40-44 | 15,913 | 118 | 139 | 85 |
| | 45-49 | 2,426 | 31 | 35 | 89 |
| | 50 and over | 241 | 9 | 5 | 180 |
| | All Ages | \$ 430,359 | \$ 946 | \$1,067 | 89% |

TABLE C—Continued

| Issue Year (Policy Year) | Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths | Mortality Ratio |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1944..... (11) | 10-14 | \$ 48,753 | \$ 47 | \$ 54 | 87% |
| | 15-19 | 117,257 | 95 | 131 | 73 |
| | 20-24 | 90,928 | 58 | 108 | 54 |
| | 25-29 | 73,388 | 83 | 131 | 63 |
| | 30-34 | 69,520 | 152 | 205 | 74 |
| | 35-39 | 55,430 | 257 | 278 | 92 |
| | 40-44 | 21,104 | 180 | 164 | 110 |
| | 45-49 | 2,782 | 42 | 36 | 117 |
| | 50 and over | 349 | 1 | 7 | 14 |
| | All Ages | \$ 479,511 | \$ 915 | \$1,114 | 82% |
| 1945..... (10) | 10-14 | \$ 53,273 | \$ 40 | \$ 58 | 69% |
| | 15-19 | 117,439 | 110 | 128 | 86 |
| | 20-24 | 98,385 | 88 | 109 | 81 |
| | 25-29 | 89,498 | 152 | 141 | 108 |
| | 30-34 | 76,220 | 166 | 193 | 86 |
| | 35-39 | 60,251 | 239 | 263 | 91 |
| | 40-44 | 22,340 | 149 | 151 | 99 |
| | 45-49 | 3,201 | 37 | 36 | 103 |
| | 50 and over | 418 | 8 | 8 | 100 |
| | All Ages | \$ 521,025 | \$ 989 | \$1,087 | 91% |
| 1946..... (9) | 10-14 | \$ 44,967 | \$ 48 | \$ 46 | 104% |
| | 15-19 | 118,000 | 102 | 127 | 80 |
| | 20-24 | 307,544 | 291 | 326 | 89 |
| | 25-29 | 259,868 | 298 | 377 | 79 |
| | 30-34 | 131,221 | 288 | 296 | 97 |
| | 35-39 | 74,982 | 273 | 293 | 93 |
| | 40-44 | 24,006 | 183 | 145 | 126 |
| | 45-49 | 3,989 | 39 | 39 | 100 |
| | 50 and over | 773 | 6 | 13 | 46 |
| | All Ages | \$ 965,350 | \$1,528 | \$1,662 | 92% |
| 1947..... (8) | 10-14 | \$ 47,403 | \$ 41 | \$ 46 | 89% |
| | 15-19 | 152,215 | 103 | 163 | 63 |
| | 20-24 | 230,550 | 179 | 237 | 76 |
| | 25-29 | 172,925 | 177 | 233 | 76 |
| | 30-34 | 106,358 | 251 | 219 | 115 |
| | 35-39 | 70,276 | 243 | 247 | 98 |
| | 40-44 | 26,504 | 143 | 143 | 100 |
| | 45-49 | 4,989 | 52 | 44 | 118 |
| | 50 and over | 1,326 | 15 | 20 | 75 |
| | All Ages | \$ 812,546 | \$1,204 | \$1,352 | 89% |

TABLE C—Continued

| Issue Year (Policy Year) | Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths | Mortality Ratio |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1948..... (7) | 10-14 | \$ 42,646 | \$ 35 | \$ 37 | 95% |
| | 15-19 | 134,925 | 143 | 144 | 99 |
| | 20-24 | 204,923 | 152 | 201 | 76 |
| | 25-29 | 148,661 | 171 | 183 | 93 |
| | 30-34 | 87,390 | 130 | 158 | 82 |
| | 35-39 | 57,300 | 170 | 172 | 99 |
| | 40-44 | 24,135 | 100 | 115 | 87 |
| | 45-49 | 5,535 | 63 | 41 | 154 |
| | 50 and over | 1,854 | 13 | 25 | 52 |
| | All Ages | \$ 707,369 | \$ 977 | \$1,076 | 91% |
| 1949..... (6) | 10-14 | \$ 46,073 | \$ 32 | \$ 38 | 84% |
| | 15-19 | 142,084 | 178 | 151 | 118 |
| | 20-24 | 225,855 | 131 | 221 | 59 |
| | 25-29 | 170,218 | 153 | 199 | 77 |
| | 30-34 | 103,665 | 137 | 172 | 80 |
| | 35-39 | 64,494 | 158 | 177 | 89 |
| | 40-44 | 25,957 | 135 | 116 | 116 |
| | 45-49 | 5,531 | 67 | 37 | 181 |
| | 50 and over | 1,486 | 25 | 19 | 132 |
| | All Ages | \$ 785,363 | \$1,016 | \$1,130 | 90% |
| 1950..... (5) | 10-14 | \$ 53,733 | \$ 30 | \$ 40 | 75% |
| | 15-19 | 187,160 | 125 | 198 | 63 |
| | 20-24 | 287,294 | 262 | 282 | 93 |
| | 25-29 | 230,589 | 190 | 258 | 74 |
| | 30-34 | 142,920 | 192 | 213 | 90 |
| | 35-39 | 77,308 | 188 | 188 | 100 |
| | 40-44 | 30,626 | 84 | 121 | 69 |
| | 45-49 | 6,034 | 36 | 36 | 100 |
| | 50 and over | 1,434 | 6 | 15 | 40 |
| | All Ages | \$1,017,098 | \$1,113 | \$1,351 | 82% |
| 1951..... (4) | 10-14 | \$ 67,323 | \$ 48 | \$ 44 | 109% |
| | 15-19 | 241,579 | 238 | 244 | 98 |
| | 20-24 | 362,352 | 303 | 341 | 89 |
| | 25-29 | 382,204 | 343 | 397 | 86 |
| | 30-34 | 262,746 | 295 | 339 | 87 |
| | 35-39 | 132,078 | 264 | 273 | 97 |
| | 40-44 | 45,859 | 164 | 151 | 109 |
| | 45-49 | 13,524 | 90 | 68 | 132 |
| | 50 and over | 2,533 | 34 | 23 | 148 |
| | All Ages | \$1,510,198 | \$1,779 | \$1,880 | 95% |

TABLE C—Continued

| Issue Year (Policy Year) | Ages at Issue | Exposed to Risk | Actual Deaths | Expected Deaths | Mortality Ratio |
|--------------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| 1952..... (3) | 10-14 | \$ 76,352 | \$ 28 | \$ 45 | 62% |
| | 15-19 | 270,972 | 164 | 260 | 63 |
| | 20-24 | 404,265 | 319 | 360 | 89 |
| | 25-29 | 467,661 | 435 | 454 | 96 |
| | 30-34 | 316,059 | 368 | 360 | 102 |
| | 35-39 | 149,928 | 298 | 267 | 112 |
| | 40-44 | 48,631 | 196 | 133 | 147 |
| | 45-49 | 13,598 | 66 | 58 | 114 |
| | 50 and over | 3,279 | 30 | 23 | 130 |
| | All Ages | \$1,750,745 | \$1,904 | \$1,960 | 97% |
| 1953..... (2) | 10-14 | \$ 97,311 | \$ 22 | \$ 49 | 45% |
| | 15-19 | 361,455 | 241 | 304 | 79 |
| | 20-24 | 493,376 | 413 | 380 | 109 |
| | 25-29 | 581,829 | 421 | 477 | 88 |
| | 30-34 | 396,132 | 351 | 360 | 98 |
| | 35-39 | 169,855 | 248 | 236 | 105 |
| | 40-44 | 46,261 | 107 | 92 | 116 |
| | 45-49 | 12,591 | 70 | 40 | 175 |
| | 50 and over | 3,082 | 15 | 15 | 100 |
| | All Ages | \$2,161,892 | \$1,888 | \$1,953 | 97% |
| 1954..... (1) | 10-14 | \$ 112,440 | \$ 37 | \$ 45 | 82% |
| | 15-19 | 389,874 | 281 | 273 | 103 |
| | 20-24 | 645,093 | 447 | 419 | 107 |
| | 25-29 | 681,216 | 523 | 450 | 116 |
| | 30-34 | 458,165 | 268 | 307 | 87 |
| | 35-39 | 184,142 | 187 | 179 | 104 |
| | 40-44 | 38,683 | 65 | 51 | 127 |
| | 45-49 | 6,132 | 33 | 13 | 254 |
| | 50 and over | 1,902 | 4 | 7 | 57 |
| | All Ages | \$2,517,647 | \$1,845 | \$1,744 | 106% |

TABLE D
 EXPERIENCE* OF THE FIRST FIVE POLICY YEARS ON STANDARD MEDICALLY
 EXAMINED ISSUES BETWEEN 1939 AND 1955 ANNIVERSARIES
 MORTALITY RATE PER 1,000 BY AGE AT ISSUE
 BASED ON AMOUNT OF INSURANCE

| AGES AT ISSUE | EXPERIENCE IN POLICY YEAR ENDING IN | | | | | |
|---------------|-------------------------------------|--------|--------|--------|--------|--------|
| | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| 10-14..... | 0.701 | 0.570 | 0.724 | 0.585 | 0.692 | 0.634 |
| 15-19..... | 1.167 | 1.137 | 1.114 | 0.759 | 0.912 | 0.720 |
| 20-24..... | 1.190 | 1.148 | 0.846 | 0.750 | 0.816 | 0.707 |
| 25-29..... | 1.060 | 1.021 | 0.951 | 0.961 | 0.964 | 1.053 |
| 30-34..... | 1.537 | 1.278 | 1.156 | 1.187 | 1.216 | 1.245 |
| 35-39..... | 1.904 | 2.011 | 1.886 | 1.838 | 1.913 | 1.612 |
| 40-44..... | 3.405 | 2.865 | 2.837 | 2.796 | 2.594 | 2.533 |
| 45-49..... | 4.697 | 4.889 | 4.706 | 4.166 | 4.235 | 3.533 |
| 50-54..... | 7.980 | 7.306 | 8.479 | 7.351 | 6.807 | 5.630 |
| 55-59..... | 12.526 | 10.575 | 11.405 | 8.533 | 10.051 | 9.062 |
| 60-64..... | 16.191 | 12.610 | 18.457 | 11.003 | 11.380 | 12.600 |
| 65 and over.. | 15.759 | 28.027 | 18.462 | 21.693 | 13.829 | 23.281 |
| | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 |
| 10-14..... | 0.631 | 0.615 | 0.538 | 0.528 | 0.485 | 0.510 |
| 15-19..... | 1.250 | 0.891 | 0.974 | 0.972 | 0.721 | 0.802 |
| 20-24..... | 1.108 | 0.808 | 0.756 | 0.790 | 0.807 | 0.827 |
| 25-29..... | 0.988 | 0.856 | 0.918 | 0.905 | 0.704 | 0.754 |
| 30-34..... | 1.177 | 1.043 | 0.961 | 0.985 | 1.087 | 0.876 |
| 35-39..... | 1.586 | 1.628 | 1.542 | 1.613 | 1.578 | 1.534 |
| 40-44..... | 2.690 | 2.627 | 2.435 | 2.359 | 2.584 | 2.368 |
| 45-49..... | 4.290 | 4.098 | 4.118 | 3.689 | 4.315 | 4.242 |
| 50-54..... | 5.763 | 6.114 | 5.246 | 5.818 | 5.696 | 5.651 |
| 55-59..... | 9.810 | 8.131 | 9.129 | 10.270 | 7.799 | 8.002 |
| 60-64..... | 12.357 | 12.091 | 12.684 | 13.578 | 13.213 | 11.805 |
| 65 and over.. | 14.591 | 22.913 | 25.973 | 15.010 | 30.055 | 25.724 |
| | 1952 | 1953 | 1954 | 1955 | | |
| 10-14..... | 0.475 | 0.358 | 0.446 | 0.928 | | |
| 15-19..... | 0.895 | 1.285 | 0.809 | 0.775 | | |
| 20-24..... | 0.816 | 0.935 | 0.652 | 0.631 | | |
| 25-29..... | 0.740 | 0.801 | 0.637 | 0.721 | | |
| 30-34..... | 0.924 | 1.004 | 0.976 | 0.837 | | |
| 35-39..... | 1.476 | 1.369 | 1.354 | 1.320 | | |
| 40-44..... | 2.311 | 2.159 | 2.204 | 2.153 | | |
| 45-49..... | 4.153 | 3.549 | 3.264 | 3.722 | | |
| 50-54..... | 5.017 | 7.063 | 5.293 | 4.849 | | |
| 55-59..... | 8.942 | 7.632 | 6.915 | 8.270 | | |
| 60-64..... | 10.001 | 10.229 | 10.254 | 11.071 | | |
| 65 and over.. | 21.484 | 19.383 | 15.276 | 12.284 | | |

* Excludes war claims between 1941 and 1946 anniversaries and between 1949 and 1954 anniversaries.

TABLE E

EXPERIENCE* OF THE SIXTH TO FIFTEENTH POLICY YEARS ON STANDARD
 MEDICALLY EXAMINED ISSUES BETWEEN 1939 AND 1955 ANNIVERSARIES
 MORTALITY RATE PER 1,000 BY APPROXIMATE ATTAINED AGE
 BASED ON AMOUNT OF INSURANCE

| APPROXIMATE ATTAINED AGES | EXPERIENCE IN POLICY YEAR ENDING IN | | | | | |
|------------------------------|-------------------------------------|--------|--------|--------|---------|--------|
| | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| 17-19..... | 1.043 | 1.090 | 1.066 | 0.820 | 0.673 | 0.369 |
| 20-24..... | 1.470 | 1.365 | 1.291 | 1.048 | 0.993 | 0.464 |
| 25-29..... | 1.496 | 1.475 | 1.283 | 1.137 | 1.174 | 1.061 |
| 30-34..... | 1.724 | 1.862 | 1.546 | 1.322 | 1.403 | 1.333 |
| 35-39..... | 2.304 | 2.189 | 2.129 | 2.154 | 1.958 | 1.964 |
| 40-44..... | 4.100 | 3.750 | 3.560 | 3.317 | 3.490 | 2.978 |
| 45-49..... | 6.446 | 5.974 | 5.501 | 5.198 | 5.577 | 5.286 |
| 50-54..... | 10.181 | 9.997 | 9.462 | 8.837 | 8.610 | 8.483 |
| 55-59..... | 16.399 | 14.992 | 14.878 | 13.285 | 13.445 | 12.135 |
| 60-64..... | 25.085 | 22.492 | 20.214 | 20.711 | 19.255 | 19.181 |
| 65-69..... | 41.752 | 37.594 | 34.766 | 33.558 | 30.005 | 31.146 |
| 70-74..... | 52.827 | 50.344 | 48.489 | 50.235 | 52.344 | 54.501 |
| 75 and over.. | 85.159 | 78.036 | 73.656 | 57.395 | 124.098 | 72.007 |
| | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 |
| 17-19..... | 1.040 | 1.061 | 1.017 | 0.891 | 0.699 | 0.899 |
| 20-24..... | 1.933 | 1.242 | 1.015 | 1.008 | 1.072 | 0.839 |
| 25-29..... | 1.616 | 1.177 | 1.012 | 0.998 | 0.967 | 0.962 |
| 30-34..... | 1.499 | 1.197 | 1.167 | 1.197 | 1.077 | 1.069 |
| 35-39..... | 1.830 | 1.788 | 1.849 | 1.752 | 1.694 | 1.653 |
| 40-44..... | 3.049 | 2.926 | 2.933 | 2.937 | 3.057 | 2.988 |
| 45-49..... | 5.033 | 4.845 | 4.907 | 5.021 | 4.732 | 4.887 |
| 50-54..... | 7.901 | 7.376 | 8.002 | 8.003 | 7.653 | 7.538 |
| 55-59..... | 13.063 | 12.515 | 12.147 | 11.887 | 11.335 | 11.108 |
| 60-64..... | 18.827 | 21.451 | 17.178 | 17.879 | 17.444 | 14.847 |
| 65-69..... | 25.699 | 26.338 | 26.417 | 25.994 | 24.805 | 25.427 |
| 70-74..... | 36.964 | 41.295 | 40.422 | 37.688 | 37.752 | 35.497 |
| 75 and over.. | 59.393 | 75.296 | 72.045 | 60.811 | 52.913 | 47.655 |
| | 1952 | 1953 | 1954 | 1955 | | |
| 17-19..... | 0.898 | 0.849 | 1.214 | 0.688 | | |
| 20-24..... | 1.189 | 1.067 | 0.975 | 1.118 | | |
| 25-29..... | 0.854 | 0.976 | 1.057 | 0.885 | | |
| 30-34..... | 1.178 | 1.022 | 1.061 | 1.002 | | |
| 35-39..... | 1.710 | 1.672 | 1.450 | 1.481 | | |
| 40-44..... | 2.849 | 2.774 | 2.658 | 2.601 | | |
| 45-49..... | 4.787 | 4.493 | 4.357 | 4.312 | | |
| 50-54..... | 7.476 | 7.498 | 7.313 | 6.851 | | |
| 55-59..... | 11.101 | 10.724 | 11.388 | 10.744 | | |
| 60-64..... | 15.372 | 15.587 | 15.072 | 14.789 | | |
| 65-69..... | 25.137 | 24.027 | 22.516 | 23.874 | | |
| 70-74..... | 39.036 | 31.356 | 35.409 | 36.146 | | |
| 75 and over.. | 49.790 | 53.727 | 50.961 | 42.075 | | |

* Excludes war claims between 1941 and 1946 anniversaries and between 1949 and 1954 anniversaries.

TABLE F
 EXPERIENCE* OF THE SIXTEENTH AND SUBSEQUENT POLICY YEARS ON
 STANDARD ISSUES BETWEEN 1939 AND 1955 ANNIVERSARIES
 MORTALITY RATE PER 1,000 BY ATTAINED AGE
 BASED ON AMOUNT OF INSURANCE

| ATTAINED AGES | EXPERIENCE IN POLICY YEAR ENDING IN | | | | | |
|------------------|-------------------------------------|---------|---------|---------|---------|---------|
| | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| 25-29 | 2.330 | 2.240 | 2.330 | 1.849 | 1.669 | 2.556 |
| 30-34 | 2.229 | 2.212 | 1.964 | 2.131 | 1.796 | 1.930 |
| 35-39 | 2.768 | 2.805 | 2.438 | 2.169 | 2.468 | 2.501 |
| 40-44 | 4.090 | 3.966 | 3.588 | 3.671 | 3.784 | 3.444 |
| 45-49 | 7.103 | 6.878 | 6.095 | 6.340 | 6.592 | 5.749 |
| 50-54 | 11.426 | 10.654 | 10.609 | 10.351 | 10.065 | 10.158 |
| 55-59 | 17.693 | 17.894 | 16.447 | 15.936 | 15.929 | 15.565 |
| 60-64 | 29.686 | 27.887 | 26.969 | 26.912 | 25.329 | 25.194 |
| 65-69 | 40.416 | 42.441 | 39.734 | 40.744 | 38.430 | 37.059 |
| 70-74 | 59.652 | 58.280 | 57.051 | 59.551 | 58.008 | 58.820 |
| 75-79 | 84.861 | 88.002 | 84.181 | 86.018 | 86.991 | 81.537 |
| 80-84 | 138.824 | 136.565 | 126.671 | 145.419 | 128.862 | 129.140 |
| 85-89 | 219.500 | 200.341 | 182.010 | 172.150 | 189.563 | 164.506 |
| 90-95 | 231.115 | 231.435 | 283.144 | 233.235 | 240.482 | 181.520 |
| | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 |
| 25-29 | 2.221 | 1.079 | 1.166 | 1.106 | 1.223 | 1.176 |
| 30-34 | 2.154 | 1.728 | 1.443 | 1.415 | 1.205 | 1.404 |
| 35-39 | 2.442 | 1.970 | 2.055 | 2.050 | 1.881 | 1.721 |
| 40-44 | 3.309 | 3.135 | 3.474 | 3.298 | 3.237 | 3.635 |
| 45-49 | 6.309 | 5.845 | 5.639 | 5.614 | 5.474 | 5.557 |
| 50-54 | 9.705 | 9.473 | 9.606 | 9.379 | 9.671 | 9.072 |
| 55-59 | 15.486 | 15.926 | 16.221 | 15.347 | 14.926 | 14.435 |
| 60-64 | 24.480 | 25.039 | 24.750 | 24.663 | 24.177 | 23.358 |
| 65-69 | 36.472 | 35.642 | 39.282 | 36.846 | 35.251 | 34.705 |
| 70-74 | 54.614 | 54.084 | 55.855 | 52.009 | 53.337 | 54.352 |
| 75-79 | 81.423 | 86.212 | 86.538 | 77.213 | 83.436 | 74.119 |
| 80-84 | 116.370 | 124.120 | 110.526 | 118.458 | 108.486 | 117.287 |
| 85-89 | 169.952 | 167.006 | 182.369 | 177.252 | 141.730 | 173.953 |
| 90-95 | 225.498 | 263.686 | 267.796 | 204.077 | 234.196 | 244.450 |
| | 1952 | 1953 | 1954 | 1955 | | |
| 25-29 | 1.291 | 1.087 | 1.012 | 1.598 | | |
| 30-34 | 1.347 | 1.252 | 1.335 | 1.275 | | |
| 35-39 | 1.859 | 1.773 | 1.743 | 1.777 | | |
| 40-44 | 3.276 | 3.399 | 2.891 | 2.811 | | |
| 45-49 | 5.258 | 5.146 | 5.189 | 4.853 | | |
| 50-54 | 8.989 | 8.624 | 8.465 | 7.969 | | |
| 55-59 | 14.510 | 14.203 | 13.611 | 13.266 | | |
| 60-64 | 22.277 | 23.606 | 21.873 | 21.693 | | |
| 65-69 | 33.876 | 35.514 | 32.976 | 33.032 | | |
| 70-74 | 54.706 | 52.688 | 48.967 | 47.766 | | |
| 75-79 | 72.357 | 75.958 | 75.629 | 76.275 | | |
| 80-84 | 106.064 | 107.983 | 118.713 | 112.856 | | |
| 85-89 | 151.521 | 149.747 | 168.916 | 176.873 | | |
| 90-95 | 291.301 | 213.684 | 170.647 | 187.662 | | |

* Excludes war claims between 1941 and 1946 anniversaries and between 1949 and 1954 anniversaries.