

## CONTINUOUS MORTALITY INVESTIGATION

### MORTALITY EXPERIENCED DURING DEFERMENT FOR THE PERIOD 1958-62 BY PURCHASERS OF RETIREMENT ANNUITIES UNDER THE PROVISIONS OF THE FINANCE ACT 1956

Data in respect of retirement annuity policies effected under the Finance Act 1956 have been collected since the beginning of 1958, and the statistics relating to the period of deferment for lives accepted without medical examination are now adequate for a report to be made on the experience. In the other sections of the investigation, i.e. medically examined lives and annuities in possession, the data are as yet insufficient for analysis.

The experience under retirement annuities during deferment has a special interest in so far as these contracts cannot be surrendered. Thus there is no possibility of selective withdrawal such as may exist in an assured lives' experience. Although there is considerable variation in practice in the benefits payable on death, no subdivision on this account has been made in the investigation.

There is no standard mortality table available which can be regarded as suitable for calculating expected deaths for retirement annuity contracts. It was thought, however, that for male lives offices would be interested in comparisons based on both the A1949-52 and the *a*(55) ultimate tables, even though neither table can be regarded as relevant to the experience. The results on these two bases are shown in Table 1, from which it can be seen that, broadly speaking, the experience has followed the A1949-52 ultimate table up to age 45 and the *a*(55) ultimate table thereafter.

For the corresponding experience of female lives, Table 2 gives a comparison based on the *a*(55) ultimate table. Actual deaths in 1958-62 were generally between 70% and 75% of expected deaths, apart from those age groups where the data were too scanty to be of significance.

TABLE 1

*Mortality of retirement annuitants during period of deferment*  
*Comparison of actual deaths 1958-62 with expected deaths according to*  
*the A1949-52 and a(55) ultimate tables (non-medical data, male lives)*

Age group (nearest ages)	Actual deaths	Expected deaths A1949-52	100 A/E	Expected deaths a(55)	100 A/E
-25	4	4.03	99	4.47	89
26-30	18	15.57	116	18.18	99
31-35	38	37.12	102	46.06	83
36-40	81	76.29	106	96.21	84
41-45	164	173.50	95	196.50	83
46-50	368	433.11	85	420.78	87
51-55	660	787.95	84	686.65	96
56-60	714	877.65	81	723.53	99
61-65	470	566.99	83	461.92	102
66-	161	238.72	67	196.35	82
Up to 45	305	306.51	100	361.42	84
46 and over	2,373	2,904.42	82	2,489.23	95
All ages	2,678	3,210.93	83	2,850.65	94

TABLE 2

*Mortality of retirement annuitants during period of deferment*  
*Comparison of actual deaths 1958-62 with expected deaths according to*  
*a(55) ultimate table (non-medical data, female lives)*

Age group (nearest ages)	Actual deaths	Expected deaths	100 A/E
-40	4	8.88	45
41-45	8	12.57	64
46-50	19	26.53	72
51-55	32	42.50	75
56-60	31	41.78	74
61-65	15	21.44	70
66-	5	5.28	95
All ages	114	158.98	72