

## THE RECENT TREND OF MORTALITY IN GREAT BRITAIN

BY L. V. MARTIN, F.I.A.

*of the Government Actuary's Department*

IN continuation of the tables given in *J.I.A.* 87, 384-88, central death-rates in age-groups for males and females separately in the year 1961, and the ratios of these death-rates to the corresponding rates for the years 1950-52 taken as the standard, are shown in Table 1. The deaths

Table 1. *Death-rates for age-groups in Great Britain in the year 1961 and ratios of these rates to the rates for 1950-52*

Age-group	Death-rates in 1961		Ratios to 1950-52 rates	
	Males	Females	Males	Females
0	·02546	·01976	·74	·75
1-4	·00106	·00082	·75	·68
5-9	·00049	·00033	·72	·69
10-14	·00039	·00025	·71	·64
15-19	·00091	·00039	·95	·57
20-24	·00111	·00051	·80	·52
25-29	·00106	·00058	·70	·47
30-34	·00129	·00089	·74	·61
35-39	·00194	·00138	·83	·72
40-44	·00308	·00224	·87	·83
45-49	·00537	·00355	·85	·84
50-54	·00951	·00555	·86	·86
55-59	·01716	·00834	·94	·84
60-64	·02906	·01400	·99	·88
65-69	·0446	·0235	·99	·88
70-74	·0690	·0414	1·00	·90
75-79	·1046	·0700	·95	·88
80-84	·165	·120	·96	·89
85 and over	·257	·228	·90	·97
All ages:				
Crude rates	·01263	·01139	·992	1·022
Standardized*	·01186	·00969	·932	·869

\* Standardized on 1951 Census age distribution.

are those recorded as occurring in Great Britain in the year and the population used is the 'home' population, i.e. the number of people actually in the country at a stated time, as estimated by the Registrars General of England and Wales and of Scotland.

The estimated population for 1961 has been adjusted to take account of the preliminary results of the 1961 Census, but the adjustments are relatively small and do not materially affect comparisons with earlier years. Further revision may be necessary when the age distribution of the population enumerated at the Census becomes available.

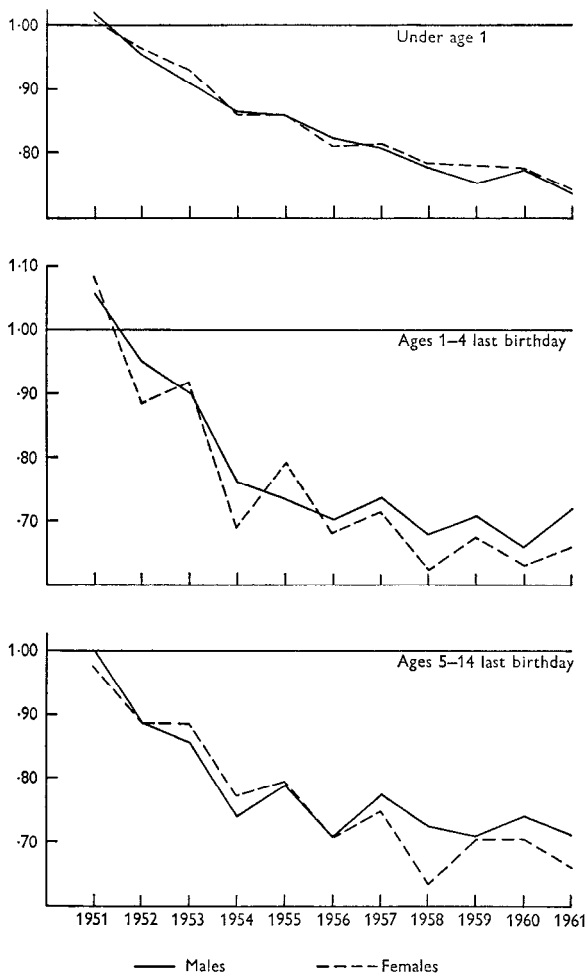


Fig. 1. Ratios of group death-rates (standardized) to 1950-52 rates—children.

In order that the trend of mortality rates may be conveniently studied, the group death-rates and the ratios to the 1950-52 standard since 1951 are set out in Tables 2 and 3, and the ratios to the 1950-52 standard are shown in graphical form in Figs. 1 and 2. Figures for 1950 and

earlier years have not been given, but they are available in previous articles. In these tables and graphs the age-groups have been reduced to six—under age 1 (infants), 1-4 (young children), 5-14 (children of school age), 15-44 (younger adults), 45-64 (older adults) and 65 and over (elderly).

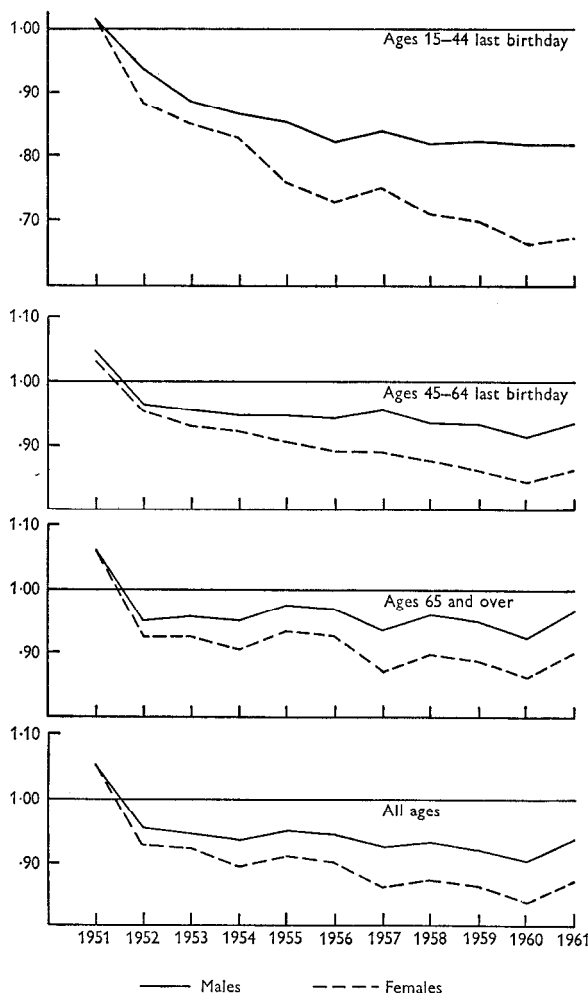


Fig. 2. Ratios of group death-rates (standardized) to 1950-52 rates—adults and all ages.

Further, the group death-rates and ratios have been standardized on the age distribution of Great Britain at the 1951 Census so as to eliminate the effect of changes in the age distribution of the population.

As a link with the earlier series of tables that appeared in the *Journal*, showing the trend of mortality in England and Wales since 1930-32, figures for Great Britain for the average of those three years have been included in Tables 2 and 3.

Table 2. *Standardized death-rates for age-groups in Great Britain*  
(standardized on 1951 Census age distribution)

Year	Age-group						All ages
	Under 1	1-4	5-14	15-44	45-64	65 and over	
Males							
1930-32	·07953	·00760	·00196	·00412	·01637	·0873	·01588
1951	·03524	·00149	·00062	·00199	·01528	·0877	·01336
1952	·03293	·00134	·00055	·00184	·01404	·0787	·01211
1953	·03139	·00127	·00053	·00174	·01392	·0790	·01204
1954	·02992	·00108	·00046	·00170	·01382	·0787	·01192
1955	·02955	·00104	·00049	·00167	·01382	·0807	·01208
1956	·02842	·00099	·00044	·00161	·01375	·0804	·01199
1957	·02779	·00104	·00048	·00164	·01391	·0774	·01176
1958	·02676	·00096	·00045	·00160	·01364	·0793	·01183
1959	·02597	·00100	·00044	·00161	·01358	·0784	·01173
1960	·02663	·00094	·00046	·00160	·01335	·0765	·01149
1961	·02546	·00102	·00044	·00160	·01363	·0799	·01186
Females							
1930-32	·05973	·00686	·00178	·00351	·01243	·0735	·01519
1951	·02668	·00130	·00043	·00156	·00895	·0674	·01174
1952	·02556	·00106	·00039	·00136	·00822	·0584	·01032
1953	·02461	·00110	·00039	·00131	·00801	·0585	·01025
1954	·02272	·00083	·00034	·00127	·00794	·0572	·00999
1955	·02270	·00095	·00035	·00117	·00783	·0591	·01018
1956	·02153	·00082	·00031	·00112	·00770	·0585	·01002
1957	·02160	·00086	·00033	·00115	·00770	·0550	·00960
1958	·02068	·00075	·00028	·00109	·00755	·0567	·00972
1959	·02062	·00081	·00031	·00107	·00742	·0561	·00961
1960	·02048	·00076	·00031	·00102	·00728	·0545	·00936
1961	·01976	·00079	·00029	·00103	·00743	·0569	·00969

The standardized death-rates in the year 1961 for all ages combined were heavier than in 1960 by about 3 % for men and 3½ % for women, but were 7 % less for men and 13 % less for women than the 1950-52 standard. At ages over 65 mortality was heavier than in any year since 1956, but at younger ages the rates differed little from those of the last few years and the infant mortality rates continue to decline.

Table 3. *Ratios of standardized death-rates for age-groups in Great Britain to the rates for 1950-52 (standardized on 1951 Census age distribution)*

Year	Age-group						All ages
	Under 1	1-4	5-14	15-44	45-64	65 and over	
Males							
1930-32	2.307	5.390	3.161	2.102	1.120	1.054	1.247
1951	1.022	1.057	1.000	1.015	1.045	1.059	1.049
1952	.955	.950	.887	.939	.960	.950	.951
1953	.910	.901	.855	.888	.952	.954	.946
1954	.868	.766	.742	.867	.945	.950	.936
1955	.857	.738	.790	.852	.945	.975	.949
1956	.824	.702	.710	.821	.940	.971	.942
1957	.806	.738	.774	.837	.951	.935	.924
1958	.776	.681	.726	.816	.933	.958	.929
1959	.753	.709	.710	.821	.929	.947	.921
1960	.772	.667	.742	.816	.913	.924	.903
1961	.738	.723	.710	.816	.932	.965	.932
Females							
1930-32	2.256	5.716	4.046	2.279	1.439	1.163	1.362
1951	1.008	1.083	.977	1.013	1.036	1.066	1.053
1952	.965	.883	.886	.883	.951	.924	.926
1953	.929	.917	.886	.851	.927	.926	.919
1954	.858	.692	.773	.825	.919	.905	.896
1955	.857	.792	.796	.760	.906	.935	.913
1956	.813	.683	.705	.727	.891	.926	.899
1957	.816	.717	.750	.747	.891	.870	.861
1958	.781	.625	.636	.708	.874	.897	.872
1959	.779	.675	.705	.695	.859	.888	.862
1960	.773	.633	.705	.662	.843	.862	.839
1961	.746	.658	.659	.669	.860	.900	.869