

THE RECENT TREND OF MORTALITY IN GREAT BRITAIN

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MORTALITY rates in Great Britain have been considered in a series of notes, the last of which appeared in *J.I.A.* **104**, 93 and dealt with mortality in 1975. The present note gives central death-rates for Great Britain in the year 1976. These are shown in Table 1, together with the ratios of these rates to the corresponding rates for the three years 1970-72, which have been taken as a standard. The rates have been calculated using the deaths recorded as occurring in Great Britain in 1976 and the 'home' population at mid-1976, i.e. the number of people actually in the country at the time, as estimated by the Registrars General of England and Wales and of Scotland.

Table 1. *Death-rates for age-groups in Great Britain in the year 1976 and ratios of those rates to the rates for 1970-72*

Age-groups	Death rates in 1976		Ratios to 1970-72 rates	
	Males	Females	Males	Females
Under 1	·01626	·01213	·80	·78
1- 4	·00065	·00047	·82	·70
5- 9	·00034	·00024	·81	·83
10-14	·00032	·00021	·86	·95
15-19	·00089	·00035	1·00	·92
20-24	·00098	·00041	·99	·93
25-29	·00089	·00049	·98	·98
30-34	·00106	·00069	·94	·95
35-39	·00159	·00109	·94	·92
40-44	·00275	·00194	·91	·93
45-49	·00503	·00332	·91	·93
50-54	·00920	·00543	·99	1·00
55-59	·01503	·00796	·95	·97
60-64	·02530	·01291	·96	1·01
65-69	·04081	·02011	·94	·97
70-74	·06583	·03412	·97	·96
75-79	·10137	·05853	1·00	·95
80-84	·15407	·10439	1·07	1·04
85 and over	·24913	·20246	1·02	1·03
All ages:				
Crude rates	·01260	·01185	1·01	1·05
Standardized*	·01211	·01117	·98	·99

Death-rates in this form for the years from 1961 to 1974 were given in a note in this series which appeared in *J.I.A.* **103**, 213. However, the overall trends of mortality can be studied by reference to standardized group death-rates for a few broad age-groups and these are set out in Table 2 for each year from 1961, showing also two earlier periods, 1930-32 and 1950-52, to illustrate the relatively

dramatic falls in mortality that took place over the preceding 30 years. The ratios of the rates to the 1970-72 standard are given in Table 3, and these are also shown graphically for the years since 1961. The age-groups used are five in number—under age 1 (infants), 1-14 (children), 15-44 (younger adults), 45-64 (the middle-aged) and 65 and over (the elderly). The group death-rates and ratios have been standardized by five-year age-groups on the age distribution of the Great Britain population at the 1971 Census, so as to eliminate the effect of changes in the age structure of the population.

Table 2. *Standardized death-rates for age-groups in Great Britain (standardized on 1971 Census age distribution)*

Year	Under 1	1-14	15-44	45-64	65 and over	All ages
<i>Males</i>						
1930-32	·07953	·00368	·00396	·01738	·08831	·01721
1950-52	·03448	·00085	·00186	·01580	·08392	·01410
1961	·02545	·00062	·00151	·01485	·08114	·01323
1962	·02614	·00059	·00149	·01481	·08157	·01326
1963	·02512	·00062	·00152	·01503	·08372	·01354
1964	·02383	·00056	·00152	·01438	·07564	·01251
1965	·02246	·00058	·00152	·01439	·07742	·01268
1966	·02241	·00058	·00152	·01439	·07961	·01290
1967	·02093	·00056	·00144	·01376	·07484	·01219
1968	·02175	·00056	·00141	·01408	·07986	·01280
1969	·02089	·00055	·00142	·01447	·07914	·01280
1970	·02136	·00051	·00141	·01406	·07757	·01253
1971	·02021	·00052	·00139	·01360	·07524	·01215
1972	·01914	·00051	·00138	·01392	·07868	·01256
1973	·01889	·00050	·00139	·01371	·07690	·01233
1974	·01884	·00046	·00136	·01353	·07605	·01217
1975	·01738	·00045	·00132	·01317	·07540	·01197
1976	·01626	·00042	·00132	·01327	·07667	·01211
<i>Females</i>						
1930-32	·05973	·00333	·00341	·01300	·08229	·01908
1950-52	·02648	·00066	·00146	·00909	·07134	·01460
1961	·01983	·00044	·00096	·00784	·06405	·01281
1962	·01955	·00044	·00097	·00781	·06312	·01265
1963	·01928	·00044	·00095	·00787	·06444	·01287
1964	·01850	·00042	·00094	·00749	·05748	·01165
1965	·01705	·00044	·00094	·00748	·05822	·01175
1966	·01706	·00042	·00092	·00751	·05936	·01193
1967	·01664	·00041	·00089	·00726	·05545	·01122
1968	·01620	·00041	·00088	·00751	·05935	·01189
1969	·01582	·00037	·00090	·00769	·05768	·01167
1970	·01627	·00037	·00087	·00748	·05686	·01148
1971	·01540	·00037	·00084	·00735	·05453	·01106
1972	·01489	·00038	·00085	·00756	·05648	·01141
1973	·01448	·00035	·00084	·00739	·05607	·01129
1974	·01419	·00035	·00081	·00745	·05516	·01115
1975	·01375	·00031	·00082	·00725	·05416	·01093
1976	·01213	·00030	·00080	·00737	·05575	·01117

Table 3. *Ratios of standardized death-rates for age-groups in Great Britain to the rates for 1970-72 (standardized on 1971 Census age distribution)*

Year	Under 1	1-14	15-44	45-64	65 and over	All ages
<i>Males</i>						
1930-32	3.930	7.191	2.843	1.254	1.144	1.386
1950-52	1.704	1.657	1.334	1.140	1.088	1.135
1961	1.257	1.215	1.086	1.071	1.052	1.066
1962	1.292	1.156	1.066	1.069	1.057	1.068
1963	1.241	1.207	1.086	1.085	1.085	1.090
1964	1.177	1.104	1.092	1.038	.980	1.007
1965	1.110	1.139	1.093	1.038	1.003	1.021
1966	1.107	1.132	1.089	1.038	1.032	1.039
1967	1.034	1.092	1.029	.993	.970	.982
1968	1.075	1.102	1.010	1.016	1.035	1.030
1969	1.032	1.068	1.021	1.044	1.026	1.031
1970	1.055	1.001	1.013	1.015	1.005	1.009
1971	.999	1.008	.998	.981	.975	.979
1972	.946	.991	.989	1.004	1.020	1.012
1973	.933	.971	1.000	.989	.997	.993
1974	.931	.899	.976	.976	.986	.980
1975	.859	.871	.949	.950	.977	.964
1976	.803	.827	.949	.957	.994	.975
<i>Females</i>						
1930-32	3.849	8.891	3.991	1.743	1.471	1.686
1950-52	1.706	1.759	1.709	1.218	1.275	1.290
1961	1.278	1.179	1.125	1.051	1.145	1.132
1962	1.260	1.173	1.131	1.047	1.128	1.118
1963	1.242	1.185	1.116	1.055	1.152	1.137
1964	1.192	1.132	1.096	1.004	1.027	1.030
1965	1.099	1.166	1.106	1.002	1.040	1.038
1966	1.099	1.122	1.079	1.007	1.061	1.054
1967	1.072	1.093	1.037	.973	.991	.992
1968	1.044	1.108	1.025	1.006	1.061	1.051
1969	1.019	.991	1.053	1.031	1.031	1.031
1970	1.048	.990	1.015	1.003	1.016	1.014
1971	.992	1.000	.990	.985	.975	.977
1972	.959	1.010	.995	1.013	1.009	1.008
1973	.933	.930	.979	.990	1.002	.998
1974	.914	.923	.953	.998	.986	.985
1975	.886	.830	.956	.972	.968	.966
1976	.781	.793	.934	.987	.996	.987

Mortality at all ages has fallen over the last thirty years, although the rate of decline has been greatest for the younger age-groups and was particularly marked in the decade immediately following the Second World War. Since 1946 the rates of mortality for infants and children have fallen by about 70%, with about one-quarter of the fall taking place since 1961. The decline has been brought about principally by the reduction in the numbers of deaths from tuberculosis, poliomyelitis and rheumatic fever to extremely low levels.

Whilst mortality from many causes has declined also for the adult age-groups, there have been a number of offsetting factors, and the resulting overall reduction in mortality has been more modest than for younger ages. Deaths from motor vehicle accidents have increased among young adults and there has been a steady increase in deaths from ischaemic heart disease in middle age, to the extent that there has been little, if any, reduction in recent years in mortality rates at ages 45 to 49.

At ages over 65 there have been substantial increases in mortality from cancer, and particularly from lung cancer, which, in the case of males, have largely offset falls in mortality from other causes. Female mortality at these ages, whilst also affected by worsening rates of death from cancer, has still fallen overall by some 20% since 1946.

Although the trend in mortality continues to be steadily downwards at most ages, there are considerable fluctuations from year to year. Whereas mortality in 1975 seems to have been fairly light as compared with the trends, that in 1976 was rather heavy at the older ages, particularly for the very elderly. Mortality for the over 80s, for example, was some 4% higher in 1976 than in 1975. Preliminary figures for deaths in 1977 suggest a fairly light year, with rates possibly a little lower than in 1975.

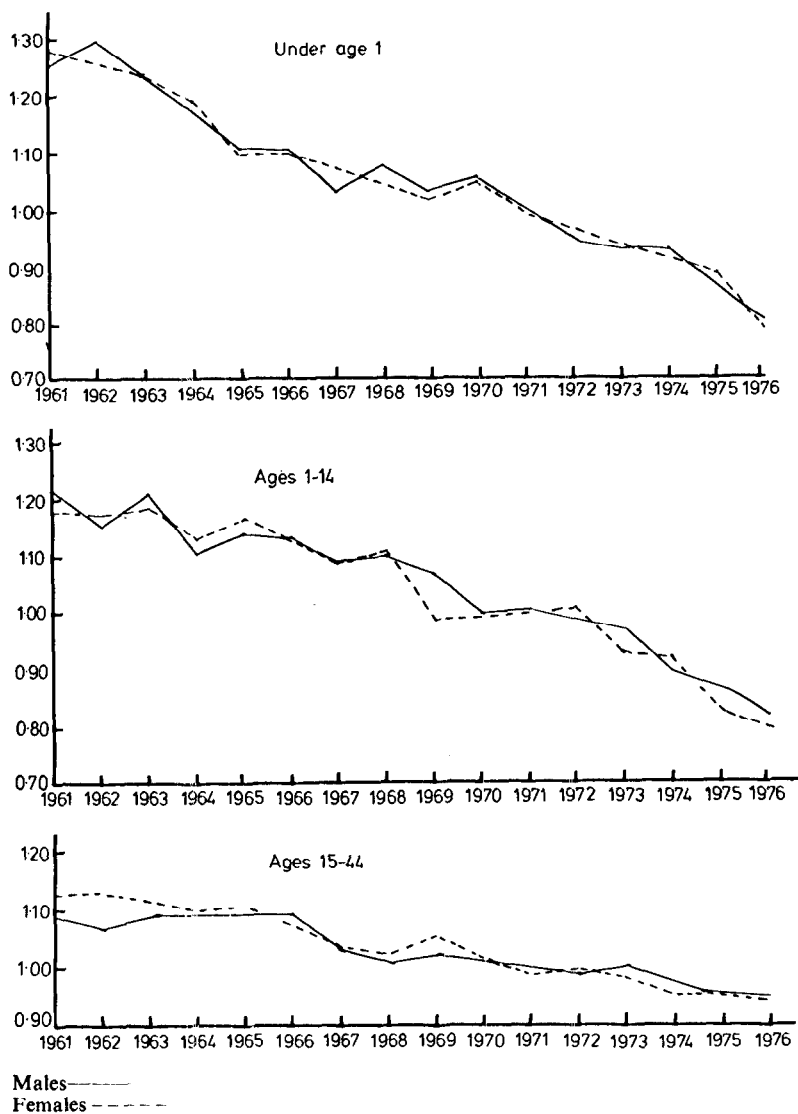


Figure 1. Ratios of Standardized Group death-rates to 1970-72 rates—Children and young adults

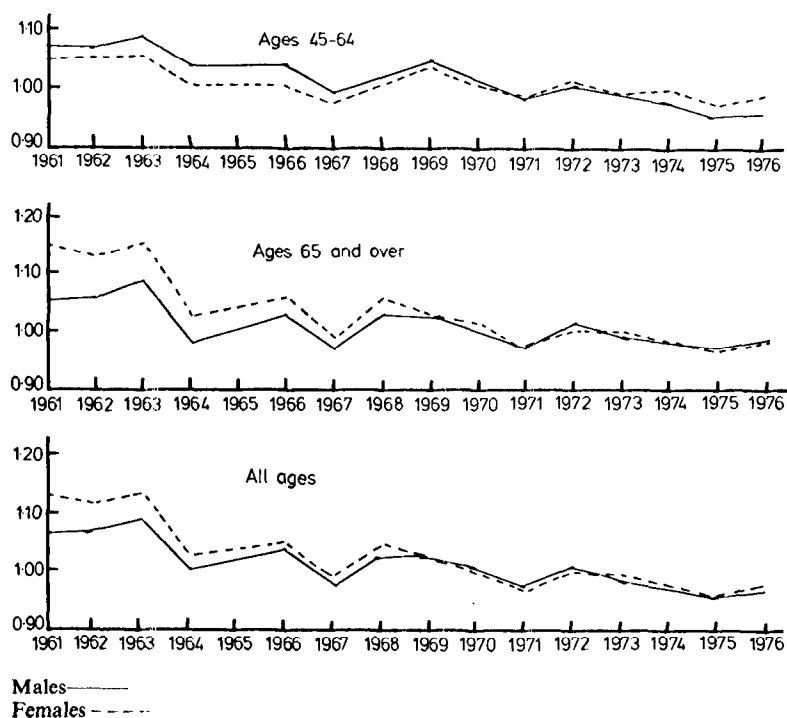
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Figure 2. Ratios of Standardized Group death-rates to 1970-72 rates- Older adults and all ages