

## THE RECENT TREND OF MORTALITY IN THE UNITED KINGDOM

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### ABSTRACT

This note continues a regular series on mortality rates in the United Kingdom. Mortality experienced in 1993 is shown by five-year age groups, and comparisons are made for broad age groups, on a standardised basis, with mortality in earlier years.

### KEYWORD

Mortality

This note continues a series on mortality rates in the United Kingdom; the previous note in the series appeared in *J.I.A.* 121, 589, and dealt with mortality in the years 1990 to 1992. Notes prior to that related to Great Britain.

The note presents details of the mortality experience of 1993, together with a comparison with earlier years. The rates have been calculated using the deaths recorded as occurring in the U.K. each year and the resident population at 30 June of each year, as estimated by the Registrars General of England and Wales, Scotland, and Northern Ireland.

Table 1 shows central death rates for the U.K. for 1993, together with the ratios of these rates to the corresponding average rates for 1990-92. To minimise the effect of changes in the age distribution of the population exposed-to-risk, the death rates for age groups have been calculated, and the comparison with the 1990-92 mortality rates has been made, by standardising by individual ages on the age distribution of the U.K. population at the 1991 Census.

Comparisons have also been made with the period since 1970; Tables 2 and 3 show, respectively, the death rates and the ratios to the 1990-92 standard by six age groups: under age 1 (infants); 1-14 (children); 15-44 (younger adults); 45-64 (the middle aged); 65-79 (the younger elderly) and 80 and over (the elderly). The ratios of standardised group death rates to the 1990-92 standard are shown graphically in Figures 1 and 2 for these broad age groups.

Mortality overall (standardised by age groups) was some 2% higher in 1993 than in 1992, which itself was about 3% lower than in 1991. It is now some 19% lower for males, and 15% lower for females, than in 1980, representing a generally uninterrupted fall, except for 1985 and 1993, when there were mild influenza epidemics. The age groups showing higher mortality in 1993 than the 1990-92 average were 80 and over for men and 70 and over for women, together with a few younger groups for women, where deaths are generally very few in number anyway.

Comparing the most recent 3 years with the earliest 3 years in Tables 2 and 3, i.e. 1991-93 with 1970-72, the average level of mortality fell by 26% for males and 23% for females. Infant mortality fell by over 60% between these two periods and the mortality of children between 1 and 15 years old fell by 50%. At

Table 1. Death rates for age groups in the United Kingdom in 1993 and the ratios of those rates to the rates for 1990-92

Age group	Death rates in 1993		Ratios to 1990-92 rates	
	Males	Females	Males	Females
Under 1	0.00701	0.00556	0.854	0.879
1-4	0.00036	0.00028	0.913	0.870
5-9	0.00017	0.00013	0.841	0.878
10-14	0.00021	0.00016	0.951	1.040
15-19	0.00060	0.00027	0.855	0.952
20-24	0.00085	0.00031	0.947	0.956
25-29	0.00085	0.00038	0.955	1.011
30-34	0.00100	0.00054	0.996	1.025
35-39	0.00136	0.00079	0.956	0.927
40-44	0.00205	0.00138	0.979	1.025
45-49	0.00325	0.00213	0.936	0.948
50-54	0.00591	0.00367	0.979	0.990
55-59	0.01001	0.00594	0.964	0.960
60-64	0.01750	0.01024	0.958	0.961
65-69	0.03031	0.01722	0.974	0.984
70-74	0.04798	0.02766	0.989	1.008
75-79	0.07726	0.04599	0.999	1.010
80-84	0.11975	0.07739	1.005	1.019
85-89	0.18108	0.12709	1.012	1.024
90 & over	0.28312	0.22496	1.037	1.015
All ages:				
Crude	0.01115	0.01146	1.007	1.030
Standardised*	0.01093	0.01127	0.987	1.006

\*Standardised on 1991 Census age distribution

ages 15-44 the fall was 18% for men and 30% for women, and at 45-64 the fall was 34% for men and 25% for women. At ages 65-79 the fall was nearly 25% overall, while at 80 and over it exceeded 20%.

Table 2. Death rates for age-groups in the United Kingdom, standardised on 1991 Census age distribution

Year	Under 1	1-14	15-44	45-64	65-79	80 & over	All ages
<b>Males</b>							
1970	0.02100	0.00051	0.00141	0.01358	0.06514	0.17619	0.01489
1971	0.01970	0.00051	0.00139	0.01317	0.06257 *	0.17451	0.01446
1972	0.01900	0.00050	0.00137	0.01344	0.06542	0.18133	0.01495
1973	0.01845	0.00049	0.00140	0.01315	0.06356	0.17922	0.01465
1974	0.01859	0.00046	0.00135	0.01295	0.06265	0.17840	0.01446
1975	0.01714	0.00045	0.00132	0.01272	0.06207	0.17800	0.01430
1976	0.01616	0.00043	0.00131	0.01281	0.06266	0.18325	0.01448
1977	0.01565	0.00040	0.00127	0.01236	0.06002	0.17101	0.01380
1978	0.01539	0.00041	0.00131	0.01244	0.06037	0.17233	0.01390
1979	0.01483	0.00038	0.00128	0.01235	0.05978	0.17451	0.01384
1980	0.01373	0.00038	0.00127	0.01225	0.05823	0.17059	0.01354
1981	0.01274	0.00036	0.00124	0.01191	0.05694	0.16861	0.01325
1982	0.01246	0.00034	0.00121	0.01164	0.05663	0.16879	0.01315
1983	0.01154	0.00033	0.00118	0.01144	0.05589	0.16616	0.01294
1984	0.01094	0.00033	0.00115	0.01100	0.05392	0.15905	0.01245
1985	0.01054	0.00033	0.00114	0.01098	0.05499	0.16566	0.01270
1986	0.01098	0.00029	0.00115	0.01074	0.05368	0.15992	0.01238
1987	0.01059	0.00029	0.00115	0.01031	0.05166	0.15133	0.01187
1988	0.01030	0.00031	0.00116	0.01009	0.05085	0.15135	0.01174
1989	0.00963	0.00029	0.00114	0.00966	0.05032	0.15380	0.01163
1990	0.00910	0.00028	0.00118	0.00938	0.04900	0.14764	0.01129
1991	0.00830	0.00027	0.00116	0.00911	0.04818	0.14806	0.01114
1992	0.00732	0.00024	0.00113	0.00881	0.04687	0.14318	0.01079
1993	0.00701	0.00024	0.00111	0.00874	0.04747	0.14800	0.01093
<b>Females</b>							
1970	0.01614	0.00037	0.00088	0.00718	0.03743	0.14426	0.01470
1971	0.01507	0.00038	0.00086	0.00706	0.03583	0.14136	0.01429
1972	0.01472	0.00039	0.00086	0.00724	0.03713	0.14583	0.01473
1973	0.01435	0.00035	0.00085	0.00705	0.03646	0.14538	0.01456
1974	0.01392	0.00035	0.00082	0.00708	0.03572	0.14280	0.01431
1975	0.01359	0.00031	0.00083	0.00696	0.03486	0.14123	0.01408
1976	0.01212	0.00030	0.00080	0.00704	0.03548	0.14677	0.01444
1977	0.01219	0.00030	0.00077	0.00681	0.03374	0.13658	0.01362
1978	0.01215	0.00032	0.00081	0.00684	0.03371	0.13555	0.01358
1979	0.01146	0.00029	0.00076	0.00690	0.03377	0.13624	0.01360
1980	0.01096	0.00028	0.00075	0.00683	0.03303	0.13260	0.01329
1981	0.00947	0.00027	0.00072	0.00670	0.03241	0.13119	0.01307
1982	0.00950	0.00025	0.00070	0.00667	0.03244	0.13074	0.01303
1983	0.00893	0.00025	0.00068	0.00652	0.03168	0.12783	0.01273
1984	0.00859	0.00024	0.00067	0.00637	0.03086	0.12155	0.01225
1985	0.00836	0.00025	0.00066	0.00641	0.03161	0.12696	0.01264
1986	0.00808	0.00024	0.00065	0.00617	0.03092	0.12239	0.01225
1987	0.00805	0.00023	0.00064	0.00613	0.03006	0.11561	0.01177
1988	0.00774	0.00022	0.00065	0.00597	0.02992	0.11613	0.01174
1989	0.00733	0.00022	0.00064	0.00588	0.03011	0.11708	0.01179
1990	0.00703	0.00020	0.00062	0.00572	0.02902	0.11190	0.01132
1991	0.00632	0.00021	0.00061	0.00552	0.02909	0.11203	0.01128
1992	0.00570	0.00018	0.00061	0.00535	0.02845	0.10779	0.01093
1993	0.00556	0.00018	0.00061	0.00534	0.02900	0.11301	0.01127

Table 3. Ratio of death rates for age groups in the United Kingdom to the rates for 1990-92, standardised on 1991 Census age distribution

Year	Under 1	1-14	15-44	45-64	65-79	80 & over	All ages
<b>Males</b>							
1970	2.548	1.924	1.217	1.493	1.357	1.204	1.344
1971	2.391	1.954	1.203	1.447	1.303	1.193	1.306
1972	2.306	1.913	1.187	1.477	1.362	1.239	1.351
1973	2.239	1.874	1.208	1.445	1.324	1.225	1.323
1974	2.256	1.743	1.168	1.423	1.305	1.219	1.306
1975	2.080	1.695	1.137	1.397	1.293	1.217	1.292
1976	1.961	1.618	1.135	1.408	1.305	1.253	1.308
1977	1.899	1.516	1.100	1.359	1.250	1.169	1.246
1978	1.868	1.549	1.131	1.367	1.257	1.178	1.255
1979	1.799	1.453	1.109	1.357	1.245	1.193	1.250
1980	1.666	1.434	1.096	1.346	1.213	1.166	1.223
1981	1.546	1.368	1.069	1.309	1.186	1.153	1.197
1982	1.512	1.305	1.045	1.279	1.179	1.154	1.188
1983	1.400	1.269	1.021	1.257	1.164	1.136	1.169
1984	1.328	1.254	0.997	1.209	1.123	1.087	1.124
1985	1.279	1.243	0.987	1.207	1.145	1.132	1.147
1986	1.333	1.089	0.991	1.180	1.118	1.093	1.118
1987	1.285	1.103	0.992	1.133	1.076	1.034	1.072
1988	1.250	1.159	1.003	1.109	1.059	1.035	1.060
1989	1.169	1.108	0.987	1.062	1.048	1.051	1.050
1990	1.105	1.058	1.019	1.030	1.020	1.009	1.020
1991	1.007	1.032	1.004	1.001	1.003	1.012	1.006
1992	0.889	0.910	0.978	0.968	0.976	0.979	0.974
1993	0.854	0.904	0.958	0.961	0.989	1.012	0.987
<b>Females</b>							
1970	2.542	1.865	1.432	1.298	1.297	1.305	1.315
1971	2.374	1.896	1.407	1.278	1.242	1.278	1.278
1972	2.318	1.954	1.403	1.310	1.287	1.319	1.318
1973	2.260	1.757	1.382	1.275	1.264	1.315	1.303
1974	2.192	1.759	1.337	1.280	1.238	1.291	1.281
1975	2.140	1.565	1.347	1.260	1.208	1.277	1.260
1976	1.908	1.514	1.312	1.274	1.230	1.327	1.292
1977	1.920	1.494	1.263	1.232	1.169	1.235	1.218
1978	1.913	1.595	1.313	1.238	1.168	1.226	1.215
1979	1.805	1.445	1.232	1.247	1.171	1.232	1.217
1980	1.729	1.424	1.229	1.235	1.145	1.199	1.189
1981	1.491	1.359	1.166	1.212	1.123	1.186	1.169
1982	1.496	1.269	1.145	1.206	1.124	1.182	1.166
1983	1.406	1.278	1.108	1.179	1.098	1.156	1.139
1984	1.353	1.213	1.087	1.152	1.070	1.099	1.096
1985	1.317	1.256	1.074	1.159	1.096	1.148	1.131
1986	1.272	1.181	1.056	1.116	1.072	1.107	1.096
1987	1.268	1.141	1.043	1.109	1.042	1.046	1.053
1988	1.219	1.101	1.055	1.080	1.037	1.050	1.050
1989	1.154	1.117	1.043	1.064	1.044	1.059	1.055
1990	1.107	1.020	1.013	1.034	1.006	1.012	1.013
1991	0.995	1.060	0.991	0.998	1.008	1.013	1.009
1992	0.898	0.920	0.996	0.968	0.986	0.975	0.978
1993	0.879	0.915	0.991	0.964	1.003	1.020	1.006

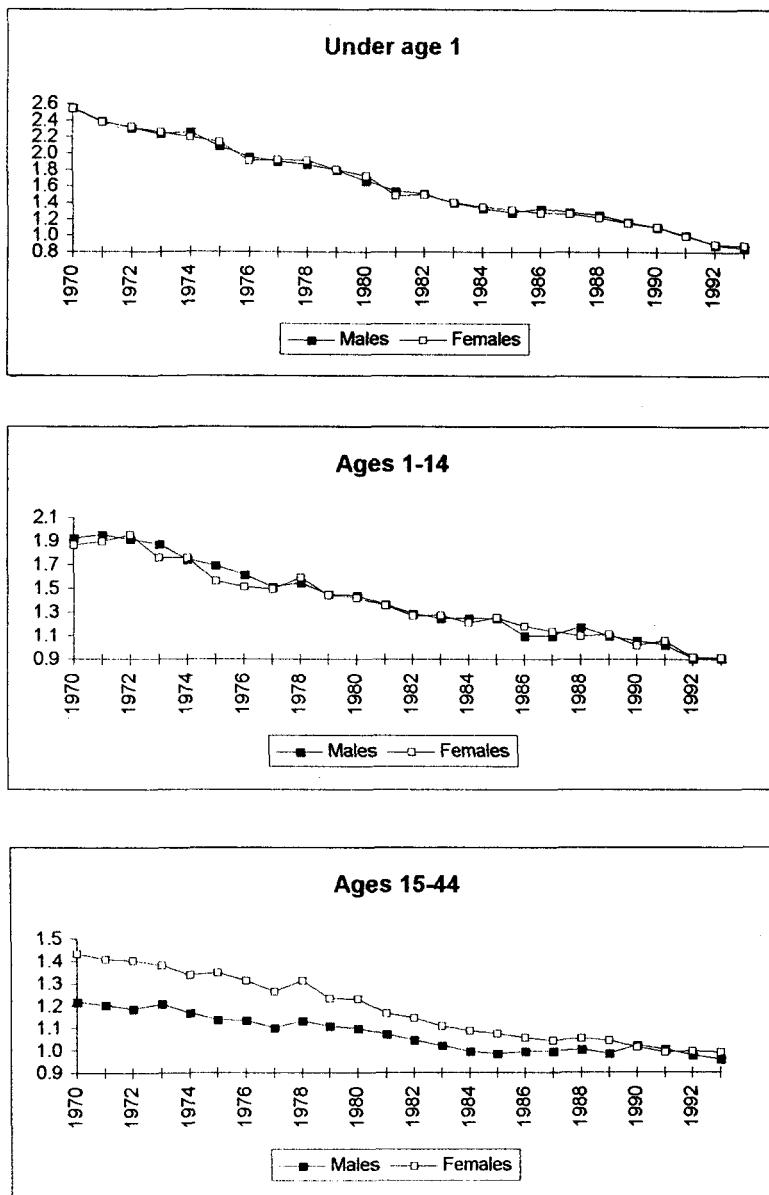


Figure 1. Ratios of standardised group death rates to 1990-92 rates — children and young adults.

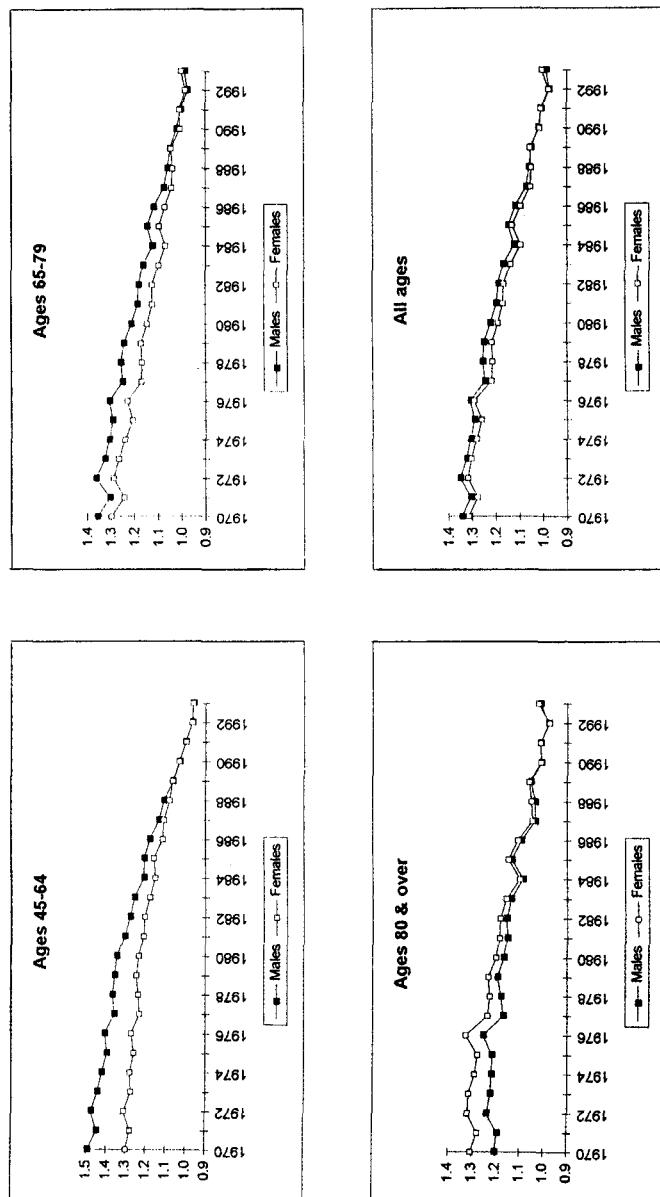


Figure 2. Ratios of standardised group death rates to 1990-92 rates — older adults and all ages.