

Adapted & rewritten for final draft.
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PT

Health

A further supplementary indicator of trends in poverty and inequality in living standards are changes in morbidity or mortality rates. ~~The~~ Standards of health vary between social classes. In general members of social class I are healthier than people in social class V. Yet there does not exist any clear ~~est~~ method of measuring objectively ~~the~~ ^{an individual's} standard of health. The interpretation of Morbidity statistics ^{are} still in their infancy.

One statistic which has been used frequently to record relative changes in the general health of the nation is the infant mortality rate. There are ^{two} ~~three~~ different rates. ~~First the number of still births per thousand live births. Second, the neonatal mortality rate which refers to the neonatal deaths among newborn babies weeks of life. Second, the post-neonatal rate which includes all deaths after the first four weeks but before the end of the first year of life. A second statistic used in conjunction with infant mortality rates is the number of still births per thousand live births.~~ ^{First} the neonatal mortality rate which includes all deaths in the first four weeks of life. Second, the post-neonatal rate which includes all deaths after the first four weeks but before the end of the first year of life. A second statistic used in conjunction with infant mortality rates is the number of still births per thousand live births.

Since the turn of the century infant mortality has fallen from well over 150 per 1000 live births, to just under 20. However, the relative disparity between the social classes did not change between 1911 and 1932. In 1911 the per cent of the infant mortality rate for all classes was 61 in the case of social class I while it was 122 for social class V. In 1932 the comparable figures were 53 and 125.² Up to date figures are only

1. Richard M. Titmuss, Birth, Poverty and wealth: A study of infant mortality, London, Hamish Hamilton Medical Books, 1943.

2. ibid, p. 26.

1. The first part of the paper discusses the importance of understanding the cultural context of the research. It highlights how cultural differences can influence the interpretation of data and the design of the study. The author argues that researchers must be aware of these differences to avoid misinterpretation and ensure the validity of their findings.

2. The second part of the paper focuses on the methodology used in the study. It describes the sampling process, the data collection methods, and the statistical analysis performed. The author emphasizes the need for transparency in reporting the methods used, so that other researchers can replicate the study and verify the results.

3. The third part of the paper presents the results of the study. It shows that there are significant differences in the behavior of the two groups being compared. The author discusses the implications of these findings for theory and practice, and suggests some potential areas for future research.

4. The final part of the paper is a conclusion. It summarizes the main findings of the study and reiterates the importance of understanding cultural context in research. The author also acknowledges the limitations of the study and suggests ways to address them in future research.

available for Scotland. Table 24 shows the number of still births ~~per 1000 live births in~~, the neonatal and post neonatal deaths ~~per 1000 live births in 1939, and the~~ ^{Scotland for} ~~years 1946-68~~ the year 1939 and years 1946-68. Infant mortality has continued to decline over the thirty year period. But ~~still~~ the still birth rate remains almost two and a half times as high in the families of unskilled workers as in those of professional families. The disparity between social class I and social class II ^{in the neonatal} ~~increased~~ death slightly ^{rate} increased slightly over the thirty year period. In 1939 there were one and a half times as many deaths during the first four weeks of life ^{in unskilled} ~~among~~ families than there were in professional families. In 1968 ~~it was~~ there were one and three quarters as many deaths. The comparable proportion for post neonatal deaths decreased sharply from six times as many to one and a quarter times as many deaths.

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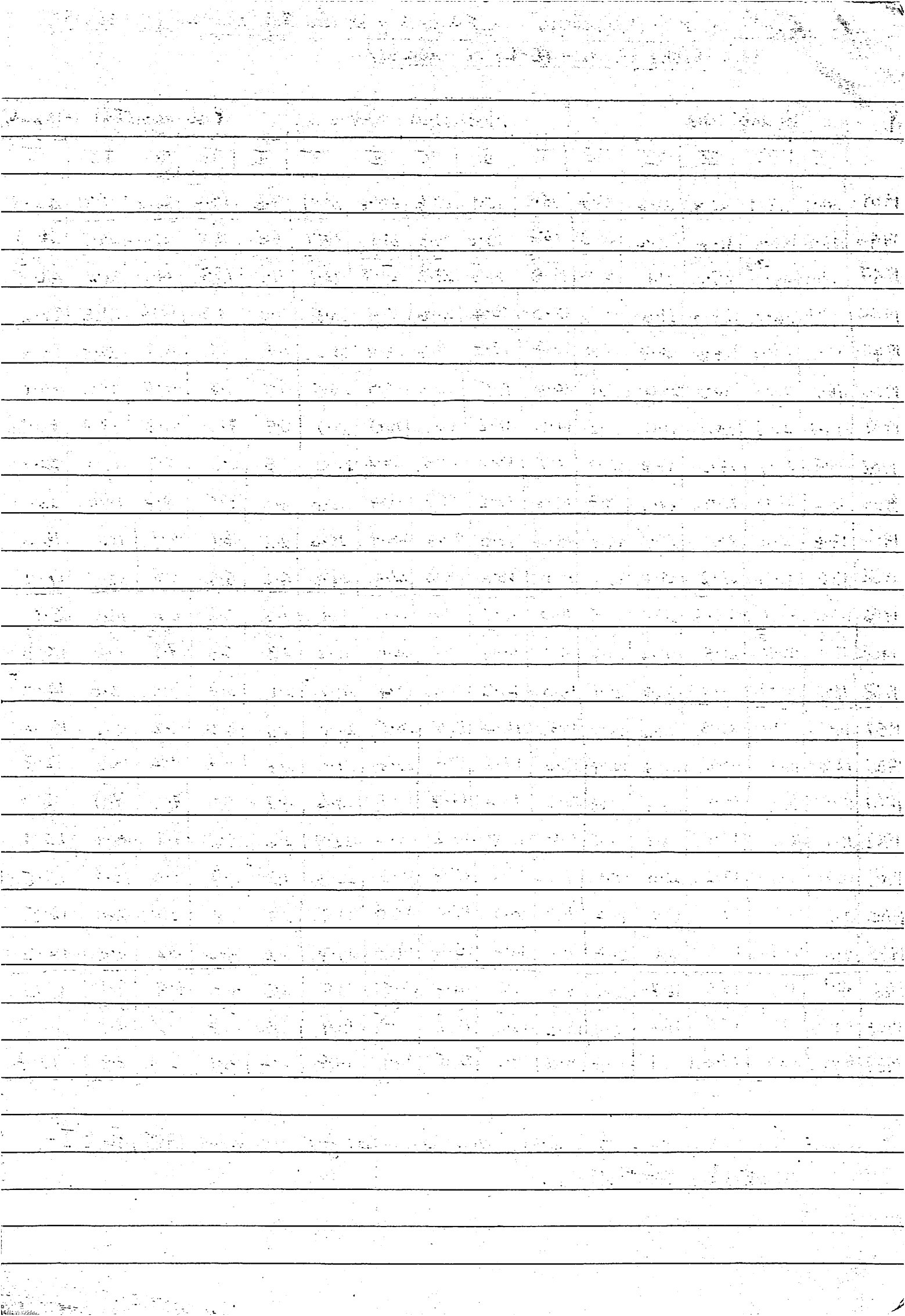
—Table 24—

1. There has been a progressive diminution of the proportion of the population in social class V. ^(See Table 11) ~~(36% in 1931, 29% in 1951, and 9% in 1966)~~. This is ^{result} due partly to the reclassification of occupations but is chiefly the ~~rest~~ of real changes. The effect has been to mitigate a little the impact of this disparity.

Table 24. Number of stillbirths, neonatal and postneonatal deaths per 1000 live births 1939, 1946-68. (Scotland)

Year	Stillbirths					Neonatal (first month)					Post-neonatal (1-12 months)				
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
1939	34.1	38.1	44.9	38.3	42.7	25.9	25.1	38.6	34.8	39.9	7.6	14.9	30.2	33.4	44.9
1946	18.8	26.0	31.7	35.6	38.3	16.7	25.0	29.3	31.1	36.9	5.5	12.8	22.0	29.3	36.1
1947	17.8	27.6 30.2	29.1 29.5	32.6 31.1	38.5 38.4	16.5 17.8	20.2 19.3	27.0 27.2	29.8 29.7	36.5 42.1	8.1 9.1	12.8 15.7	21.4 24.1	27.5 31.4	38.3 46.5
1948	19.8	26.7	26.0	31.6	38.9	15.0	16.4	24.6	28.7	30.5	9.8	9.9	18.2	21.8	32.2
1949	17.3	21.4	26.5	28.7	36.0	13.7	17.9	22.6	24.4	31.3	4.9	9.1	16.2	22.9	30.8
1950	16.3	22.5	26.3	29.0	32.1	20.0	16.5	22.7	24.9	28.5	5.9	7.7	14.3	18.9	25.1
1951	14.7	22.9	25.1	31.1	32.2	14.6	15.2	22.1	23.3	29.7	3.8	7.6	14.3	17.7	24.3
1952	19.7	23.9	25.3	27.8	29.9	12.9	18.2	21.8	23.2	24.2	5.3	6.6	12.7	15.9	22.1
1953	13.2	21.0	23.9	27.4	29.7	14.8	16.2	19.3	21.4	22.0	4.0	5.5	10.6	13.0	20.4
1954	17.6	22.0	24.1	28.3	29.9	13.4	16.0	20.8	20.7	25.6	2.2	6.1	10.1	10.9	16.4
1955	16.1	17.3	23.2	29.5	30.6	15.8	16.7	18.3	22.4	24.3	4.2	5.9	9.5	12.5	17.9
1956	17.4	19.9	22.8	25.5	29.5	11.0	13.5	19.0	22.0	22.1	5.6	5.6	8.2	10.6	16.1
1957	17.0 17.1	20.5 20.8	22.1 21.5	26.5 29.2	28.8 29.7	13.4 14.1	14.7 16.4	19.0 19.5	20.2 20.1	22.8 22.2	4.0 4.3	5.5 6.3	8.2 7.9	10.9 11.6	14.8 14.3
1958	16.5	20.7	21.9	24.7	27.1	15.0	14.2	18.4	18.4	24.2	2.1	5.7	8.4	10.6	14.0
1959	13.5	15.4	21.8	24.4	26.9	13.7	16.4	18.8	20.5	24.0	2.3	6.0	8.2	10.2	15.4
1960	12.8	16.8	20.8	24.7	26.4	13.0	17.2	17.1	20.7	21.0	2.7	4.3	7.2	10.2	12.8
1961	12.9	16.4	20.1	23.2	25.7	13.3	13.2	17.7	19.5	21.6	4.7	3.9	7.4	7.9	12.9
1962	11.1	16.6	19.1	21.7	27.0	11.1	12.9	17.2	20.2	22.9	2.6	5.5	7.8	10.1	15.1
1963	10.8	15.6	18.2	21.0	25.1	9.5	13.2	15.8	19.3	22.3	1.2	4.7	8.0	10.6	15.5
1964	9.3	12.3	17.6	19.9	23.7	9.5	10.9	15.8	18.0	21.9	2.9	3.8	6.8	8.5	13.5
1965	9.5	12.3	17.7	21.1	21.7	7.3	13.7	15.8	17.7	19.7	3.2	4.6	6.2	8.7	14.2
1966	12.1	11.9	15.6	16.7	22.4	8.8	9.5	14.6	17.5	21.9	2.3	4.0	7.4	9.1	15.4
1967	10.2 10.6	12.5 13.4	15.5 15.8	15.7 16.4	20.0 17.9	9.5 10.2	11.0 12.4	13.4 13.2	15.2 13.9	19.5 18.9	3.1 3.8	3.9 3.7	6.7 6.2	8.8 8.5	14.6 14.7
1968	8.0	12.1	15.0	14.1	19.7	9.4	11.2	12.5	14.1	17.8	3.2	4.1	6.4	8.8	13.7

Source: Annual Report of the Registrar General for Scotland, 1968, Part I - Mortality Statistics.



Figures for England and Wales for the years 1949-50 and 1964 reflect this marked improvement in corresponding post-neonatal mortality rates. Table 25 shows that whereas social class differentials appear to have increased in the case of stillbirths and neonatal mortality they have decreased for post-neonatal mortality. Titmuss over the period 1911 to 1932 found the opposite trend emerged. 'Those statistics epitomise the chances of death of two infants; one born to well to do families parents, the other to poor parents; both potential citizens of Britain. During the first few weeks of life, little separates the two children in their chances of death, but slowly at first and then with increasing effect, as week succeeds week, the gulf widens.' ¹

— Table 25 —

no differential
Morris has shown that, death rates ~~between~~ of 1 to 2 year olds narrowed between the classes in the period 1930-32 to 1949-53 much more than in ~~the~~ infancy. ² In 1930-32 death rates showed an excess of over 400 per cent between social class V and I; in 1951 this had fallen to 63 percent. Douglas's 'cohort' survey found in 1958 that there was little social class difference in the proportion of children having common childhood infections, but poorer children were more likely to be admitted to hospital, or to die, because of their disease. ³

1. ibid pp.45-6

2. J.N. Morris, Use of Epidemiology, 1964, p.65.

3. J.W.B. Douglas and J.M. Blomfield, Children Under Five, 1958.

still births and neonatal mortality; they appear to have been reduced in the case of post-neonatal mortality.

Table 25. Single legitimate births: changes in mortality rates (per 1000 live births) 1949-50 - 1964. (England & Wales)

Year	Stillbirths			Neonatal			Postneonatal		
	I&II	III	IV&V	I&II	III	IV&V	I&II	III	IV&V
1949-50	18.2	21.0	24.0	13.2	15.9	18.5	5.3	10.3	15.4
1964	11.8	15.6	17.2	9.2	11.8	13.2	3.5	5.4	7.6
% change	41	26	23	38	30	30	52	54	56

Sources: C.C. Spicer and L. Lipworth, Regional and Social factors in Infant Mortality, Studies on Medical and Population Subjects No 19, G.R.O.
J.A. Heady and M.A. Heasman, Social and Biological factors in Infant Mortality, Studies on Medical and Population Subjects, No 15, G.R.O.

Table 25 suggests that whereas absolute mortality rates declined over the period 1949-50 to 1964 social class differences

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Adult mortality although following a similar trend in early decades of this century gives a different picture to infant mortality. By 1930 class differentials had narrowed, with standardized mortality ratios of 90 for class I and 111 for class V, for males, aged 20-64. Table 26 compares the standardized mortality ratios in different years.

—Table - 26.

Figures are only available for England and Wales up to the period 1949-53. Hence the use of ~~figures for~~ Scotland to show more recent figures. Table 26 shows that relative position of class V to the other classes improved up to the time of the depression and has since declined. On the other hand, the differentials between the middle levels and class I have more or less disappeared. The data about infant and adult mortality suggests that there has been very little narrowing of health inequality during this thirty year period 1938-1968.

Adult mortality although following a similar trend in early decades of this century gives a different picture to infant mortality. By 1930 class differentials had narrowed, with standardized mortality ratios of 10 for class I and 11 for class V, for males. Table 2b compares the standardized mortality ratios in different years.

Table 2b

Figures are only available for England and Wales up to the period 1949-53. Table 2b shows that relative position of class I to the other classes improved up to the time of the depression and has since declined. On the other hand, the differences between the middle levels and class I have remained unchanged. The data about infant and adult mortality suggests that there has been very little narrowing of health inequalities during the thirty year period 1926-1952.

Table 26 - Mortality at various ages of males in social class as compared with that for males of similar age. England and Wales and Scotland.

Time Period	Age Groups	England & Wales					Scotland.				
		I	II	III	IV	V	I	II	III	IV	V
1910-12	25-64	88	94	96	93	142	-	-	-	-	-
1910-12 ¹	25-64	88	94	96	107	128	-	-	-	-	-
1921-23	20-64	82	94	95	101	125	-	-	-	-	-
1930-32	20-64	90	94	97	102	111	-	-	-	-	-
1949-53	20- 64	98	94 ⁸⁶	97 ¹⁰¹	94	118	107.9	86.2	102.5	90.3	112.6
1949-53 ²	20-64	100	90	101	104	118	-	-	-	-	-
1959-63	-	-	-	-	-	-	83	87	97	99	142
1949-53	15-19	126	84	88	84	100	126 ¹²⁶	64	78	84	100
	20-44	99	84	88	84	100	99	80	94	92	131
	45-64	110	84	88	84	100	110	87	105	90	109
	65+	115	84	88	84	100	115	109	109	103	97
1959-63	15-19						90	97	107	99	127
	20-44						73	81	87	106	178
	45-64						85	87	99	98	137
	65+						95	103	115	99	118

Notes:

1. Stevenson, T.H.C., 'The Social Distribution of Mortality from Different Causes in England and Wales, 1910-1912', Biometrika, 15, 384-388, 1923; argues that about 10% of class IV are misclassified. These figures are his adjustments.
2. Occupied males adjusted to control for occupational changes since 1930-32.

Sources: 1. A. Antonovsky, 'Social Class, Life Expectancy and Overall Mortality', Millbank Memorial Fund Quarterly, 45, April, 1967.

2. Annual Report of the Registrar General for Scotland, 1955, Fourth report on occupational mortality, Table FF.

3. Annual Report of the Registrar General for Scotland, 1968, Second supplement - Occupational Mortality, 1959-63, Table .

Table 26 - Mortality at various ages of males in social class as compared with that for males of similar age. England and Wales and Scotland.

Age Group		England & Wales					Scotland				
		I	II	III	IV	V	I	II	III	IV	V
1910-12	22-24	88	94	96	89	145	-	-	-	-	-
1910-12	25-27	88	94	96	107	138	-	-	-	-	-
1911-13	20-24	82	94	98	101	132	-	-	-	-	-
1913-15	20-24	90	94	97	105	111	-	-	-	-	-
1916-18	20-24	88	94	97	101	118	104	88	102	102	115
1919-21	20-24	100	90	101	104	118	-	-	-	-	-
1921-23	-	-	-	-	-	-	88	87	94	145	-
1924-26	12-14	120	120	120	120	120	120	120	120	120	120
1924-26	20-24	88	94	96	107	138	104	88	102	102	115
1924-26	25-27	120	120	120	120	120	120	120	120	120	120
1924-26	30-34	120	120	120	120	120	120	120	120	120	120
1924-26	35-39	120	120	120	120	120	120	120	120	120	120
1924-26	40-44	120	120	120	120	120	120	120	120	120	120
1924-26	45-49	120	120	120	120	120	120	120	120	120	120
1924-26	50-54	120	120	120	120	120	120	120	120	120	120
1924-26	55-59	120	120	120	120	120	120	120	120	120	120
1924-26	60-64	120	120	120	120	120	120	120	120	120	120
1924-26	65-69	120	120	120	120	120	120	120	120	120	120
1924-26	70-74	120	120	120	120	120	120	120	120	120	120
1924-26	75-79	120	120	120	120	120	120	120	120	120	120
1924-26	80-84	120	120	120	120	120	120	120	120	120	120
1924-26	85-89	120	120	120	120	120	120	120	120	120	120
1924-26	90-94	120	120	120	120	120	120	120	120	120	120
1924-26	95-99	120	120	120	120	120	120	120	120	120	120
1924-26	100+	120	120	120	120	120	120	120	120	120	120

Notes

1. Stearns, T.H.C. The Social Distribution of Mortality from Different Causes in England and Wales, 1910-1912, 1924-1926, 1928-1930, and in the year 1931 of class IV are misclassified. These figures are in parentheses.
2. Deaths were adjusted to control for occupational changes since 1905.
3. A. Antonsen, 'Social and Life Expectancy and Mortality', Mortality, Munksgaard International Book Company, 1954, p. 107.
4. Annual Report of the Registrar General for Scotland, 1928, Table 1.
5. Occupational mortality, Table 7.
6. Annual Report of the Registrar General for Scotland, 1928, Table 1.
7. Occupational mortality, 1924-26, Table 1.